



ew G4

PDF export of the original HTML instructions



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1. Preface

PDF export of the original HTML instructions

This PDF document is an automated export of an interactive set of HTML instructions. It may be the case that not all contents and interactive elements are contained in the PDF as they cannot be presented in this format. Furthermore, automatically generated page breaks may cause coherent contents to be moved slightly. We can therefore only guarantee the completeness of the information in the HTML instructions, and recommend that you use these. You can find these in the download section of the website under www.sennheiser.com/download.



2. Product information

All information about the product and available accessories at a glance.

[Products of the ew 100 G4 series](#)
[Products of the ew 300-500 G4 series](#)
[Products of the ew 100 P G4 series](#)
[Products of the ew 500 P G4 series](#)
[Accessories](#)
[The frequency bank system](#)
[Frequency ranges](#)

Products of the ew 100 G4 series



For information about the available **accessories**, see [Accessories](#).

You can find technical **specifications** for the individual products under [Specifications](#).

You can find information about **starting up** and **operating** the products under [User manual](#).



EM 100 G4 rack receiver



i You can find more detailed information about the EM 100 G4 in the following sections:

- **Startup and operation:** [EM 100 G4 rack receiver](#)
- **Specifications:** [EM 100 G4 rack receiver](#)



SKM 100 G4 | SKM 100 G4-S handheld transmitter



SKM 100 G4 variant:



SKM 100 G4-S variant:



The SKM 100 G4 handheld transmitter is also available in the SKM 100 G4-S variant with an integrated mute switch.

i You can find more detailed information about the SKM 100 G4 | SKM 100 G4-S in the following sections:

- **Startup and operation:** [SKM 100 G4 | SKM 100 G4-S handheld transmitter](#)
- **Specifications:** [SKM 100 G4 | SKM 100 G4-S handheld transmitter](#)



SK 100 G4 bodypack transmitter



i You can find more detailed information about the SK 100 G4 in the following sections:

- **Startup and operation:** [SK 100 G4 bodypack transmitter](#)
- **Specifications:** [SK 100 G4 bodypack transmitter](#)



Products of the ew 300-500 G4 series



For information about the available **accessories**, see [Accessories](#).

You can find technical **specifications** for the individual products under [Specifications](#).

You can find information about **starting up** and **operating** the products under [User manual](#).

EM 300-500 G4 rack receiver



i You can find more detailed information about the EM 300-500 G4 in the following sections:

- **Startup and operation:** [EM 300-500 G4 rack receiver](#)
- **Specifications:** [EM 300-500 G4 rack receiver](#)



SKM 300 G4-S handheld transmitter



i You can find more detailed information about the SKM 300 G4-S in the following sections:

- **Startup and operation:** [SKM 300 G4-S handheld transmitter](#)
- **Specifications:** [SKM 300 G4-S handheld transmitter](#)



SKM 500 G4 handheld transmitter



i You can find more detailed information about the SKM 500 G4 in the following sections:

- **Startup and operation:** [SKM 500 G4 handheld transmitter](#)
- **Specifications:** [SKM 500 G4 handheld transmitter](#)



SK 300 G4-RC bodypack transmitter



i You can find more detailed information about the SK 300 G4-RC in the following sections:

- **Startup and operation:** [SK 300 G4-RC bodypack transmitter](#)
- **Specifications:** [SK 300 G4-RC bodypack transmitter](#)



SK 500 G4 bodypack transmitter



i You can find more detailed information about the SK 500 G4 in the following sections:

- **Startup and operation:** [SK 500 G4 bodypack transmitter](#)
- **Specifications:** [SK 500 G4 bodypack transmitter](#)



Products of the ew 100 P G4 series



For information about the available **accessories**, see [Accessories](#).

You can find technical **specifications** for the individual products under [Specifications](#).

You can find information about **starting up** and **operating** the products under [User manual](#).



EK 100 G4 diversity receiver



i You can find more detailed information about the EK 100 G4 in the following sections:

- **Startup and operation:** [EK 100 G4 diversity receiver](#)
- **Specifications:** [EK 100 G4 diversity receiver](#)



SKP 100 G4 plug-on transmitter



i You can find more detailed information about the SKP 100 G4 in the following sections:

- **Startup and operation:** [SKP 100 G4 plug-on transmitter](#)
- **Specifications:** [SKP 100 G4 plug-on transmitter](#)



Products of the ew 500 P G4 series



For information about the available **accessories**, see [Accessories](#).

You can find technical **specifications** for the individual products under [Specifications](#).

You can find information about **starting up** and **operating** the products under [User manual](#).



EK 500 G4 diversity receiver



i You can find more detailed information about the EK 500 G4 in the following sections:

- **Startup and operation:** [EK 500 G4 diversity receiver](#)
- **Specifications:** [EK 500 G4 diversity receiver](#)



SKP 500 G4 plug-on transmitter



i You can find more detailed information about the SKP 500 G4 in the following sections:

- **Startup and operation:** [SKP 500 G4 plug-on transmitter](#)
- **Specifications:** [SKP 500 G4 plug-on transmitter](#)



Accessories

A variety of accessories are available for the ew G4 series.

[Microphones and cables](#)
[Rechargeable battery and charger](#)
[Accessories for rack mounting](#)
[Antennas and accessories](#)
[Additional accessories](#)

Microphones and cables

Microphone modules

We recommend using the following microphone modules with the SKM 100 G4 | SKM 100 G4-S, SKM 300 G4-S and SKM 500 G4 handheld transmitters.

Module	Features	Article no.
MMD 835-1 BK	Dynamic, cardioid, black	502575
MMD 845-1 BK	Dynamic, super-cardioid, black	502576
MME 865-1 BK	Capacitor, super-cardioid, black	502581
MMD 935-1 BK	Dynamic, cardioid, black	502577
MMD 945-1 BK	Dynamic, super-cardioid, black	502579
MMK 965-1 BK	Capacitor, switchable Cardioid/super-cardioid, black	502582
MMK 965-1 NI	Capacitor, switchable Cardioid/super-cardioid, nickel	502584

We recommend using the following microphone modules with the SKM 100 G4 | SKM 100 G4-S handheld transmitter.

Module	Features	Article no.
MMD 42-1	Dynamic, omni-directional, black	506772

We recommend using the following microphone modules with the SKM 300 G4-S and SKM 500 G4 handheld transmitters.

Module	Features	Article no.
Neumann KK 204	Capacitor, cardioid, nickel	008651



Module	Features	Article no.
Neumann KK 204 BK	Capacitor, cardioid, black	008652
Neumann KK 205	Capacitor, super-cardioid, nickel	008653
Neumann KK 205 BK	Capacitor, super-cardioid, black	008654

i You can find more information about the individual microphone modules on their respective product pages at [sennheiser.com](https://www.sennheiser.com).

Headset and Lavalier microphones

We recommend using the following Lavalier microphones and headset microphones with the SK 100 G4, SK 300 G4-RC and SK 500 G4 bodypack transmitters.

Microphone	Features	Article no.
ME 2	Lavalier microphone, omni-directional, black	508935
ME 3	Headset microphone, cardioid, black	508928
ME 4	Lavalier microphone, cardioid, black	508936
MKE 1-ew	Lavalier microphone, omni-directional, black	502876
MKE 1-ew-3	Lavalier microphone, omni-directional, beige	502879
MKE 2-ew Gold	Lavalier microphone, omni-directional, black	009831
MKE 2-ew-3 Gold	Lavalier microphone, omni-directional, beige	009832
MKE 40-ew	Lavalier microphone, cardioid, black	500527
SL Headmic 1 BE	Headband microphone, omni-directional, beige	506272
SL Headmic 1 BK	Headband microphone, omni-directional, black	506271
SL Headmic 1 SB	Headband microphone, omni-directional, silver	506904



Line/instrument cables

The following cables are available to connect instruments and line sources to the **SK 100 G4** bodypack transmitter:

- **Sennheiser CL 2** | Line cable with XLR-3F plug on lockable 3.5 mm jack plug | Article no. 004840



- **Sennheiser CI 1-N** | Guitar cable with 6.3 mm jack plug on lockable 3.5 mm jack plug | Article no. 005021





Line connecting cable

The following cables are available to connect instruments and line sources to the **EK 100 G4** and **EK 500 G4** bodypack transmitter:

- **CL 1-N** | 3.5 mm jack plug on lockable 3.5 mm jack plugs | Article no. 005022



- **CL 100** | XLR-3 on a 3.5 mm jack plug | Article no. 556950





Rechargeable battery and charger

BA 2015 rechargeable battery

The BA 2015 rechargeable battery is designed for use with evolution wireless G4 series handheld transmitters, bodypack transmitters and bodypack receivers.

Article no. 009950



L 2015 charger

The BA 2015 rechargeable battery can be charged in the L 2015 charger on its own or inside of the bodypack transmitter/bodypack receiver.



Article no. 009828



LA 2 charging adapter

Charging adapter for L 2015 charger for charging SKM G4 handheld transmitters with installed BA 2015 rechargeable battery.

Article no. 503162





Accessories for rack mounting

GA 3 rack mount kit

19" rack adapter for mounting the EM 100 G4, EM 300-500 G4 or SR IEM G4 in a 19" rack.

Article no. 503167



AM 2 antenna front mounting kit

Antenna front mounting kit for installing antenna connections on the front of the rack when using the EM 100 G4, EM 300-500 G4 or SR IEM G4 together with the GA 3 rack mounting kit.

Article no. 009912





Antennas and accessories

The following antenna components are available as accessory parts.

Omni-directional antennas

A 1031-U | passive omni-directional antenna | Article no. 004645

Directional antennas

A 2003 UHF | passive directional antenna | Article no. 003658

AD 1800 | passive directional antenna, 1.8 GHz range | Article no. 504916

Antenna splitter

ASA 214 | active antenna splitter 2×1:4

- **ASA 214-UHF** variant | 470 - 870 MHz | Article no. 508241
- **ASA 214-1G8** variant | 1785 - 1800 MHz | Article no. 508242
- see [ASA 214 antenna splitter](#)



Antenna amplifiers

AB 3700 | broadband antenna amplifier | Article no. 502196

AB 3 | antenna amplifier, up to 42 MHz bandwidth

- **AB 3-K** variant | frequency range K | Article no. 505550
- **AB 3-1G8** variant | frequency range 1G8 | Article no. 504915



AB 4 | antenna amplifier, up to 88 MHz bandwidth

- **AB 4-Aw+** variant | frequency range Aw+ | Article no. 508538
- **AB 4-Gw** variant | frequency range Gw | Article no. 508539
- **AB 4-GBw** variant | frequency range GBw | Article no. 508540
- **AB 4-Bw** variant | frequency range Bw | Article no. 508541
- **AB 4-Cw** variant | frequency range Cw | Article no. 508542
- **AB 4-Dw** variant | frequency range Dw | Article no. 508543

Antenna cables

GZL 1019 | BNC/BNC coaxial cable, antenna cable with 50 Ω characteristic (wave) impedance

- **GZL 1019-A1** variant | 1 m | Article no. 002324
- **GZL 1019-A5** variant | 5 m | Article no. 002325
- **GZL 1019-A10** variant | 10 m | Article no. 002326



Additional accessories

KEN 2 Color labeling set

Color labeling set for SKM handheld transmitters

Article no. 530195



MZQ 1 Microphone clamp

Microphone clamp for SKM handheld transmitters



Article no. 076670



RMS 1 MUTE switch

Remote mute switch for SK 300 G4

Article no. 503164



CA 2 camera adapter

Camera adapter with hot shoe for portable receivers from the ew 100 P G4 and ew 500 PG4 series.



Article no. 009986





The frequency bank system

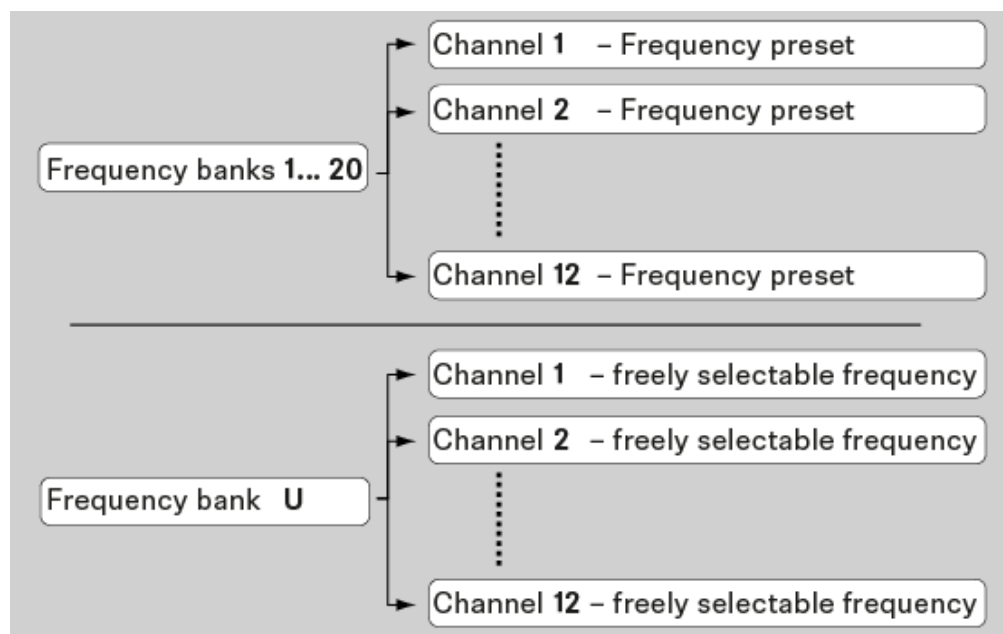
There are different frequency ranges in the UHF band available for transmission.

ew 100 G4

The following frequency ranges are available for the ew 100 G4 series:

- **A1 range:** 470 - 516 MHz
- **A range:** 516 - 558 MHz
- **AS range:** 520 - 558 MHz
- **G range:** 566 - 608 MHz
- **GB range:** 606 - 648 MHz
- **B range:** 626 - 668 MHz
- **C range:** 734 - 776 MHz
- **C-TH range:** 748.2 - 757.8 MHz
- **D range:** 780 - 822 MHz
- **JB range:** 806 - 810 MHz
- **E range:** 823 - 865 MHz
- **K+ range:** 925 - 937,5 MHz
- **1G8 range:** 1785 - 1800 MHz

Every frequency range has 21 frequency banks with up to 12 channels:





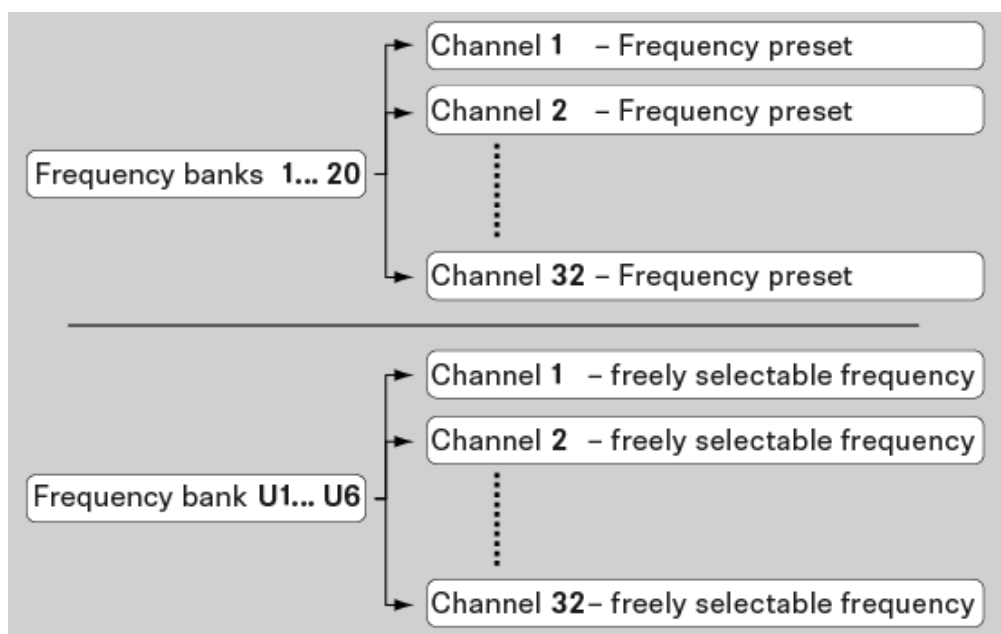
i You can find information about the frequency presets in the frequency tables of the respective frequency ranges under [Frequency ranges](#).

ew 300-500 G4

The following frequency ranges are available for the ew 300-500 G4 series:

- **Aw+ range:** 470 - 558 MHz
- **Aw30 range:** 470 - 558 MHz
- **AS range:** 520 - 558 MHz
- **Gw1 range:** 558 - 608 MHz
- **Gw range:** 558 - 626 MHz
- **GBw range:** 606 - 678 MHz
- **Bw range:** 626 - 698 MHz
- **Bw30 range:** 626 - 698 MHz
- **Cw range:** 718 - 790 MHz
- **Cw-TH range:** 748.2 - 757.8 MHz
- **Dw range:** 790 - 865 MHz
- **JB range:** 806 - 810 MHz
- **K+ range:** 925 - 937,5 MHz

Every frequency range has 26 frequency banks with up to 32 channels:





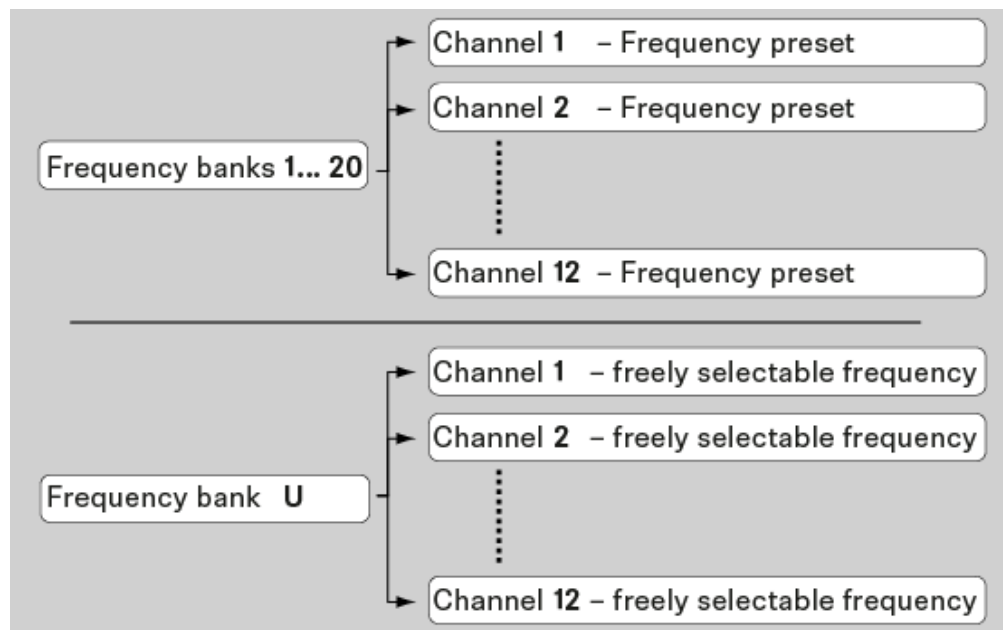
i You can find information about the frequency presets in the frequency tables of the respective frequency ranges under [Frequency ranges](#).

ew 100 P G4

The following frequency ranges are available for the ew 100 P G4 series

- **A1 range:** 470 - 516 MHz
- **A range:** 516 - 558 MHz
- **AS range:** 520 - 558 MHz
- **G range:** 566 - 608 MHz
- **GB range:** 606 - 648 MHz
- **B range:** 626 - 668 MHz
- **C range:** 734 - 776 MHz
- **C-TH range:** 748.2 - 757.8 MHz
- **D range:** 780 - 822 MHz
- **JB range:** 806 - 810 MHz
- **E range:** 823 - 865 MHz
- **K+ range:** 925 - 937,5 MHz

Every frequency range has 21 frequency banks with up to 12 channels:



i You can find information about the frequency presets in the frequency tables of the respective frequency ranges under [Frequency ranges](#).

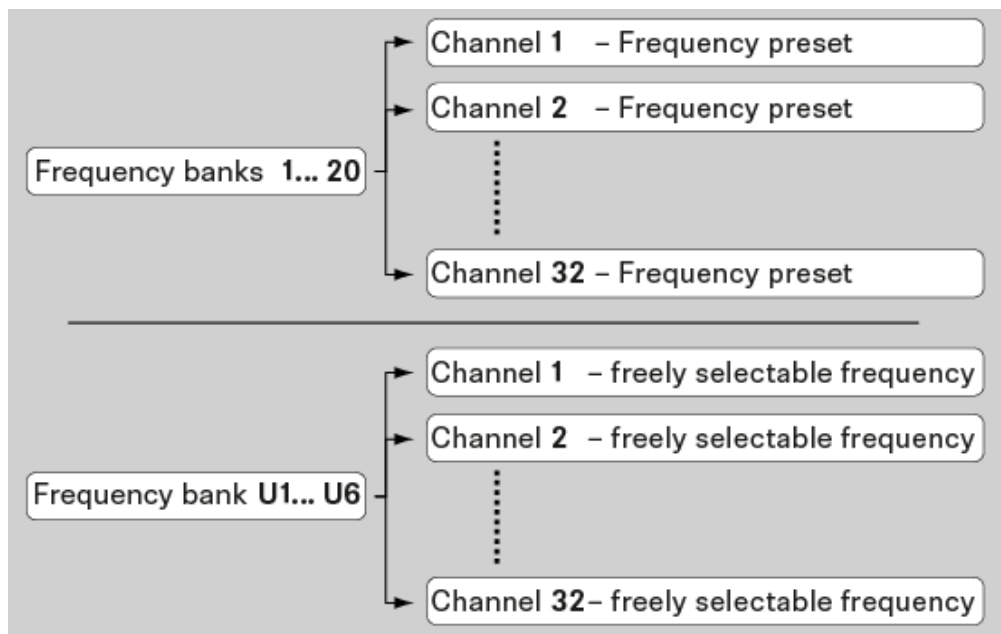


ew 500 P G4

The following frequency ranges are available for the ew 500 P G4 series

- **Aw+ range:** 470 - 558 MHz
- **AS range:** 520 - 558 MHz
- **Gw1 range:** 558 - 608 MHz
- **Gw range:** 558 - 626 MHz
- **GBw range:** 606 - 678 MHz
- **Bw range:** 626 - 698 MHz
- **Cw range:** 718 - 790 MHz
- **Dw range:** 790 - 865 MHz
- **JB range:** 806 - 810 MHz
- **K+ range:** 925 - 937,5 MHz

Every frequency range has 26 frequency banks with up to 32 channels:



i You can find information about the frequency presets in the frequency tables of the respective frequency ranges under [Frequency ranges](#).



Frequency ranges

Frequency tables with the factory presets for all available frequency ranges can be found in the download area of the Sennheiser website at: sennheiser.com/download.

Enter **ew G4** in the search bar to show the frequency tables.



3. User manual

Starting up and operating devices of the ew G4 series.

Products of the ew 100 G4 series

[EM 100 G4 rack receiver](#)

[SKM 100 G4 | SKM 100 G4-S handheld transmitter](#)

[SK 100 G4 bodypack transmitter](#)

Products of the ew 300-500 G4 series

[EM 300-500 G4 rack receiver](#)

[SKM 300 G4-S handheld transmitter](#)

[SKM 500 G4 handheld transmitter](#)

[SK 300 G4-RC bodypack transmitter](#)

[SK 500 G4 bodypack transmitter](#)

Products of the ew 100 P G4 series

[EK 100 G4 diversity receiver](#)

[SKP 100 G4 plug-on transmitter](#)

Products of the ew 500 P G4 series

[EK 500 G4 diversity receiver](#)

[SKP 500 G4 plug-on transmitter](#)

Establishing a radio link and synchronizing devices

[Establishing a radio link](#)

[Synchronizing devices](#)

Accessory

[ASA 214 antenna splitter](#)

Cleaning and maintenance

[Cleaning and maintenance](#)



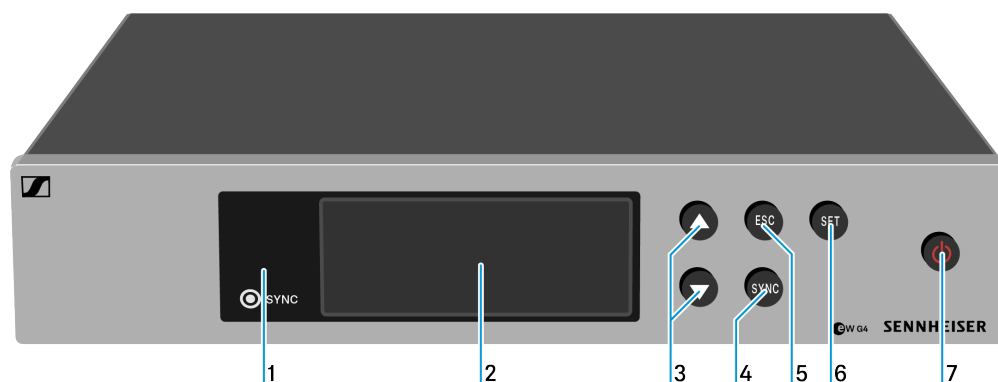
EM 100 G4 rack receiver

Product overview
Connecting/disconnecting the rack receiver to/from the power supply system
Connecting antennas
Outputting audio signals
Creating a data network
Installing the rack receiver in a rack
Switching the rack receiver on and off
Muting the audio output
Lock-off function
Buttons for navigating through the menu
Home Screen
Receiver Parameters standard display
Soundcheck standard display
Guitar Tuner standard display
Menu structure
Setting options in the menu
Squelch menu item
Easy Setup menu item
Scan New List
Current List
Reset
Performing multi-channel frequency setup
Setting up a multi-channel system with more than 12 receivers
Frequency Preset menu item
Name menu item
AF Out menu item
Equalizer menu item
Auto Lock menu item
Advanced menu item
Advanced -> Tune menu item
Advanced -> Guitar Tuner menu item
Advanced -> Pilot Tone menu item
Advanced -> LCD Contrast menu item
Advanced -> Reset menu item
Advanced -> Software Revision menu item



Product overview

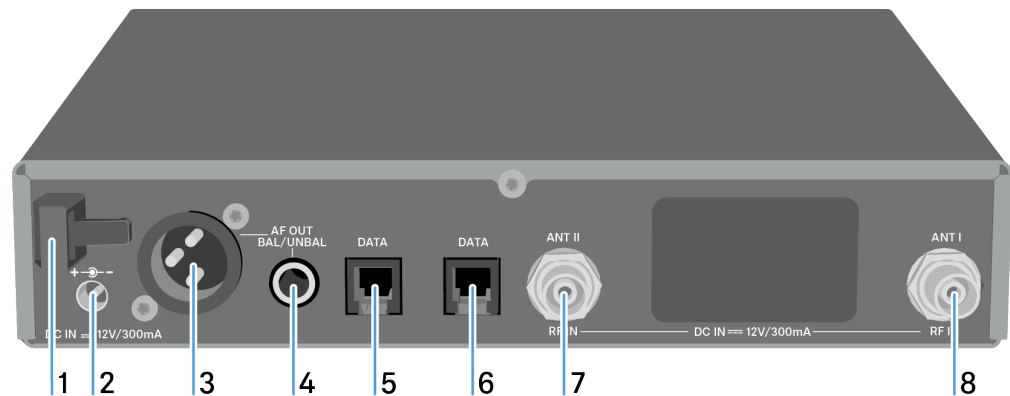
Front



- 1 Infrared interface with a blue LED
 - see [Ew 100 G4 synchronizing](#)
- 2 Display panel
 - see [Displays on the rack receiver display panel](#)
- 3 UP/DOWN buttons
 - see [Buttons for navigating through the menu](#)
- 4 SYNC button
 - see [Ew 100 G4 synchronizing](#)
- 5 ESC button
 - see [Buttons for navigating through the menu](#)
- 6 SET button
 - see [Buttons for navigating through the menu](#)
- 7 STANDBY button
 - see [Switching the rack receiver on and off](#)



Back



- 1 Strain relief for the cable of the power supply unit
 - see [Connecting/disconnecting the rack receiver to/from the power supply system](#)
- 2 Connecting cables for the power supply unit (**DC IN**)
 - see [Connecting/disconnecting the rack receiver to/from the power supply system](#)
- 3 XLR-3 socket for audio output, balanced (**AF OUT BAL**)
 - see [Outputting audio signals](#)
- 4 6.3 mm jack socket for audio output, unbalanced (**AF OUT UNBAL**)
 - see [Outputting audio signals](#)
- 5 RJ-10 interface (**DATA**)
 - see [Creating a data network](#)
- 6 RJ-10 interface (**DATA**)
 - see [Creating a data network](#)
- 7 BNC socket, antenna input II (**ANT II**) with remote power supply unit
 - see [Connecting antennas](#)
- 8 BNC socket, antenna input I (**ANT I**) with remote power supply unit
 - see [Connecting antennas](#)

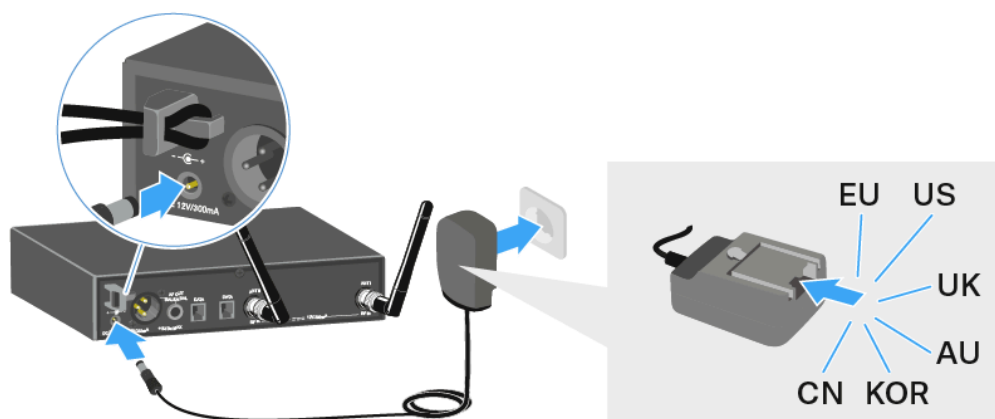


Connecting/disconnecting the rack receiver to/from the power supply system

Only use the supplied power supply unit. It is designed for your receiver and ensures safe operation.

To connect the rack receiver to the power supply system:

- ▶ Insert the plug of the power supply unit into the **DC IN** socket of the receiver.
- ▶ Pass the cable of the power supply unit through the cable grip.
- ▶ Slide the supplied country adapter onto the power supply unit.



- ▶ Plug the power supply unit into the wall socket.

To completely disconnect the rack receiver from the power supply system:

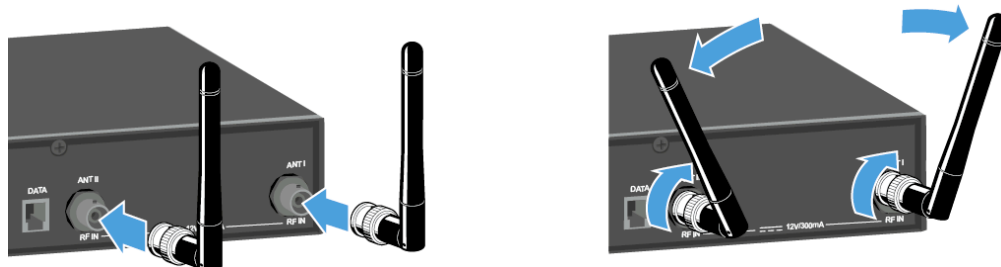
- ▶ Unplug the power supply unit from the wall socket.
- ▶ Unplug the power supply unit from the **DC IN** socket of the receiver.



Connecting antennas

To connect the supplied rod antennas:

- ▶ Connect the first rod antenna to the **ANT I** socket on the rear side of the EM 100 G4.
- ▶ Connect the second rod antenna to the **ANT II** socket on the rear side of the EM 100 G4.
- ▶ Gently angle the rod antennas to the left and right as shown in the figure.



i If you are using more than one receiver, we recommend using remote antennas and the ASA 214 antenna splitter. You can find more information here: [ASA 214 antenna splitter](#).



Outputting audio signals

The EM 100 G4 has a balanced XLR-3M output socket and an unbalanced 6.3 mm jack output socket.

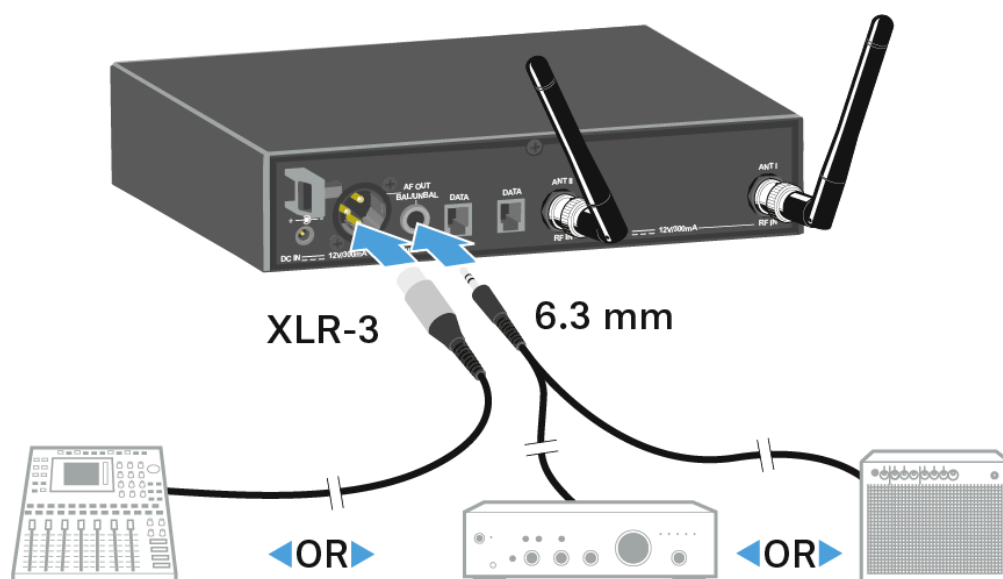
- ▶ Always use only one of the two **AF OUT** output sockets for each channel.

To connect an XLR cable:

- ▶ Plug the XLR cable into the **AF OUT BAL** socket of the EM 100 G4.

To connect a jack cable:

- ▶ Plug the jack cable into the **AF OUT UNBAL** socket of the EM 100 G4.



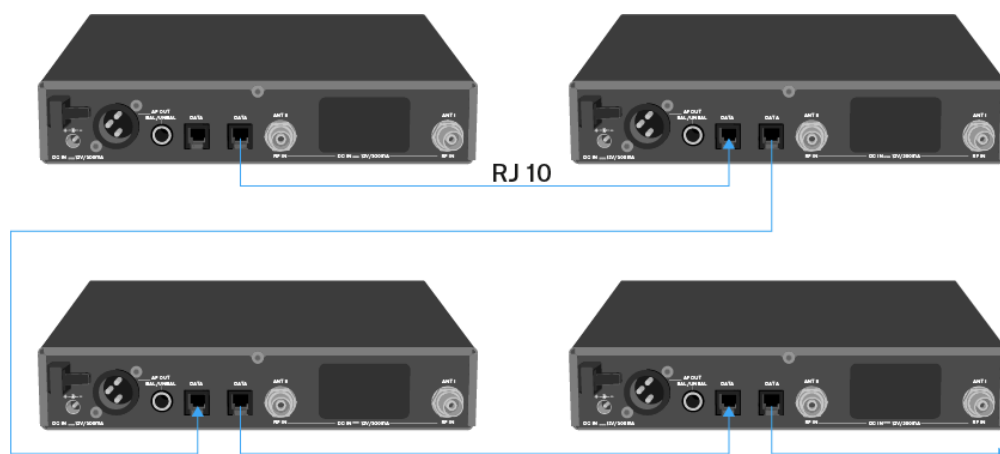


Creating a data network

You can cascade multiple EM 100 G4s to a multi-channel system using the two **DATA** RJ-10 interfaces (up to 12 receivers). You can perform a frequency setup for the entire multi-channel system via this data network using the **Easy Setup** function.

The setup only works when all of the receivers have the same frequency range.

- ▶ Connect the receivers to create a multi-channel system using the supplied RJ-10 cables as shown in the diagram.
- ✓ Both RJ-10 sockets are interchangeable. There is no set order for cabling.



i You can find more information about the **Easy Setup** function under [Easy Setup menu item](#).



Setting up a multi-channel system with more than 12 receivers

- i** You can use the **Easy Setup** function to automatically set up a maximum of 12 receivers.

If you assign the frequencies manually, however, you can use up to 20 receivers in a multi-channel system (not possible in the TH, JB, K+ and 1G8 frequency ranges).

- ▶ To do so, set a frequency manually in each receiver (see [Advanced -> Tune menu item](#)).
- ▶ Use the frequencies from the following table.

Channel	Frequency Ranges								
	A1	A	AS	G	GB	B	C	D	E
1	470.100	518.200	530.100	566.200	606.500	626.200	742.200	790.200	830.200
2	470.500	518.700	530.800	566.600	606.875	626.600	742.600	790.600	830.600
3	471.050	519.650	531.650	567.200	607.325	627.200	743.150	791.200	831.200
4	471.750	520.450	532.050	568.000	607.850	628.400	743.850	792.000	832.000
5	472.200	520.900	533.050	569.200	608.250	629.800	744.300	793.200	833.200
6	472.800	521.600	533.550	571.600	608.725	631.400	744.900	795.600	834.800
7	473.650	522.000	534.850	573.800	609.275	632.200	750.200	797.800	838.600
8	474.750	522.900	535.750	572.900	609.900	634.200	750.700	796.900	839.900
9	475.250	524.750	536.850	568.475	610.400	637.600	751.550	792.475	842.600
10	506.150	526.350	537.400	570.125	611.150	632.650	752.550	794.125	843.100
11	506.950	526.900	538.200	570.575	612.200	633.550	753.950	794.575	844.800
12	511.000	527.750	539.250	572.475	612.775	635.300	754.750	796.475	845.500
13	508.500	528.400	542.400	558.200	614.700	639.450	759.000	801.950	846.750
14	512.300	529.400	545.250	558.750	615.300	640.150	761.450	803.900	848.250
15	514.350	531.500	547.000	580.650	615.975	644.150	762.100	806.600	848.900
16	515.550	534.350	549.500	583.100	616.400	645.850	763.400	807.700	851.550
17	482.100	537.700	552.900	585.800	617.975	647.300	765.000	810.350	857.000
18	482.750	541.950	554.350	587.750	620.425	647.800	765.900	817.900	858.050
19	484.100	547.350	555.000	591.800	622.600	653.550	770.550	819.500	862.750
20	485.000	550.300	555.950	594.300	623.600	656.600	775.050		864.300



Installing the rack receiver in a rack

To mount the receiver in a rack, you will need the [GA 3 rack mount kit](#) (optional accessory).

NOTICE



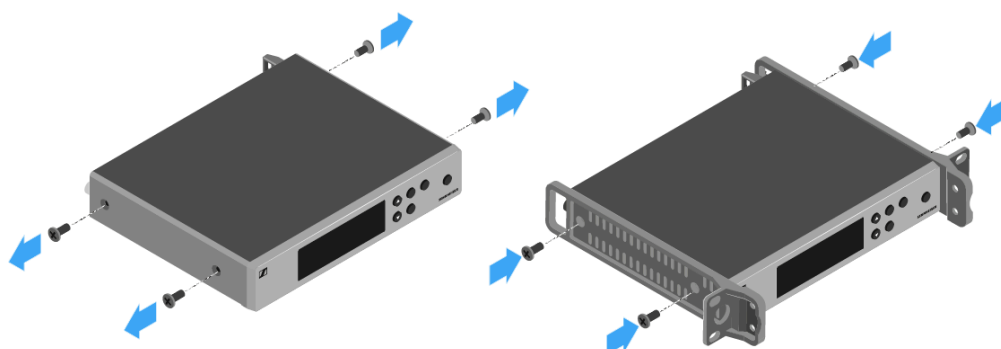
Rack mounting poses risks

When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- ▶ Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the specifications. See [Specifications](#).
- ▶ Ensure sufficient ventilation; if necessary, provide additional ventilation.
- ▶ Make sure that the mechanical loading of the rack is even.
- ▶ When connecting to the power supply system, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- ▶ When rack mounting, please note that intrinsically harmless leakage currents of the individual power supply units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

Mounting a single receiver in a rack

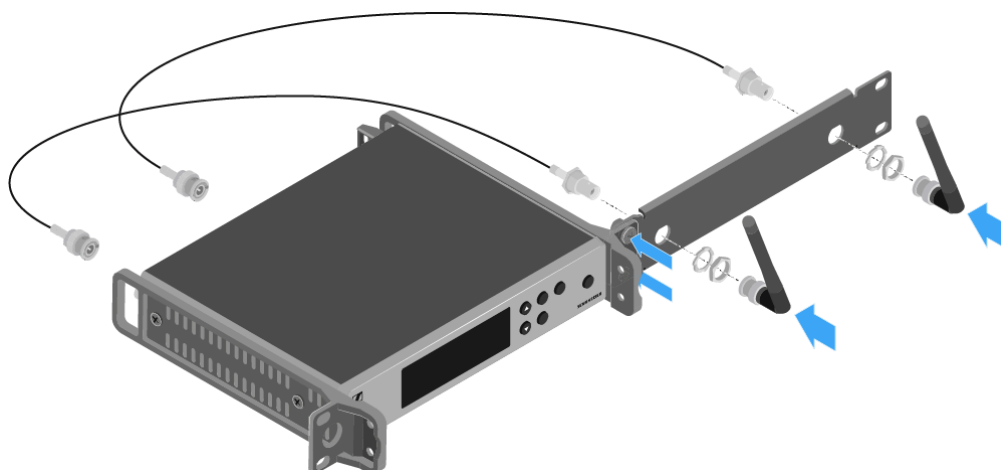
- ▶ Unscrew and remove the two recessed head screws (M4x8) on each side of the receiver.
- ▶ Secure both of the the mounting angles to the sides of the receiver using the previously removed recessed head screws.



- ▶ Secure the blanking plate to one of the mounting angles using two recessed head screws (M6x10).



- ▶ Attach the [AM 2 antenna front mounting kit](#) (optional accessory) and mount the rod antennas on the blanking plate.



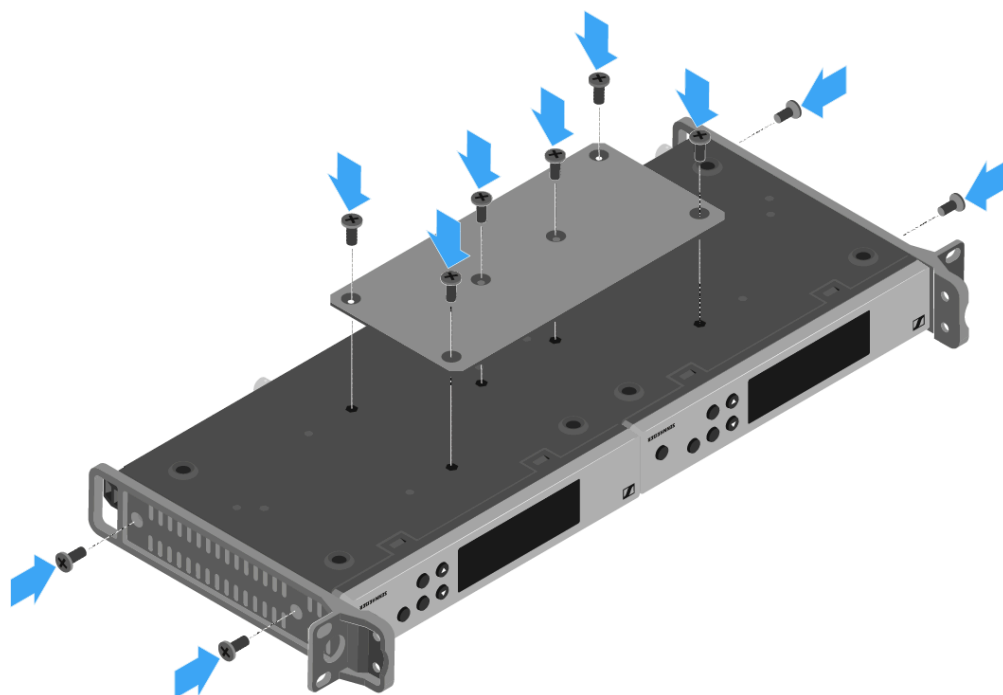
- ▶ Slide the receiver with the mounted blanking plate into the 19" rack.
- ▶ Secure the mounting angle and the blanking plate to the 19" rack.
- ▶ Align the mounted antennas in a V-shape.



Mounting two receivers side by side in a rack

i When you mount two receivers side by side, it is only possible to front mount antennas when you use the [ASA 214 antenna splitter](#) in combination with the [AM 2 antenna front mounting kit](#) and an additional [GA 3 rack mount kit](#).

- ▶ Place both receivers upside down and side by side on an even surface.
- ▶ Secure the jointing plate to the transmitters using the six recessed head screws (M3x6).
- ▶ Secure the mounting angle.

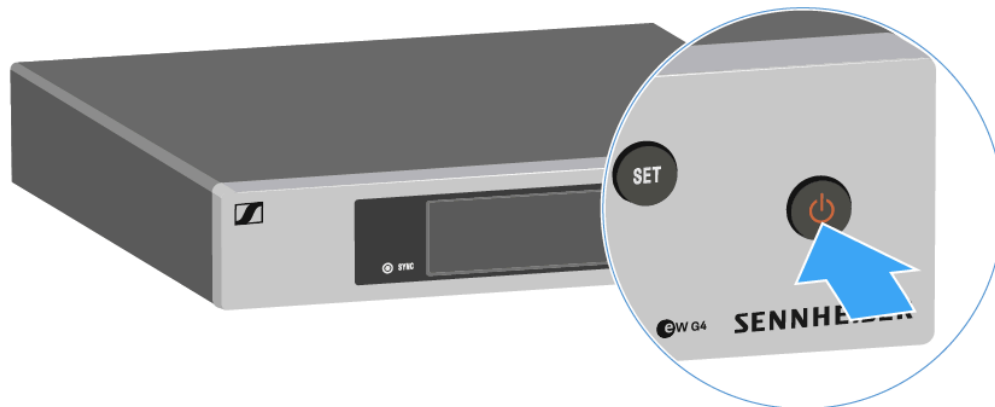




Switching the rack receiver on and off

To switch the receiver on:

- ▶ Short-press the **STANDBY** button.



- ✓ The receiver switches on and the Receiver Parameters standard display appears.

To switch the receiver to standby mode:

- ▶ If necessary, deactivate the lock-off function (see [Lock-off function](#)).
- ▶ Press and hold the **STANDBY** button until OFF appears on the display panel.
- ✓ The display panel switches off.

To switch the receiver off completely:

- ▶ Disconnect the receiver from the power supply system by unplugging the power supply unit from the wall socket.



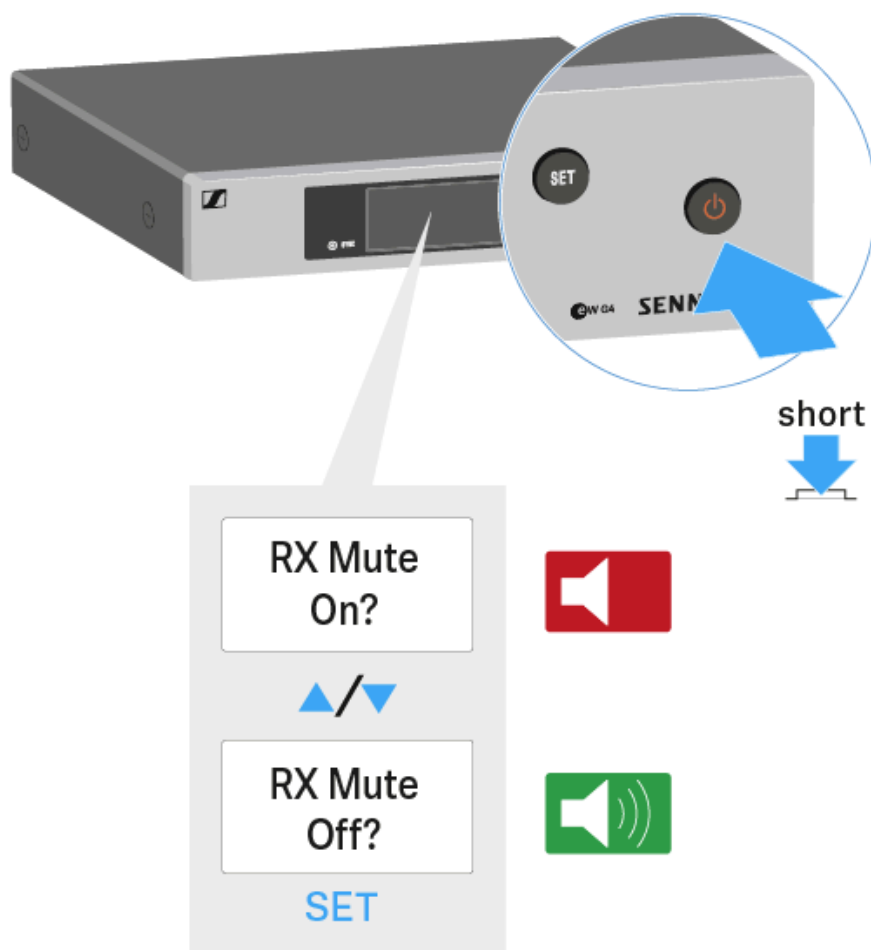
Muting the audio output

To mute the audio signal of the receiver:

- ▶ Short-press the **STANDBY** button in one of the standard displays.
 - ✓ The *RX Mute On?* display appears.
- ▶ Press the **SET** button.
 - ✓ The audio signal is muted.

To cancel the muting:

- ▶ Short-press the **STANDBY** button.
 - ✓ The *RX Mute Off?* display appears.
- ▶ Press the **SET** button.
 - ✓ The audio output is no longer muted.





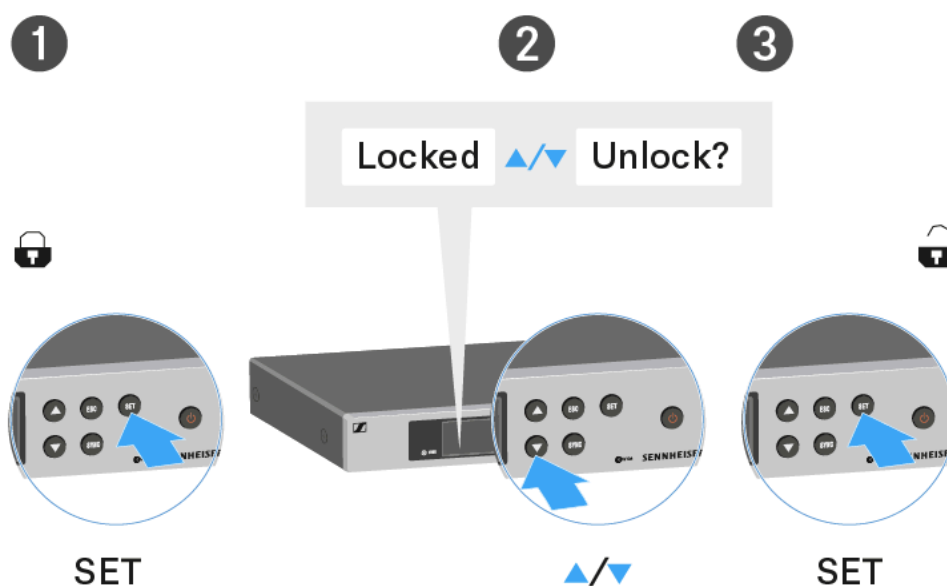
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the receiver off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

When one of the standard displays is shown

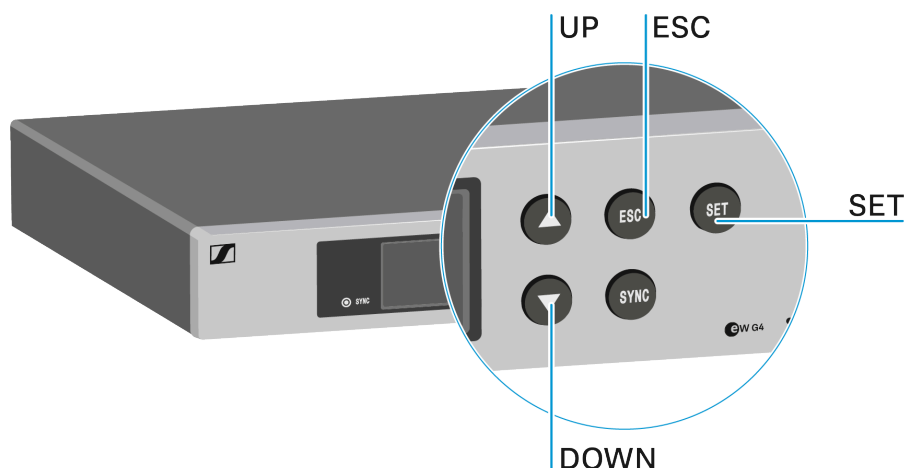
- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.



Buttons for navigating through the menu

To navigate through the EM 100 G4 operating menu, you need the following buttons.



ESC button

- Short-press
 - Cancels the entry and returns to the previous display
- Long-press
 - Cancels the entry and returns to the home screen

Press the **SET** button

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Press the **UP** or **DOWN** button

- Selects a standard display (see [Home Screen](#))
- Changes to the previous or next menu item
- Changes the setting of a menu item



Displays on the rack receiver display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See [Home Screen](#)

The display panel also displays the operating menu which you can use to configure all of the settings.

- See [Setting options in the menu](#)



Home Screen

After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has three different standard displays.

- ▶ On the home screen, press the **UP** and **DOWN** buttons to switch between the standard displays.

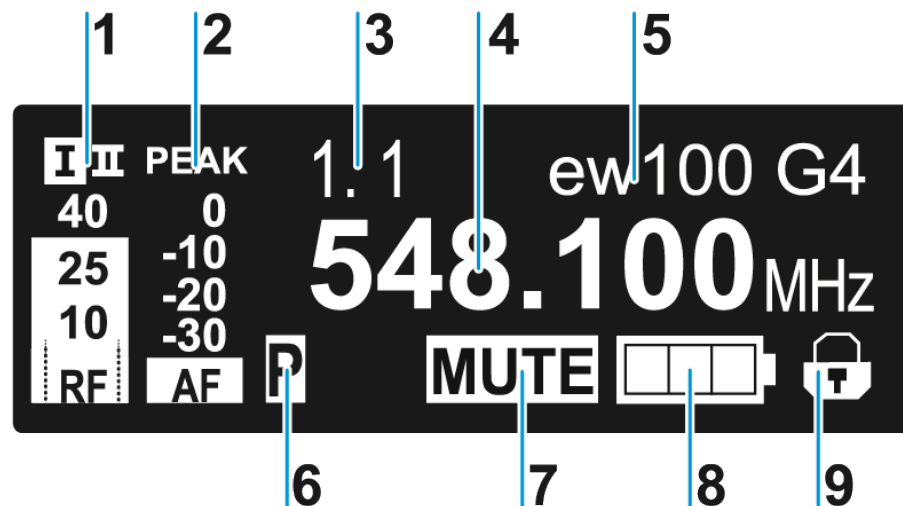
Related information

[Receiver Parameters standard display](#)

[Soundcheck standard display](#)

[Guitar Tuner standard display](#)

Receiver Parameters standard display



1 RF level **RF** (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see [Squelch menu item](#))



2 Audio level **AF (audio frequency))**

- Displays the audio level of the received transmitter

When the display shows full deflection, the audio input level is excessively high.

When the transmitter is overloaded frequently or for extended periods of time, the PEAK display is shown inverted.

- see [AF Out menu item](#)

3 Frequency bank and channel

- current frequency bank and channel number
- see [Frequency Preset menu item](#)

4 Frequency

- current receiving frequency
- see [Frequency Preset menu item](#)

5 Name

- freely selectable name of the receiver
- see [Name menu item](#)

6 P pilot tone

- activated pilot tone evaluation
- see [Advanced -> Pilot Tone menu item](#)

7 MUTE muting function

- receiver or transmitter is muted
- see [Muting the audio output](#)

8 Battery status of the transmitter

- SKM 100 G4: see [Inserting and removing the batteries/rechargeable batteries](#)
- SK 100 G4: see [Inserting and removing the batteries/rechargeable batteries](#)

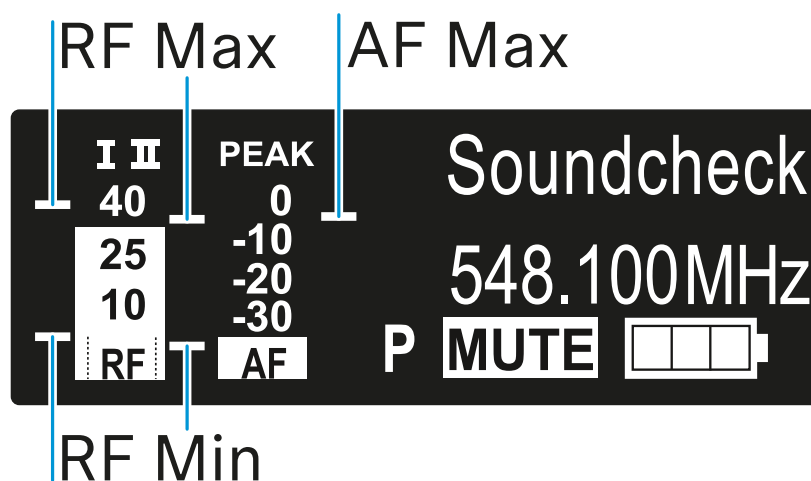
9 Lock-off function

- lock-off function is activated on the receiver
- see [Lock-off function](#)



Soundcheck standard display

The Soundcheck standard display shows the transmission quality between the transmitter and the receiver.



By doing a soundcheck, you can ensure adequate transmission quality in the entire area in which you want to use the transmitter. You can do the soundcheck without the help of another person.

- ▶ With the transmitter, walk up and down the area in which you want to use the transmitter.
- ✓ The receiver records the following parameters:

RF Min

- Minimum RF signal level
- must be well above the squelch threshold level for one of the two antennas
- Ways to optimize:
 - Check that the antennas and the antenna cables are correctly connected.
 - Improve the position of the antennas.
 - If necessary, use an antenna booster.



RF Max

- Maximum RF signal level
- both antennas should reach 40 dB μ V
- Ways to optimize:
 - Check that the antennas and the antenna cables are correctly connected.
 - Improve the position of the antennas.
 - If necessary, use an antenna booster.

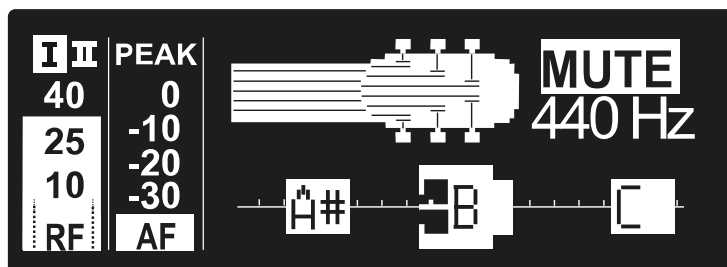
AF Max

- Maximum audio level
- Ways to optimize:
 - On your transmitter, adjust the audio level as high as possible without the display for the audio level showing full deflection (AF Max is at a level with the PEAK display). See [AF Out menu item](#).



Guitar Tuner standard display

The Guitar Tuner standard display shows the guitar tuner (only for the SK 100 G4).



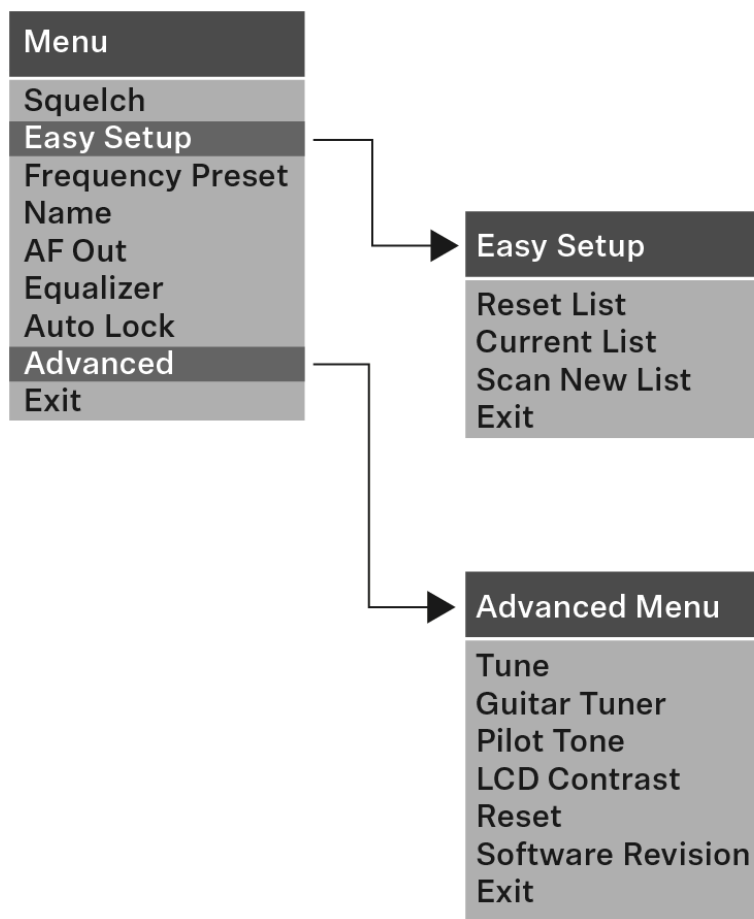
The Guitar Tuner standard display is deactivated upon delivery.

To show this standard display, you have to activate it (see [Advanced -> Guitar Tuner menu item](#)).



Menu structure

The figure shows the complete rack receiver menu structure in an overview.





Setting options in the menu

In the rack receiver menu, you can configure the following settings.

Adjusting the squelch threshold

- See [Squelch menu item](#)

Scanning for unused frequency presets, releases and selects frequency presets

- See [Easy Setup menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Adjusting the audio output level

- See [AF Out menu item](#)

Adjusting the frequency response of the output signal

- See [Equalizer menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the receiving frequencies for the U frequency bank
- Adjusting the guitar tuner options
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the receiver
- Displaying the current software revision
- See [Advanced menu item](#)

Squelch menu item

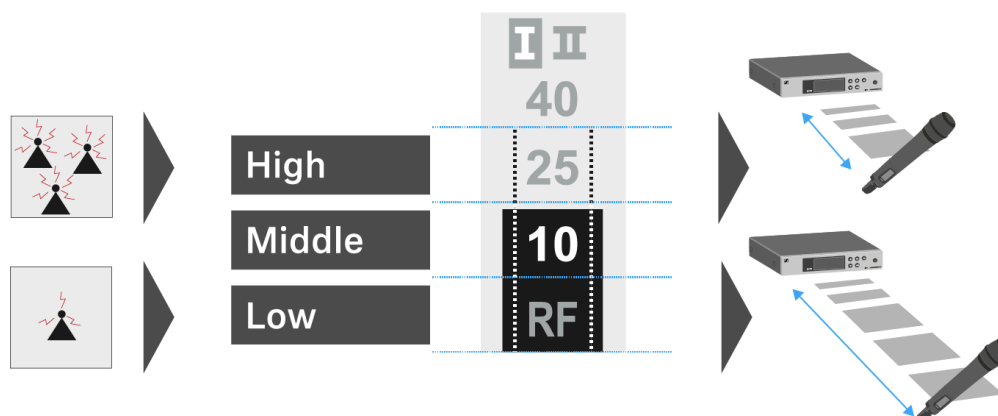
You can adjust the squelch threshold in the Squelch menu item.



Setting range:

- Low = 5 dB μ V
- Middle = 15 dB μ V
- High = 25 dB μ V

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION



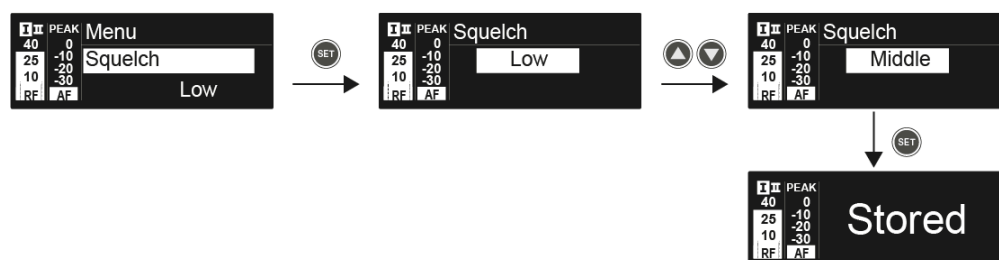
Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

- ▶ Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- ▶ Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Squelch** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.





- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



Easy Setup menu item

You can scan for unused frequencies using the Easy Setup menu item.

When you have connected multiple EM 100 G4 devices to a network via the RJ-10 interfaces (see [Creating a data network](#)), you can perform the frequency setup for all of the connected receivers. You can find more information about connecting multiple devices under [Performing multi-channel frequency setup](#).

- i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

The squelch threshold setting influences the result. Set the squelch threshold to Low for as many frequencies as possible, and to High for as many safe frequencies as possible (see [Squelch menu item](#)).

To open the Easy Setup menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Easy Setup** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.

Related information

[Scan New List](#)

[Current List](#)

[Reset](#)

[Performing multi-channel frequency setup](#)

[Setting up a multi-channel system with more than 12 receivers](#)

Scan New List

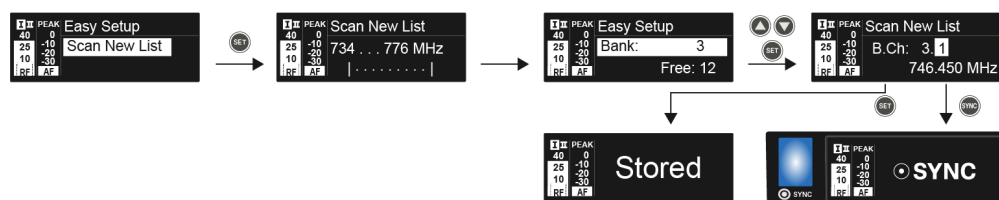
- ▶ Select **Scan New List** to scan for unused frequencies.
- ▶ Press the **SET** button to start the scan.
 - ✓ The frequency range of the receiver is scanned. As a result, the number of unused frequencies is displayed for every frequency bank.
- ▶ Press the **UP** or **DOWN** buttons to select a frequency bank.
- ▶ Press the **SET** button to confirm your selection.



- ▶ Press the **UP** or **DOWN** buttons to select an unused frequency from the selected bank.
- ▶ Press the **SET** button to save your selection and synchronize the selected frequency with the transmitter at a later point (see [Ew 100 G4 synchronizing](#)).

OR

- ▶ Press the **SYNC** button to synchronize the selected frequency with the transmitter immediately.





Current List

- ▶ Select **Current List** to show the list of unused frequencies from the last scan.



Reset

- ▶ Select **Reset List** to delete the list of unused frequencies.



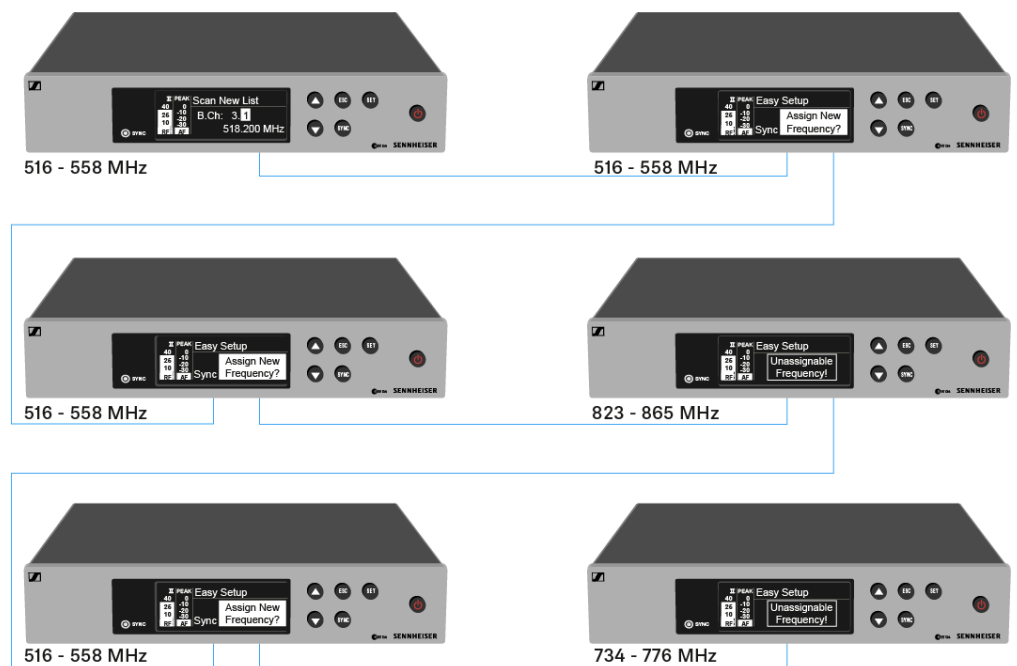
Performing multi-channel frequency setup

To perform the automatic frequency setup for multiple receivers (max. 12) simultaneously:

- ▶ Connect all of the receivers to one network. See [Creating a data network](#).
- ▶ Open the **Easy Setup** menu item on one of the receivers.
 - ✓ This receiver is the master. You can choose any receiver to be the master.
- ▶ Perform the frequency scan on the master receiver as under [Scan New List](#).
 - ✓ After the scan, the display panels of the other receivers will display the message *Assign New Frequency?*.

Receivers with non-compatible frequency ranges will display the message *Unassignable Frequency!*.

- ▶ Select an unused frequency for the first receiver on the master receiver.
- ▶ Press the **SET** button on the receiver that you would like to assign this frequency to.
- ▶ Use this procedure to assign a frequency to each connected receiver, one after another.
- ▶ For the last step, assign a frequency to the master receiver.
 - ✓ This completes the multi-channel frequency setup.





Setting up a multi-channel system with more than 12 receivers

You can use the Easy Setup function to automatically set up a maximum of 12 receivers.

If you assign the frequencies manually, however, you can use up to 20 receivers in a multi-channel system (not possible in the JB, K+ and 1G8 frequency ranges).

- ▶ To do so, set a frequency manually in each receiver (see [Advanced -> Tune menu item](#)).
- ▶ Use the frequencies from the following table.

Channel	Frequency Ranges								
	A1	A	AS	G	GB	B	C	D	E
1	470.100	518.200	530.100	566.200	606.500	626.200	742.200	790.200	830.200
2	470.500	518.700	530.800	566.600	606.875	626.600	742.600	790.600	830.600
3	471.050	519.650	531.650	567.200	607.325	627.200	743.150	791.200	831.200
4	471.750	520.450	532.050	568.000	607.850	628.400	743.850	792.000	832.000
5	472.200	520.900	533.050	569.200	608.250	629.800	744.300	793.200	833.200
6	472.800	521.600	533.550	571.600	608.725	631.400	744.900	795.600	834.800
7	473.650	522.000	534.850	573.800	609.275	632.200	750.200	797.800	838.600
8	474.750	522.900	535.750	572.900	609.900	634.200	750.700	796.900	839.900
9	475.250	524.750	536.850	568.475	610.400	637.600	751.550	792.475	842.600
10	506.150	526.350	537.400	570.125	611.150	632.650	752.550	794.125	843.100
11	506.950	526.900	538.200	570.575	612.200	633.550	753.950	794.575	844.800
12	511.000	527.750	539.250	572.475	612.775	635.300	754.750	796.475	845.500
13	508.500	528.400	542.400	558.200	614.700	639.450	759.000	801.950	846.750
14	512.300	529.400	545.250	558.750	615.300	640.150	761.450	803.900	848.250
15	514.350	531.500	547.000	580.650	615.975	644.150	762.100	806.600	848.900
16	515.550	534.350	549.500	583.100	616.400	645.850	763.400	807.700	851.550
17	482.100	537.700	552.900	585.800	617.975	647.300	765.000	810.350	857.000
18	482.750	541.950	554.350	587.750	620.425	647.800	765.900	817.900	858.050
19	484.100	547.350	555.000	591.800	622.600	653.550	770.550	819.500	862.750
20	485.000	550.300	555.950	594.300	623.600	656.600	775.050		864.300

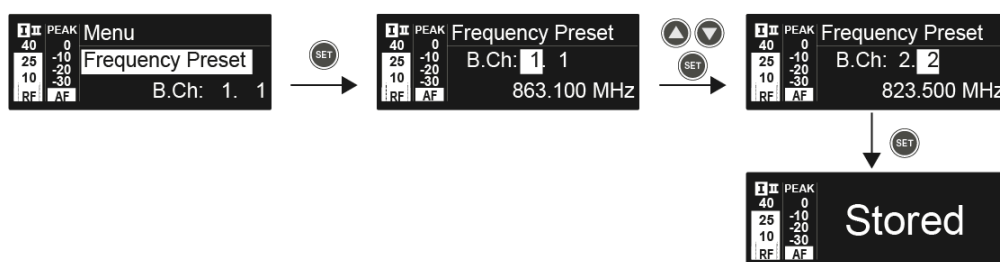


Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Frequency Preset** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.

i You can set the frequencies of the frequency bank U here: [Advanced -> Tune menu item](#).

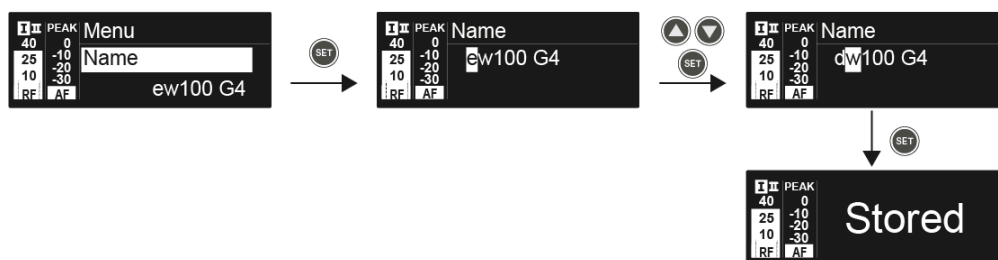


Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Name** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



AF Out menu item

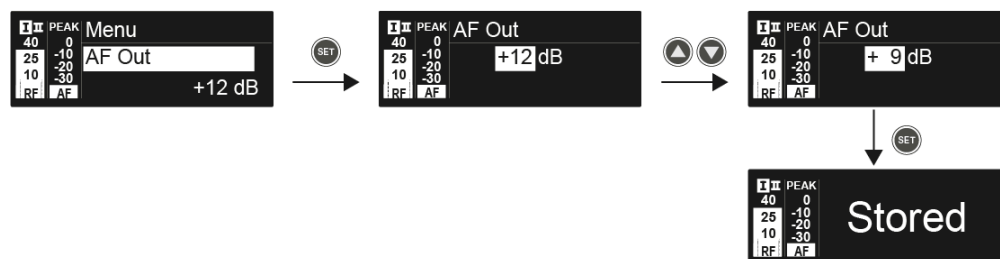
In the AF Out menu item, you can set the audio level that is output via the receiver audio outputs.

Setting range:

- -24 dB to +18 dB
- in 3 dB steps

To open the AF Out menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **AF Out** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



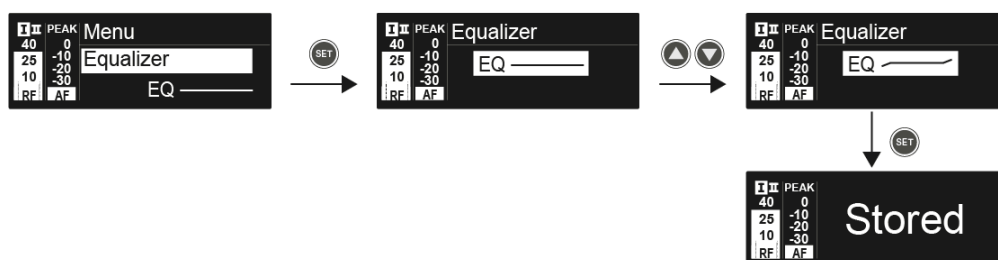
Equalizer menu item

In the Equalizer menu item, you can change the frequency response of the output signal.

You can reduce the bass range and boost the treble range.

To open the Equalizer menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Equalizer** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **UP** or **DOWN** buttons to configure the desired settings.
 - ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



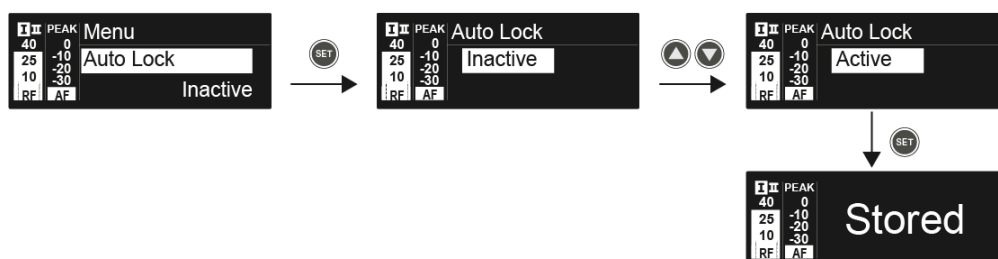
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

i You can find information about temporarily deactivating the lock-off function during operation under [Lock-off function](#).

To open the Auto Lock menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Auto Lock** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Advanced** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.

Adjusting the receiving frequencies for the U frequency bank

- See [Advanced -> Tune menu item](#)

Adjusting the guitar tuner options

- See [Advanced -> Guitar Tuner menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced -> Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced -> LCD Contrast menu item](#)

Resetting the receiver

- See [Advanced -> Reset menu item](#)

Displaying the current software revision

- See [Advanced -> Software Revision menu item](#)

Advanced -> Tune menu item

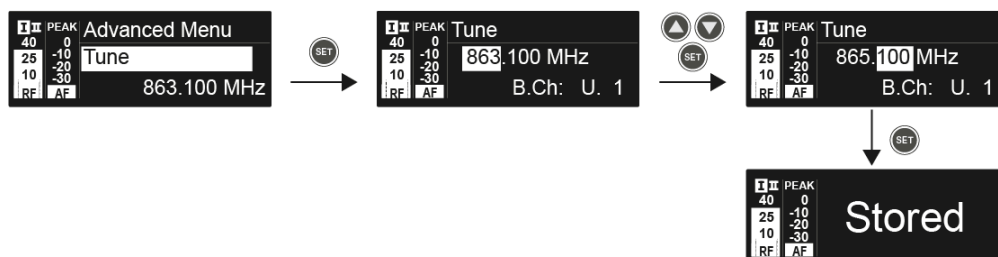
In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the U frequency bank.

You can save a total of 12 frequencies in the U frequency bank.



Only adjusting the frequency

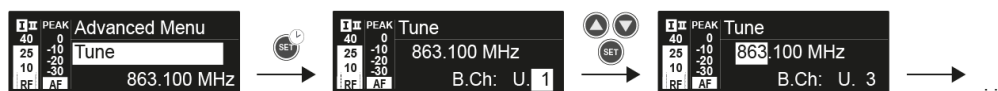
- ▶ Open the **Tune** menu item in the **Advanced** menu.
- ▶ Adjust the settings.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.

Setting the channel and frequency

- ▶ Select the **Tune** menu item and call it up by holding down the **SET** button until the channel selection appears.
- ▶ Adjust the settings.



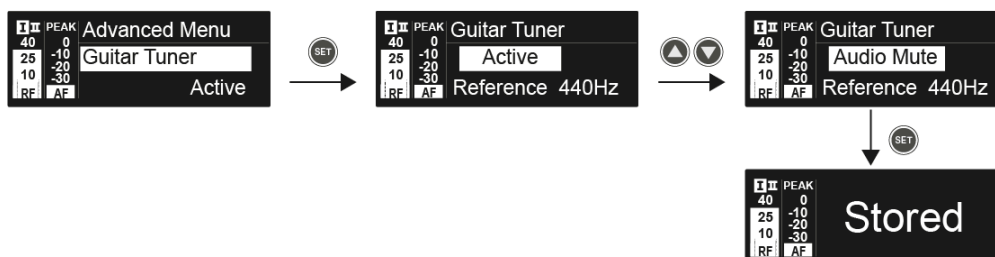
- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



Advanced -> Guitar Tuner menu item

In the Guitar Tuner menu item of the Advanced submenu, you can adjust the options of the guitar tuner.

The guitar tuner is opened in the Guitar Tuner standard display on the home screen. See [Guitar Tuner standard display](#).

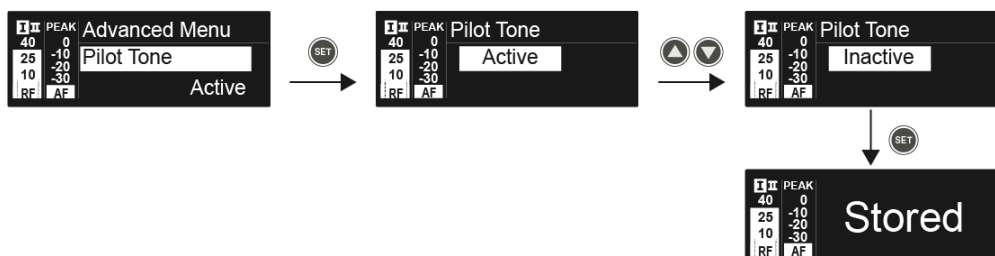


- **Inactive:** The guitar tuner is deactivated.
- **Active:** The guitar tuner is activated.
- **Audio Mute:** The guitar tuner is activated. Once the **Guitar Tuner** standard display is open on the home screen, the audio signal is muted.



Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.



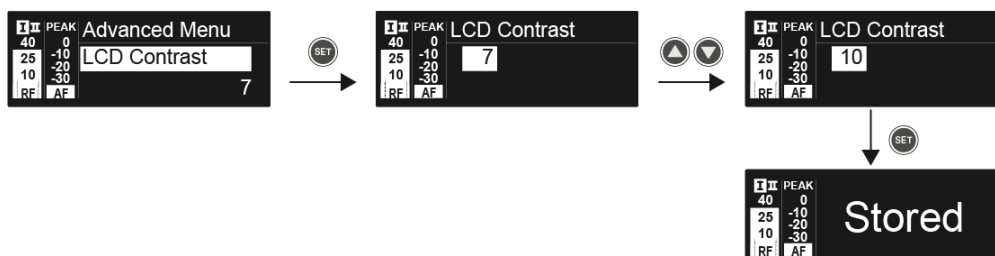
The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.

i For the best possible operational reliability, we recommend leaving the pilot tone activated.



Advanced -> LCD Contrast menu item

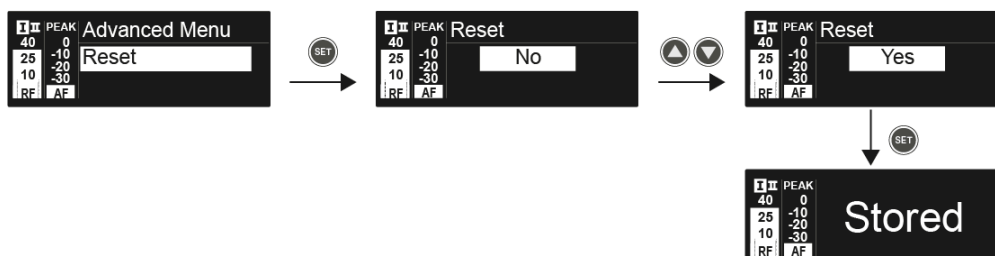
In the LCD Contrast menu item of the Advanced submenu, you can adjust the display contrast of the display panel.





Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset all of the settings of the receiver to the factory settings.





Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

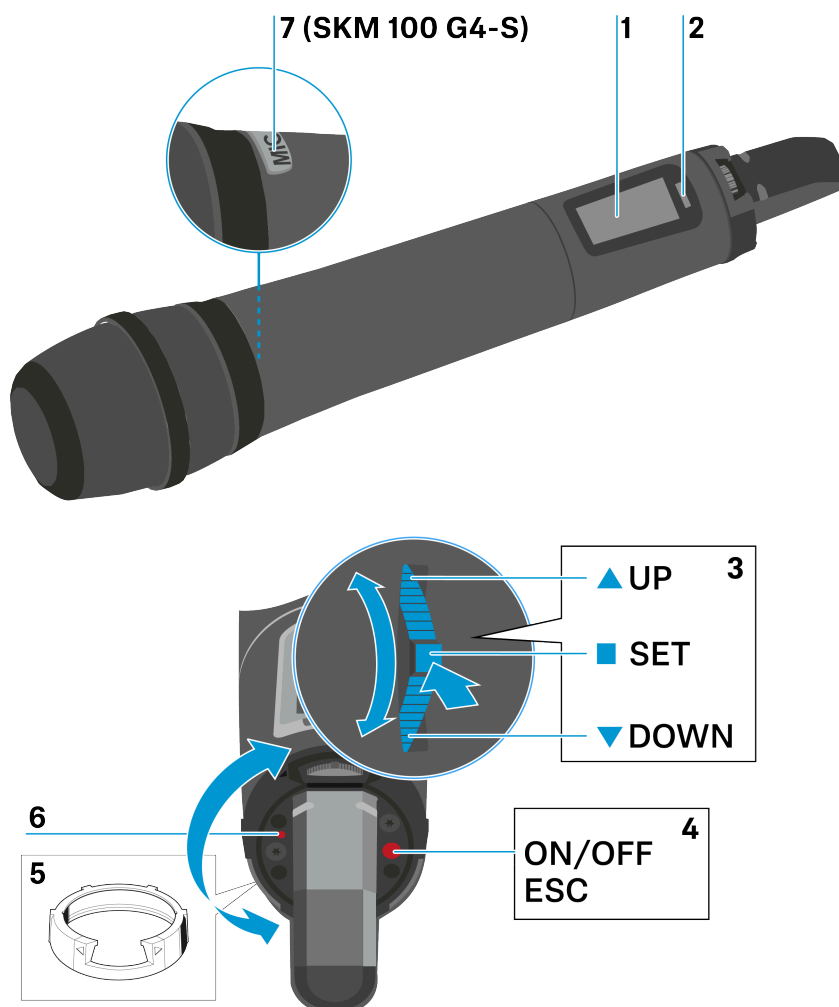


SKM 100 G4 | SKM 100 G4-S handheld transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Replacing the microphone module
- Changing the colored ring
- Switching the handheld transmitter on and off
- Muting the handheld transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the handheld transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > Mute Mode menu item (SKM 100 G4-S only)
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



1 Display panel

- see [Displays on the handheld transmitter display panel](#)

2 Infra-red interface

- see [Ew 100 G4 synchronizing](#)

3 DOWN, UP and SET multi-function switch

- see [Buttons for navigating the menu](#)

4 ON/OFF button with ESC function in the operating menu

- Switch the transmitter on or off, see [Switching the handheld transmitter on and off](#)
- Escape function in the menu, see [Buttons for navigating the menu](#)



5 Colored ring

- Available in different colors, see [KEN 2 Color labeling set](#) and [Changing the colored ring](#)
- Can be turned to protect the multi-function switch

6 Operation and battery indicator, red LED

- illuminated = ON, see [Switching the handheld transmitter on and off](#)
- flashing = LOW BATTERY, see [Inserting and removing the batteries/rechargeable batteries](#)

7 **MIC** button (only SKM 100 G4-S)

- see [Muting the handheld transmitter \(AF mute\)](#)
- see [Advanced > Mute Mode menu item \(SKM 100 G4-S only\)](#)



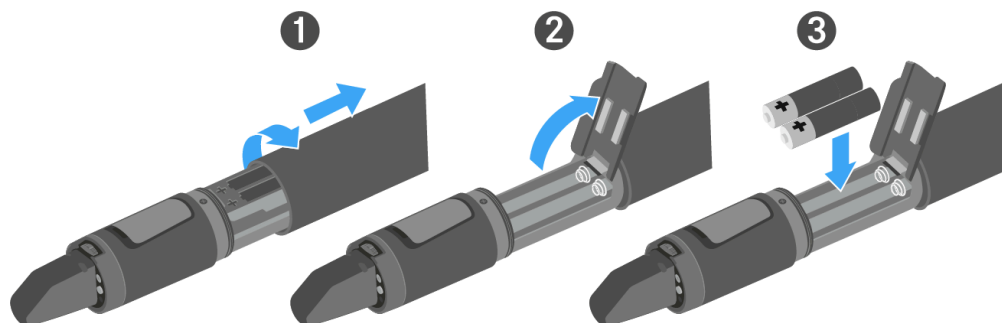
Inserting and removing the batteries/rechargeable batteries

You can operate the wireless microphone either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Screw the rear part of the wireless microphone in the direction of the arrow (counter-clockwise) off of the handle of the wireless microphone.

i When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

- ▶ Pull the rear part of the wireless microphone all the way out.
- ▶ Open the cover of the battery compartment.
- ▶ Place the batteries or the BA 2015 rechargeable battery in the battery compartment as shown on the cover. Please observe correct polarity when inserting the batteries/accupack.



- ▶ Close the cover.
- ▶ Push the battery compartment into the handle of the wireless microphone.
- ▶ Screw the rear part of the wireless microphone back onto the handle.








Related information

[Battery status](#)

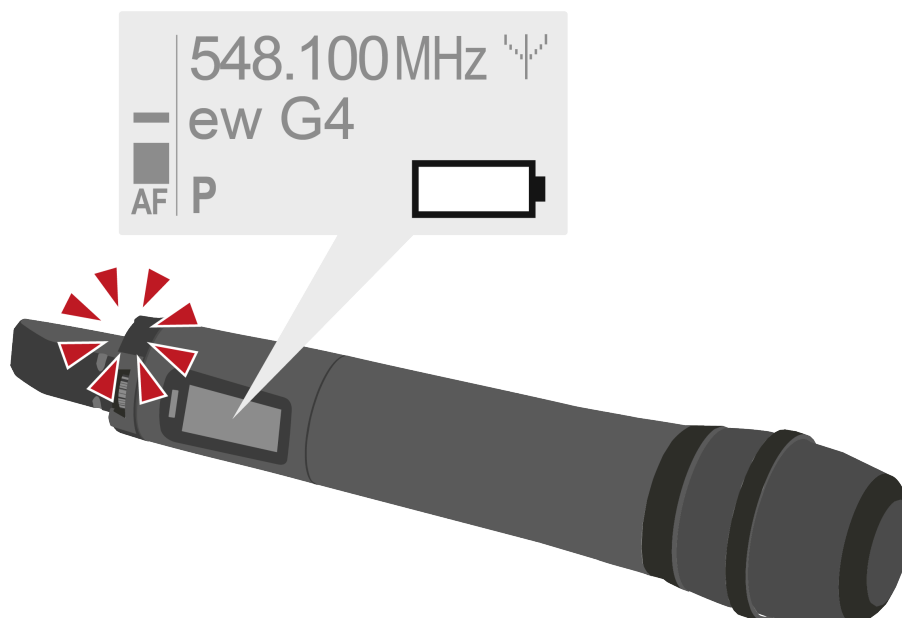


Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
<div>LOW BATT</div> <div>    ...</div>		

Charge status is critical (LOW BATT):





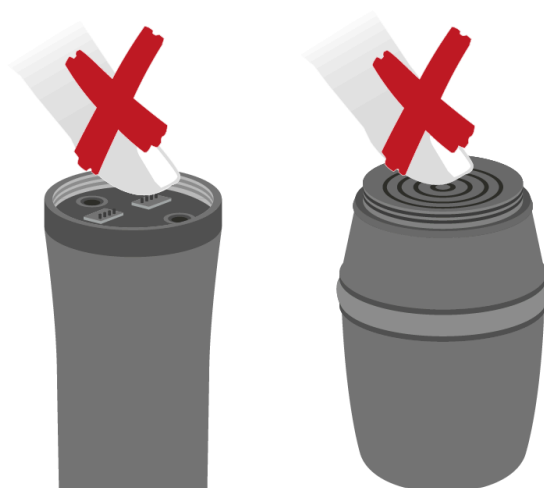
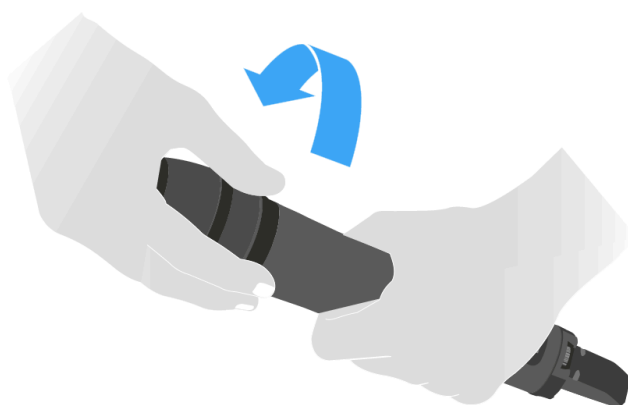
Replacing the microphone module

You can find a list of the recommended microphone modules for the handheld transmitter under [Microphones and cables](#).

- i** Do not touch the wireless microphone contacts or the microphone module contacts. If you touch the contacts, they may become dirty or bent.

To change the microphone module:

- ▶ Unscrew the microphone module.
- ▶ Screw the desired microphone module on.



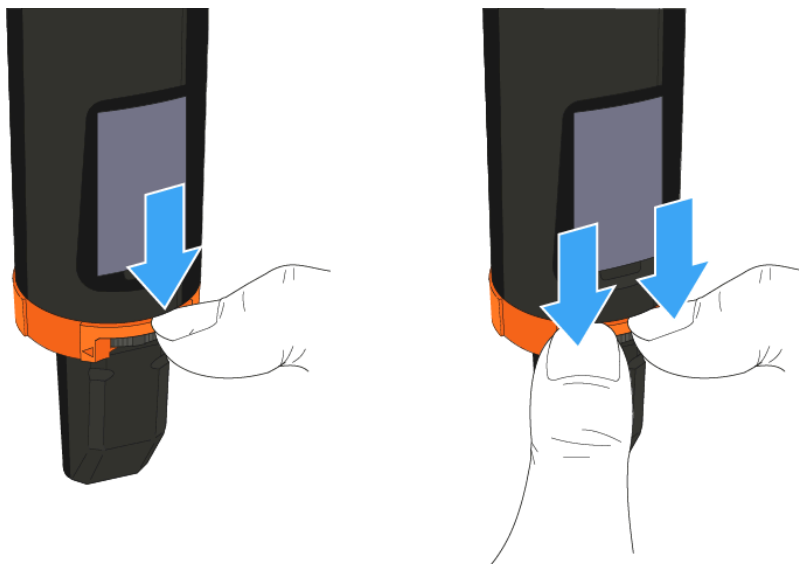
- i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.



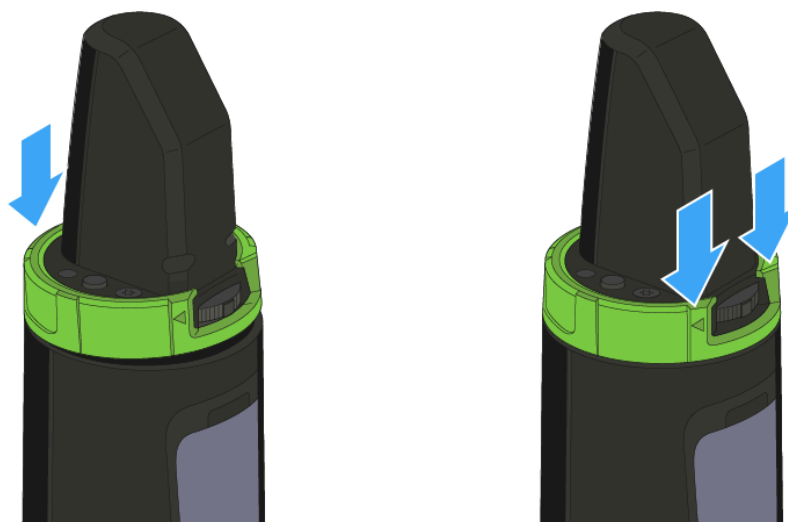
Changing the colored ring

To change the colored ring:

- ▶ Pull the colored ring off as shown in the diagram.



- ▶ Attached a colored ring in the color you want as shown in the diagram.

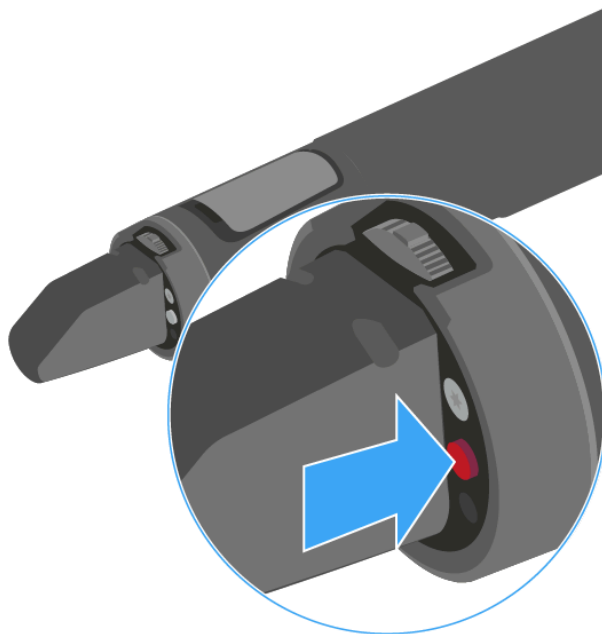




Switching the handheld transmitter on and off

To switch on the handheld transmitter:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the handheld transmitter:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the handheld transmitter (AF mute)

SKM 100 G4

The audio signal of the transmitter cannot be muted.

However, when you deactivate the RF signal no AF signal is output. See [Deactivating the RF signal \(RF mute\)](#).

SKM 100 G4-S

You can mute the audio signal by pressing the **MIC** button.

- The **MIC** button lights up red: the audio signal is activated
- The **MIC** button is not lit: the audio signal is muted





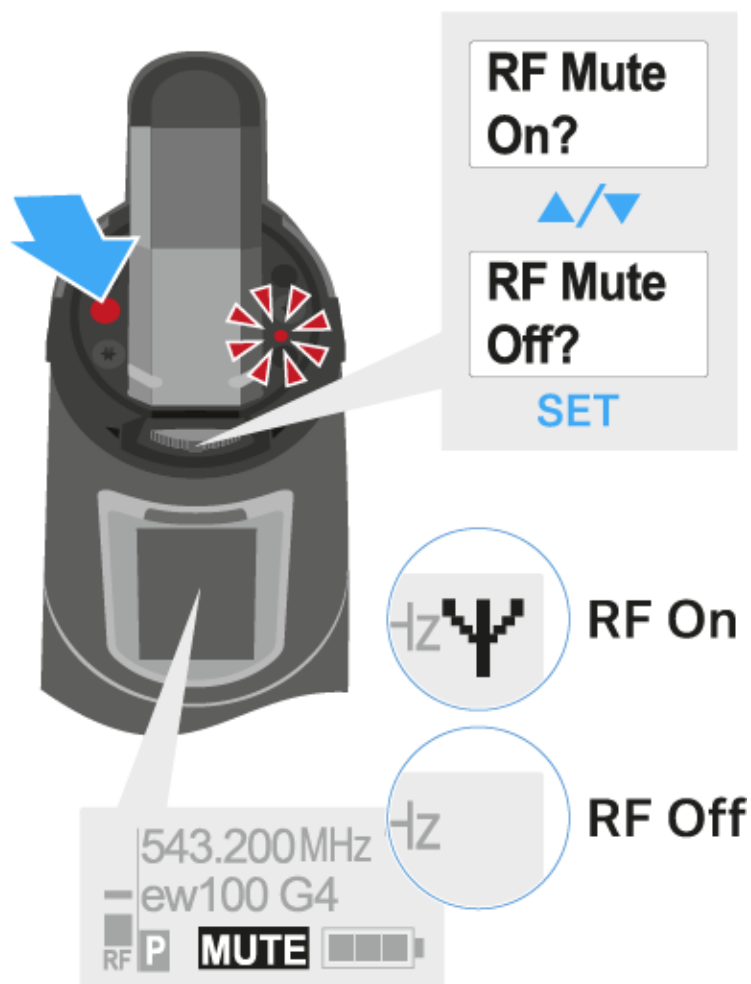
Deactivating the RF signal (RF mute)

You can temporarily deactivate the RF signal when the microphone is switched on. When the RF signal is deactivated, no audio signal is output.

Use this function to save battery or when you want to prepare a microphone for use during live broadcast without interfering with the current transmission path.

To deactivate the RF signal:

- ▶ Short-press the **ON/OFF** button.
 - ✓ *RF Mute On?* appears.
- ▶ Press the **SET** button.
 - ✓ The transmission frequency is displayed, however the wireless microphone is not transmitting an RF signal. The transmission icon is not lit (see [Displays on the handheld transmitter display panel](#)).





To activate the RF signal:

- ▶ Short-press the **ON/OFF** button.
 - ✓ *RF Mute Off?* appears.
- ▶ Press the **SET** button.
 - ✓ The transmission icon appears again (see [Displays on the handheld transmitter display panel](#)).



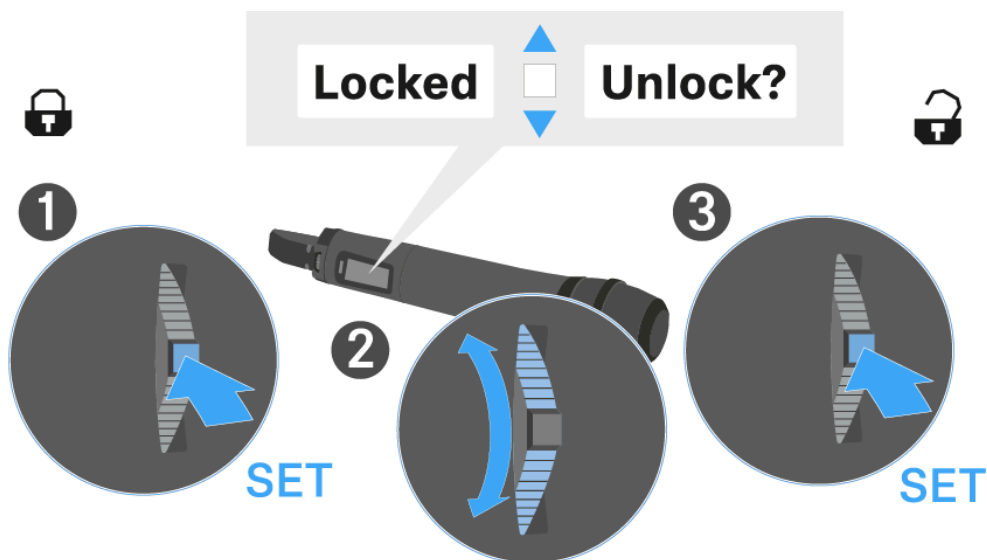
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

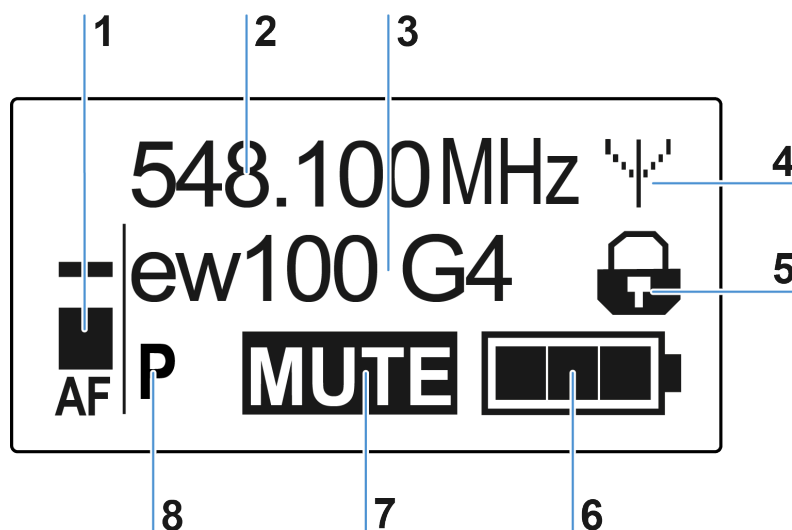
- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.





Displays on the handheld transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)

6 Battery status

- see [Battery status](#)



7 MUTE muting function

- The audio signal is muted
- see [Muting the handheld transmitter \(AF mute\)](#)
- see [Deactivating the RF signal \(RF mute\)](#)

8 P pilot tone

- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Move the multi-function switch to select a standard display:
Frequency/Name standard display

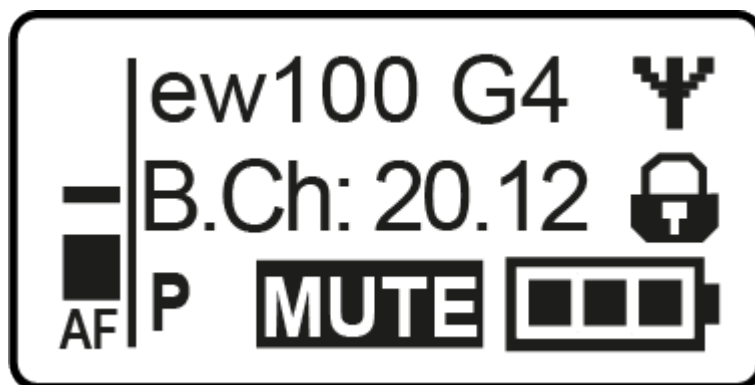




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the handheld transmitter display panel](#)



Setting options in the menu

In the SKM 100 G4 menu, you can configure the following settings.

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Defining the MIC button setting (SKM 100 G4-S only)
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -48 dB
- in 6 dB steps



The **AF** audio level is also displayed when the wireless microphone is muted, e.g. to check the sensitivity before a live broadcast.



Recommended presets:

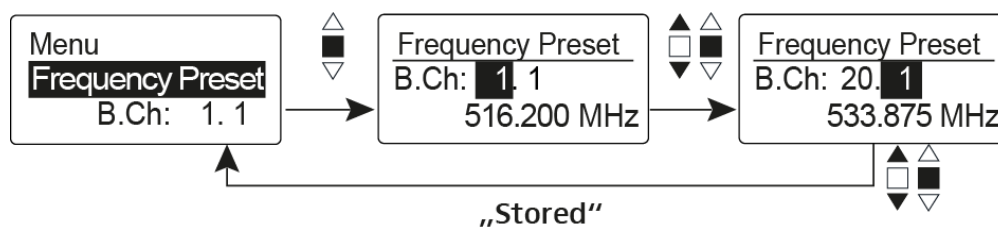
- Loud music/vocals: -48 to -18 dB
- Moderation: -18 to -12 dB
- Interviews: -12 to 0 dB



Frequency Preset menu item

Manually selecting a frequency bank and channel

i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The wireless microphone and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).

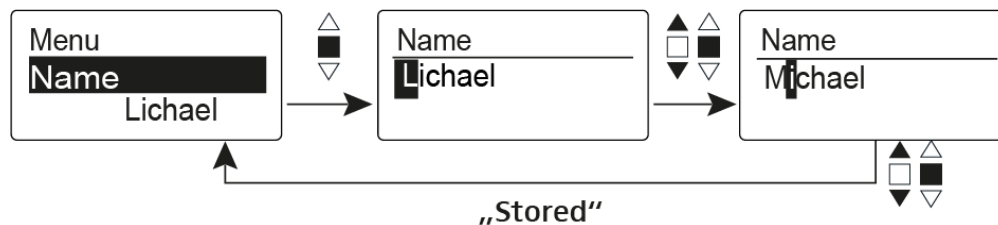


Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the wireless microphone (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



The names are a maximum of 8 characters:

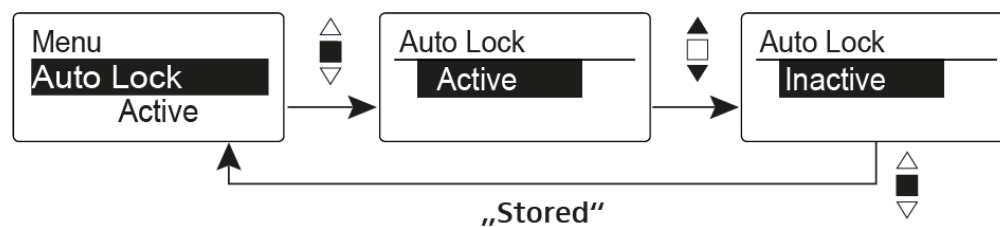
- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Defining the MIC button setting (SKM 100 G4-S only)

- See [Advanced > Mute Mode menu item \(SKM 100 G4-S only\)](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the wireless microphone to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

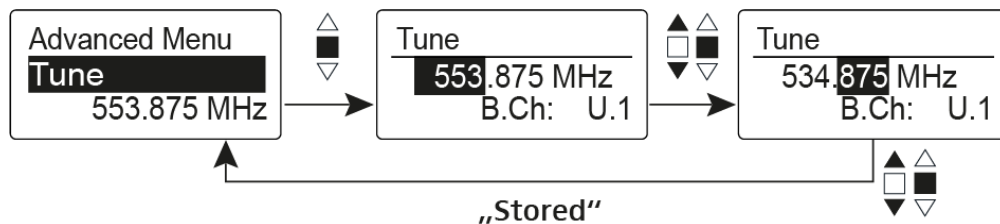
You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).



To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

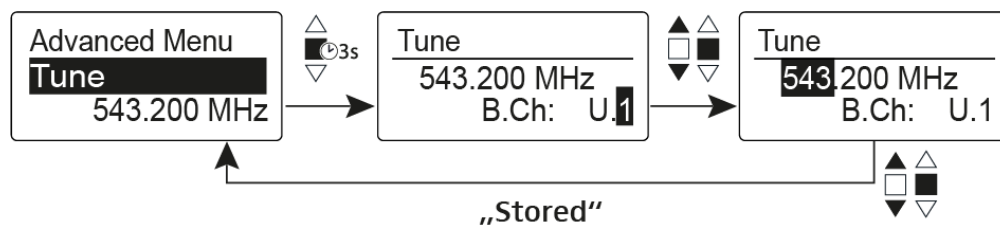
✓ The frequency selection appears.



- ▶ Configure the desired frequency.
- ▶ Press the multi-function switch.
- ✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Move the multi-function switch until the **Tune** menu item appears.
- ▶ Hold down the multi-function switch until the frequency bank selection appears.

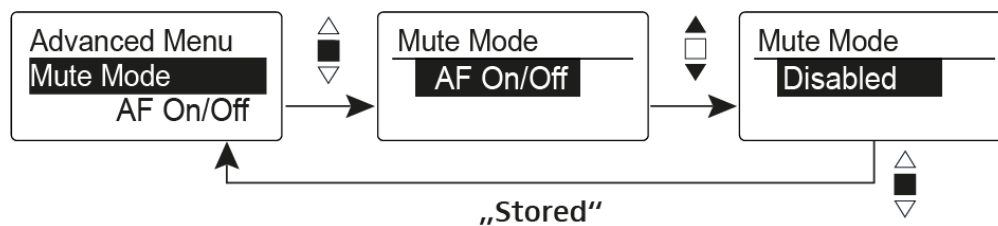


- ▶ Set the desired channel.
- ▶ Press the multi-function switch.
- ✓ The frequency selection appears.
- ▶ Configure the frequency.



Advanced > Mute Mode menu item (SKM 100 G4-S only)

Configuring the function of the MIC button



AF On/Off mode

- When you press the **MIC** button, no audio signal is transmitted.

Disabled mode

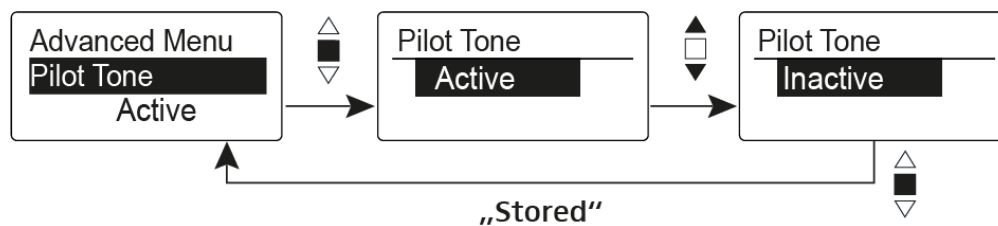
- No function

i You can find information about the **MIC** button under [Muting the handheld transmitter \(AF mute\)](#).



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

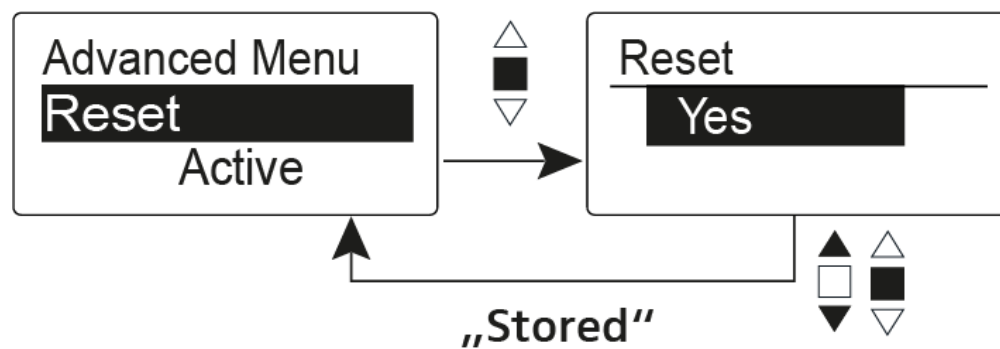
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the wireless microphone



When you reset the wireless microphone, only the selected settings of the pilot tone and the **U** frequency bank are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

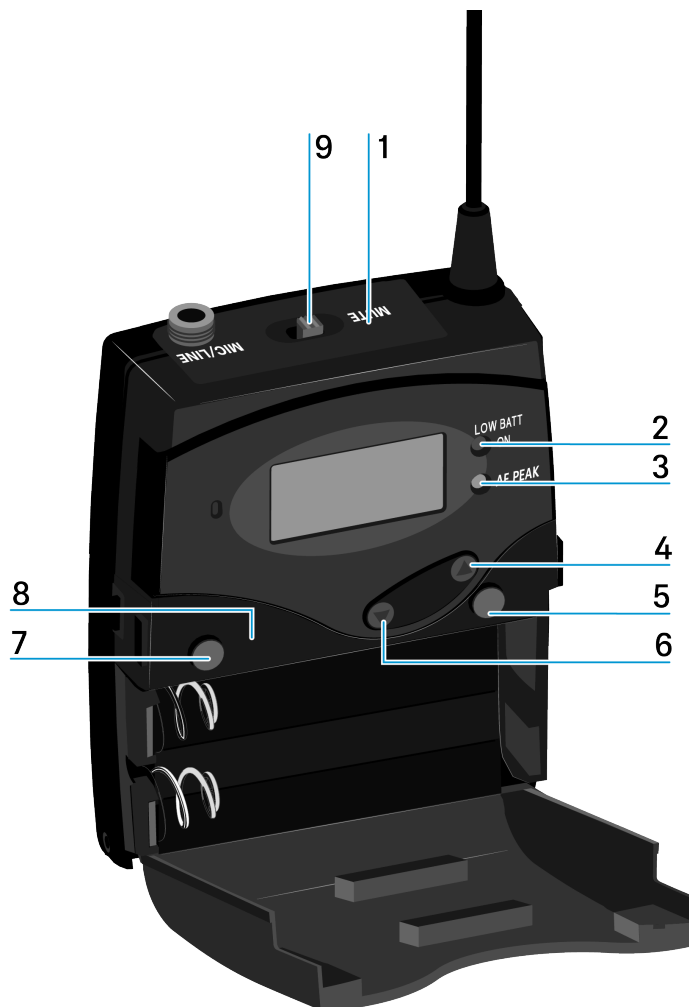


SK 100 G4 bodypack transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Connecting a microphone to the bodypack transmitter
- Connecting an instrument or line source to the bodypack transmitter
- Attaching the bodypack transmitter to clothing
- Switching the bodypack transmitter on and off
- Muting the bodypack transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the bodypack transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > Mute Mode menu item
- Advanced > Cable Emulation menu item
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



1 Display panel

- see [Displays on the bodypack transmitter display panel](#)

2 Operation and battery indicator, red LED

- illuminated = ON, see [Switching the bodypack transmitter on and off](#)
- flashing = LOW BATTERY, see [Inserting and removing the batteries/rechargeable batteries](#)

3 Audio overload indicator, yellow LED

- illuminated = AF PEAK (overload), see [Sensitivity menu item](#)

4 UP button

- see [Buttons for navigating the menu](#)



5 SET button

- see [Buttons for navigating the menu](#)

6 DOWN button

- see [Buttons for navigating the menu](#)

7 ON/OFF button with ESC function in the operating menu

- Switch the transmitter on or off, see [Switching the bodypack transmitter on and off](#)
- Escape function in the menu, see [Buttons for navigating the menu](#)

8 Infra-red interface

- see [Ew 100 G4 synchronizing](#)

9 MUTE switch

- Deactivate and activate audio signal, see [Muting the bodypack transmitter \(AF mute\)](#)
- Deactivate and activate RF signal, see [Deactivating the RF signal \(RF mute\)](#)



Inserting and removing the batteries/rechargeable batteries

You can operate the bodypack transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Press the two catches and open the battery compartment cover.
- ▶ Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.






- ▶ Close the battery compartment.
 - ✓ The cover locks into place with an audible click.

Related information

[Battery status](#)

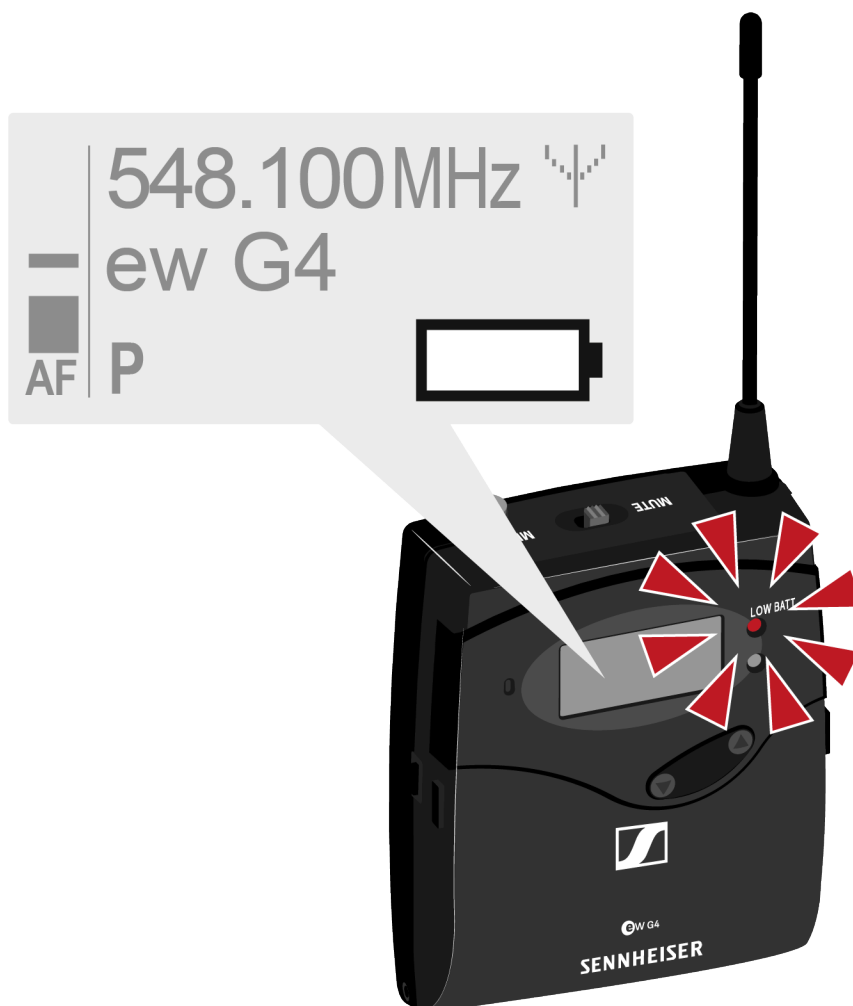
Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
LOW BATT    ...		



Charge status is critical (LOW BATT):





Connecting a microphone to the bodypack transmitter

You can find a list of recommended Lavalier and headset microphones for the bodypack transmitter under [Microphones and cables](#).

To connect a microphone to the bodypack transmitter:

- ▶ Insert the cable's 3.5 mm jack plug into the **MIC/LINE** socket on the bodypack transmitter as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.





Connecting an instrument or line source to the bodypack transmitter

You can connect instruments or audio sources with a line level to the bodypack transmitter.

To do this, you will need the Ci 1-N (6.3 mm jack plug on a lockable 3.5 mm jack plug) or CL 2 (XLR-3F plug on lockable 3.5 mm jack plug) Sennheiser cables.

To connect an instrument or line source to bodypack transmitter:

- ▶ Insert the cable's 3.5 mm jack plug into the MIC/LINE socket on the bodypack transmitter as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.





Attaching the bodypack transmitter to clothing

You can use the belt clip to attach the bodypack transmitter to your waistband or on a guitar strap.

The belt clip is detachable so that you can also attach the bodypack transmitter with the antenna pointing downwards. To do so, withdraw the belt clip from its fixing points and attach it the other way round.

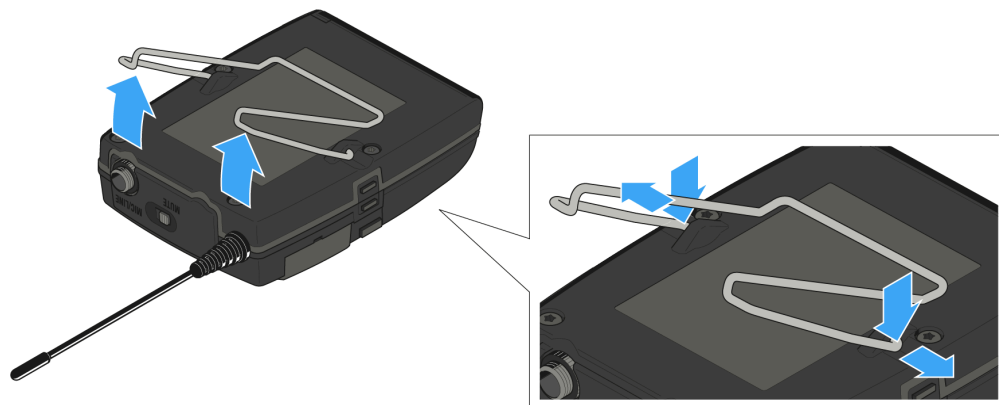
The belt clip is secured so that it cannot slide out of its fixing points accidentally.





To detach the belt clip:

- ▶ Lift the belt clip as shown in the diagram.
- ▶ Press one side of the clip downward on the fixing hole and pull it out of the transmitter housing.
- ▶ Do the same thing on the other side.



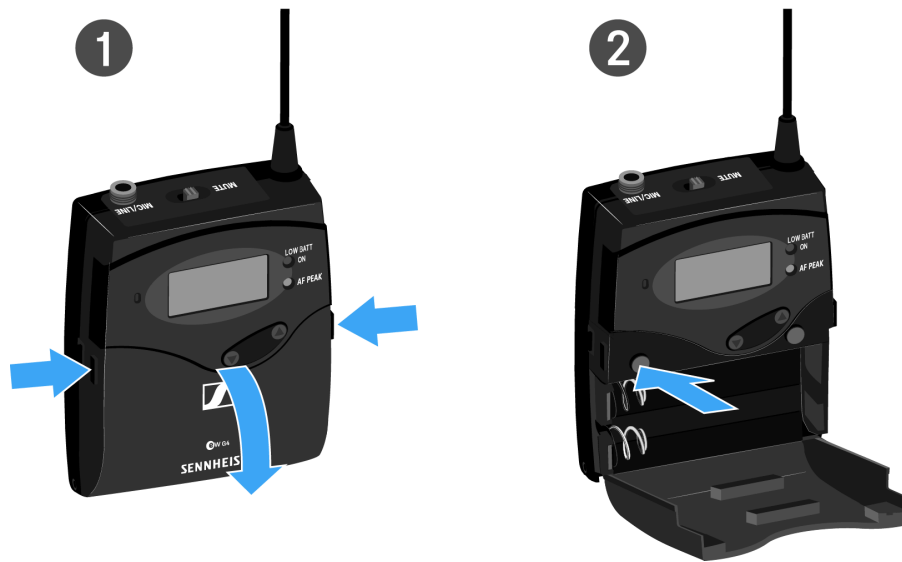


Switching the bodypack transmitter on and off

- ▶ Press the two catches and open the battery compartment cover.

To switch on the SK 100 G4:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the SK 100 G4:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the bodypack transmitter (AF mute)

You can deactivate the audio signal with the **MUTE** switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.
 - ✓ The audio signal is muted. The message **MUTE** is shown on the display.



Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:



Deactivating the RF signal with the MUTE switch

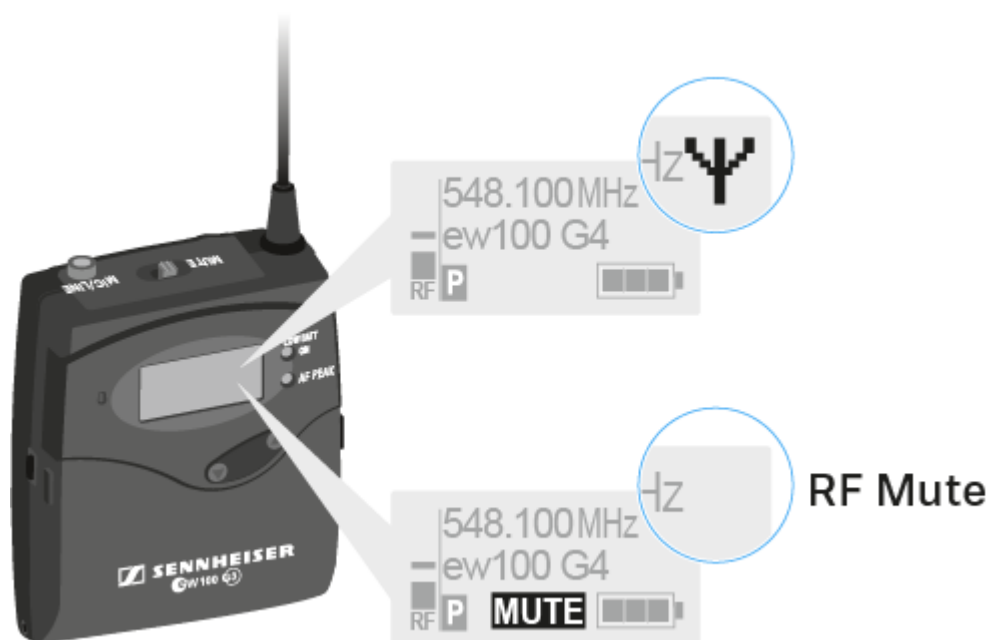
- i** To do this, the **MUTE** switch function must be configured to **RF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.



- ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.

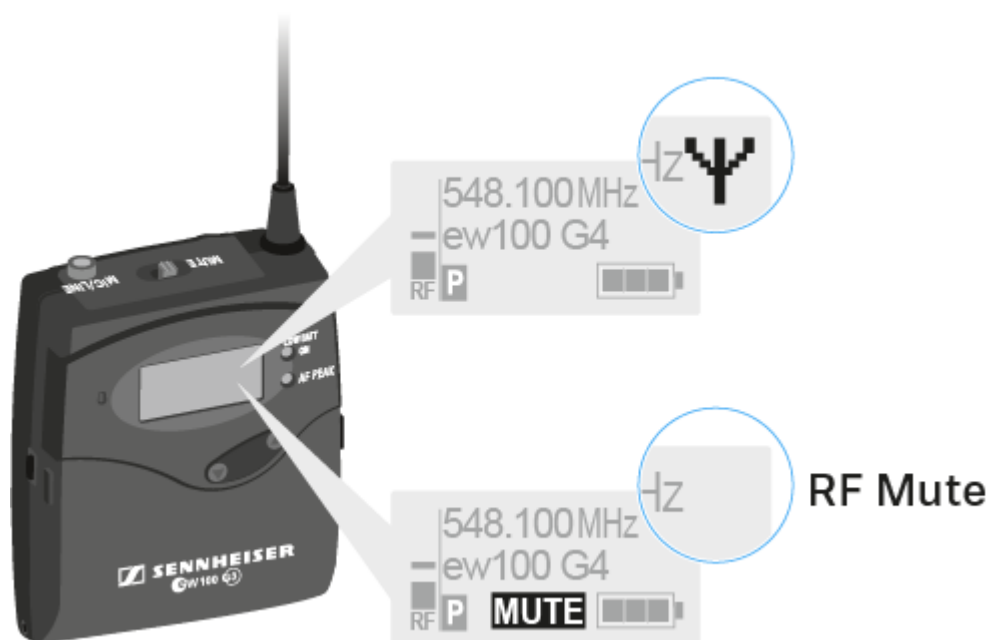


Deactivating the RF signal with the ON/OFF button

- ▶ Short-press the **ON/OFF** button.
 - ✓ **RF Mute On?** appears.
- ▶ Press the **SET** button.



- ✓ The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



- ▶ Short-press the **ON/OFF** button.
 - ✓ *RF Mute Off?* appears.
- ▶ Press the **SET** button.
 - ✓ The transmission icon appears again.



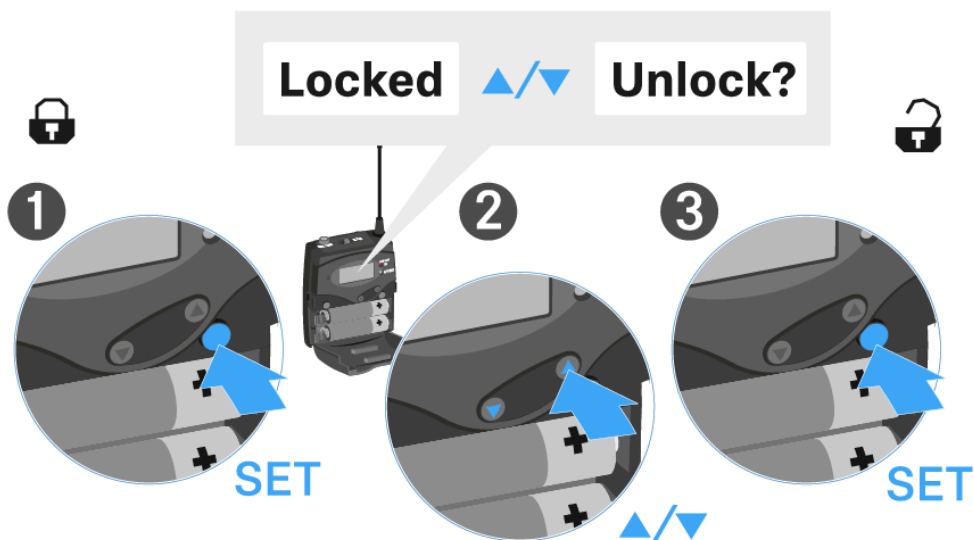
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

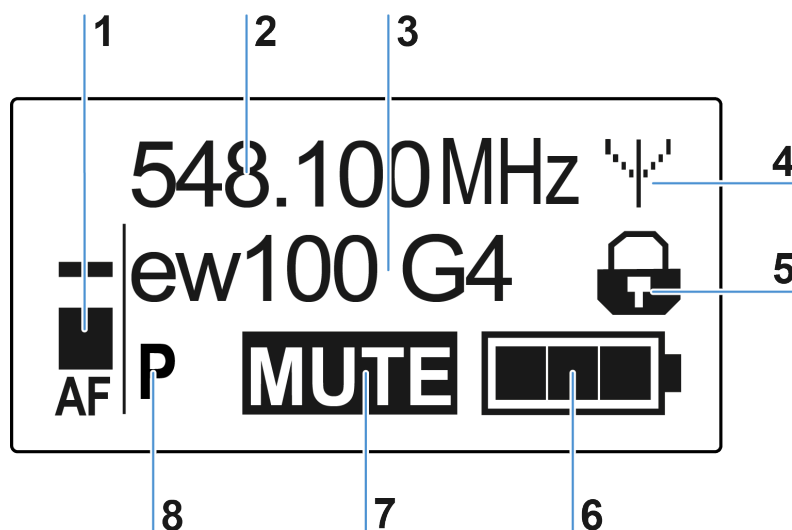
- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.





Displays on the bodypack transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)

6 Battery status

- see [Battery status](#)



7 MUTE muting function

- The audio signal is muted
- see [Muting the bodypack transmitter \(AF mute\)](#)
- see [Deactivating the RF signal \(RF mute\)](#)

8 P pilot tone

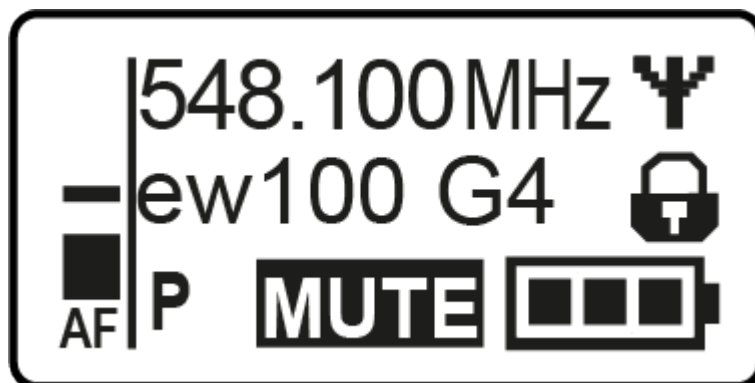
- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display

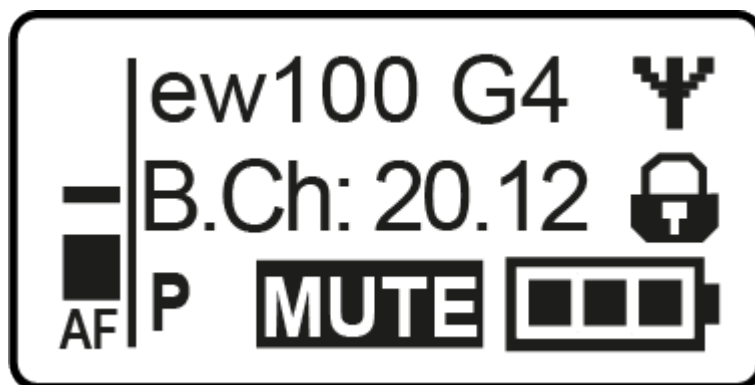




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu/a menu item:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the bodypack transmitter display panel](#)



Setting options in the menu

In the SK 100 G4 menu, you can configure the following settings.

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Configuring the guitar cable emulation
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -60 dB
- in 6 dB steps.



The AF audio level is also displayed when the bodypack transmitter is muted, e.g. to check the sensitivity before a live broadcast.



Recommended presets:

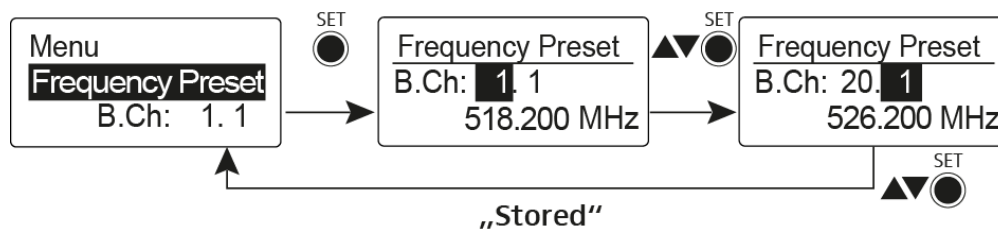
- Loud music/vocals: -30 to -21 dB
- Moderation: -21 to 0 dB
- Electric guitar with single-coil pickups: -30 to -24 dB
- Electric guitar with Humbucker pickups: -45 to -30 dB
- Electric guitars with active electronics: -45 to -30 dB



Frequency Preset menu item

Manually selecting a frequency bank and channel

i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).

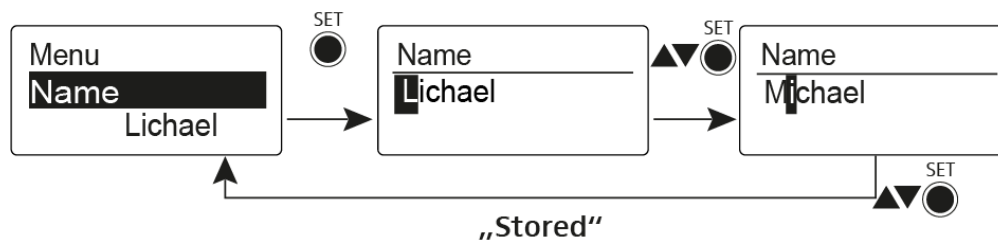


Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



The names are a maximum of 8 characters:

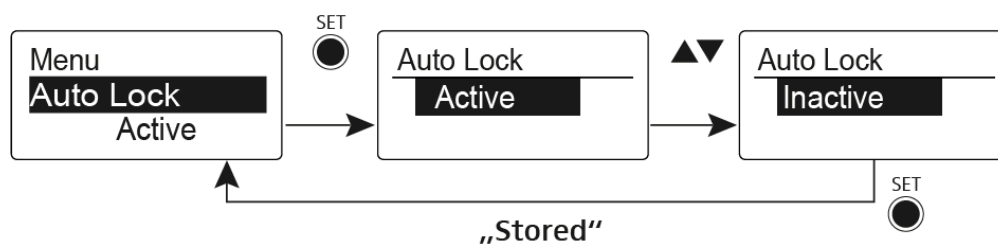
- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Configuring the MUTE switch

- See [Advanced > Mute Mode menu item](#)

Configuring the guitar cable emulation

- See [Advanced > Cable Emulation menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

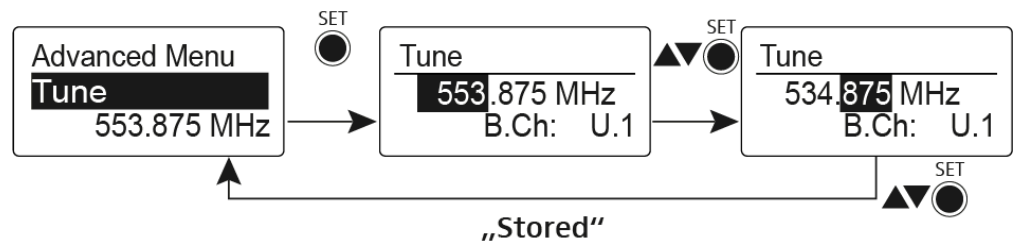
While you work in the **Tune** menu, the RF signal is deactivated.



You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).

To configure the transmission frequency for the current channel:

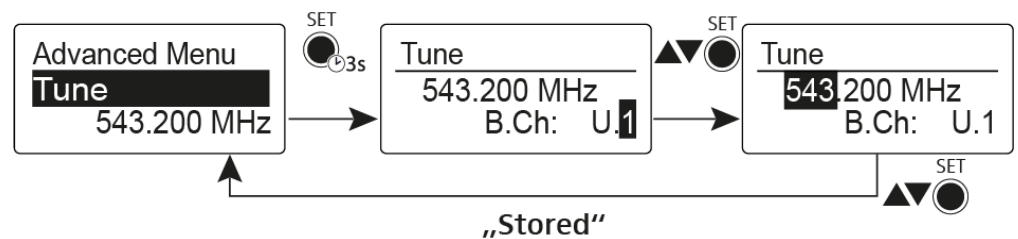
- ▶ Open the **Tune** menu item in the **Advanced** menu.
 - ✓ The frequency selection appears.



- ▶ Configure the desired frequency.
- ▶ Press the **SET** button.
 - ✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.

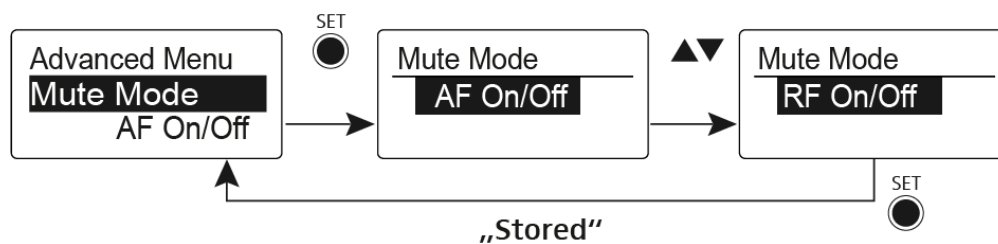


- ▶ Set the desired channel.
- ▶ Press the **SET** button.
 - ✓ The frequency selection appears.
- ▶ Configure the frequency.



Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to position MUTE, the RF signal is deactivated

Disabled mode

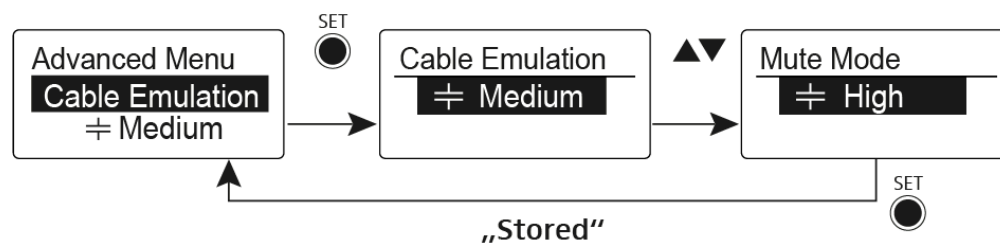
- No function

i You can find information about operating the mute switch under [Muting the bodypack transmitter \(AF mute\)](#) and [Deactivating the RF signal \(RF mute\)](#).



Advanced > Cable Emulation menu item

Emulating a guitar cable

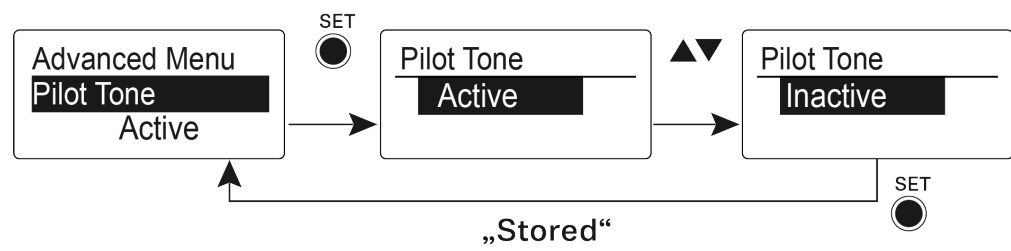


Using this menu item you can emulate the capacitances of your guitar cables and influence the sound of your guitar.



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

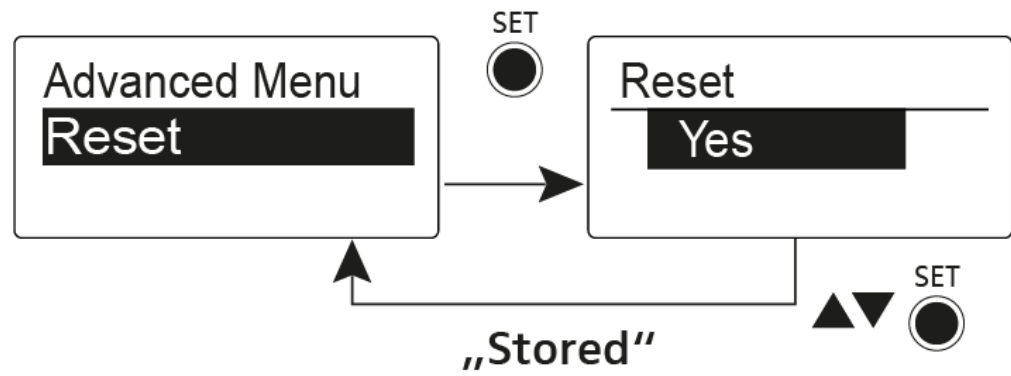
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the bodypack transmitter



When you reset the bodypack transmitter, only the selected settings of the pilot tone and the **U** frequency bank are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.



EM 300-500 G4 rack receiver

[Product overview](#)
[Connecting/disconnecting the rack receiver to/from the power supply system](#)
[Connecting antennas](#)
[Outputting audio signals](#)
[Creating a data network](#)
[Installing the rack receiver in a rack](#)
[Switching the rack receiver on and off](#)
[Muting the audio output](#)
[Using the headphone output](#)
[Lock-off function](#)
[Buttons for navigating through the menu](#)
[Displays on the rack receiver display panel](#)
[Home Screen](#)
[Receiver Parameters standard display](#)
[Transmitter Parameters standard display](#)
[Soundcheck standard display](#)
[Menüstruktur](#)
[Setting options in the menu](#)
[Squelch menu item](#)
[Easy Setup menu item](#)
[Scan New List](#)
[Current List](#)
[Reset](#)
[Performing multi-channel frequency setup](#)
[Frequency Preset menu item](#)
[Name menu item](#)
[AF Out menu item](#)
[Equalizer menu item](#)
[Auto Lock menu item](#)
[Advanced menu item](#)
[Advanced -> Tune menu item](#)
[Advanced -> Sync Settings menu item](#)
[Advanced -> Pilot Tone menu item](#)
[Advanced -> Fullscreen Warnings menu item](#)
[Advanced -> Brightness menu item](#)
[Advanced -> Reset menu item](#)
[Advanced -> IP Address menu item](#)
[Advanced -> Software Revision menu item](#)



Product overview

Front



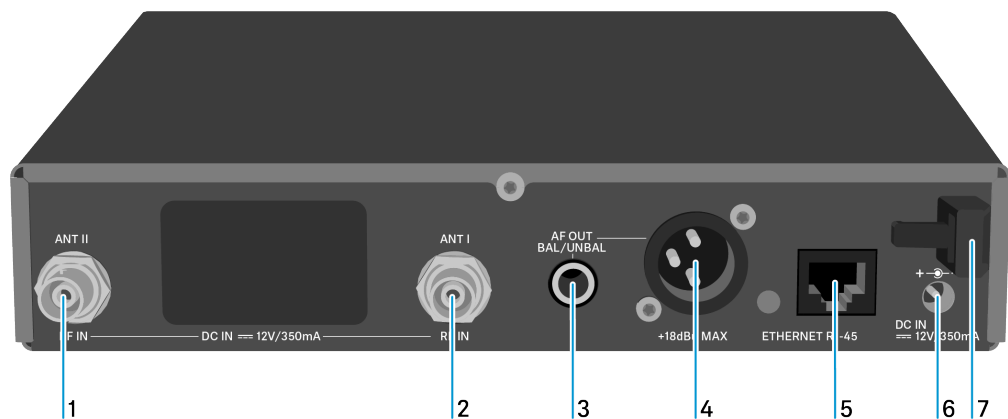
- 1 Headphone socket
 - see [Using the headphone output](#)
- 2 Volume control for the headphone socket
 - see [Using the headphone output](#)
- 3 Infrared interface with a blue LED
 - see [Ew 300-500 G4 synchronizing](#)
- 4 Red LED for warnings
 - see [Advanced -> Fullscreen Warnings menu item](#)
- 5 Display panel
 - see [Displays on the rack receiver display panel](#)
- 6 Jog-Dial for navigating through the menu
 - see [Buttons for navigating through the menu](#)
- 7 SYNC button
 - see [Ew 300-500 G4 synchronizing](#)
- 8 ESC button
 - see [Buttons for navigating through the menu](#)



9 STANDBY button

- see [Switching the rack receiver on and off](#)

Back



- 1 BNC socket, antenna input II (**ANT II**) with remote power supply unit
 - see [Connecting antennas](#)
- 2 BNC socket, antenna input I (**ANT I**) with remote power supply unit
 - see [Connecting antennas](#)
- 3 6.3 mm jack socket for audio output, unbalanced (**AF OUT UNBAL**)
 - see [Outputting audio signals](#)
- 4 XLR-3 socket for audio output, balanced (**AF OUT BAL**)
 - see [Outputting audio signals](#)
- 5 LAN connection socket (ETHERNET **RJ 45**)
 - see [Creating a data network](#)
- 6 Connecting cables for the power supply unit (**DC IN**)
 - see [Connecting/disconnecting the rack receiver to/from the power supply system](#)
- 7 Strain relief for the cable of the power supply unit
 - see [Connecting/disconnecting the rack receiver to/from the power supply system](#)

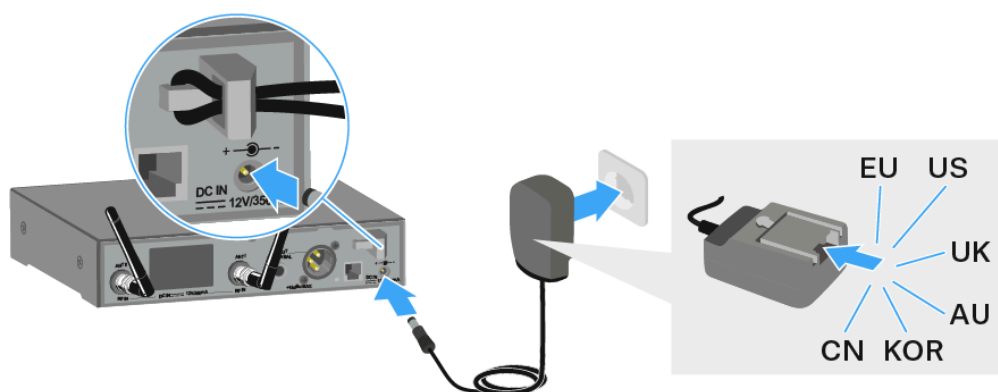


Connecting/disconnecting the rack receiver to/from the power supply system

Only use the supplied power supply unit. It is designed for your receiver and ensures safe operation.

To connect the rack receiver to the power supply system:

- ▶ Insert the plug of the power supply unit into the **DC IN** socket of the receiver.
- ▶ Pass the cable of the power supply unit through the cable grip.
- ▶ Slide the supplied country adapter onto the power supply unit.



- ▶ Plug the power supply unit into the wall socket.

To completely disconnect the rack receiver from the power supply system:

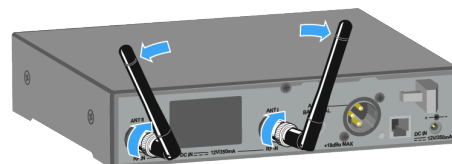
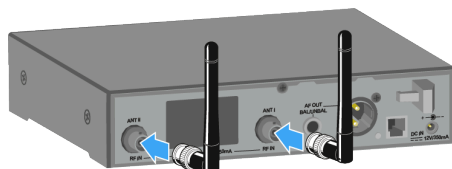
- ▶ Unplug the power supply unit from the wall socket.
- ▶ Unplug the power supply unit from the **DC IN** socket of the receiver.



Connecting antennas

To connect the supplied rod antennas:

- ▶ Connect the first rod antenna to the **ANT I** socket on the rear side of the EM 300-500 G4.
- ▶ Connect the second rod antenna to the **ANT II** socket on the rear side of the EM 300-500 G4.
- ▶ Gently angle the rod antennas to the left and right as shown in the figure.



- i** If you are using more than one receiver, we recommend using remote antennas and, as needed, Sennheiser antenna accessories. For more information, visit the ew G4 product page at sennheiser.com/g4-business.



Outputting audio signals

The EM 300-500 G4 has a balanced XLR-3M output socket and an unbalanced 6.3 mm jack output socket.

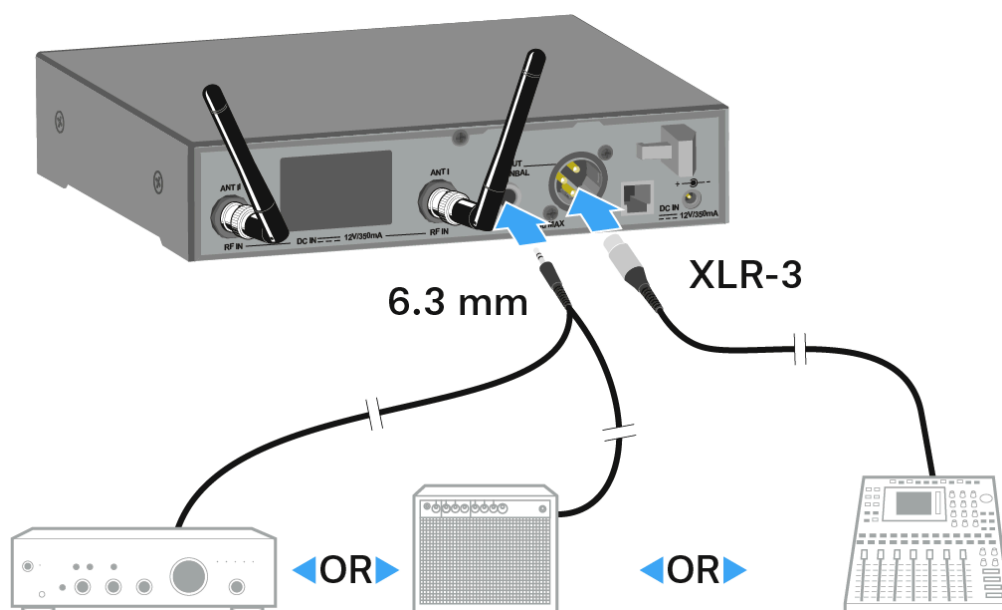
- ▶ Always use only one of the two **AF OUT** output sockets for each channel.

To connect an XLR cable:

- ▶ Plug the XLR cable into the **AF OUT BAL** socket of the EM 300-500 G4.

To connect a jack cable:

- ▶ Plug the jack cable into the **AF OUT UNBAL** socket of the EM 300-500 G4.





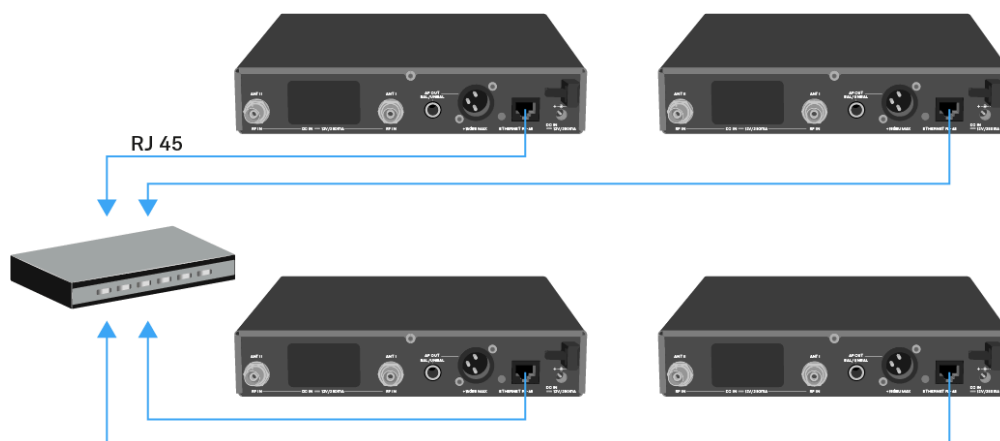
Creating a data network

You can monitor and control one or more EM 300-500 G4s via a network connection using Sennheiser **Wireless Systems Manager** (WSM) software.

- i** Automatic frequency setup can also be performed over the network without the WSM software. See [Easy Setup menu item](#).

To connect the EM 300-500 G4 to a network:

- ▶ Connect a network cable with an RJ-45 connector (to the **Ethernet** socket on the rear side of the EM 300-500 G4.
- ▶ Connect the other end of the network cable to a network switch.



- i** For more information about controlling devices via the Sennheiser **Wireless Systems Manager** (WSM) software, refer to the instruction manual for the software. You can download the software here: sennheiser.com/wsm.



Installing the rack receiver in a rack

To mount the receiver in a rack, you will need the [GA 3 rack mount kit](#) (optional accessory).

NOTICE



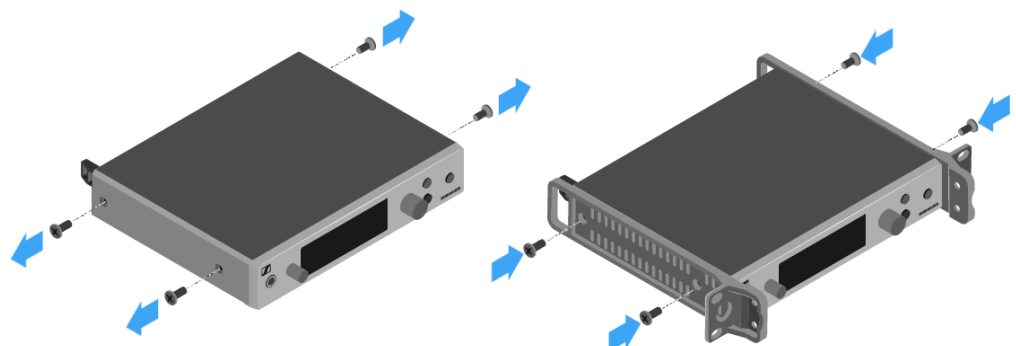
Rack mounting poses risks

When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- ▶ Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the specifications. See [Specifications](#).
- ▶ Ensure sufficient ventilation; if necessary, provide additional ventilation.
- ▶ Make sure that the mechanical loading of the rack is even.
- ▶ When connecting to the power supply system, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- ▶ When rack mounting, please note that intrinsically harmless leakage currents of the individual power supply units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

Mounting a single receiver in a rack

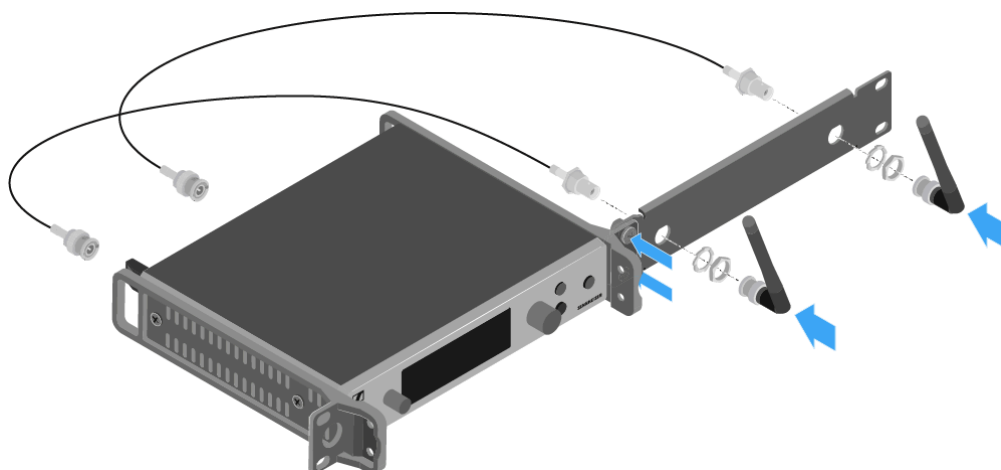
- ▶ Unscrew and remove the two recessed head screws (M4x8) on each side of the receiver.
- ▶ Secure both of the the mounting angles to the sides of the receiver using the previously removed recessed head screws.



- ▶ Secure the blanking plate to one of the mounting angles using two recessed head screws (M6x10).



- ▶ Attach the [AM 2 antenna front mounting kit](#) (optional accessory) and mount the rod antennas on the blanking plate.



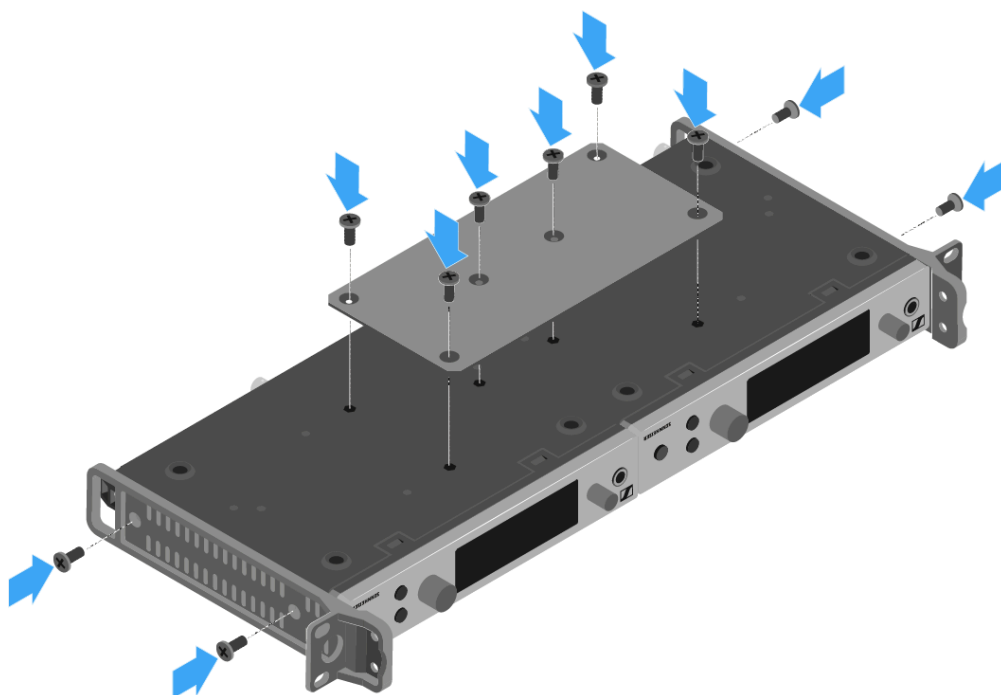
- ▶ Slide the receiver with the mounted blanking plate into the 19" rack.
- ▶ Secure the mounting angle and the blanking plate to the 19" rack.
- ▶ Align the mounted antennas in a V-shape.



Mounting two receivers side by side in a rack

i When you mount two receivers side by side, it is only possible to front mount antennas when you use the [ASA 214 antenna splitter](#) in combination with the [AM 2 antenna front mounting kit](#) and an additional [GA 3 rack mount kit](#).

- ▶ Place both receivers upside down and side by side on an even surface.
- ▶ Secure the jointing plate to the transmitters using the six recessed head screws (M3x6).
- ▶ Secure the mounting angle.

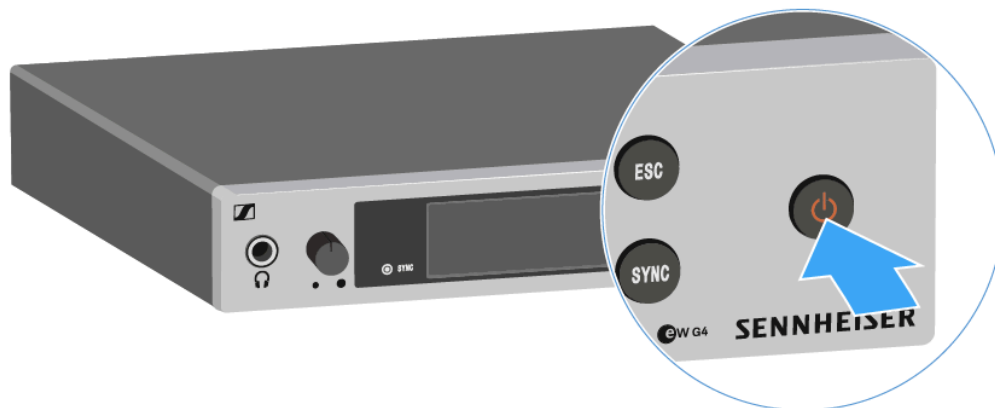




Switching the rack receiver on and off

To switch the receiver on:

- ▶ Short-press the **STANDBY** button.



- ✓ The receiver switches on and the Receiver Parameters standard display appears.

To switch the receiver to standby mode:

- ▶ If necessary, deactivate the lock-off function (see [Lock-off function](#)).
- ▶ Press and hold the **STANDBY** button until OFF appears on the display panel.
- ✓ The display panel switches off.

To switch the receiver off completely:

- ▶ Disconnect the receiver from the power supply system by unplugging the power supply unit from the wall socket.



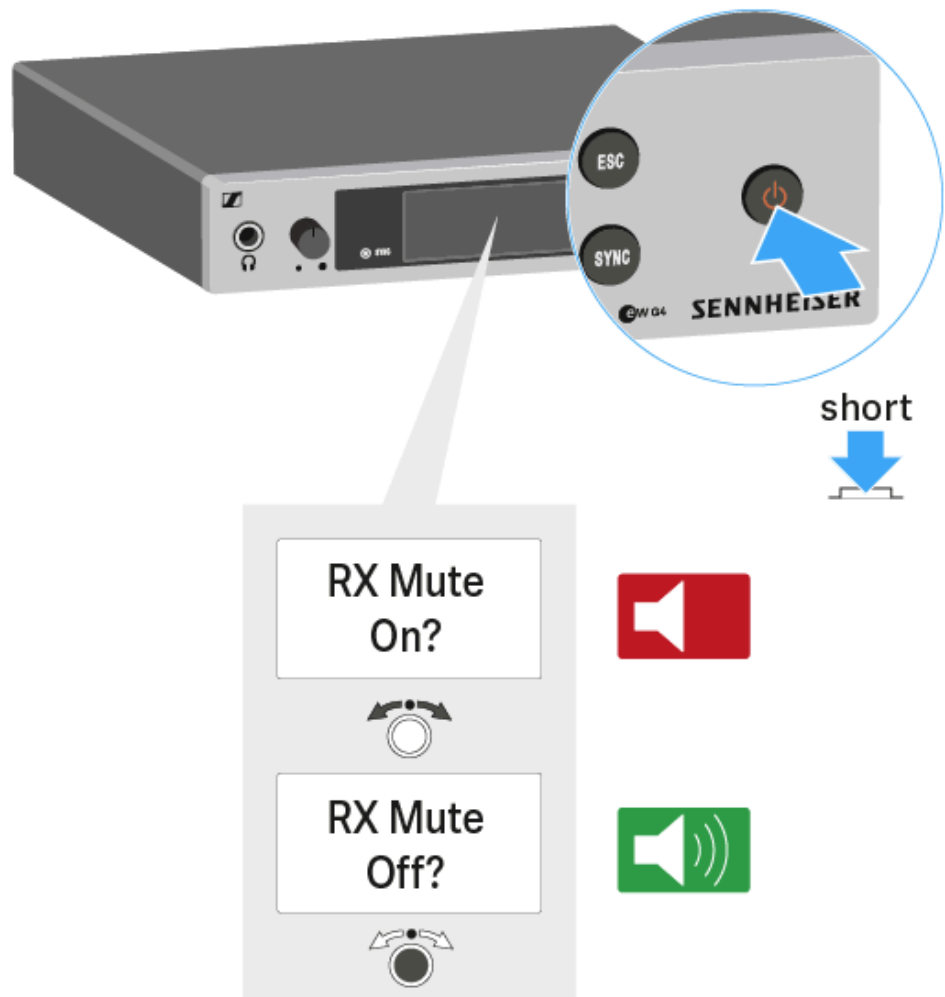
Muting the audio output

To mute the audio signal of the receiver:

- ▶ Press the **STANDBY** button in one of the standard displays.
 - ✓ The *RX Mute On?* display appears.
- ▶ Press the **SET** button.
 - ✓ The audio signal is muted.

To cancel the muting:

- ▶ Press the **STANDBY** button.
 - ✓ The *RX Mute Off?* display appears.
- ▶ Press the **SET** button.
 - ✓ The audio output is no longer muted.





Using the headphone output

You can use the headphone output on the front of the EM 300-500 G4 (6.3 mm jack) to listen to the audio signal.

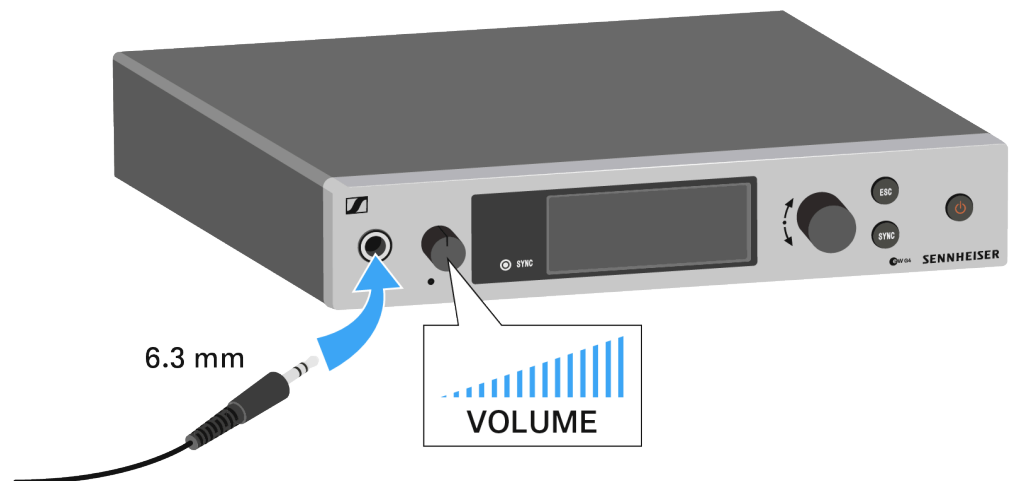
CAUTION

Danger due to high volume levels

Volume levels that are too high may damage your hearing.

- ▶ Turn down the volume of the headphone output before you put on the headphone.
- ▶ Increasing the volume of the audio output **AF Out** (see [AF Out menu item](#)) to more than +18 dB also increases the volume of the headphone output.

- ▶ Connect the headphone to the headphone socket.
- ▶ Control the volume by turning the volume control next to the headphone socket.





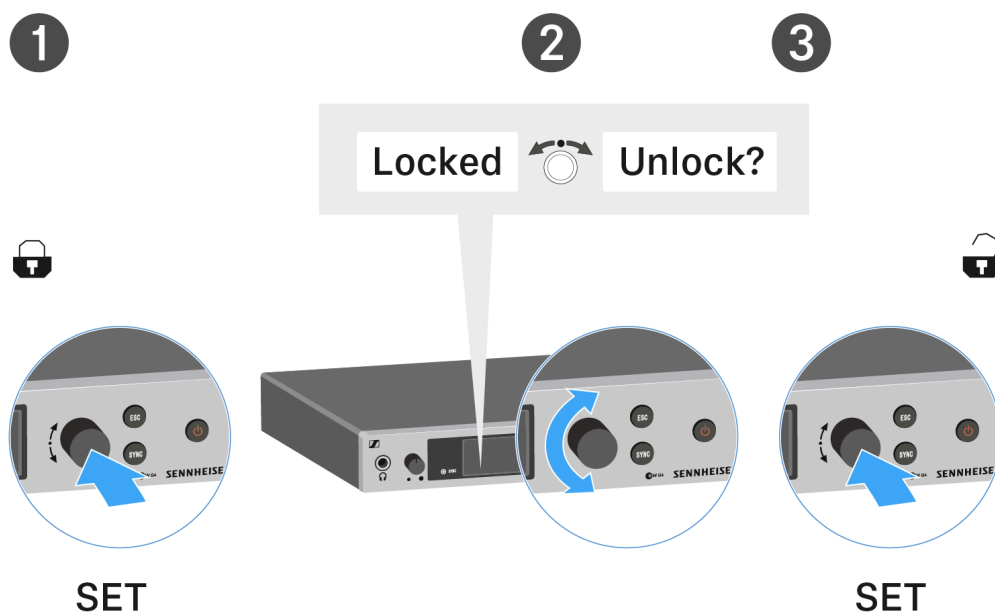
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the receiver off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- ▶ Press the **jog dial**.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **jog dial**.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **jog dial**.
 - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

When one of the standard displays is shown

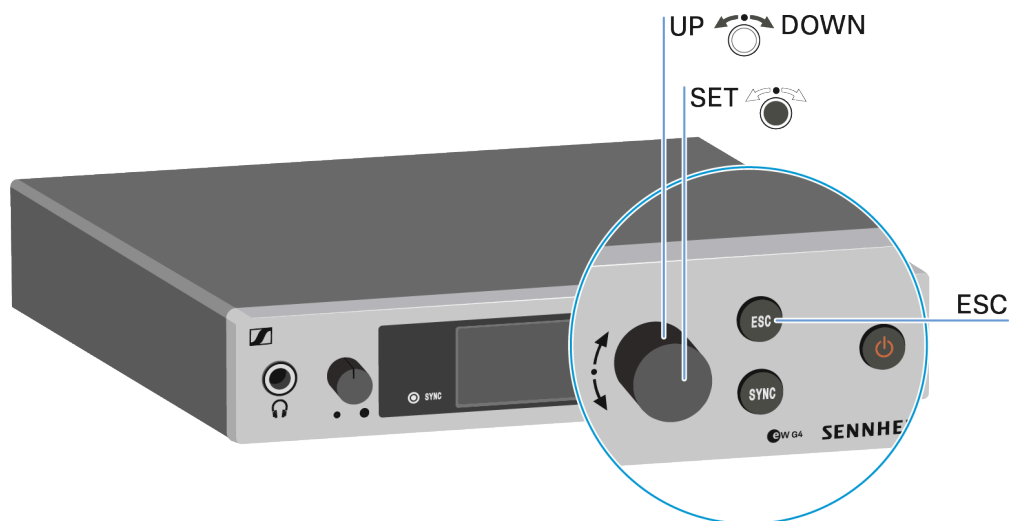
- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.



Buttons for navigating through the menu

To navigate through the EM 300-500 G4 operating menu, you need the following buttons.



ESC button

- Short-press
 - Cancels the entry and returns to the previous display
- Long-press
 - Cancels the entry and returns to the home screen

Press the **jog dial**

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Turn the **jog dial**

- Selects a standard display (see [Home Screen](#))
- Changes to the previous or next menu item
- Changes the setting of a menu item



Displays on the rack receiver display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See [Home Screen](#)

The display panel also displays the operating menu which you can use to configure all of the settings.

- See [Setting options in the menu](#)

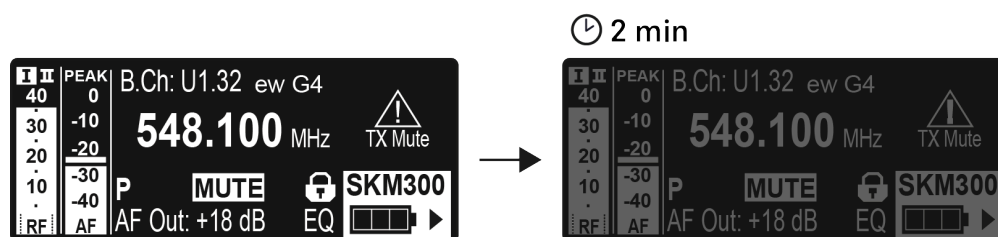


Home Screen

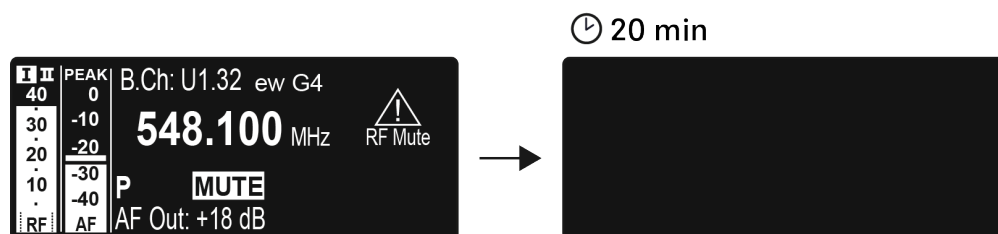
After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has three different standard displays.

- ▶ On the home screen, press the **UP** and **DOWN** buttons to switch between the standard displays.



The display is dimmed automatically after 2 minutes of inactivity.



If there is no radio link to a transmitter, the display switches off after 20 minutes. The display can be reactivated by pressing any button.

Related information

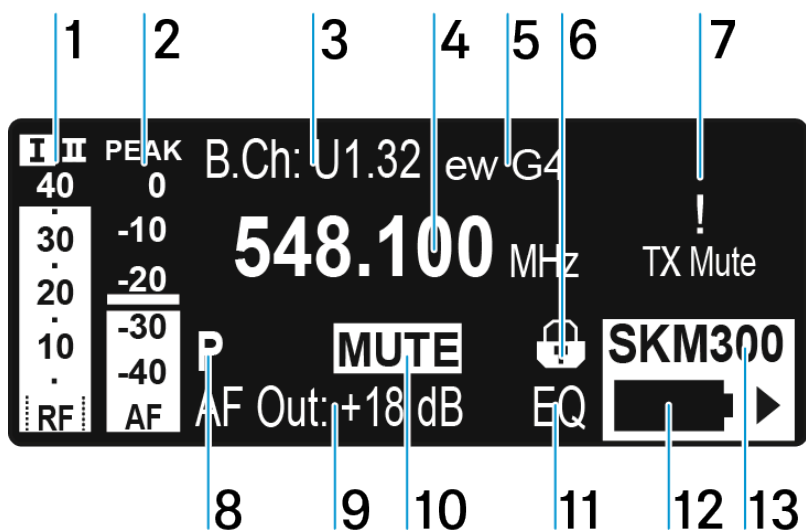
[Receiver Parameters standard display](#)

[Soundcheck standard display](#)

[Guitar Tuner standard display](#)



Receiver Parameters standard display



- 1 RF level **RF** (radio frequency)
 - RF signal level display
 - including the display of the squelch threshold (see [Squelch menu item](#))
- 2 Audio level **AF** (audio frequency)
 - Displays the audio level of the received transmitter
 - When the display shows full deflection, the audio input level is excessively high. When the transmitter is overloaded frequently or for extended periods of time, the PEAK display is shown inverted.
 - see [AF Out menu item](#)
- 3 Frequency bank and channel
 - current frequency bank and channel number
 - see [Frequency Preset menu item](#)
- 4 Frequency
 - current receiving frequency
 - see [Frequency Preset menu item](#)
- 5 Name
 - freely selectable name of the receiver
 - see [Name menu item](#)

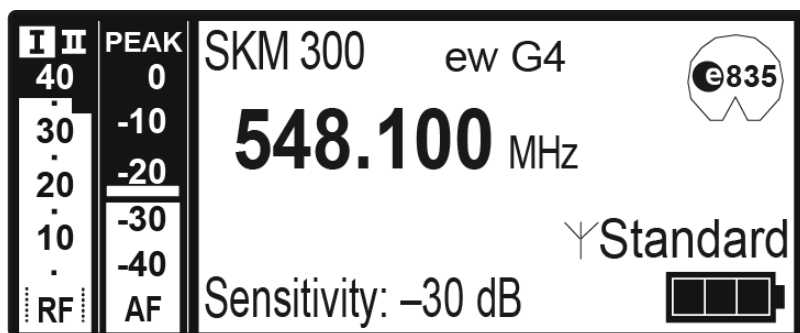


- 6 Lock-off function
 - Lock-off function is activated on the receiver
 - see [Lock-off function](#)
- 7 Warnings
 - Activated warning messages are displayed
 - see [Advanced -> Fullscreen Warnings menu item](#)
- 8 **P** pilot tone
 - Activated pilot tone evaluation
 - see [Advanced -> Pilot Tone menu item](#)
- 9 Output gain
 - Current output gain of the audio frequency signal at the 6.3 mm socket / XLR socket
 - see [AF Out menu item](#)
- 10 Equalizer setting
 - Current equalizer setting
 - see [Equalizer menu item](#)
- 11 **MUTE** muting function
 - Receiver or transmitter is muted
 - see [Muting the audio output](#)
- 12 Battery status of the transmitter
 - SKM 300 G4-S: see [Inserting and removing the batteries/rechargeable batteries](#)
 - SKM 500 G4: see [Inserting and removing the batteries/rechargeable batteries](#)
 - SK 300 G4-RC: see [Inserting and removing the batteries/rechargeable batteries](#)
 - SK 500 G4: see [Inserting and removing the batteries/rechargeable batteries](#)
- 13 Transmitter type
 - Product name of the connected transmitter



Transmitter Parameters standard display

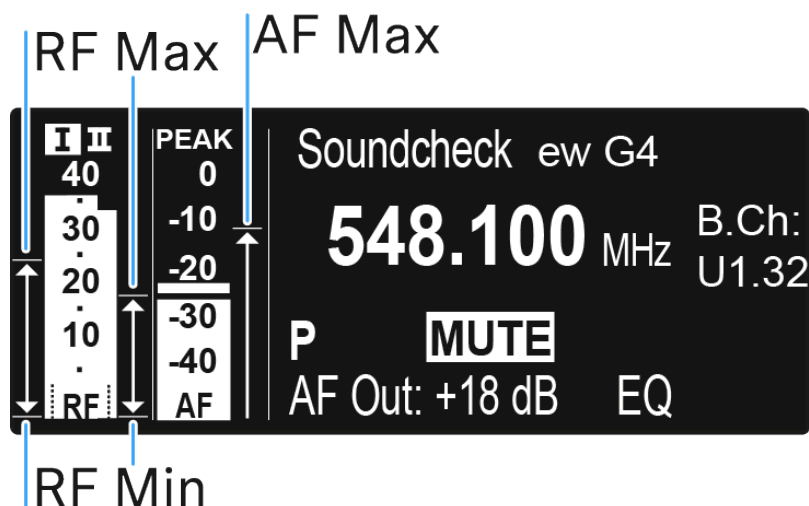
The Transmitter Parameters standard display shows the microphone module (only for SKM) and the transmitter type.





Soundcheck standard display

The Soundcheck standard display shows the transmission quality between the transmitter and the receiver.



By doing a soundcheck, you can ensure adequate transmission quality in the entire area in which you want to use the transmitter. You can do the soundcheck without the help of another person.

- ▶ With the transmitter, walk up and down the area in which you want to use the transmitter.
- ✓ The receiver records the following parameters:

RF Min

- Minimum RF signal level
- must be well above the squelch threshold level for one of the two antennas
- Ways to optimize:
 - Check that the antennas and the antenna cables are correctly connected.
 - Improve the position of the antennas.
 - If necessary, use an antenna booster.

RF Max

- Maximum RF signal level
- both antennas should reach 40 dBμV
- Ways to optimize:
 - Check that the antennas and the antenna cables are correctly connected.
 - Improve the position of the antennas.
 - If necessary, use an antenna booster.



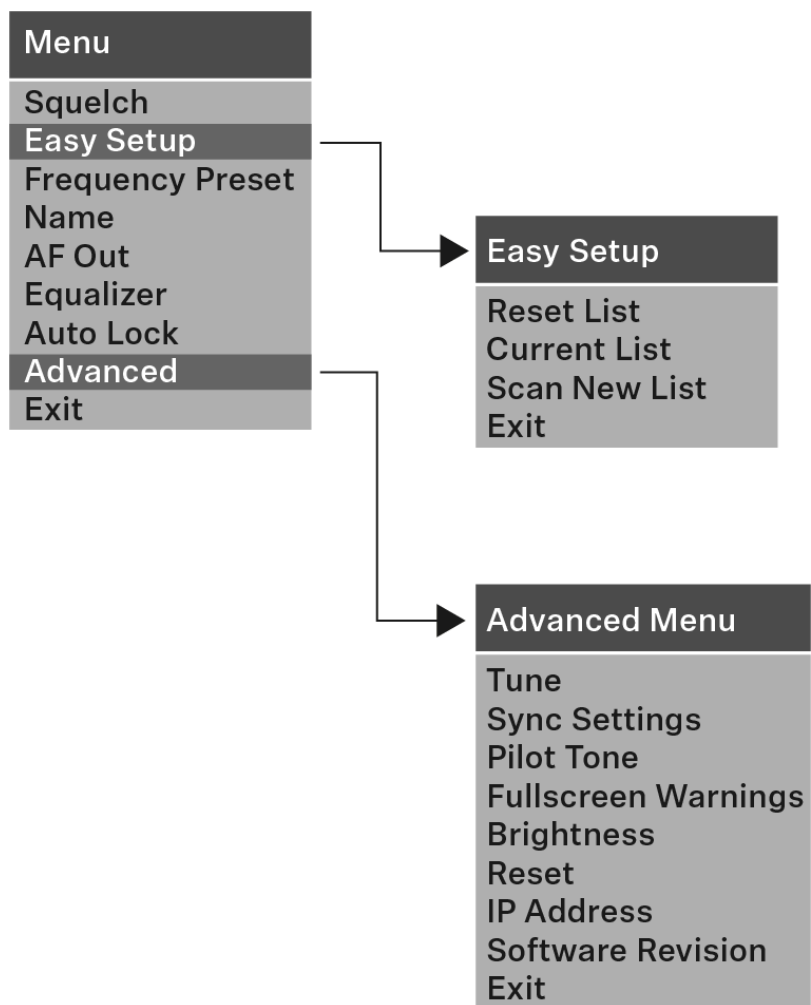
AF Max

- Maximum audio level
- Ways to optimize:
 - On your transmitter, adjust the audio level as high as possible without the display for the audio level showing full deflection (AF Max is at a level with the PEAK display). See [AF Out menu item](#).



Menüstruktur

The figure shows the complete EM 300-500 G4 menu structure in an overview.





Setting options in the menu

In the rack receiver menu, you can configure the following settings.

Adjusting the squelch threshold

- See [Squelch menu item](#)

Scanning for unused frequency presets, releases and selects frequency presets

- See [Easy Setup menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Adjusting the audio output level

- See [AF Out menu item](#)

Adjusting the frequency response of the output signal

- See [Equalizer menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Setting the receiving frequencies for the frequency banks U1 to U6
- Activating/deactivating the parameters to be transferred to the transmitters
- Activating/deactivating the pilot tone evaluation
- Activating/deactivating warnings
- Adjusting the contrast of the display panel
- Resetting the receiver
- Adjusting the network configuration
- Displaying the current software revision
- See [Advanced menu item](#)



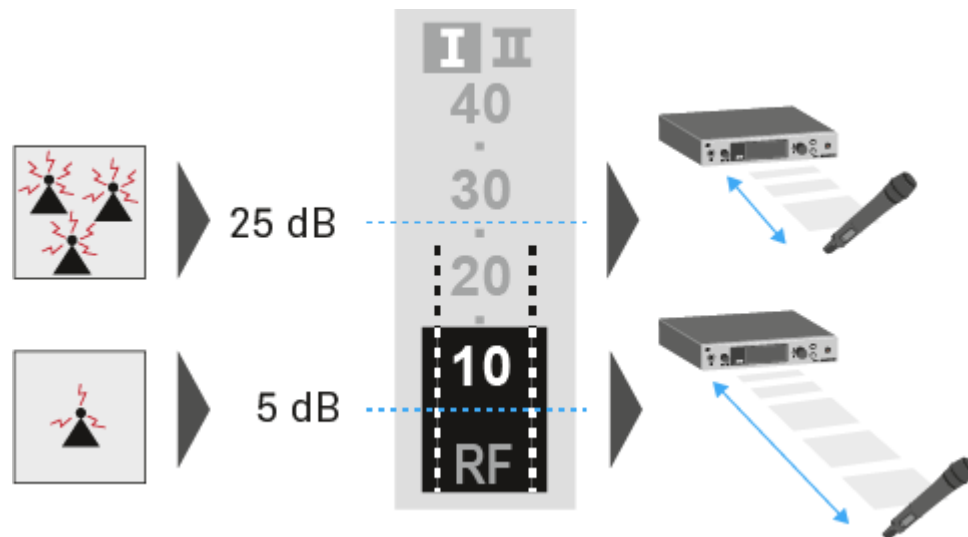
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- 5 - 25 dB μ V
- adjustable in 2 dB steps

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION



Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

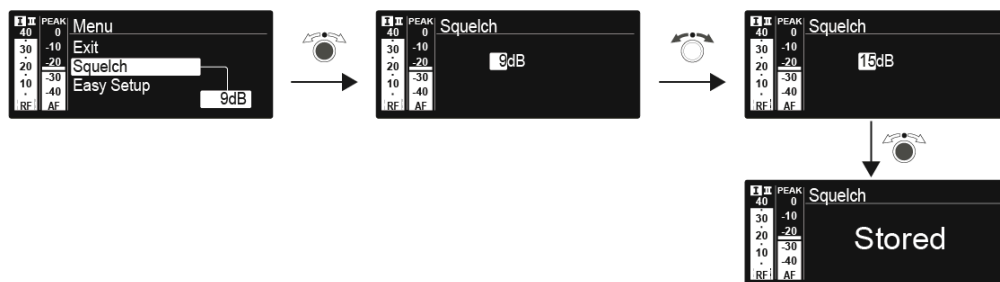
- ▶ Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- ▶ Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the Squelch menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.



- ▶ Adjust the settings as desired.



- ▶ Press the **jog dial** to save your selection.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



Easy Setup menu item

You can scan for unused frequencies using the Easy Setup menu item.

When you have connected multiple EM 300-500 G4 devices to a network via the RJ-45 interfaces (see [Creating a data network](#)), you can perform the frequency setup for all of the connected receivers.

- i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

To open the Easy Setup menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the **Easy Setup** menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.

Related information

[Scan New List](#)

[Current List](#)

[Reset](#)

[Performing multi-channel frequency setup](#)

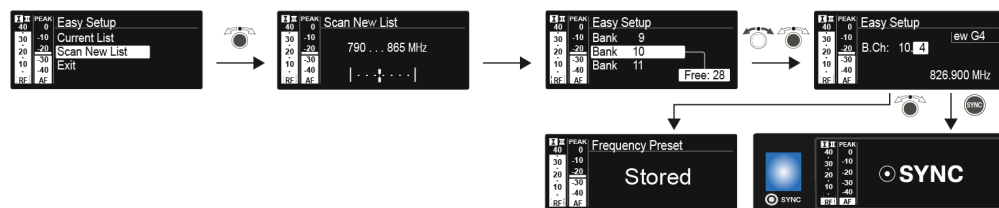
Scan New List

- ▶ Select **Scan New List** to scan for unused frequencies.
- ▶ Press the **jog dial** to start the scan.
 - ✓ The frequency range of the receiver is scanned. As a result, the number of unused frequencies is displayed for every frequency bank.
- ▶ Turn the **jog dial** to select a frequency bank.
- ▶ Press the **jog dial** to confirm your selection.
- ▶ Turn the **jog dial** to select an unused frequency from the selected bank.
- ▶ Press the **jog dial** to save your selection and synchronize the selected frequency with the transmitter at a later point (see [Ew 300-500 G4 synchronizing](#)).



OR

- ▶ Press the **SYNC** button to synchronize the selected frequency with the transmitter immediately.





Current List

- ▶ Select **Current List** to show the list of unused frequencies from the last scan.



Reset

- ▶ Select **Reset List** to delete the list of unused frequencies.

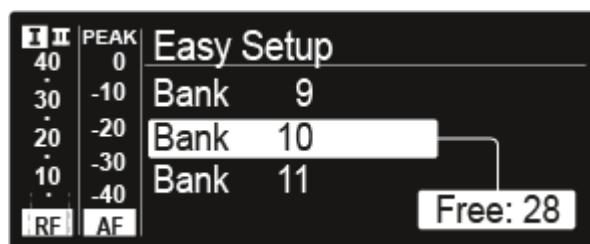


Performing multi-channel frequency setup

- i** As an alternative to the following procedure, multi-channel frequency setup can also be performed using the **Sennheiser Wireless Systems Manager (WSM)** software. For more information about controlling devices via the **Sennheiser Wireless Systems Manager (WSM)** software, refer to the instruction manual for the software. You can download the software here: sennheiser.com/wsm.

To perform the automatic frequency setup for multiple radio links simultaneously:

- ▶ Connect all of the receivers to one network using a network switch. See [Creating a data network](#).
- ▶ Please note that all receivers must be in the same IP address range.
 - The IP addresses can be **automatically** assigned if there is a DHCP server in the network.
 - If there is no DHCP server in the network, the IP addresses must be assigned **manually**. See [Advanced -> IP Address menu item](#).
 - Assign the IP addresses for all receivers in the **192.168.x.x** range (the link-local range **169.254.x.x** is also a possible alternative).
- ▶ Open the **Easy Setup** menu item on one of the receivers.
 - ✓ This receiver is the master. You can choose any receiver to be the master.
- ▶ Perform the frequency scan on the master receiver as described under [Scan New List](#).
- ▶ From the scan results in the master receiver, select a frequency bank with enough free channels.





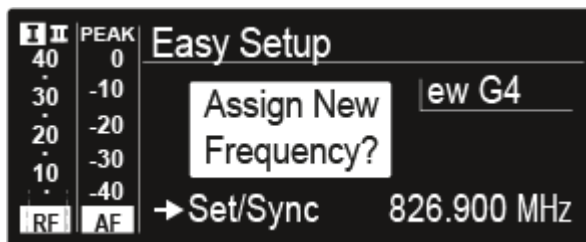
- ✓ After you make your selection, the display panels of the other receivers will display the message *Assign New Frequency?*.

Receivers with non-compatible frequency ranges will display the message *Unassignable Frequency!*.



- ▶ Select an unused frequency for one of the connected receiver on the master receiver.

- ✓ The frequency selected on the master receiver will also be shown on the display panel of the connected receivers.



- ▶ Press the **jog dial** (SET) on the particular receiver to save your selected frequency and synchronize it with the corresponding transmitter at a later point (see [Ew 300-500 G4 synchronizing](#)).

OR

- ▶ Press the **SYNC** button to synchronize the selected frequency with the transmitter immediately.
- ▶ Use this procedure to assign an unused frequency to all connected receivers, one after another.
- ▶ For the last step, assign a frequency to the master receiver.

- ✓ This completes the multi-channel frequency setup.

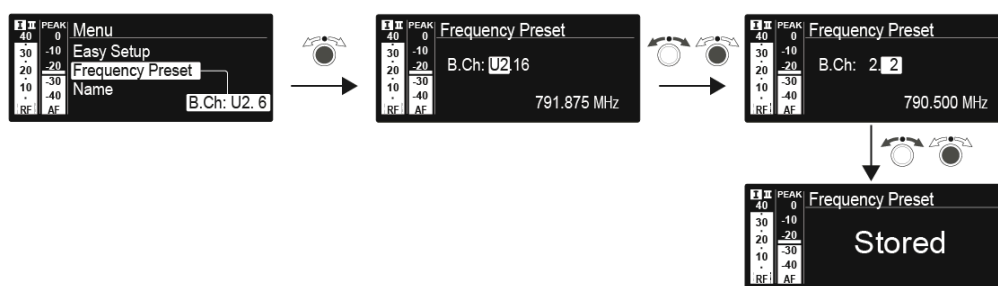


Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the **Frequency Preset** menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.
- ▶ Adjust the settings as desired.



- ▶ Press the **jog dial** to save your selection.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.

i You can set the frequencies of the frequency bank U here: [Advanced -> Tune menu item](#).

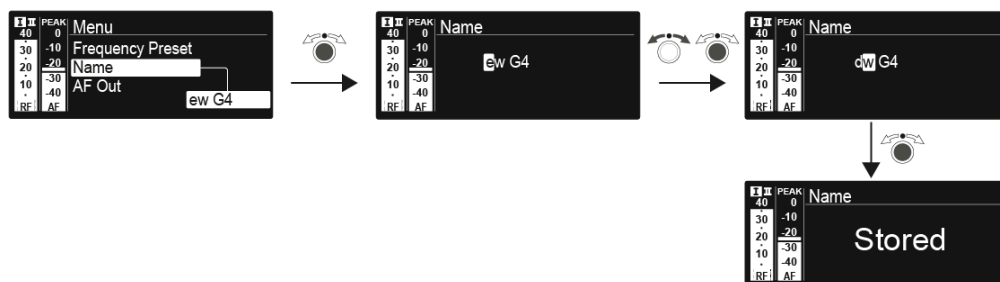


Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the **Name** menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.
- ▶ Adjust the settings as desired.



- ▶ Press the **jog dial** to save your selection.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



AF Out menu item

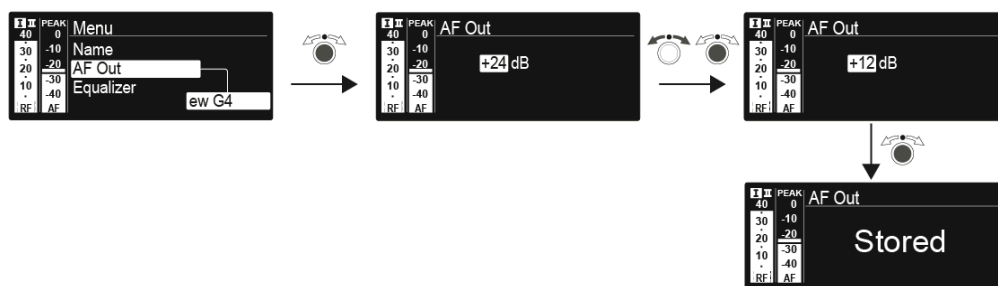
In the AF Out menu item, you can set the audio level that is output via the receiver audio outputs.

Setting range:

- -24 dB to +24 dB
- in 3 dB steps

To open the AF Out menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the **AF Out** menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.
- ▶ Adjust the settings as desired.



- ▶ Press the **jog dial** to save your selection.
OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



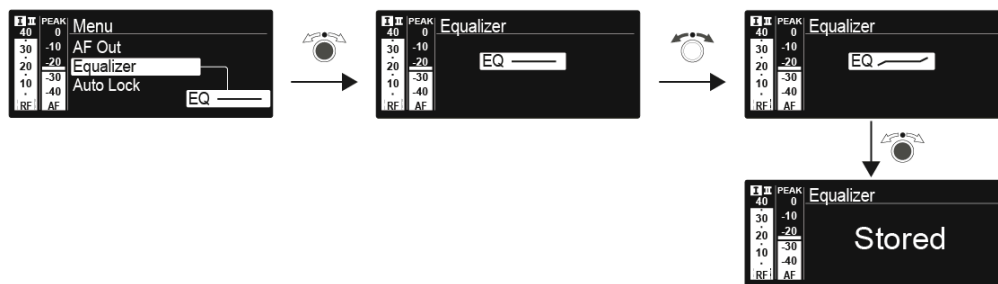
Equalizer menu item

In the Equalizer menu item, you can change the frequency response of the output signal.

You can reduce the bass range and boost the treble range.

To open the Equalizer menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the **Equalizer** menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.
- ▶ Adjust the settings as desired.



- ▶ Press the **jog dial** to save your selection.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



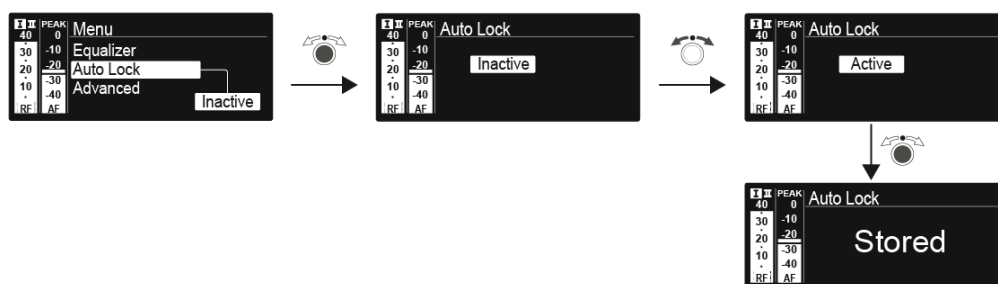
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

i You can find information about temporarily deactivating the lock-off function during operation under [Lock-off function](#).

To open the Auto Lock menu item:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
- ▶ Turn the **jog dial** until the **Auto Lock** menu item appears in the selection frame.
- ▶ Press the **jog dial** to open the menu.
- ▶ Adjust the settings as desired.



- ▶ Press the **jog dial** to save your selection.
- OR**
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the **Advanced** submenu:

- ▶ On the home screen, press the **jog dial** to open the operating menu.
 - ▶ Turn the **jog dial** until the **Advanced** menu item appears in the selection frame.
 - ▶ Press the **jog dial** to open the menu.
- ✓ The following sub-items are available:

Adjusting the receiving frequency for the frequency bank U

- See [Advanced -> Tune menu item](#)

Receiving frequency

- See [Advanced -> Sync Settings menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced -> Pilot Tone menu item](#)

Activating/deactivating warnings

- See [Advanced -> Fullscreen Warnings menu item](#)

Adjusting the contrast of the display panel

- See [Advanced -> Brightness menu item](#)

Resetting the receiver

- See [Advanced -> Reset menu item](#)

Adjusting the network configuration

- See [Advanced -> IP Address menu item](#)

Displaying the current software revision

- See [Advanced -> Software Revision menu item](#)



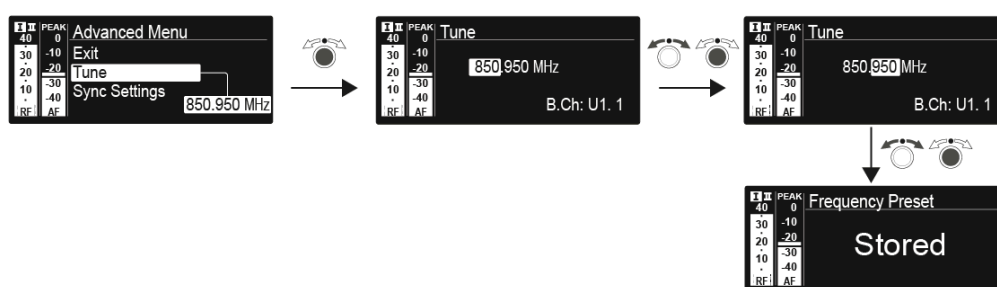
Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the frequency banks U1 to U6.

You can save a total of 32 frequencies in the U frequency bank.

Only adjusting the frequency

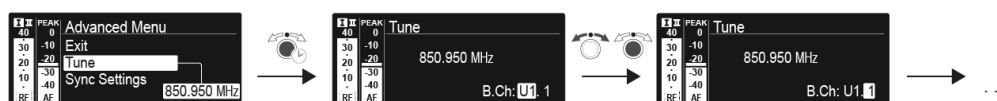
- ▶ Open the **Tune** menu item in the **Advanced** menu.
- ▶ Adjust the settings.



- ▶ Press the **jog dial** to save your selection.
- OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.

Setting the channel and frequency

- ▶ Select the **Tune** menu item and call it up by holding down the **SET** button until the channel selection appears.
- ▶ Adjust the settings.



- ▶ Press the **jog dial** to save your selection.
- OR
- ▶ Press the **ESC** button to cancel the entry without saving the setting.



Advanced -> Sync Settings menu item

In the Sync Settings menu item of the Advanced submenu, you can configure the parameters to be sent to the transmitters and activate or deactivate transmission.

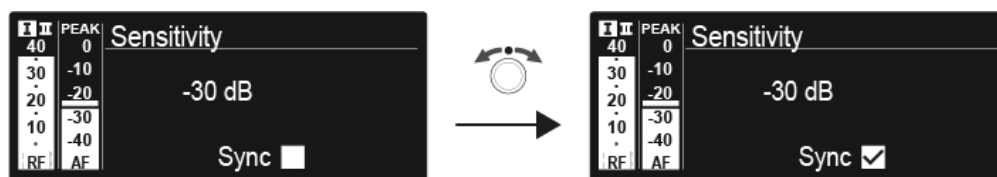
The parameters are defined separately for the SK, SKM and SKP.

You can activate/deactivate the following parameters:

- Sensitivity
- Auto Lock
- Mute Mode
- RF Power
- Phantom Power 48V (only SKP)

To configure a parameter and activate or deactivate transmission:

- ▶ Go to the parameter in question in the **Advanced -> Sync Settings** menu.
- ▶ Press the **jog dial** to open the sub-item.
- ▶ Turn the **jog dial** to set the value.
- ▶ Press the **jog dial** to save your setting.
- ▶ Turn the **jog dial** to activate or deactivate the check box.

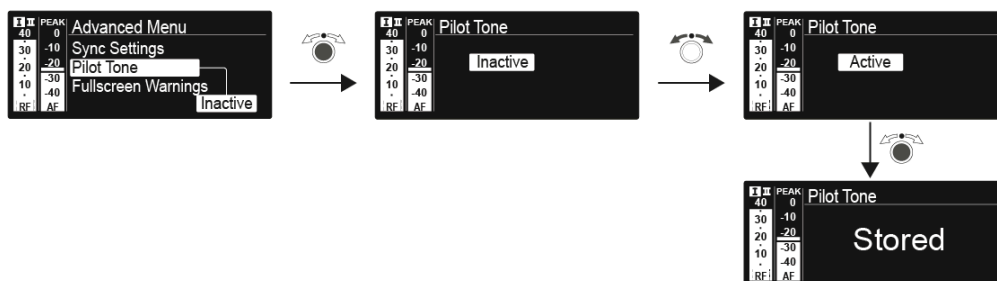


- ✔ When the check box is activated, the value will be transmitted during synchronization. If it is deactivated, the value will not be transmitted.
- ▶ Press the **jog dial** to save your setting.



Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.



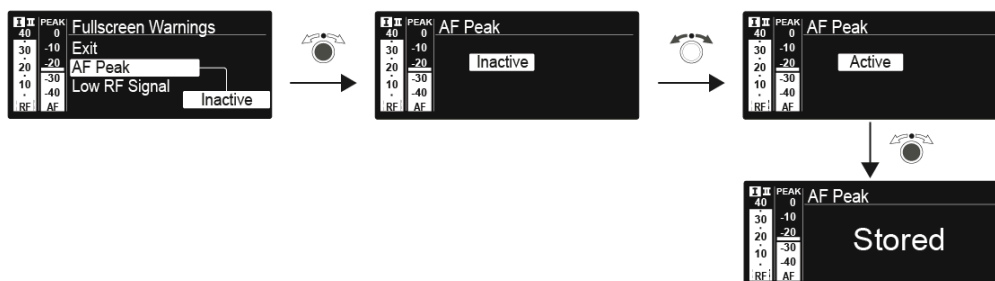
The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced -> Fullscreen Warnings menu item

In the Warnings menu item of the Advanced submenu, you can activate or deactivate warnings for certain cases.

The warning in question will flash across the entire screen.



You can activate or deactivate the following warnings:

AF Peak

- The audio level is too high.

Low RF signal

- The RF signal is too weak.

RF Mute

- The RF signal from the transmitter to the receiver is deactivated.

TX Mute

- The transmitter audio signal is muted.

RX Mute

- The receiver audio output is muted.

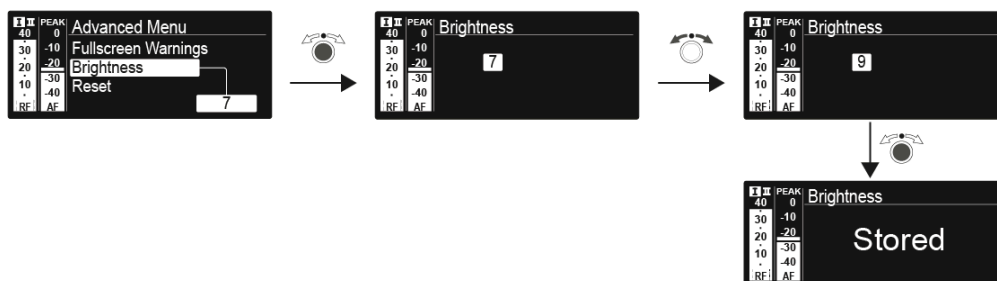
Low Battery

- The battery charge of the transmitter is low.



Advanced -> Brightness menu item

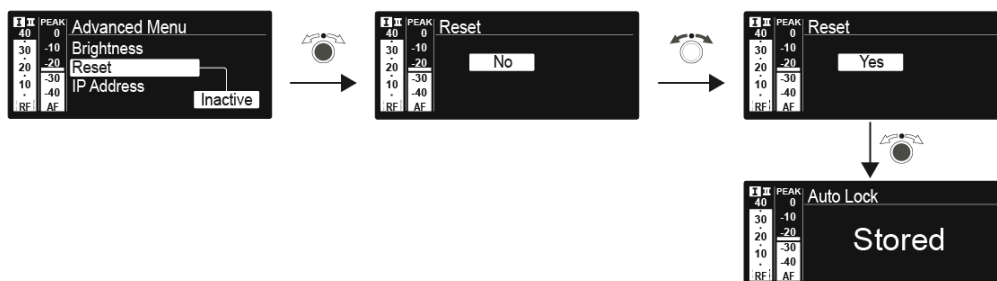
In the Brightness menu item of the Advanced submenu, you can adjust the display contrast of the display panel.





Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset the settings of the receiver.

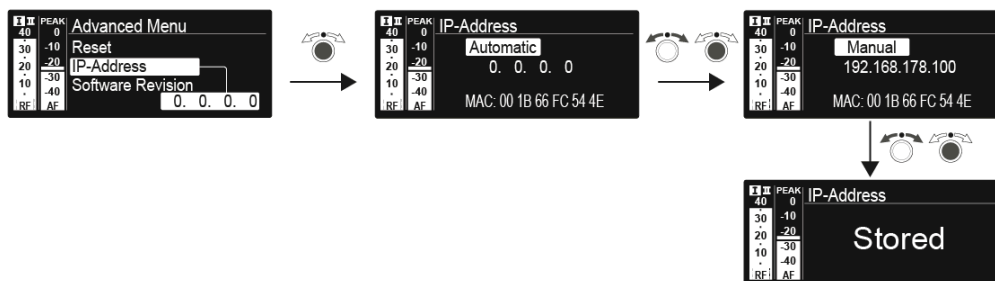




Advanced -> IP Address menu item

In the IP Address menu item of the Advanced submenu, you can configure the IP addresses.

The IP addresses can be obtained automatically (automatic) or entered manually (manual).





Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

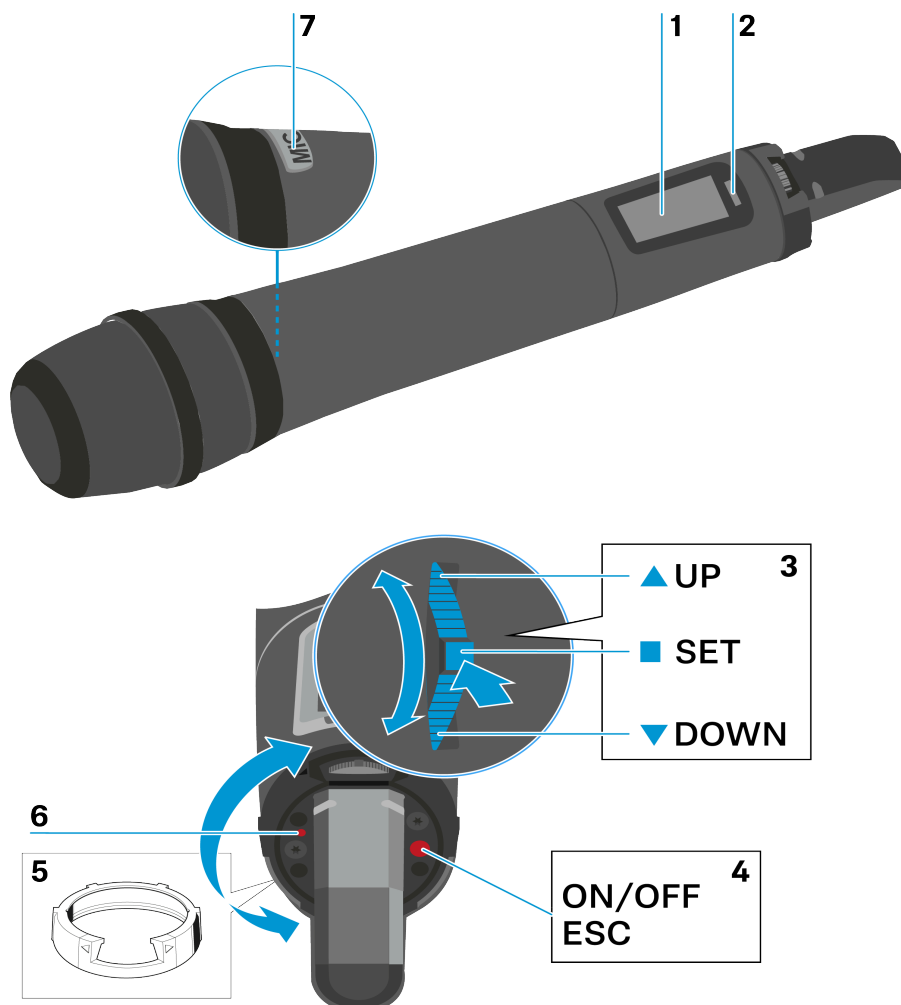


SKM 300 G4-S handheld transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Replacing the microphone module
- Changing the colored ring
- Switching the handheld transmitter on and off
- Muting the handheld transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the handheld transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > Mute Mode menu item
- Advanced > MIC LED menu item
- Advanced > RF Power menu item
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



1 Display panel

- see [Displays on the handheld transmitter display panel](#)

2 Infra-red interface

- see [Ew 300-500 G4 synchronizing](#)

3 DOWN, UP and SET multi-function switch

- see [Buttons for navigating the menu](#)

4 ON/OFF button with ESC function in the operating menu

- Switch the transmitter on or off, see [Switching the handheld transmitter on and off](#)
- Escape function in the menu, see [Buttons for navigating the menu](#)
- Deactivating the RF signal, see [Deactivating the RF signal \(RF mute\)](#)



5 Colored ring

- Available in different colors, see [KEN 2 Color labeling set](#) and [Changing the colored ring](#)
- Can be turned to protect the multi-function switch

6 Operation and battery indicator, red LED

- illuminated = ON, see [Switching the handheld transmitter on and off](#)
- flashing = LOW BATTERY, see [Inserting and removing the batteries/rechargeable batteries](#)

7 **MIC** button (only SKM 300 G4-S)

- see [Muting the handheld transmitter \(AF mute\)](#)
- see [Deactivating the RF signal \(RF mute\)](#)
- see [Advanced > Mute Mode menu item](#)



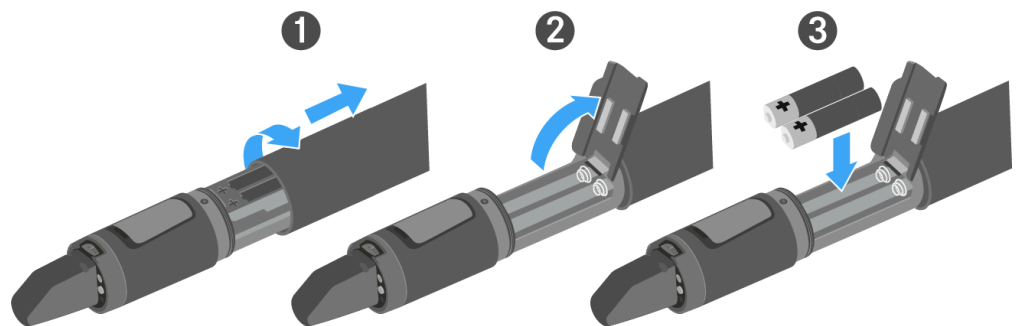
Inserting and removing the batteries/rechargeable batteries

You can operate the wireless microphone either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Screw the rear part of the wireless microphone in the direction of the arrow (counter-clockwise) off of the handle of the wireless microphone.

i When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

- ▶ Pull the rear part of the wireless microphone all the way out.
- ▶ Open the cover of the battery compartment.
- ▶ Place the batteries or the BA 2015 rechargeable battery in the battery compartment as shown on the cover. Please observe correct polarity when inserting the batteries/accupack.



- ▶ Close the cover.
- ▶ Push the battery compartment into the handle of the wireless microphone.
- ▶ Screw the rear part of the wireless microphone back onto the handle.





Related information

[Battery status](#)

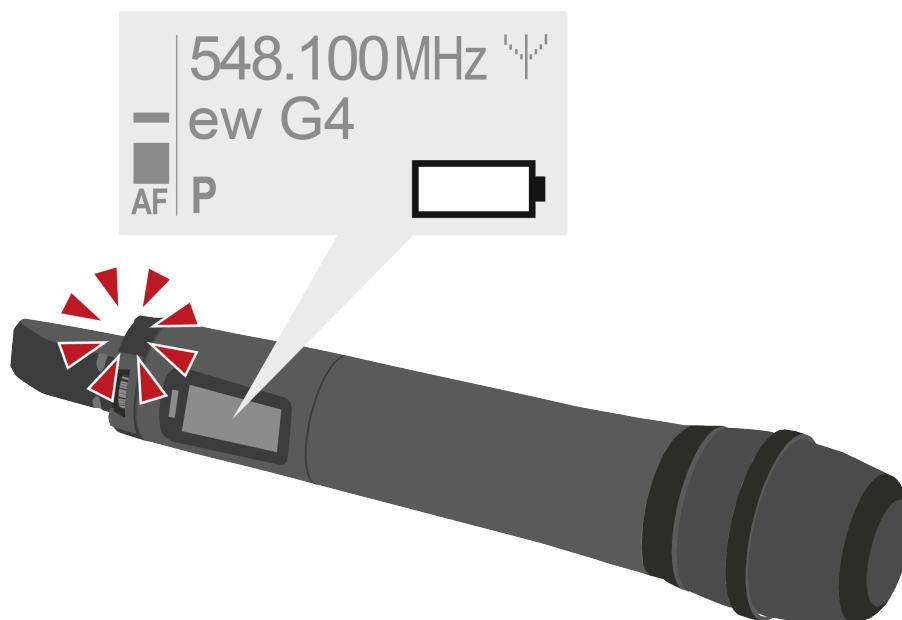


Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
<p>LOW BATT</p> 		

Charge status is critical (LOW BATT):





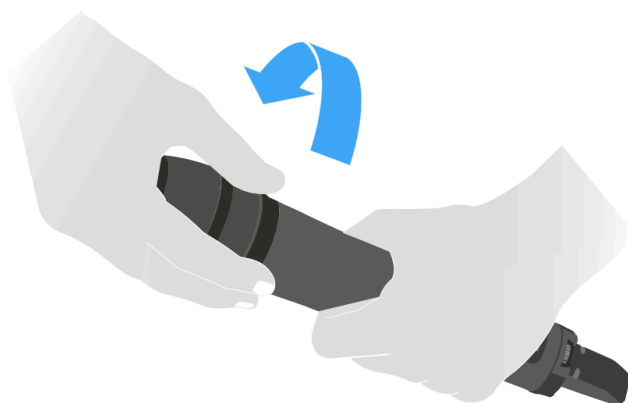
Replacing the microphone module

You can find a list of the recommended microphone modules for the handheld transmitter under [Microphones and cables](#).

- i** Do not touch the wireless microphone contacts or the microphone module contacts. If you touch the contacts, they may become dirty or bent.

To change the microphone module:

- ▶ Unscrew the microphone module.
- ▶ Screw the desired microphone module on.



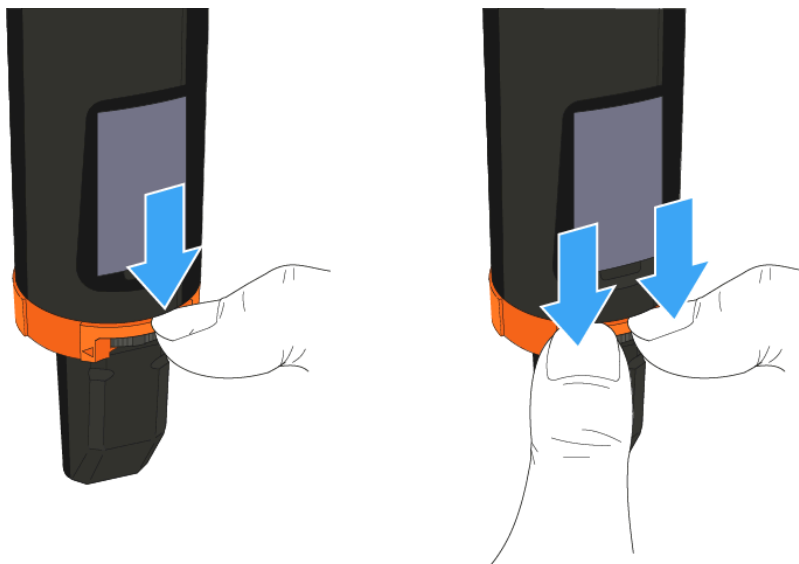
- i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.



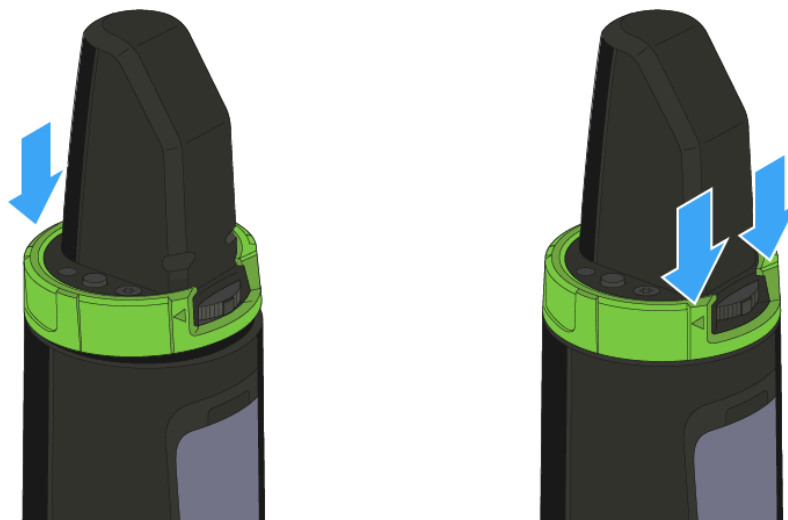
Changing the colored ring

To change the colored ring:

- ▶ Pull the colored ring off as shown in the diagram.



- ▶ Attached a colored ring in the color you want as shown in the diagram.

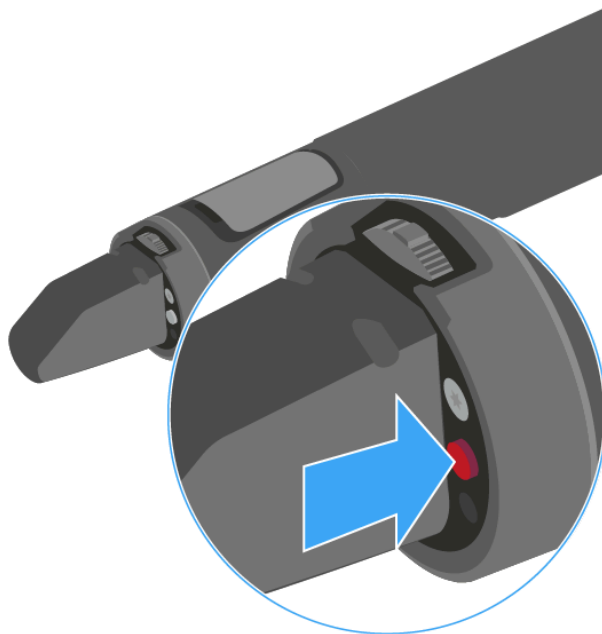




Switching the handheld transmitter on and off

To switch on the handheld transmitter:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the handheld transmitter:

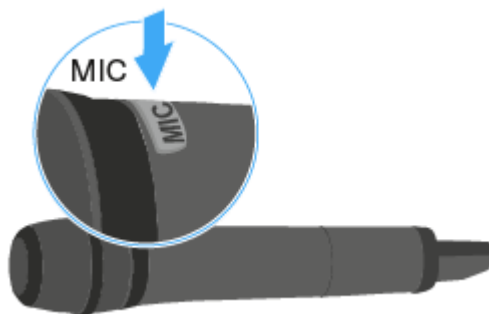
- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the handheld transmitter (AF mute)

You can mute the audio signal by pressing the **MIC** button.

To do this, the **MIC** button function must be configured to **AF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



Furthermore, you can configure whether the **MIC** button should light up red and when. You can find more information about this subject under [Advanced > MIC LED menu item](#).

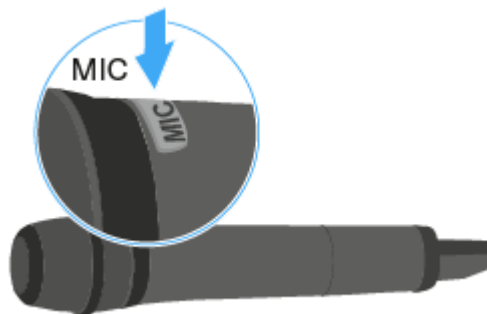


Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:

Deactivating the RF signal with the MIC button

- You can mute the RF signal by pressing the **MIC** button.
- To do this, the **MIC** button function must be configured to **RF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- Furthermore, you can configure whether the **MIC** button should light up red and when. You can find more information about this subject under [Advanced > MIC LED menu item](#).

Deactivating the RF signal with the ON/OFF button

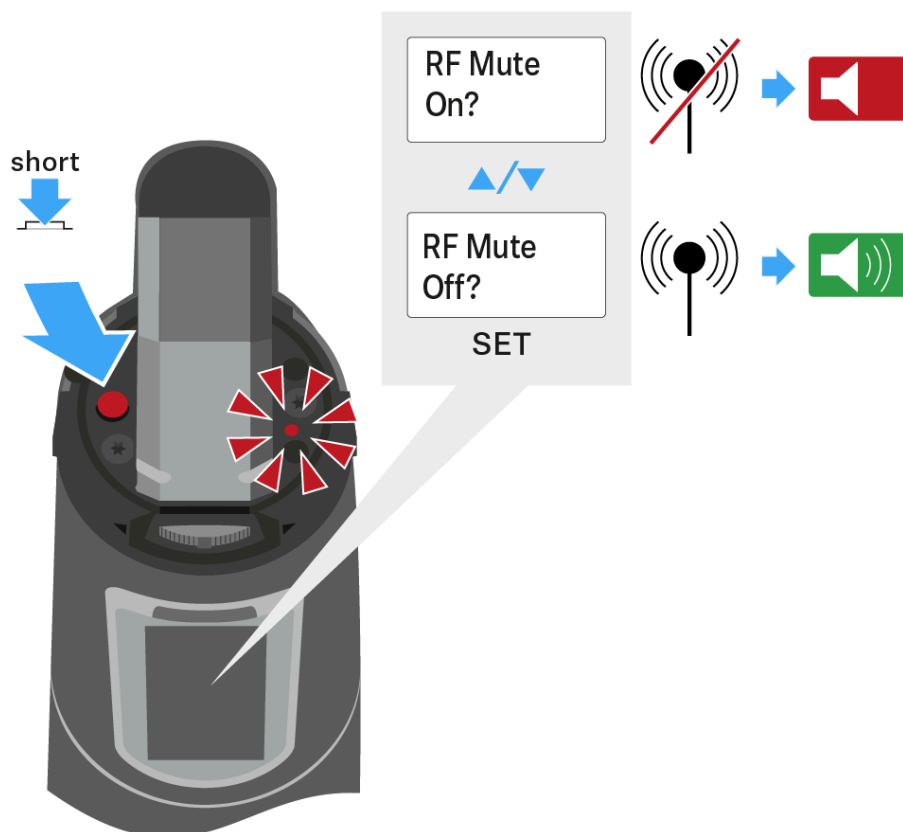
- You can deactivate the RF signal with the **ON/OFF** button.

Deactivating the RF signal with the ON/OFF button

- ▶ Press the **ON/OFF** button.
- ✓ *RF Mute On?* appears.



- ▶ Press the **SET** button.
 - ✓ The transmission frequency is displayed, however the wireless microphone is not transmitting an RF signal. The transmission icon is not lit (see [Displays on the handheld transmitter display panel](#)).



To activate the RF signal:

- ▶ Press the **ON/OFF** button.
 - ✓ *RF Mute Off?* appears.
- ▶ Press the **SET** button.
 - ✓ The transmission icon appears again (see [Displays on the handheld transmitter display panel](#)).



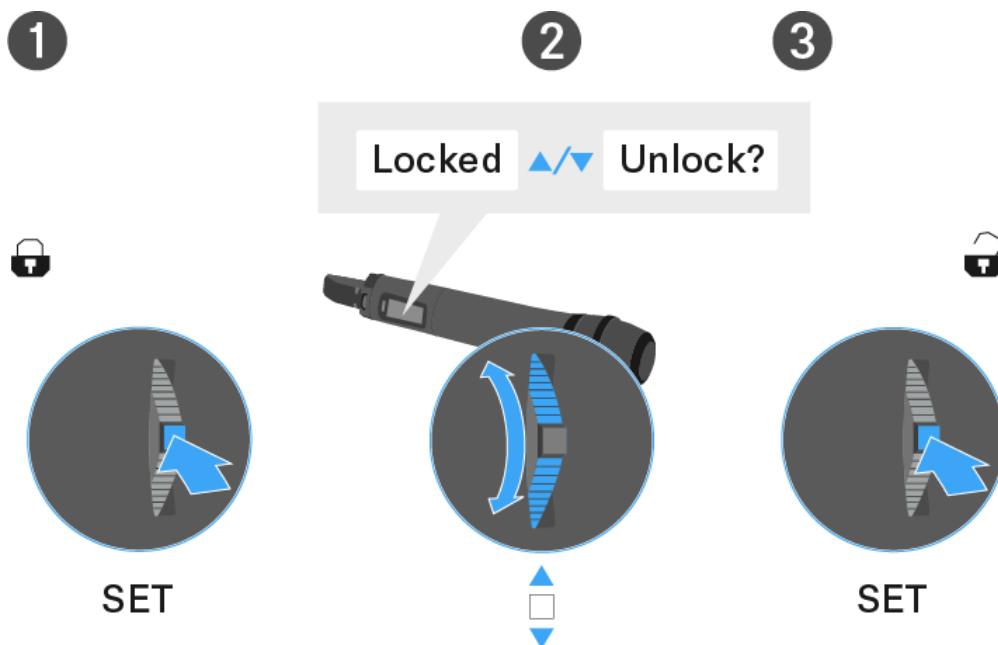
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

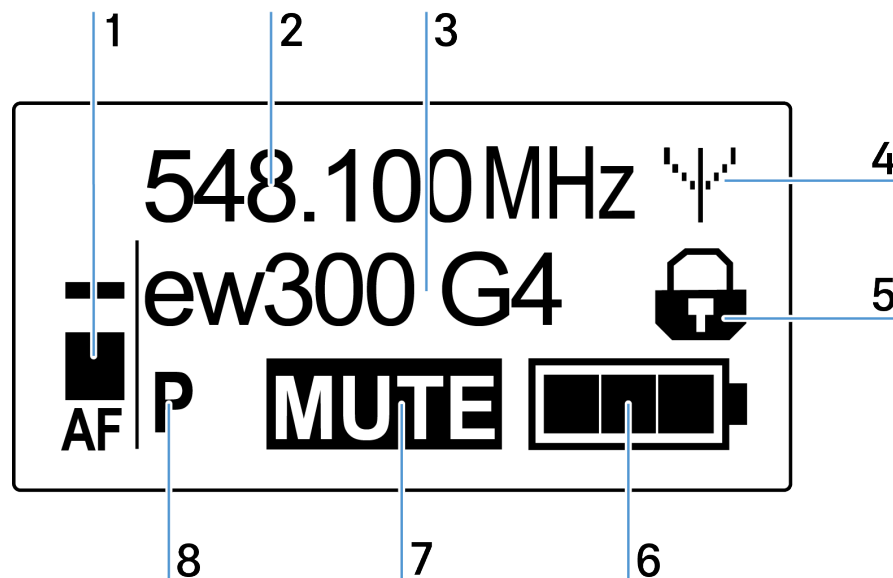
- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.





Displays on the handheld transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)

6 Battery status

- see [Battery status](#)



7 MUTE muting function

- The audio signal is muted
- see [Muting the handheld transmitter \(AF mute\)](#)

8 P pilot tone

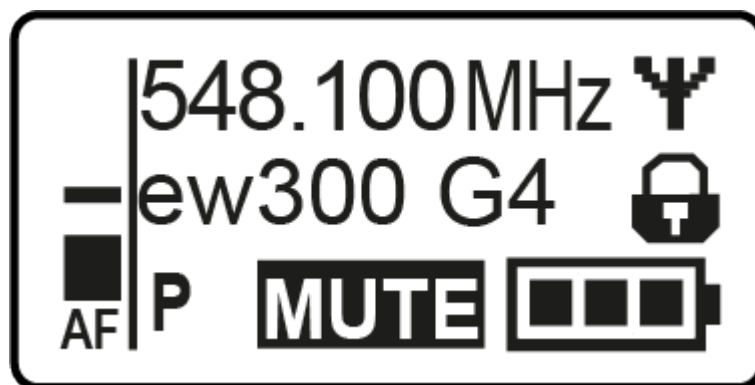
- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Move the multi-function switch to select a standard display:
Frequency/Name standard display

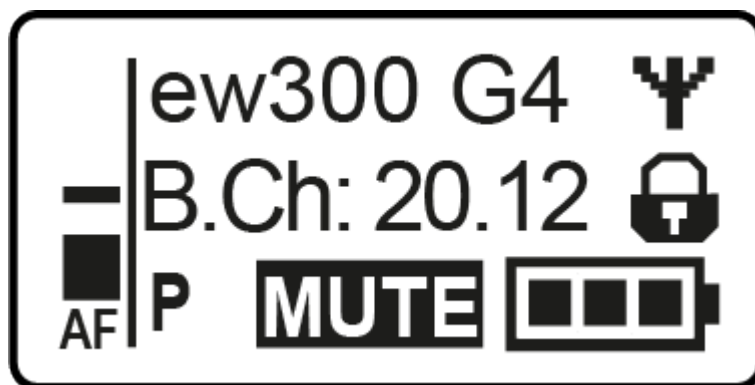




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the handheld transmitter display panel](#)



Setting options in the menu

In the SKM 300 G4-S menu, you can configure the following settings

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Defining the MIC button setting
- Configuring the background lighting of the MIC button
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -48 dB
- in 6 dB steps



The **AF** audio level is also displayed when the wireless microphone is muted, e.g. to check the sensitivity before a live broadcast.



Recommended presets:

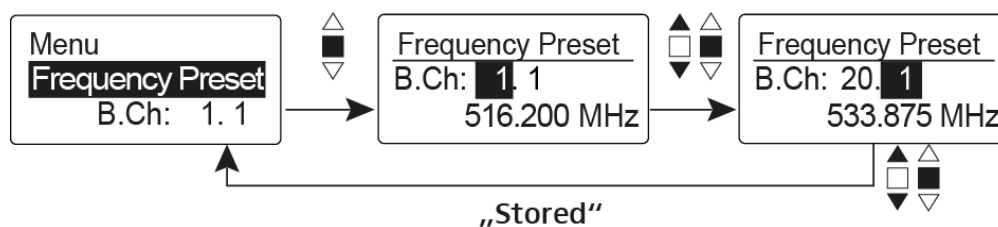
- Loud music/vocals: -48 to -18 dB
- Moderation: -18 to -12 dB
- Interviews: -12 to 0 dB



Frequency Preset menu item

Manually selecting a frequency bank and channel

i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The wireless microphone and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).

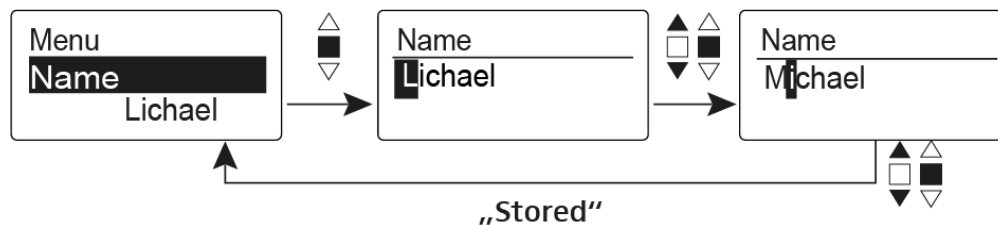


Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the wireless microphone (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



The names are a maximum of 8 characters:

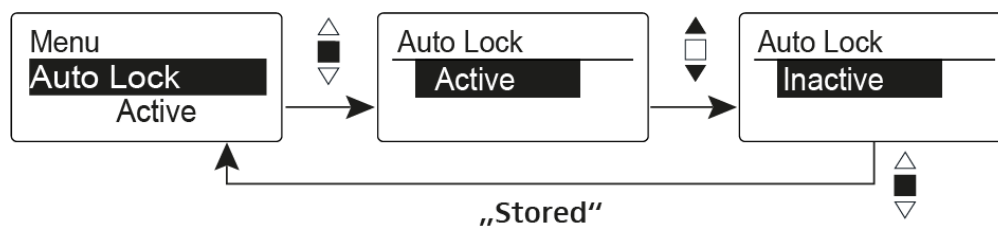
- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Defining the MIC button setting

- See [Advanced > Mute Mode menu item](#)

Configuring the background lighting of the MIC button

- See [Advanced > MIC LED menu item](#)

Configuring the transmission power

- See [Advanced > RF Power menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the wireless microphone to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.



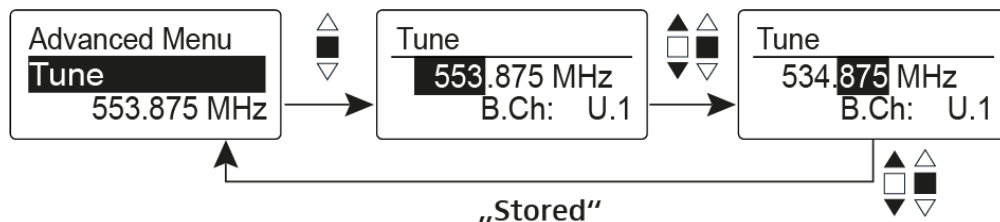
While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).

To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

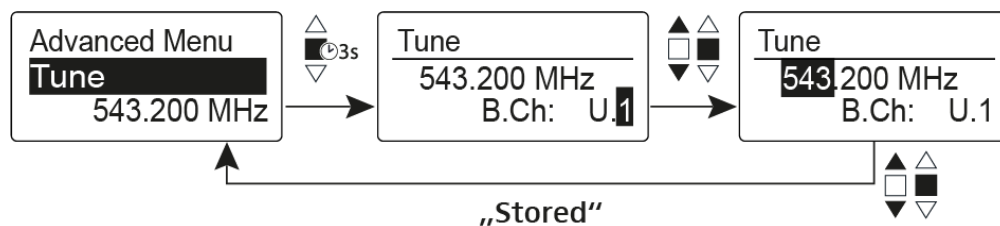
✓ The frequency selection appears.



- ▶ Configure the desired frequency.
 - ▶ Press the multi-function switch.
- ✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Move the multi-function switch until the **Tune** menu item appears.
- ▶ Hold down the multi-function switch until the frequency bank selection appears.

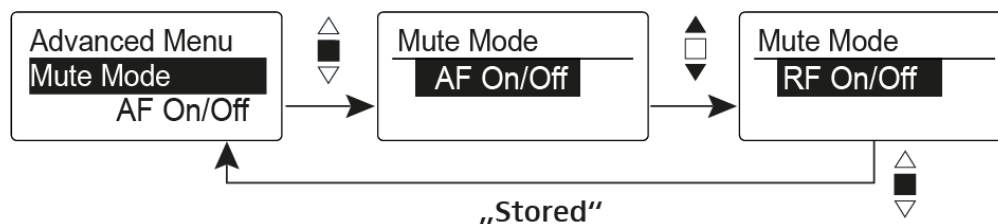


- ▶ Set the desired channel.
 - ▶ Press the multi-function switch.
- ✓ The frequency selection appears.
- ▶ Configure the frequency.



Advanced > Mute Mode menu item

Configuring the function of the MIC button



AF On/Off mode

- When you press the **MIC** button, no audio signal is transmitted.

RF On/Off mode

- When you press the **MIC** button, the RF signal is deactivated.

Push To Mute mode

- The audio signal is deactivated as long as you press down the **MIC** button.

Push To Talk mode

- The audio signal is activated as long as you press down the **MIC** button.
- The wireless microphone is muted when you configure the **Push to Talk** function.

Disabled mode

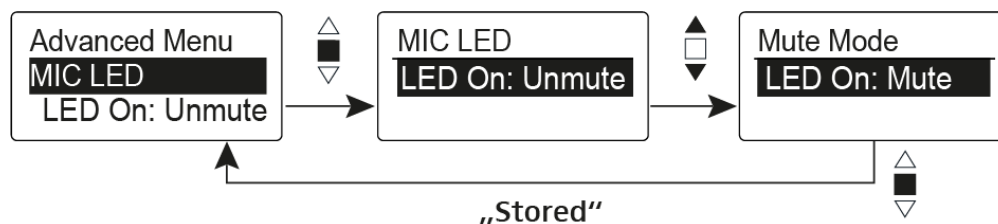
- No function

i You can find information about the **MIC** button under [Muting the handheld transmitter \(AF mute\)](#) and [Deactivating the RF signal \(RF mute\)](#).



Advanced > MIC LED menu item

Configuring the background lighting of the MIC button



In the **MIC LED** menu item you can configure and deactivate the background lighting of the **MIC** button regardless of the settings of the [Advanced > Mute Mode menu item](#) and the status of the RF signal.

LED On: setting Unmute

- The **MIC** button is backlit when the wireless microphone sends an RF signal or is not muted.

LED On: setting Mute

- The **MIC** button is backlit when the wireless microphone is not sending an RF signal or is muted.

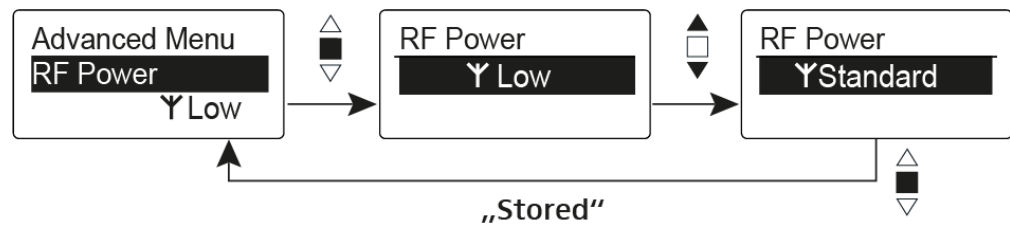
Disable LED setting

- The background lighting of the **MIC** button is deactivated.



Advanced > RF Power menu item

Configuring the transmission power



You can configure the transmission power in three steps in the **RF Power** menu item.

i Please note the information at the following address: sennheiser.com/sifa.

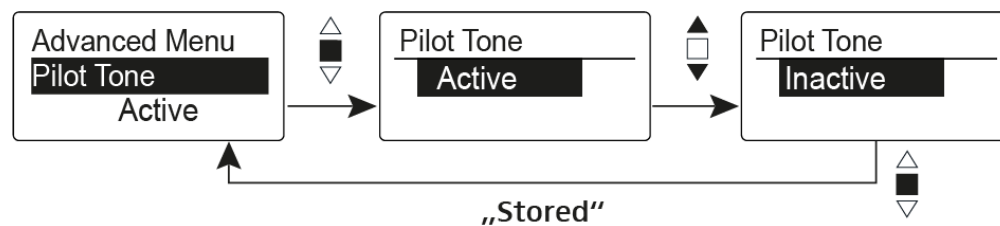
Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

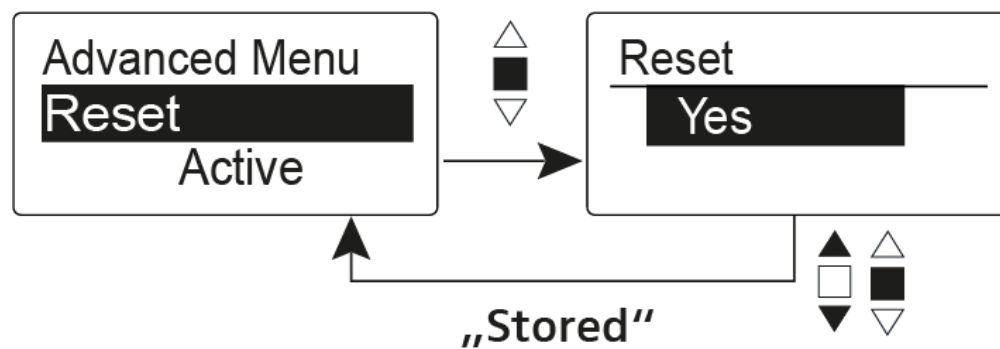
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the wireless microphone



When you reset the wireless microphone, only the selected settings of the pilot tone and the **U1** to **U6** frequency banks are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

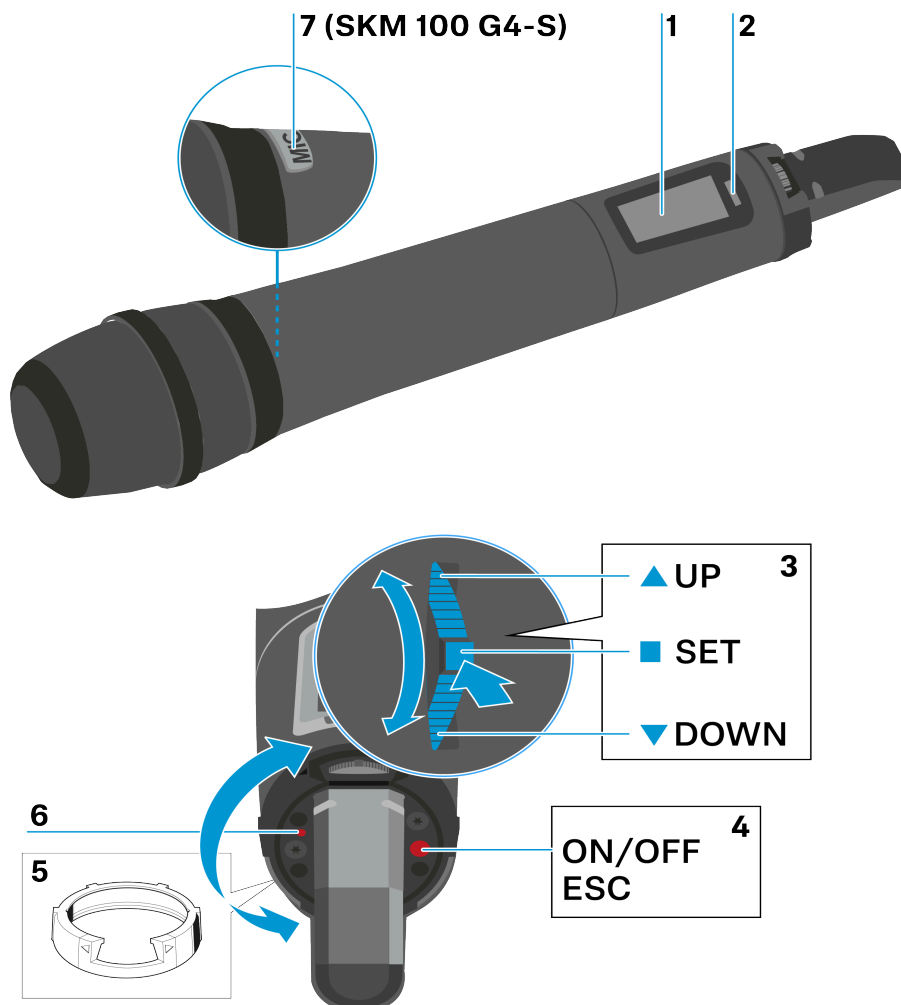


SKM 500 G4 handheld transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Replacing the microphone module
- Changing the colored ring
- Switching the handheld transmitter on and off
- Muting the handheld transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the handheld transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > RF Power menu item
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



1 Display panel

- see [Displays on the handheld transmitter display panel](#)

2 Infra-red interface

- see [Ew 300-500 G4 synchronizing](#)

3 DOWN, UP and SET multi-function switch

- see [Buttons for navigating the menu](#)

4 ON/OFF button with ESC function in the operating menu

- Switch the transmitter on or off, see [Switching the handheld transmitter on and off](#)
- Escape function in the menu, see [Buttons for navigating the menu](#)
- Deactivating the RF signal, see [Deactivating the RF signal \(RF mute\)](#)



5 Colored ring

- Available in different colors, see [KEN 2 Color labeling set](#) and [Changing the colored ring](#)
- Can be turned to protect the multi-function switch

6 Operation and battery indicator, red LED

- illuminated = ON, see [Switching the handheld transmitter on and off](#)
- flashing = LOW BATTERY, see [Inserting and removing the batteries/rechargeable batteries](#)



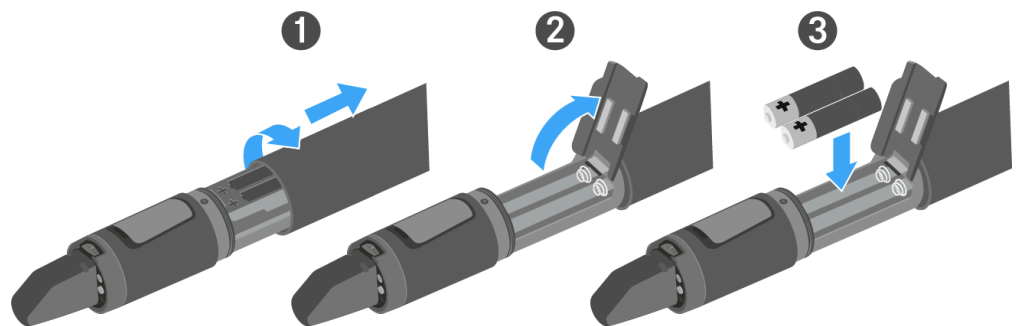
Inserting and removing the batteries/rechargeable batteries

You can operate the wireless microphone either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Screw the rear part of the wireless microphone in the direction of the arrow (counter-clockwise) off of the handle of the wireless microphone.

i When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

- ▶ Pull the rear part of the wireless microphone all the way out.
- ▶ Open the cover of the battery compartment.
- ▶ Place the batteries or the BA 2015 rechargeable battery in the battery compartment as shown on the cover. Please observe correct polarity when inserting the batteries/accupack.



- ▶ Close the cover.
- ▶ Push the battery compartment into the handle of the wireless microphone.
- ▶ Screw the rear part of the wireless microphone back onto the handle.








Related information

[Battery status](#)

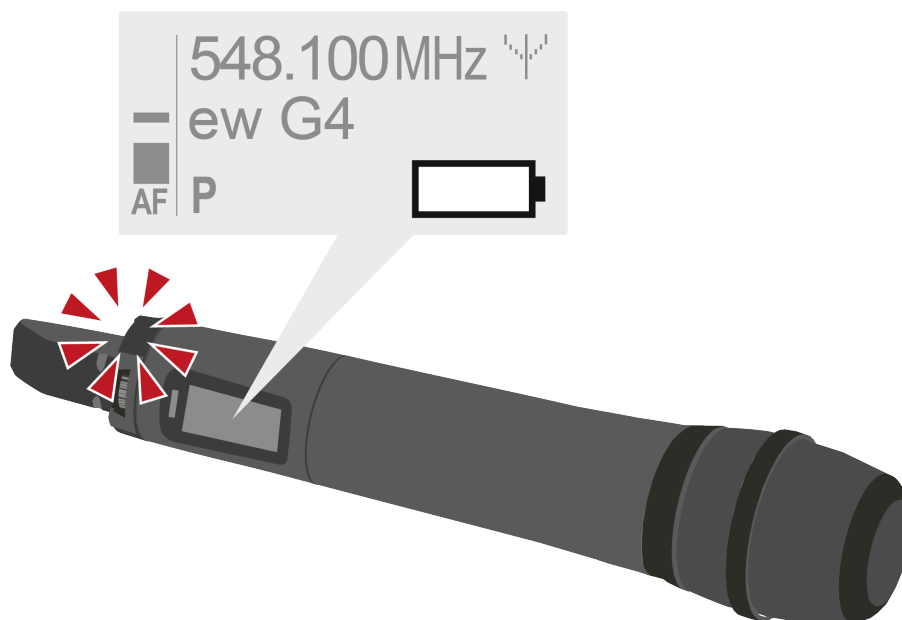


Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
<div>LOW BATT</div> <div>    ...</div>		

Charge status is critical (LOW BATT):





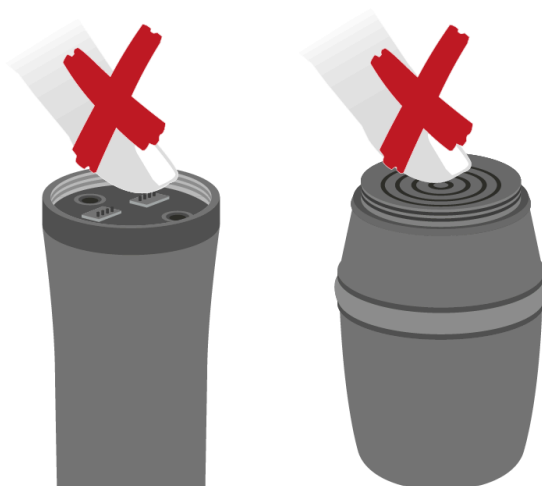
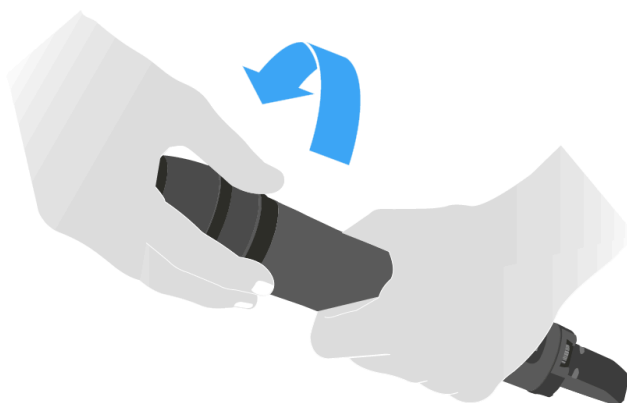
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You can find a list of the recommended microphone modules for the handheld transmitter under [Microphones and cables](#).

- i** Do not touch the wireless microphone contacts or the microphone module contacts. If you touch the contacts, they may become dirty or bent.

To change the microphone module:

- ▶ Unscrew the microphone module.
- ▶ Screw the desired microphone module on.



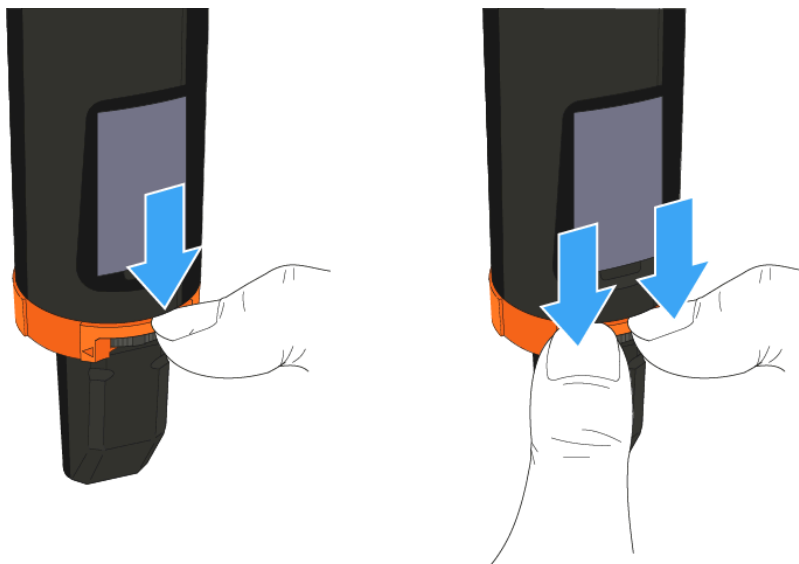
- i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.



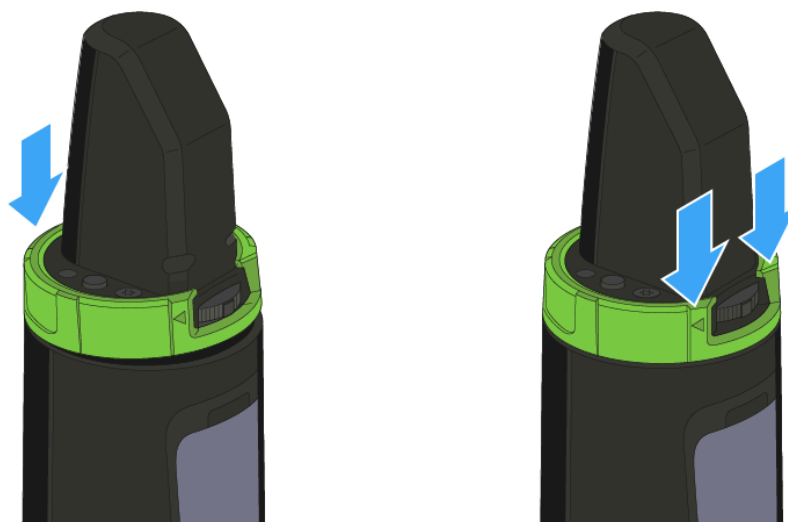
Changing the colored ring

To change the colored ring:

- ▶ Pull the colored ring off as shown in the diagram.



- ▶ Attached a colored ring in the color you want as shown in the diagram.

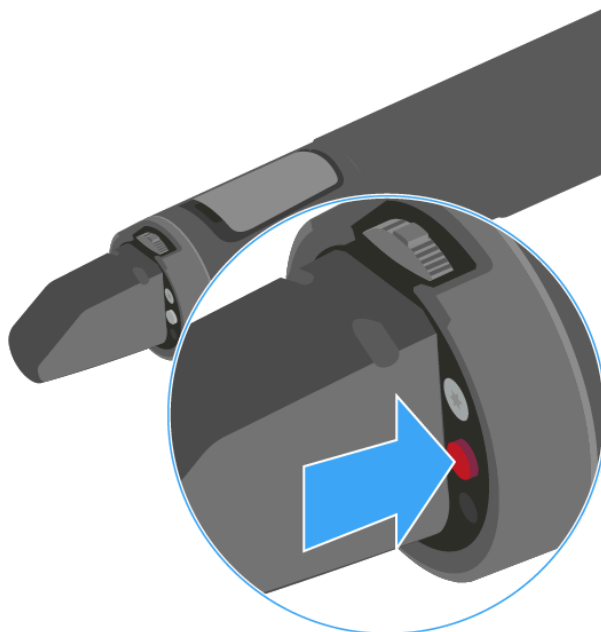




Switching the handheld transmitter on and off

To switch on the handheld transmitter:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the handheld transmitter:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the handheld transmitter (AF mute)

The audio signal of the transmitter cannot be muted.

However, when you deactivate the RF signal no AF signal is output. See [Deactivating the RF signal \(RF mute\)](#).

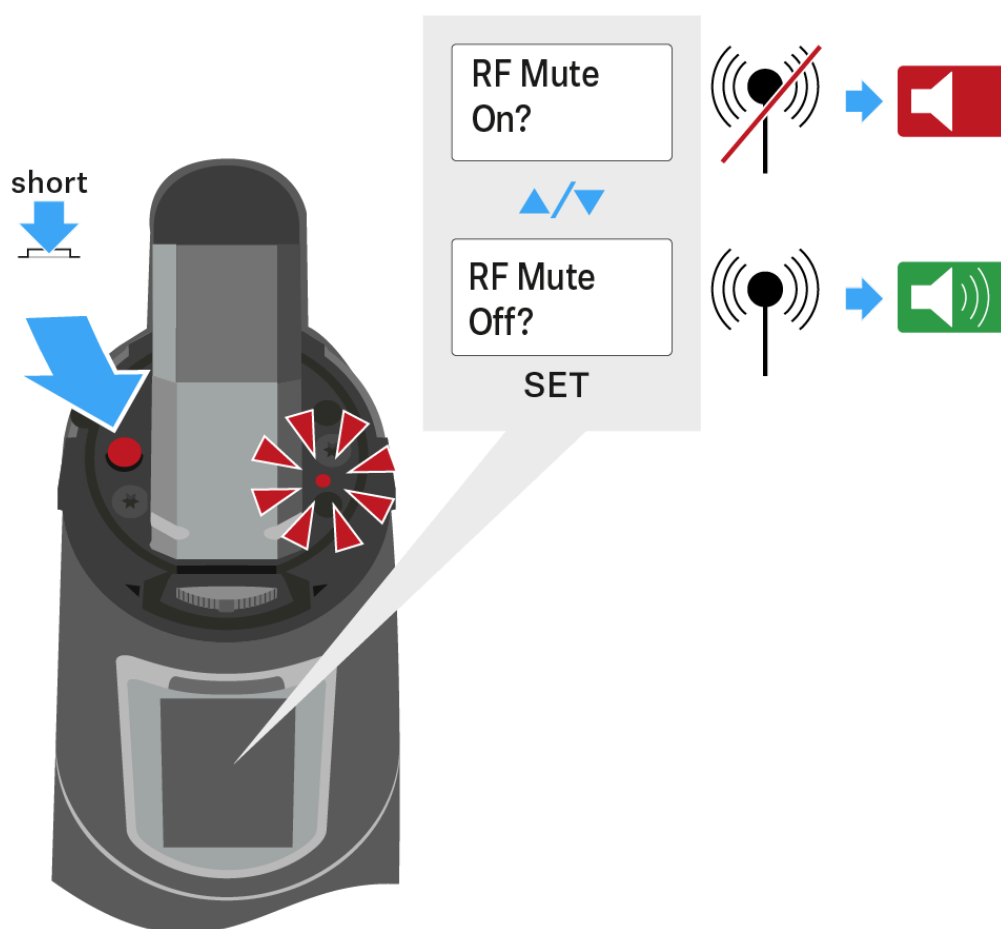


Deactivating the RF signal (RF mute)

You can deactivate the RF signal with the **ON/OFF** button.

To deactivate the RF signal:

- ▶ Press the **ON/OFF** button.
 - ✓ *RF Mute On?* appears.
- ▶ Press the **SET** button.
 - ✓ The transmission frequency is displayed, however the wireless microphone is not transmitting an RF signal. The transmission icon is not lit (see [Displays on the handheld transmitter display panel](#)).



To activate the RF signal

- ▶ Press the **ON/OFF** button.
 - ✓ *RF Mute Off?* appears.



- ▶ Press the **SET** button.
 - ✓ The transmission icon appears again (see [Displays on the handheld transmitter display panel](#)).



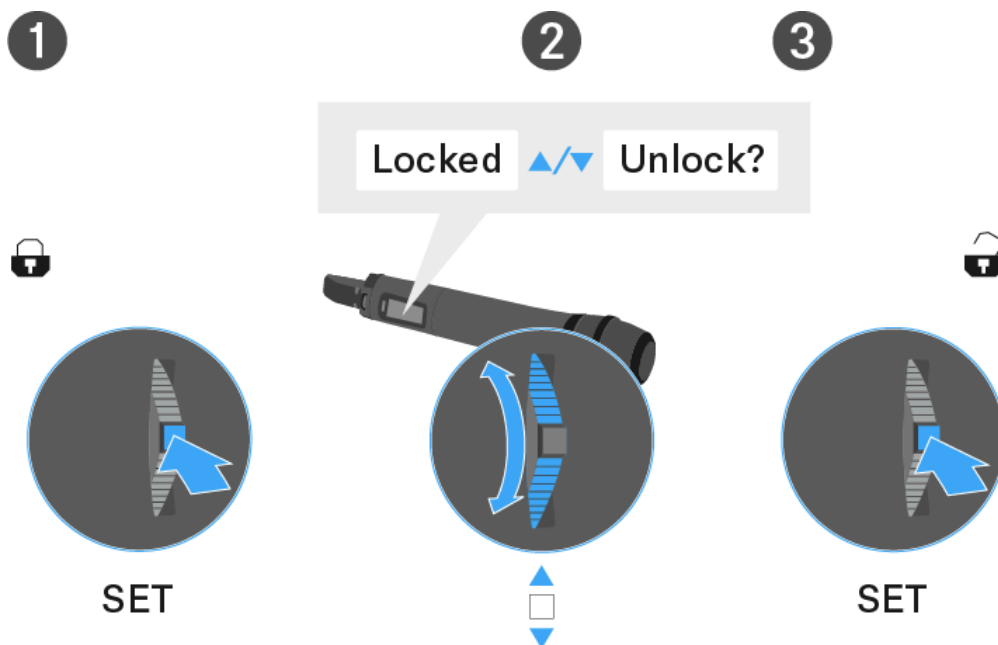
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

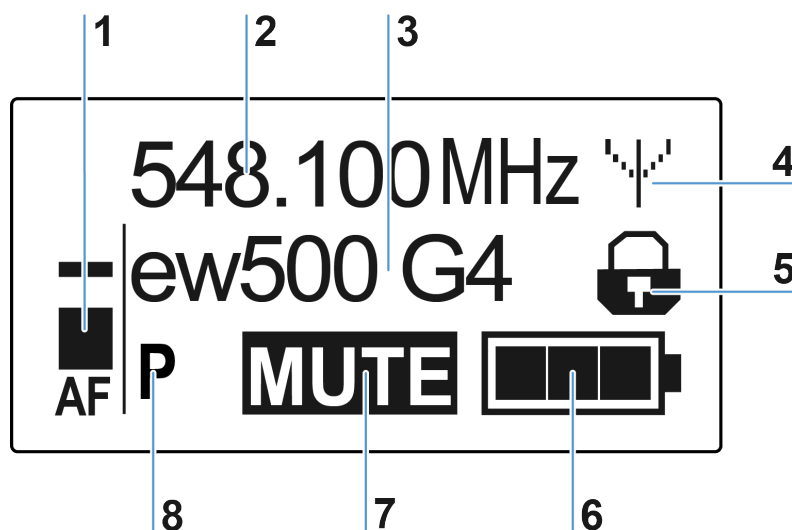
- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.





Displays on the handheld transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)

6 Battery status

- see [Battery status](#)



7 MUTE muting function

- The audio signal is muted
- see [Muting the handheld transmitter \(AF mute\)](#)

8 P pilot tone

- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Move the multi-function switch to select a standard display:
Frequency/Name standard display

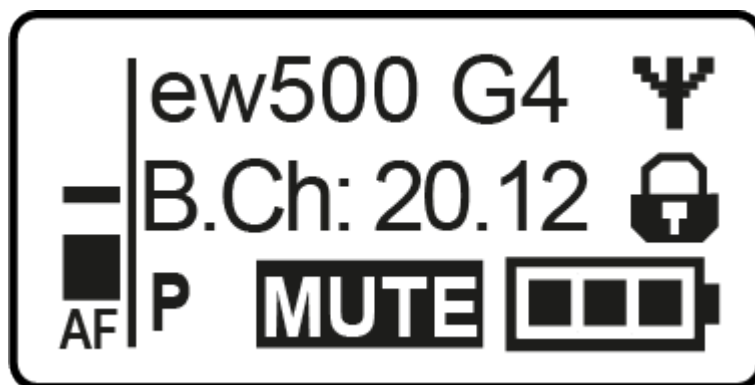




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
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- ▶ Press the **SET** button to open the selected menu item.

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- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the handheld transmitter display panel](#)



Setting options in the menu

In the SKM 500 G4 menu, you can configure the following settings

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -48 dB
- in 6 dB steps



The **AF** audio level is also displayed when the wireless microphone is muted, e.g. to check the sensitivity before a live broadcast.



Recommended presets:

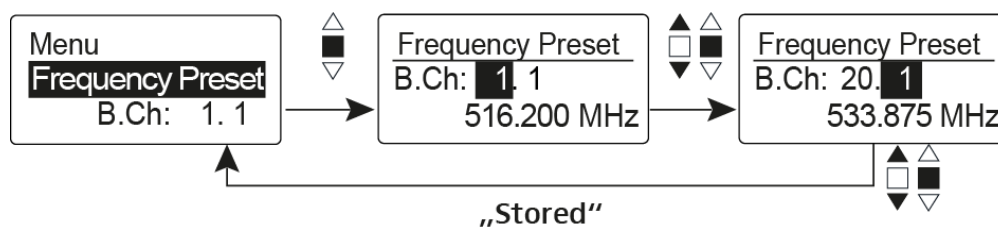
- Loud music/vocals: -48 to -18 dB
- Moderation: -18 to -12 dB
- Interviews: -12 to 0 dB



Frequency Preset menu item

Manually selecting a frequency bank and channel

i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The wireless microphone and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).

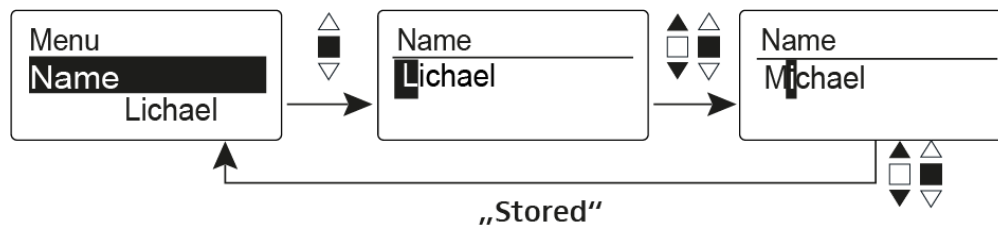


Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the wireless microphone (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



The names are a maximum of 8 characters:

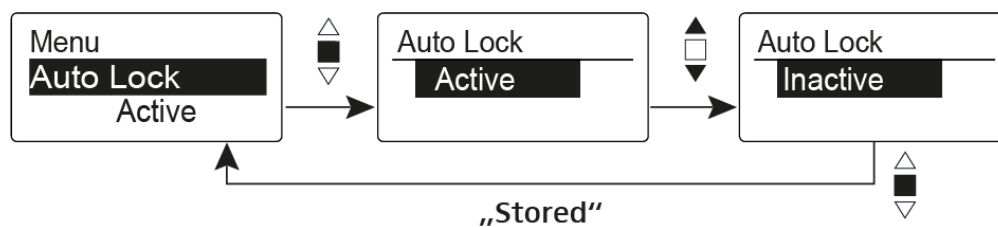
- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Configuring the transmission power *Sendeleistung einstellen*

- See [Advanced > RF Power menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revisions

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the wireless microphone to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

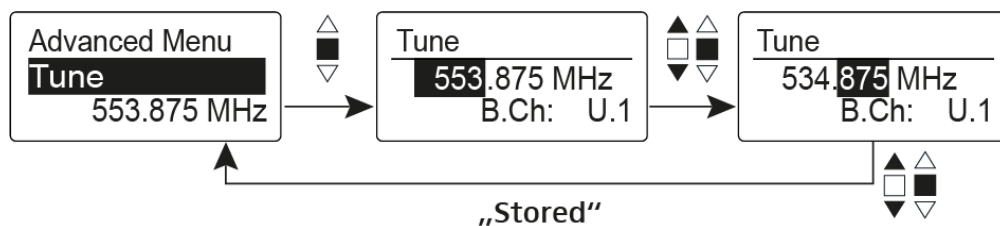
You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).



To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

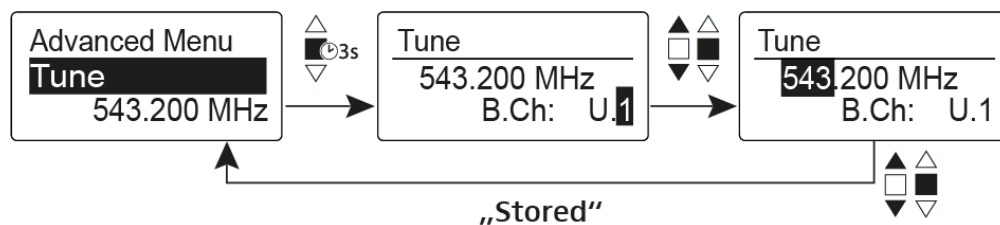
✓ The frequency selection appears.



- ▶ Configure the desired frequency.
 - ▶ Press the multi-function switch.
- ✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Move the multi-function switch until the **Tune** menu item appears.
- ▶ Hold down the multi-function switch until the frequency bank selection appears.

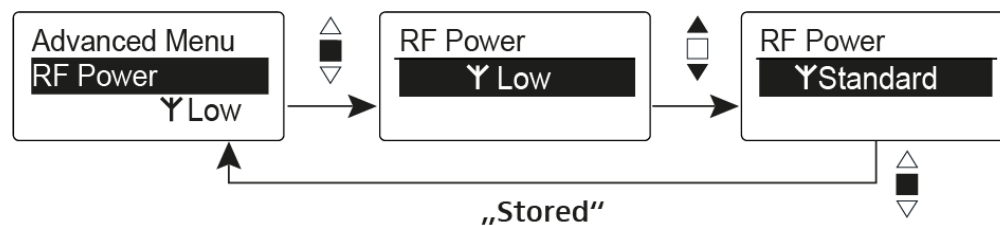


- ▶ Set the desired channel.
 - ▶ Press the multi-function switch.
- ✓ The frequency selection appears.
- ▶ Configure the frequency.



Advanced > RF Power menu item

Configuring the transmission power



You can configure the transmission power in three steps in the **RF Power** menu item.

i Please note the information at the following address: sennheiser.com/sifa.

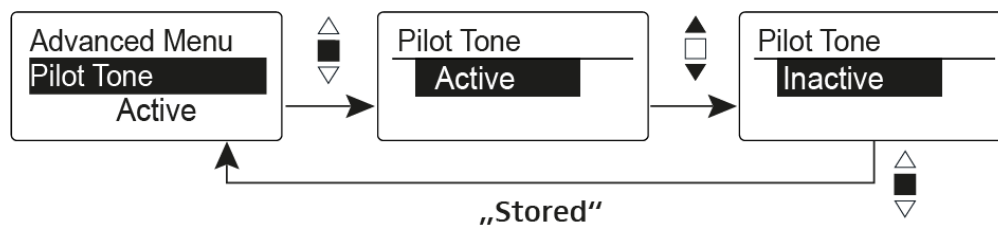
Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

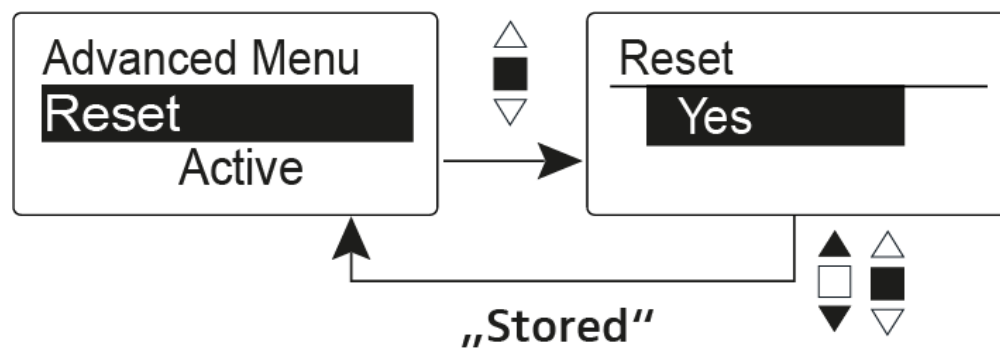
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the wireless microphone



When you reset the wireless microphone, only the selected settings of the pilot tone and the **U1** to **U6** frequency banks are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.



SK 300 G4-RC bodypack transmitter

Product overview

Inserting and removing the batteries/rechargeable batteries

Battery status

Connecting a microphone to the bodypack transmitter

Connecting an instrument or line source to the bodypack transmitter

Connecting the RMS 1 mute switch to the bodypack transmitter

Attaching the bodypack transmitter to clothing

Switching the bodypack transmitter on and off

Muting the bodypack transmitter (AF mute)

Deactivating the RF signal (RF mute)

Using the bodypack transmitter with the RMS 1 remote mute switch

Lock-off function

Displays on the bodypack transmitter display panel

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Buttons for navigating the menu

Setting options in the menu

Sensitivity menu item

Frequency Preset menu item

Name menu item

Auto Lock menu item

Advanced menu item

Advanced > Tune menu item

Advanced > Mute Mode menu item

Advanced > MIC LED menu item

Advanced > RF Power menu item

Advanced > Pilot Tone menu item

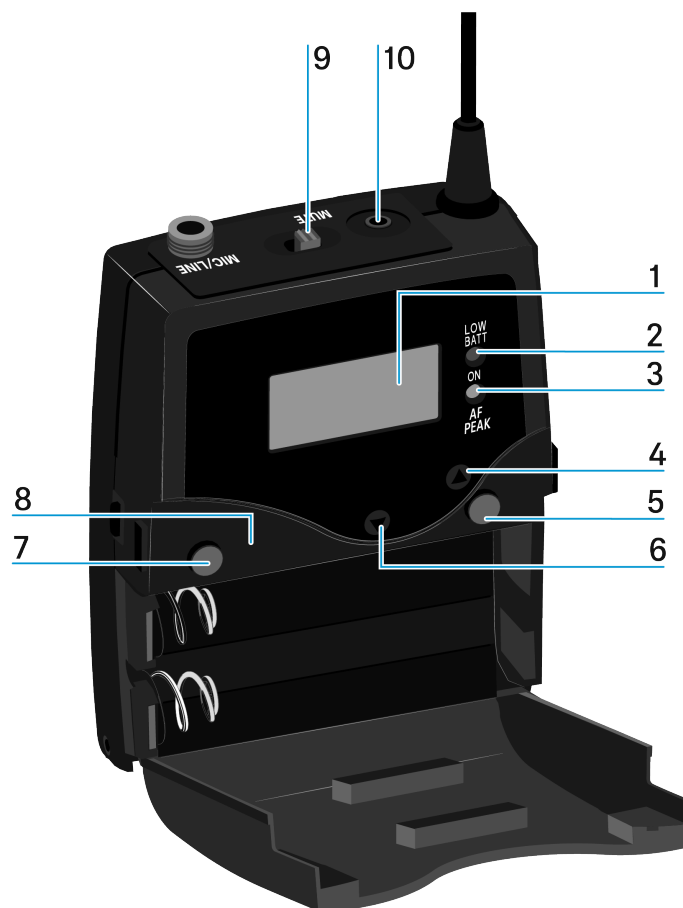
Advanced > LCD Contrast menu item

Advanced > Reset menu item

Advanced > Software Revision menu item



Product overview



- 1 Display panel
 - see [Displays on the bodypack transmitter display panel](#)
- 2 Operation and battery indicator, red LED
 - illuminated = ON
 - see [Switching the bodypack transmitter on and off](#)
 - flashing = LOW BATTERY
 - see [Inserting and removing the batteries/rechargeable batteries](#)
- 3 Audio overload indicator, yellow LED
 - illuminated = AF PEAK (overload)
 - see [Sensitivity menu item](#)
- 4 UP button
 - see [Buttons for navigating the menu](#)



- 5 **SET** button
 - see [Buttons for navigating the menu](#)
- 6 **DOWN** button
 - see [Buttons for navigating the menu](#)
- 7 **ON/OFF** button with ESC function in the operating menu
 - Switch the transmitter on or off
 - see [Switching the bodypack transmitter on and off](#)
 - Escape function in the menu
 - see [Buttons for navigating the menu](#)
- 8 Infra-red interface
 - see [Ew 300-500 G4 synchronizing](#)
- 9 **MUTE** switch
 - Deactivate and activate RF signal
 - see [Muting the bodypack transmitter \(AF mute\)](#)
 - Deactivate and activate audio signal
 - see [Deactivating the RF signal \(RF mute\)](#)
- 10 2.5 mm jack socket
 - for remote [RMS 1 MUTE switch](#)
 - see [Connecting the RMS 1 mute switch to the bodypack transmitter](#)



Inserting and removing the batteries/rechargeable batteries

You can operate the bodypack transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Press the two catches and open the battery compartment cover.
- ▶ Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



- ▶ Close the battery compartment.
 - ✓ The cover locks into place with an audible click.

Related information

[Battery status](#)

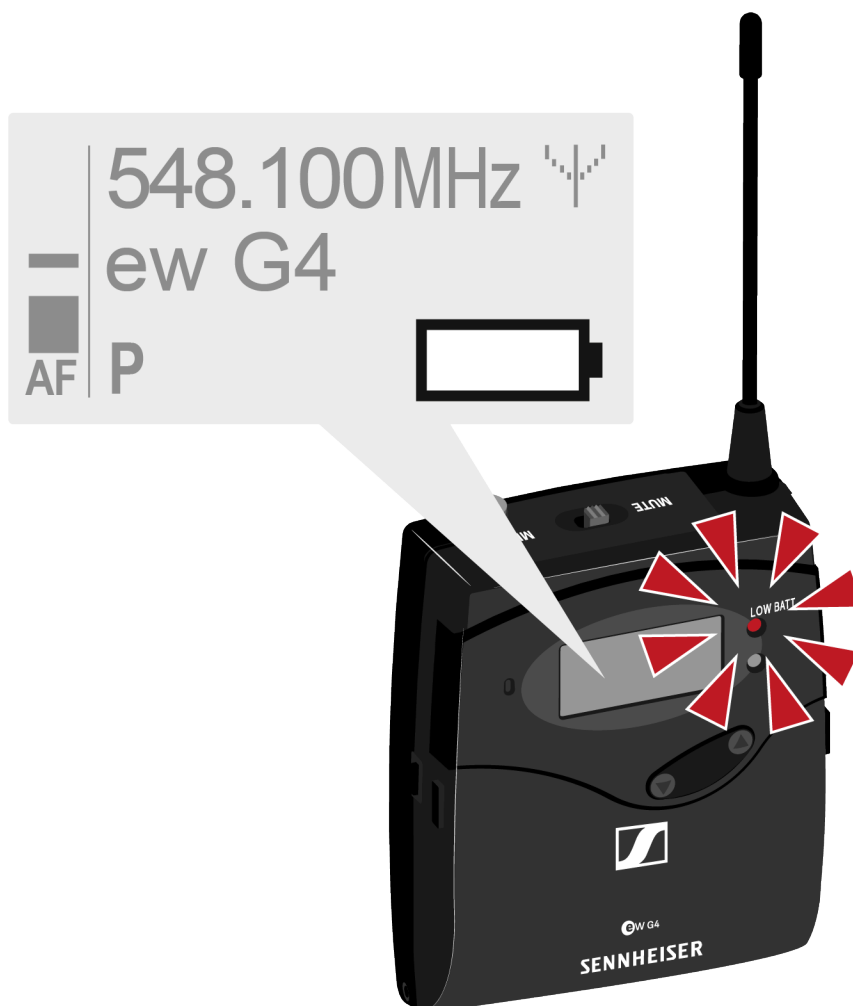
Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
LOW BATT ...		



Charge status is critical (LOW BATT):





Connecting a microphone to the bodypack transmitter

You can find a list of recommended Lavalier and headset microphones for the bodypack transmitter under [Microphones and cables](#).

To connect a microphone to the bodypack transmitter:

- ▶ Insert the cable's 3.5 mm jack plug into the **MIC/LINE** socket on the bodypack transmitter as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.





Connecting an instrument or line source to the bodypack transmitter

You can connect instruments or audio sources with a line level to the bodypack transmitter.

To do this, you will need the Ci 1-N (6.3 mm jack plug on a lockable 3.5 mm jack plug) or CL 2 (XLR-3F plug on lockable 3.5 mm jack plug) Sennheiser cables.

To connect an instrument or line source to bodypack transmitter:

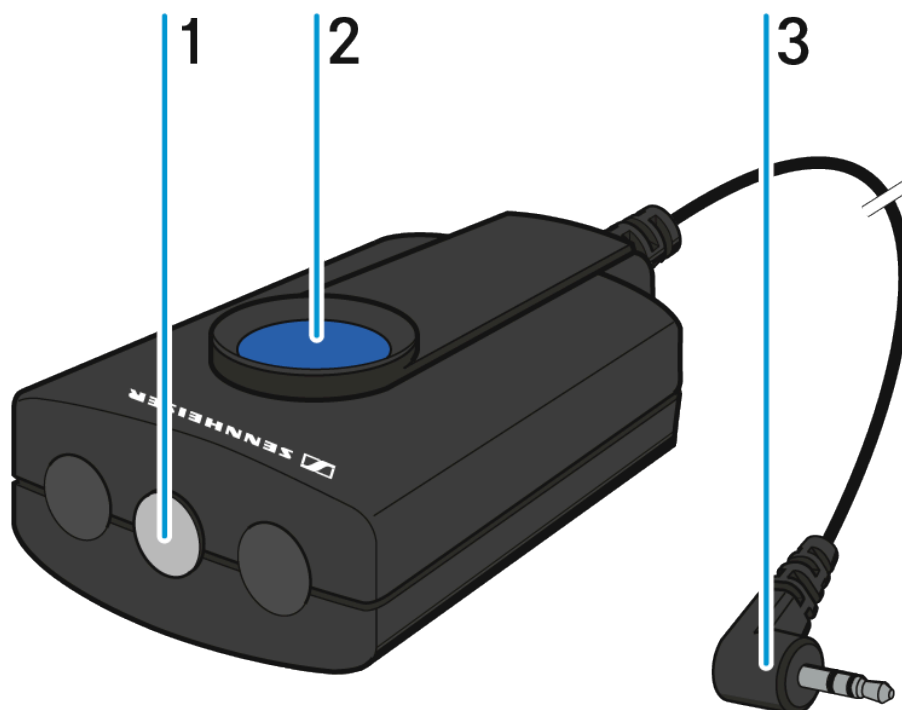
- ▶ Insert the cable's 3.5 mm jack plug into the MIC/LINE socket on the bodypack transmitter as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.





Connecting the RMS 1 mute switch to the bodypack transmitter

You can control the SK 300 G4-RC remotely via cable with the RMS 1 remote mute switch.



1 **STATUS** LED

- see [Advanced > MIC LED menu item](#)

2 **MIC** button

- see [Using the bodypack transmitter with the RMS 1 remote mute switch](#)

3 2.5 mm jack plug



To connect the RMS 1 to the SK 300 G4-RC:

- ▶ Insert the 2.5 mm jack plug of the RMS 1 into the 2.5 mm jack socket of the SK 300 G4-RC.



- ✓ This deactivates the function of the **MUTE** switch of the SK 300 G4-RC.

- i** You can find information about operating the RMS 1 under [Using the bodypack transmitter with the RMS 1 remote mute switch](#).

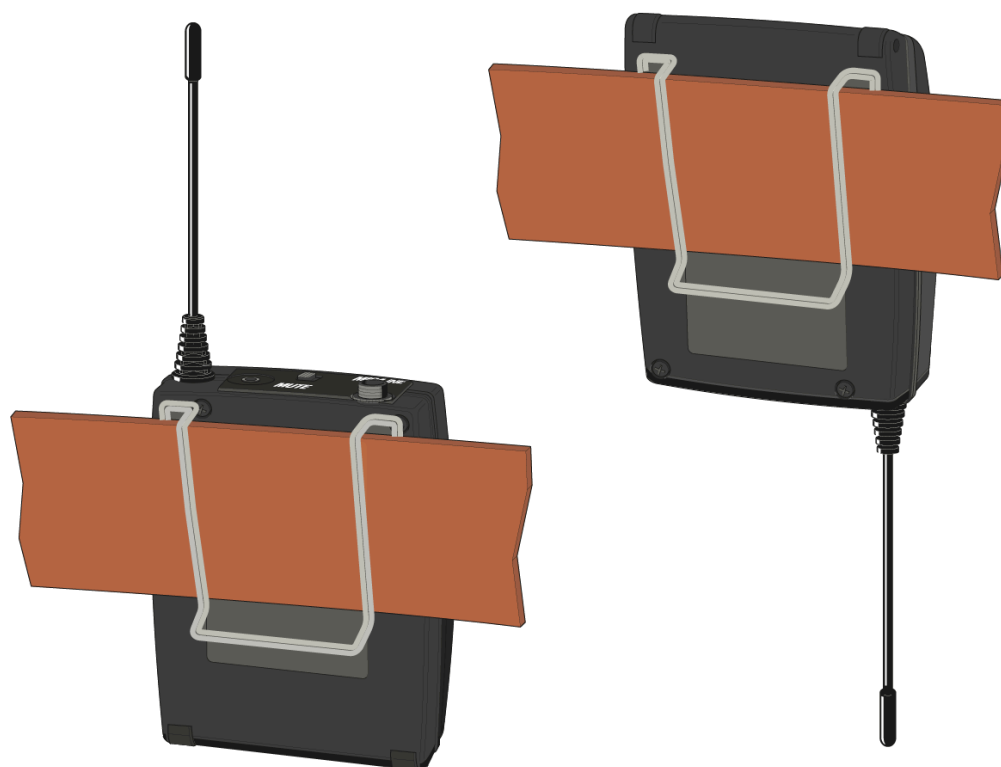


Attaching the bodypack transmitter to clothing

You can use the belt clip to attach the bodypack transmitter to your waistband or on a guitar strap.

The belt clip is detachable so that you can also attach the bodypack transmitter with the antenna pointing downwards. To do so, withdraw the belt clip from its fixing points and attach it the other way round.

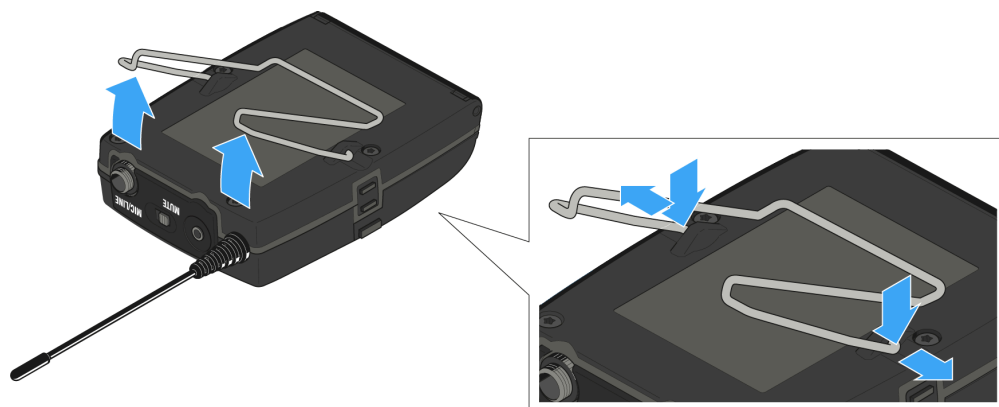
The belt clip is secured so that it cannot slide out of its fixing points accidentally.





To detach the belt clip:

- ▶ Lift the belt clip as shown in the diagram.
- ▶ Press one side of the clip downward on the fixing hole and pull it out of the transmitter housing.
- ▶ Do the same thing on the other side.



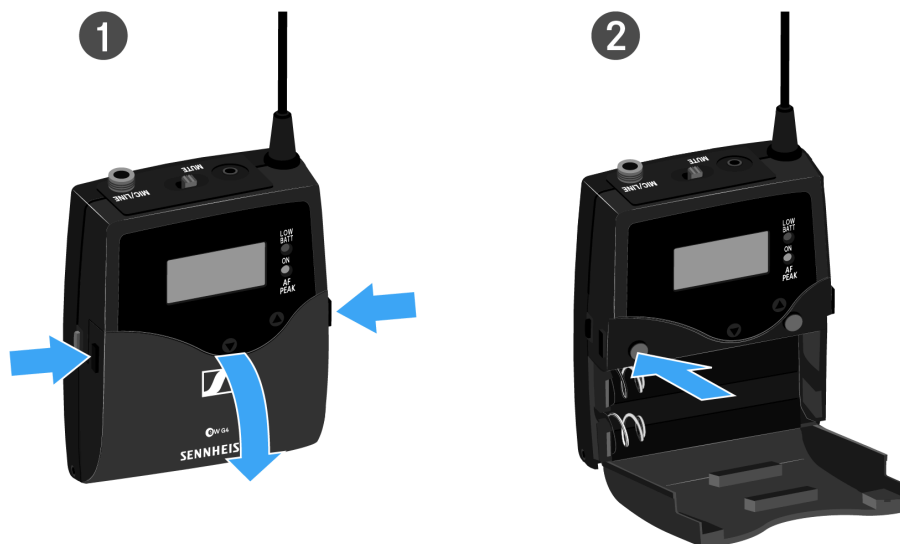


Switching the bodypack transmitter on and off

- ▶ Press the two catches and open the battery compartment cover.

To switch on the SK 100 G4:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the SK 100 G4:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the bodypack transmitter (AF mute)

You can mute the audio signal in two ways:

Muting the audio signal with the MUTE switch

You can mute the audio signal with the **MUTE** switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.



The audio signal is muted. The message *MUTE* is shown on the display.

Muting the audio signal with the RMS 1 remote mute switch

See [Using the bodypack transmitter with the RMS 1 remote mute switch](#).



Deactivating the RF signal (RF mute)

You can deactivate the RF signal in three ways:



Deactivating the RF signal with the MUTE switch

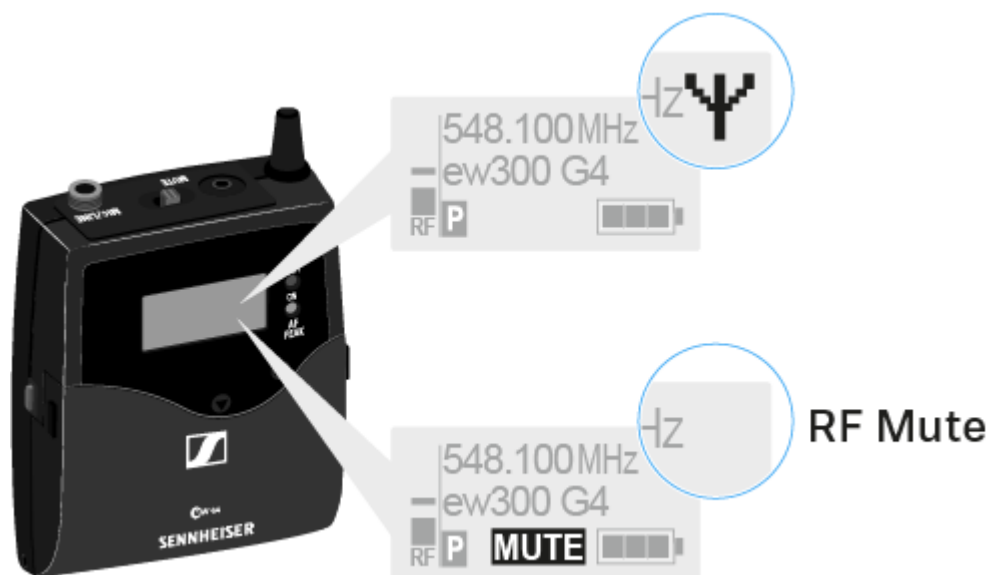
- i** To do this, the **MUTE** switch function must be configured to RF On/Off. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.

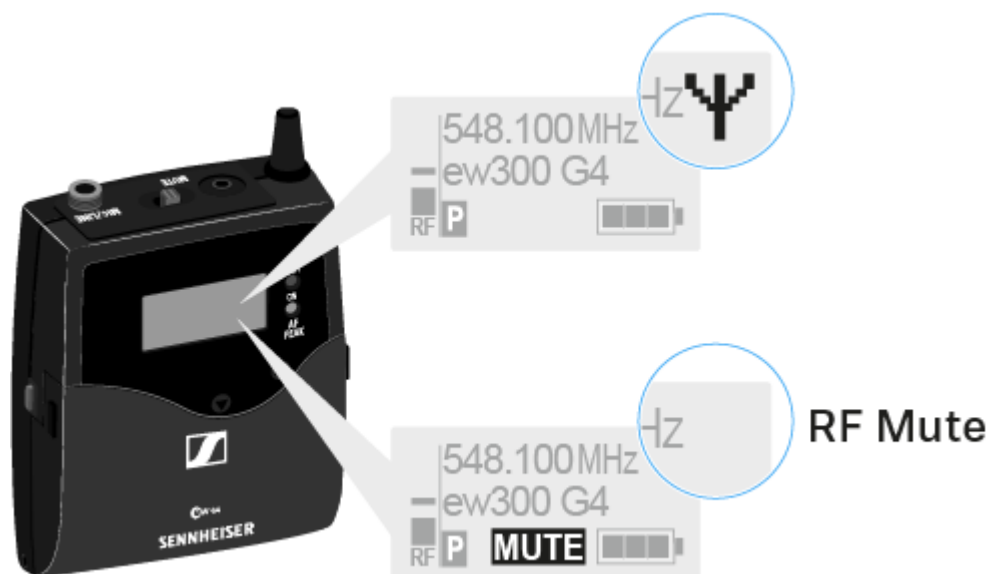


- ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- ▶ Short-press the **ON/OFF** button.
 - ✓ **RF Mute On?** appears.
- ▶ Press the **SET** button.
 - ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



- ▶ Short-press the **ON/OFF** button.



- ✓ *RF Mute Off?* appears.
- ▶ Press the **SET** button.
- ✓ The transmission icon appears again.

Deactivating the RF signal with the RMS 1 remote mute switch

See [Using the bodypack transmitter with the RMS 1 remote mute switch](#).



Using the bodypack transmitter with the RMS 1 remote mute switch

You can control the SK 300 G4 remotely via cable with the RMS 1 remote mute switch.

- ▶ Configure the desired function for the RMS 1 in the [Advanced > Mute Mode menu item](#) of the SK 300.
- ▶ Press the **MIC** button.



- ✓ The bodypack transmitter will behave as described in the table in [Advanced > Mute Mode menu item](#) angegeben.



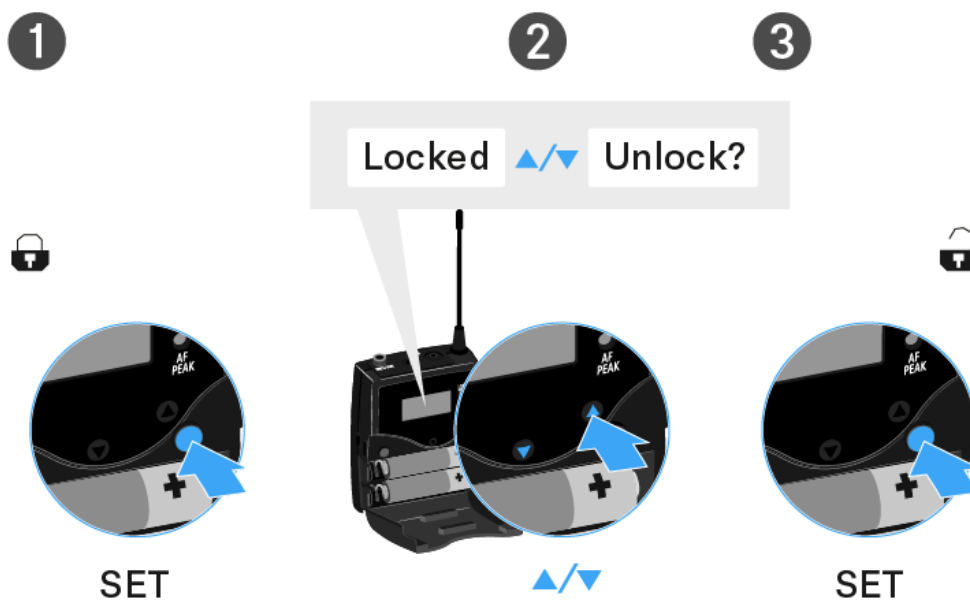
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

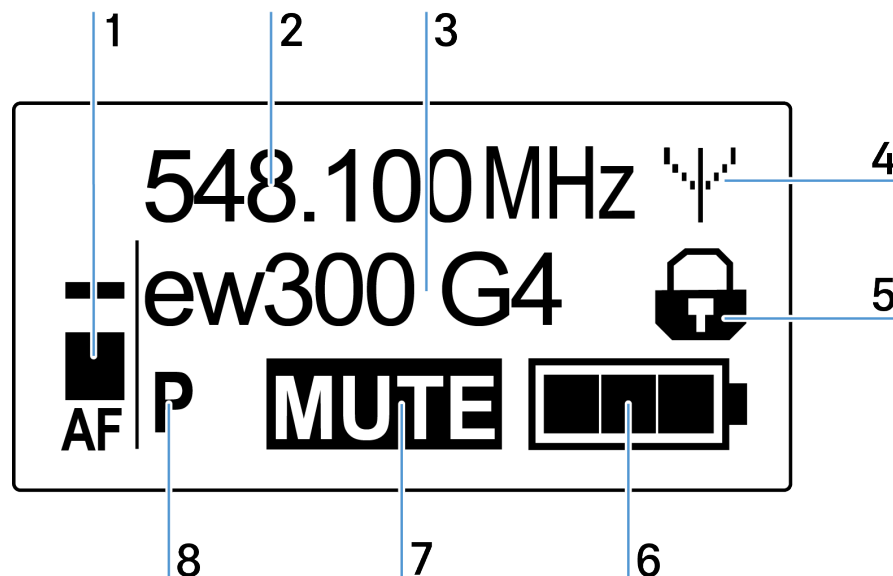
- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.





Displays on the bodypack transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)

6 Battery status

- see [Battery status](#)



7 MUTE muting function

- The audio signal is muted
- see [Muting the bodypack transmitter \(AF mute\)](#)
- see [Deactivating the RF signal \(RF mute\)](#)

8 P pilot tone

- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display

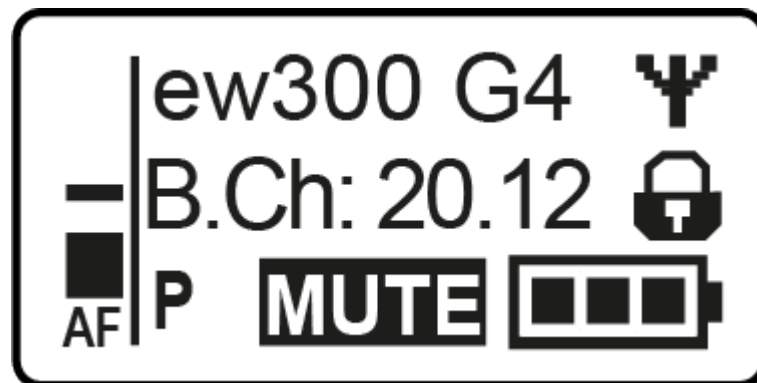




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu/a menu item:

- ▶ Press the **SET** button.
 - ✓ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the bodypack transmitter display panel](#)



Setting options in the menu

In the SK 500 G4-RC menu, you can configure the following settings.

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the function of the MUTE switch and the RMS 1 remote mute switch
- Configuring the LED behavior of the RMS 1 external mute switch
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -60 dB
- in 3 dB steps



The AF audio level is also displayed when the bodypack transmitter is muted, e.g. to check the sensitivity before a live broadcast.



Recommended presets:

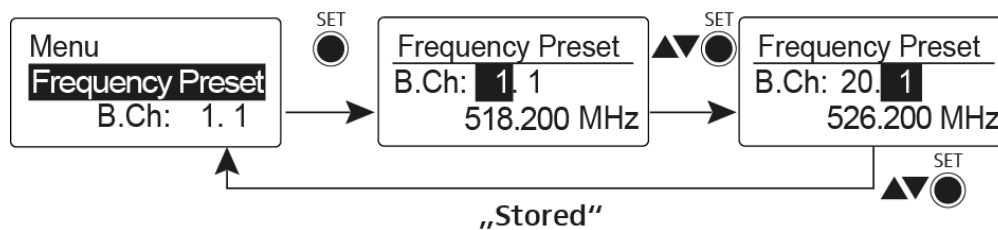
- Loud music/vocals: -30 to -21 dB
- Moderation: -21 to 0 dB
- Instrument input
 - Electric guitar with single-coil pickup: -30 to -24 dB
 - Electric guitar with Humbucker pickups: -45 to -30 dB
 - Guitars with active electronics (active pickups, active EQs, Piezo pickups): -45 to -30 dB



Frequency Preset menu item

Manually selecting a frequency bank and channel

i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).

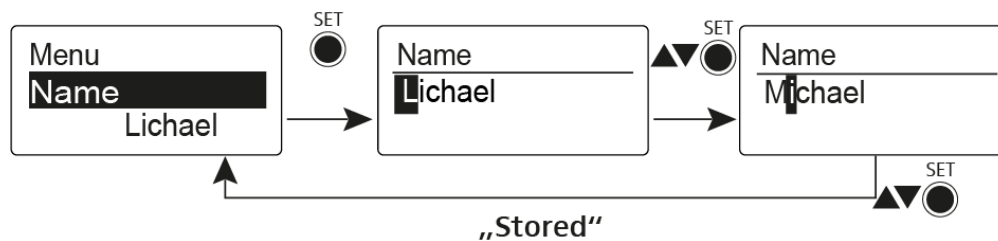


Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



The names are a maximum of 8 characters:

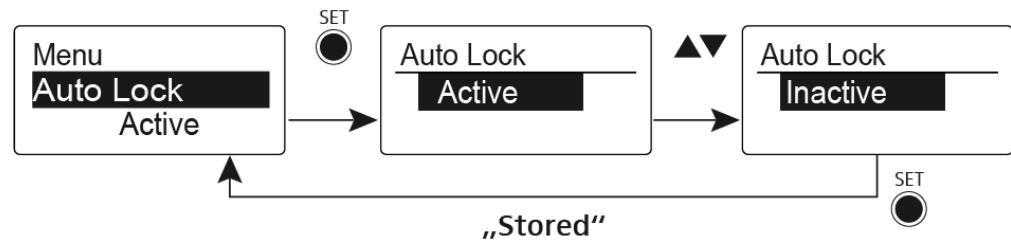
- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Configuring the function of the MUTE switch and the RMS 1 remote mute switch

- See [Advanced > Mute Mode menu item](#)

Configuring the LED behavior of the RMS 1 external mute switch

- See [Advanced > MIC LED menu item](#)

Configuring the transmission power

- See [Advanced > RF Power menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.



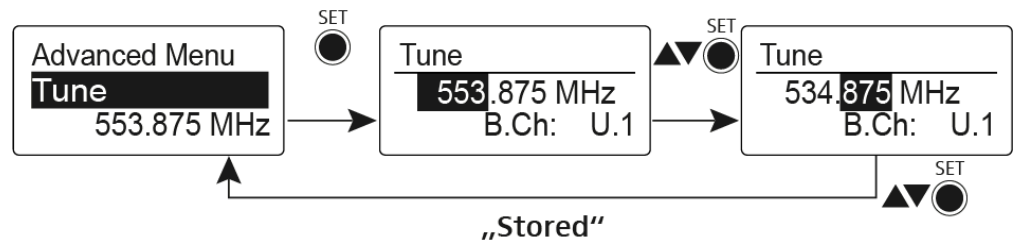
While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).

To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

✓ The frequency selection appears.



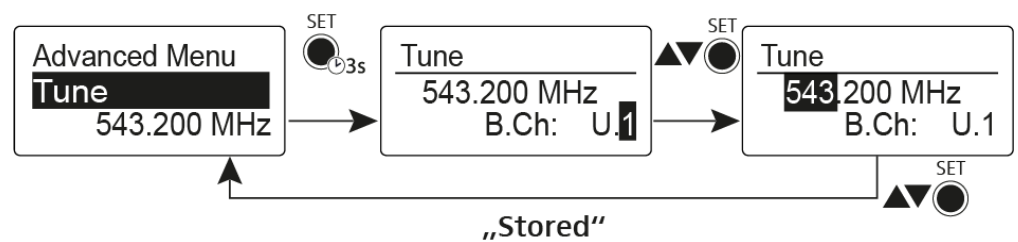
- ▶ Configure the desired frequency.

- ▶ Press the **SET** button.

✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- ▶ Set the desired channel.

- ▶ Press the **SET** button.

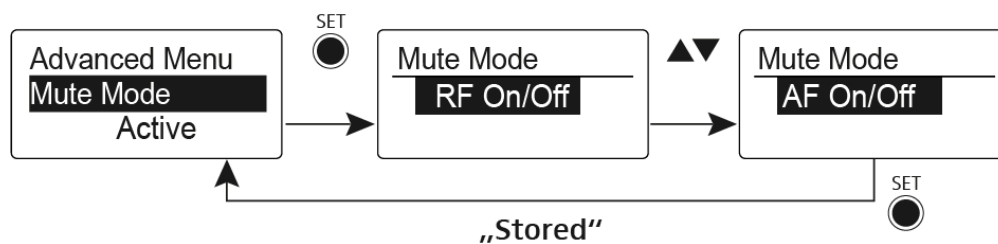
✓ The frequency selection appears.

- ▶ Configure the frequency.



Advanced > Mute Mode menu item

Configure the function of the mute switch and the RMS 1 remote mute switch



- i** The **Push to mute** and **Push to talk** menu items can only be used with an RMS 1 remote mute switch.

MUTE switch functions

AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to the MUTE selector position, the RF signal is deactivated.

Disabled mode

- No function

Functions of the RMS 1 remote mute switch

AF On/Off mode

- Press the RMS 1 mute switch: The audio signal is muted.
- Press the RMS 1 mute switch again: The audio signal is no longer muted.

RF On/Off mode

- Press the RMS 1 mute switch: The RF signal is deactivated.
- Press the RMS 1 mute switch again: The RF signal is activated.

Push To Mute mode

- The audio signal is deactivated as long as the RMS 1 mute switch is pressed.



Push To Talk mode

- The audio signal is activated as long as the RMS 1 mute switch is pressed.
- The bodypack transmitter is muted when you configure the Push to Talk function.

Disabled mode

- No function

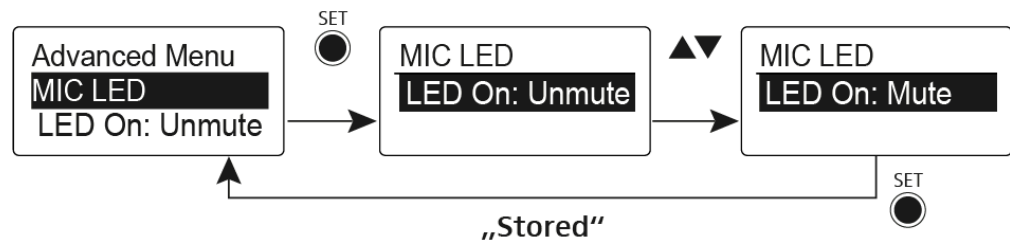
i When you connect the RMS 1 remote mute switch you can only mute the signal using this switch. The **MUTE** switch's function is deactivated during this time.



Advanced > MIC LED menu item

Configure the STATUS LED of the RMS 1 remote mute switch

In the MIC LED menu item you can configure and deactivate the STATUS LED (see [Connecting the RMS 1 mute switch to the bodypack transmitter](#)) of the RMS 1 remote mute switch regardless of the settings of the [Advanced > Mute Mode menu item](#) and the status of the RF signal.



LED On: setting Unmute

- The STATUS LED is illuminated when the bodypack transmitter is sending an RF signal or is not muted.

LED On: setting Mute

- The STATUS LED is illuminated when the bodypack transmitter is not sending an RF signal or is muted.

Disable LED setting

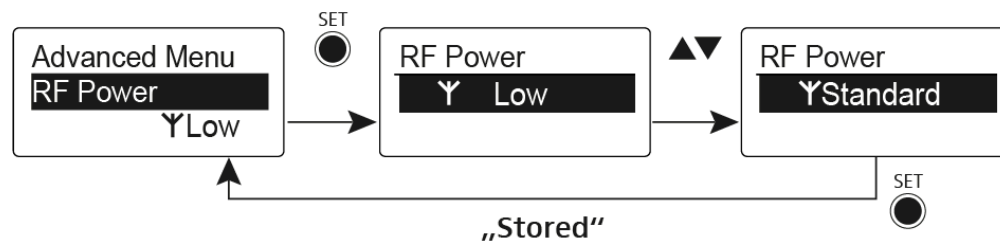
- The STATUS LED is deactivated.



Advanced > RF Power menu item

Configuring the transmission power

You can configure the transmission power in three steps in the RF Power menu item.



i Please note the information at the following address: sennheiser.com/sifa.

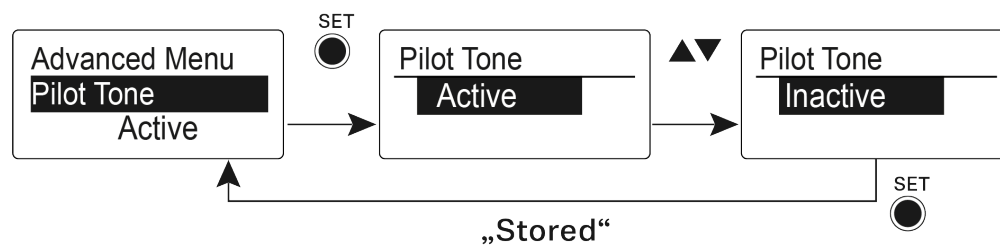
Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

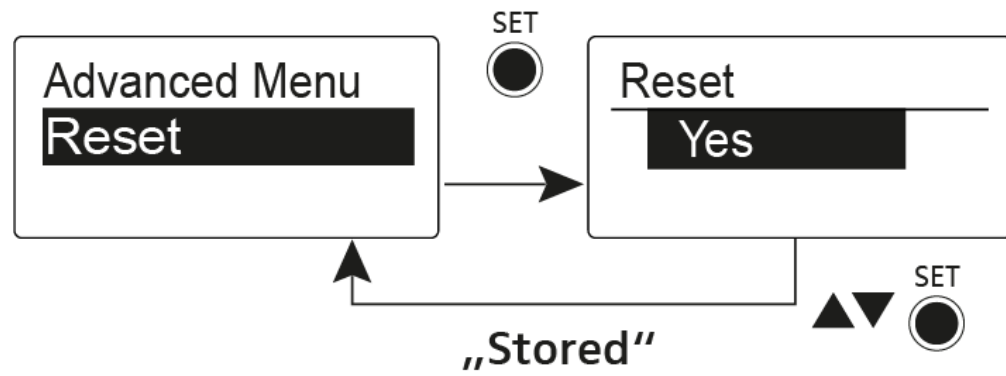
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the bodypack transmitter



When you reset the bodypack transmitter, only the selected settings of the pilot tone and the **U1** to **U6** frequency banks are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

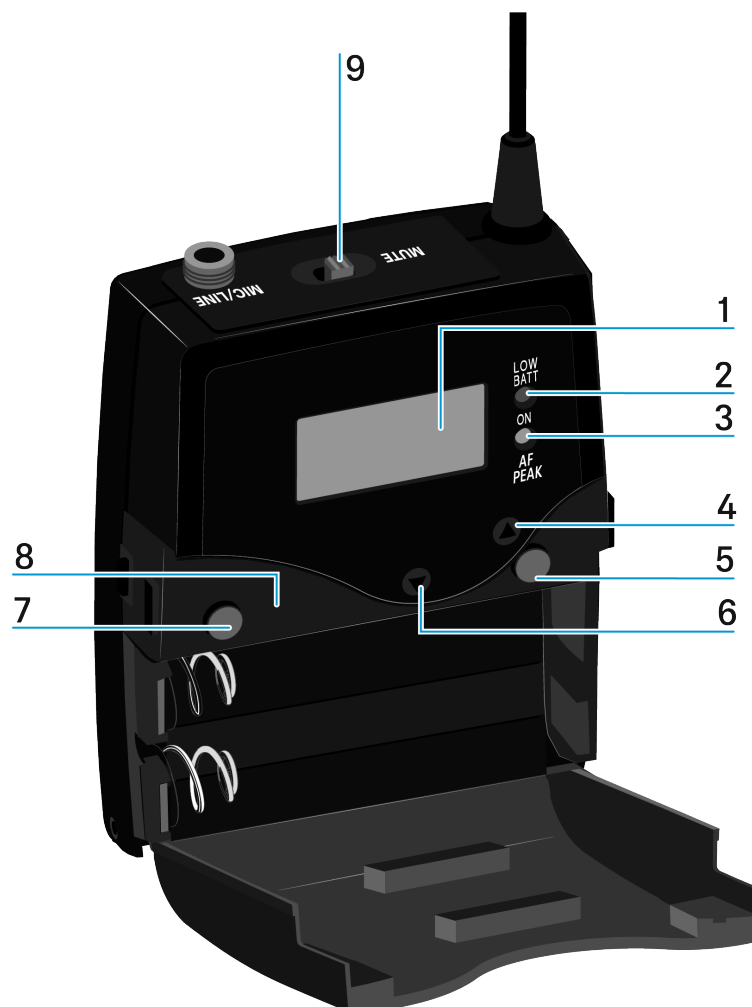


SK 500 G4 bodypack transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Connecting a microphone to the bodypack transmitter
- Connecting an instrument or line source to the bodypack transmitter
- Attaching the bodypack transmitter to clothing
- Switching the bodypack transmitter on and off
- Muting the bodypack transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the bodypack transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > Mute Mode menu item
- Advanced > RF Power menu item
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



1 Display panel

- see [Displays on the bodypack transmitter display panel](#)

2 Operation and battery indicator, red LED

- illuminated = ON
 - see [Switching the bodypack transmitter on and off](#)
- flashing = LOW BATTERY
 - see [Inserting and removing the batteries/rechargeable batteries](#)

3 Audio overload indicator, yellow LED

- illuminated = AF PEAK (overload)
 - see [Sensitivity menu item](#)



4 UP button

- see [Buttons for navigating the menu](#)

5 SET button

- see [Buttons for navigating the menu](#)

6 DOWN button

- see [Buttons for navigating the menu](#)

7 ON/OFF button with ESC function in the operating menu

- Switch the transmitter on or off
 - see [Switching the bodypack transmitter on and off](#)
- Escape function in the menu
 - see [Buttons for navigating the menu](#)

8 Infra-red interface

- see [Ew 300-500 G4 synchronizing](#)

9 MUTE switch

- Deactivate and activate RF signal
 - see [Muting the bodypack transmitter \(AF mute\)](#)
- Deactivate and activate audio signal
 - see [Deactivating the RF signal \(RF mute\)](#)



Inserting and removing the batteries/rechargeable batteries

You can operate the bodypack transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Press the two catches and open the battery compartment cover.
- ▶ Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



- ▶ Close the battery compartment.
 - ✓ The cover locks into place with an audible click.

Related information

[Battery status](#)

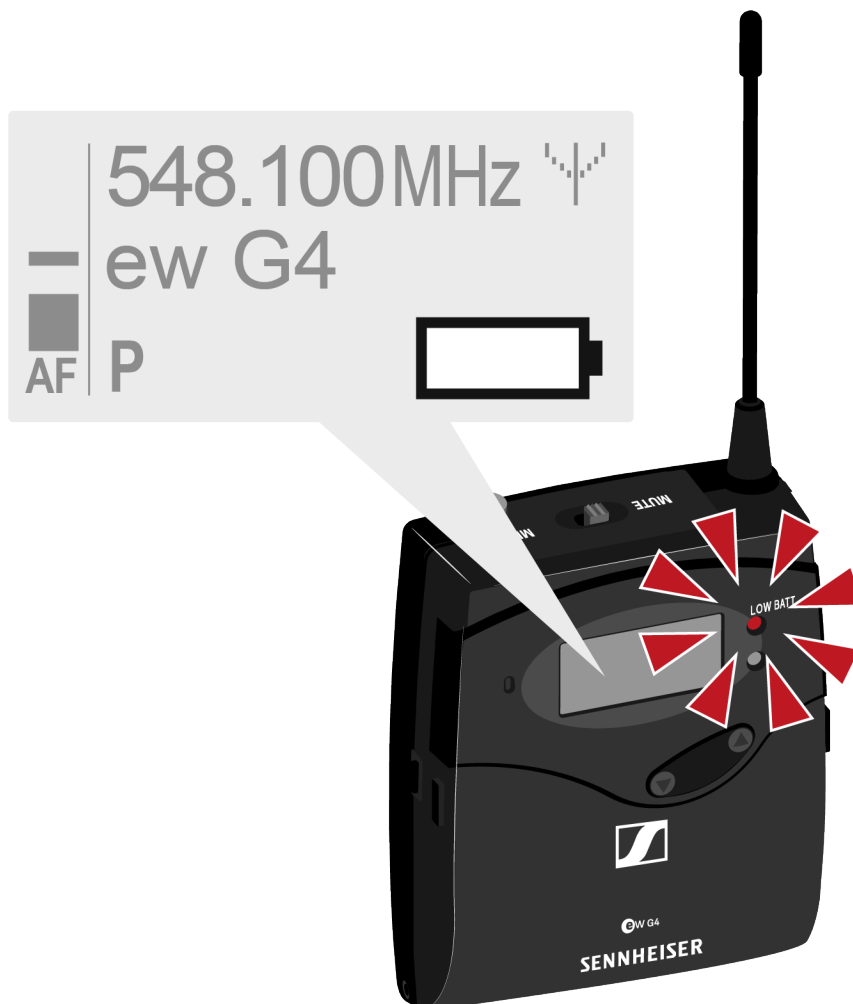
Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
LOW BATT ...		



Charge status is critical (LOW BATT):



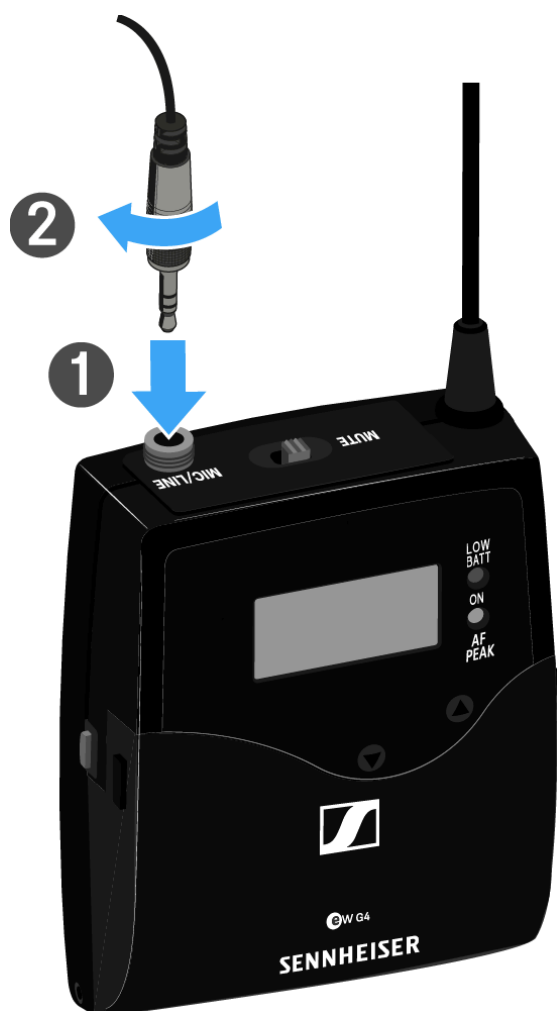


Connecting a microphone to the bodypack transmitter

You can find a list of recommended Lavalier and headset microphones for the bodypack transmitter under [Microphones and cables](#).

To connect a microphone to the bodypack transmitter:

- ▶ Insert the cable's 3.5 mm jack plug into the **MIC/LINE** socket on the bodypack transmitter as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.





Connecting an instrument or line source to the bodypack transmitter

You can connect instruments or audio sources with a line level to the bodypack transmitter.

To do this, you will need the Ci 1-N (6.3 mm jack plug on a lockable 3.5 mm jack plug) or CL 2 (XLR-3F plug on lockable 3.5 mm jack plug) Sennheiser cables.

To connect an instrument or line source to bodypack transmitter:

- ▶ Insert the cable's 3.5 mm jack plug into the MIC/LINE socket on the bodypack transmitter as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



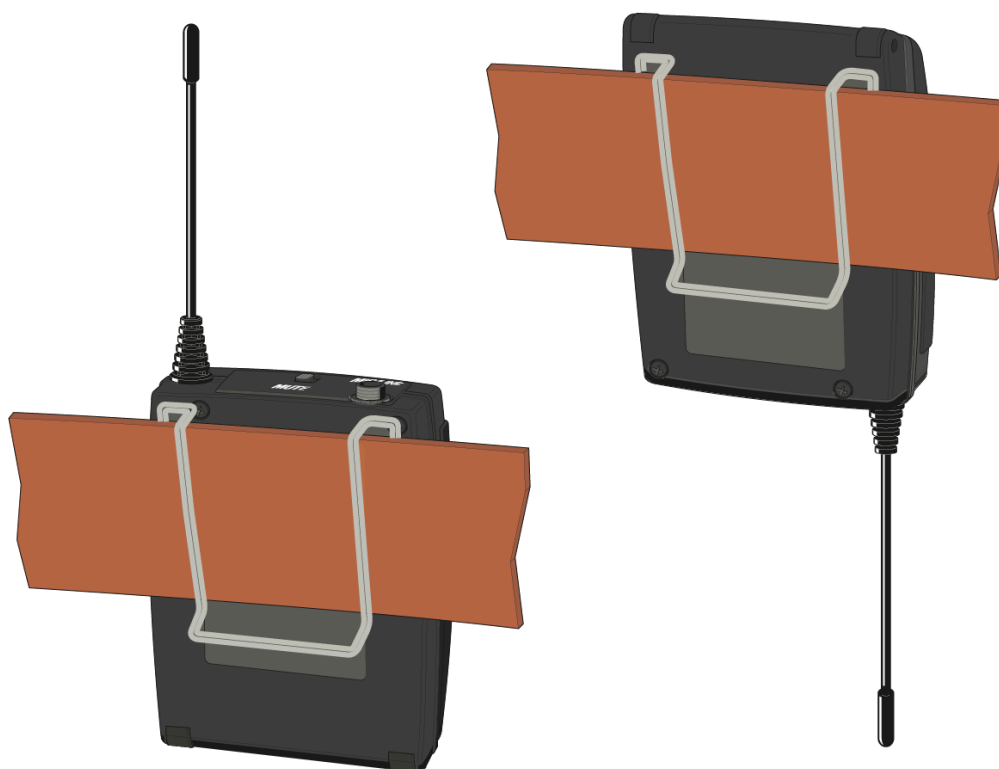


Attaching the bodypack transmitter to clothing

You can use the belt clip to attach the bodypack transmitter to your waistband or on a guitar strap.

The belt clip is detachable so that you can also attach the bodypack transmitter with the antenna pointing downwards. To do so, withdraw the belt clip from its fixing points and attach it the other way round.

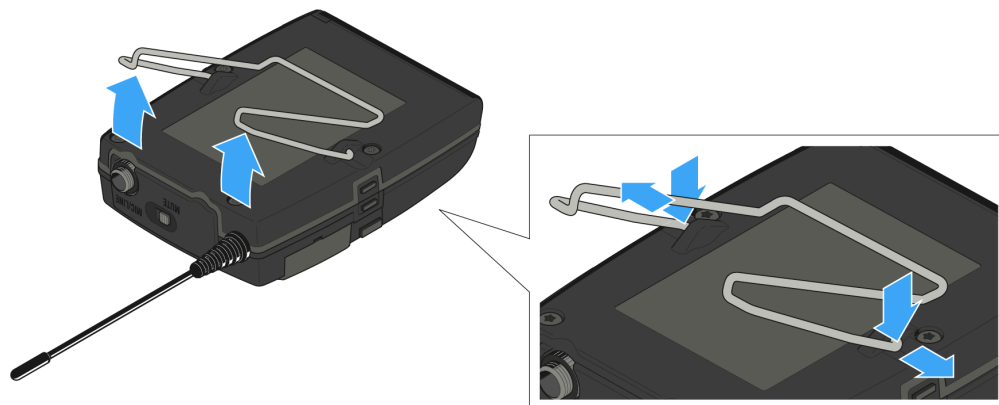
The belt clip is secured so that it cannot slide out of its fixing points accidentally.





To detach the belt clip:

- ▶ Lift the belt clip as shown in the diagram.
- ▶ Press one side of the clip downward on the fixing hole and pull it out of the transmitter housing.
- ▶ Do the same thing on the other side.



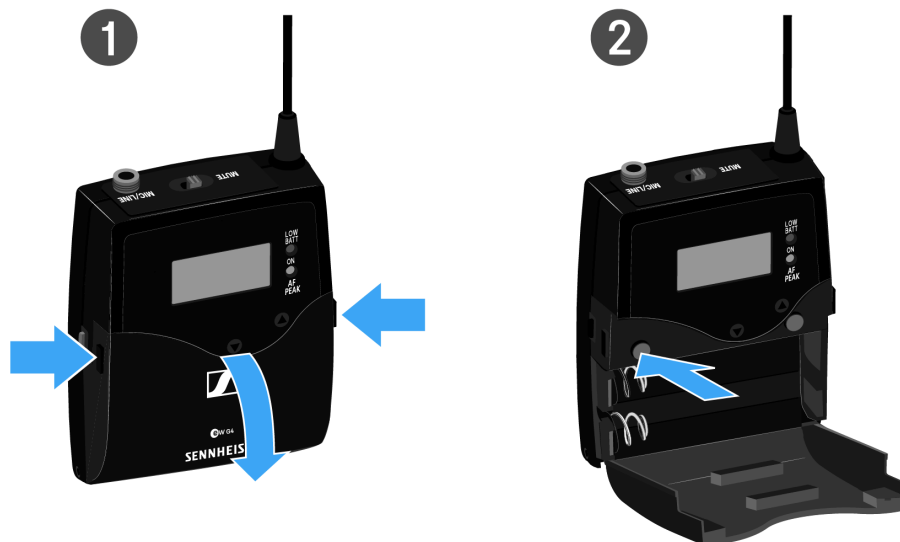


Switching the bodypack transmitter on and off

- ▶ Press the two catches and open the battery compartment cover.

To switch on the SK 100 G4:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the SK 100 G4:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the bodypack transmitter (AF mute)

You can deactivate the audio signal with the **MUTE** switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.
 - ✓ The audio signal is muted. The message **MUTE** is shown on the display.



Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:



Deactivating the RF signal with the MUTE switch

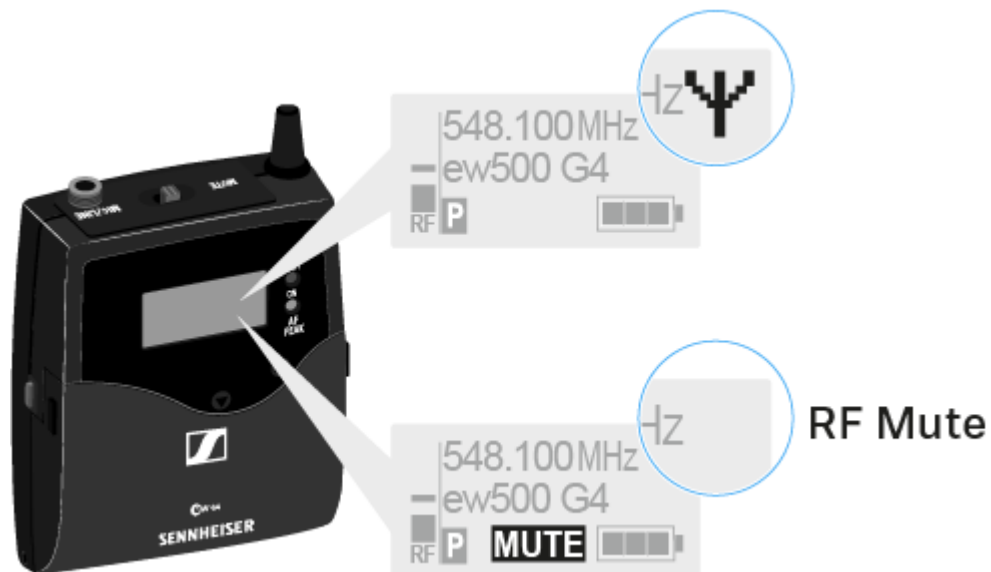
- i** To do this, the MUTE switch function must be configured to RF On/Off. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.

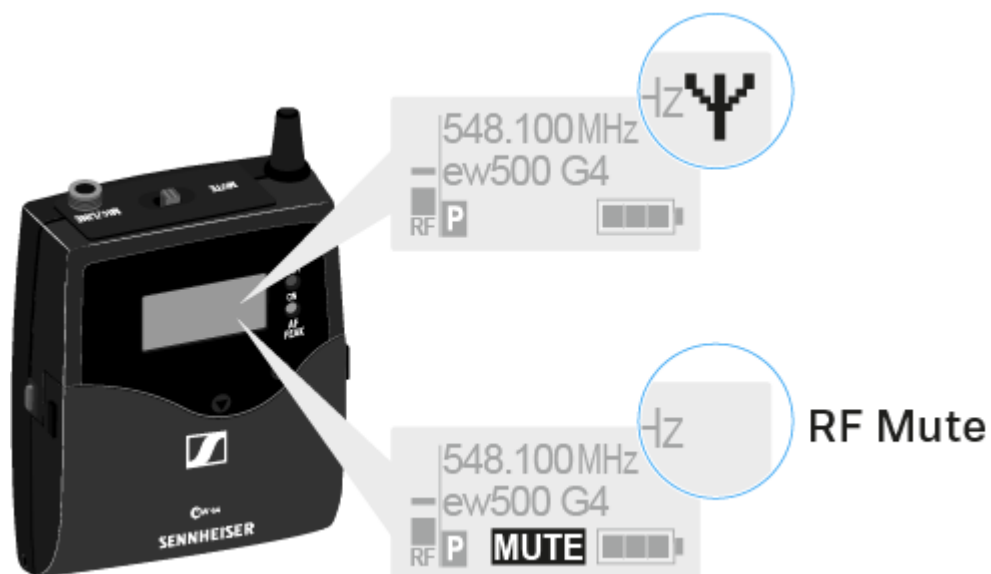


- ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- ▶ Short-press the **ON/OFF** button.
 - ✓ **RF Mute On?** appears.
- ▶ Press the **SET** button.
 - ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



- ▶ Short-press the **ON/OFF** button, to activate the RF signal.



- ✓ *RF Mute Off?* appears.
- ▶ Press the **SET** button.
- ✓ The transmission icon appears again.



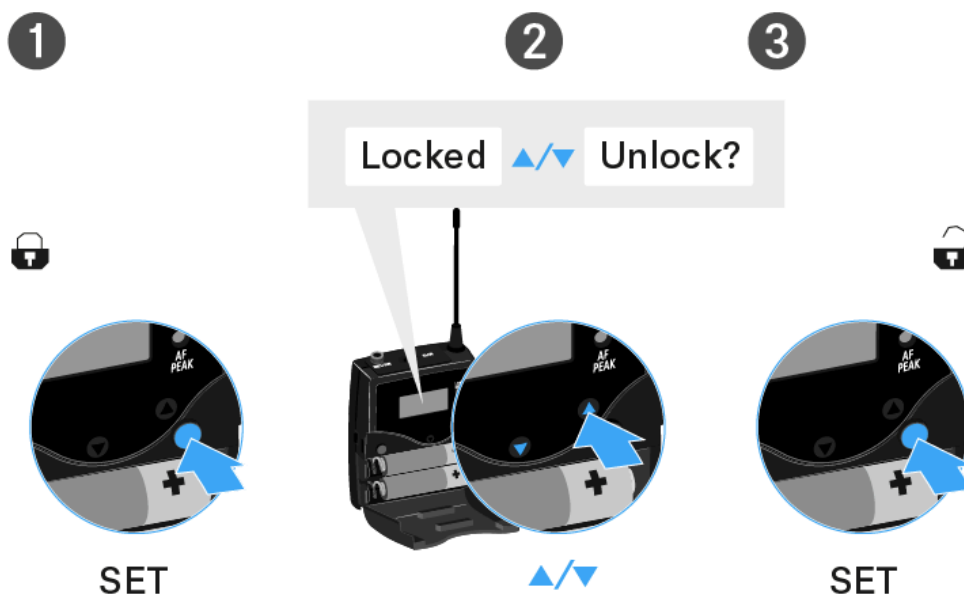
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

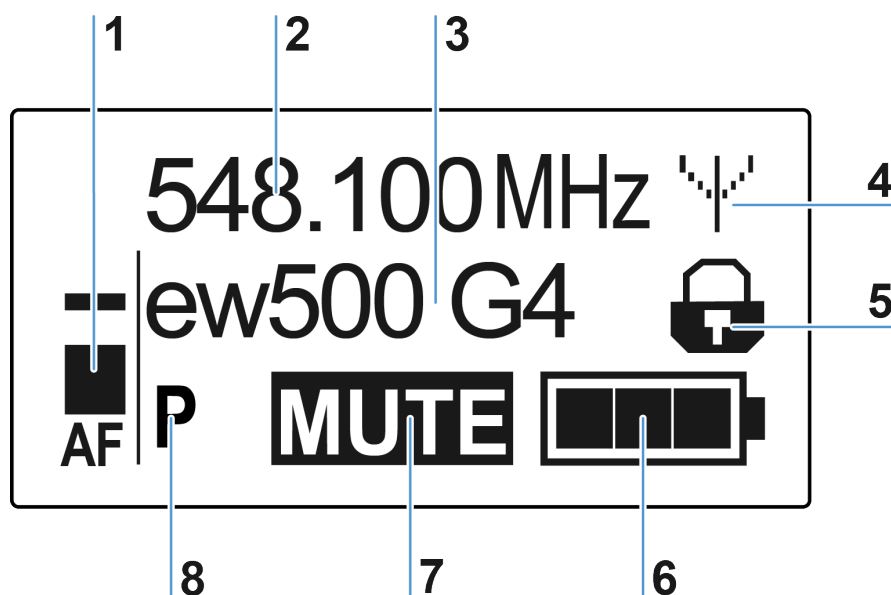
- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.





Displays on the bodypack transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)

6 Battery status

- see [Battery status](#)



7 MUTE muting function

- The audio signal is muted
- see [Muting the bodypack transmitter \(AF mute\)](#)
- see [Deactivating the RF signal \(RF mute\)](#)

8 P pilot tone

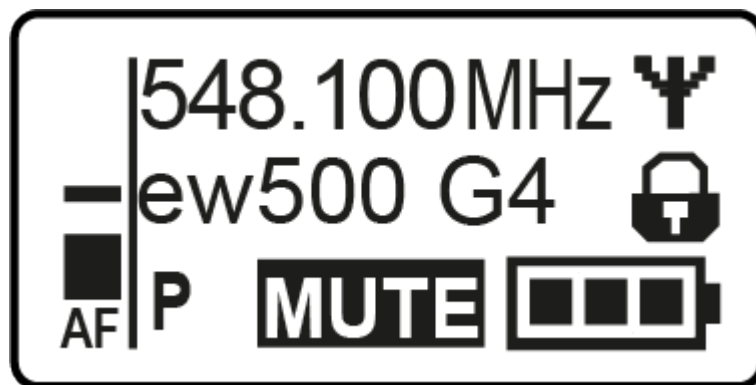
- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display

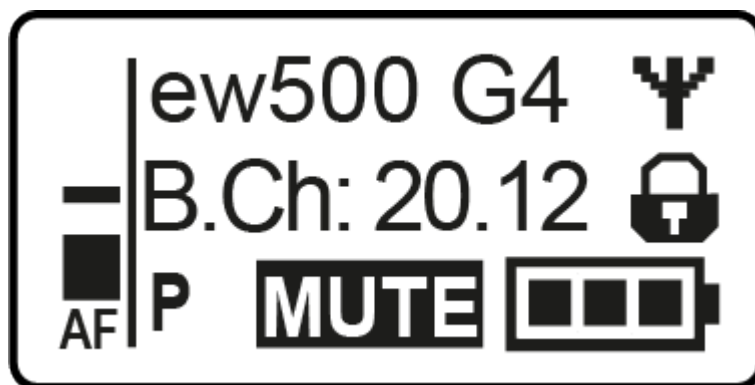




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu/a menu item:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the bodypack transmitter display panel](#)



Setting options in the menu

In the SK 500 G4 menu, you can configure the following settings.

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

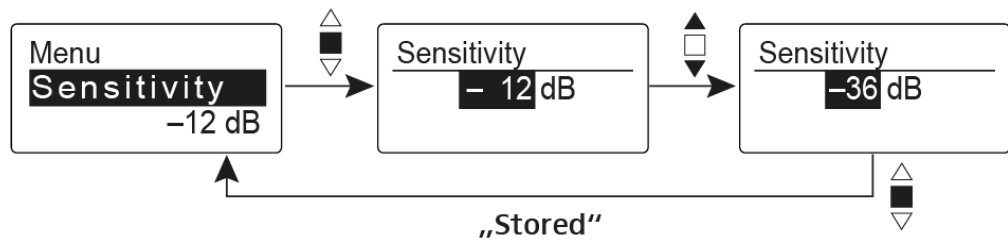
Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -60 dB
- in 6 dB steps.



The AF audio level is also displayed when the bodypack transmitter is muted, e.g. to check the sensitivity before a live broadcast.



Recommended presets:

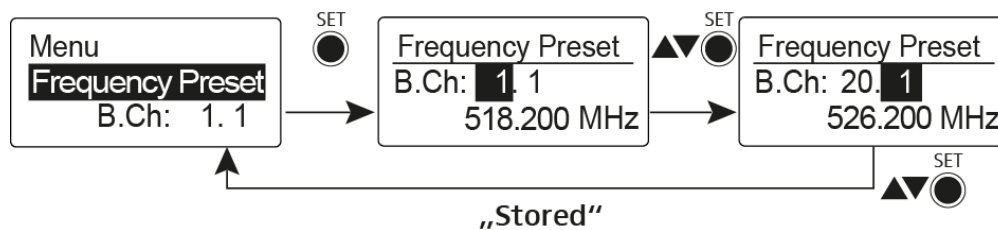
- Loud music/vocals: -30 to -21 dB
- Moderation: -21 to 0 dB
- Electric guitar with single-coil pickups: -30 to -24 dB
- Electric guitar with Humbucker pickups: -45 to -30 dB
- Electric guitars with active electronics: -45 to -30 dB



Frequency Preset menu item

Manually selecting a frequency bank and channel

i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).

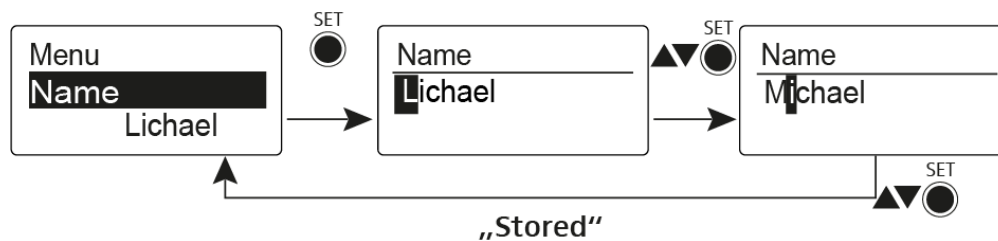


Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



The names are a maximum of 8 characters:

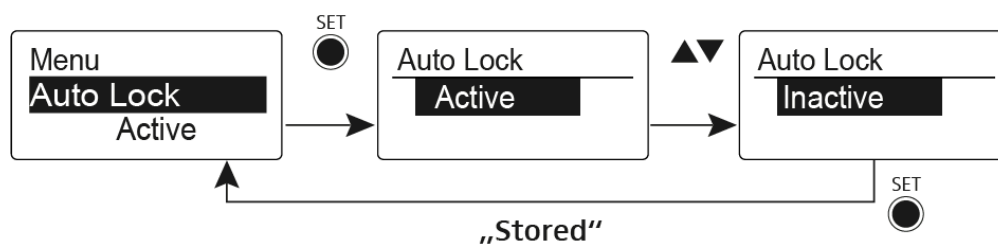
- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Configuring the function of the MUTE switch and the RMS 1 remote mute switch

- See [Advanced > Mute Mode menu item](#)

Configuring the transmission power

- See [Advanced > RF Power menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

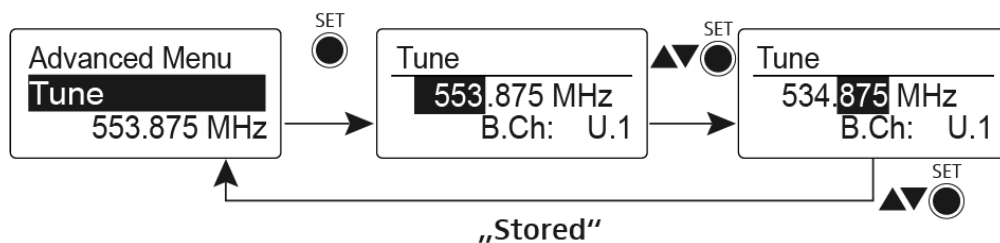


You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).

To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

✓ The frequency selection appears.



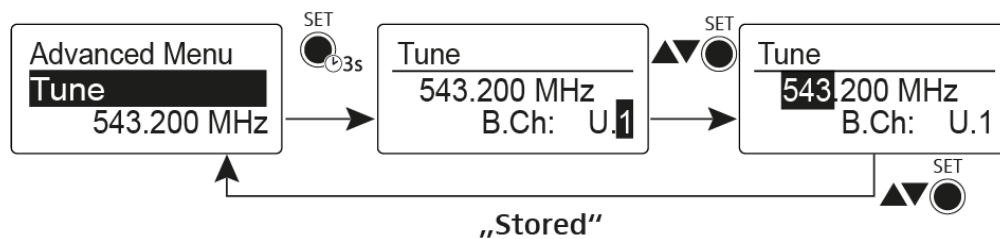
- ▶ Configure the desired frequency.

- ▶ Press the **SET** button.

✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- ▶ Set the desired channel.

- ▶ Press the **SET** button.

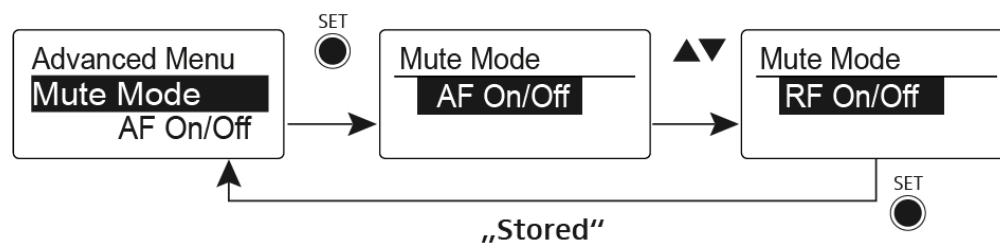
✓ The frequency selection appears.

- ▶ Configure the frequency.



Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to position MUTE, the RF signal is deactivated.

Disabled mode

- No function

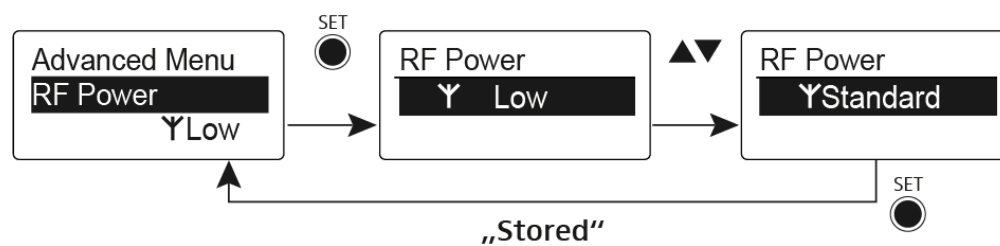
i You can find information about operating the mute switch under [Muting the bodypack transmitter \(AF mute\)](#) and [Deactivating the RF signal \(RF mute\)](#).



Advanced > RF Power menu item

Configuring the transmission power

You can configure the transmission power in three steps in the RF Power menu item.



i Please note the information at the following address: sennheiser.com/sifa.

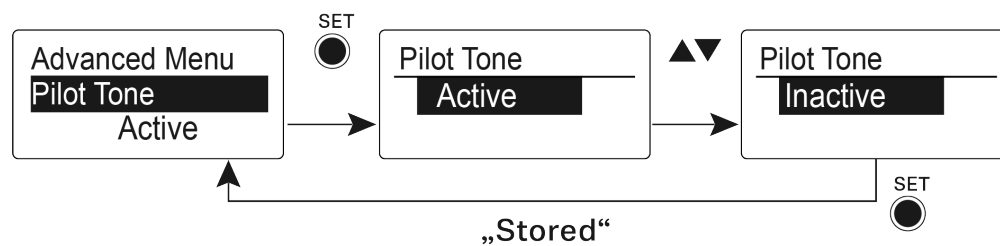
Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

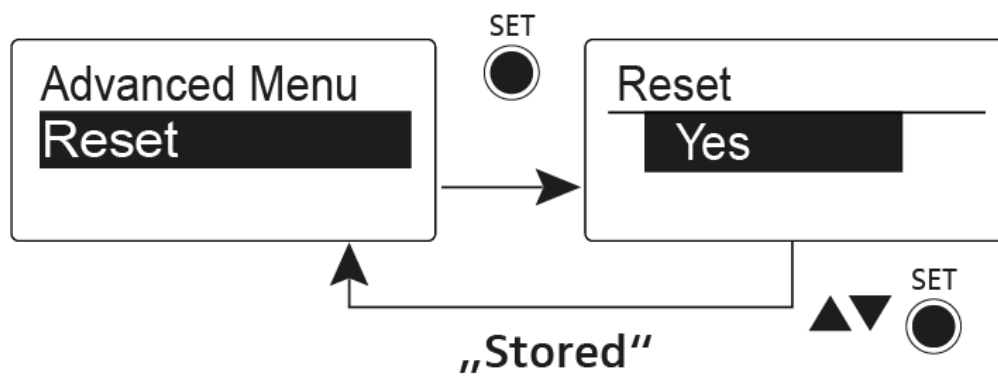
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the bodypack transmitter



When you reset the bodypack transmitter, only the selected settings of the pilot tone and the **U** frequency bank are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

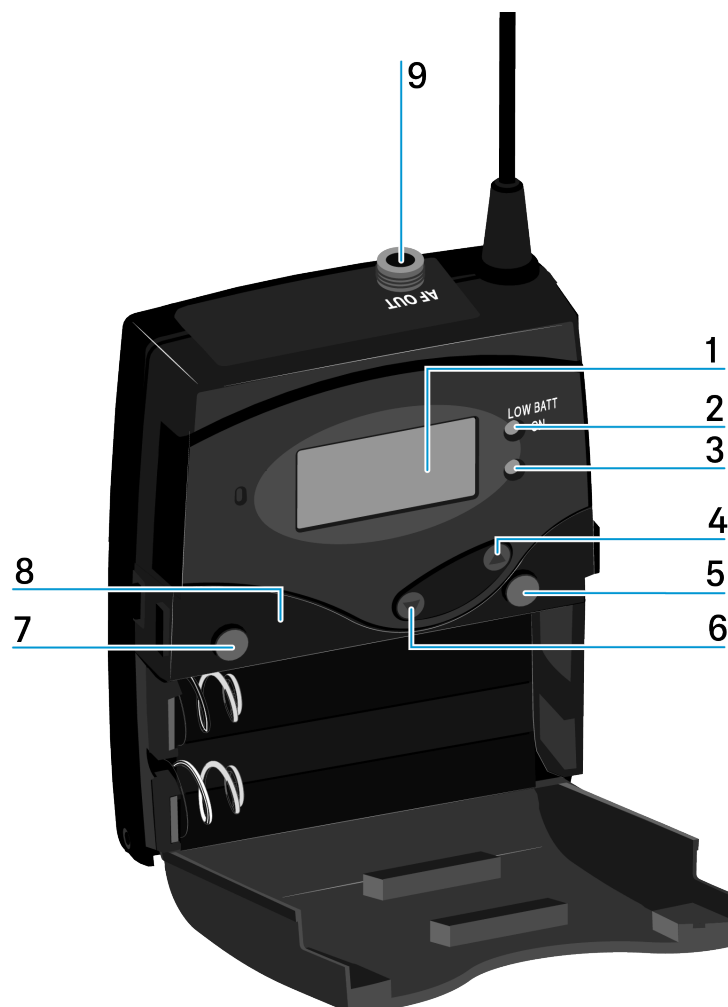


EK 100 G4 diversity receiver

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Attaching the diversity receiver to a camera
- Connecting the diversity receiver to a camera
- Switching the diversity receiver on and off
- Lock-off function
- Buttons for navigating through the menu
- Displays on the EK 500 G4 display panel
- Home Screen
- Frequency/Name standard display
- Frequency Bank/Channel/Name standard display
- Menu structure
- Setting options in the menu
- Sync menu item
- Squelch menu item
- Easy Setup menu item
- Frequency Preset menu item
- Name menu item
- AF Out menu item
- Auto Lock menu item
- Advanced menu item
- Advanced -> Tune menu item
- Advanced -> Pilot Tone menu item
- Advanced -> LCD Contrast menu item
- Advanced -> Reset menu item
- Advanced -> Software Revision menu item



Product overview



- 1 Display panel
 - see [Displays on the EK 500 G4 display panel](#)
- 2 Operation and battery indicator, red LED
 - illuminated = ON
 - see [Switching the diversity receiver on and off](#)
 - flashing = LOW BATTERY
 - see [Inserting and removing the batteries/rechargeable batteries](#)
- 3 Wireless reception indicator, green LED
 - illuminated = RF



4 UP button

- see [Buttons for navigating through the menu](#)

5 SET button

- see [Buttons for navigating through the menu](#)

6 DOWN button

- see [Buttons for navigating through the menu](#)

7 ON/OFF button with ESC function in the operating menu

- Switch the transmitter on or off
 - see [Switching the diversity receiver on and off](#)
- Escape function in the menu
 - see [Buttons for navigating through the menu](#)

8 Infra-red interface

- see [Ew 100 P G4 synchronizing](#)

9 3.5 mm jack socket

- lockable
- see [Connecting the diversity receiver to a camera](#)



Inserting and removing the batteries/rechargeable batteries

You can operate the diversity receiver either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Press the two catches and open the battery compartment cover.
- ▶ Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



- ▶ Close the battery compartment.
 - ✓ The cover locks into place with an audible click.

Related information

[Battery status](#)

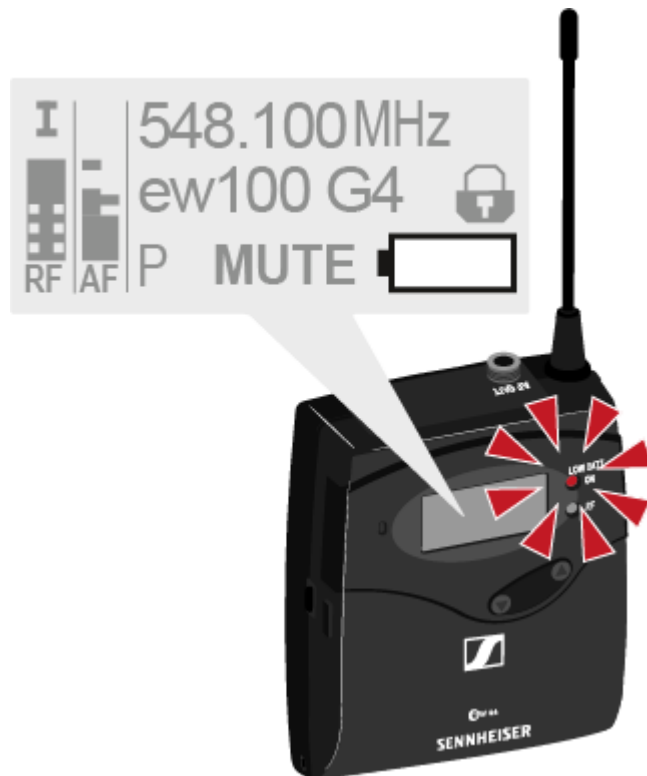
Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
LOW BATT ...		



Charge status is critical (LOW BATT):



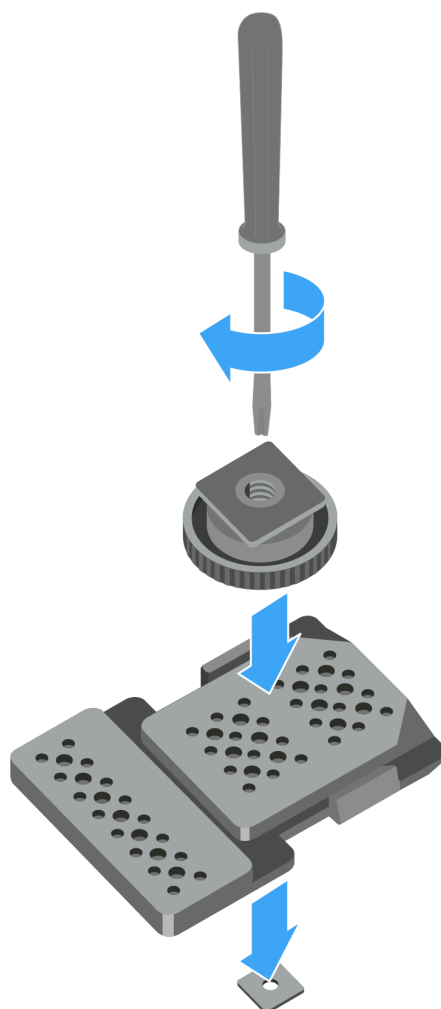


Attaching the diversity receiver to a camera

You can attach the diversity receiver on the hot shoe of the camera with the included CA 2 camera kit.

To attach the diversity receiver to a camera:

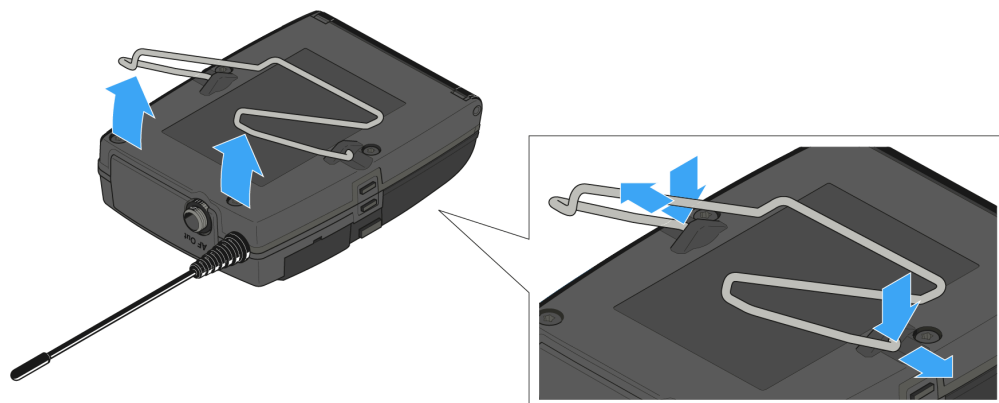
- ▶ Determine where on the perforated plate you need to attach the hot shoe adapter so that the diversity receiver can be optimally attached to the camera.
- ▶ Place a square nut under the perforated plate at this position.
- ▶ Affix the hot shoe adapter to the perforated plate with the square nut.



- ▶ Lift the belt clip.
- ▶ Press one side of the clip downward on the fixing hole and pull it out of the housing.



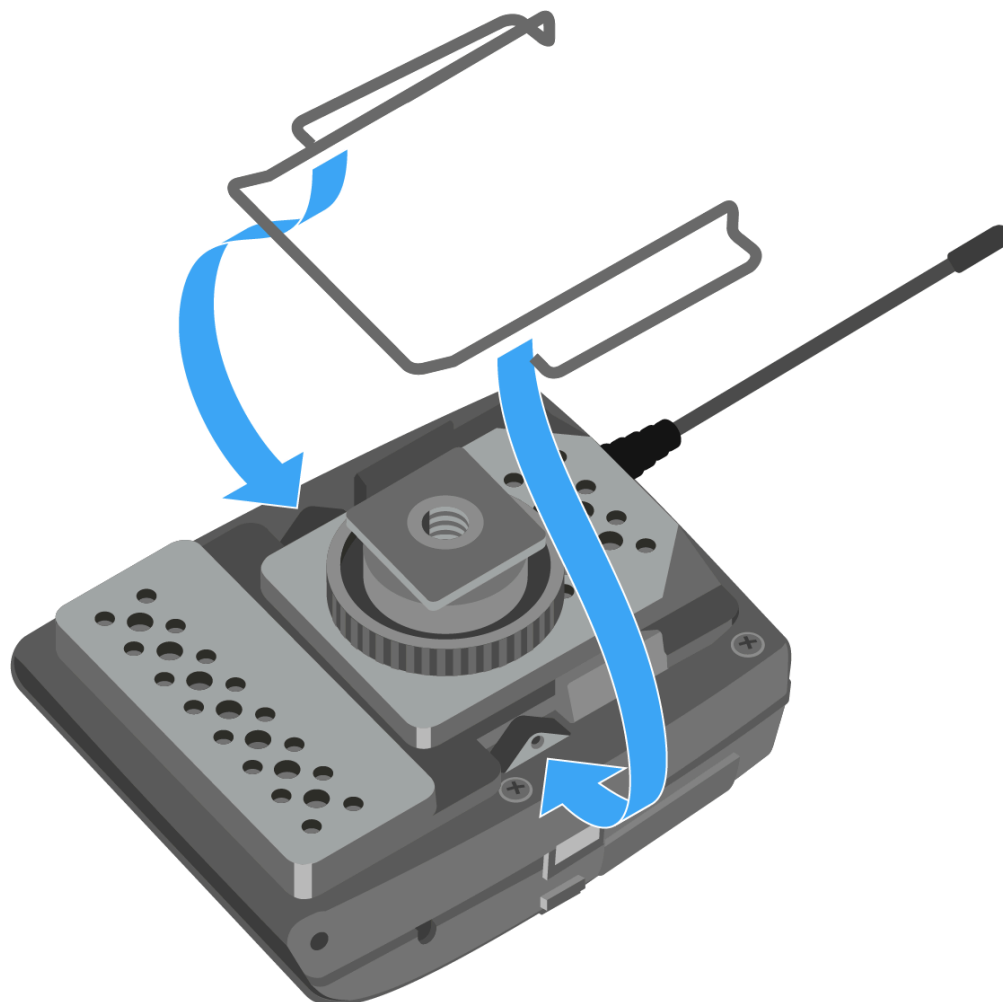
- ▶ Do the same thing on the other side.



- ▶ Place the perforated plate on the rear side of the diversity receiver.

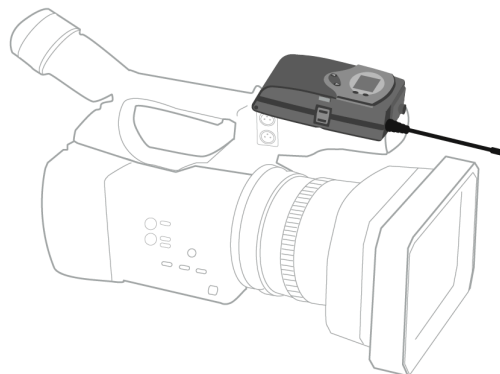
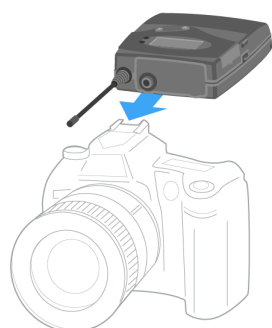


- ▶ Reattach the clip.



- ▶ Slide the receiver onto a camera.

◀OR▶





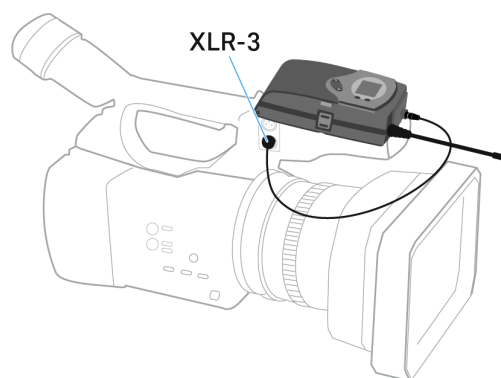
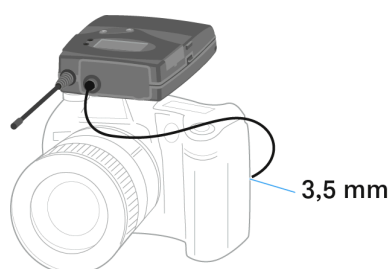
Connecting the diversity receiver to a camera

To connect the diversity receiver to a camera:

- ▶ Attach the line input of the camera to the jack socket of the receiver using one of the enclosed line connecting cables.



◀ OR ▶





- ▶ Adjust the level of the AF Out audio output in the operating menu of the diversity receiver based on the input level of the camera (see [AF Out menu item](#)).

i The shielding of the line cable acts as an antenna for the second diversity branch. For details on the pin assignment, see [Pin assignment](#).



Switching the diversity receiver on and off

- ▶ Press the two catches and open the battery compartment cover.

To switch the receiver on:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch the receiver off:

- ▶ Hold down the **ON/OFF** button until the display goes off.



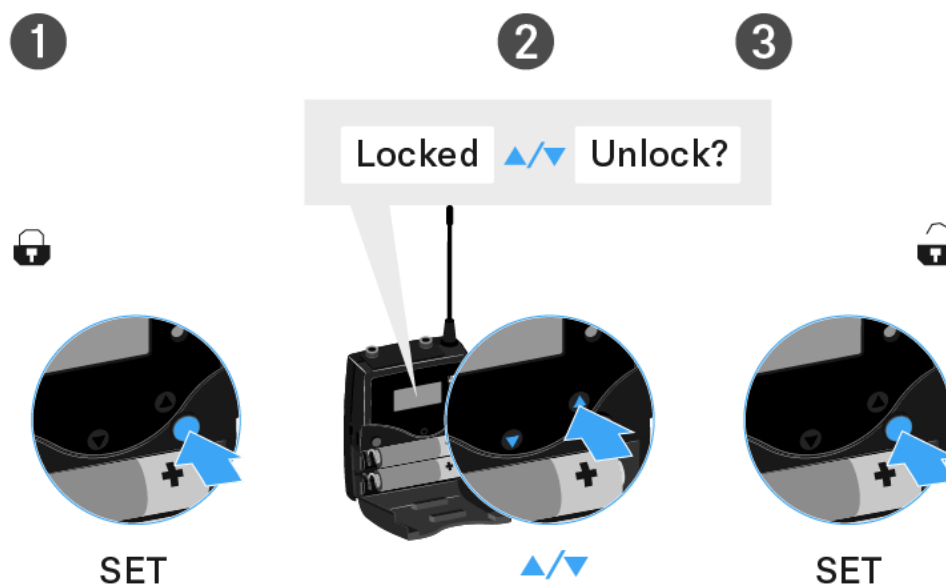
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

When one of the standard displays is shown

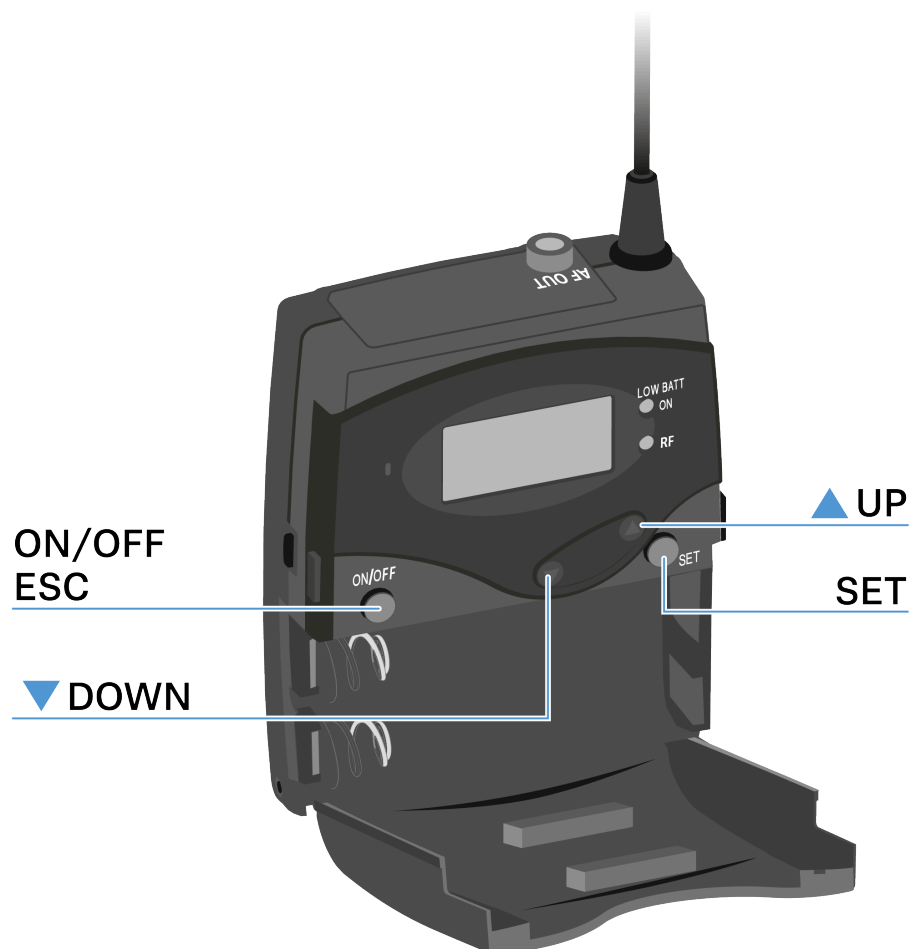
- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.



Buttons for navigating through the menu

To navigate through the diversity receiver operating menu, you need the following buttons.



Press the **ON/OFF** button

- ESC function: Cancels the entry and returns to the current standard display
- Selects a standard display (see [Home Screen](#))

Press the **SET** button

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Press the **UP** or **DOWN** button

- Changes to the previous or next menu item
- Changes the setting of a menu item



Displays on the EK 500 G4 display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See [Home Screen](#)

The display panel also displays the operating menu which you can use to configure all of the settings.

- See [Setting options in the menu](#)



Home Screen

After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has two different standard displays.

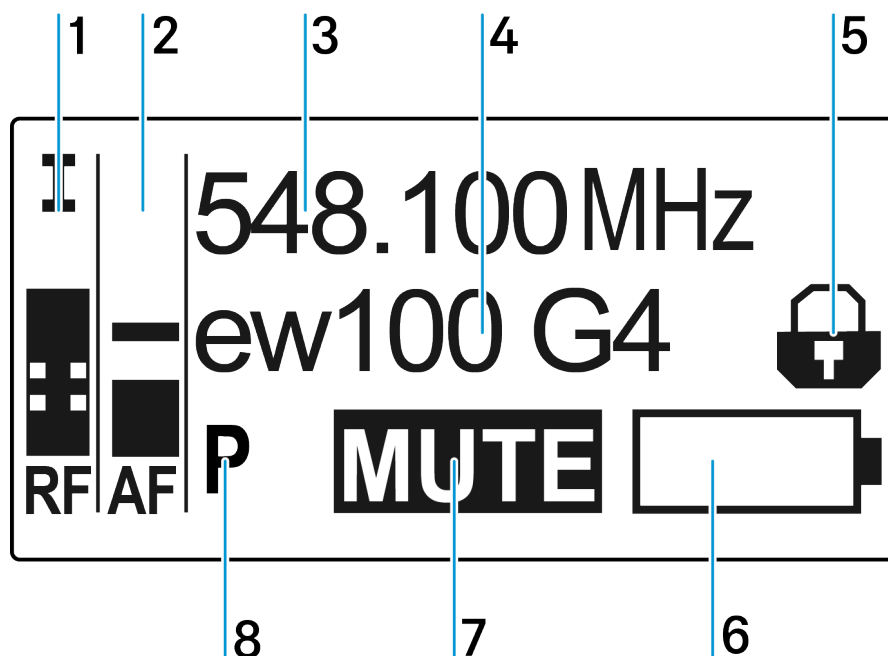
- ▶ Short-press the **ON/OFF** button to switch between the standard displays.

Related information

[Frequency/Name standard display](#)

[Frequency Bank/Channel/Name standard display](#)

Frequency/Name standard display



1 RF level (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see [Squelch menu item](#))



2 AF audio level (audio frequency)

- Displays the audio level of the received transmitter When the display shows full deflection, the audio input level is excessively high.
- see [AF Out menu item](#)

3 Frequency

- Current receiving frequency
- see [Frequency Preset menu item](#)

4 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

5 Lock-off function

- Lock-off function is activated on the receiver
- see [Lock-off function](#)

6 Battery status of the receiver

- see [Inserting and removing the batteries/rechargeable batteries](#)

7 MUTE muting function

- No RF signal received

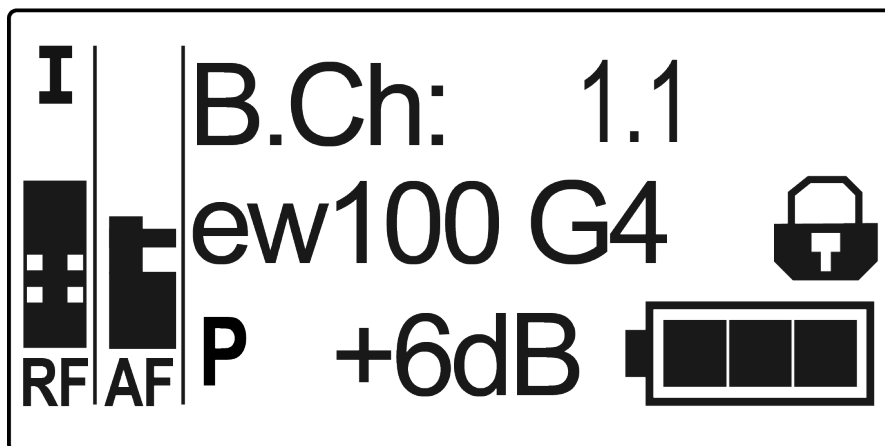
8 P pilot tone

- P = Activated pilot tone evaluation
- No symbol = Evaluation is deactivated
- P is black = Pilot tone is being received on the current frequency
- see [Advanced -> Pilot Tone menu item](#)



Frequency Bank/Channel/Name standard display

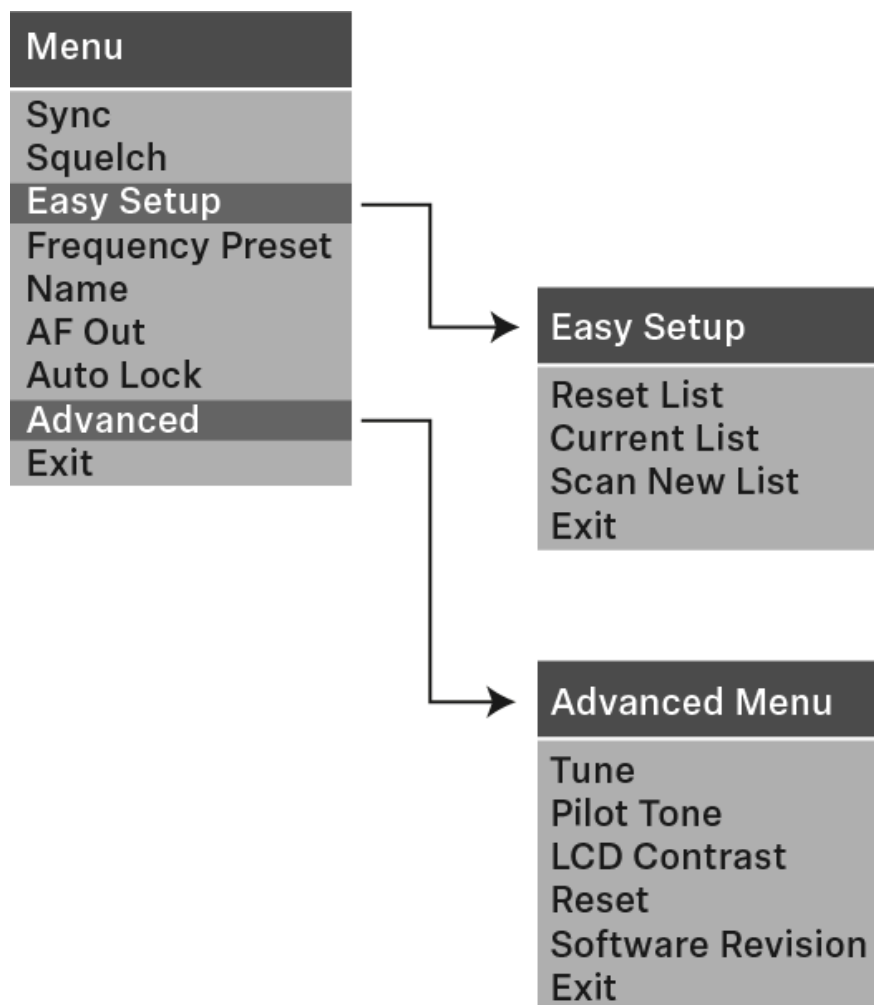
The Frequency Bank/Channel/Name standard display shows the level of the line output AF Out instead of the **MUTE** muting function.





Menu structure

The figure shows the complete diversity receiver menu structure in an overview.





Setting options in the menu

In the diversity receivers menu, you can configure the following settings.

Synchronizing the transmitter with the diversity receiver

- See [Sync menu item](#)

Adjusting the squelch threshold

- See [Squelch menu item](#)

Scanning for unused frequency presets, releases and selects frequency presets

- See [Easy Setup menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Adjusting the audio output level

- See [AF Out menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the receiving frequencies for the U frequency bank
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the receiver
- Displaying the current software revision
- See [Advanced menu item](#)

Sync menu item

In the Sync menu item you can synchronize ew 100 P G4 series transmitters and receivers.



i For more information, see [Ew 100 P G4 synchronizing](#).



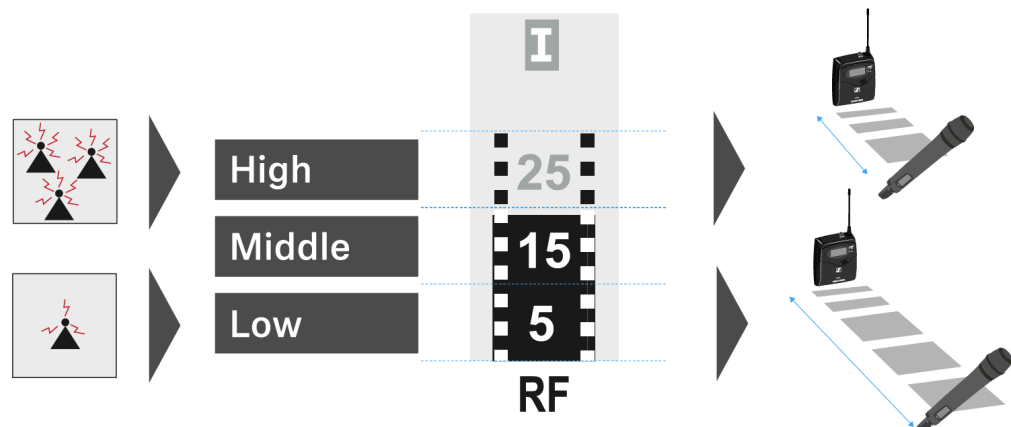
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- Low >> 5 dB μ V
- Middle >> 15 dB μ V
- High >> 25 dB μ V

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION



Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

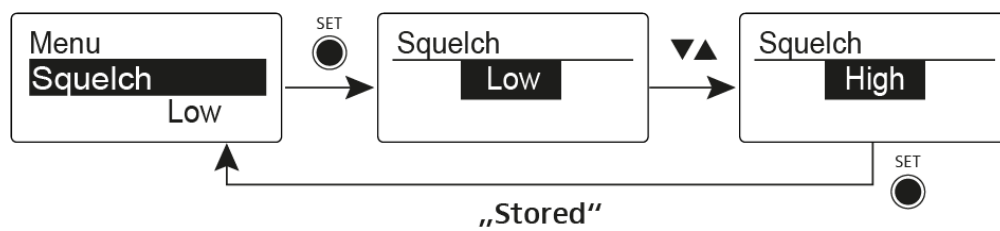
- ▶ Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- ▶ Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Squelch** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.



- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



Easy Setup menu item

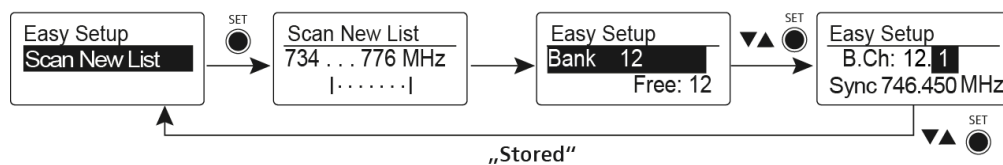
You can scan for unused frequencies using the Easy Setup menu item.

- i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

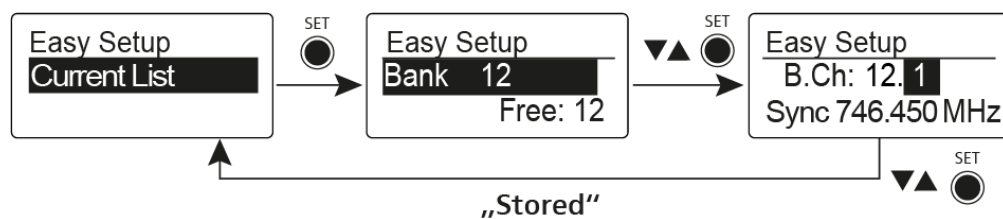
To open the Easy Setup menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Easy Setup** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.

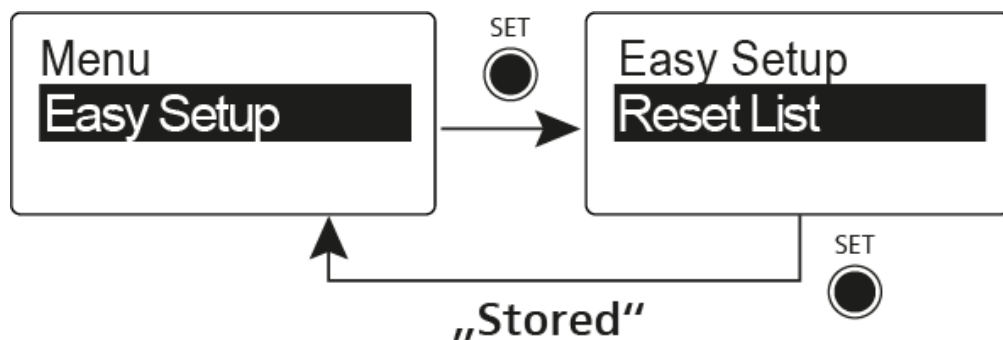
- **Scan New List:** Automatically searches for unused receiving frequencies (frequency preset scan):



- **Current List:** Selects an unused frequency preset:



- **Reset List:** Releases all occupied frequency presets and selects an unused frequency preset:



- ▶ Press the **SET** button to save the changes you made to the settings.



OR

- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.

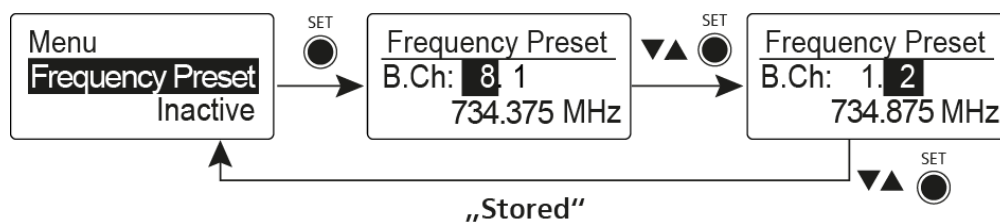


Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Frequency Preset** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.

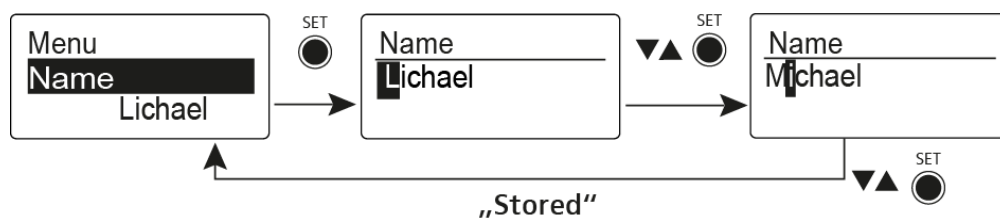


Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Name** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



AF Out menu item

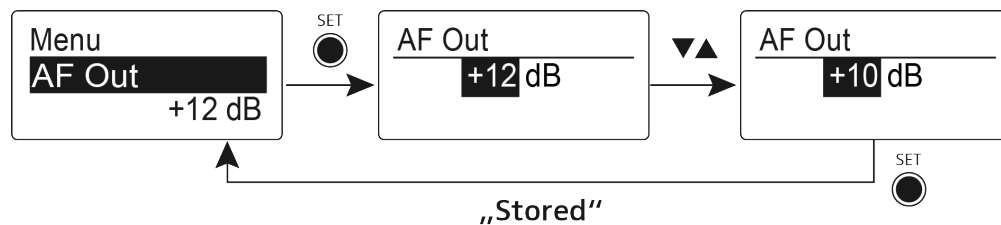
In the AF Out menu item you can adjust the level of the line audio output based on the level of the connected camera.

Setting range:

- -30 dB to +12 dB
- in 6 dB steps

To open the AF Out menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **AF Out** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



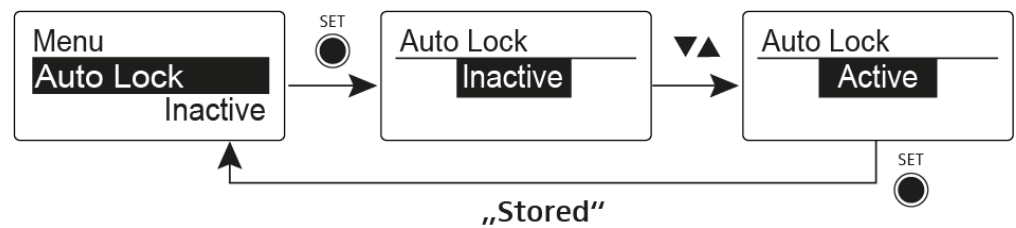
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

i You can find information about temporarily deactivating the lock-off function during operation under [Lock-off function](#).

To open the Auto Lock menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Auto Lock** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Advanced** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ✔ The following sub-items are available:

Adjusting the receiving frequency for the frequency bank U

- See [Advanced -> Tune menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced -> Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced -> LCD Contrast menu item](#)

Resetting the receiver

- See [Advanced -> Reset menu item](#)

Displaying the current software revision

- See [Advanced -> Software Revision menu item](#)

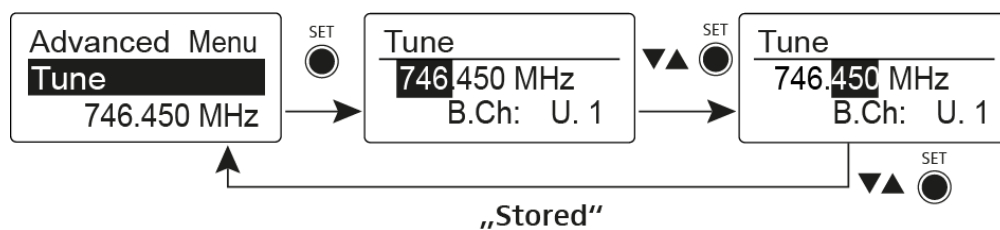
Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the U frequency bank.



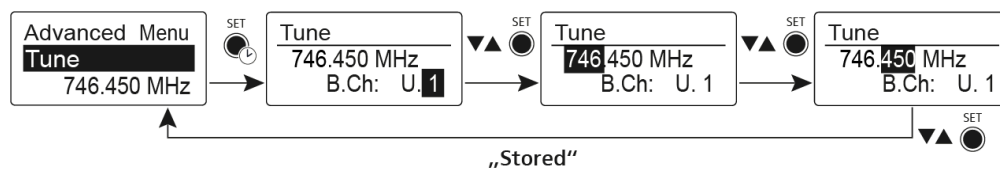
Only adjusting the frequency

- ▶ Open the **Tune** menu item in the **Advanced** menu.
- ▶ Adjust the settings.



Setting the channel and frequency

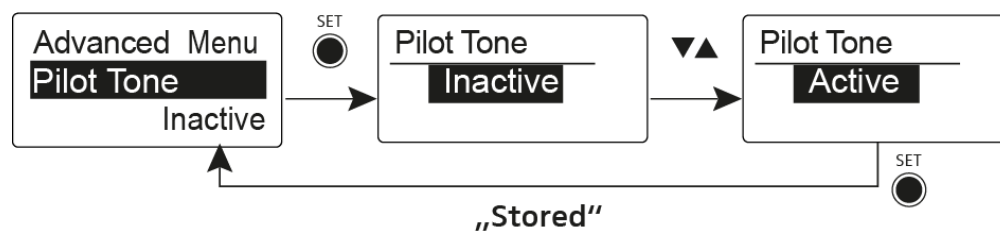
- ▶ Select the menu item and call it up by holding down the **SET** button until the channel selection appears.





Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.

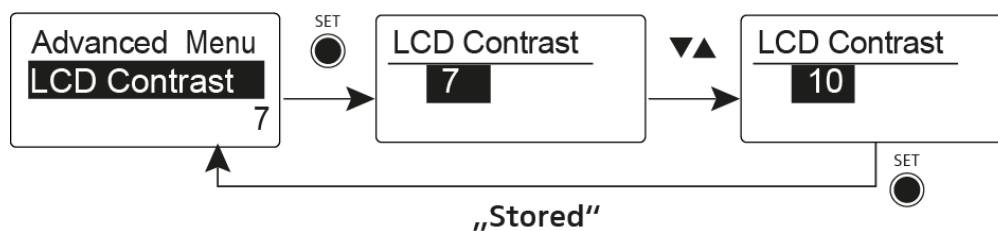


The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced -> LCD Contrast menu item

In the LCD Contrast menu item of the Advanced submenu, you can adjust the display contrast of the display panel in 16 steps.

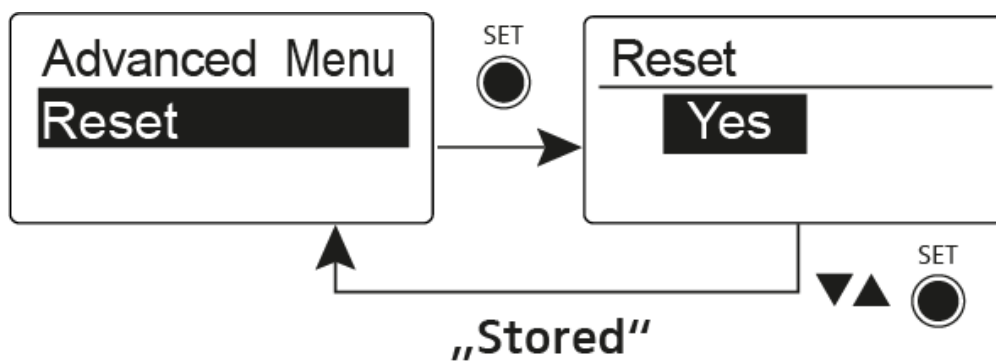




Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset the settings of the receiver.

When you reset the diversity receiver, only the selected settings of the pilot tone and the U frequency bank are retained.





Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

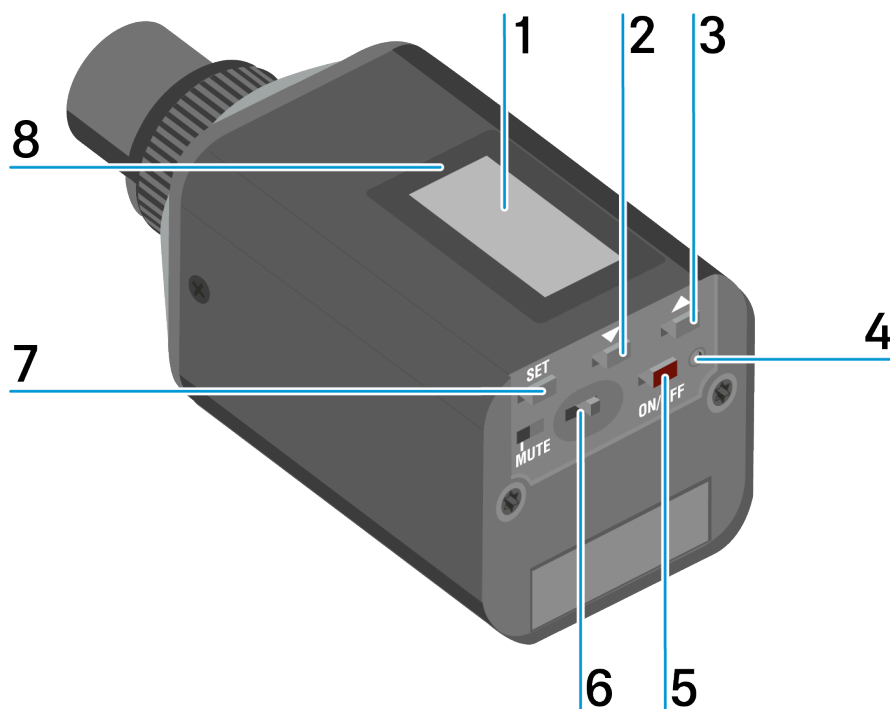


SKP 100 G4 plug-on transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Attaching the plug-on transmitter to the microphone
- Switching the plug-on transmitter on and off
- Muting the plug-on transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the plug-on transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > Mute Mode menu item
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



- 1 Display panel
 - see [Displays on the plug-on transmitter display panel](#)
- 2 **DOWN** button
 - see [Buttons for navigating the menu](#)
- 3 **UP** button
 - see [Buttons for navigating the menu](#)
- 4 Operation and battery indicator, red LED
 - illuminated = ON, see [Switching the plug-on transmitter on and off](#)
 - flashing = LOW BATTERY, see [Inserting and removing the batteries/rechargeable batteries](#)
- 5 **ON/OFF** button with **ESC** function in the operating menu
 - Switch the transmitter on or off, see [Switching the plug-on transmitter on and off](#)
 - Escape function in the menu, see [Buttons for navigating the menu](#)
- 6 **MUTE** switch
 - see [Muting the plug-on transmitter \(AF mute\)](#)



7 SET button

- see [Buttons for navigating the menu](#)

8 Infra-red interface

- see [Ew 100 P G4 synchronizing](#)

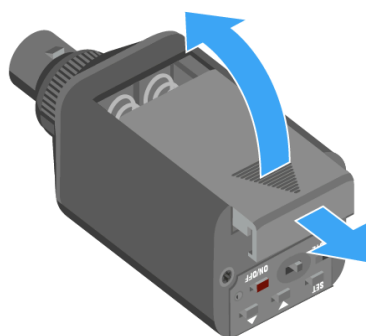


Inserting and removing the batteries/rechargeable batteries

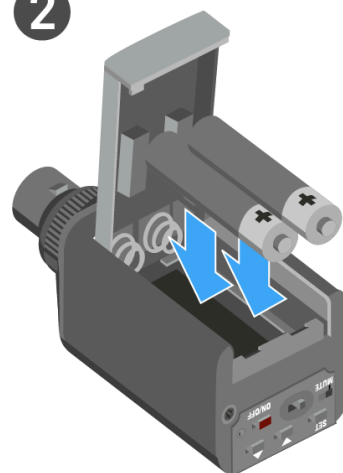
You can operate the plug-on transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Slide the battery compartment cover in the direction of the embossed arrow and open the cover.
- ▶ Insert the batteries or the accupack as shown below. Please observe correct polarity when inserting the batteries/accupack.

1



2



- ▶ Close the battery compartment.
- ✓ The cover locks into place with an audible click.





Related information

[Battery status](#)

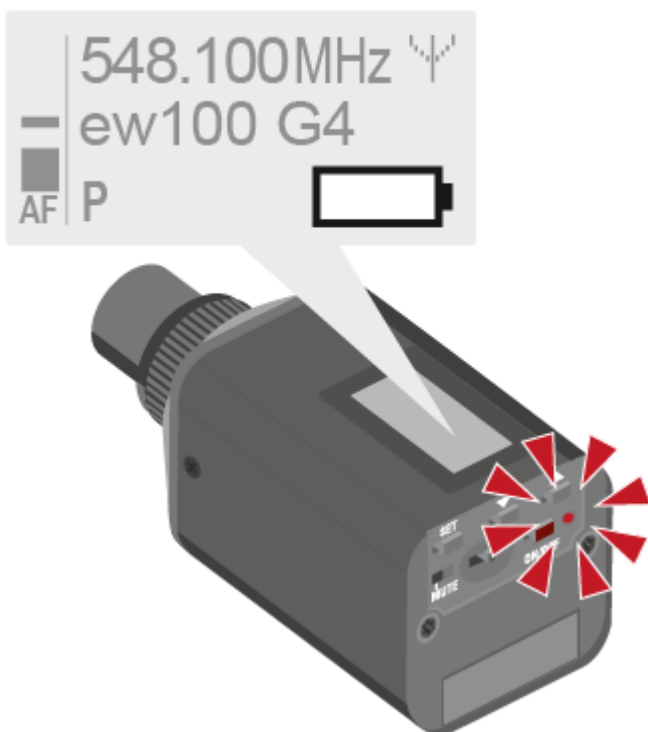


Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
<p>LOW BATT</p> 		

Charge status is critical (LOW BATT):

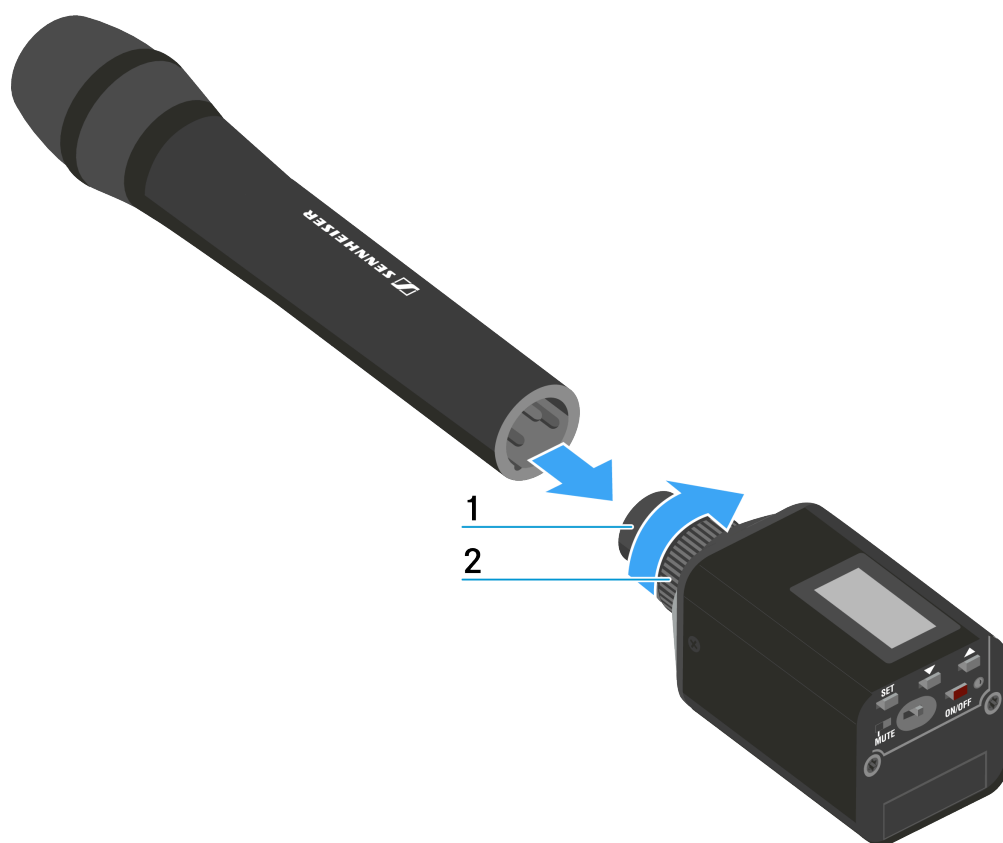




Attaching the plug-on transmitter to the microphone

i Microphones with a metal casing should be used for optimal signal transmission.

- ▶ Loosen the locking ring (2) by rotating it in the clockwise direction past the center point.
 - ✓ This unlocks the XLR-3 plug (1) of the plug-on transmitter.
- ▶ Connect the plug-on transmitter's XLR-3 plug (1) to the XLR-3 socket of the microphone.
- ▶ Tighten the locking ring (2) by rotating it counter-clockwise in the direction of the arrow.

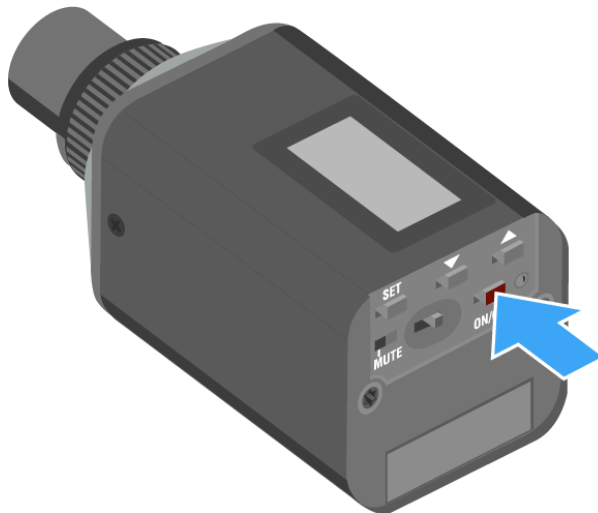




Switching the plug-on transmitter on and off

To switch on the plug-on transmitter:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the plug-on transmitter:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the plug-on transmitter (AF mute)

You can mute the audio signal with the MUTE switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).

- ▶ Slide the **MUTE** switch to the MUTE position.



- ✓ The audio signal is muted. The message **MUTE** is shown on the display.



Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:



Deactivating the RF signal with the MUTE switch

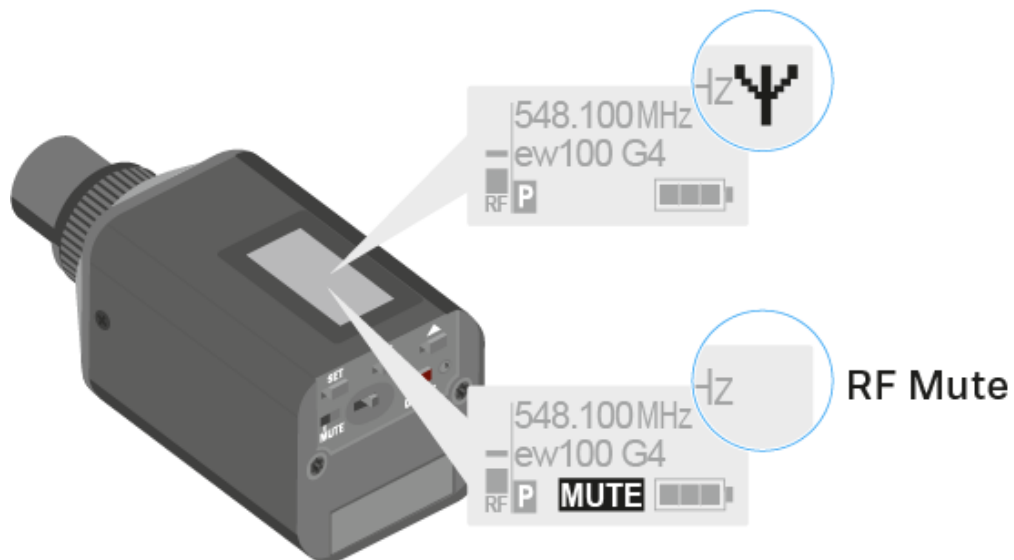
- i** You can deactivate the RF signal with the **MUTE** switch. To do this, the **MUTE** switch function must be configured to RF On/Off. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- ▶ Slide the **MUTE** switch to the MUTE position.

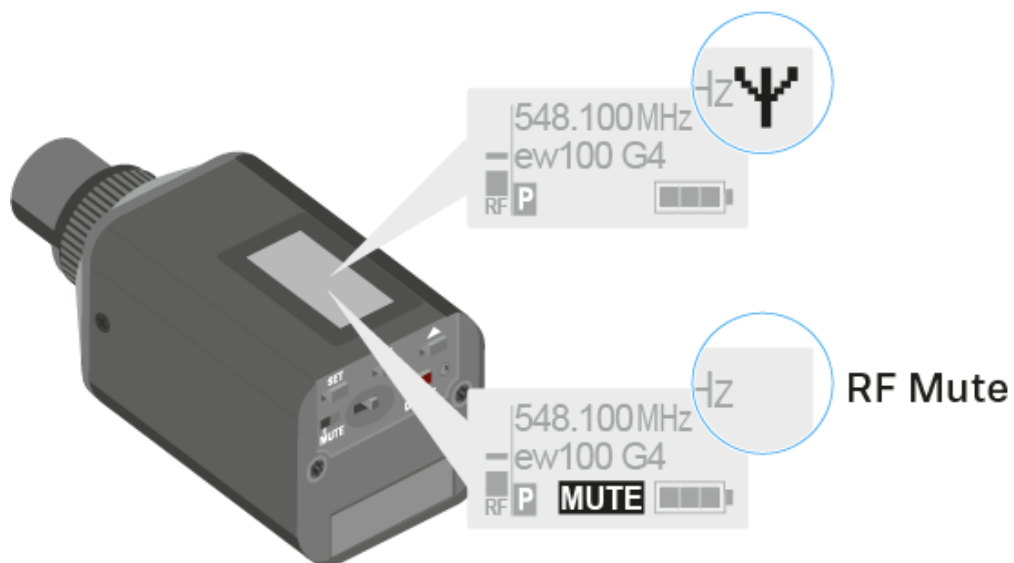


- ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- ▶ Short-press the **ON/OFF** button.
 - ✓ **RF Mute On?** appears.
- ▶ Press the **SET** button.
 - ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



- ▶ Short-press the **ON/OFF** button, to activate the RF signal.
 - ✓ **RF Mute Off?** appears.



- ▶ Press the **SET** button.
 - ✔ The transmission icon appears again.



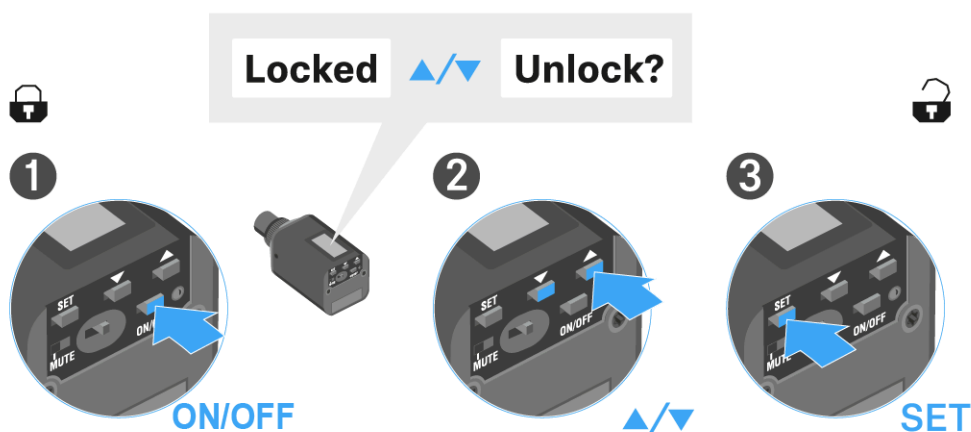
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

When one of the standard displays is shown

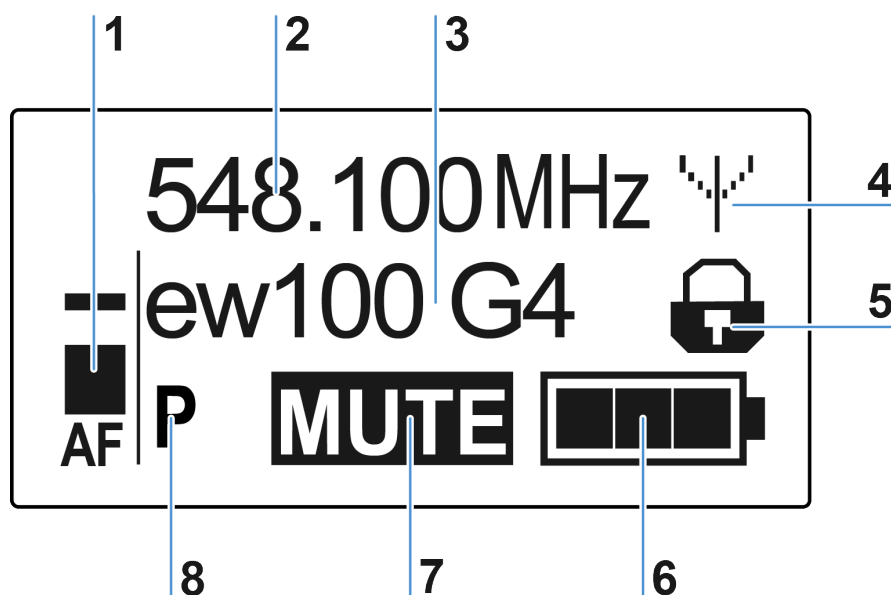
- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.



Displays on the plug-on transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)



6 Battery status

- see [Battery status](#)

7 MUTE muting function

- The audio signal is muted
- see [Muting the plug-on transmitter \(AF mute\)](#)

8 P pilot tone

- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display

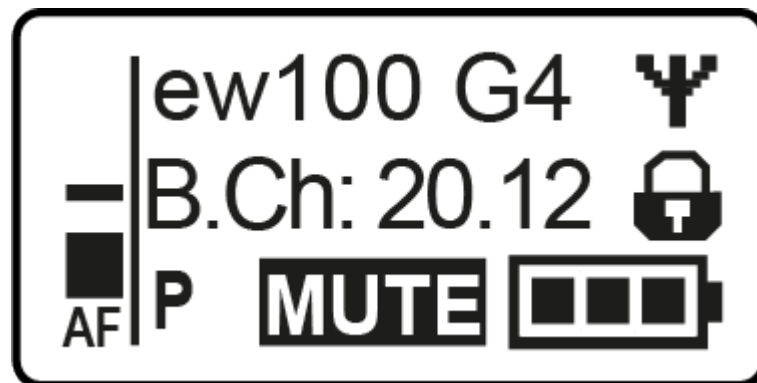




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu/a menu item:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the plug-on transmitter display panel](#)



Setting options in the menu

In the plug-on transmitters menu, you can configure the following settings.

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level



Setting range:

- 0 to -48 dB
- in 6 dB steps

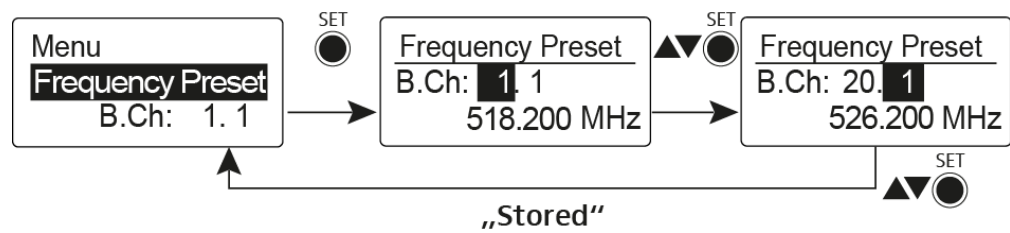


The AF audio level is also displayed when the plug-on transmitter is muted, e.g. to check the sensitivity before a live broadcast.



Frequency Preset menu item

Manually selecting a frequency bank and channel



i While you work in the Frequency Preset menu, the RF signal is deactivated.

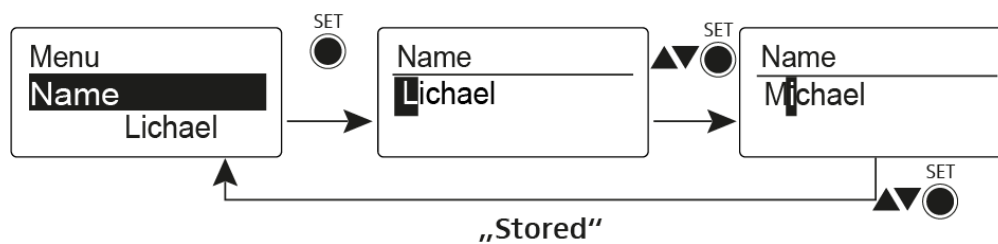
Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).



Name menu item

Entering names



In the Name menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.

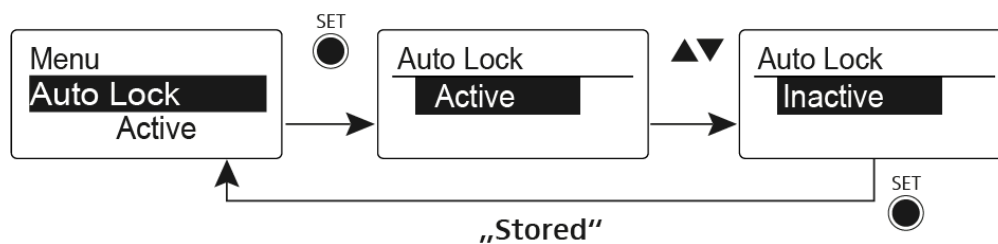
The names are a maximum of 8 characters:

- All letters except umlauts.
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off



This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.

You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Configuring the MUTE switch

- See [Advanced > Mute Mode menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

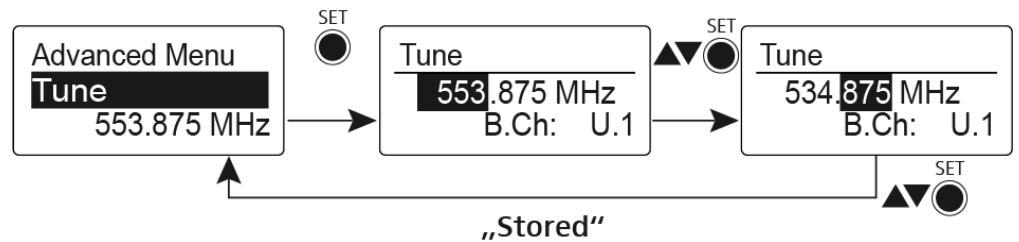
You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).



To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

✓ The frequency selection appears.



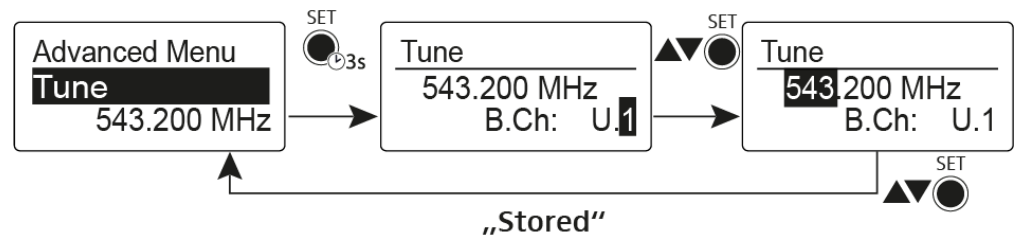
- ▶ Configure the desired frequency.

- ▶ Press the **SET** button.

✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- ▶ Set the desired channel.

- ▶ Press the **SET** button.

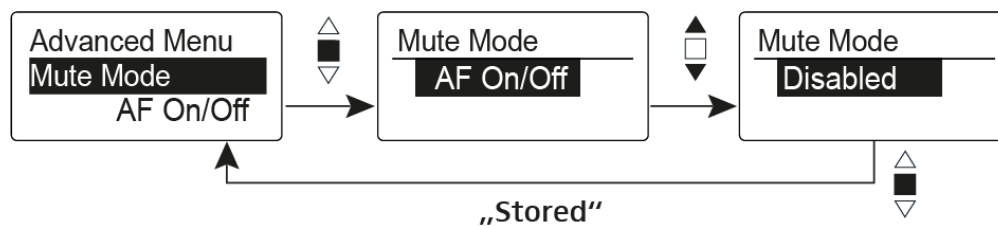
✓ The frequency selection appears.

- ▶ Configure the frequency.



Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to the MUTE selector position, the RF signal is deactivated

Disabled mode

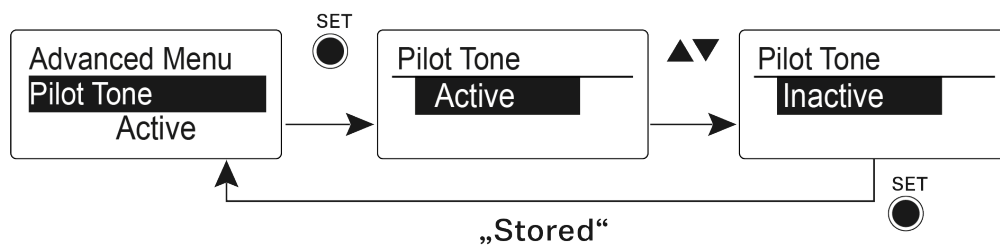
- No function

i You can find information about operating the mute switch under [Muting the plug-on transmitter \(AF mute\)](#) and [Deactivating the RF signal \(RF mute\)](#).



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

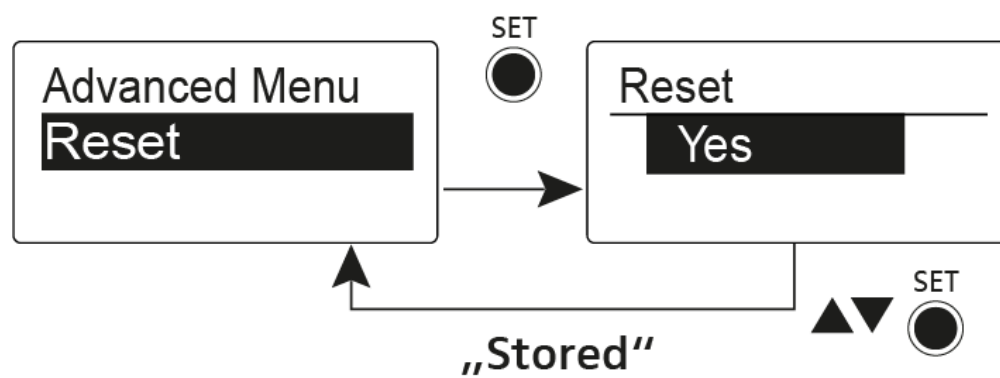
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the plug-on transmitter



When you reset the plug-on transmitter, only the selected settings of the pilot tone and the U frequency bank are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

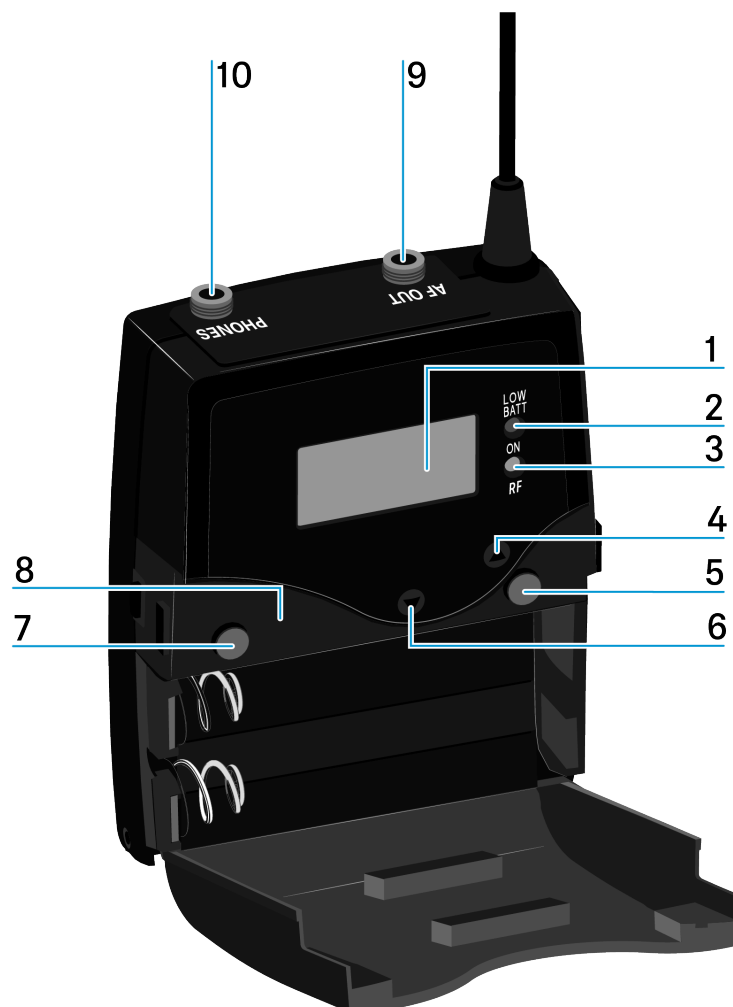


EK 500 G4 diversity receiver

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Connecting headphones to the diversity receiver
- Attaching the diversity receiver to a camera
- Connecting the diversity receiver to a camera
- Switching the diversity receiver on and off
- Volume control of the PHONES socket
- Lock-off function
- Buttons for navigating through the menu
- Displays on the EK 500 G4 display panel
- Home Screen
- Frequency/Name standard display
- Frequency Bank/Channel/Name standard display
- Menu structure
- Setting options in the menu
- Sync menu item
- Phones Volume menu item
- Squelch menu item
- Easy Setup menu item
- Frequency Preset menu item
- Name menu item
- AF Out menu item
- Auto Lock menu item
- Advanced menu item
- Advanced -> Tune menu item
- Advanced -> Sync Settings menu item
- Advanced -> Pilot Tone menu item
- Advanced -> LCD Contrast menu item
- Advanced -> Reset menu item
- Advanced -> Software Revision menu item



Product overview



- 1 Display panel
 - see [Displays on the EK 500 G4 display panel](#)
- 2 Operation and battery indicator, red LED
 - illuminated = ON
 - see [Switching the diversity receiver on and off](#)
 - flashing = LOW BATTERY
 - see [Inserting and removing the batteries/rechargeable batteries](#)
- 3 Wireless reception indicator, green LED
 - illuminated = RF



- 4 **UP** button
 - see [Buttons for navigating through the menu](#)
- 5 **SET** button
 - see [Buttons for navigating through the menu](#)
- 6 **DOWN** button
 - see [Buttons for navigating through the menu](#)
- 7 **ON/OFF** button with ESC function in the operating menu
 - Switch the transmitter on or off
 - see [Switching the diversity receiver on and off](#)
 - Escape function in the menu
 - see [Buttons for navigating through the menu](#)
- 8 Infra-red interface
 - see [Ew 500 P G4 synchronizing](#)
- 9 3.5 mm jack socket **PHONES**
 - see [Connecting headphones to the diversity receiver](#)
 - see [Volume control of the PHONES socket](#)
- 10 3.5 mm jack socket **AF OUT**
 - lockable
 - see [Connecting the diversity receiver to a camera](#)



Inserting and removing the batteries/rechargeable batteries

You can operate the diversity receiver either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Press the two catches and open the battery compartment cover.
- ▶ Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.






- ▶ Close the battery compartment.
 - ✓ The cover locks into place with an audible click.

Related information

[Battery status](#)

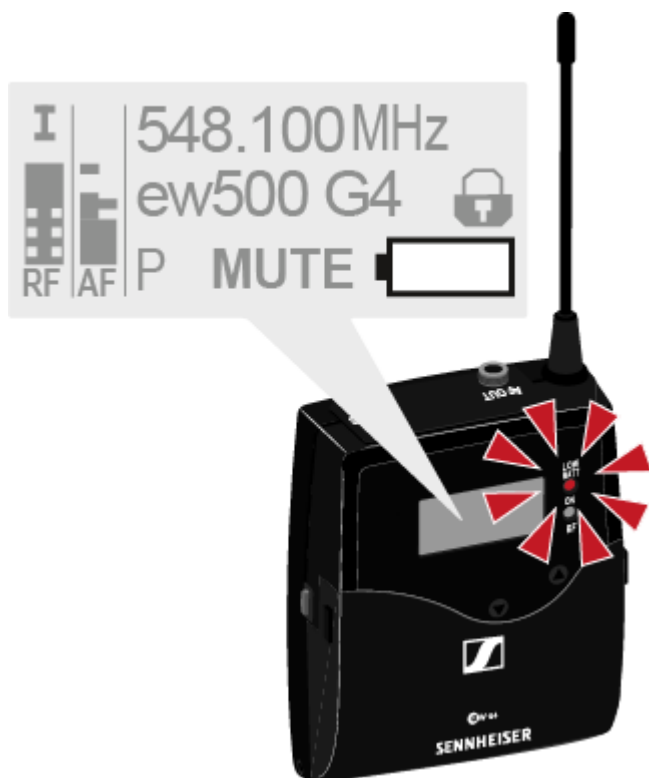
Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
LOW BATT    ...		



Charge status is critical (LOW BATT):





Connecting headphones to the diversity receiver

CAUTION



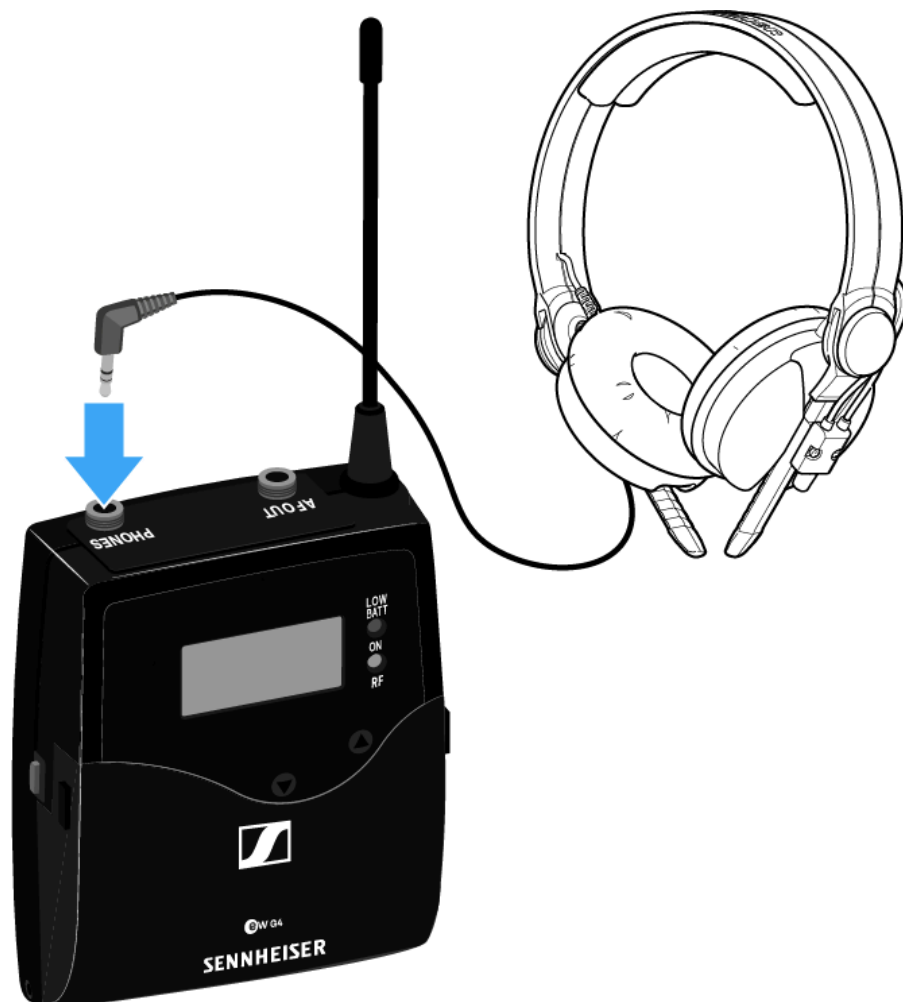
Danger due to high volume levels

Volume levels that are too high may damage your hearing.

- ▶ Turn down the volume of the headphone output before you put on the headphone.

To connect the headphones to the receiver:

- ▶ Insert the cable's 3.5 mm jack plug into the **PHONES** socket on the receiver as shown in the diagram.
- ▶ Screw the plug's coupling ring onto the audio socket thread of the receiver if needed.



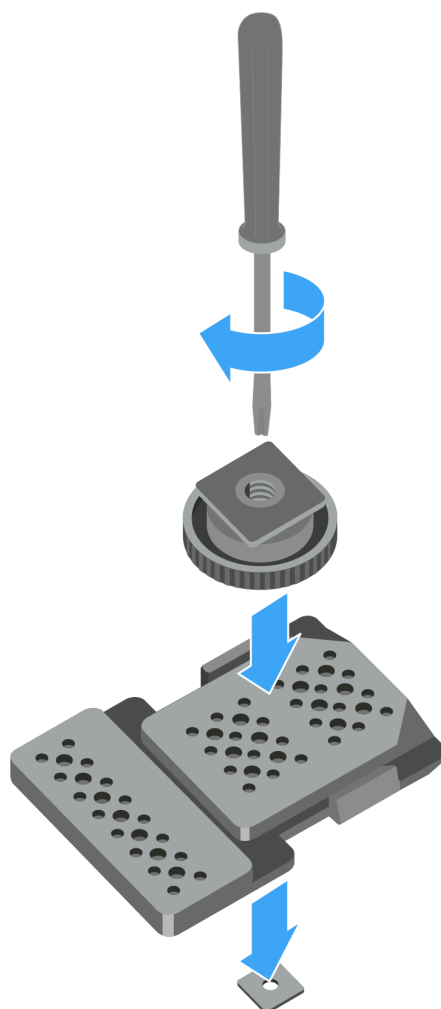


Attaching the diversity receiver to a camera

You can attach the diversity receiver on the hot shoe of the camera with the included CA 2 camera kit.

To attach the diversity receiver to a camera:

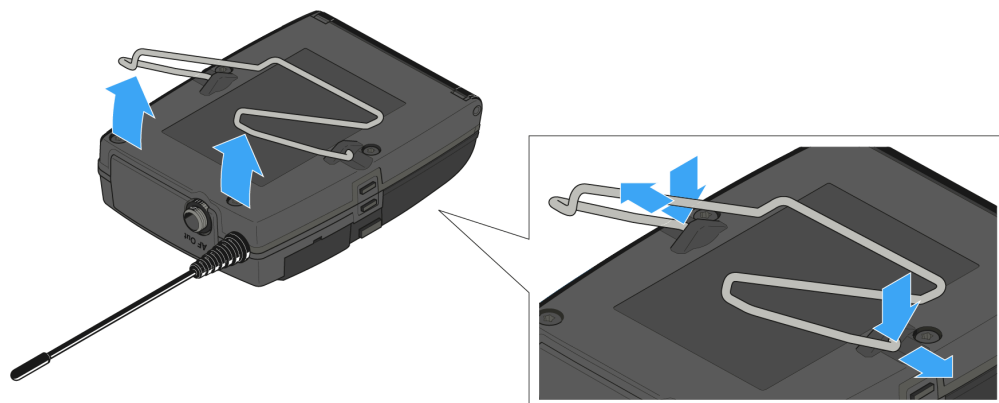
- ▶ Determine where on the perforated plate you need to attach the hot shoe adapter so that the diversity receiver can be optimally attached to the camera.
- ▶ Place a square nut under the perforated plate at this position.
- ▶ Affix the hot shoe adapter to the perforated plate with the square nut.



- ▶ Lift the belt clip.
- ▶ Press one side of the clip downward on the fixing hole and pull it out of the housing.



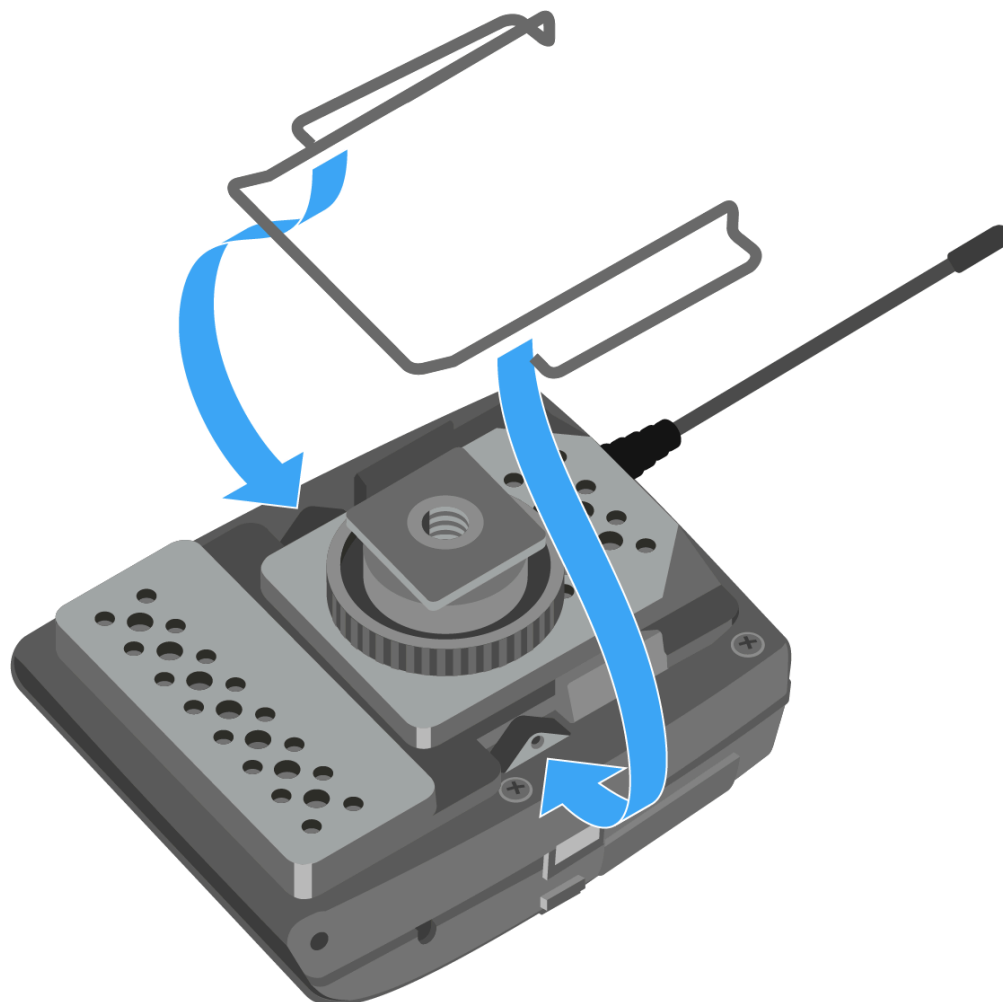
- ▶ Do the same thing on the other side.



- ▶ Place the perforated plate on the rear side of the diversity receiver.

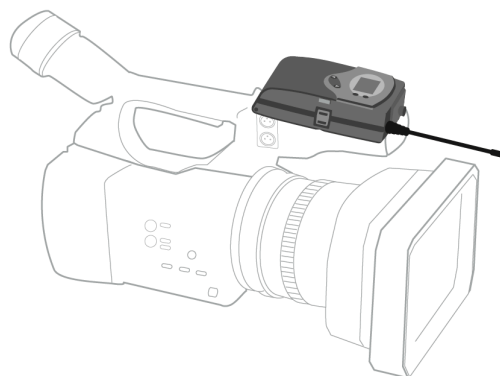
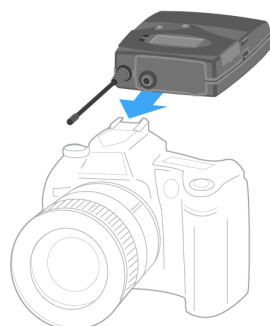


- ▶ Reattach the clip.



- ▶ Slide the receiver onto a camera.

◀OR▶

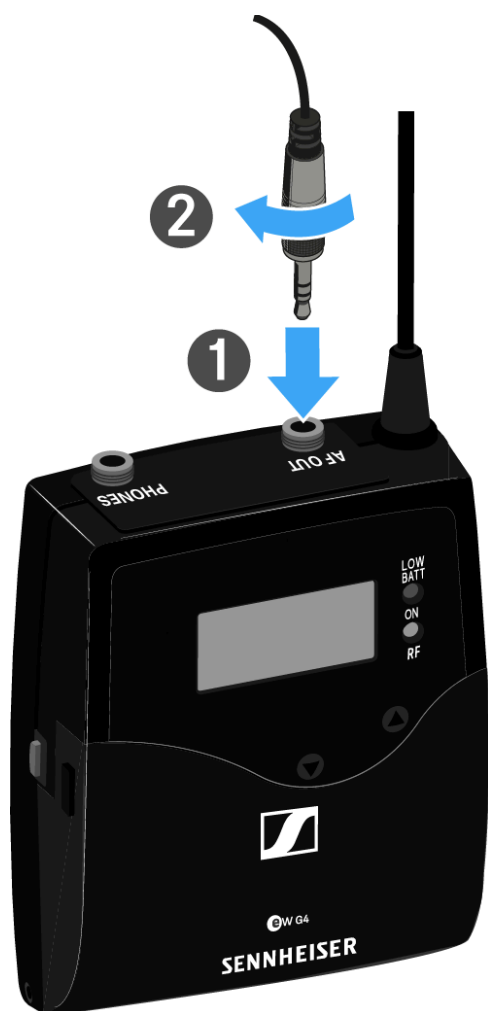




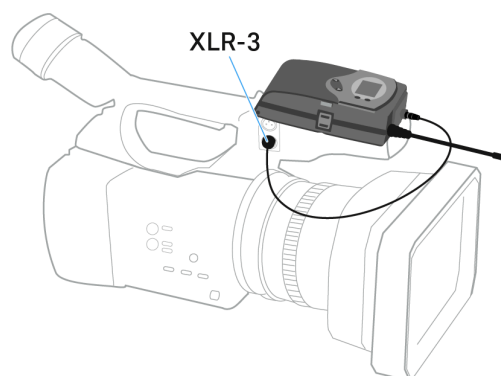
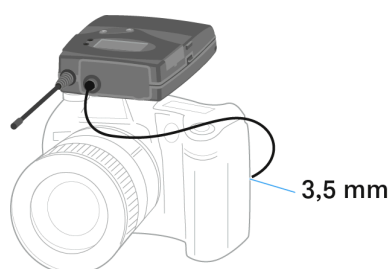
Connecting the diversity receiver to a camera

To connect the diversity receiver to a camera:

- ▶ Attach the line input of the camera to the jack socket of the receiver using one of the enclosed line connecting cables.



◀ OR ▶





- ▶ Adjust the level of the AF Out audio output in the operating menu of the diversity receiver based on the input level of the camera (see [AF Out menu item](#)).

i The shielding of the line cable acts as an antenna for the second diversity branch. For details on the pin assignment, see [Pin assignment](#).



Switching the diversity receiver on and off

- ▶ Press the two catches and open the battery compartment cover.

To switch the receiver on:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch the receiver off:

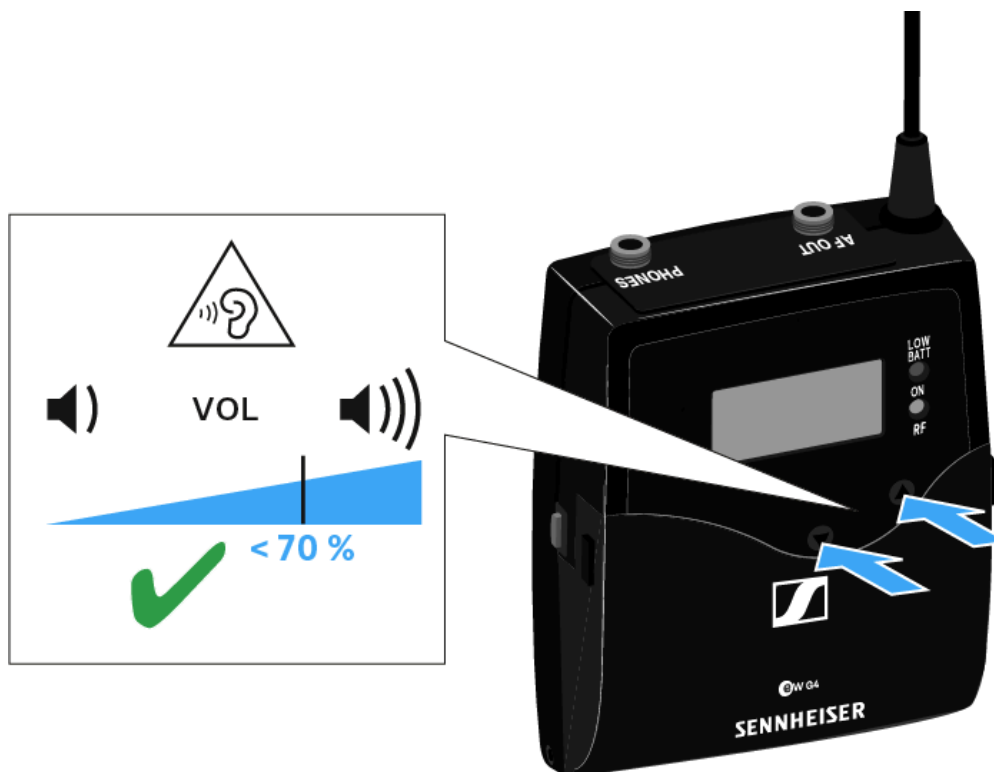
- ▶ Hold down the **ON/OFF** button until the display goes off.



Volume control of the PHONES socket

To adjust the volume of the connected headphone:

- ▶ Press the **UP** or **DOWN** buttons.





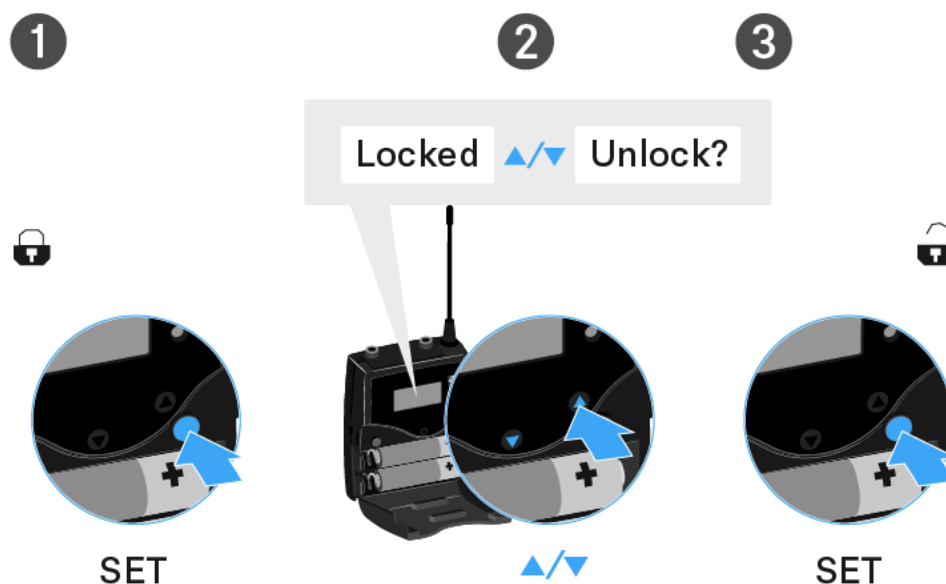
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

When one of the standard displays is shown

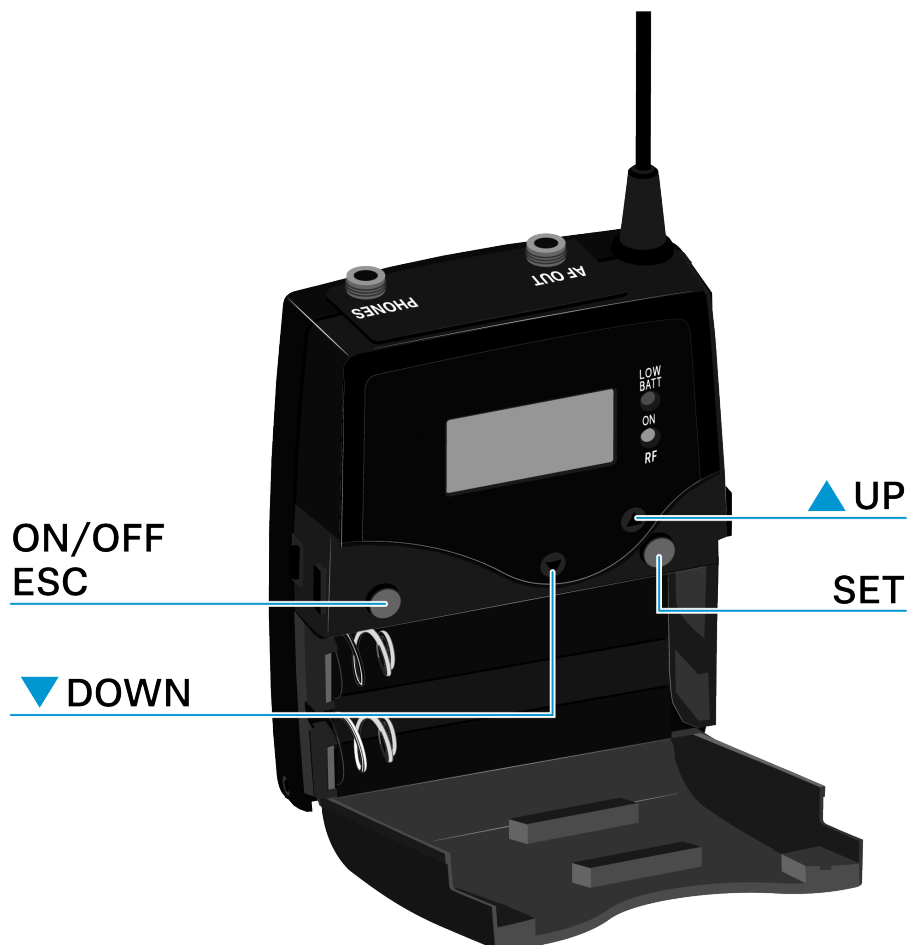
- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.



Buttons for navigating through the menu

To navigate through the diversity receiver operating menu, you need the following buttons.



Press the **ON/OFF** button

- ESC function: Cancels the entry and returns to the current standard display
- Selects a standard display (see [Home Screen](#))

Press the **SET** button

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Press the **UP** or **DOWN** button

- Changes to the previous or next menu item
- Changes the setting of a menu item



Displays on the EK 500 G4 display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See [Home Screen](#)

The display panel also displays the operating menu which you can use to configure all of the settings.

- See [Setting options in the menu](#)



Home Screen

After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has two different standard displays.

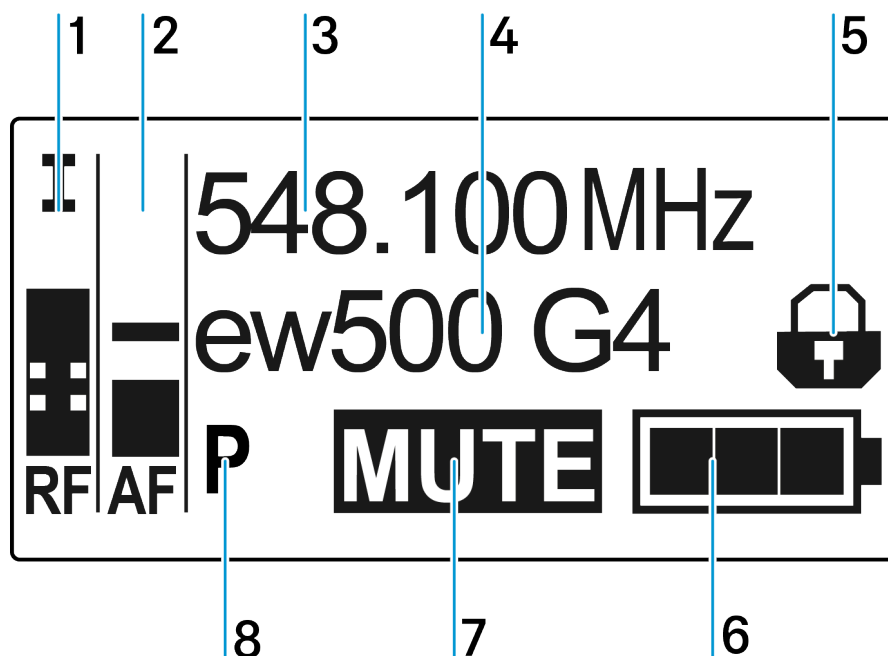
- ▶ Short-press the **ON/OFF** button to switch between the standard displays.

Related information

[Frequency/Name standard display](#)

[Frequency Bank/Channel/Name standard display](#)

Frequency/Name standard display



1 RF level (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see [Squelch menu item](#))



2 AF audio level (audio frequency)

- Displays the audio level of the received transmitter When the display shows full deflection, the audio input level is excessively high.
- see [AF Out menu item](#)

3 Frequency

- Current receiving frequency Empfangsfrequenz
- see [Frequency Preset menu item](#)

4 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

5 Lock-off function

- Lock-off function is activated on the receiver
- see [Lock-off function](#)

6 Battery status of the receiver

- see [Inserting and removing the batteries/rechargeable batteries](#)

7 MUTE muting function

- No RF signal received

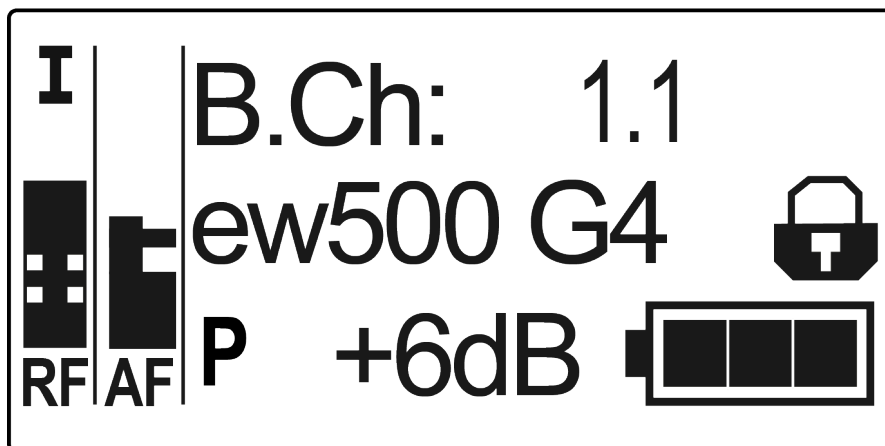
8 P pilot tone

- P = Activated pilot tone evaluation
- No symbol = Evaluation is deactivated
- P is black = Pilot tone is being received on the current frequency
- see [Advanced -> Pilot Tone menu item](#)



Frequency Bank/Channel/Name standard display

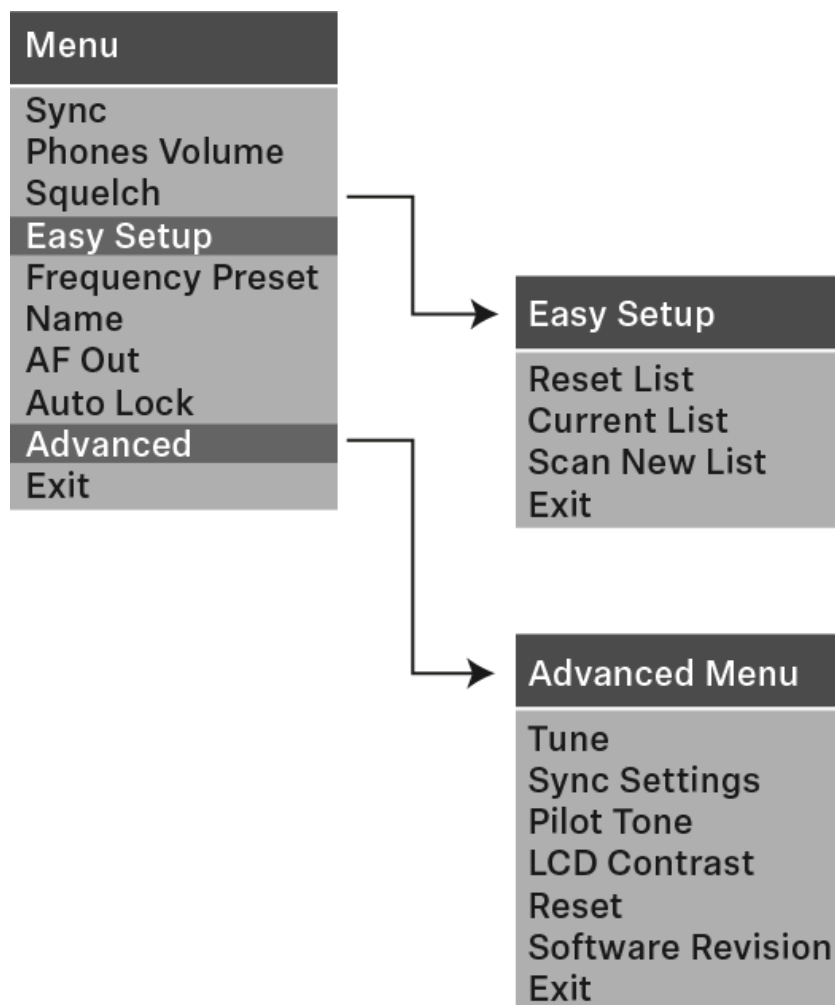
The Frequency Bank/Channel/Name standard display shows the level of the line output AF Out instead of the **MUTE** muting function.





Menu structure

The figure shows the complete diversity receiver menu structure in an overview.





Setting options in the menu

In the diversity receivers menu, you can configure the following settings.

Synchronizing the transmitter with the diversity receiver

- See [Sync menu item](#)

Adjusting the volume of the headphone socket

- See [Phones Volume menu item](#)

Adjusting the squelch threshold

- See [Squelch menu item](#)

Scanning for unused frequency presets, releases and selects frequency presets

- See [Easy Setup menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Adjusting the audio output level

- See [AF Out menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the receiving frequencies for the U frequency bank
- Activating/deactivating the parameters to be transferred to the transmitters
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the receiver
- Displaying the current software revision
- See [Advanced menu item](#)



Sync menu item

In the Sync menu item you can synchronize ew 500 P G4 series transmitters and receivers.

i For more information, see [Ew 500 P G4 synchronizing](#).



Phones Volume menu item

In the Phones Volume menu item you can adjust the volume for the headphone output.

Setting range:

- 1 to 5

You can also adjust the headphone volume in the standard display with the **UP** and **DOWN** buttons. See [Volume control of the PHONES socket](#).



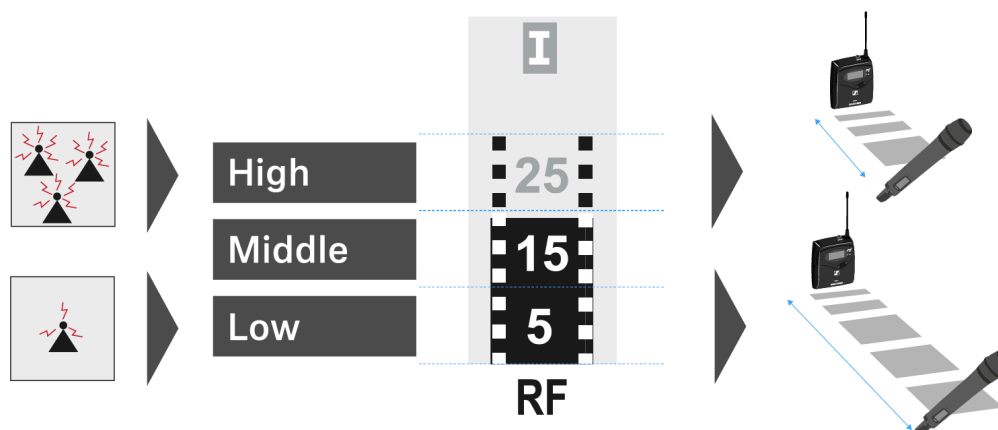
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- Low >> 5 dB μ V
- Middle >> 15 dB μ V
- High >> 25 dB μ V

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION



Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

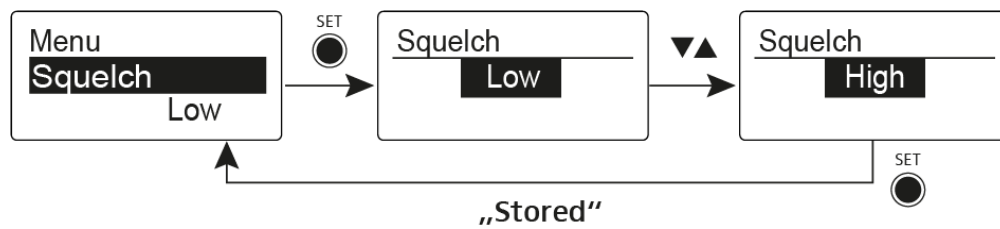
- ▶ Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- ▶ Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Squelch** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.



- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



Easy Setup menu item

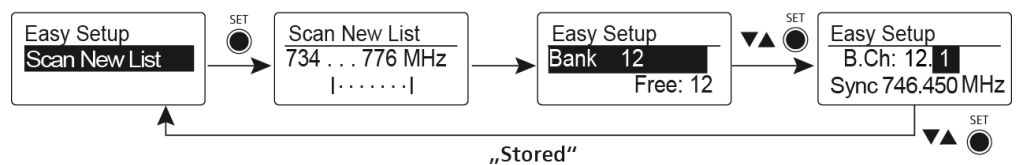
You can scan for unused frequencies using the Easy Setup menu item.

- i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

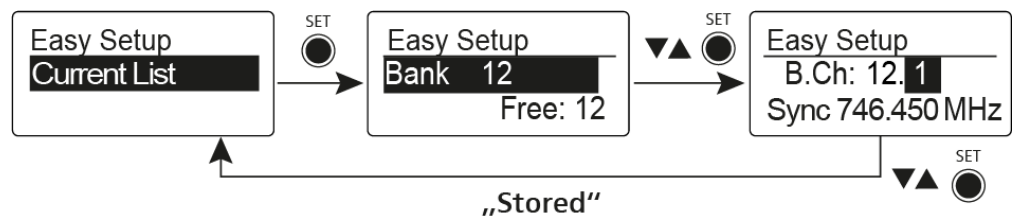
To open the Easy Setup menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Easy Setup** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.

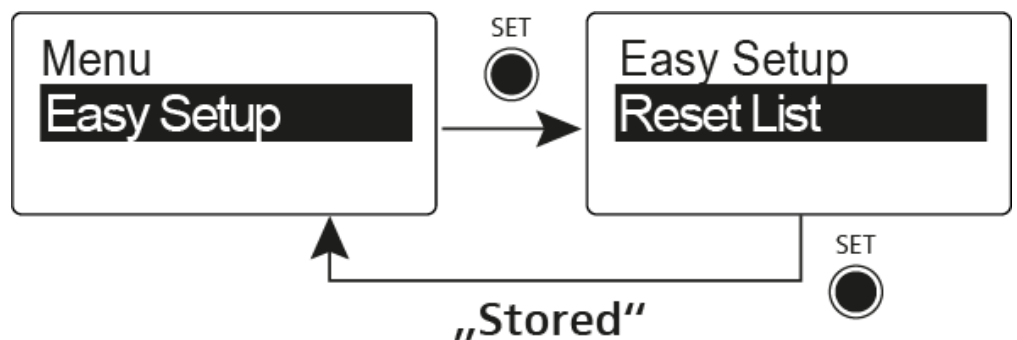
- **Scan New List:** Automatically searches for unused receiving frequencies (frequency preset scan):



- **Current List:** Selects an unused frequency preset:



- **Reset List:** Releases all occupied frequency presets and selects an unused frequency preset:



- ▶ Press the **SET** button to save the changes you made to the settings.



OR

- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.

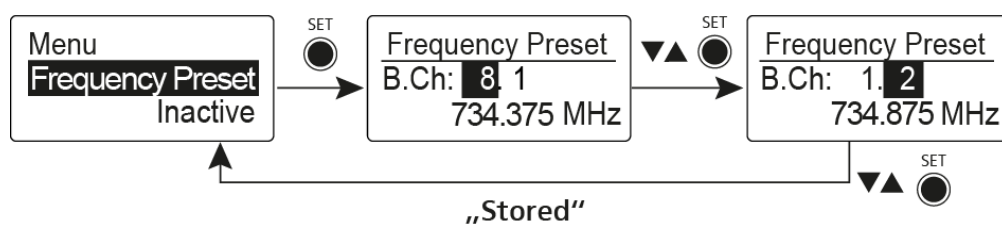


Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Frequency Preset** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.

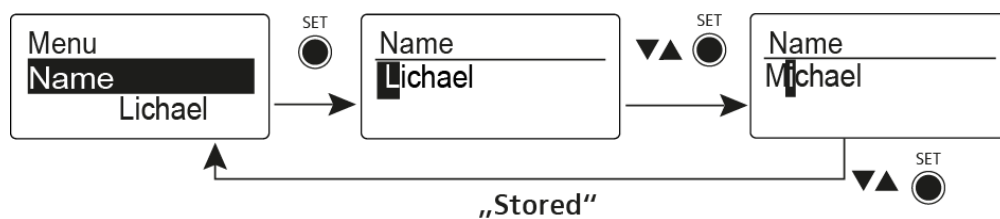


Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Name** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



AF Out menu item

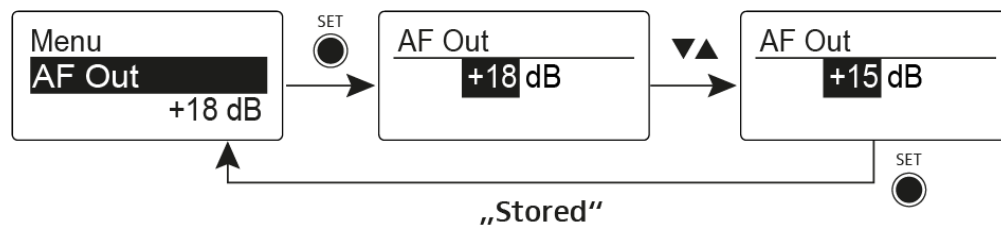
In the AF Out menu item you can adjust the level of the line audio output based on the level of the connected camera.

Setting range:

- -24 dB to +18 dB
- in 6 dB steps

To open the AF Out menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **AF Out** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
OR
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



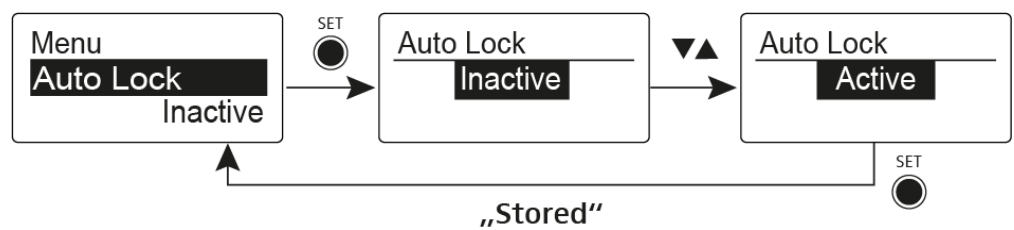
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

i You can find information about temporarily deactivating the lock-off function during operation under [Lock-off function](#).

To open the Auto Lock menu item:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Auto Lock** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ▶ Adjust the settings as desired.



- ▶ Press the **SET** button to save the changes you made to the settings.
- OR**
- ▶ Press the **ON/OFF** button to cancel the entry without saving the settings.



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- ▶ On the home screen, press the **SET** button to open the operating menu.
- ▶ Press the **UP** or **DOWN** button until the **Advanced** menu item appears in the selection frame.
- ▶ Press the **SET** button to open the menu item.
- ✓ The following sub-items are available:

Adjusting the receiving frequency for the frequency bank U

- See [Advanced -> Tune menu item](#)

Activating/deactivating the parameters to be transferred to the transmitters

- See [Advanced -> Sync Settings menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced -> Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced -> LCD Contrast menu item](#)

Resetting the receiver

- See [Advanced -> Reset menu item](#)

Displaying the current software revision

- See [Advanced -> Software Revision menu item](#)

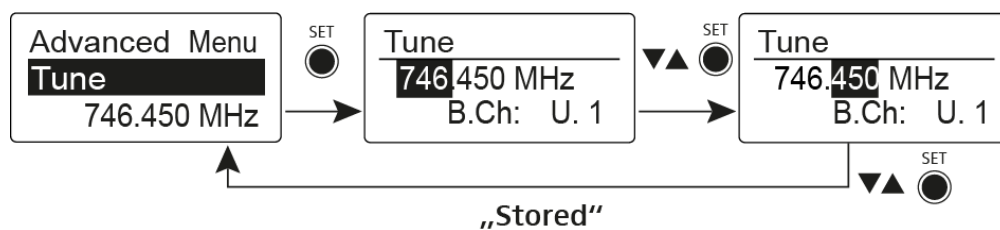
Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the U frequency bank.



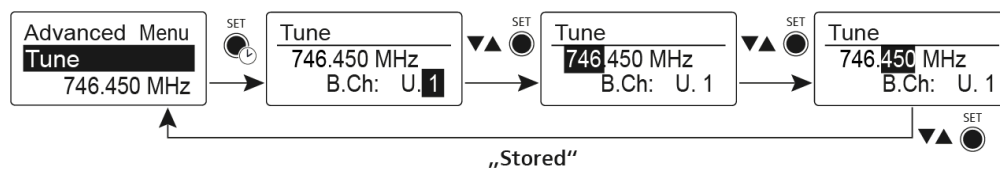
Only adjusting the frequency

- ▶ Open the **Tune** menu item in the **Advanced** menu.
- ▶ Adjust the settings.



Setting the channel and frequency

- ▶ Select the menu item and call it up by holding down the **SET** button until the channel selection appears.





In the Sync Settings menu item of the Advanced submenu, you can configure the parameters to be sent to the transmitters and activate or deactivate transmission

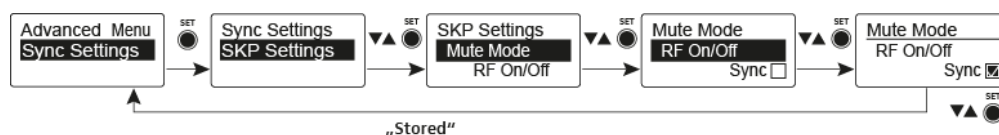
The parameters are defined separately for the SK, SKM and SKP.

You can activate/deactivate the following parameters:

- Sensitivity
- Auto Lock
- Mute Mode
- RF Power
- Phantom Power 48V (only SKP 500 G4)

To configure a parameter and activate or deactivate transmission:

- ▶ Go to the parameter in question in the **Advanced -> Sync Settings** menu.
- ▶ Press the **SET** button to open the sub-item.
- ▶ Press the **UP** and **DOWN** buttons to set the value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **UP** and **DOWN** buttons to activate or deactivate the check box.

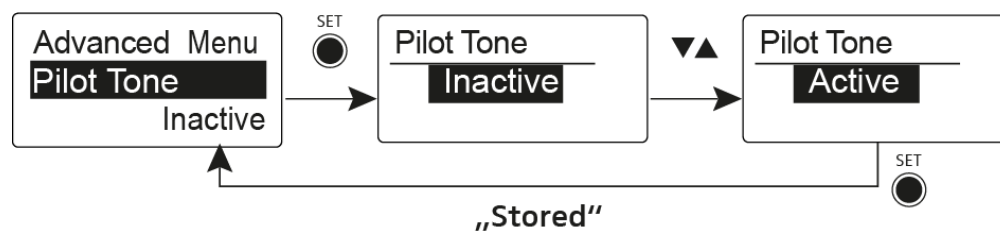


- When the check box is activated, the value will be transmitted during synchronization. If it is deactivated, the value will not be transmitted.
- Press the **SET** button to save the setting.



Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.

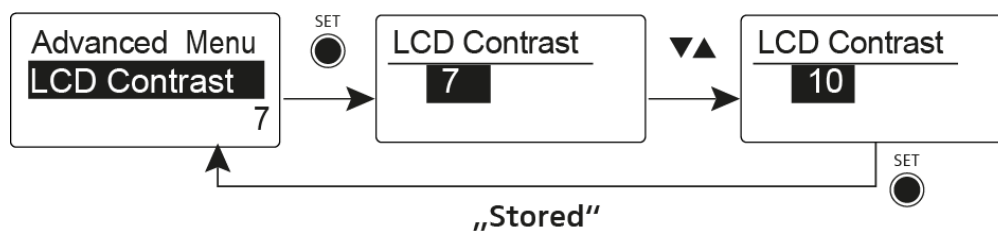


The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced -> LCD Contrast menu item

In the LCD Contrast menu item of the Advanced submenu, you can adjust the display contrast of the display panel in 16 steps.

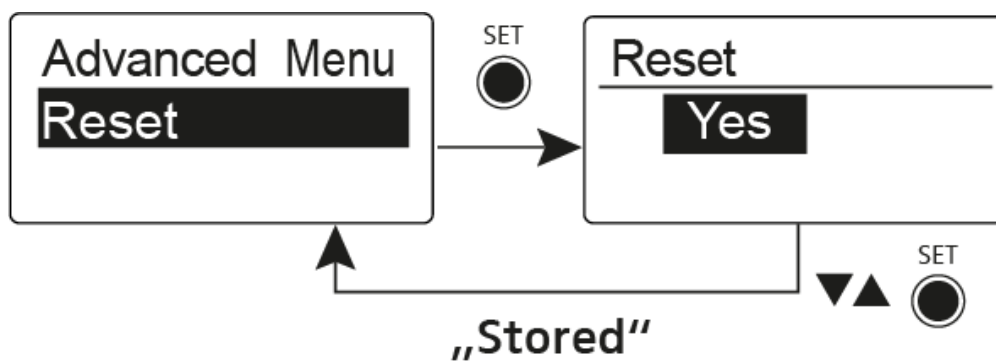




Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset the settings of the receiver.

When you reset the diversity receiver, only the selected settings of the pilot tone and the U frequency bank are retained.





Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

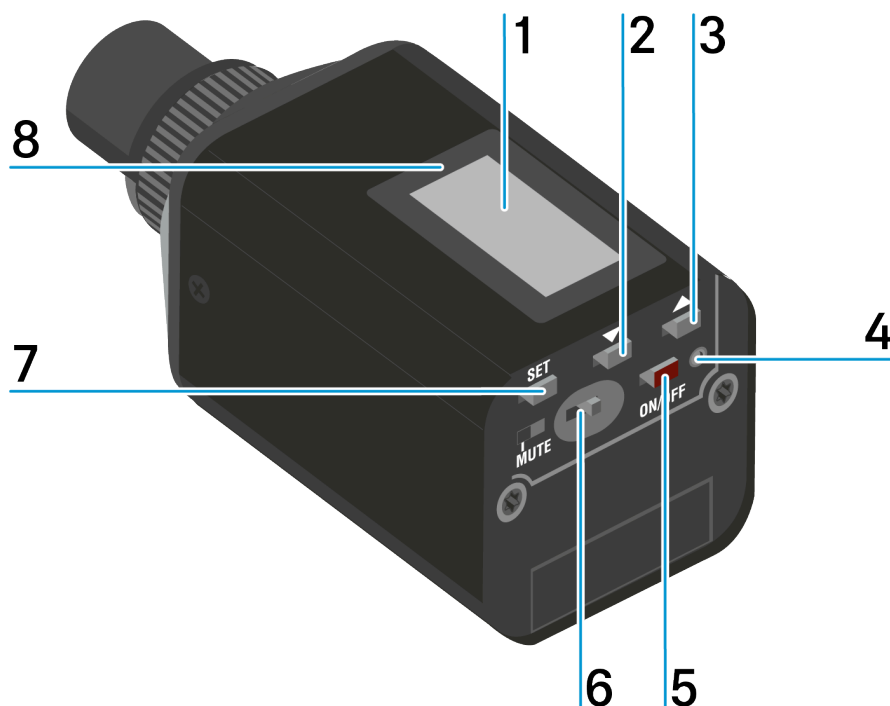


SKP 500 G4 plug-on transmitter

- Product overview
- Inserting and removing the batteries/rechargeable batteries
- Battery status
- Attaching the plug-on transmitter to the microphone
- Switching the plug-on transmitter on and off
- Muting the plug-on transmitter (AF mute)
- Deactivating the RF signal (RF mute)
- Lock-off function
- Displays on the plug-on transmitter display panel
- Select a standard display
- Buttons for navigating the menu
- Setting options in the menu
- Sensitivity menu item
- Frequency Preset menu item
- Name menu item
- Auto Lock menu item
- Advanced menu item
- Advanced > Tune menu item
- Advanced > Mute Mode menu item
- Advanced > RF Power menu item
- Advanced > Phantom Power 48V menu item
- Advanced > Pilot Tone menu item
- Advanced > LCD Contrast menu item
- Advanced > Reset menu item
- Advanced > Software Revision menu item



Product overview



- 1 Display panel
 - see [Displays on the plug-on transmitter display panel](#)
- 2 **DOWN** button
 - see [Buttons for navigating the menu](#)
- 3 **UP** button
 - see [Buttons for navigating the menu](#)
- 4 Operation and battery indicator, red LED
 - illuminated = ON, see [Switching the plug-on transmitter on and off](#)
 - flashing = LOW BATTERY, see [Inserting and removing the batteries/rechargeable batteries](#)
- 5 **ON/OFF** button with **ESC** function in the operating menu
 - Switch the transmitter on or off, see [Switching the plug-on transmitter on and off](#)
 - Escape function in the menu, see [Buttons for navigating the menu](#)
- 6 **MUTE** switch
 - see [Muting the plug-on transmitter \(AF mute\)](#)



7 SET button

- see [Buttons for navigating the menu](#)

8 Infra-red interface

- see [Ew 500 P G4 synchronizing](#)

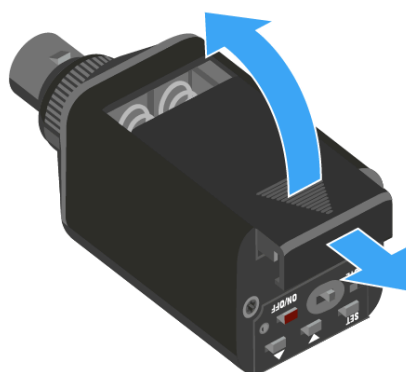


Inserting and removing the batteries/rechargeable batteries

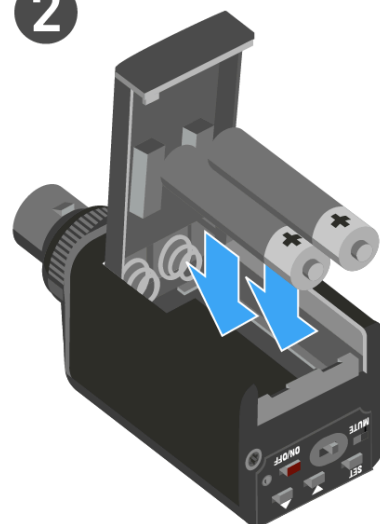
You can operate the plug-on transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- ▶ Slide the battery compartment cover in the direction of the embossed arrow and open the cover.
- ▶ Insert the batteries or the accupack as shown below. Please observe correct polarity when inserting the batteries/accupack.

1



2



- ▶ Close the battery compartment.
 - ✓ The cover locks into place with an audible click.





Related information

[Battery status](#)



Battery status

Charge status of the batteries:

	100 %	> 8 h
	70 %	4 - 6 h
	30 %	2 - 3 h
<p>LOW BATT</p> 		

Charge status is critical (LOW BATT):

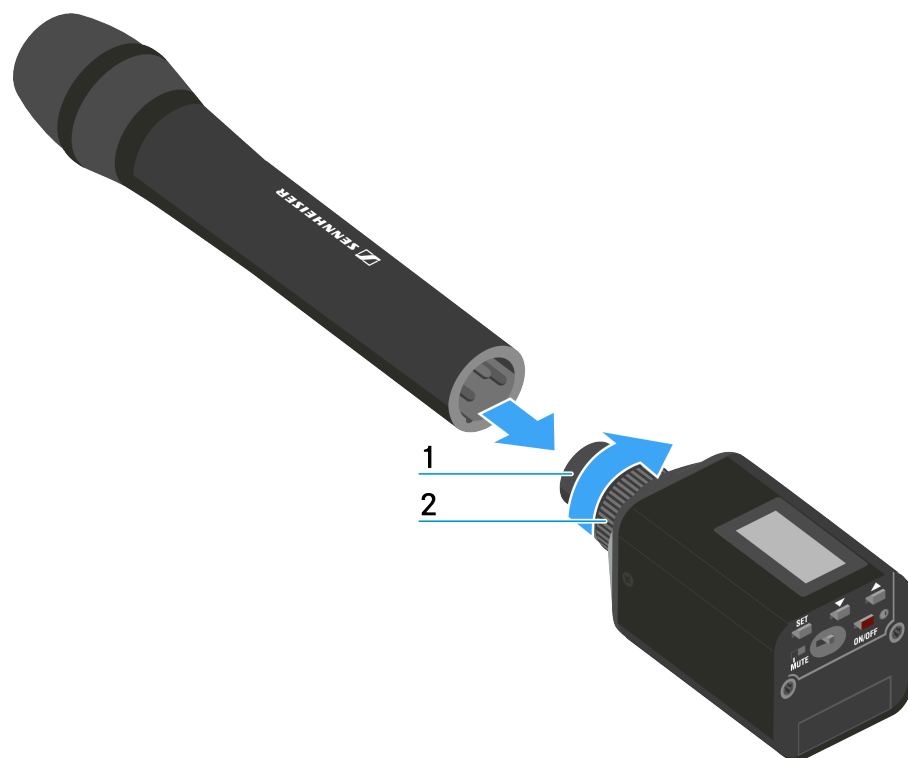




Attaching the plug-on transmitter to the microphone

i Microphones with a metal casing should be used for optimal signal transmission.

- ▶ Loosen the locking ring (2) by rotating it in the clockwise direction past the center point.
 - ✓ This unlocks the XLR-3 plug (1) of the plug-on transmitter.
- ▶ Connect the plug-on transmitter's XLR-3 plug (1) to the XLR-3 socket of the microphone.
- ▶ Tighten the locking ring (2) by rotating it counter-clockwise in the direction of the arrow.





Switching the plug-on transmitter on and off

To switch on the plug-on transmitter:

- ▶ Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the plug-on transmitter:

- ▶ Hold down the **ON/OFF** button until the display goes off.



Muting the plug-on transmitter (AF mute)

You can mute the audio signal with the MUTE switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under [Advanced > Mute Mode menu item](#).

- ▶ Slide the **MUTE** switch to the MUTE position.



- ✓ The audio signal is muted. The message **MUTE** is shown on the display.



Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:



Deactivating the RF signal with the MUTE switch

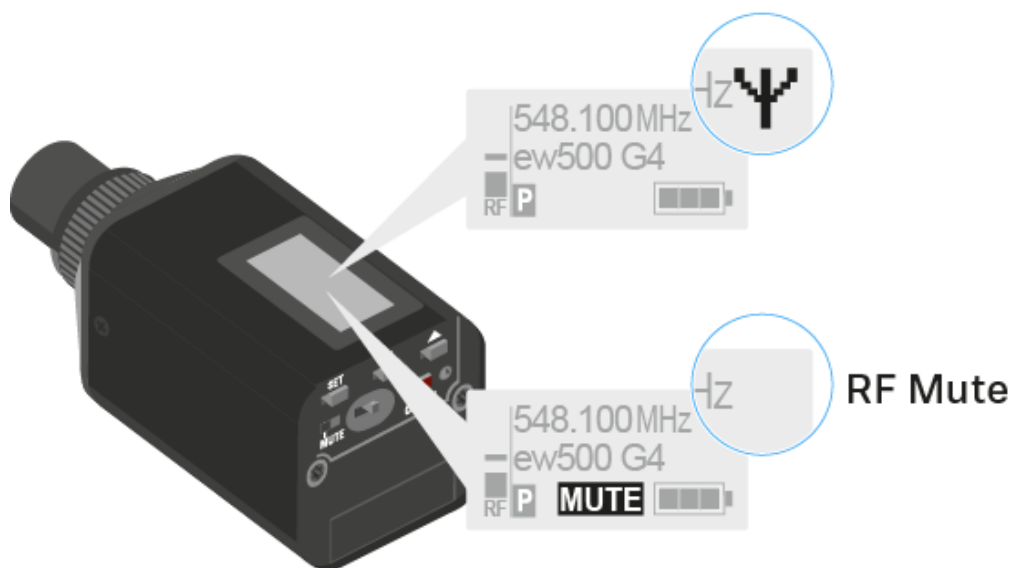
- i** You can deactivate the RF signal with the **MUTE** switch. To do this, the MUTE switch function must be configured to RF On/Off. You can find more information about this subject under [Advanced > Mute Mode menu item](#).



- Slide the **MUTE** switch to the MUTE position.

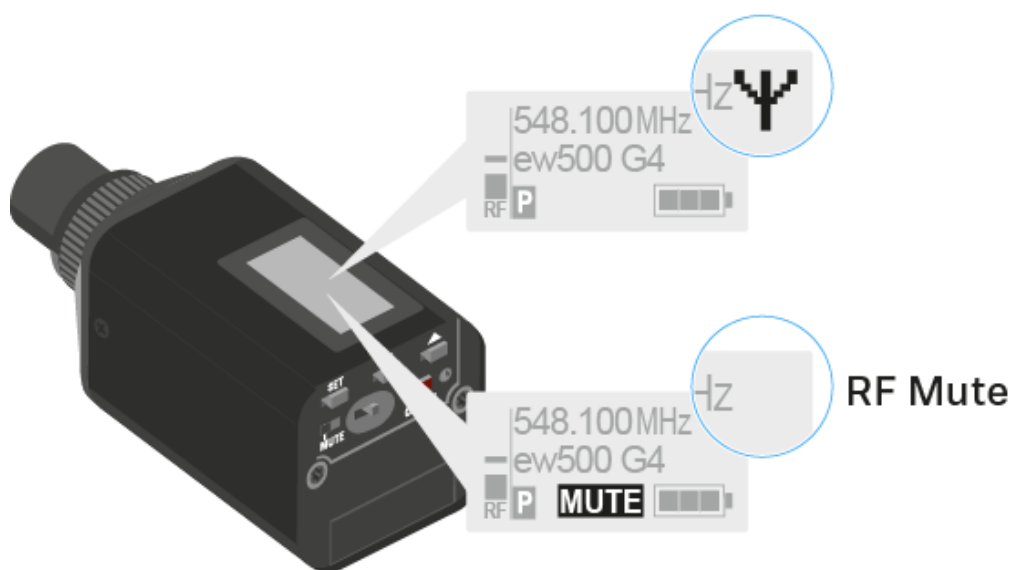


- ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- ▶ Short-press the **ON/OFF** button.
 - ✓ **RF Mute On?** appears.
- ▶ Press the **SET** button.
 - ✓ The RF signal is deactivated. The message **MUTE** is shown in the display and the transmission icon no longer appears.



- ▶ Short-press the **ON/OFF** button, to activate the RF signal.
 - ✓ **RF Mute Off?** appears.



- ▶ Press the **SET** button.
 - ✓ The transmission icon appears again.



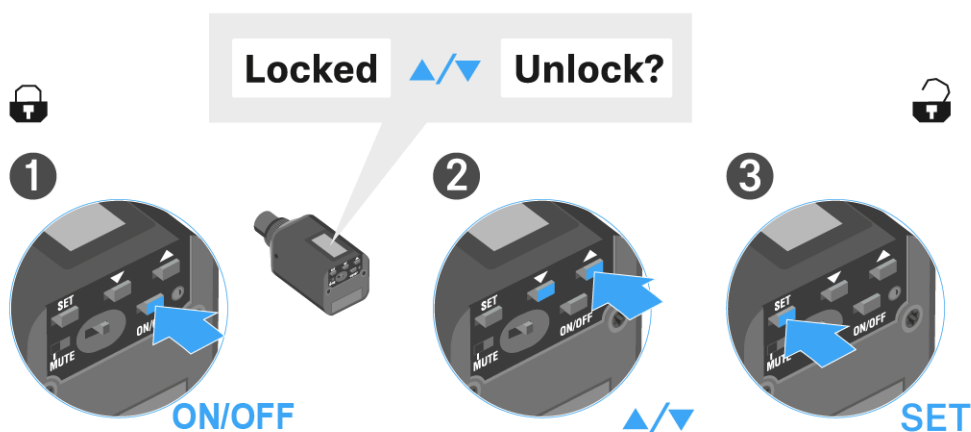
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see [Auto Lock menu item](#)).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- ▶ Press the **SET** button.
 - ✓ *Locked* appears in the display panel.
- ▶ Press the **UP** or **DOWN** button.
 - ✓ *Unlock?* appears in the display panel.
- ▶ Press the **SET** button.
 - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

When one of the standard displays is shown

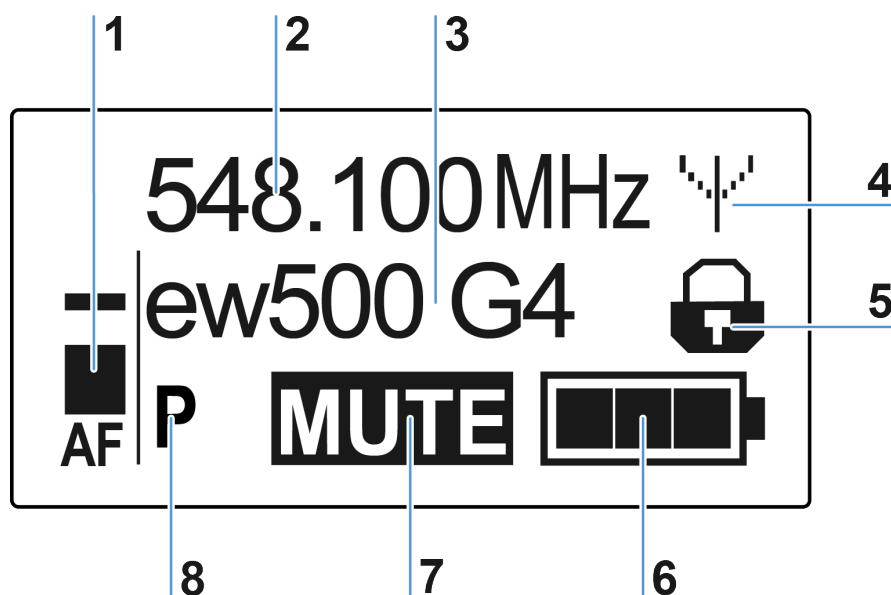
- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.



Displays on the plug-on transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see [Sensitivity menu item](#)

2 Frequency

- Configured transmission frequency
- see [Frequency Preset menu item](#)

3 Name

- Freely selectable name of the receiver
- see [Name menu item](#)

4 Transmission icon

- RF signal is being transmitted
- see [Deactivating the RF signal \(RF mute\)](#)

5 Lock-off function

- Lock-off function is activated
- see [Auto Lock menu item](#)



6 Battery status

- see [Battery status](#)

7 MUTE muting function

- The audio signal is muted
- see [Muting the plug-on transmitter \(AF mute\)](#)

8 P pilot tone

- Pilot tone transmission is activated
- see [Advanced > Pilot Tone menu item](#)

Related information

[Select a standard display](#)

Select a standard display

- ▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display

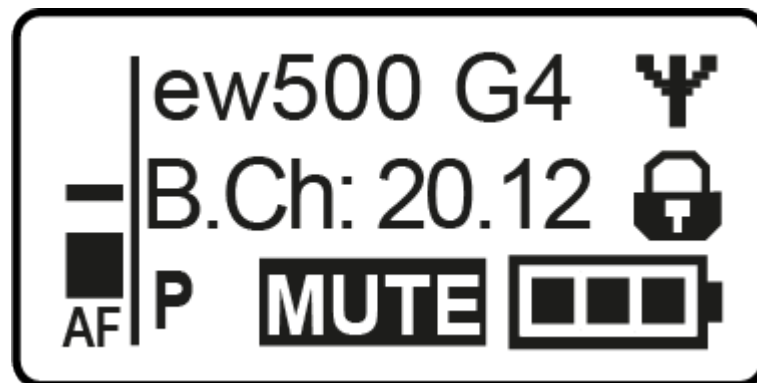




Channel/Frequency standard display



Name/Channel standard display





Buttons for navigating the menu

To open the menu/a menu item:

- ▶ Press the **SET** button.
 - ✔ The operating menu is shown on the transmitter display panel.
- ▶ Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- ▶ Press the **SET** button to open the selected menu item.

Making changes in a menu item

- ▶ Press the **UP** or **DOWN** buttons to set the displayed value.
- ▶ Press the **SET** button to save the setting.
- ▶ Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Related information

[Product overview](#)

[Displays on the plug-on transmitter display panel](#)



Setting options in the menu

In the plug-on transmitters menu, you can configure the following settings.

Adjusting the input sensitivity

- See [Sensitivity menu item](#)

Setting the frequency bank and the channel

- See [Frequency Preset menu item](#)

Entering a freely selectable name

- See [Name menu item](#)

Activating/deactivating the automatic lock-off function

- See [Auto Lock menu item](#)

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Configuring the transmission power
- Activating phantom powering
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See [Advanced menu item](#)

Sensitivity menu item

Adjusting the input sensitivity – AF audio level





Setting range:

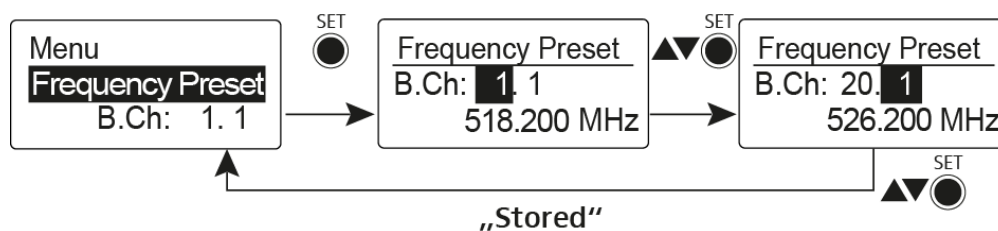
- 0 to -48 dB
- in 6 dB steps

The AF audio level is also displayed when the plug-on transmitter is muted, e.g. to check the sensitivity before a live broadcast.



Frequency Preset menu item

Manually selecting a frequency bank and channel



i While you work in the Frequency Preset menu, the RF signal is deactivated.

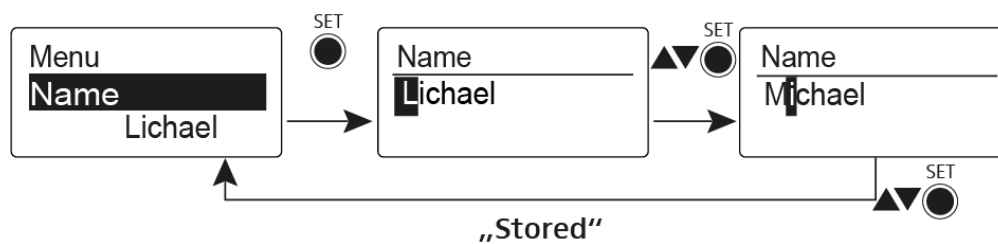
Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under [Establishing a radio link](#).



Name menu item

Entering names



In the Name menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.

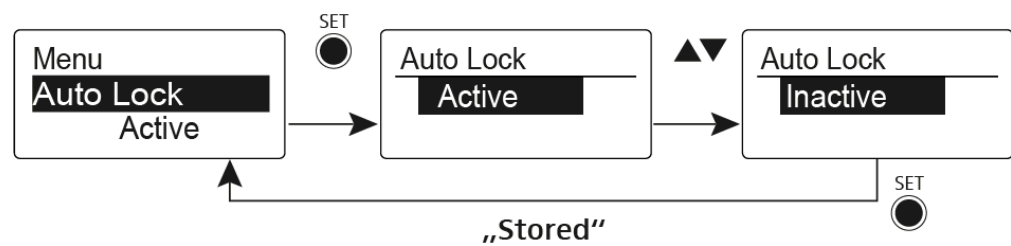
The names are a maximum of 8 characters:

- All letters except umlauts.
- Numbers from 0 to 9
- Special characters and spaces



Auto Lock menu item

Switching the automatic lock-off function on and off



This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.

You can find information about using the lock-off function under [Lock-off function](#).



Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See [Advanced > Tune menu item](#)

Configuring the function of the MUTE switch and the RMS 1 remote mute switch

- See [Advanced > Mute Mode menu item](#)

Configuring the transmission power

- See [Advanced > RF Power menu item](#)

Activating phantom powering

- See [Advanced > Phantom Power 48V menu item](#)

Activating/deactivating the pilot tone evaluation

- See [Advanced > Pilot Tone menu item](#)

Adjusting the contrast of the display panel

- See [Advanced > LCD Contrast menu item](#)

Resetting the transmitter

- See [Advanced > Reset menu item](#)

Displaying the current software revision

- See [Advanced > Software Revision menu item](#)

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.



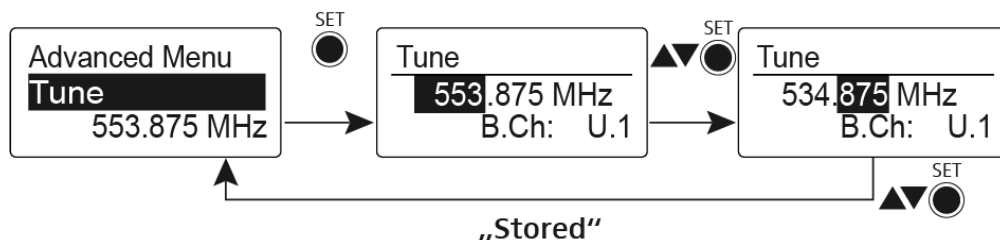
While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see [Establishing a radio link](#).

To configure the transmission frequency for the current channel:

- ▶ Open the **Tune** menu item in the **Advanced** menu.

✓ The frequency selection appears.



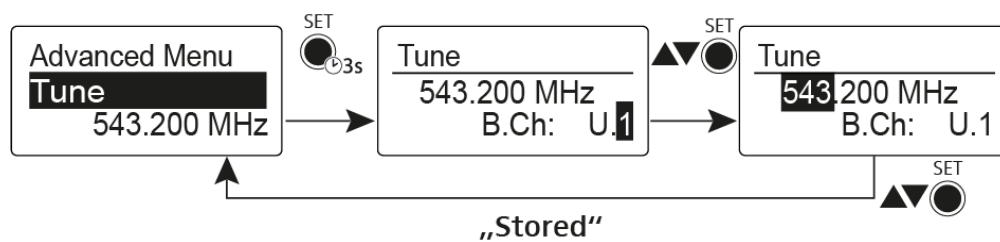
- ▶ Configure the desired frequency.

- ▶ Press the **SET** button.

✓ Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

- ▶ Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- ▶ Set the desired channel.

- ▶ Press the **SET** button.

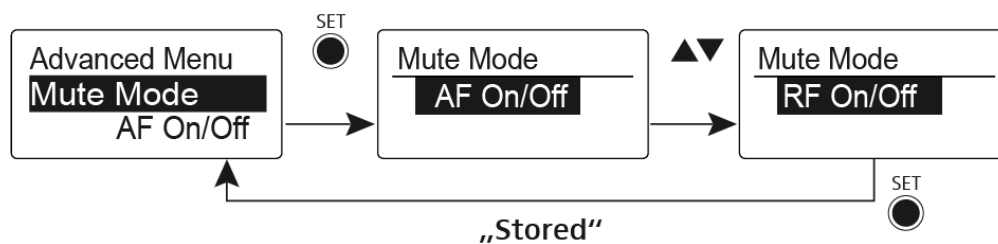
✓ The frequency selection appears.

- ▶ Configure the frequency.



Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to the MUTE selector position, the RF signal is deactivated.

Disabled mode

- No function

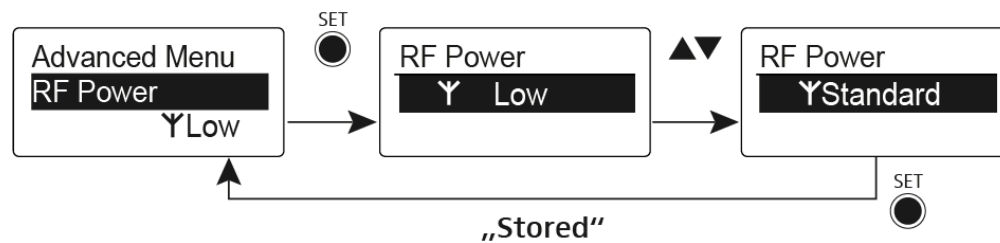
i You can find information about operating the mute switch under [Muting the plug-on transmitter \(AF mute\)](#) and [Deactivating the RF signal \(RF mute\)](#).



Advanced > RF Power menu item

Configuring the transmission power

You can configure the transmission power in three steps in the RF Power menu item.



i Please note the information at the following address: sennheiser.com/sifa.

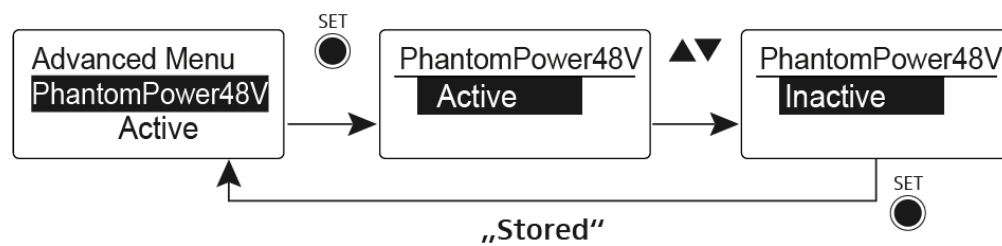
Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW



Advanced > Phantom Power 48V menu item

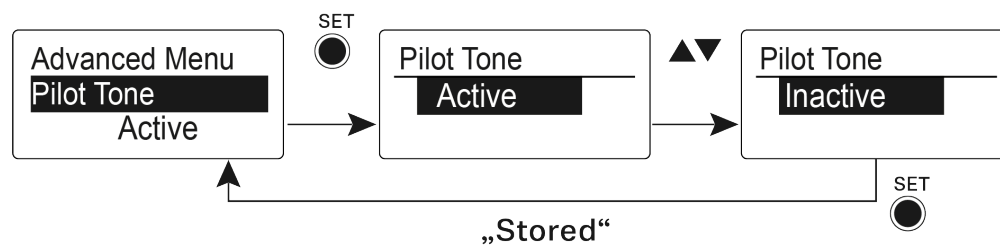
Activating phantom powering





Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.



Advanced > LCD Contrast menu item

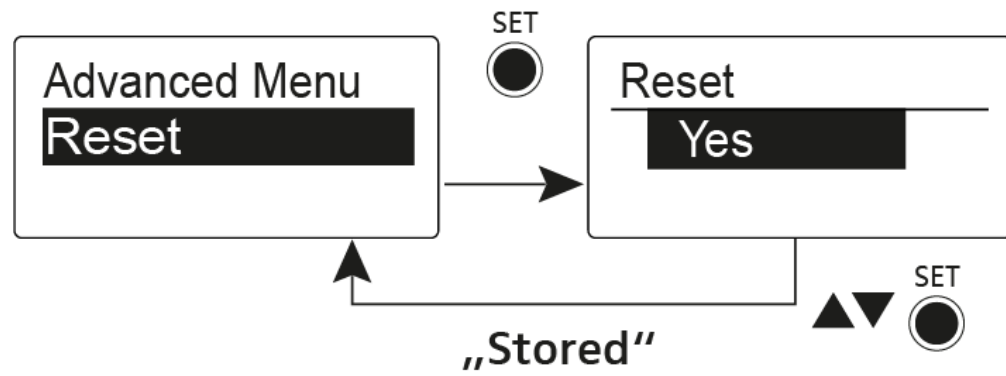
Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.



Advanced > Reset menu item

Resetting the plug-on transmitter



When you reset the plug-on transmitter, only the selected settings of the pilot tone and the U frequency bank are retained.



Advanced > Software Revision menu item

Show software revision

You can display the current software revision.



Establishing a radio link

Setting notes

Please note the following when synchronizing a transmitter with a receivers:

- ▶ Only use transmitters and receivers from the same frequency range (see the type plate on the transmitter and receiver).
- ▶ Make sure that your chosen frequencies are listed in the frequency table for the particular frequency range (see [Frequency ranges](#)).
- ▶ Ensure that the desired frequencies are permitted in your country and apply for an operating license if necessary.
- ▶ Please note the information at the following address: sennheiser.com/sifa.

Related information

[Ew 100 G4 Establishing a radio link](#)
[Ew 300-500 G4 Establishing a radio link](#)
[Ew 100 P G4 Establishing a radio link](#)
[Ew 500 P G4 Establishing a radio link](#)

Ew 100 G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see [Easy Setup menu item](#)).
- Set a frequency in the receiver manually (see [Frequency Preset menu item](#)) and synchronize it with the transmitter [Ew 100 G4 synchronizing](#)).
- Set the frequency on the receiver and the transmitter manually.
 - EM 100 G4: [Frequency Preset menu item](#)
 - SKM 100 G4: [Frequency Preset menu item](#)
 - SK 100 G4: [Frequency Preset menu item](#)



Ew 300-500 G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see [Easy Setup menu item](#)).
- Set a frequency in the receiver manually (see [Frequency Preset menu item](#)) and synchronize it with the transmitter [Ew 300-500 G4 synchronizing](#)).
- Set the frequency on the receiver and the transmitter manually.
 - EM 300-500 G4: [Frequency Preset menu item](#)
 - SKM 300 G4-S: [Frequency Preset menu item](#), SKM 500 G4: [Frequency Preset menu item](#)
 - SK 300 G4-RC: [Frequency Preset menu item](#), SK 500 G4: [Frequency Preset menu item](#)



Ew 100 P G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see [Easy Setup menu item](#)).
- Set a frequency in the receiver manually (see [Frequency Preset menu item](#)) and synchronize it with the transmitter [Ew 100 P G4 synchronizing](#)).
- Set the frequency on the receiver and the transmitter manually.
 - EK 100 G4: [Frequency Preset menu item](#)
 - SKM 100 G4: [Frequency Preset menu item](#)
 - SK 100 G4: [Frequency Preset menu item](#)
 - SKP 100 G4: [Frequency Preset menu item](#)



Ew 500 P G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

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- Use the Easy Setup function to perform an automatic frequency setup (see [Easy Setup menu item](#)).
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 - EK 500 G4: [Frequency Preset menu item](#)
 - SKM 500 G4: [Frequency Preset menu item](#)
 - SK 500 G4: [Frequency Preset menu item](#)
 - SKP 500 G4: [Frequency Preset menu item](#)



Synchronizing devices

Related information

- [Ew 100 G4 synchronizing](#)
- [Ew 300-500 G4 synchronizing](#)
- [Ew 100 P G4 synchronizing](#)
- [Ew 500 P G4 synchronizing](#)

Ew 100 G4 synchronizing

You can synchronize ew 100 G4 series transmitters and receivers via the receiver's infrared interface.

The following Parameters are transferred to the transmitters:

- Frequency Preset >> currently configured frequency (see [Frequency Preset menu item](#))
- Name >> currently configured frequency (see [Name menu item](#))
- Pilot Tone >> current setting of the pilot tone on the receiver (see [Advanced -> Pilot Tone menu item](#))

To synchronize the devices:

- ▶ Switch the transmitter and the receiver on.
- ▶ Press the **SYNC** button on the receiver.



- ✓ *Sync* appears in the receiver's display and the blue LED turns blue.





- ▶ Hold the infra-red interface of the transmitter (see SKM [Product overview](#) and SK [Product overview](#)) in front of the infra-red interface of the receiver (see EM [Front](#)).



- ✓ The parameters are transferred to the transmitter. The blue LED blinks during transmission.

When the transfer is complete, a tick appears in the receiver's display as a confirmation.

Then the receiver will return to the current standard display.

To cancel synchronization:

- ▶ Press the **ESC** button on the receiver.
- ✓ An **X** appears in the display.

- i** This icon also appears when:
- no transmitter is found or the transmitter is not compatible.
 - no transmitter is found and the synchronization process automatically ends after 30 seconds.



Ew 300-500 G4 synchronizing

You can synchronize ew 300-500 G4 series transmitters and receivers via the receiver's infrared interface.

You can adjust the Parameters to be transferred to the transmitter here: [Advanced -> Sync Settings menu item](#).

To synchronize the devices:

- ▶ Switch the transmitter and the receiver on.
- ▶ Press the **SYNC** button on the receiver.
- ✔ *Sync* appears in the receiver's display and the blue LED turns blue.





- ▶ Hold the infra-red interface of the transmitter in front of the infra-red interface of the receiver.



- ✓ The parameters are transferred to the transmitter. The blue LED blinks during transmission.

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Ew 100 P G4 synchronizing

You can synchronize ew 100 P G4 series transmitters and receivers via the receiver's infrared interface.

To synchronize the devices:

- ▶ Switch the transmitter and the receiver on.
- ▶ Call up the **Sync** menu item on the receiver.
 - ✓ **Sync** appears in the receiver's display.
- ▶ Hold the infra-red interface of the transmitter in front of the infra-red interface of the receiver.
 - ✓ The parameters are transferred to the transmitter. When the transfer is complete, a tick appears in the receiver's display as a confirmation. Then the receiver will return to the current standard display.



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 - ✓ **Sync** appears in the receiver's display.
- ▶ Hold the infra-red interface of the transmitter in front of the infra-red interface of the receiver.
 - ✓ The parameters are transferred to the transmitter. When the transfer is complete, a tick appears in the receiver's display as a confirmation. Then the receiver will return to the current standard display.



To cancel synchronization:

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 - ✓ An **X** appears in the display.

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- no transmitter is found or the transmitter is not compatible.
 - no transmitter is found and the synchronization process automatically ends after 30 seconds.



ASA 214 antenna splitter

Product overview

Connecting/disconnecting the splitter to/from the power supply system

Connecting receivers

Connecting antennas

Information on antenna amplifiers and cable lengths

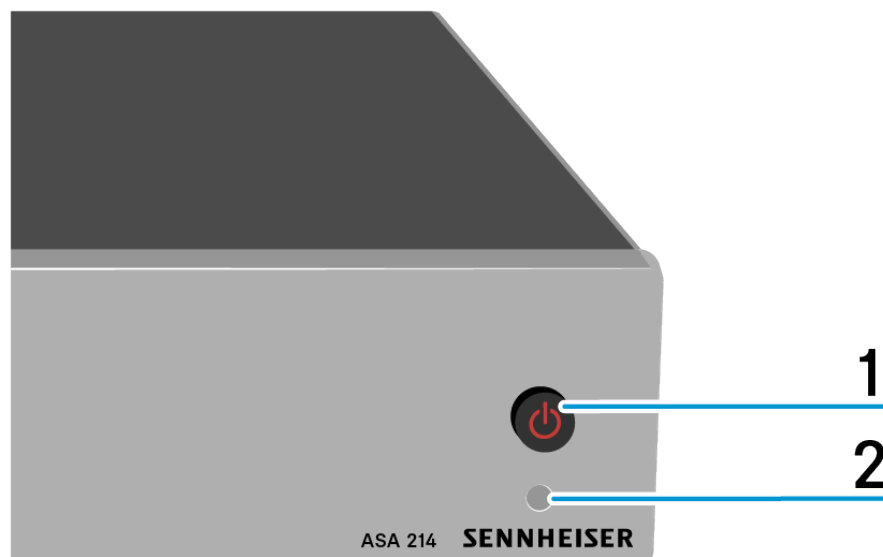
Configuring multi-channel systems

Installing the splitter in a rack

Switching the splitter on and off

Product overview

Front



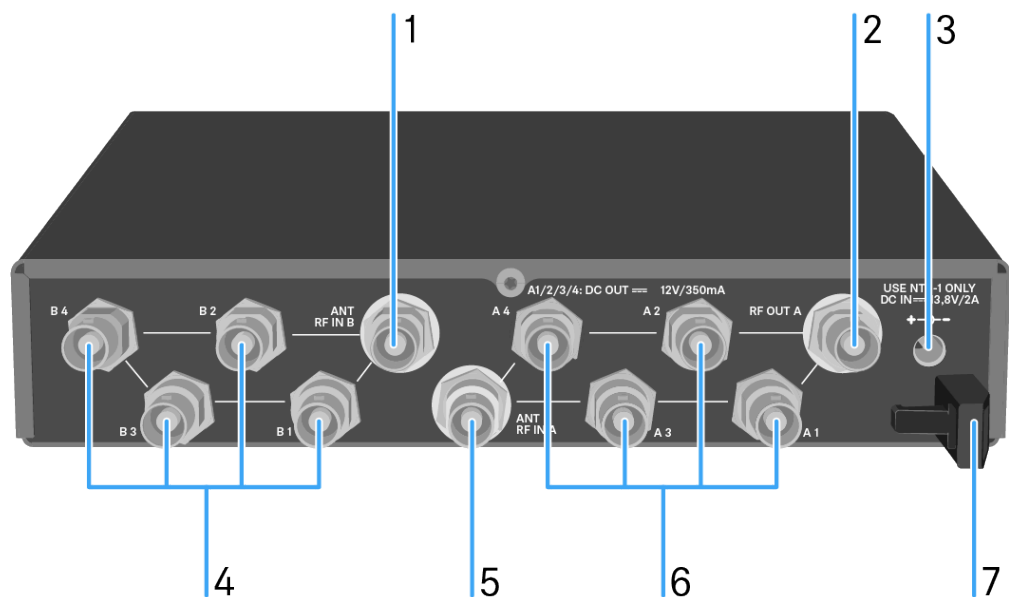
1 STANDBY button

- see [Switching the splitter on and off](#)

2 LED: Operation indicator



Back



1 ANT RF IN B BNC socket

- Antenna input of diversity branch B
- see [Connecting antennas](#)

2 RF OUT A BNC socket

- RF output only for connecting an additional ASA 214 to build an 8-channel diversity system
- see [Configuring multi-channel systems](#)

3 DC IN socket

- To connect the NT 1-1 power supply unit
- see [Connecting/disconnecting the splitter to/from the power supply system](#)

4 BNC sockets B1 to B4

- RF outputs of diversity branch B for connection to the receiver
- see [Connecting receivers](#)

5 ANT RF IN A BNC socket

- Antenna input of diversity branch A
- see [Connecting antennas](#)



6 BNC sockets A1 to A4

- RF outputs of diversity branch A for connection to the receiver
- Every one of these RF outputs can also provide voltage to a receiver.
- see [Connecting receivers](#)

7 Strain relief for the cable of the power supply unit

- see [Connecting/disconnecting the splitter to/from the power supply system](#)



Connecting/disconnecting the splitter to/from the power supply system

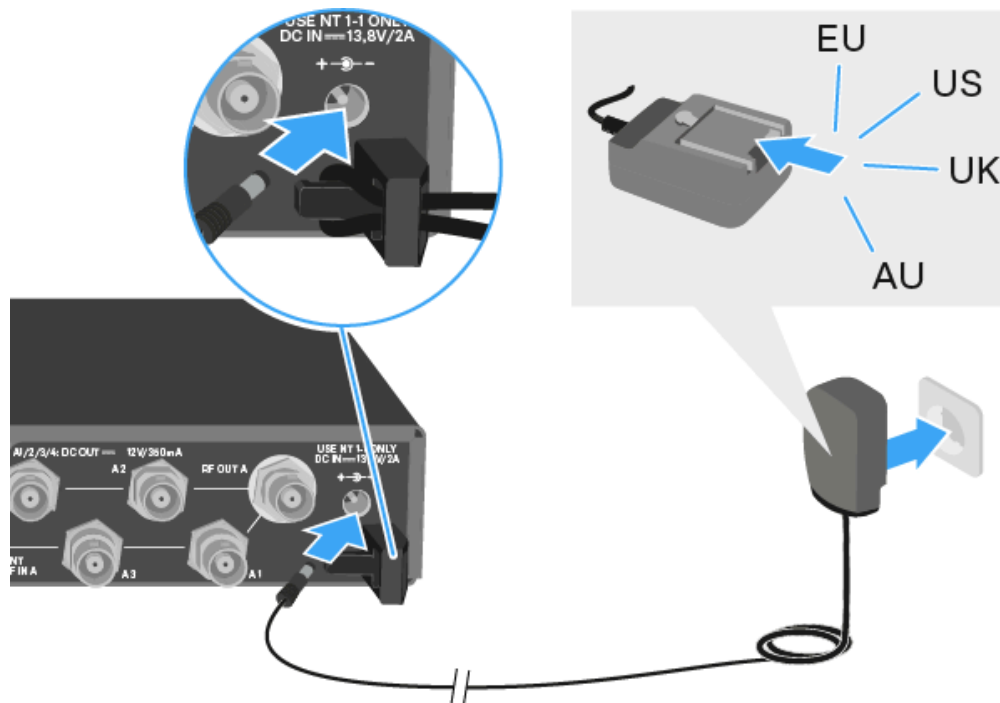
To supply power to the ASA 214, the connected receivers and any antenna amplifiers used, you will need the NT 1-1 power supply unit.

i Only use the supplied NT 1-1 power supply unit.

It is designed for your antenna splitter and ensures safe operation.

To connect the ASA 214 antenna splitter to the power supply system:

- ▶ Plug the hollow jack plug of the power supply unit into the **DC IN** socket of the antenna splitter.
- ▶ Pass the cable of the power supply unit through the cable grip.
- ▶ Slide the supplied country adapter onto the power supply unit.
- ▶ Plug the power supply unit into the wall socket.



To completely disconnect the ASA 214 antenna splitter from the power supply system:

- ▶ Unplug the power supply unit from the wall socket.
- ▶ Unplug the hollow jack plug of the power supply unit from the **DC IN** socket of the antenna splitter.



Connecting receivers

You can connect and operate up to four stationary receivers to the ASA 214.

Sennheiser receivers of the ew G4 and ew G3 series can also be supplied with power from the ASA 214.

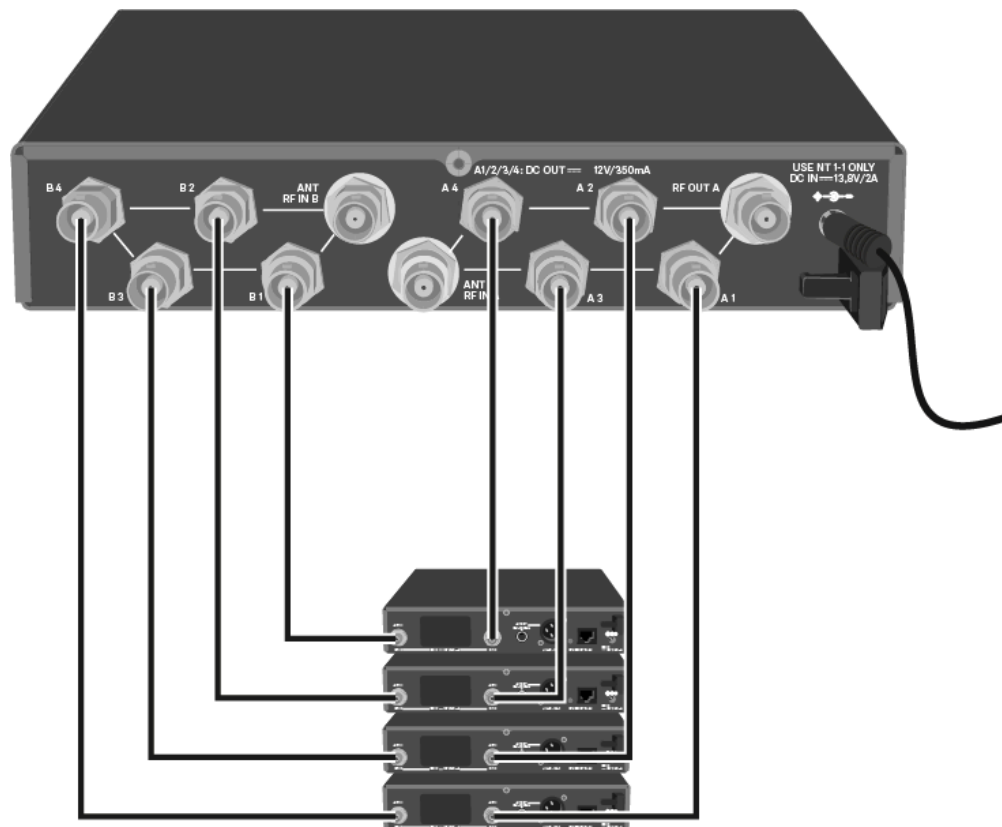
The following receivers are compatible:

- evolution wireless G4:
 - EM 100 G4
 - EM 300-500 G4
- evolution wireless G3:
 - EM 100 G3
 - EM 300 G3
 - EM 500 G3
- 2000 series:
 - EM 2000 (with its own power supply)
 - EM 2050 (with its own power supply)



To connect the receivers to the ASA 214 antenna splitter:

- ▶ Connect one of the receiver's antenna inputs to one of the BNC sockets **A1** to **A4** using one of the supplied BNC cables.
 - ✓ The compatible receivers listed above do not require their own power supply.
They are powered via the BNC sockets **A1** to **A4**.
- ▶ Connect the receiver's other antenna input to one of the BNC sockets B1 to B4 using one of the supplied BNC cables.



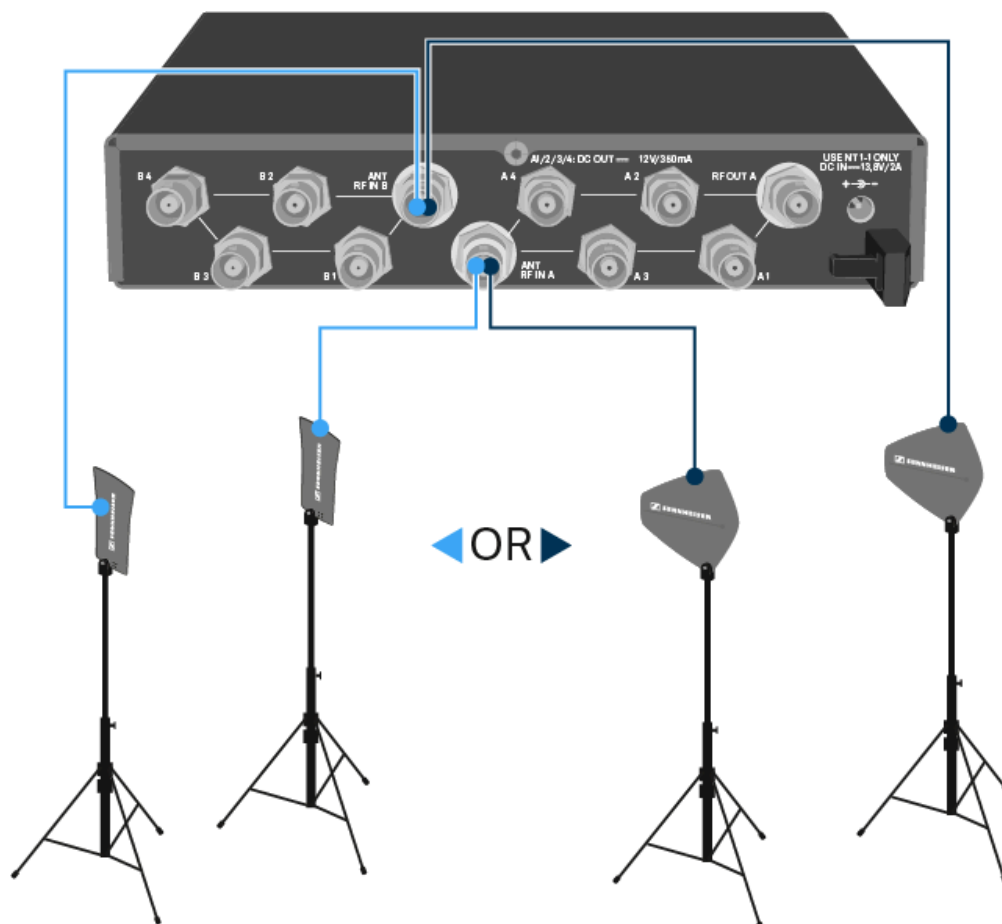


Connecting antennas

- i** For more information about antennas and antenna accessories, see [Antennas and accessories](#).
- i** In order to ensure optimal reception even in the case of poor reception conditions, we recommend using remote antennas.

Connecting remote antennas

- ▶ Mount two antennas or a combination of an antenna and an antenna amplifier to the BNC sockets **ANT RF IN A** and **ANT RF IN B**.



Connecting rod antennas

- ▶ Mount the antennas to the BNC sockets **ANT RF IN A** and **ANT RF IN B**.
- ▶ Align the antennas in a V-shape in order to ensure the best possible reception.



Information on antenna amplifiers and cable lengths

The following table shows which cable lengths require the use of the AB 3 or AB 4 antenna amplifier as well as the maximum recommended cable lengths.

Device	Frequency range around	Number of AB 3	Max. cable length	
			RG 58	GZL 5000
ASA 214	500 MHz	0	8 m	16 m
		1	36 m	72 m
		2	64 m	128 m
	700 MHz	0	7 m	14 m
		1	30 m	60 m
		2	53 m	106 m
	900 MHz	0	6 m	12 m
		1	26 m	52 m
		2	46 m	92 m
ASA 214 - 1G8	1800 MHz	0	4 m	8 m
		1	16 m	36 m
		2	28 m	64 m

Use the **AB 3** for the following frequency ranges:

- **K+ range:** 925 - 937,5 MHz
- **1G8 range:** 1785 - 1800 MHz

Use the **AB 4** for the following frequency ranges:

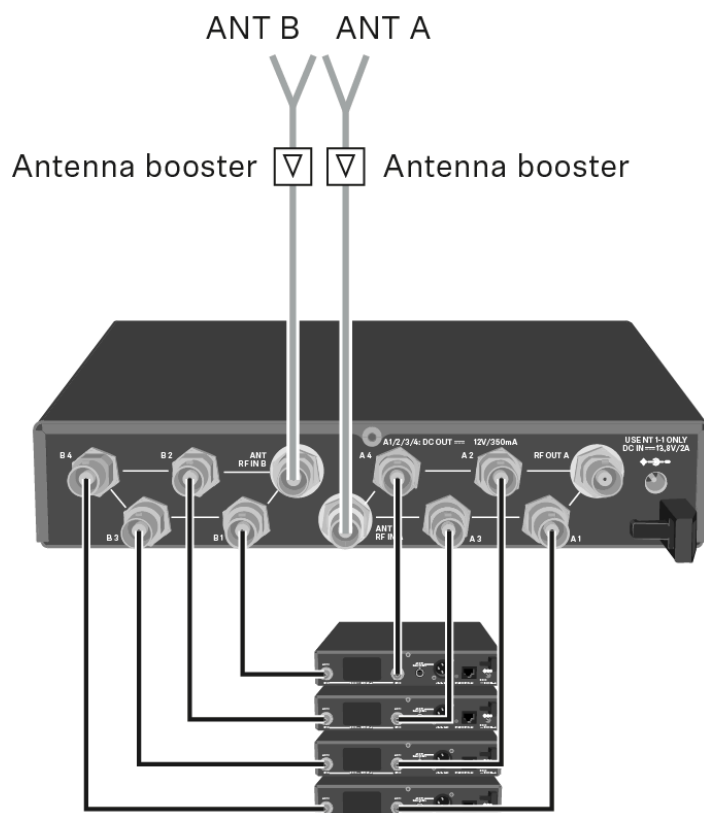
- **Aw+ range:** 470 - 558 MHz
- **Gw range:** 558 - 626 MHz
- **GBw range:** 606 - 678 MHz
- **Bw range:** 526 - 698 MHz
- **Cw range:** 718 - 790 MHz
- **Dw range:** 790 - 865 MHz



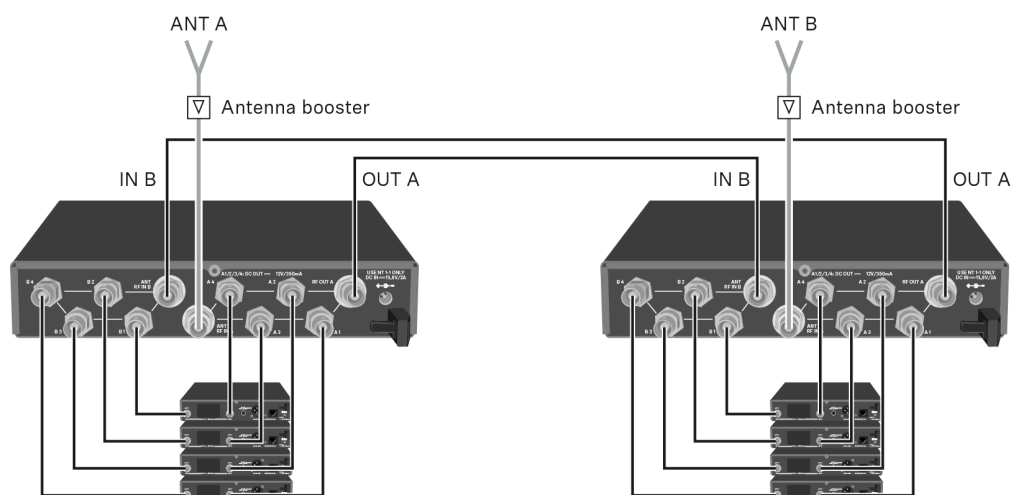
Configuring multi-channel systems

The following options for connecting multi-channel systems are possible:

Option 1: Two antennas supply a 4-channel system

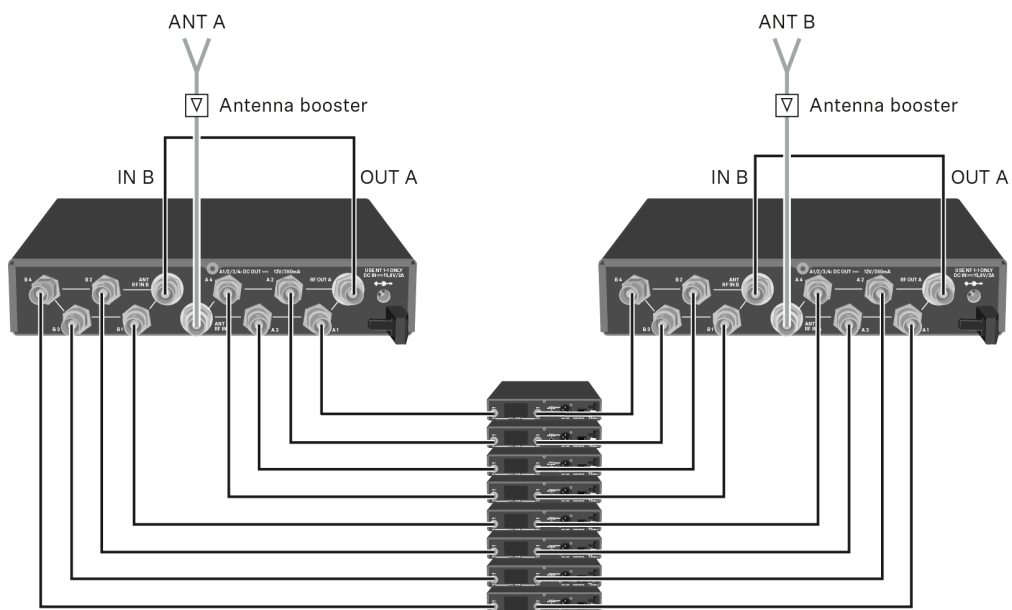


Option 2: Two 4-channel systems are interconnected





Option 3: Two antennas supply a 8-channel system





Installing the splitter in a rack

NOTICE



Rack mounting poses risks

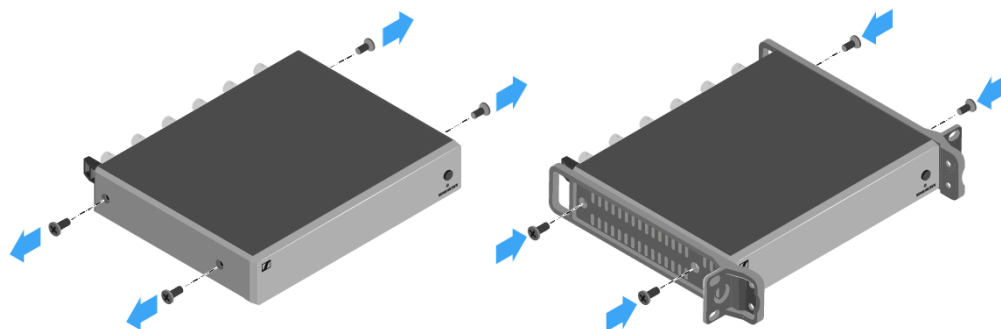
When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- ▶ Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the specifications. See [Specifications](#).
- ▶ Ensure sufficient ventilation; if necessary, provide additional ventilation.
- ▶ Make sure that the mechanical loading of the rack is even.
- ▶ When connecting to the power supply system, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- ▶ When rack mounting, please note that intrinsically harmless leakage currents of the individual power supply units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

- i** To mount the antenna splitter in a rack, you will need the [GA 3 rack mount kit](#) (optional accessory).

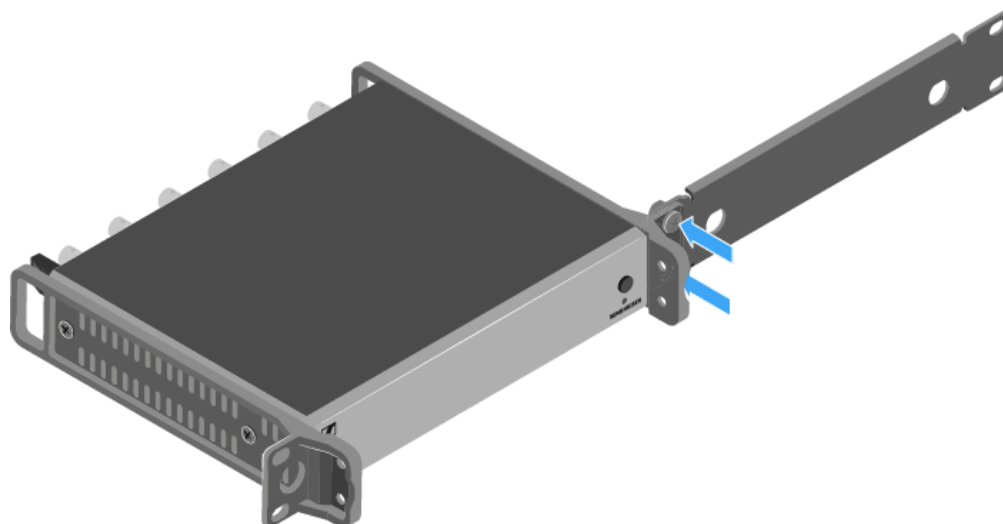
Mounting a single antenna splitter in a rack

- ▶ Unscrew and remove the two recessed head screws (M4x8) on each side of the antenna splitter.
- ▶ Secure the mounting angles to the sides of the antenna splitter using the previously removed recessed head screws.

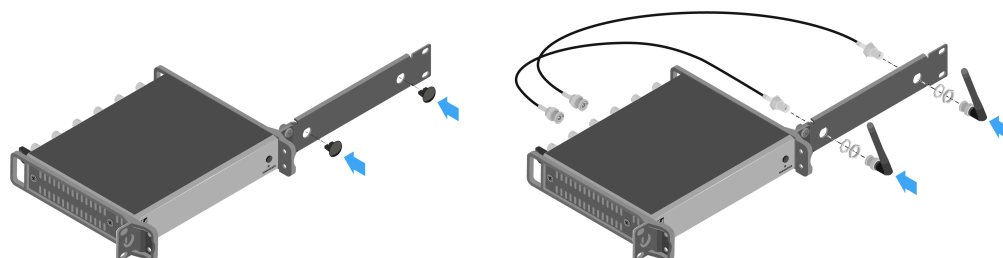




- ▶ Secure the blanking plate to one of the mounting angles using two recessed head screws (M6x10).



- ▶ Attach the antennas. You have the following options:
 - Connect the supplied rod antennas on the rear side of the antenna splitter. In this case, cover the antenna holes with the two covers (left diagram).
 - Attach the [AM 2 antenna front mounting kit](#) (optional accessory) and mount the rod antennas on the blanking plate (right diagram).

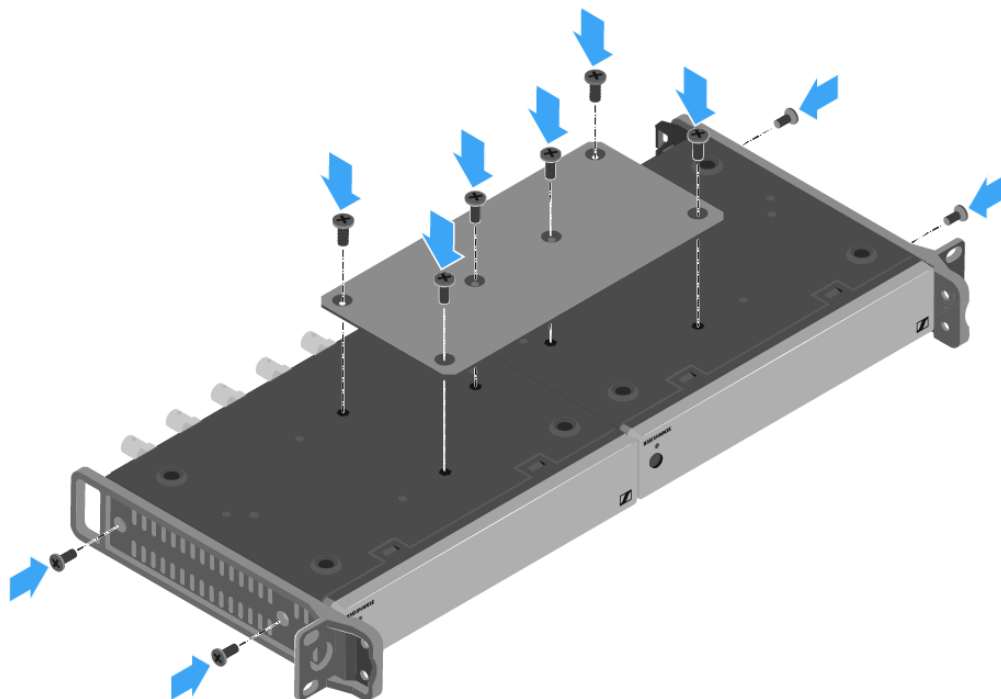


- ▶ Slide the antenna splitter with the mounted blanking plate into the 19" rack.
- ▶ Secure the mounting angle and the blanking plate to the 19" rack.
- ▶ Align the mounted antennas in a V-shape.



Mounting two antenna splitters side by side in a rack

- ▶ Place both antenna splitters upside down and side by side on an even surface.
- ▶ Secure the jointing plate to the transmitters using the six recessed head screws (M3x6).
- ▶ Secure the mounting angle.





Switching the splitter on and off

To switch on the antenna splitter:

- ▶ Short-press the **STANDBY** button.
 - ✓ The antenna splitter switches on and the power LED turns green.

The RF signals of the connected antennas are distributed to all connected receivers.



To switch the antenna splitter to standby mode:

- ▶ Press the **STANDBY** button for approx. 2 seconds.
 - ✓ The LED turns off. The connected antenna amplifiers are switched off.
Connected receivers are switched off if they draw their supply voltage from the BNC sockets A1 to A4 (see [Connecting receivers](#)).

To fully switch off the antenna splitter:

- ▶ Disconnect the antenna splitter from the power supply system by unplugging the power supply unit from the wall socket.
 - ✓ The LED turns off.



Cleaning and maintenance

Note the following information when cleaning and maintaining products of the ew G4 series.

NOTICE



Liquids can damage the electronics of the product

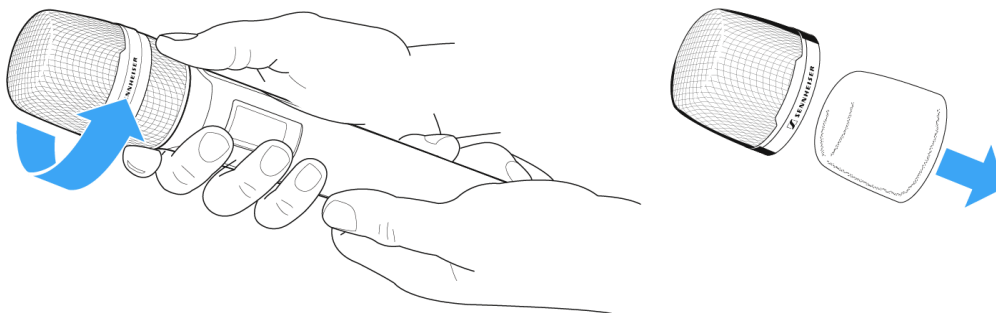
Liquids entering the product housing can cause a short-circuit and damage the electronics.

- ▶ Keep all liquids away from the products.
- ▶ Do not use any solvents or cleansing agents.
- ▶ Disconnect the mains-operated products from the power supply system and remove rechargeable batteries and batteries (if present) before you begin cleaning.
- ▶ Clean all products only with a soft, dry cloth.

- ▶ Note the special cleaning instructions below for the following products.

Cleaning the sound inlet basket of the microphone module

- ▶ Unscrew the top sound inlet basket from the microphone module by turning it counterclockwise.
- ▶ Remove the foam insert.



You can clean the sound inlet basket in two ways:

- ▶ Use a slightly damp cloth to clean the top sound inlet basket from the inside and outside.
- ▶ Use a brush and rinse with clean water.
- ▶ If necessary, clean the foam insert with a mild detergent or replace the foam insert.
- ▶ Dry the top sound inlet basket and foam insert.
- ▶ Reinsert the foam insert.
- ▶ Screw the sound inlet basket back onto the microphone module.



From time to time, you should also clean the microphone module contacts:

- ▶ Wipe the contacts of the microphone module with a soft, dry cloth.



4. Specifications

All specifications at a glance.

[EM 100 G4 rack receiver](#)
[EM 300-500 G4 rack receiver](#)
[SKM 100 G4 | SKM 100 G4-S handheld transmitter](#)
[SKM 300 G4-S handheld transmitter](#)
[SKM 500 G4 handheld transmitter](#)
[SK 100 G4 bodypack transmitter](#)
[SK 300 G4-RC bodypack transmitter](#)
[SK 500 G4 bodypack transmitter](#)
[EK 100 G4 diversity receiver](#)
[EK 500 G4 diversity receiver](#)
[SKP 100 G4 plug-on transmitter](#)
[SKP 500 G4 plug-on transmitter](#)
[ASA 214 antenna splitter](#)
[Pin assignment](#)

EM 100 G4 rack receiver

RF characteristics

Modulation	Wideband FM
Receiving frequency ranges	A1: 470 - 516 MHz
	A: 516 - 558 MHz
	AS: 520 - 558 MHz
	G: 566 - 608 MHz
	GB: 606 - 648 MHz
	B: 626 - 668 MHz
	C: 734 - 776 MHz
	C-TH: 748.2 - 757.8 MHz
	D: 780 - 822 MHz
	E: 823 - 865 MHz
	JB: 806 - 810 MHz



	K+: 925 - 937,5 MHz
	1G8: 1785 - 1800 MHz
Receiving frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Receiver principle	True diversity
Sensitivity (with HDX, peak deviation)	$< 2,5 \mu\text{V}$ for 52 dBA _{eff S/N}
Adjacent channel selection	typ. ≥ 65 dB
Intermodulation attenuation	typ. ≥ 65 dB
Blocking	≥ 70 dB
Squelch	Off Low: 5 dB μV Middle: 15 dB μV High: 25 dB μV
Pilot tone squelch	Can be switched off
Antenna inputs	2 BNC sockets
AF characteristics	
Compander system	Sennheiser HDX



EQ presets (switchable, act on line and monitor outputs):

- **Preset 1: Flat**
- **Preset 2: Low Cut** -3 dB at 180 Hz
- **Preset 3: Low Cut / High Boost** -3 dB at 180 Hz
+6 dB at 10 kHz
- **Preset 4: High Boost** +6 dB at 10 kHz

Signal-to-noise ratio (1 mV, peak deviation) ≥ 110 dBA

Total harmonic distortion (THD) $\leq 0,9 \%$

AF output voltage (at peak deviation, 1 kHz AF	6.3 mm jack socket (unbalanced): +12 dBu
	BNC socket (balanced): +18 dBu

AF OUT setting range	48 dB in 3 dB steps
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Overall device

Temperature range -10 °C to +55 °C (14 °F to 131 °F)

Power supply	12 V DC
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Power consumption	300 mA
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Dimensions approx. 190 x 212 x 43 mm

Weight approx. 980 g



EM 300-500 G4 rack receiver

RF characteristics

Modulation	Wideband FM
Receiving frequency ranges	Aw+: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Cw: 718 - 790 MHz Cw-TH: 748.2 - 757.8 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Receiving frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 32 factory-preset channels, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	>up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Receiver principle	True diversity
Sensitivity (with HDX, peak deviation)	$< 2,5 \mu\text{V}$ for 52 dBA _{eff S/N}
Adjacent channel selection	typ. ≥ 75 dB
Intermodulation attenuation	typ. ≥ 70 dB
Blocking	≥ 75 dB
Squelch	5 to 25 dB μV can be set in 2 dB steps
Pilot tone squelch	Can be switched off
Antenna inputs	2 BNC sockets



AF characteristics

Compander system	Sennheiser HDX
EQ presets (switchable, act on line and monitor outputs):	
• Preset 1: Flat	
• Preset 2: Low Cut	-3 dB at 180 Hz
• Preset 3: Low Cut / High Boost	-3 dB at 180 Hz +6 dB at 10 kHz
• Preset 4: High Boost	+6 dB at 10 kHz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
AF output voltage (at peak deviation, 1 kHz AF)	6.3 mm jack socket (unbalanced): +12 dBu BNC socket (balanced): +18 dBu
AF OUT setting range	48 dB in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	12 V DC
Power consumption	300 mA
Dimensions	approx. 202 x 212 x 43 mm
Weight	approx. 980 g



SKM 100 G4 | SKM 100 G4-S handheld transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz A: 516 - 558 MHz A10: 516 - 558 MHz AS: 520 - 558 MHz G: 566 - 608 MHz GB: 606 - 648 MHz B: 626 - 668 MHz B10: 626 - 668 MHz C: 734 - 776 MHz C-TH: 748.2 - 757.8 MHz D: 780 - 822 MHz JB: 806 - 810 MHz E: 823 - 865 MHz K+: 925 - 937,5 MHz 1G8: 1785 - 1800 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	max. 30 mW
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Input voltage	$3 V_{\text{eff}}$
Input impedance	40 k Ω
Input capacitance	Switchable
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. \varnothing 50 x 265 mm
Weight	approx. 450 g



SKM 300 G4-S handheld transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz Aw30: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Bw30: 526 - 698 MHz Cw: 718 - 790 MHz Cw-TH: 748.2 - 757.8 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies,adjustable in 25 kHz steps 20 frequency banks, each with up to 32 factory-preset channels, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	>up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	Switchable: Low: typ. 10 mW Standard: typ. 30 mW High: typ. 50 mW
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. \varnothing 50 x 265 mm
Weight	approx. 450 g



SKM 500 G4 handheld transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Cw: 718 - 790 MHz Cw-TH: 748.2 - 757.8 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies,adjustable in 25 kHz steps 20 frequency banks, each with up to 32 factory-preset channels, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	Switchable: Low: typ. 10 mW Standard: typ. 30 mW High: typ. 50 mW
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. \varnothing 50 x 265 mm
Weight	approx. 450 g



SK 100 G4 bodypack transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz A: 516 - 558 MHz A10: 516 - 558 MHz AS: 520 - 558 MHz G: 566 - 608 MHz GB: 606 - 648 MHz B: 626 - 668 MHz B10: 626 - 668 MHz C: 734 - 776 MHz C-TH: 748.2 - 757.8 MHz D: 780 - 822 MHz JB: 806 - 810 MHz E: 823 - 865 MHz K+: 925 - 937,5 MHz 1G8: 1785 - 1800 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	max. 30 mW
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
AF frequency response	Microphone: 80 - 18.000 Hz Line: 25 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Input voltage	$3 V_{\text{eff}}$
Input impedance	40 k Ω , unbalanced/1 M Ω
Input capacitance	Switchable
Setting range for input sensitivity	60 dB, in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• $\leq 25 \mu\text{A}$
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g



SK 300 G4-RC bodypack transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz Aw30: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Bw30: 526 - 698 MHz Cw: 718 - 790 MHz Cw-TH: 748.2 - 757.8 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies,adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	Switchable: Low: typ. 10 mW Standard: typ. 30 mW High: typ. 50 mW
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
AF frequency response	Microphone: 80 - 18.000 Hz Line: 25 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Input voltage	$3 V_{\text{eff}}$
Input impedance	40 k Ω , unbalanced/1 M Ω
Input capacitance	Switchable
Setting range for input sensitivity	60 dB, in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• $\leq 25 \mu\text{A}$
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g



SK 500 G4 bodypack transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Cw: 718 - 790 MHz Cw-TH: 748.2 - 757.8 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	Switchable: Low: typ. 10 mW Standard: typ. 30 mW High: typ. 50 mW
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
AF frequency response	Microphone: 80 - 18.000 Hz Line: 25 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Input voltage	$3 V_{\text{eff}}$
Input impedance	40 k Ω , unbalanced/1 M Ω
Input capacitance	Switchable
Setting range for input sensitivity	60 dB, in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g



EK 100 G4 diversity receiver

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz A: 516 - 558 MHz AS: 520 - 558 MHz G: 566 - 608 MHz GB: 606 - 648 MHz B: 626 - 668 MHz C: 734 - 776 MHz C-TH: 748.2 - 757.8 MHz D: 780 - 822 MHz JB: 806 - 810 MHz E: 823 - 865 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Receiver principle	Adaptive-Diversity
Sensitivity (with HDX, peak deviation)	$< 1,6 \mu\text{V}$ for 52 dBA _{eff S/N}
Adjacent channel selection	≥ 65 dB
Intermodulation attenuation	≥ 65 dB
Blocking	≥ 70 dB
Squelch	low: 5 dB μV middle: 15 dB μV high: 25 dB μV



Pilot tone squelch	Can be switched off
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AF characteristics

Compander system	Sennheiser HDX
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
AF output voltage (at peak deviation, 1 kHz AF)	3.5 mm jack socket +12 dBu (mono, unbalanced)
“AF Out” setting range	48 dB (in 6 dB steps)

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption <ul style="list-style-type: none">• at nominal voltage• with transmitter switched off	<ul style="list-style-type: none">• typ. 180 mA• ≤ 25 μA
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g



EK 500 G4 diversity receiver

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Cw: 718 - 790 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps 20 Kanalbänke mit jeweils >up to 32 voreingestellten Kanälen, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	>up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Receiver principle	Adaptive-Diversity
Sensitivity (with HDX, peak deviation)	$< 1,6 \mu\text{V}$ for 52 dBA _{eff S/N}
Adjacent channel selection	≥ 65 dB
Intermodulation attenuation	≥ 65 dB
Blocking	≥ 70 dB
Squelch	low: 5 dB μV middle: 15 dB μV high: 25 dB μV
Pilot tone squelch	Can be switched off



AF characteristics

Compander system	Sennheiser HDX
Signal-to-noise ratio (1 mV, peak deviation)	Line: ≥ 110 dBA Phones: approx. 90 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
AF output voltage (at peak deviation, 1 kHz AF)	3.5 mm jack socket +17 dBu (mono, unbalanced)
“AF Out” setting range	42 dB (in 6 dB steps)

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 130 g



SKP 100 G4 plug-on transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz A: 516 - 558 MHz AS: 520 - 558 MHz G: 566 - 608 MHz GB: 606 - 648 MHz B: 626 - 668 MHz C: 734 - 776 MHz C-TH: 748.2 - 757.8 MHz D: 780 - 822 MHz JB: 806 - 810 MHz E: 823 - 865 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	max. 30 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz



Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Input voltage	$3 V_{\text{eff}}$
Input impedance	68 k Ω , unbalanced
Input capacitance	Switchable
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. 105 x 43 x 43 mm
Weight	approx. 195 g



SKP 500 G4 plug-on transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Cw: 718 - 790 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps 20 Kanalbänke mit jeweils >up to 32 voreingestellten Kanälen, no intermodulation 6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	± 24 kHz / ± 48 kHz
Frequency stability	$\leq \pm 15$ ppm
RF output power at 50 Ω	Switchable: Low: typ. 10 mW Standard: typ. 30 mW High: typ. 50 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz



Signal-to-noise ratio (1 mV, peak deviation)	≥ 120 dBA
Total harmonic distortion (THD)	$\leq 0,9$ %
Input voltage	6 V _{eff}
Input impedance	68 k Ω , unbalanced
Input capacitance	Switchable
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• at nominal voltage	• typ. 180 mA
• with transmitter switched off	• ≤ 25 μ A
Operating time	typ. 8 h
Dimensions	approx. 105 x 43 x 43 mm
Weight	approx. 195 g

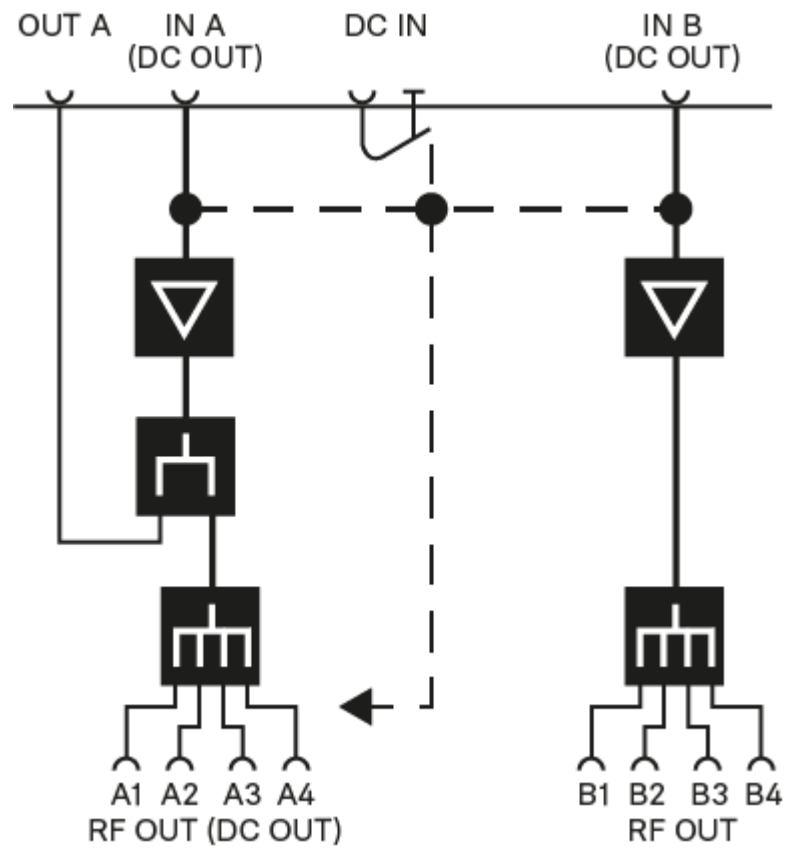


ASA 214 antenna splitter

ASA 214 antenna splitter	2 x 1:4 or 1 X 1:8, active
Connection cable	8 pieces, 50 cm, BNC
Frequency range	ASA 214-UHF: 470 - 870 MHz at -3 dB ASA 214-1G8: 1785 - 1805 MHz at -3 dB
Amplification	In A – Out A: 0 ± 1 dB In A – Out A1 ... A4: 0 ± 1 dB In B – Out B1 ... B4: 0 ± 1 dB
IIP3	20 dBm min. 23 dBm typ.
Impedance	50 Ω
Reflection loss	10 dB (all RF outputs)
Operating voltage	13.8 V DC (with power supply unit NT 1-1)
Power consumption	ASA 214: 245 mA ASA 214-1G8: 350 mA
Total power consumption	max. 2.0 A with 4 receivers and 2×2 antenna amplifiers per antenna input
Antenna amplifier power supply at ANT RF IN A and ANT RF IN B	12 V, 130 mA
Receiver power supply at A1 to A4	12 V (protected against reverse supply), 350 mA
Relative air humidity	5 to 95 %
Temperature range	Operation: -10 °C to +55 °C (14 °F to 131 °F) Storage: -20 °C to +70 °C
Dimensions	approx. 212 x 168 x 43 mm
Weight	approx. 1090 g



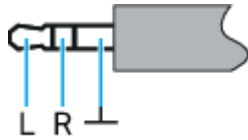
Block diagram





Pin assignment

3.5 mm stereo jack plug

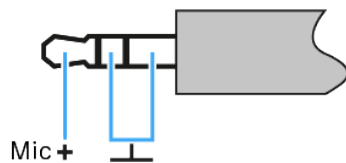


Plug for headphone and earphone cables, e.g. IE 4.

Connect to:

- EK IEM G4
- EK 500 G4

3.5 mm mic jack plug Mic

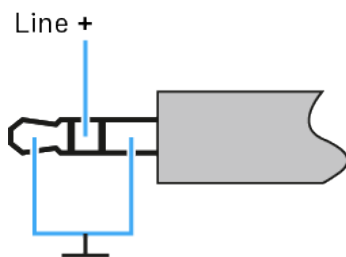


Plug for lavalier and headset microphone, e.g. ME 2

Connect to:

- SK 100 G4
- SK 300 G4-RC
- SK 500 G4

3.5 mm line jack plug Line



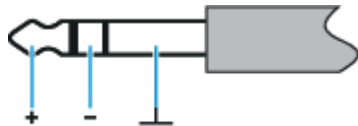
Plug for line and instrument cables, e.g. Ci 1-N



Connect to:

- SK 100 G4
- SK 300 G4-RC
- SK 500 G4

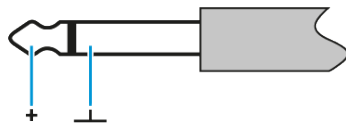
6.3 mm stereo jack plug, balanced (audio in/loop out)



Connect to:

- SR IEM G4 Audio In
- SR IEM G4 Loop Out

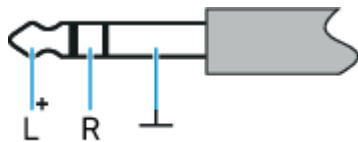
6,3 mm Mono-Klinkenstecker, unsymmetrisch



Connect to:

- EM 100 G4 Audio Out
- EM 300-500 G4 Audio Out

6.3 mm mono jack plug, unbalanced

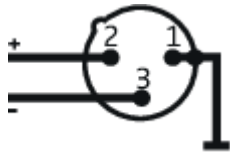


Connect to:

- EM 100 G4 headphone input
- EM 300-500 G4 headphone input
- SR IEM G4 headphone input



XLR-3 plug, balanced



Hollow jack plug for power supply



