

LinkDesk

Software for Spectera Wireless Solution

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

Software for the world's first wideband bidirectional wireless solution — Spectera.

With LinkDesk and Spectera, you get an intuitive workflow and unprecedented remote control and monitoring capabilities, plus visibility of IEM volume, latency, audio level and settings, RF health, battery status, and more.

The software's RF manager provides a continuous spectrum scan via Spectera's innovative DAD antenna. Plus, LinkDesk's assistive behaviors allow for quick and easy system management, and its production handling allow you to manage, store, and recall multiple Base Station configurations instantly.

Key Features

- Intuitive desktop application for full system management
- Notification system to expedite workflows and troubleshooting
- Assistive behaviors for fast and easy system management
- Production handling: manage, store, and recall multiple Base Station configurations instantly
- Full remote control and monitoring of all Spectera ecosystem components including Base Station, DAD antenna, SEK bodypacks
- Unprecedented remote control and monitoring capabilities, plus visibility of IEM volume, latency, audio level and settings, RF health, battery status, and more
- RF manager for continuous spectrum scan via DAD antenna
- License activation for Base Station

Operating System

- Windows®
- MacOS

Product Support

- Base Station
- DAD antenna
- SEK bodypacks

Language Support

- English



Related information

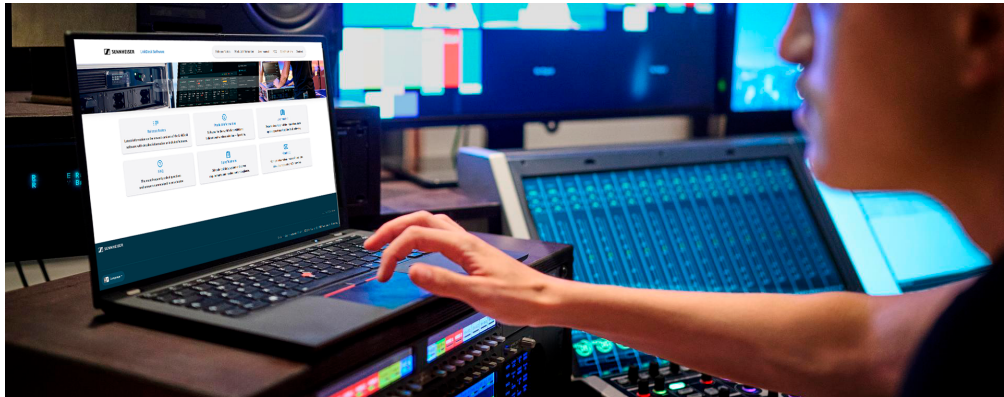
[User manual](#)

[Specifications](#)



3. User manual

Detailed description of the installation, start-up and operation of the LinkDesk software.



Please navigate to the desired chapters by clicking on the related information.

Related information

- [Get started](#)
- [Basic configuration](#)
- [Productions](#)
- [Base Station](#)
- [Mobile devices](#)
- [Routing Editor](#)
- [Error handling](#)

Get started

Please navigate to the desired chapters by clicking on the related information.

Related information

- [Downloading and installing](#)
- [Signing in](#)
- [Main views and cards](#)



Downloading and installing

The application is freely available and can be downloaded directly from the Sennheiser website.

To download LinkDesk:

- ▶ Navigate to the [software product page](#) of Sennheiser.
- ▶ Navigate to **Download**.
- ▶ Accept the listed **Terms and Conditions** and click on **Download**.
- ✓ The download of the latest software version will be started.

To install the software:

i Please note that you need admin rights for the installation!

- ▶ Navigate to the folder of the downloaded software package.
- ▶ Double click on the application and follow the setup instructions.

✓ You have successfully downloaded and installed the software.

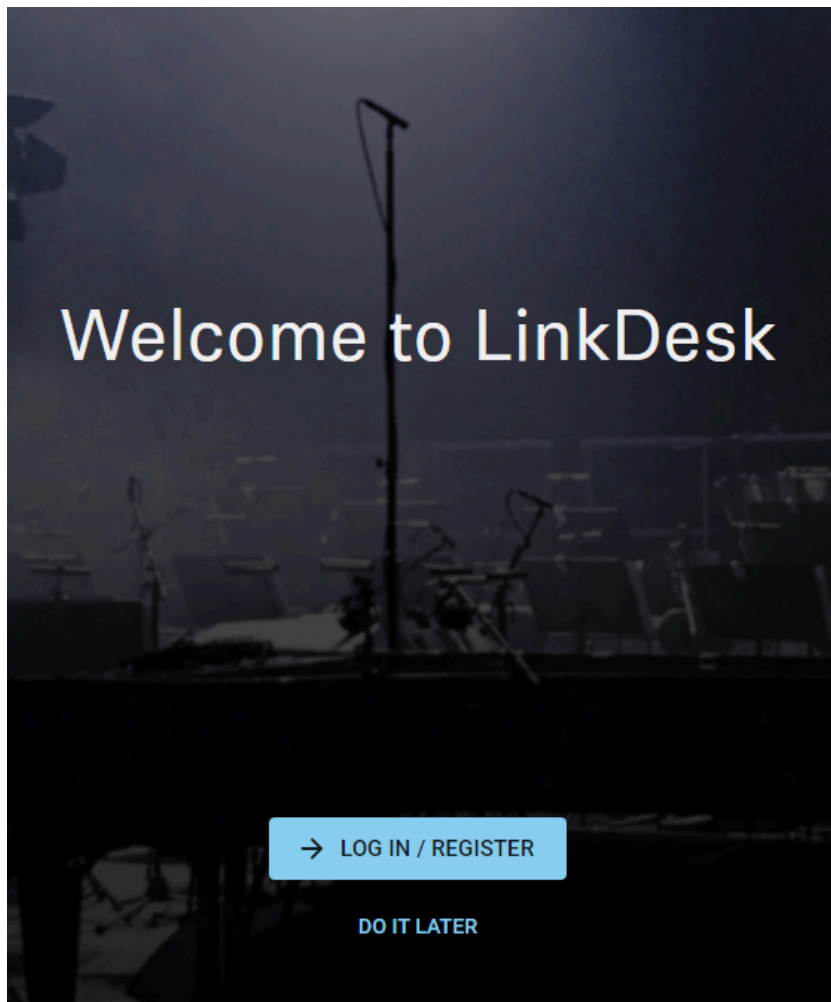
Related information

[Signing in](#)



Signing in

To start the application, you can sign up for a new account or log in with an existing account.



When you start the software, you will be redirected to a log-in window. Here you can sign up and log in with your new account.

When you sign up for Sennheiser, your credentials will be valid for all brands within the Sennheiser Group.

- i** You can also skip the log-in and start the software without registration. You can then sign up or log in from the application at any time.



- i** The login and account data assigned to your account are saved as long as your user account exists. You can delete your user account at any time. Further information can be found in the **consent to the processing of personal data**, which you must read and confirm during the registration process.

To sign up and log in:

- ▶ Click on **LOG IN / REGISTER**.
- ✓ You will be redirected to the registration window. You can log in here if you already have an account.



Log in to your Sennheiser account

Sign in with email address

email address

Next

[Forgot your password?](#)

OR

Don't have an account? [Sign up now](#)

One login, multiple experiences!

Your Sennheiser credentials are now valid for all brands
within the Sennheiser group.



- ▶ If you do not yet have an account, click on **Sign up now** and fill in your registration data:
 - e-mail address*
 - country
- ✓ A confirmation code will be sent to your registered e-mail address.



- Confirm your consent to the processing of personal data and click on **Next**.



Create a profile with Sennheiser

Please provide the following details:

email address *

Country *

Country

☒ Based on your country, we'll save your personal data at the closest possible location according to our privacy policy.

☐ [I consent to the processing of personal data *](#)

Cancel

Next

[Already have an account? Click here to log in.](#)

One login, multiple experiences!

Your Sennheiser credentials are now valid for all brands within the Sennheiser group.

 **Sennheiser Group**

- In the second step, type in your personal data. Mandatory blanks are marked with an asterisk*:
- user name*,
 - surname,
 - family name,
 - phone number.



- ▶ Next, set your new password and enter the conformation code from your e-mail.



Create a profile with Sennheiser

Please provide the following details:

email address
dada@sennheiser.com

Country
Germany

We sent a verification code to dada@sennheiser.com, please paste it here.

Verification code *

Set new password

New password *

repeat new password *

[Already have an account? Click here to log in.](#)

- ▶ Click **Create account** to log in with your credentials.

i Your Sennheiser credentials are now valid for all brands within the Sennheiser Group. That way, you only need one log-in name and one password.

To start directly without signing up / logging in:

- ▶ Click on **DO IT LATER**.

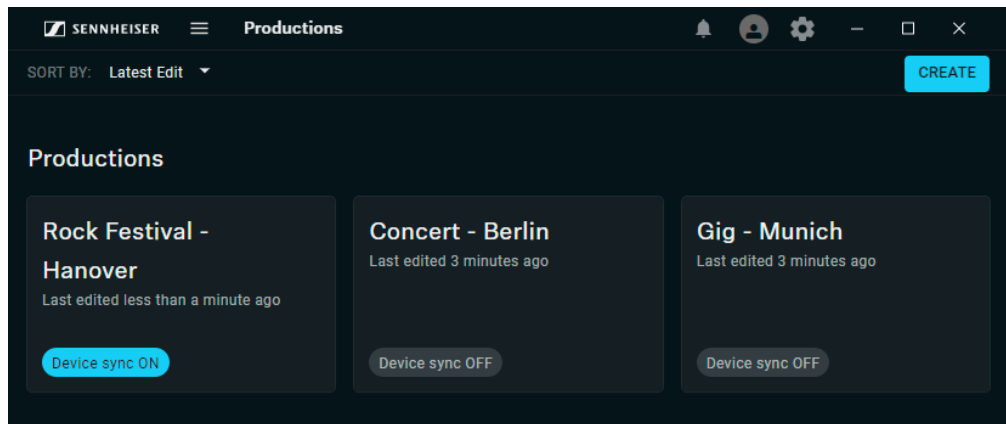
- ✓ The application is started immediately. In order to sign up or log in afterwards, click on the user icon at the top right and then on **Log in**.

✓ You have successfully signed up and/or logged in.



Main views and cards

The main view of the application shows general settings and already created cards.



The top bar contains general settings that can be customized.

Beneath this, all production cards are displayed that are active or inactive depending on the sync status. The production cards can be sorted by:

- Latest edit
- Oldest edit
- Alphabetically A-Z
- Alphabetically Z-A

Related information

[Settings](#)

[Productions](#)

[Device State Colors](#)

Settings

Under **Settings**, various customizations can be configured for the user and the software.

General

- Setting the user's current country
- Setting the time zone
- Setting the date format



User

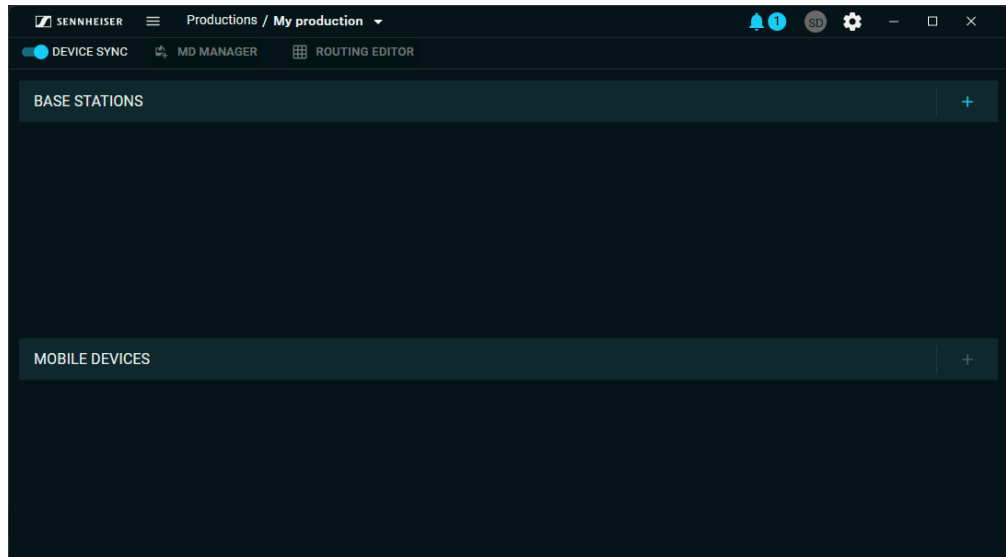
- Sign in/registration



Productions

Productions contain a virtual configuration set of devices and settings that are prepared for an upcoming event.

Within a production card, all the required components are clearly visualized in a structural sequence arranged among each other, which enables easy handling and quick access to the important elements.



Each production is divided into sections (only visible once the Base Station and an antenna have been added):

- **Frequency Information Visualization**
 - Live display of the current frequency spectrum with occupied and free frequencies
 - Scanning RF Spectrum
- **Base Stations**
 - Summary of all connected or planned Base Stations
- **Mobile devices**
 - Summary of all connected or planned mobile devices

Related information

[Scanning RF spectrum](#)
[Creating new productions](#)
[Adding Base Stations](#)
[Adding mobile devices](#)

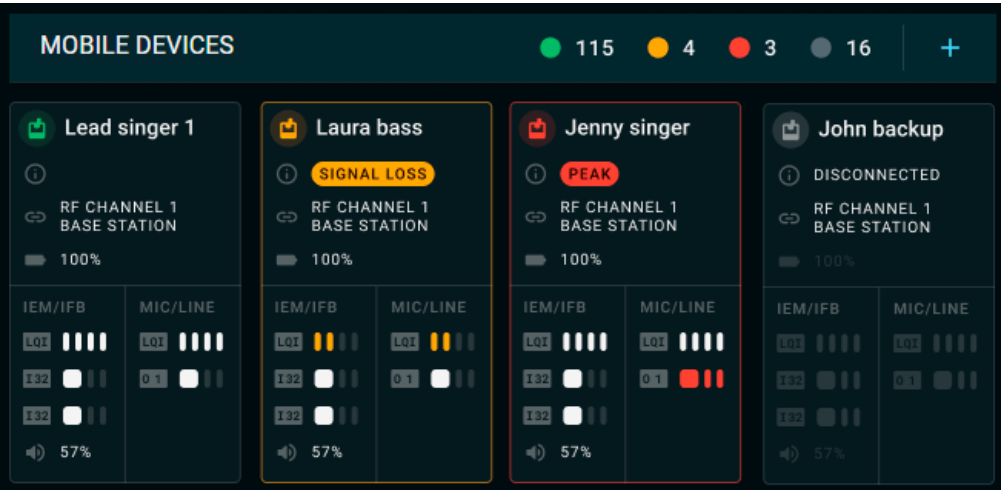


Device State Colors

The displayed colors of the device symbols provide a visual indication of the current status of the device.

In addition to the colors, associated messages/warnings are displayed. The following colors may occur:

Icon	Color	Meaning
	GREEN	successful status (e. g. normal operation mode)
	YELLOW	warning (e. g. not properly configured device (e. g. no audio links))
	RED	error (e. g. firmware mismatch)
	WHITE	neutral status (e. g. not connected / offline device)



Related information

[Error handling](#)



Basic configuration

Start your basic configuration with the recommended steps.

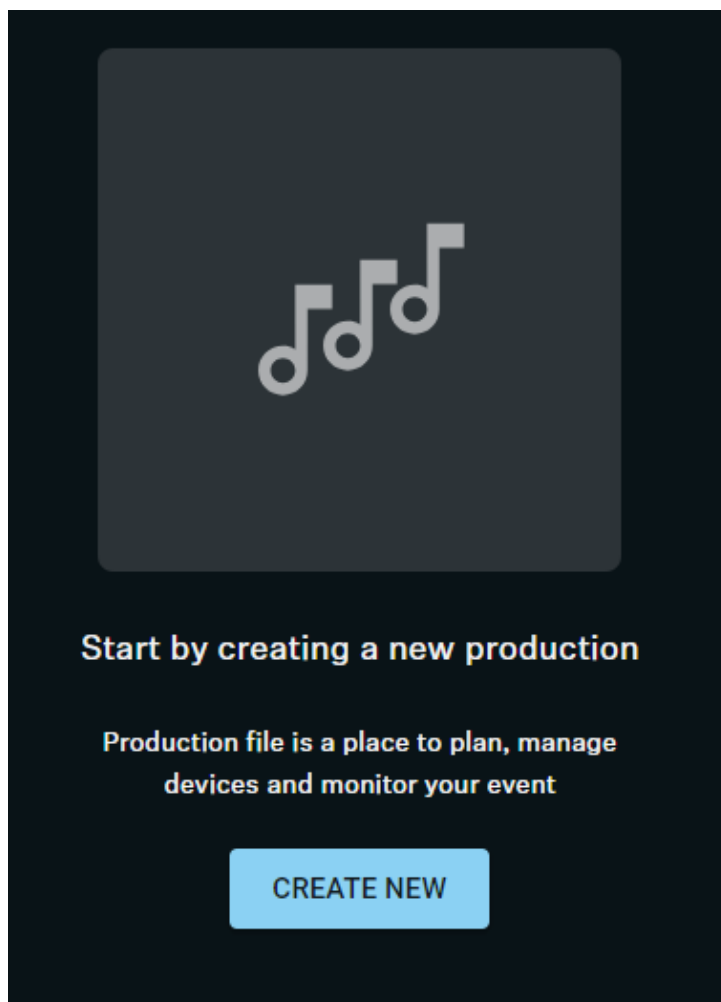
For an initial setup, we recommend following these first steps to successfully configure the system from the start:

- [Creating new productions](#)
- [Adding Base Stations](#)
- [Activating license](#)
- [Activating antennas](#)
- [Scanning RF spectrum](#)
- [Adding RF channels](#)
- [Pairing/unpairing mobile devices](#)



Creating new productions

With productions, you can create a virtual workplace to plan, manage and monitor your real devices for the upcoming event.



To create a new production:

- ▶ Click on **CREATE NEW**, to start a new production.
- ▶ Enter a name under **Production Information** and click on **CREATE**.



To create a further production:

- ▶ In the task bar at the top click on **Productions > Create**.

i Please note, that the new production will take lead access to devices in the network, while the other productions will lose access.

- ▶ Enter a name under **Production Information** and click on **CREATE**.

✓ The production has been created.

Related information

[Editing meta information](#)

[Scanning RF spectrum](#)

[Identifying Base Stations](#)

[Adding mobile devices](#)



Adding Base Stations



The networked Base Station can be added to the software using an IP address.

In order to add a Base Station, its IP address is required. You can read the IP address on the display of the device (see **Network** or **Dante**).

When adding the Base Station for the first time, three intermediate steps are required:

- Identifying the Base Station via IP
- Authenticating the Base Station using the configured password (Claiming)
- Activating the Base Station license (see [Activating license](#))

To add a Base Station:


- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the  symbol in the heading **BASE STATIONS** bar on the right.
- ▶ Enter the correct IP address of the Base Station and click on **Search**.



- ✓ The Base Station has been identified and is displayed in the results.

Add base station [X]

SELECTED DEVICE

 CLAIMED
Spectera base station

Status: Adding to production...

CONFIGURATION

Keep current configuration stored on the base station?

☒ No, reset and add Spectera base station as unconfigured

☐ Yes, keep current configuration and add connected mobile devices to the production

CANCEL CONFIRM

i When the device is used for the first time, you will be prompted to assign a secure password to the device. In this case, the status **Claiming ...** is displayed.

i If the Base Station has already been used with a previous configuration, this will be retrieved when it is added. You will be asked whether you want to keep the current configuration on the Base Station or continue with an unconfigured Base Station.

- If you are logging in for the first time, enter a new device password. If you have already logged in, enter the password you have already assigned for authentication.

- i** Please note that the new password must meet the following requirements:
- At least ten characters
 - At least one lowercase letter
 - At least one uppercase letter
 - At least one number
 - At least one special character: !#\$%&()*+,-./:;<=>?@[^_`{|}~
 - Maximum length: 64 characters



- ✓ Your Base Station has been added successfully and is displayed on the Base Station card on the top left. If external antennas are connected to the Base Station, they automatically appear on the card (see [Activating antennas](#)).

You will then be prompted to activate the license ([Activating license](#)) for your region (if it hasn't been activated yet), or to configure at least one broadband channel to enable pairing and communication between the Base Station and mobile devices.

Related information

[Scanning RF spectrum](#)

[Activating antennas](#)

[Activating license](#)

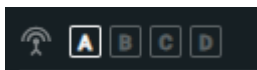
[Adding RF channels](#)



Activating antennas

Antennas connected to a Base Station must be selected and activated before use.

The connected antennas are displayed with a white marking in the overview card of the Base Station:



i For detailed information on how to connect the antennas to the Base Station, please refer to the chapter **Connecting antennas**.

To assign one or more connected antennas to the Base Station:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Select the RF channel to which you want to add an additional antenna.
- ▶ Under **ANTENNAS** click on **+ ADD ANTENNA**.
 - ✓ All connected antennas are displayed.
- ▶ Select the antenna that you want to assign to your RF channel.

✓ The antenna has been assigned and is displayed in the overview of the Base Station card.

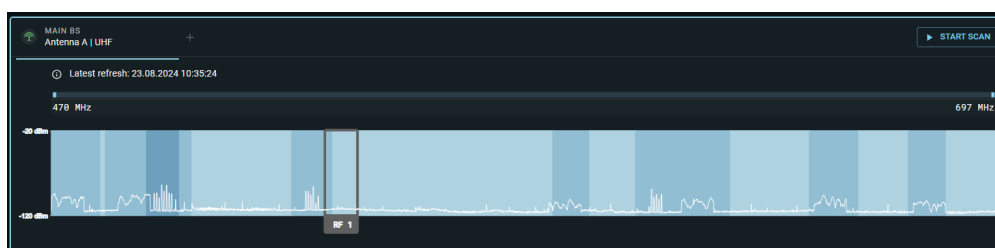


Scanning RF spectrum

You can use an RF scan to examine the current frequency situation of your connected antenna.

You can scan the frequency environment of all antennas connected to the Base Station.

i Make sure that no antenna is activated! If the scan is started with an active antenna, the RF channel is automatically muted until the scan is completed.



Before activating the connected antenna, you can check the occupancy of the frequency spectrum and examine the surroundings for possible frequency interference.

To start the RF Scan:

- ▶ From your production card dashboard, click **START SCAN** on the right side of the top bar.
- ✓ The connected antenna scans the environment and displays a live graphic within the configured RF channel.

i You can zoom into the spectrum by pressing CMD and using the scroll function of your mouse. If the scan is started with an active antenna, the RF channel is automatically muted until the scan is completed.

To start the RF scan for another antenna:

- ▶ In the main window of the RF SCAN click on + to select your antenna and then on **START SCAN**.

✓ The RF spectrum of your connected antennas has been scanned.




Adding RF channels

You can configure an RF channel and assign it to the available devices.

i To configure an RF channel, at least one antenna must be connected to the BS station (see [Connecting antennas](#)).

In order to add a RF channel:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Click on:
 - the symbol  **Add RF channel** on the Base Station card **OR**
 - the Base Station card and navigate in the right-hand tab to **RF CHANNEL > RF SETTINGS > EDIT**.
- ✓ A configuration menu for RF channels appears.
- ▶ Select the operating antenna.
- ▶ Select the RF power and enter your available frequency and bandwidth.
- ▶ Click on **SAVE** to create the RF channel.

✓ The RF channel has been successfully added and the antenna has been muted.



Pairing/unpairing mobile devices





In LinkDesk you can pair up to 128 mobile devices to a Base Station within one RF channel.

Mobile devices can only be paired and operated with one Base Station at a time. If a mobile device is to be used with another Base Station, it must first be paired again.

i Please unmute at least one RF channel before pairing if this was not done automatically!




i Mobile device cards cannot be re-ordered. Please add devices in the desired order. Newly added devices are always added at last position to the right.

To pair a mobile device:

- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the button  **MD Manager** on the left-hand side of the top bar.
 - ✓ A new window **Add mobile devices** opens.
- ▶ Select your Base Station from the drop down list on the left-hand side and activate the  **PAIRING MODE**.
- ▶ Switch on your mobile device and activate the **Pairing Mode** if it has not been activated automatically (**Switching the SEK on and off**).
 - ✓ After a few seconds, the available mobile devices are displayed in the list.
- ▶ Click on the  button in the line of the mobile device to be paired.
 - ✓ A confirmation code is displayed both in LinkDesk and on the mobile device.
- ▶ Compare the displayed code at both endpoints.
- ▶ In LinkDesk, click on **Confirm** to pair the selected mobile device.
 - ✓ The mobile device has been paired successfully. The device state color changes to:
 - green: successful operation, or
 - yellow: warning (e. g. if the audio links have not yet been assigned (see also [Device State Colors](#))).



To unpair a mobile device:

- ▶ You can either
- click on the  **unpair** button of the corresponding device in the MD Manager or
 - click on the three dots  of the mobile device card and select the  **unpair** function.
- ✓ The mobile device has been unpaired successfully.

✓ The mobile devices have been successfully paired/unpaired.

Related information

[Device State Colors](#)



Productions

In this chapter you will learn the basic information about productions.

Please navigate to the desired chapters by clicking on the related information.

Related information

[Creating new productions](#)

[Editing meta information](#)

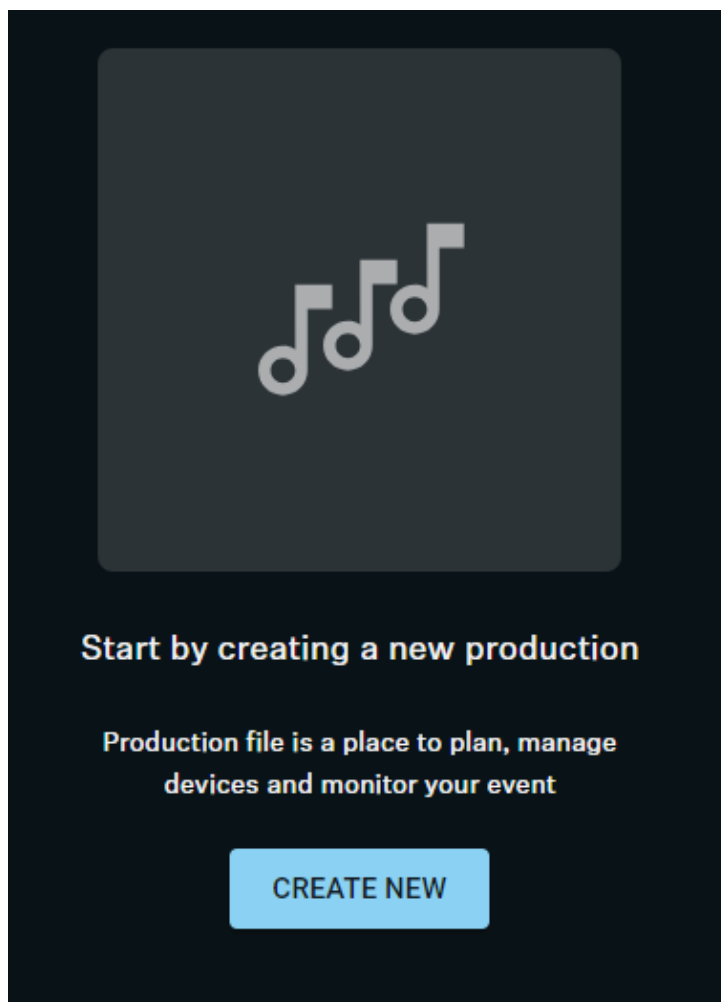
[Activating device synchronization](#)

[Deleting productions](#)



Creating new productions

With productions, you can create a virtual workplace to plan, manage and monitor your real devices for the upcoming event.



To create a new production:

- ▶ Click on **CREATE NEW**, to start a new production.
- ▶ Enter a name under **Production Information** and click on **CREATE**.



To create a further production:

- ▶ In the task bar at the top click on **Productions > Create**.

i Please note, that the new production will take lead access to devices in the network, while the other productions will lose access.

- ▶ Enter a name under **Production Information** and click on **CREATE**.

✓ The production has been created.

Related information

[Editing meta information](#)

[Scanning RF spectrum](#)

[Identifying Base Stations](#)


[Adding mobile devices](#)



Editing meta information

You can edit the meta information of your previously created production card.

To edit a production:

- ▶ Navigate to **Productions** and click on the three dots  of the production card.
- ▶ Select **Edit** to edit the meta information of the production.

i You can edit a description with up to 32 characters. Special characters in general and spaces at the beginning and end of the description are not permitted.

✓ The meta information has been edited.




Activating device synchronization

Device synchronization connects all your devices like a network hub, making it essential for both existing and newly added devices to work together smoothly.

When you turn on device synchronization, it automatically starts the matching process for Base Stations that are already in use and configured. During this process, you'll be guided step-by-step.

- i** All settings currently on the Base Station will be replaced with the ones saved in LinkDesk during matching.

To activate device synchronization:

- ▶ Click on your created production card.
- ▶ Click on the button  **DEVICE SYNCHRONIZATION** at the top left of the product card.

✓ Device synchronization has been activated.

You can now add new components such as Base Stations, mobile devices and antennas to your card.

Related information

[Adding Base Stations](#)

[Activating antennas](#)



Deleting productions

The previously created productions can simply be deleted.

CAUTION





This production card will be permanently deleted.

Deleted production cards can no longer be restored.

- ▶ Only delete the production card if you are sure.

To delete a production:

- ▶ Navigate to **Productions** and click on the three dots  of the production to be deleted.
- ▶ Select  **Delete** to permanently delete the production.



The production has been deleted permanently.

Related information

[Creating new productions](#)

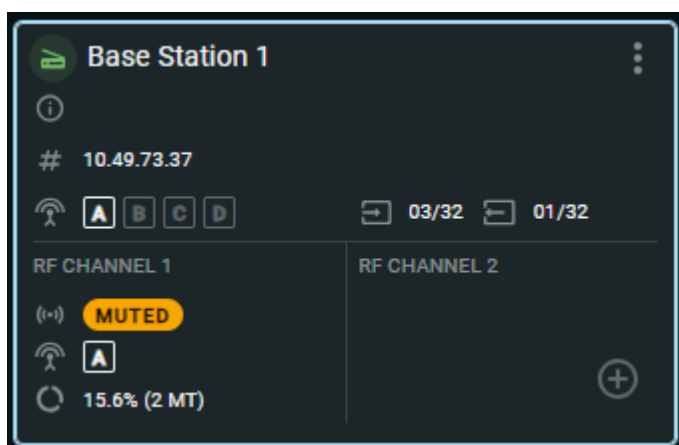


Base Station








The Base Station is the central hardware for managing and monitoring all compatible Spectera products.

The Base Station is used to connect, configure and monitor antennas and mobile devices all in one.

Summarized view



Depending on the configuration, a Base Station can provide the following summarized device information:

-  the [device state color](#)
-  the current warnings about the status of the device
- the IP address
-  the connected antennas
- the configured RF channels
-  the status of the RF channel, e. g. muted, antenna loss or antenna update
-  the number of routed IEF /IFB inputs
-  the number of routed MIC/LINE outputs
-  the capacity utilization of the entire RF bandwidth



Details view

BASE STATION

RF CHANNEL 1

RF CHANNEL 2

Device name

BAT-37

RF CHANNEL 1 (---.--- MHZ)

RF CHANNEL 2 (584.000 MHZ)

Monitoring data

Interface settings

Antenna ports

Paired devices

Hardware details



By clicking on the card of the Base Station, a details page appears on the right-hand side of the navigation menu. The page shows detailed information about the device and allows you to edit and monitor the settings for ongoing operation:

- **BASE STATION**
 - Name and status of the Base Station
 - [Device State Colors](#)
 - [Identifying Base Stations](#)
 - Status of the RF channel
 - [Muting/unmuting RF signals](#)
- **Device information:**
 - [Changing device name](#)
 - [Updating firmware \(Base Station\)](#)
- **Monitoring data**
 - Here you can monitor the hardware health-state, the configured RF channels and the number of connected power supply units
- **Interface settings**
 - Overview of all available interfaces for incoming and outgoing links and connections
- **Antenna ports**
 - Overview of all connected antennas and available antenna ports
- **Paired devices**
 - Overview of all known devices within the RF channels with its number of linked routes
- **Hardware details**
 - Detailed information of the Base Station





Related information

[Adding Base Stations](#)
[Activating license](#)
[Identifying Base Stations](#)
[Activating antennas](#)
[Adding RF channels](#)
[Configuring RF channels](#)
[Scanning RF spectrum](#)
[Adding mobile devices](#)
[Pairing/unpairing mobile devices](#)
[Displaying device information](#)
[Changing device name](#)
[Configuring interface settings](#)
[Muting/unmuting RF signals](#)
[Resetting RF channels](#)
[Removing Base Station](#)
[Updating firmware \(Base Station\)](#)

Identifying Base Stations

You can remotely identify your Base Station.

To identify the Base Station:

- ▶ On your Base Station Card, click on the 3 dots  and then on  **Identify** under the section **Base Station**.
 - ✓ The icon on the Base Station card flashes. The display of the Base Station shows **Identify**.

✓ The Base Station has been identified.



Adding Base Stations



The networked Base Station can be added to the software using an IP address.

In order to add a Base Station, its IP address is required. You can read the IP address on the display of the device (see **Network** or **Dante**).

When adding the Base Station for the first time, three intermediate steps are required:

- Identifying the Base Station via IP
- Authenticating the Base Station using the configured password (Claiming)
- Activating the Base Station license (see [Activating license](#))

To add a Base Station:

- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the  symbol in the heading **BASE STATIONS** bar on the right.
- ▶ Enter the correct IP address of the Base Station and click on **Search**.



- ✓ The Base Station has been identified and is displayed in the results.

Add base station [X]

SELECTED DEVICE

CLAIMED
Spectera base station

Status: Adding to production...

CONFIGURATION

Keep current configuration stored on the base station?

☒ No, reset and add Spectera base station as unconfigured

☐ Yes, keep current configuration and add connected mobile devices to the production

[CANCEL] [CONFIRM]

i When the device is used for the first time, you will be prompted to assign a secure password to the device. In this case, the status **Claiming ...** is displayed.

i If the Base Station has already been used with a previous configuration, this will be retrieved when it is added. You will be asked whether you want to keep the current configuration on the Base Station or continue with an unconfigured Base Station.

- ▶ If you are logging in for the first time, enter a new device password. If you have already logged in, enter the password you have already assigned for authentication.

- i** Please note that the new password must meet the following requirements:
- At least ten characters
 - At least one lowercase letter
 - At least one uppercase letter
 - At least one number
 - At least one special character: !#\$%&()*+,-./:;<=>?@[^_`{|}~
 - Maximum length: 64 characters



- ✓ Your Base Station has been added successfully and is displayed on the Base Station card on the top left. If external antennas are connected to the Base Station, they automatically appear on the card (see [Activating antennas](#)).

You will then be prompted to activate the license ([Activating license](#)) for your region (if it hasn't been activated yet), or to configure at least one broadband channel to enable pairing and communication between the Base Station and mobile devices.

Related information

[Scanning RF spectrum](#)

[Activating antennas](#)

[Activating license](#)

[Adding RF channels](#)



Activating license

Here you will learn how to activate your region-specific license for your Base Station.

i The purchased license (included in the product) is only valid for the region for which the product was designed and approved. The license may not be used in other regions.

i Please note that an Internet connection is required to activate the license.

After you have successfully added and claimed your Base Station (see [Adding Base Stations](#)) you will be prompted to activate the license.

To activate the license:

- ▶ Add a new Base Station to your production (see [Adding Base Stations](#)).
- ✓ A new license activation window appears:

Add base station [X]

SELECTED DEVICE

CLAIMED
Spectera base station [REDACTED]

Status: Checking device license...

LICENSE ACTIVATION

Enter the product activation key and accept the terms and conditions to activate the base station. Ensure that the device has an internet connection for the process.

Product activation key [REDACTED]

☐ I have read and I accept the [General Terms and EULA](#)

[?] [CANCEL] [ENTER]

- ▶ Enter your purchased product activation key.



- ▶ Read and acknowledge the general terms and the end-user license agreement:

Add base station

×

SELECTED DEVICE

CLAIMED

Spectera base station

Status: Checking device license...

LICENSE ACTIVATION

Enter the product activation key and accept the terms and conditions to activate the base station. Ensure that the device has an internet connection for the process.

Product activation key

☒ I have read and I accept the [General Terms and EULA](#)

?

CANCEL

ENTER

- ▶ Click **ENTER** to activate the license.

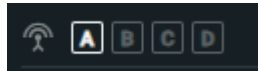
✓ Your license has been activated successfully.



Activating antennas

Antennas connected to a Base Station must be selected and activated before use.

The connected antennas are displayed with a white marking in the overview card of the Base Station:



i For detailed information on how to connect the antennas to the Base Station, please refer to the chapter **Connecting antennas**.

To assign one or more connected antennas to the Base Station:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Select the RF channel to which you want to add an additional antenna.
- ▶ Under **ANTENNAS** click on **+ ADD ANTENNA**.
 - ✓ All connected antennas are displayed.
- ▶ Select the antenna that you want to assign to your RF channel.

✓ The antenna has been assigned and is displayed in the overview of the Base Station card.




Adding RF channels

You can configure an RF channel and assign it to the available devices.

i To configure an RF channel, at least one antenna must be connected to the BS station (see [Connecting antennas](#)).

In order to add a RF channel:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Click on:
 - the symbol  **Add RF channel** on the Base Station card **OR**
 - the Base Station card and navigate in the right-hand tab to **RF CHANNEL > RF SETTINGS > EDIT**.
- ✓ A configuration menu for RF channels appears.
- ▶ Select the operating antenna.
- ▶ Select the RF power and enter your available frequency and bandwidth.
- ▶ Click on **SAVE** to create the RF channel.

✓ The RF channel has been successfully added and the antenna has been muted.



Configuring RF channels

You can adjust the RF channel in its antenna selection, frequency and bandwidth.

i The current local permissions are displayed when the frequency is selected.

To configure an RF channel:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Navigate to the tab **RF CHANNEL 1** or **RF CHANNEL 2**.
- ▶ Under **ANTENNAS** please select the operating antenna, on which the RF channel is to be configured.
 - ✓ The antenna has been selected.
- ▶ Adjust the desired frequency and bandwidth under: **Channel settings > RF SETTINGS > EDIT**.

✓ The RF Channel has been configured.

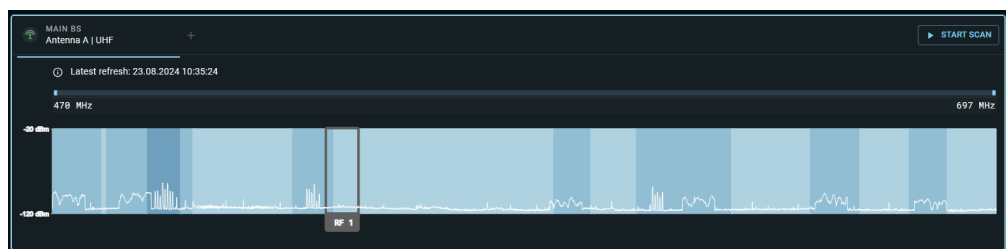


Scanning RF spectrum

You can use an RF scan to examine the current frequency situation of your connected antenna.

You can scan the frequency environment of all antennas connected to the Base Station.

i Make sure that no antenna is activated! If the scan is started with an active antenna, the RF channel is automatically muted until the scan is completed.



Before activating the connected antenna, you can check the occupancy of the frequency spectrum and examine the surroundings for possible frequency interference.

To start the RF Scan:

- ▶ From your production card dashboard, click **START SCAN** on the right side of the top bar.
- ✓ The connected antenna scans the environment and displays a live graphic within the configured RF channel.

i You can zoom into the spectrum by pressing CMD and using the scroll function of your mouse. If the scan is started with an active antenna, the RF channel is automatically muted until the scan is completed.

To start the RF scan for another antenna:

- ▶ In the main window of the RF SCAN click on **+** to select your antenna and then on **START SCAN**.

✓ The RF spectrum of your connected antennas has been scanned.




Adding mobile devices





You can add mobile devices to your connected Base Station.



When adding mobile devices for the first time, they need to be paired. Devices that have already been paired and **removed** will be displayed in the MD Manager

and can easily be added back to production using the  button.

To add a mobile device:

- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the button  **MD Manager** on the left-hand side of the top bar.
 - ✓ A new window opens and shows a list of all known and connected mobile devices.
- ▶ Click on  **PAIRING MODE** to set the Base Station to pairing mode.
 - ✓ The Base Station remains in pairing status for 5 minutes.
- ▶ Switch on your mobile device and activate the **Pairing Mode** if it has not been activated automatically (Switching the SEK on and off, Pairing the SEK to the Base Station).
 - ✓ After a few seconds, the available mobile devices are displayed in the list.
- ▶ Click on the  **Add** button in the line of the mobile device to be added.
 - ✓ A confirmation code is displayed both in LinkDesk and on the mobile device.
- ▶ Compare the displayed code at both endpoints.
- ▶ In LinkDesk, click on **Confirm** to pair the selected mobile device.



The mobile device has been added to the Base Station and is indicated as a separate card. The card shows the connected Base Station and the occupied RF channel. The device state color changes to:

- green: successful operation, or
- yellow: warning (e.g. if the audio links have not yet been assigned (see also [Device State Colors](#) and [Routing Editor](#))).



Pairing/unpairing mobile devices





In LinkDesk you can pair up to 128 mobile devices to a Base Station within one RF channel.

Mobile devices can only be paired and operated with one Base Station at a time. If a mobile device is to be used with another Base Station, it must first be paired again.

i Please unmute at least one RF channel before pairing if this was not done automatically!

i Mobile device cards cannot be re-ordered. Please add devices in the desired order. Newly added devices are always added at last position to the right.




To pair a mobile device:

- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the button  **MD Manager** on the left-hand side of the top bar.
 - ✓ A new window **Add mobile devices** opens.
- ▶ Select your Base Station from the drop down list on the left-hand side and activate the  **PAIRING MODE**.
- ▶ Switch on your mobile device and activate the **Pairing Mode** if it has not been activated automatically (**Switching the SEK on and off**).
 - ✓ After a few seconds, the available mobile devices are displayed in the list.
- ▶ Click on the  button in the line of the mobile device to be paired.
 - ✓ A confirmation code is displayed both in LinkDesk and on the mobile device.
- ▶ Compare the displayed code at both endpoints.
- ▶ In LinkDesk, click on **Confirm** to pair the selected mobile device.
 - ✓ The mobile device has been paired successfully. The device state color changes to:
 - green: successful operation, or
 - yellow: warning (e. g. if the audio links have not yet been assigned (see also [Device State Colors](#))).



To unpair a mobile device:

▶ You can either

- click on the  **unpair** button of the corresponding device in the MD Manager or
- click on the three dots  of the mobile device card and select the  **unpair** function.

✓ The mobile device has been unpaired successfully.

✓ The mobile devices have been successfully paired/unpaired.

Related information

[Device State Colors](#)



Displaying device information

You can display detailed information relating to your Spectera device.

Find out here which device information can be displayed in the details view for [mobile devices](#) or for the [Base Station](#).

In order to display detailed information:

- ▶ Click on the card of your Spectera device (Base Station or mobile device).
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Observe all the details in the menu by scrolling up and down.

✓ Detailed information are displayed.

Related information

[Base Station](#)

[Mobile devices](#)



Changing device name

You can change the device name for your Base Station.

i For security reasons, please do not enter any sensitive personal data as the device name.

To change the device name:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Navigate to **BASE STATION > Device information**.
- ▶ Edit the name under **Device name**.
 - ✓ The name is immediately transmitted to the Base Station and saved.

✓ The device name has been changed.



Configuring interface settings

You can configure the interfaces of the inputs and outputs on the device individually.

The following interfaces are available for the Base Station:

- AUDIO NETWORK (DANTE)
- MADI 1
- MADI 2
- WORD CLOCK

i Once you select the DANTE interface, configuration must be completed through either the Dante Controller or the Domain Manager.

To select and assign an available interface:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Navigate to **BASE STATION > Interface Settings**.
- ▶ Assign the desired audio connections to the available interfaces.



✓ The interface settings have been configured.



Muting/unmuting RF signals



You can mute/unmute the RF signals of the configured channels.

The following RF status are possible:

-  muted RF channel
-  unmuted RF channel

In order to mute/unmute the RF signal:

i Attention! Signal transmission will be stopped immediately on all routed links!

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ In the tab **BASE STATION** click on the icon:
 -  in order to mute the RF channel
 -  in order to unmute the RF channel

✓ The RF signal has been muted/unmuted.



Resetting RF channels

You can reset or remove you configured RF channel from the current production.

NOTICE




By resetting the RF channel, the connected mobile devices are also removed from this production!

The audio signal of connected devices will be interrupted immediately!

- ▶ Only remove the channel if no active audio is being used.

To reset the RF channel:

- ▶ On your Base Station Card, click on the 3 dots  and then on **Reset RF Ch 1** under the section **RF CHANNEL 1**.
- ▶ Click on **REMOVE**.

i This function can also be accessed via the RF Channel context tray (click on the Base Station card and navigate to the context tray menu on the right).

✓ The RF channel has been reset.

Related information

[Adding RF channels](#)



Resetting device password

You can reset the assigned device password on your Base Station to its factory settings.

- i** To change or reset the device password, the device must be reset to factory settings.

NOTICE



Data loss during the factory reset

All audio devices will be unpaired and all audio routes will be deleted.

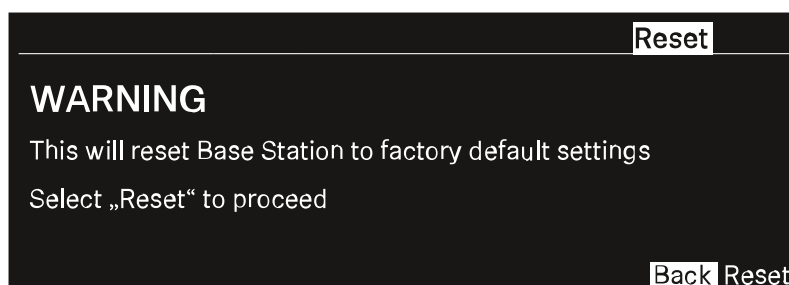
All settings (including the device password) are reset to the default values. The license remains activated.

After the reset, the device is restarted automatically.

- ▶ Do not reset the Base Station during an active live audio transmission.

To reset the Base Station to factory default settings:

- ▶ On the Base Station, rotate the jog-dial and navigate to the menu **Reset**.
- ▶ Press the jog-dial to enter the menu.
- ✓ A warning will appear.



- ▶ Rotate the jog-dial to **Reset**.
- ▶ Press the jog-dial again.
- ✓ The Base Station will be set back to factory settings and reboot.

- i** After rebooting, check the IP address as it may have changed.

- ✓ The Base Station has been reset to its factory default settings.



Removing Base Station

You can delete your configured Base Station from the current production.

NOTICE




By removing the Base Station, the connected mobile devices are also removed from this production!

The audio signal of connected devices will be interrupted immediately!

- ▶ Only remove the Base Station if no active audio is being used.

To remove the Base Station:

- ▶ On your Base Station Card, click on the 3 dots  and then on **Delete** under the section **Base Station**.
- ▶ Click on **OK**.

✓ The Base Station has been removed.

Related information

[Adding Base Stations](#)



Updating firmware (Base Station)

The firmware version of the Base Station can be downloaded and updated manually.

The DAD antenna updates automatically (about 20 seconds) after the BS is updated or when the DAD is plugged in. RF signals will pause during the update. You'll see the update status on the BS card.

i Please download the latest firmware version for your Base Station under: sennheiser.com/spectera.

NOTICE




Data loss during firmware update

The audio transmission is interrupted during the firmware update of the Base Station, the antenna or the mobile device.

After the firmware update, the device is restarted automatically.

- ▶ Do not update the firmware during an active live audio transmission.

To update your Base Station firmware:

- ▶ Click on your Base Station card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Navigate to **BASE STATION > Device information**.
- ▶ Under the current Base Station click on **UPDATE** and then on **Update Version** .
- ▶ Click on **UPLOAD FILE** and select the manually downloaded `.sennpkg` file.
 - ✓ The firmware file has been selected.
- ▶ Click on **UPDATE** to start the update process.
 - ✓ The firmware starts the update automatically.

i After the successful update, the Base Station restarts and automatically begins the update on the connected antennas. Please refresh your browser after the entire update process.

✓ The firmware has been updated.



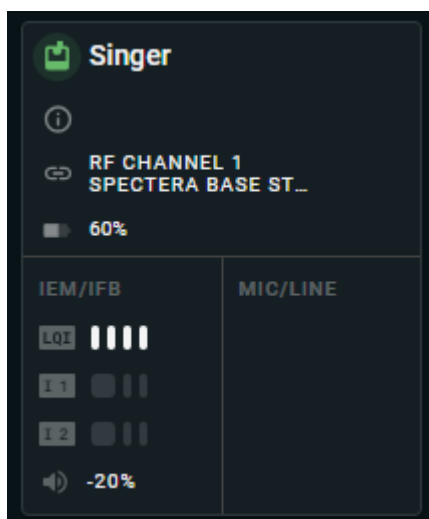
Mobile devices

Mobile devices are bodypack transmitters and/or receivers, which are assigned to a Base Station.






On a mobile device, both incoming in-ear signals and outgoing microphone signals can be sent with one device. To do this, the audio link mode must be set.

- i** Mobile device cards cannot be re-ordered. Please add devices in the desired order. Newly added devices are always added at last position to the right.

Summarized view

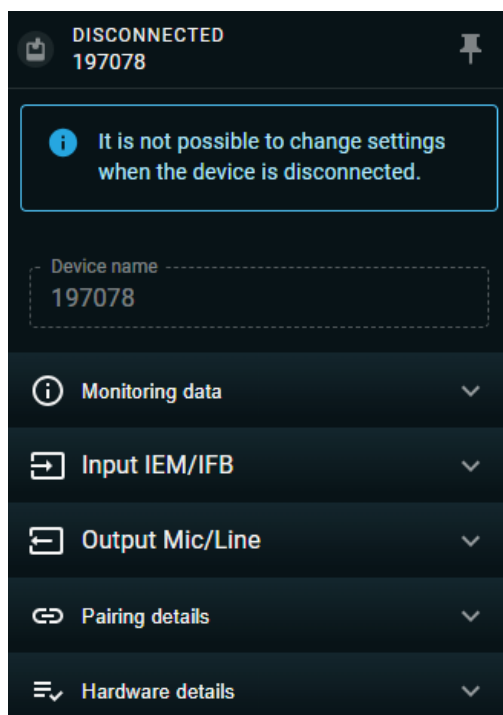


Depending on the configuration, a mobile device can provide the following summarized device information:

-  the **device state color** and the name of the device
-  the current warnings about the status of the device
-  the connected RF channels and Base Station
-  the battery status
- the **IEM /IFB** input information:
 - **LQI** Link Quality Input (LQI)
 - **I1** Input channel number (e. g. "I 1" for mono or "I 2" and "I 3" for stereo)
- **MIC/LINE** the output information
-  the current volume status








Detail view





By clicking on the card of the mobile device, a details page appears on the right-hand side of the navigation menu. The page shows detailed information about the device and allows you to edit important settings for ongoing operation:

- **Name** and **status** of the devices
 - [Changing device name](#)
-  **Monitoring data**
 - Monitoring the readiness state and the battery status of your mobile device
-  **Input IEM / IFB**
 - Changing the balance
 - Changing the headphone volume
 - Changing the headphone volume limiter
 - Monitoring the selected audio link mode
 - Monitoring the configured audio channel
 - Changing the routing configuration with **EDIT ROUTES**
-  **Output Mic/Line**
 - Changing the **MIC/LINE SELECTION**
 - Changing the **PREAMP GAIN** for the microphone output
 - Changing the low cut value in order to minimize the wind noise
 - Monitoring the selected audio link mode
 - Monitoring the configured audio channel
-  **Pairing details**
 - Details about the connected Base Station
 - Details about the active RF channel and
 - Details about the capacity utilization of the entire RF bandwidth
-  **Hardware details**
 - Product name
 - Type
 - Serial Number
 - FCC Number
 - Firmware version
 - If a firmware update is available, you can start the update here ([Updating firmware \(Base Station\)](#))



Related information

[Pairing/unpairing mobile devices](#)
[Adding mobile devices](#)
[Displaying device information](#)
[Changing device name](#)
[Configuring IEM/IFB input](#)
[Configuring MIC/LINE output](#)
[Removing mobile device](#)
[Updating firmware \(mobile devices\)](#)

Pairing/unpairing mobile devices





In LinkDesk you can pair up to 128 mobile devices to a Base Station within one RF channel.

Mobile devices can only be paired and operated with one Base Station at a time. If a mobile device is to be used with another Base Station, it must first be paired again.

i Please unmute at least one RF channel before pairing if this was not done automatically!

i Mobile device cards cannot be re-ordered. Please add devices in the desired order. Newly added devices are always added at last position to the right.




To pair a mobile device:

- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the button  **MD Manager** on the left-hand side of the top bar.
 - ✓ A new window **Add mobile devices** opens.
- ▶ Select your Base Station from the drop down list on the left-hand side and activate the  **PAIRING MODE**.
- ▶ Switch on your mobile device and activate the **Pairing Mode** if it has not been activated automatically (**Switching the SEK on and off**).
 - ✓ After a few seconds, the available mobile devices are displayed in the list.
- ▶ Click on the  button in the line of the mobile device to be paired.
 - ✓ A confirmation code is displayed both in LinkDesk and on the mobile device.



- ▶ Compare the displayed code at both endpoints.
- ▶ In LinkDesk, click on **Confirm** to pair the selected mobile device.
 - ✓ The mobile device has been paired successfully. The device state color changes to:
 - green: successful operation, or
 - yellow: warning (e. g. if the audio links have not yet been assigned (see also [Device State Colors](#))).

To unpair a mobile device:

- ▶ You can either
 - click on the  **unpair** button of the corresponding device in the MD Manager or
 - click on the three dots  of the mobile device card and select the  **unpair** function.
- ✓ The mobile device has been unpaired successfully.

✓ The mobile devices have been successfully paired/unpaired.

Related information


[Device State Colors](#)







Adding mobile devices

You can add mobile devices to your connected Base Station.



When adding mobile devices for the first time, they need to be paired. Devices that have already been paired and **removed** will be displayed in the MD Manager and can easily be added back to production using the  button.

To add a mobile device:

- ▶ In your production card, activate the function  **DEVICE SYNCHRONIZATION** on the left-hand side of the top bar.
- ▶ Click on the button  **MD Manager** on the left-hand side of the top bar.
 - ✓ A new window opens and shows a list of all known and connected mobile devices.
- ▶ Click on  **PAIRING MODE** to set the Base Station to pairing mode.
 - ✓ The Base Station remains in pairing status for 5 minutes.
- ▶ Switch on your mobile device and activate the **Pairing Mode** if it has not been activated automatically (Switching the SEK on and off, Pairing the SEK to the Base Station).
 - ✓ After a few seconds, the available mobile devices are displayed in the list.
- ▶ Click on the  **Add** button in the line of the mobile device to be added.
 - ✓ A confirmation code is displayed both in LinkDesk and on the mobile device.
- ▶ Compare the displayed code at both endpoints.
- ▶ In LinkDesk, click on **Confirm** to pair the selected mobile device.



The mobile device has been added to the Base Station and is indicated as a separate card. The card shows the connected Base Station and the occupied RF channel. The device state color changes to:

- green: successful operation, or
- yellow: warning (e.g. if the audio links have not yet been assigned (see also [Device State Colors](#) and [Routing Editor](#))).



Displaying device information

You can display detailed information relating to your Spectera device.

Find out here which device information can be displayed in the details view for [mobile devices](#) or for the [Base Station](#).

In order to display detailed information:

- ▶ Click on the card of your Spectera device (Base Station or mobile device).
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Observe all the details in the menu by scrolling up and down.

✓ Detailed information are displayed.

Related information

[Base Station](#)

[Mobile devices](#)



Changing device name

You can change the device name for your mobile device.

i For security reasons, please do not enter any sensitive personal data as the device name.

To change the device name:

- ▶ Click on your mobile device card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Edit the name under **Device name**.
 - ✓ The name is immediately transmitted to the mobile device and saved.

✓ The device name has been changed.



Configuring IEM/IFB input

You can adjust the **BALANCE** and **VOLUME** of the IEM/IFB input.

WARNING



Danger due to high volume levels

Volume levels that are too high may damage your hearing.

- ▶ Reduce the volume and the microphone amplification, if applicable, before using the product.

To configure the IEM/IFB input:

- ▶ Click on your mobile device card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Click on the drop-down menu **Input IEM/IFB** and adapt the settings for:
 - BALANCE
 - HEADPHONE VOLUME
 - HEADPHONE VOLUME LIMITER
- ▶ Click on **EDIT ROUTES** to configure the audio link mode.

Related information

[Defining audio routes](#)



Configuring MIC/LINE output

You can adjust the **PREAMP GAIN** and **LOW CUT** of the Output MIC/ LINE.

WARNING



Danger due to high volume levels

Volume levels that are too high may damage your hearing.

- ▶ Reduce the volume and the microphone amplification, if applicable, before using the product.

To configure the MIC/LINE output:

- ▶ Click on your mobile device card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Click on the drop-down menu **Output MIC/LINE** and adapt the settings for:
 - **PREAMP GAIN**, to adjust the pre amplification OR
 - **LOW CUT**, to minimize wind noise.
- ▶ Click on **EDIT ROUTES** to configure the audio link mode.

Related information

[Defining audio routes](#)



Removing mobile device

You can remove your mobile devices from your current production.

When you remove a mobile device from the production card, LinkDesk will still remember and keep it paired. You can re-add this device to your production card at any time through the MD Manager.

NOTICE





The audio signal will be interrupted immediately!

By removing the connected mobile devices the audio signal of connected devices will be interrupted immediately!

- ▶ Only remove mobile devices if no active audio is being used.

To remove the mobile device:

- ▶ On your mobile device card, click on the 3 dots  and then on  **Delete**.
- ▶ Click on **OK**.

✓ The mobile device has been removed.

Related information

[Adding mobile devices](#)



Updating firmware (mobile devices)

The firmware version of the mobile devices can be downloaded and updated manually.

The Base Station update typically ensures that all components are included, so no manual downloads are required. Once the Base Station firmware is updated, the user will be guided through the process of updating the Mobile Devices (MDs). MDs with an older firmware version cannot be used until they are updated.

If the user pairs a mobile device with an outdated firmware, it won't work until the update is done. The update can be started from the mobile device context file.

i Please download the latest firmware version for your Base Station under: sennheiser.com/base-station.

NOTICE





Loss of data if the firmware transfer is interrupted

If the transfer is interrupted, this may lead to a loss of data. The devices may be damaged by this.

- ▶ Do not remove any connections to the stationary devices during firmware updates.
- ▶ Do not disconnect the devices from the mains power. For portable devices, use fully charged batteries where possible!
- ▶ Place the portable devices in a stable position in front of the infrared interface for the duration of the update.

To update your mobile device firmware:

- ▶ Click on your mobile device card.
 - ✓ An additional navigation menu will appear on the right-hand side of the window.
- ▶ Navigate to the drop-down menu  **Hardware details**.
- ▶ Click on **UPLOAD FILE**  and select the manually downloaded firmware.
 - ✓ The firmware file has been selected.
- ▶ Click on **UPDATE** to start the update process.

i The update is done as a broadcast, meaning all mobile devices with outdated firmware will be recognized and updated one by one.



✓ The firmware has been updated.

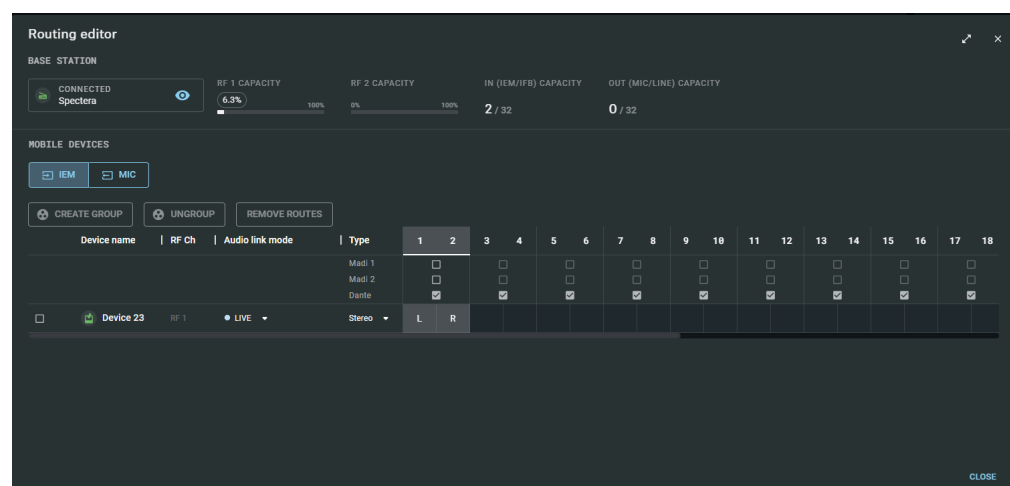


Routing Editor

The editor serves as a basic configurator for mobile devices and also provides an overview of all connected devices with their total capacity utilization within an RF spectrum.

The editor can be used to:

- Select connected Base Stations and show up the configured RF channels
- Assign RF channels to mobile devices;
- Configure audio link modes for mobile devices;
- Configure audio types for mobile devices
- Assign up to 32 audio links for IEM/IFB input and MIC output



1. Routing Settings

Base Station

- Summarized view of the selected base station with the configured channels and inputs/outputs.

Mobile devices

- Selection and display of a mobile device by signal type (IEM or MIC).

Groups

- Possibility to group devices and remove groups or the defined routes.



Routing Settings

- The customized configuration of individual paired mobile devices.
- **Device name**
 - Display of all paired mobile devices.
- **RF channel**
 - Display of the channel assignment of the individual mobile device.
- **Audio link mode**
 - Selection of preset audio link modes with indication of their capacity impact:
 - Not set
 - LIVE Link Density
 - LIVE
 - LIVE Low Latency
 - LIVE Ultra Low Latency
- **Mode Type**
 - Type of the available mode (stereo / mono).
- **Audio Links**
 - Assignment of individual links for IEM/MIC, with specification of the existing sound type (stereo/mono).

Related information

[Defining audio routes](#)

[Removing audio routes](#)

Defining audio routes



With the routing editor, you can easily route the audio of your connected devices and monitor the capacity impact.

The following settings must be made to route the audio:

- Select the affected input or output
- Select a suitable audio link mode
- Select the audio type
- Assign the audio link number



To select the setting for your IEM or MIC channel:

- ▶ Under **MOBILE DEVICES** click on  IEM or  MIC.
- ✓ The channel has been selected.

To select the Audio Link Mode:

- ▶ Navigate to the row of the mobile device to be configured and select the desired mode in the **Audio link mode** column.

i Depending on the selected mode, the capacity utilization of the HF channel will be adapted and the influence on important parameters will be shown.

- ✓ The Audio Link mode has been selected.

NOTICE



This action will reset the audio channel assignment and audio link mode for this device

The Audio might be interrupted.

- ▶ Make sure that no live audio is being used.

- ▶ Navigate to the row of the mobile device to be configured and select the desired mode in the **Type** column.
- ✓ The audio type has been selected.

To assign the audio link:

- ▶ Navigate to the row of the mobile device to be routed and select the desired link in the numbering column.
- ✓ The audio link has been assigned.

- ✓ The Audio links have been routed.



Removing audio routes

You can remove defined audio routes from the routing editor.

NOTICE



This action will reset the audio channel assignment and audio link mode for this device

The Audio might be interrupted.

- ▶ Make sure that no live audio is being used.

To remove defined audio routes:

- ▶ In your production card, navigate to **ROUTING EDITOR**.
- ▶ Activate the check-box of the mobile devices for which the audio routes are to be deleted.
- ▶ Click on the button **REMOVE ROUTES > OK**.



The defined audio routes have been removed.



Error handling

Summary of the typical error messages that can occur and how to resolve them.



Base Station is currently in-use and cannot be claimed.

- ▶ Use a different Base Station or deactivate the sync status in a running production ([Activating device synchronization](#)).



The RF channel is muted.

- ▶ Unmute the RF channel (see [Muting/unmuting RF signals](#)).



No Audio Link was set.

- ▶ Assign an audio link to the mobile device (see [Defining audio routes](#)).



4. Specifications

All technical data, system and server requirements and needed ports at a glance.

System requirements

Recommended for Host PC Client

- Intel i5 Dual Core processor/M1 Mac/or similar
- 16 GB RAM
- At least 4 GB hard disk space (5 GB for Mac devices)
- Gigabit LAN interface
- Windows® 10, 11, Server 2019, Server 2022 (x64) or higher
- Mac OS Big Sonoma or later
- IPv4 network

Port requirements

Address	Port	Protocol	Type	Service	Usage
LOCALHOST	54 352	HTTPS (TCP)	Unicast	LinkDesk backend	Internal backend communication
ANY	443	HTTPS (TCP)	Unicast	Spectera Base Station API	Communication to devices
Accounts EMEA ¹ B2C Configuration ²	443	HTTPS (TCP)	Unicast	Sennheiser CIAM	Sennheiser account Sign-In/Log-In
User insights ³ User insights ⁴	443	HTTPS (TCP)	Unicast	Sennheiser user insights	Analytics of usage and operational data
ANY	443	HTTPS (TCP)	Unicast	Spectera Base Station API	Base Station API Communication from devices
224.0.0.251	5353	mDNS (UDP)	Multicast	mDNS, DNS-SD	(optional - if desired) Device/service discovery



¹	accounts-pro-emea.sennheiser-cloud.com
²	b2c-config.sennheisercloud.com
³	sennheiseruserinsights.matomo.cloud
⁴	cdn.matomo.cloud

