Instructions for use

English

Comfort Digisystem
Conference Microphone DC20

Comfort Audio
HEAR THE FUTURE

Contents

I. User guide.....7

1. Introduction.....9
Your device.....9
SST™.....9
Overview.....10
Included accessories.....13

2. Getting started.....15
Charge.....15
Start up.....17
Navigate the menu.....17

3. Usage.....19
Meetings and conferences.....19
Attend a meeting.....20
Use a lecture microphone.....20
Telephone conversations.....21
Bluetooth®.....22
Landline.....24
External audio sources.....26
Connect an external audio source.....26

II. For professionals.....29

4. Basic setup.....31
Change the menu language.....31
Name the device.....31

5. Pairing Comfort Digisystem devices.....33

The pairing button....33
Change channel....34
Available channels....35
Send pairing information....36
Receive pairing information....37
Pair the remote control....38

6. Advanced features....39
Use a remote microphone for telephony....39
Use **Tel only** to save power....39
Tone adjustments....40
Adjust Treble and Bass....40
Adjust the equalizer....40
Perceptual Speech Enhancement....41
Adjust the PSE compensation....41
Bluetooth settings....42
Adjust the level of your own voice....42
Change the default microphone mode....42
Remove all paired Bluetooth devices....43
Lock the buttons....43
PIN code settings....43
Set a PIN Code....43
Choose which functions to lock....44
Hide the PIN entry dialogue....45
Change the PIN code....45
Disable the PIN code....45
FFC....46
Reset all settings....46

Appendices....49

A. Product information....51
Menu overview....51

Function indicator....54
Microphone modes....56
Optional accessories....58
Technical specifications....59

B. Radio....61
Channel planning....61
Radio range....61

C. Battery maintenance....63
Replacing the remote control battery....63

D. Troubleshooting....67
Service and warranty....69
Service centers....69
Contact information....71
Product symbols....73

I. User guide

This part of the instruction manual covers day-to-day tasks that a user of the product should be familiar with.

1. Introduction

Thank you for choosing Conference Microphone DC20!

Conference Microphone DC20 is part of *Comfort Digisystem™* that uses digital wireless technology to give you the best sound quality available, together with secured transmission to prevent eavesdropping.

To get the most out of your new product, please read these instructions before using it for the first time. Take special notice to the printed document *Important Safety Instructions* included in the box.

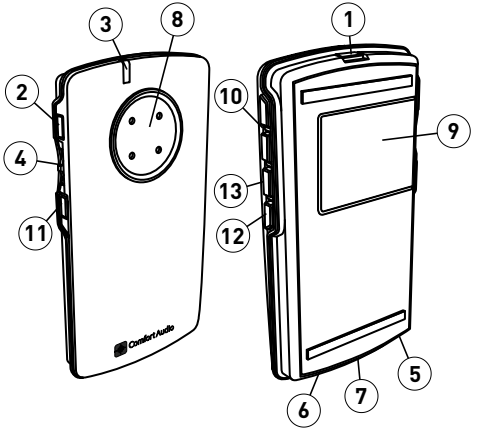
Your device

Conference Microphone DC20 is an advanced microphone offering the option of setting the size and shape of the sound registering area. It can be connected to two Bluetooth equipped telephones, as well as to a landline telephone using the Telelink accessory. A built-in receiver allows you to set up a system with several wireless microphones from the Digisystem line up.

SST™

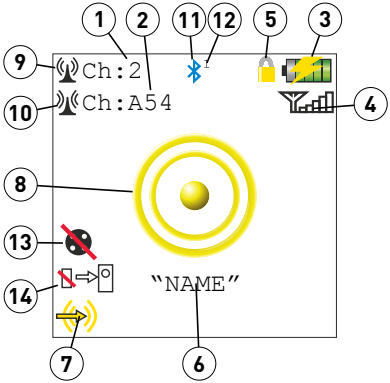
SecureStream Technology (SST) is Comfort Audio's proprietary digital transmission technology. It lets you communicate securely and latency free with other Comfort Digisystem devices.

Overview



1. On/Off button ⏻
2. Pairing button
3. Function indicator
4. Menu controller
5. Charger input
6. Aux input and output
7. Multifunction socket
8. Microphone
9. Display
10. Mode buttons ◄►
11. Answer button
12. Receiver mute button
13. Microphone mute button

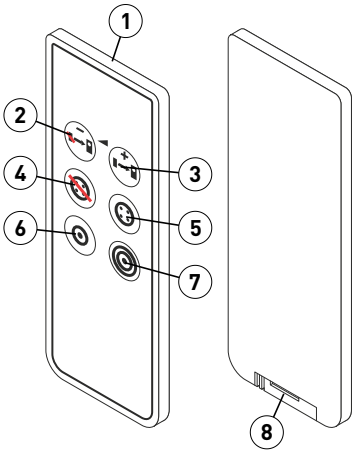
Display



1. Transmitter channel
2. Receiver channel
3. Battery status
4. Signal quality
5. Key lock padlock
6. Unit name
7. Current aux setting
8. Current microphone mode
9. Receiver status
10. Transmitter status
11. Bluetooth enabled
12. Bluetooth connection status
13. Mic mute active
14. Receiver mute active

Remote DC05

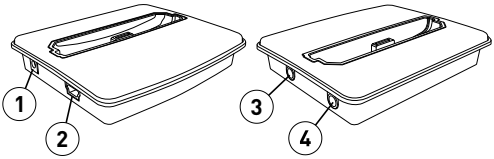
Overview



1. Function indicator
2. Receiver off / Receiver volume down
3. Receiver on / Receiver volume up
4. Microphone off
5. Microphone on
6. Narrow omni mode
7. Wide omni mode
8. Battery compartment

Charging stand

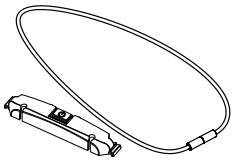
Overview



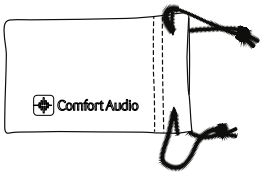
1. Charger socket
2. USB socket
3. Input 1
4. Input 2

Included accessories

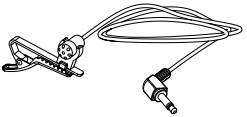
Necklace



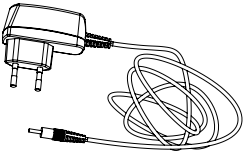
Microfibre pouch



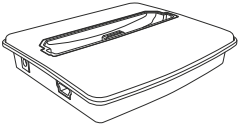
Clip on microphone



Power supply



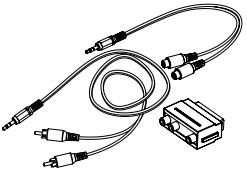
Charging stand



Cable split

Remote DC05

Audio-kit



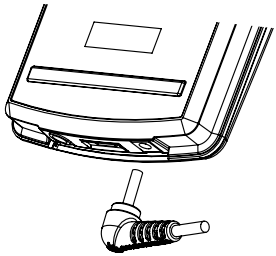
2. Getting started

This section will teach you how to perform the basic steps needed to get started.

Charge

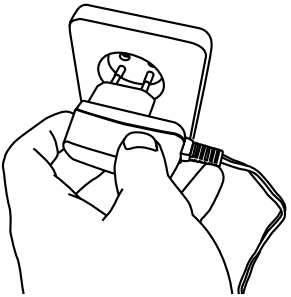
Charging can be done at any time. If you make it routine to charge your product whenever you do not use it, it is always ready for use when you need it.

1. Insert the supplied charger into the charger input.



Caution: *Only use the charger supplied by Comfort Audio AB. Using any other type of charger might damage your device.*

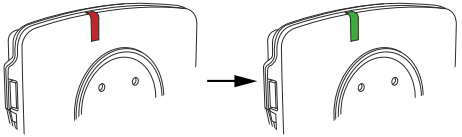
2. Plug the charger into the wall socket.



The function indicator turns red to indicate charging.

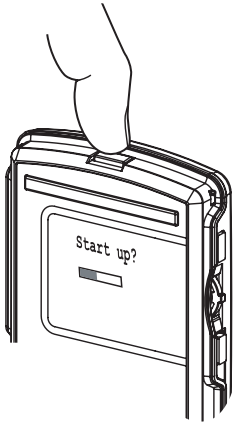
Note: *The unit might become warm during charging, this is entirely normal. The unit is equipped with overcharging- and temperature monitoring to protect the batteries.*

The charging is done when the function indicator turns green.



Start up

1. Press ⏻ until the start up bar is fully lit.



2. Use ◄► to select the microphone mode that gives you the best speech perception.

Navigate the menu

You can use ▁▂▃ on the side of the unit to navigate your way through the menu.

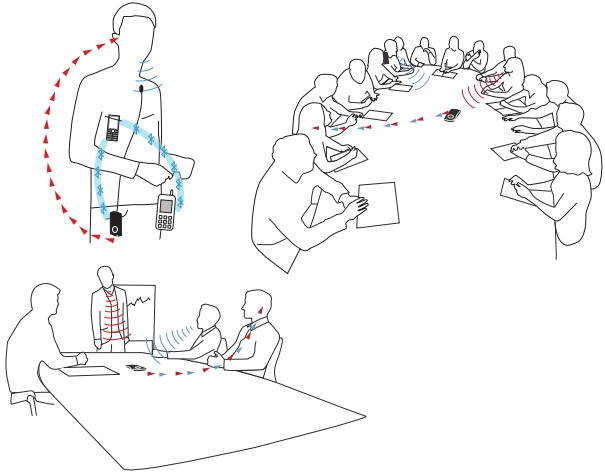
1. Press to activate the menu.

2. Flick the controller up or down to select the desired menu option.

3. Press to enter the selected sub menu or activate the selected menu option.
4. When done, use the **Back** option to move to the previous menu.

3. Usage

Your product is highly flexible and well suited for several situations where good speech perception is important.



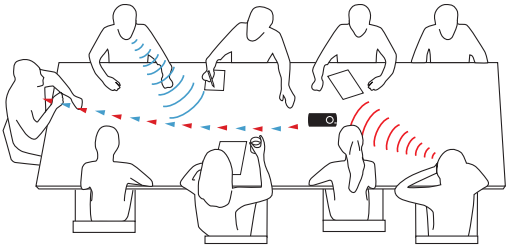
Meetings and conferences

In meetings and conferences it is vital to be able to follow along in the discussions without straining to hear. With the conference microphone you can hear persons around you loud and clear without the need for a pass-around microphone or complex arrangements. With the included remote control it is possible to adjust the settings without disturbing the meeting.

Note: *Functions that are accessible from the remote are indicated with .*

Attend a meeting

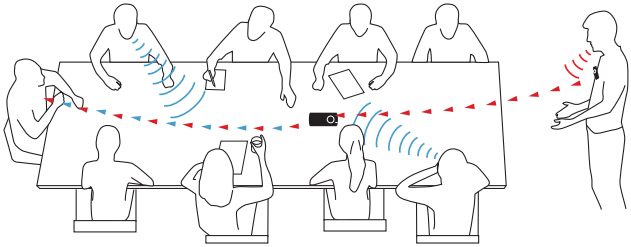
For typical discussions around a table, a conference microphone placed in the middle of the table will be enough to capture the voices of all participants.



1. Place the conference microphone on the table; as close to the participants as possible.
2. Choose an omni directional microphone mode with ◄►.
3. Adjust the volume on your receiver to a suitable level.

Use a lecture microphone

At larger meetings and conferences, with a lecturer, the built in receiver allows you to use an additional Comfort Digisystem microphone (purchased separately) that is clipped on to the lecturer.



1. Place the conference microphone on the table; as close to the participants as possible.
2. Activate the built in receiver using .
3. Turn on the lecturer's microphone.
4. Verify that the signal quality indicator symbol ( ) in the display is lit up red.
5. Adjust the volume on your receiver to a suitable level.
6. If needed, adjust the volume of the lecturer through the menu **Inputs** > **Receiver gain**.

   (A long press on the receiver buttons one the remote control will adjust the volume as well.)

Telephone conversations

Hearing on the phone is often difficult when using hearing aids. The conference microphone can help you hear clearly on both landline and mobile phones.

Note: *For usage with landline phones the TeleLink accessory is needed.*

Bluetooth®

Thanks to Bluetooth technology this product can be used as a wireless handsfree for a Bluetooth equipped phone. Up to two devices can be connected at the same time.

Pair a Bluetooth device

Conference Microphone DC20 and the Bluetooth device needs to be *paired* before they can be used together.

1. Select **Communication** > **Bluetooth**.
2. Make sure Bluetooth is enabled. If not, select **Enable**.
3. Select:

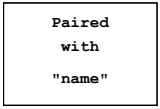
   • **Pair Mobile** to pair a mobile phone.
   • **Pair Phone** to pair a DECT™ phone.

   The pairing sequence will start, which means that the unit is discoverable by your Bluetooth device.

4. Search for new equipment on your Bluetooth device (please refer to the user manual of the device).

5. When found, select DC20 in the list of found devices.
6. If asked for a PIN, enter the PIN code shown in the display of your Comfort Digisystem unit.

If the pairing is successful `Paired with` and the name of your Bluetooth device will appear in the display.



Answer a call

When the phone rings, the text `Answer?` will be shown in the display.

1. To answer, press .

Tip: *Use to adjust the call volume.*

2. When done talking, hang up by pressing again, or by using your phone.

Make a call

On most phones you can initiate a call from the phone or via the Bluetooth headset.

1. Use *one* of the following methods to make a call:

Option	Description
Use your phone to dial the number.	The sound will automatically be transferred to Conference Microphone DC20.
Re-dial the last called number.	Press ☎ for approx. 2 sec.
Activate voice dialing.	Press ☎ briefly, approx 1/2 sec.

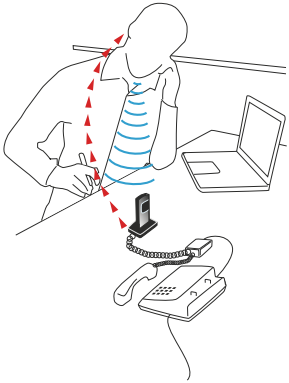
Note: *The different dialling options is dependent on the phone being used. Please refer to the user manual of your phone.*

2. When done talking, hang up by pressing ☎ again, or by using your phone.

Landline

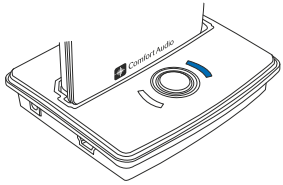
With the help of the TeleLink accessory (purchased separately) the Conference Microphone DC20 can be connected to a landline telephone.

Note: *Please refer to the TeleLink manual for a description of the connection procedure.*



Answer a call

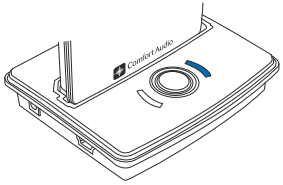
1. Make sure the TeleLink is in telephone mode. The light next to the function button should be blue. If not, press the function button.



2. Lift the handset from the cradle, or press the answering button on the phone.
3. Talk into the conference microphone.

Make a call

1. Make sure the TeleLink is in telephone mode. The light next to the function button should be blue. If not, press the function button.



2. Lift the handset from the cradle, or press the answering button on the phone. Listen for the dial tone.
3. Dial the number on the phone.
4. Talk into the conference microphone.

External audio sources

You can connect any sound source that has a line out socket to the device. This lets you listen to television, conference telephones, voice recorders and the like. It is also possible to connect an external microphone, such as a clip-on microphone, or a pair of headphones.

Connect an external audio source

Connecting an external audio source will bring up a menu where you can select the type of device you have connected.

1. Connect your external audio source to the aux socket.

   For line sources you can use the supplied audio cable.

   The **Inputs** menu will be shown automatically.

2. Select the option that corresponds to the device you have connected.

Option	Description
Line In	Computer, TV, music player etc.
Microphone in	Boom microphone, clip on microphone etc.
Headphones out	Headphones or earphones.

3. Adjust the volume for the respective option till you find a suitable level.

II. For professionals

The following sections cover advanced features and procedures primarily intended for professionals and advanced users.

4. Basic setup

Before setting up the product you should make sure that the menu is set to the preferred language.

Change the menu language

The default menu language is English. You can change language from the menu **Settings**.

1. Select **Settings** > **Language**.
2. Select the language you want from the list of available languages.

Name the device

To help identify the device, you can enter a name that will be shown in the display.

1. Select **Settings** > **Name**.
2. Use to scroll through the list of characters. Press to enter the selected character.
3. When done select ✓. (To cancel, select ✕ instead.)

5. Pairing Comfort Digisystem devices

By pairing two or more Comfort Digisystem devices you ensure that they can communicate securely with each other.

Comfort Digisystem is a digitally encrypted communication system that relies on unique *code keys* to provide transmission security. Any units that are to be used together needs to be set to the same channel and share the same code key.

When you perform a pairing procedure you send information about the channel and code key from one unit to one or several others. This lets you create a channel and code key combination on one unit and distribute it to other units to form a system.

The information about the channel and code key is referred to as *pairing information*. Conference Microphone DC20 is able to both send and receive pairing information.

Important: *At delivery all units share the same factory code key. To make the system secure, you need to generate a new code key.*

The pairing button

All Comfort Digisystem units are equipped with a pairing button. The pairing button gives you quick access to the pairing features of the device.

Table 1: Pairing short cuts accessible through the pairing button.

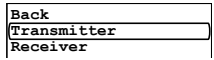
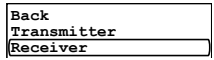
Option	Description
A single press.	Takes you to the pairing menu.
A long press.	Sets the unit to receive pairing information. (For units with more than one channel, this affects the transmitter channel only.)
A double press.	Sends pairing information. (For units with more than one channel, this affects the transmitter channel only.)

Change channel

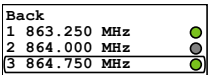
If a channel does not suit your setup, or if you are experiencing interference from some other radio source, you can change to a different channel via the **Channel** menu.

1. Select **Communication** > **Channel**.

2. Select:

Option	Description
Transmitter 	Set the channel for the built-in transmitter.
Receiver 	Set the channel for the built-in receiver.

3. Choose the channel you wish to use in the channel list.



The green circle next to the frequency indicates that the channel is free from interference. If the channel is occupied the circle will be grey.

Available channels

In most European countries, channels 1-3 (863.250 – 864.750 MHz) may be used for hearing products. In addition to channels 1-3, there are several channels in bands A-F, which require a licence in most European countries. These are found under the **Extended** option.

Important: *Always verify with the local frequency assignment authority which channels are free to use and which require a licence.*

Send pairing information

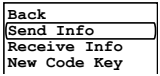
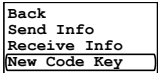
By sending pairing information from Conference Microphone DC20 you can synchronise its channel and code key with another unit. Any existing pairing information in the other unit will be overwritten.

1. Select **Communication** > **Pair**
2. Choose whether to pair the transmitting or receiving channel by selecting one of the following options:

   • **Transmitter**
   • **Receiver**

3. Set the unit or units that you would like to pair with Conference Microphone DC20 to receive pairing information.

4. To send the pairing information, select *one* of the following options:

Option	Description
Send Info 	Send the *existing* code key.
New Code Key 	Generate and send a *new* code key. ***Important:*** *This will break the pairing with any previously paired units.*

When the info is sent the text `Info sent!` will appear in the display.

Receive pairing information

When the unit is set to receive pairing information its current channel and code key will be overwritten by the received information.

1. Set the unit to receive information by selecting **Communication** > **Pair**.

2. Choose whether to pair the transmitting or receiving channel by selecting one of the following options:

   • **Transmitter**
   • **Receiver**

3. Select **Receive Info**.
4. Send pairing information from the unit you are pairing with Conference Microphone DC20.

If the pairing is successful, the word OK will appear in the display of Conference Microphone DC20.

Pair the remote control

To prevent others to remotely control Conference Microphone DC20, the remote control will only work with the device it has been paired with. If the remote has been replaced, e.g. during service, the pairing procedure needs to be redone.

1. Select **Settings** > **Remote control**.
2. Make sure **Enabled** is checked.
3. Select **Pair**.
4. Press any button on the remote.

If the pairing is successful, the word OK will appear in the display of Conference Microphone DC20.

6. Advanced features

This product has special features and settings that lets you tailor the unit to the user's specific needs.

Use a remote microphone for telephony

An additional Comfort Digisystem microphone (purchased separately) can be used during phone calls as a remote microphone. This is particularly useful when making phone calls in a noisy environment such as an open office space.

1. You can activate the remote microphone feature for Bluetooth and landline separately:
   - For Bluetooth, select **Communication** > **Bluetooth**.
   - For landline, select **Inputs** > **TeleLink**.
2. Enable **Remote Mic.**.

Use Tel only to save power

If the device is mainly used for telephony, the operating time can be improved by enabling the **Tel only** feature. When this feature is active the device will only transmit radio during phone calls.

1. Select **Communication** > **Bluetooth**.
   (The feature is also accessible from **Inputs** > **TeleLink**.)
2. Enable **Tel only**.

Tone adjustments

The unit provides the possibility to adjust the frequency response of the sound. For example, the response can be adjusted to lessen the harsh sound of rustling paper or to reduce excessive bass that can mask higher frequencies.

Note: *The settings are saved separately for each microphone mode.*

Adjust Treble and Bass

The treble and bass adjustments lets you do a rough adjustment of the unit's frequency characteristics. This is useful if, for example, the user finds the overall sound to be too thin or harsh.

1. Select **Sound** > **Treble and Bass**.
2. Select the desired frequency range by pressing .
3. Flick up or down to adjust the level of the selected frequency range.
4. Press to confirm your choice.

   The next frequency range will be selected automatically.
5. Press to save the settings or to cancel.

Adjust the equalizer

Use the equalizer to perform detailed adjustments of the frequency response.

1. Select **Sound** > **Equalizer**.

2. Flick up or down to adjust the level of the selected frequency range.
3. Press to confirm your choice.

   The next frequency range will be selected automatically.
4. Press to save the settings or to cancel.

Perceptual Speech Enhancement

Perceptual Speech Enhancement (PSE) is a powerful digital sound processing technology that is unique to Comfort Audio's conference microphones. The technique is used to optimize speech intelligibility in challenging acoustic environments, where a microphone can not be placed in close proximity to the speaker. This may be situations where a near field microphone would be perceived as intrusive or too troublesome, such as in workplace meetings or dinners. PSE emphasises speech and effectively reduces unwanted noise and sounds that impair speech intelligibility. The PSE feature is active in the omni directional microphone modes, and when using an external microphone.

Adjust the PSE compensation

The PSE compensation determines how much the volume should be increased to compensate for the perceived loss of loudness that occurs in a noisy environment. Increase this setting if you find the volume too low in noisy situations. The setting is only effective in the omni directional microphone modes, and is saved separately for each mode.

1. Select **Sound** > **Advanced settings**.
2. Select **PSE comp.**.

3. Flick up or down to adjust the degree of compensation.
4. Press to confirm your choice.

Bluetooth settings

The Bluetooth settings let you adjust how the unit should function when connected to a Bluetooth equipped device.

Adjust the level of your own voice

Hearing your own voice during telephone calls can prevent you from talking to loud or feeling confined. The voice monitoring can also be used to allow communication with the surrounding environment while making a telephone call.

Note: *This function can only be adjusted during an ongoing telephone call.*

1. Select **Communication** > **Bluetooth**.
2. Select **Mix level** and adjust the level by flicking up or down.
3. Press to confirm you choice.

Change the default microphone mode

When entering a telephone call the unit will automatically change to a pre-selected microphone mode. You can change the default microphone mode for Bluetooth calls in the **Bluetooth** menu.

1. Select **Communication** > **Bluetooth** > **Mic. mode**.

2. Use ◄► to choose a microphone mode
3. Save the selection by pressing ⟲.

Remove all paired Bluetooth devices

If you have problems with a Bluetooth device or want to redo the pairing you can remove all paired Bluetooth devices with the menu option **Clear settings**.

Select **Communication** > **Bluetooth** > **Clear settings**.

All paired devices are cleared from memory.

Lock the buttons

If you want to avoid accidental button presses it is possible to lock all functions by activating the key lock. (You can always use the On/Off button regardless of the key lock.)

Select **Activate Key Lock**.

An orange padlock symbol will appear in the display of the device.

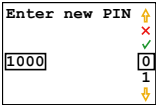
PIN code settings

To prevent tampering or unintentional changes of the settings, you can lock the product with a four digit PIN code. You can choose to lock all of the features or a selected category.

Set a PIN Code

1. Select **Settings** > **PIN Code**.
2. Check **Enabled**.

3. Use ▲ to scroll through the list of characters. Press ▲ to enter the selected character.



4. When done select ✓. (To cancel, select ✕ instead.)

Important: *Make note of the PIN code. If you forget the PIN, contact your point of purchase.*

Choose which functions to lock

By selecting which functions to lock with the PIN code you can allow access to commonly used functions while preventing access to others.

1. Select **Settings** > **PIN Code** > **Lock Select**.
2. Select the functions you want to lock:

Option	Description
Pair	Lock access to the Pair menu
All Menus	Lock access to all menus.

Hide the PIN entry dialogue

To reduce the temptation to guess the PIN, the PIN entry dialogue can be hidden. The user then has 3 seconds from start up to access the dialogue before it is hidden.

1. Select **Settings** > **PIN Code** > **Lock Select**.
2. Select **Hide PIN Entry**.

Change the PIN code

To change the current PIN you must first enter the current PIN.

1. Select **Settings** > **PIN Code**.
2. Enter the current PIN code.
3. Select **Change PIN**.
4. Enter the new PIN code.
5. Select ✓ to confirm PIN.

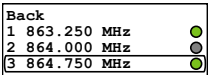
Disable the PIN code

If you no longer wish to lock access to the unit, you can disable the PIN code. The PIN will be reset and a new code will have to be entered if you choose to enable it again.

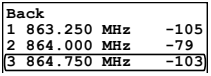
1. Select **Settings** > **PIN Code**.
2. Enter the current PIN code.
3. Uncheck the **Enabled** option.

FFC

Free Frequency Check (FFC) makes it easy to find available frequencies. When a channel is free from interference, a green circle will be shown next to the channel in the channel selection menu.



If is checked, the background noise for each channel will be shown in dBm.



Note: *The circle will turn green at a noise level of > -80 dBm.*

Reset all settings

If you need to reset all settings to their default values, you can do a factory reset.

1. Select **Settings** > **Factory Reset**.

2. Select **Yes**.

Important: *All settings will be lost. Any pairing needs to be redone.*

Appendices

A. Product information

Menu overview

Back	
Communication	**Back** **Channel** **Pair** **Bluetooth**
Sound	**Back** **Treble and Bass** **Equalizer** **Advanced settings**
Inputs	**Back** **Mic/Line in** **Charger Unit** **TeleLink** **Receiver gain**
Settings	**Back** **Charge** **Language** **PIN Code** **Activate Key Lock** **Name** **Remote control** **Factory Reset**

Activate Key Lock

About

Back

Leave the current menu.

Communication

Settings for radio channels and pairing.

Channel	Change the transmitting and receiving channel.
Pair	Pair the unit with another Comfort Digisystem device. Allows you to generate a new code key to make the system secure.
Bluetooth	Connect the microphone to any mobile phone with Bluetooth.

Sound

Settings that affect the sound quality.

Treble and Bass	Simple adjustment of the unit's equalizer.
Equalizer	Advanced adjustment of the frequency response in eight bands.
Advanced settings	Adjust the PSE-compensation.

Inputs

Settings for various audio inputs.

Mic/Line in	Input type and gain level.

Charger unit	Input gains for the charger unit.
TeleLink	Input and output gain when using the TeleLink accessory.
Receiver gain	Gain for the built-in receiver.

Settings

General settings.

PIN Code	Lock the unit with a PIN code to prevent tampering.
Charge	When **Auto Power Off** is activated, the unit will turn *off* when charged. **Auto Restart** will start the unit when charging is interrupted. Default is to stay *on* during charging.
Language	Set the menu language.
Name	Give the unit a name to help identify it.
Key lock	Enable auto key lock to prevent accidental button presses after the screen has faded.
Func.Indicator	Toggle the function indicator on or off.
Remote control	Activate and pair the remote control.
Factory Reset	Reset the unit to factory settings. All settings will be lost!

Activate Key Lock

Manually activate the key lock. Also activated by pressing followed by ►.

About

Information about the firmware version.

Function indicator

The *function indicator* gives you information about the units current status.

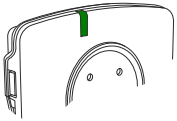


Table 2: Microphone mode indications

Status	Indication
Music mode	//...■...//...■...//...■...//
Narrow omni mode	//...■■//...■■//...■■//
Wide omni mode	//...■■■...//...■■■...//
Zoom mode	//...■■■■//...■■■■//

Table 3: Pairing indications

Status	Indication
Ready to receive pairing information	//...■ ■ ■ ■ ■ ■ ■ ■...//
Pairing information sent.	// ■ ■ ■ ■ ■ //

Status	Indication
Information received	// ▬▬▬ //

Table 4: Charging indications

Status	Indication
Charging in progress	//... ▬▬▬▬▬ .../
Charging complete	//... ▬▬▬▬▬ .../
Low battery	//... ■ .../ /... ■ .../ /... ■ .../

Note: *Charging is not indicated if the device is turned on and placed in the TeleLink.*

Note: *If the unit is on while charging the function indicator stays red even when the battery is fully charged.*

Table 5: Remote control indications

Status	Indication
Command received	■

Table 6: Bluetooth indications

Status	Indication
Pairing mode active	//...▬▬▬▬▬▬...//
Pairing successful	//■ ■ ■ ■ ■//
Call in progress	//...■...■...■...■...//
Settings cleared	//■ ■ ■ ■ ■ ■ ■ ■ ■ ■//

Microphone modes

Conference Microphone has four different microphone modes that are selectable with ◄►. The two omni modes can also be selected with the remote control.

Music mode

Suitable for music listening, or in very quiet environments with favourable acoustics. PSE disabled.

Wide omni directional mode

Enhances speech and suppresses interfering noise. Strong amplification of soft sounds. Suitable for most occasions where several persons needs to be heard. PSE enabled.

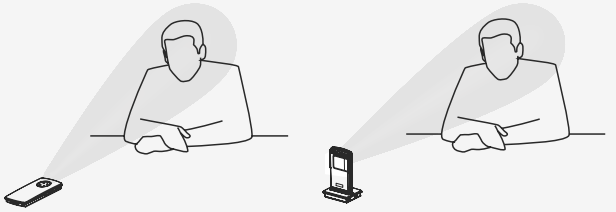
Narrow omni directional mode

Enhances speech and suppresses interfering noise. Less amplification of soft sounds. Suitable for exceptionally noisy environments and in smaller groups and meetings. PSE enabled.

Directional mode

Directional pick up pattern. Suitable for telephony or in conversations with a single individual in noisy environments. For best effect, the microphone should be placed near the sound source. PSE disabled.

Note: *When set to zoom mode, the direction of the pick up pattern will change automatically if the device is placed in the charger stand or TeleLink accessory.*

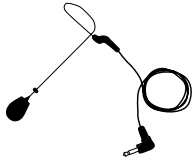


Optional accessories

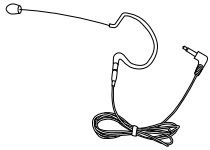
The following accessories can be used with your product:

Soft case

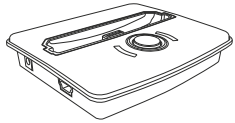
Boom microphone, black



Boom microphone, beige



TeleLink



Technical specifications

Type of transmitter/receiver	SST - SecureStream Technology
Range	Approx. 30 m
Dimensions	115 x 62 x 14 mm
Weight	90 g
Frequency range transmitter	852 - 872 MHz
Frequency range receiver	(f2) 768 - 785 MHz , (f1) 824 - 849 MHz

Antennas	Built-in
Operating time	Up to 10 hours. Dependent on usage conditions. Measured with factory settings.
Charging time	Up to 5 hours.
Microphone	Combination of four built-in microphones, directional and omnidirectional
Connections	Mic/Line in, socket for testing with headphones, socket for charger unit and Telelink
Bluetooth protocol	Version 2.1
Supported profiles	*Handsfree Profile (HFP)*, *Headset Profile (HSP)*
Battery remote control	CR2025, Li-Mn

B. Radio

Comfort Digisystem relies on radio technology to transfer the sound between transmitters and receivers. Like all radio systems, it communicates on specific channels. If you use two transmitters on the same channel, or neighbouring ones, there may be interference. Other electronic equipment can also interfere with radio transmissions.

Channel planning

To achieve optimal radio performance you need to take into account the distance between transmitters and their frequencies. A longer distance between transmitters allows you to use frequencies that are closer together.

When both the transmitter and the built-in receiver are in use, the transmitted and received frequency should be at least 15 MHz apart for optimal operation.

The frequency difference between the transmitted and received frequency must not be 26.0 MHz exactly. Conference Microphone DC20 blocks the option to set the frequencies in this way.

If several transmitting frequencies are being used in the same room, the frequency differences between the units should be at least 1 MHz for optimal operation.

Radio range

The radio range between the units is around 30 m. However, this may vary depending on the particular environment you are in.

C. Battery maintenance

This product uses Lithium-Ion Polymer technology. Lithium-Ion batteries do not suffer from so called memory effects and do not need to be routinely discharged to preserve performance.

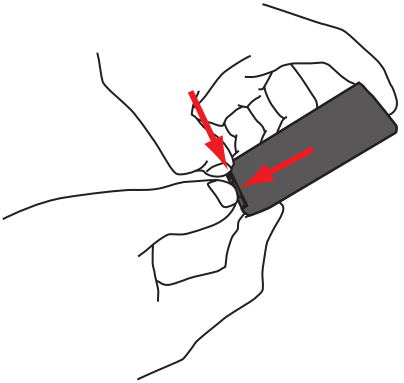
The battery's capacity will degrade over time. This is normal for all rechargeable batteries. Battery lifetime is dependent on usage patterns. The battery is preferably charged little and often; it will reach 90% of its capacity after half its charging time. If stored for long periods of time, the battery is best left semi-charged. Contact your point of purchase when it is time to change the battery.

Operating times vary depending on which features are used. Features such as Bluetooth and the built-in transmitter can be disabled to extend operating times.

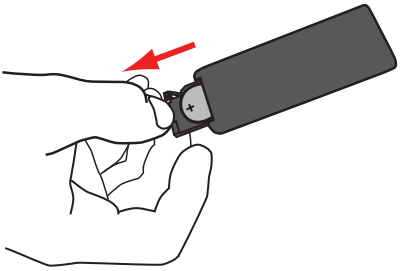
Replacing the remote control battery

The remote control comes equipped with a replaceable 3 volt lithium battery (CR2025). Under normal circumstances the battery will last for several years. The battery needs replacement when the remote control function indicator is dimly lit or does not light up at all.

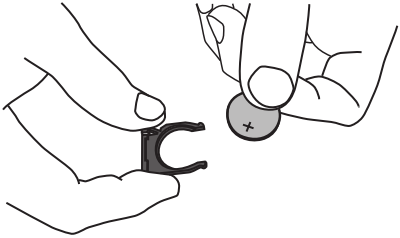
1. Gently push the latch to release the battery holder.



2. Pull out the battery holder.

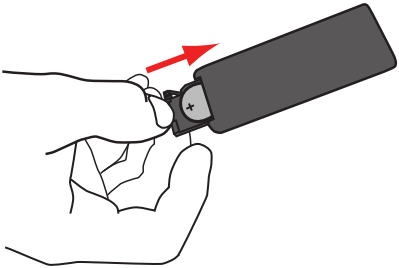


3. Insert the new battery into the battery holder.



Caution: *Observe the polarity. Failing to do so might damage the device.*

4. Push the battery holder into the battery compartment.



D. Troubleshooting

Consult the following guide if you have problems with your equipment. If you still have questions, please contact your point of purchase.

Symptom	Cause	Solution
• The device does not start.	• The battery is depleted. • ⏻ is released too soon.	• Charge the battery. • Press ⏻ for at least 2 sec.
• Poor speech intelligibility.	• The microphone and/or receiver is muted. • The distance between the microphone and the person speaking is too long.	• Unmute the microphone and/or receiver. • Reduce the distance to the speaker.
• Poor range and/or static interference.	• The distance between the microphone and the receiver is too long.	• Reduce the distance to the receiver. Maximum distance is approx. 30 m.
• Loud hissing noise (no sound transfer).	• The units are not paired.	• Redo the pairing procedure. See *Pairing Comfort Digisystem devices* on page 33
• Device will not start during charging.	• **Auto Power Off** is activated.	• Disable **Auto Power Off**

Symptom	Cause	Solution
• `Incorrect channel. Please select again`, or `Channel interference! Please select again` is shown on the display.	• The selected channel is unsuitable for use.	• Select a different channel. See *Change channel* on page 34
• Speech is coming through but considerable background noise is heard.	• Interference from some other radio source is affecting the built-in receiver. • The built-in receiver is not paired with its corresponding transmitter.	• Mute the built-in receiver by pressing . • Redo the pairing procedure. See *Pairing Comfort Digisystem devices* on page 33
• The Bluetooth device will not pair with Conference Microphone DC20.	• The Bluetooth device does not support the necessary profiles.	• Make sure that your Bluetooth device supports any of the necessary profiles. See *Technical specifications*.
• No sound is heard.	• The microphone is muted. • The transmitter and receiver channel does not match.	• Unmute the microphone. • Redo the pairing procedure. See *Pairing Comfort Digisystem devices* on page 33

Service and warranty

Comfort Audio AB accords a limited warranty for two years as of the date of delivery. This covers all defects of manufacture and materials. For accessories the warranty period is 90 days as of the date of delivery. Local agreements or regulations may exist. Defects caused by careless handling or intervention inside the product or its accessories are not covered by the warranty.

If you are in a need of service on your device, please contact your point of purchase. You are always welcome to contact Comfort Audio if you have any questions.

Service centers

Head office

SWEDEN/GLOBAL

☎ +46 35 260 16 00

✉ service@comfortaudio.se

🌐 www.comfortaudio.se

Subsidiaries

DENMARK

☎ +45 33 78 03 02

✉ info@comfortaudio.dk

🌐 www.comfortaudio.dk

NORWAY

☎ +47 959 87 910

✉ service@comfortaudio.no

🌐 www.comfortaudio.no

GERMANY

☎ +49 711 67 400 224

✉ service@comfortaudio.de

🌐 www.comfortaudio.de

BENELUX

☎ +31 229 21 18 65

✉ service@comfortaudio.nl

🌐 www.comfortaudio.nl

USA

☎ +1 877 635-3529

✉ service@comfortaudio.us

🌐 www.comfortaudio.us

Contact information

Head office

SWEDEN
Comfort Audio AB
Box 154
SE-301 05 Halmstad
☎ +46 35 260 16 00
✉ info@comfortaudio.com
🌐 www.comfortaudio.com

Subsidiaries

DENMARK
Comfort Audio ApS
Benediktevej 5, 1.sal
DK-3480 Fredensborg
☎ +45 33 78 03 02
✉ info@comfortaudio.dk
🌐 www.comfortaudio.dk

NORWAY
Comfort Audio AS
Postboks 304
NO-3201 Sandefjord
☎ +47 959 87 910
✉ info@comfortaudio.no
🌐 www.comfortaudio.no

GERMANY

Comfort Audio GmbH

Curiestraße 2

DE-70563 Stuttgart

☎ +49 711 67 400 224

✉ info@comfortaudio.de

🌐 www.comfortaudio.de

BENELUX

Comfort Audio BV

Nieuwe Steen 20

NL-1625 HV Hoorn

☎ +31 229-87 01 10

✉ info@comfortaudio.nl

🌐 www.comfortaudio.nl

USA

Comfort Audio Inc.

411 E. Business Center Drive

Suite 109

Mount Prospect, IL 60056, USA

☎ +1 888 421-0843

✉ usa@comfortaudio.com

🌐 www.comfortaudio.us

Product symbols

CE	The product complies with the European directive 93/42/EEC, including amendments, concerning medical devices. The product complies with the essential requirements of the European Directive 1999/5/EC, including amendments, concerning Radio and Telecommunications terminal equipment.
	The product is covered by the European directive 2002/96/EC, including amendments, concerning Waste Electrical and Electronic Equipment (WEEE). Recycle the product and its accessories according to national regulations.
⎓	Direct current.
	Restriction of usage related to transmitted frequencies may apply, due to national regulations.
	Connector for battery charger.

Indoor use only.

Class II equipment.

Trademark and copyright notices

Bluetooth® is a registered trademark of Bluetooth SIG, inc.

DECT™ is a trademark of the European Telecommunications Standards Institute.

Comfort Digisystem™ is a trademark of Comfort Audio AB.

SecureStream Technology™ is a trademark of Comfort Audio AB.

Comfort Audio™ is a trademark of Comfort Audio AB.

MA0140
141030

© Comfort Audio AB. All rights reserved. All content is subject to change without notice.

Comfort Audio AB

Box 154
SE-301 05 Halmstad, Sweden
Phone: +46 35 260 16 00
info@comfortaudio.com
www.comfortaudio.com