

Comfort Digisystem User Manual

 SecureStream
Technology

Earset DE-10



English

 **Comfort Audio**
HEAR THE FUTURE

User Manual


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Introduction of the Comfort Digisystem

Thank you for choosing the Comfort Digisystem. The products are easy to use, with or without hearing aid.

Before using the product, please read this manual carefully.

The receiver Earset DE-10 receives signals digitally which results in crystal clear sound.

The Comfort Digisystem is fitted with  SecureStream Technology – a special kind of digital technology allowing eavesdrop-secure radio transfer in real time.

Presenting the Earset DE-10

The Earset DE-10 is a small, flexible receiver which is attached directly to the ear, usable with or without all-in-the-ear – hearing aids. The receiver can be used on both right and left ear.

It suits users with high demands for nicely designed and discreet products. Furthermore, the radio signal is encrypted, making it impossible to overhear what is being said.

Functions - Earset DE-10



Getting started

Charging

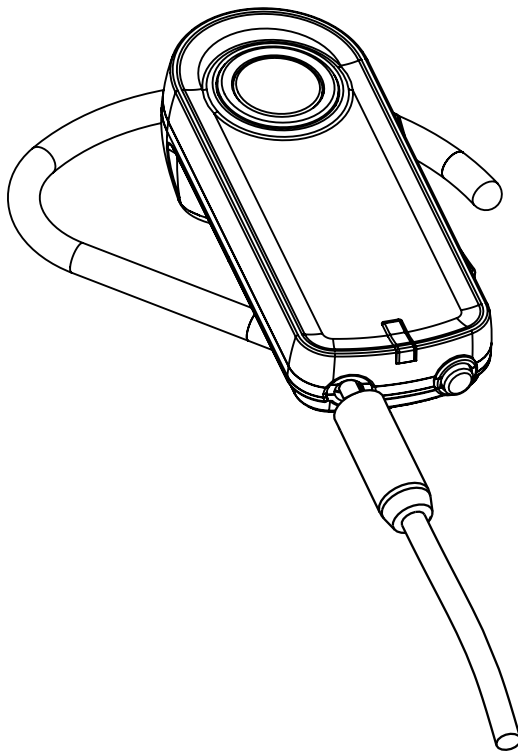
The Earset DE-10 is chargeable. Charge the DE-10 at least 2 hours before you use it for the first time. An empty battery is fully charged within 2 hours.

During charging, the function indicator shows red. When the function indicator shows green, the unit is fully charged and switches to automatic float charging. The unit is automatically switched off during charging.

A fully charged battery has an operating time of up to six hours. Battery lifetime is up to five years. You must not change the battery yourself; please contact your point of purchase.

INPUT 5V --- 220mA

Only use the Comfort Audio charger



Connecting charger to the Earset DE-10

Please note!

Only use the charger supplied by Comfort Audio AB.

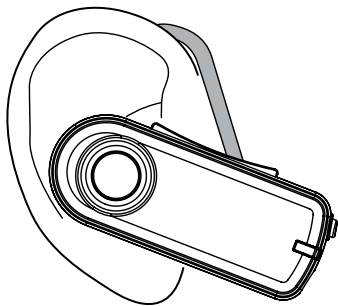
First Time Use

Switch on the receiver by pressing the On/Off-button for around 2 seconds until the function indicator's green light switches off.

The DE-10 is attached to the ear with the earloop.

Please note! Do not have the volume too high; too high a volume can seriously damage your hearing.

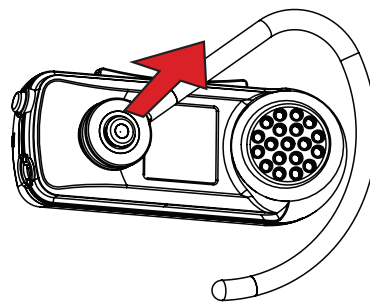
DE-10's earloop can be turned around its fastening so that the loudspeaker can be brought to the ear canal. The earloop should not be bent.



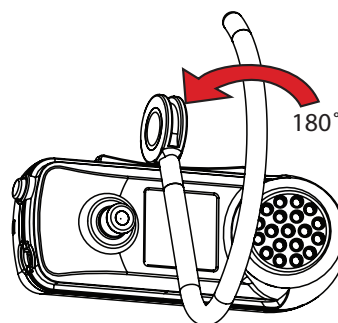
The illustration shows the ideal setting of the DE-10 at the ear

At delivery, the DE-10 is ready to use at the right ear, but by turning around the earloop it can be used at the left ear.

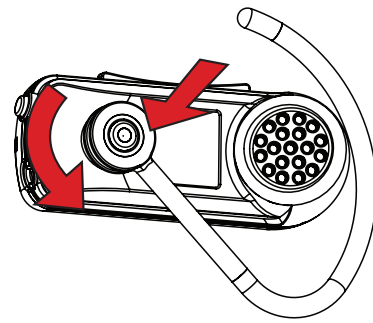
1. Bend the earloop carefully away from the DE-10.



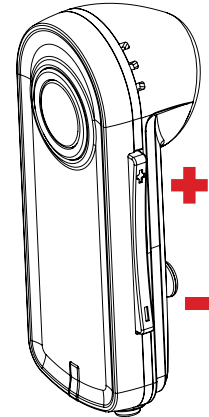
2. Loosen the earloop and turn it around



3. Press the earloop back on until it is firmly attached and turn it slightly while you mount it.

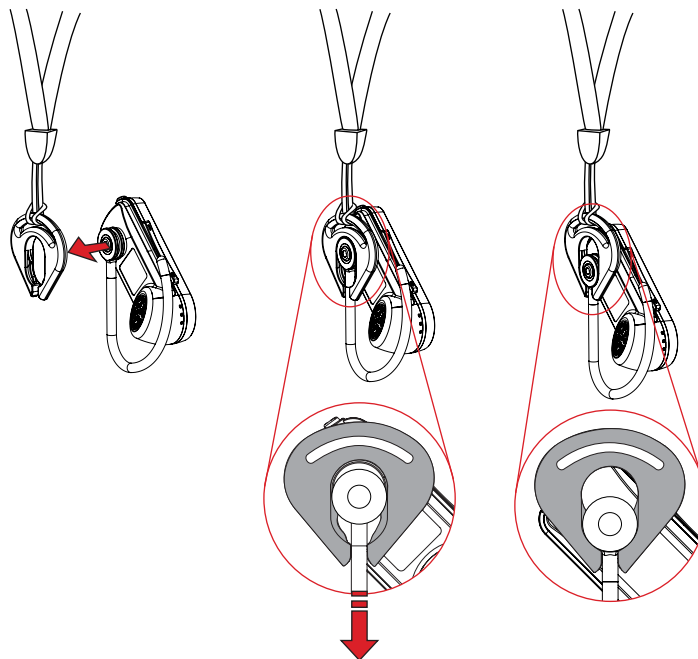


Adjust the volume to a comfortable level with the volume buttons (+ and -) at the long side of the unit.



Switch off the DE-10 by pressing the On/Off-button for around 2 seconds until the indicator's red light switches off.

The necklace can be used as shown in the following illustration



WARNING!

The necklace should not be used if there is a risk of getting stuck, e.g. in a machine or other objects.

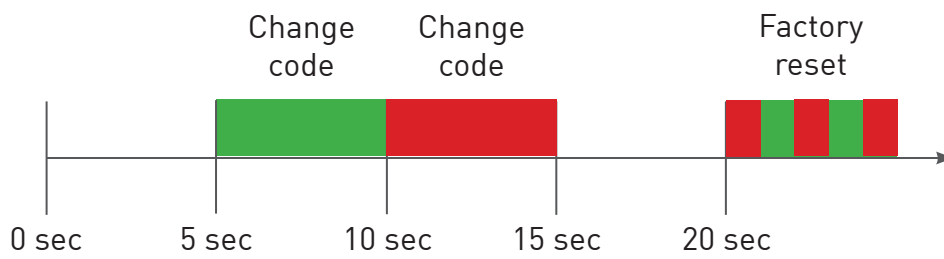
Settings

As the DE-10 does not have a display/menu, the unit's functions are controlled by means of the pairing button. The current function is shown by the function indicator.

In addition to the pairing functions (see section Pairing), three other functions can be activated.

To do this, press the pairing button and hold it immediately after starting up the unit for 2 seconds.

A selected function can always be cancelled by switching of the DE-10 and starting it up again.



Change channel

When the pairing button is pressed for five seconds, the function indicator shows a constant green light. Now release the pairing button, the function Change channel is activated.

10 channels can be selected (see chapter *Radio Range and Channels*). To choose a channel, press the pairing button briefly the number of times corresponding to the desired channel (1x for channel 1, 2x for channel 2 etc.)

After 2 seconds, the selected channel is shown by the same number of green flashes of the function indicator.

Change code

When the pairing button is pressed for 10 seconds, the function indicator shows a constant red light. Now release the pairing button, the function *Change code* is activated.

Press the pairing button quickly 2 times to generate a new code; at the same time the pairing information is transmitted (make sure that the other Digisystem units which should be paired are activated to receive pairing information).

The function indicator flashes red 5 times, pairing information (code and channel) has been sent

Factory Reset

When the pairing button is pressed for 20 seconds, the function indicator will switch to alternating red and green light. The *Factory Reset* function is activated.

To perform a factory reset, press the pairing button quickly one time. The function indicator flashes the number of times corresponding to the channel; see chapter *Radio Range and Channels*.

The channel and the code are now reset to the factory settings.

Activating max volume

Choose your max volume with the volume buttons; then press the pairing button and shortly after the volume [-] button. Keep both buttons pressed for about 10 seconds until the function indicator flashes green 5 times. Now the volume cannot be raised above the installed max volume.

Deactivating max volume

Press the pairing button and shortly after the volume [+] button. Keep both buttons pressed for about 10 seconds until the function indicator flashes red 5 times. Now the volume can be raised as much as you want.

Factory reset deactivates max volume

Pair

Earset DE-10 must be paired using the pairing button, see section *Pairing (via pairing button)*.

Pairing

To use a receiver and transmitter together, they must be paired. All transmitters and receivers are default paired at the factory and will work together.

NB! To prevent eavesdropping, a new code key must be generated and transmitted between the units by pairing.

Transmitting/receiving of pairing information along with a new code can be performed from any Comfort Digisystem unit with a display.

To pair units without a display, see sections *Pairing (via pairing button)* and *Pairing (Connector DT-10)*. Pairing information or a new code key can be received by several activated units.

Pairing (via menu)

1. Choose **Communication - Pair**
2. Select **Receive info** on one unit. **Ready to receive pairing info** is shown in the display.
3. Select **New code** on the other unit; select **Yes**.
4. **Generate new code and send info?** is shown in the display. Select **Yes** (Now both the channel and the coding information have been sent, and sound transfer is eavesdrop-secure).
5. To pair another unit into your coded system, select **Send info** instead on one of your paired units.

Pairing (via pairing button)

(The only way of pairing units without a display, with the pairing button)

You can activate the Pairing function via the pairing button.

1. One brief press of the button opens the *Pairing* menu.
2. Two brief presses activate the **Send info** function.
3. One long press activates the **Receive info** function.

Pairing (Connector DT-10)

The connector cannot send information, only receive it.

1. To activate the position **Receive info**, the connector must be in operation (position I or II) and connected to an operating hearing aid.
2. The selector is then quickly moved to position 0 and back to the operating position (I or II). The connector can now receive pairing info.
3. If no info is received by the connector, after a short time this returns automatically to the previous setting.

Units with both transmitters and receivers built in

Comfort Digisystem units with both transmitters and receivers built-in can be paired separately.

When opening the pairing menu, choose the concerning unit (transmitter/receiver). In units with both transmitters and receivers, the pairing button controls the transmitter.

The transmitter and receiver are paired separately in these units. The code key is always the same for the transmitter and the receiver when these are built-in in the same unit.

The easiest way to get the same code key in the whole Digisystem is to generate a new code key from the combined unit; in that way the built-in receiver gets the same code as the rest of the system.

More functions

Function indicator (LED)

The function indicator shows the unit's status depending on its setting.

When the DE-10 starts, the function indicator shows which channel is selected (1-10) by flashing green 1-10 times.

During charging the indicator shows red. When the charging is completed, the indicator shows green.

Once the unit has been set to receive pairing information, the indicator flashes green quickly.

When pairing information has been received successfully, the indicator shows green during 4 seconds.

When sending pairing information, the indicator flashes red 5 times.

A constant green light indicates Change Channel function.

A constant red light indicates Change Code function.

An alternating red/green light indicates Factory Reset function.

Acoustic indication

Is the battery status low, a warning signal, 2 short sounds, is heard every 60 seconds. The unit has to be charged soon.

Radio Range and Channels

Digisystem transmitters and receivers have built-in antennas. The radio range between the units is around 30 meters. However, this may vary, depending on the particular environment you are in. Like all radio systems, Comfort Digisystem communicates on specific channels. If you use two transmitters on the same or neighboring channels, there may be interferences. Other electronic equipment can also interfere with radio transmissions.

In most European countries, channels 1-3 (863.250 – 864.750 MHz) may be used for hearing products. However, you should always check with the frequency assignment authority in your own country which channels are free to use and which require a licence.

Article DG03001 (F1) 818 - 872 MHz
(complete package DG20001 F1)

Pre-programmed channels

DG03001	1.	1	- 863,250 MHz
	2.	2	- 864,000 MHz*
	3.	3	- 864,750 MHz
	4.	E85	- 820,000 MHz
	5.	E71	- 825,600 MHz
	6.	E42	- 837,200 MHz
	7.	E19	- 846,400 MHz
	8.	E4	- 852,400 MHz
	9.	B15	- 857,200 MHz
	10.	B4	- 861,600 MHz

**Factory-set channel*

In addition to these selectable channels, channels within the frequency range can be set by means of pairing with other Digisystem units.

Attached Accessories

Charger

Necklace

Other Original Accessories

Car charger

The car charger is designed for cars with a 12 Volt (-) earthed electrical system. The charger has short-circuit and automatic overload protection. Disconnect the charger from the socket after use.

Charger unit

For other accessories, please visit our website
www.comfortaudio.com

Trouble shooting

The transmitter and receiver do not start

Charge the transmitter and receiver. Remember to press the On/Off-button for 2 seconds to switch the unit on. Check that the charger is connected to the socket.

Poor Speech intelligibility

The distance between the transmitter and the receiver may be too long. The range is around 30 meters. The distance between the microphone and the person talking may also be too long; move the microphone nearer to the talking person. Try to change channel/environment.

Poor range and interference

In some environments, e.g. buildings with a lot of concrete, iron or sheer metal structures, the range may be reduced. There may also be electronic equipment nearby causing interference. Change channel.

No sound

Check that the transmitter and receiver are set to the same channel.

Loud hissing noise

Check that the units are paired.


Service and Warranty

Comfort Audio provides a comprehensive warranty for two years as from the date of delivery. This covers all defects of manufacture and materials. Defects caused by careless handling or intervention inside the product or its accessories are not covered by the warranty.

Under normal use, battery lifetime is up to five years. Contact your point of purchase when it is time to change the battery.

You are always welcome to contact us at Comfort Audio if you have any questions.

Technical Specifications

Type of transmitter:	SST - SecureStream Technology
Range:	Ca 30 m
Dimensions:	59,6 x 50,7 x 19,6 mm incl. earloop 56,7 x 23,4 x 19,6 mm excl. earloop
Weight:	15 g
Frequency range:	DG03001 (F1) 818 - 872 MHz (complete package DG20001 F1)
Antenna:	Built-in
Operating time:	Up to 6 hours
Battery:	Chargeable Li-Polymer
Charging time:	Approx. 2 hours
Charger:	5V  220mA



Important Safety Instructions - Read these before using your product

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not use near any heat sources such as radiators heat registers stoves, or other apparatus (including amplifiers) that produce heat.
- 8) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet. (Only when using polarized plug)
- 9) Protect the power cord from being walked on or pinched particularly at plugs convenience receptacles. and the point where they exit from the apparatus.
- 10) Only use attachments/accessories specified by Comfort Audio AB.
- 11) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 12) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way such as power-supply cord or plug is damaged liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture does not operate normally or has been dropped.
- 13) Start listening at a low volume.
- 14) Too high a volume can seriously damage your

hearing.

- 15) Don't disassemble the product.
- 16) Should the product break open because of damage, service should only be done by qualified service personnel.
- 17) Never use a transmitter or receiver set to a non-permitted frequency. Check with the frequency authority in the country where the equipment is to be used.
- 18) The product contains sensitive electronic equipment and must be handled carefully.
- 19) Never charge product in closed, unaired spaces such as handbags, cases or other closed storage bags.
- 20) Only use batteries and power supply specified by Comfort Audio AB.
- 21) You must not change the battery yourself; please contact your point of purchase.
- 22) **CAUTION!** Danger of explosion if battery is incorrectly replaced.
- 23) The product shall not be exposed to excessive heat such as sunshine, fire or the like.
- 24) Products include radio transmitters. Do not use products where it is not allowed to use electronic equipment, e.g. on airplanes.

Subject to change



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