

INTRODUCTION

What is wireless fitting?

Wireless fitting is fitting without cables! Widex introduces wireless fitting using the nEARcom concept with the CLEAR440 hearing aid.

Via an industry standard (the nEARcom), data is sent wirelessly between Compass and the hearing aids. The nEARcom module is connected to the NOAHlink. To control Widex wireless hearing aids, the so-called **Tech Module** is placed in the top of the nEARcom.

This ensures wireless connection from the computer to the wireless hearing aids. This bulletin describes the dataflow in the wireless fitting.

Wireless fitting – why?

Over the years, several hearing aid manufacturers have introduced more cables, connectors and battery pills into the clinic with the launch of new hearing aids.

To make the fitting situation easier to handle, Widex has adopted the industry standard nEARcom. This industry standard aims at security in wireless fitting situations and is based on well proven technology.

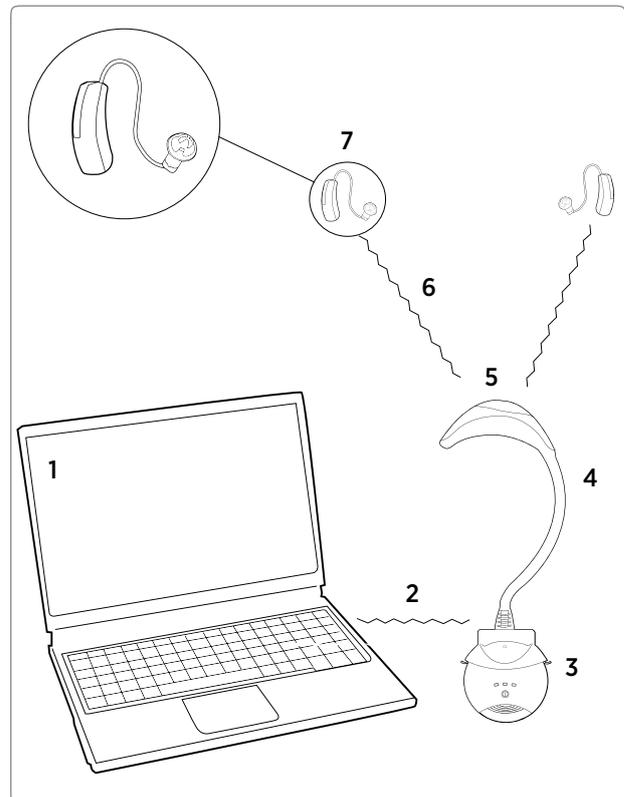
With nEARcom it is possible to fit all CLEAR440 models – without using any cables.

DATAFLOW IN THE WIRELESS FITTING

The dataflow between the fitting software and the hearing aids during the fitting is the same as with wired cables, but instead of the cables a wireless link protocol (WidexLink) is used.

In the following, the dataflow is described under three headings; the dataflow from Compass to the NOAHlink,

from the NOAHlink to the Tech Module and from the Tech Module to the hearing aids.

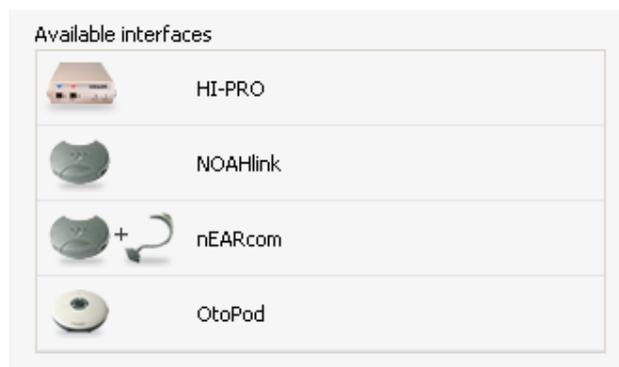


From Compass to the NOAHlink (1, 2, 3)

1. As usual with Widex hearing aids, the fitting is performed in Compass on the fitting computer.
2. Compass provides control of information sent via a Bluetooth link
3. to the NOAHlink.

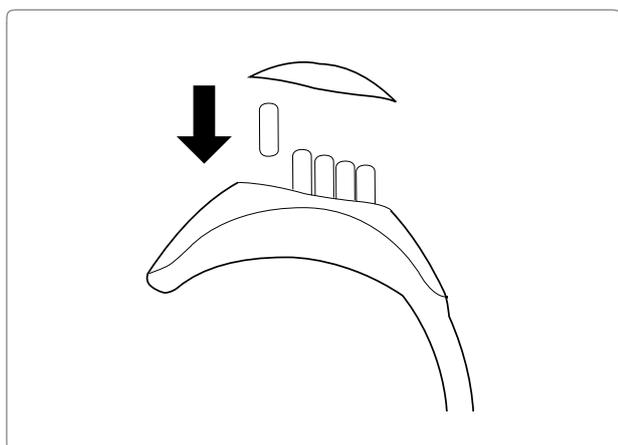
You are properly familiar with this wireless communication from previous fitting situations using the NOAHlink. Since NOAHlink is still the unit used for connection to the computer, this is still a Bluetooth connection.

Compass will activate the nEARcom and the Tech Module when you choose to perform a wireless fitting. To be able to use the nEARcom, you must first choose the nEARcom as your interface in Compass by enabling the wireless detection icon.



From the NOAHlink to the Tech Module (4, 5)

4. When using nEARcom as fitting interface, the NOAHlink must be connected to the nEARcom module.
5. The nEARcom enables communication between the NOAHlink and the Tech Module. There is room for up to five different Tech Modules, allowing the nEARcom unit to be used across hearing aid manufacturers. The Tech Module from Widex provides specific control over Widex wireless hearing aids utilising the proprietary WidexLink protocol.



From the Tech Module to the hearing aids (6, 7)

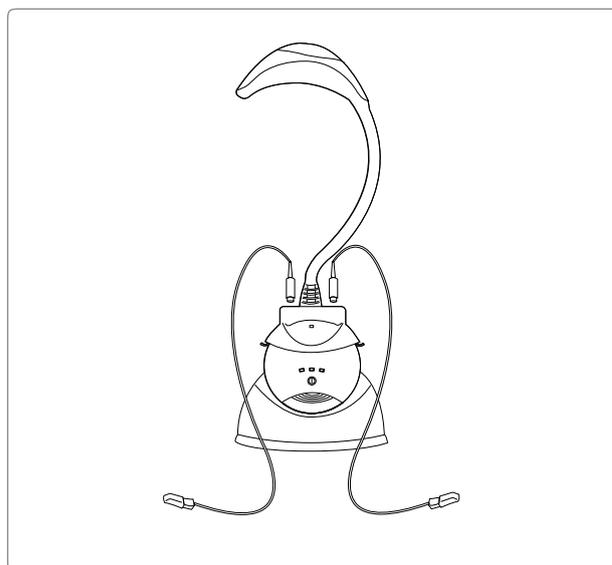
6. Using the WidexLink technology for safe wireless transmission, the fitting data is then sent
7. to the relevant WidexLink compatible hearing aids. The data is transmitted between the Tech Module and the hearing aids according to choices made in the Compass fitting session. The WidexLink technology encodes the data and transmits it to the relevant hearing aid using a so-called Cyclic Redundancy Check.

Consistent data transfer

A Cyclic Redundancy Check is used to ensure data consistency, both in the wired transmission through the nEARcom and when data is submitted for wireless transmission over the WidexLink.

Also allows for cable fitting

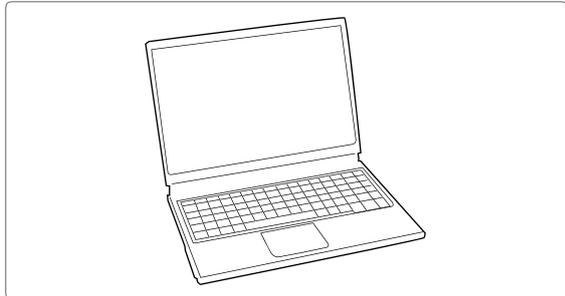
The nEARcom also allows for fitting with cables.



The existing red/blue DIN connections are pushed through the nEARcom so they are still accessible in the same way as when programming with NOAHlink alone. This means that you do not have to change between nEARcom and NOAHlink, but can use nEARcom for all fittings regardless of whether they are wireless or cable fittings.

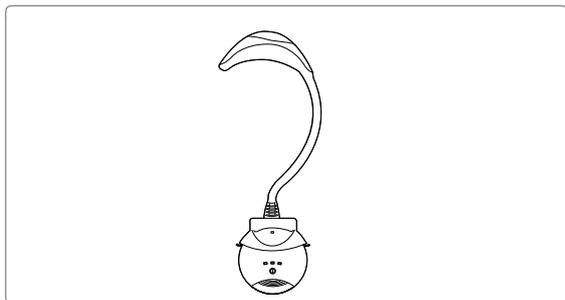
HARDWARE REQUIREMENTS

Below you find the hardware required to perform the wireless fitting.



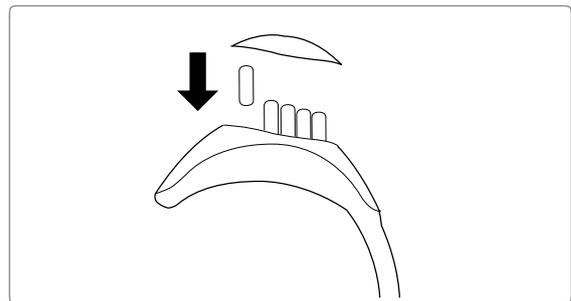
Fitting computer

- incl. Compass V5
- Bluetooth to NOAHlink



nEARcom (incl. NOAHlink)

If you are in possession of a NOAHlink from previous fittings, it is compatible with the nEARcom. You just have to connect the NOAHlink to the nEARcom module.



Tech Module

You have to insert the Tech Module to control Widex wireless hearing aids. Once inserted in the nEARcom, it stays there regardless of fitting method and choice of hearing aid brand.



WidexLink compatible hearing aids - CLEAR440

The hearing aids must be WidexLink compatible. CLEAR440 and future Widex products built on WidexLink technology are suitable for a wireless fitting.

CONCLUSION

Widex has adopted the industry standard nEARcom to secure easy handling and security in the wireless fitting situation. With nEARcom it is possible to fit all models of CLEAR440 – without cables.