

Assistive Technology for Deaf/ Hard of Hearing

Digimaster Soundfield System

A soundfield system is an amplification system that distributes the sound evenly throughout a classroom. It is difficult for the Deaf/Hard of Hearing student to hear with any background noise. The Digimaster soundfield system is beneficial for all students. The speaker's voice is increased by 10dB and clarity is improved. This focuses attention and helps to decrease background noise.



- The soundfield speaker is usually mounted on the wall. If required to be freestanding, a special stand is available. The base of the speaker is to be four feet from the ground. The distance from the ground needs to be taken into consideration when moving the speaker from class to class.
- The silver speaker contains 12 mini loudspeakers which compensates for background noise, poor acoustics and distance from the teacher/speaker.



Touchscreen (teacher's) Microphone/Transmitter

The teacher's mic transmits sound from the teacher to the soundfield system once it is paired/connected. To connect the mic with the soundfield system, hold the mic in direct contact with the top of the speaker. Press the connect icon on the teacher mic and a message will appear to say Digimaster 5000 connected. The speaker light will change from green to blue when paired and you will hear your voice over the system.



Pass- around Mic

This microphone is designed to enhance classroom discussions so that all students are heard clearly. The pass-around mic needs to be connected to the Touchscreen mic using the connect button. Place the mic in a vertical position and press the connect icon. A message will appear showing you have successfully connected the pass-around mic. A blue light on the mic indicates a voice is being broadcast. Hearing aids and cochlear implants have a listening range of four to six feet. By using the pass-around mic the answers of the student's/peers will be heard clearly. The pass-around mic should be held as close as is comfortable to the speaker's mouth (approximately four inches away).

Roger Receivers

- A receiver is integrated in hearing aids and is attached to cochlear implants. They allow students to hear the voice transmitted from the teacher microphone/transmitter directly into the hearing aid or implant processor.
- When connected to hearing aids or cochlear implants, the receivers enable students to hear sounds transmitted from the teacher's Roger Microphone/transmitter. They allow the student to hear the teacher clearly over distance.



Roger Nucleus 6 with Receiver

Nucleus 6 Sound Processor





Roger Nucleus 7 with Receiver



Integrated Receiver for Hearing Aid



Teacher wearing Roger Touchscreen Microphone

Roger Touchscreen Teacher's Microphone



On/Off button

Connect to Network

Connect the receivers

The Touchscreen (teacher's microphone) sends the teacher's voice directly to the student's receivers. This overcomes the effects of reverberation and background noise that can hinder student's ability to listen with clarity and hear the teacher's voice.

The Touchscreen Microphone delivers the teacher's voice through the soundfield system and integrated receivers of a student's cochlear implant or hearing aid.

Connect Receivers:

- Press the connect icon and hold the teacher's mic in direct contact with the receivers on processor/hearing aid.
- Each hearing aid/ cochlear implant must be connected individually.
- Blue lights will flash on the cochlear implant to indicate a connection.
- **Roger 11, 14, 20... connected-** will appear on screen of teacher's mic. This indicates that the hearing aids/processors and receivers are working correctly.

How to wear the Teacher's Microphone/Transmitter:

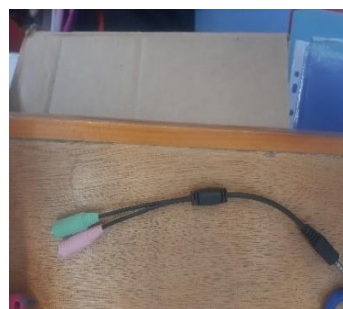
- The teacher (speaker) wears the touchscreen microphone around his/her neck.
- A tab can be pulled at the back of the microphone to shorten the lanyard.
- The teacher's mic should sit on the base of the collarbone. This is about 4 inches away from the speaker's mouth. Jewellery worn by the teacher can cause interference to the sound quality for the student with hearing loss. If a scarf is being worn, ensure it does not cover the microphone.

How to use the Teacher's Microphone/Transmitter:

- The on/off button is located at the side of the touchscreen transmitter. The green light flashes to show the microphone is working.
- The mute button turns off the connection to the sound field and the student's receivers. The button flashes red when in mute mode.
- Turn off the mic at the end of the day. The teacher's mic needs to be charged daily.
- During station teaching in class switch OFF the Digimaster sound field at the base of the speaker cylinder.
- If a student is getting additional help in another room leave the setting on network but switch off the sound field in the base classroom.

Connecting to the Whiteboard:

- Use the jack lead to connect the touchscreen to the laptop.
- Insert one jack end into the port on the Touchscreen mic. Insert the other end into the 'head phone' port on the laptop. The mute button will flash red. You need to select input from the options on the mic screen.
- If you have a coloured splitter (pink and green) insert the microphone jack into the **green** part of the splitter. The student will NOT hear through the pink part of splitter.



- For online learning, PowerPoints and audio the sound will be streamed directly to the cochlear processor or hearing aids.