

bhi NEIS-RM Troubleshooting Guide

Introduction:

Please ensure that the NEIS-RM system is installed and connected up according to the instructions in the NEIS-RM installation and operating manual supplied with the system.

When the NEIS-RM system is connected up and switched on, the green LED will light on the NEIS-DU unit. Normal operation is where there is open communication between the patient in the treatment room and the control room. Turning the volume control on the NEIS-DU clockwise will increase the volume in the NEIS-DU unit and either speech or just the background sounds from the treatment room will be heard in the NEIS-DU unit (see fig 1 below). Pressing the "PUSH TO TALK" button on the NEIS-DU enables communication between the control room and the treatment room so that it is possible to talk to the patient in the treatment room. The volume from the NEIS-SPKR in the treatment room can be adjusted by turning the volume control knob on the rear NEIS-SPKR to suit the environment (see fig 2 below).

To test the noise cancellation part of the system, pull the noise cancelling switch up to the off position. The noise and sounds from the treatment room will increase until you release the switch.

Troubleshooting:

It is recommended that a working set of NEIS-RM parts, and a straight through CAT5 test cable are used to aid the fault finding of suspect installations.

Ideally two people are needed to check the operation of the NEIS-RM system. If this is not possible you will need some audio test equipment like a portable radio, CD or similar audio device to enable you to check that the audio path from the treatment room is working correctly. Alternatively, take the NEIS-DU & NEIS-PSU into the bunker, and using a CAT5 straight through test cable, connect up the system. All checks can then be done in the treatment room (please be aware that if the units are too close together audio "howl round" might occur).

Note: When carrying out any of the checks below, please ensure that the NEIS-RM system is fully switched off each time before you carry out another test.



Fig 1: Rear of NEIS-

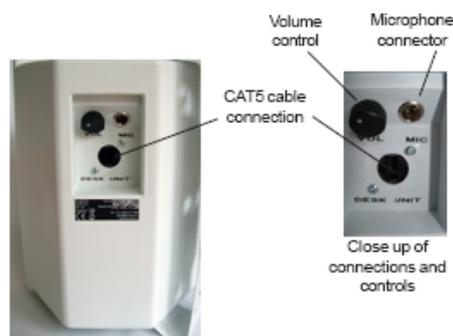


Fig 2: Rear of NEIS-SPKR

NEIS-RM doesn't work at all

1. Make sure that the NEIS-RM system is switched off by turning the NEIS-DU ON/OFF Volume control knob counter clockwise until it clicks off.
2. Ensure that the all CAT5 cable connections are fully mated in the NEIS-DU, NEIS-SPKR, and any CAT5 wall sockets where applicable.

3. Check that the NEIS-MIC remote microphone is connected to the NEIS-SPKR unit correctly.
4. Check that the NEIS-PSU is working and the green neon lights when the mains power is switched on, if ok go to 5. If the neon on the PSU is not glowing and you are sure that the mains power is switched on then the NEIS-PSU is faulty. Replace the NEIS-PSU to see if this solves the problem.
5. Switch on the NEIS-DU unit. If the LED doesn't light up then the NEIS-DU is faulty and needs replacing. If the LED on the NEIS-DU lights up go to 6.

Audio problems

6. Turn the on/off volume control switch on the NEIS-DU clockwise and listen to the speaker. If you cannot hear any sounds in the speaker then this indicates that the NEIS-DU unit is faulty and needs replacing.
If you can hear sound in the speaker but still can't hear the audio from the treatment room, the problem could be caused by one of the following: a) Faulty CAT5 connections – Check the CAT5 connections by substituting the existing cable with a known CAT5 straight through test cable. b) Faulty NEIS-DU unit - Substitute the NEIS-DU with a known working unit and re-test. c) Substitute the NEIS-SPKR unit with a known working unit and re-test. d) NEIS-MIC is faulty – Try replacing this to see if there is any difference.

Low audio output even when the NEIS-DU volume control is set to maximum:

7. Try the following: a) Substitute the NEIS-SPKR with a known working unit. If volume in NEIS-DU increases then the NEIS-SPKR is faulty and needs replacing. b) Substitute the NEIS-DU with a known working unit and re-test. If volume increases then replace the NEIS-DU unit.

No audio in NEIS-SPKR unit when PTT on the NEIS-DU is pressed, but audio in the NEIS-DU when PTT is released:

8. This could be caused by either a fault in the NEIS-DU unit or a fault in the NEIS-SPKR unit. Ensure that the volume control on the rear panel of the NEIS-SPEKR has not been turned down to the off position. Try the PTT again. If the unit still doesn't work, substitute the NEIS-SPKR with a known working unit and re-test. If you can now hear audio then the NEIS-SPKR unit is faulty and needs replacing. If there is still no audio when the PTT is pressed then the NEIS-DU is faulty and needs replacing.

Noise cancelling doesn't appear to work

9. Go to pages 16 & 17 of the NEIS-RM installation and operating manual. Peel off the serial number label to check that the noise cancellation jumper plugs are selected correctly for filter level 7 (jumper only across pins 1 & 2). To test that the noise filter is working, pull up and hold the noise cancellation switch on the rear of the NEIS-DU in the off position. The noise in the NEIS-DU speaker should increase dramatically. If there is no difference then the NEIS-DU is faulty and needs replacing.

Audio sounds distorted in the NEIS-DU unit

10. a) Turn the volume down on the NEIS-DU unit. b) Substitute the NEIS-DU with a known working unit and re-test. If the audio improves then the NEIS-DU is faulty and needs replacing. c) Adjust the filter level by changing the noise cancellation jumper plugs to reduce the filter level. d) Substitute the NEIS-SPKR with a known working unit and re-test. If the audio improves then the NEIS-SPKR is faulty and needs replacing

For any service queries or for more information please call 0044 (0)845 2179926 or email info@bhi-ltd.co.uk and we will endeavour to respond to any requests as quickly as possible.