



This Fast Track Guide takes you through the basic steps required to get your CRM-220 working.

## Part 1 Batteries

Connevens recommend using rechargeable nickel metal hydride batteries. However, if you wish to try out your new CRM-220 immediately, you can alternatively use alkaline PP3 batteries.

### Fitting batteries

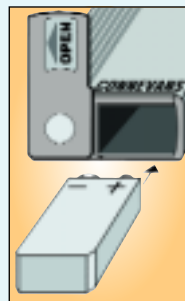
To fit a battery, slide open the battery cover, insert as shown.

*Although there is a battery polarity label in the CRM-220 between you and me you can actually fit the battery either way around and it will still work!*

### Rechargeable nickel metal hydride (NiMH) batteries

New rechargeable batteries require charging before use, the charger recommended by Connevens is an intelligent quad charger (Part no. 22684).

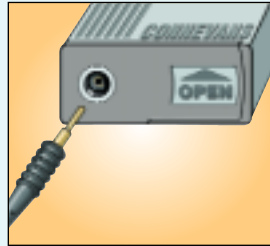
- 1 Plug in the batteries to be charged. New batteries will need a firm push into the charger – we would suggest using the flat of the hand. Try lifting the battery a little, if it comes straight out it was not pushed in properly.
- 2 Instructions for using the quad charger are simply:
  - a) Insert battery
  - b) don't touch 'mode' button
  - c) battery is charged when display shows 'RDY'.



The performance of the CRM-220 is the same whatever type of battery is used.

**Part 2a Turning on**

- 1 Connect an aerial into the CRM-T220 transmitter.
- 2 Turn on the transmitter using the toggle switch on the top panel. The battery low indicator should give you a confidence wink.
- 3 Note the operating channel letter of the transmitter, this is shown on the right of the top panel label.
- 4 The CRM-R220 receiver has a 2 channel capability however most receivers are used with just the resident channel.



Check the resident channel on the receiver, is it the same channel as the transmitter?

- 5a If the transmitter frequency is the same as the receiver resident channel, turn on the receiver by moving the toggle switch to the right towards the channel number. The battery low indicator should give you a confidence wink.

- 5b If the transmitter frequency is NOT the same as the receiver resident channel, you require a plug in frequency/channel module. Modules have their frequency engraved on the front and are fitted in the front of the receiver. When using a channel module the receiver is turned on by moving the toggle switch towards the word module. The battery low indicator should give you a confidence wink.



The channel on the transmitter MUST match the channel used on the receiver!

**Part 2b Using a 'listening stick' to check the CRM-220 system**

**Hearing aid users setting up a CRM-220 for themselves should skip this section and move on to Part 3.**

- 1 Plug the 'listening stick' into the CRM-R220 receiver output socket (O/P).
- 2 Give the CRM-T220 transmitter to a colleague and ask them to walk to the other side of the room while talking into the microphone at 150mm (the length of a biro) from the mouth.
- 3 Using the listening stick, listen to the CRM-R220 receiver adjusting the Tx volume to a comfortable level using the supplied twiddling stick.

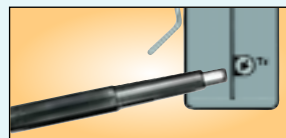
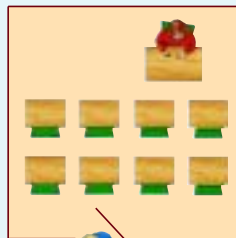


Assuming you are able to hear your colleague talking, well done – you are halfway to a fully working system. The next step is to get the hearing aid(s) working with the CRM-R220 receiver.



### Part 3a Using a CRM-R220 receiver with an inductive neckloop and hearing aid on 'T'

- 1 Plug in a neck loop.
- 2 The hearing aid user should listen at arm's length to somebody talking, to establish the level of sound from the hearing aid alone. Page 40 of the user guide explains further as to why we do this.
- 3 The hearing aid wearer should take the receiver and place the neck loop around their neck. They should then turn their hearing aid(s) to the 'T' position.
- 4 Make sure that both CRM-220 units are turned on.
- 5 The helper should take the CRM-T220 transmitter and walk to the other side of the room while talking into the microphone at 150mm (the length of a biro) from the mouth.
- 6 The hearing aid user should be able to hear the helper through the CRM-R220 receiver by adjusting the Tx volume up to a comfortable level using the supplied twiddling stick.



Congratulations, it's as simple as that!

If nothing is heard with the hearing aid, a hearing helper could listen using a listening stick. If they can hear with the listening stick then any problem must lie with either the hearing aid or the neck loop.

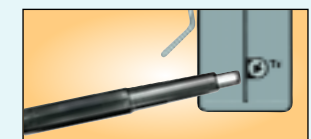
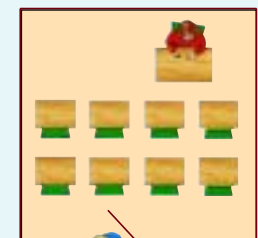
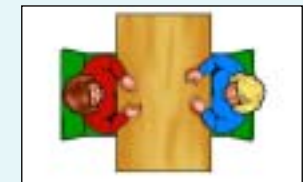
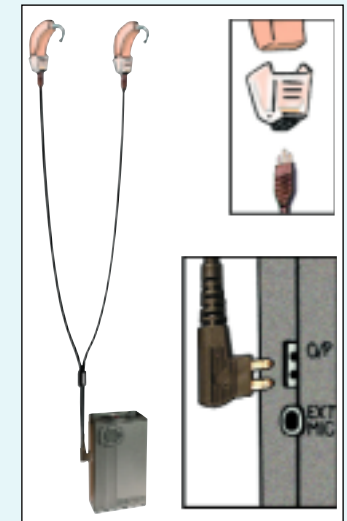
The hearing aid 'T' position can be roughly checked by moving the hearing aid near to a mains transformer (e.g. any plug-in power supply) when you should hear a buzz or hum. The neck loop can be checked by exchanging it for a spare one.

### Part 3b Using a CRM-R220 receiver with a direct input hearing aid

- 1 Ensure that the 'Tx' volume is at minimum.
- 2 The hearing aid user should listen at arm's length to somebody talking, to establish the level of sound from the hearing aid alone. Page 40 of the user guide explains further as to why we do this.

*Please read the hearing aid user instructions to determine which hearing aid control settings are required to use direct input.*

- 3 Plug the direct input lead into the 'O/P' socket and connect to the direct input shoes and hearing aids. It may be necessary to temporarily remove the hearing aids to do this.
- 4 Make sure that both units are turned on.
- 5 The hearing aid wearer should take the receiver and can now refit their hearing aids.
- 6 The helper should take the CRM-T220 transmitter and walk to the other side of the room while talking into the microphone at 150mm (the length of a biro) from the mouth.
- 7 The hearing aid user should be able to hear the helper through the CRM-220, adjusting the receiver Tx volume control to a suitable level using the supplied twiddling stick.



It may be necessary to repeat the comparison of sound from the hearing aid microphone and sound through the radio aid system.

Congratulations, you now have a working system!

## Part 4 Setting the volume

In an ideal world, setting the volume controls (and the treble and bass tone) would be done with the help of an audiologist, however it is also possible for a good listener to set their own listening preference.

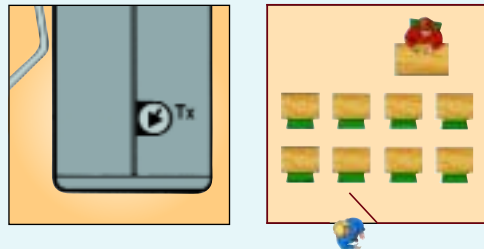
*The objective is very simply that the sound heard at a distance through the CRM-220 should be similar or louder to the sound heard from the hearing aid on its own at close range in a quiet room.*



### Volume controls

The CRM-220 volume should be set by a comparison method.


- Initially establish a satisfactory listening level with the hearing aid(s) alone, at arm's length from somebody talking to you.
- Turn on the CRM-220 system, give the transmitter to your helper and ask them to walk away whilst talking into the microphone at 150mm (the length of a biro) from the mouth.
- You should now listen to the hearing aids but this time through the CRM-220 receiver. Use a twiddling stick to adjust the transmitter volume control (Tx) to match, or be slightly louder than, the original listening level through the hearing aid alone.



Be careful not to overbalance hearing aids or cochlear implant processors that have Wide Dynamic Range Compression, although the aid will adjust itself there will be an increased level of background noise and loss of quality. Always adjust by turning the volume upwards, if necessary turn the volume down and slowly back up again.

### Tone controls

Setting the tone controls is straightforward but most users do not need to adjust them at this stage.

 Pages 29 & 40 – CRM-220 User Guide

## Using a CRM-220



This fast track guide is designed to get you started with your new CRM-220 quickly and easily.

There are several other useful accessories to help gain better use of your CRM-220, such as a conference table microphone or tv.

The use of these are explained in the main CRM-220 User Guide & Reference Manual.

[www.connevens.com](http://www.connevens.com)

– the information website for Connevens

[www.DeafEquipment.co.uk](http://www.DeafEquipment.co.uk)


– the e-commerce website for Connevens where you can order spares online.



**Putting a CRM-220 system together**

Please refer to the Instruction Booklet for full information, however the following illustrations will give you a quick guide to 'what goes where'.

**Using CRM-220 Transmitter with integral microphone**



Sound input

CRM-220 Transmitter  
Part No. 2250


CRM-220 aerial supplied with transmitter, fits into bottom of Tx with a push fit.

Page 27 – CRM-220 User Guide

**Label microphone**

The microphone pack (Part no. 22364) contains 3 items; a microphone head, lead and lapel clip.


The microphone head plugs directly into the lead with a push on fitting.



- Black stub microphone head  
Part No. FMG211
- Lapel clip for black stub mic head  
Part No. FMG212
- CRM-220 stub microphone lead  
Part No. 2271500R

Page 16 – CRM-220 User Guide and Connevens Catalogue – Sections 1

**Using CRM-220 Transmitter with lapel microphone**



Sound input

CRM-220 Transmitter with lapel mic and aerial

Note: internal microphone is automatically disabled when lapel mic is in use.

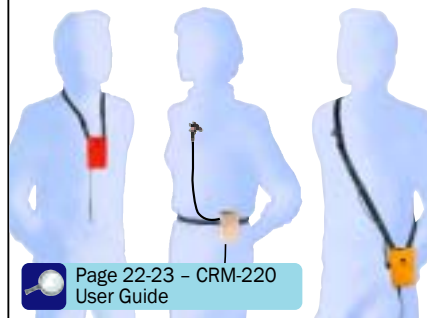
Page 16 – CRM-220 User Guide

**Wearing the CRM-200 transmitter**

Tx with neck harness

Tx with belt harness

Tx with hip pouch




Page 22-23 – CRM-220 User Guide

**Using CRM-220 Transmitter with conference microphone**



Tx and conference microphone in centre of table




Conference mic plugged into receiver, presenter wearing transmitter

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**Connecting CRM-220 to external equipment**

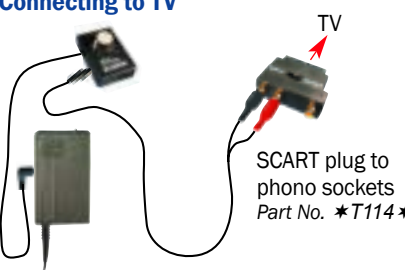
A transmitter input adaptor allows you to connect a CRM-T220 transmitter to other equipment such as TV, video or hi-fi.



CRM-T220 transmitter stereo input adaptor  
Part No. 2206S

External audio equipment will plug in here

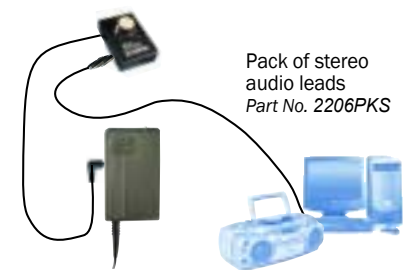
**Connecting to TV**



TV

SCART plug to phono sockets  
Part No. \*T114\*

**Connecting to external audio source**



Pack of stereo audio leads  
Part No. 2206PKS

Page 42-44 – CRM-220 User Guide and Connevens Catalogue – Sections 1 & 11



### Using CRM-220 Receiver with neck loops

Multiturn plastic neck loop and patch cord  
Part Nos. FMG441 & 293/200-700mm

Fabric neck loop  
Part No. 225WH

Rx with neck loop plus lapel microphone

Both multiturn plastic and fabric neck loops have similar performance but the plastic loop is usually preferred.

Page 20 – CRM-220 User Guide and Connevens Catalogue – Section 1

### Rx with direct input V lead plus hearing aids and shoes

Direct input V lead DV300mm-1metre

Page 21 – CRM-220 User Guide and Connevens Catalogue – Section 1

### Wearing the CRM-220 Receiver

Pages 22-23 – CRM-220 User Guide

Rx with child's body harness

Rx with belt harness

Rx with bum bag

Rx with belt pouch

### Listening stick test kit

Listening stick test kit for CRM-220 Part no: 22874

Receiver testing stick is used to listen to the receiver output

Stetoclip is used to listen to the hearing aid either through the earmould or direct to earhook.

Variable attenuator has a roller wheel to allow hearing aids to be listened to at a comfortable level.

CRM-220 receiver testing stick only  
Part No. 22875

Stetoclip listener and variable attenuator  
Part No. 22880F

Page 36-37 – CRM-220 User Guide and Connevens Catalogue – sections 1 & 6 for separate items and spares.



# Connevens Limited

54 Albert Road North, Reigate, Surrey RH2 9YR  
Switchboard 01 737 247571  
Text/Minicom 01 737 243134 Fax 01 737 223475  
Email [mail@connevens.com](mailto:mail@connevens.com)

Information website: [www.connevens.com](http://www.connevens.com)  
Online shopping: [www.DeafEquipment.co.uk](http://www.DeafEquipment.co.uk)

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