

Telephones

Telephones.

Corded telephones. The majority of amplified or hearing-impaired telephones will have:

- Big buttons with contrasting numbers.
- Volume control and possibly a tone control.
- Amplified ringer with flashing light.
- Telecoil

Corded telephones usually have a large base, which makes them stable, and a larger surface. Volume and tone controls may be mechanical sliders or rotating controls. (User often marks the volume sweet spot).

Additional features may include:

- Emergency number shortcuts
- Short cuts to favorite numbers
- Headphone socket

Cordless telephones.

- Large but not big buttons
- Volume and tone controls
- Telecoil
- Selection of ringer tones, useful to adopt to suit hearing loss
- Short cuts to favourite numbers.
- You may have more than one handset – up to four. The number of extra handsets that you have must not affect the REN (*See later*)
- Cordless telephones will not work in the event of a power cut.

Batteries. Telephone handsets use re-chargeable N-Cad batteries. Battery life should be about 2 years, when replacing please ensure that only re-chargeable batteries are used. Do not mix old and new batteries; and never install alkaline batteries in a re-chargeable handset.

Users. Cordless telephones are more complex to use than corded telephones.

Combo. There are corded/cordless combination kits available. The advantage being that in the event of a power failure the base station will continue to function.

- **Buttons.** That's the way they manufacture, one style to cover all disabilities.
- **Speakerphone.** With severe hearing loss it may be the only option.

Telephones

Telephones in the workplace.

Office telecom systems are installed with standard handsets that in some cases are not compatible with hearing loss. In the case of open plan offices and workstations then there is the possible problem of noise. It is difficult to connect an amplified off the shelf telephone into the system. An option may be to install a reception style headset and microphone, Plantronics is the brand.

Telepermit. And REN (RN)

The Telepermit is the green sticker; but in some cases it may be printed on the box. It is the approval that the telephone is suitable to be connected to the NZ network, and indicated its RN. The RN number is printed on the side of the Telepermit. It is important that you do not exceed a total RN of five.

Telecom connections. What may you connect to your Telecom connection?

- Voice telephone
- Voice telephone extensions
- Broadband
- Fax machine
- House alarm
- Alarm pendant
- Sky TV

If you have too many connections and the RN exceeds five then you may have problems with volume and ringing.

Telecom connection - Fibre Optic Cable.

Fibre optic cable is replacing the copper cable for the distribution of Telecom data and voice; telecom companies are also offering to upgrade their customers to fibre optic. Fibre optic offers a very fast Internet connection, and the telecom companies will bundle voice with the data.

A fibre optic connection will require mains power, so if you rely on fibre optic for voice as well as data then if there is a power outage then you will have no data or voice. Should the telecom data fail then you will lose both voice and data.

A Fax machine will not work on a fibre-optic connection.

If you have Captel then you will need to use a broadband option.

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- **Interference**

If there is a problem with noise or interference on your telephone it is worth checking internally before contacting Telecom.

- Internet connection. The commonest source of noise complaints. If you have Internet and you share your Internet line with your telephone line then you will require a DSL filter. The DSL filter is a passive device that prevents the Internet signal from causing noise and interference to the voice signal. The DSL filter must be connected at the wall Telecom socket where the Telecom line enters the property. If you have Telecom extension sockets in other parts of the property then each socket will require a DSL filter. If you are a user of a Fibre-Optic connection then you will not require a DSL filter.
- Microwave. If you position your telephone receiver near a microwave then there is a possibility of electrical noise interference when the microwave is running.
- Lighting. Modern lighting installations using LED of similar light sources often have a transformer to reduce the voltage. This is quite common in some kitchen lights where the light source slides along metal tracks. This can be a source of local interference.
- External noise sources.
- If you have overhead power lines near your property then rain or damp conditions may cause the lines to short and create electrical noise.
- Electric fencing. The control boxes can emit interference.
- Telecom connection. The line from the street to your property may suffer from dampness or a poor physical connection where it joins the house. This often comes to light after heavy rain.

- **Help from Telecom**

Telecom will provide assistance. Call 123 and you can advise Telecom that you are hearing impaired or deaf. Telecom will mark your account with an alert.

Fire Service. If you are Deaf or have a profound hearing loss then you should advise the Fire Service. They will mark your address and in the event of a call-out will be aware of any potential problems.

Telephones

- **Assistive Listening Devices (ALD)**
Individual.

In the home loud or excessive television sound may be source of friction, not from the hearing impaired but from their families.

Home Solutions:

- The simplest choice would be use headphones; the problem being that plugging in the headphones will cut the speaker. With modern televisions you should find a menu control, often on the remote control. One of the menu items will be sound. While not all televisions are the same, you may find a headphone control that switches the speaker on/off. In some cases a neck loop may be connected allowing a hearing aid telecoil to be used.
- Loop amplifier. Connect an inductive loop amplifier to the television, install a wire loop around the room, or place a loop cushion in the comfy chair, provided the hearing aids have a T Coil you will have sound. The loop amplifier will require the same audio connections as a wireless headset.
- Wireless/IR headset. Wireless (radio) most popular, has a longer range, IR (Infra Red) is line-of-site, even turning away from the transmitter will cause loss of the signal. Sunlight may cause noise interference.
- To have a successful wireless installation you need a direct audio connection from the TV to the transmitter. On the rear of a TV you will find a wide range of connectors, typically used to connect Sky TV or video players. The sockets and plugs are called RCA connectors and are colour coded red, black, and yellow. To need to find a black and red audio out pair. If there is not an audio out pair then you need to find the optical audio out. Connect the black box to the fibre optic output and then connect RCA connectors.
- Bluetooth. This is a short-range digital transmitter /receiver More and more hearing aids are Bluetooth enabled, this allows the aid to communicate with a digital streamer or transmitter.
- Bluetooth transmitters are easily connected to the fibre optic audio on the television. If your hearing does not have Bluetooth, then you can still stream to Bluetooth headphones or even Bluetooth loudspeakers.
- Portable amplifiers. Small battery powered personal amplifiers like Bellman Maxi have a direct connection cord to headphone sockets.

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Assistive Listening Devices (ALD)

Groups, entertainment.

With larger areas such as theatres, cinemas and churches there may be a requirement to comply with the NZ Building Act 2004 clause G interior environment. This requires that new and renovated buildings have an assistive listening system installed:

- Public buildings with space for at least 250 people.
- All theatres cinemas, and public halls.
- Assembly spaces in aged homes occupied by 20+ people.

The standard response in these buildings is for an inductive loop to be installed. This is often the case with Church's, meeting halls, etc.,

Possible actions:

- Install a loop in a section of the area.
- Loan inductive receivers and headphones.
- Consider improving the interior sound with speakers.

Other.

- If you do opt for inductive loops then you will need to connect the inductive loop amplifier to the audio system.
- An inductive loop assumes that those who need hearing assistance will use a hearing aid, and that the hearing aid has a T coil. A problem is that not all hearing impaired people have hearing aids.
- Inductive loop receivers and headsets are available.

Alarm systems.

Specialised alarm systems are available for the hearing impaired and for the Deaf. They are expensive, need to be correctly installed and instruction needs to be given in their operation and use. For more information you need to contact LIFE HTS services.

There are simpler systems available,

- Telephone ringers
- Doorbells with wireless remote ringers
- Alarm clocks

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Telecoil

T or telecoil. A telecoil is an electrical coil that is switched to temporarily replace the microphone in a hearing aid. The coil detects the electrical sound field created by an inductive sound source; this sound source is then amplified and processed by the hearing aid.

- By switching out the microphone only sound from the inductive source is heard. So background noise is totally reduced.
- An inductive loop system is often found in cinemas, theatres, and meeting places.
- A telecoil fitted telephone is in effect an inductive sound source.

Telephone program. Hearing aids are programmed with a specific program for use with a telephone. This may not be a telecoil but the amplification of the telephone sound may be tailored to a specific hearing loss. The program may not work with an inductive loop.

If you are a Hearing Aid user then you need to discuss telecoil/telephone program with an audiologist.