Equipment and Devices for People who have Dual Sensory Loss

Senses
Foundation (Inc.)
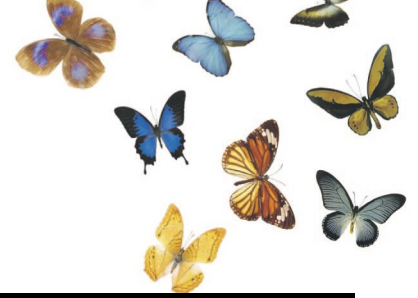
The Royal WA Institute for the Blind and the West Australian Deafblind Association

Ending the isolation

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This booklet provides an overview of the types of equipment that are available, and may be useful to people who have dual sensory loss.

Equipment examples are not exhaustive and further research may be required to find equipment that will be suitable depending on the individual's needs and whether they require audio, large print or tactile feedback.

At the end of the leaflet there is a list of organisations where products may be available for purchase.

DISCLAIMER:

Contents

Funding

Western Australian funding schemes are referred to below *(funding systems will vary from State to State)*

To support an individual's ability to remain independent, financial assistance through grants may be available for some specialist equipment referred to in this booklet.

Possible funding sources:

- *Disability Equipment Grant (administered through the Independent Living Centre)* www.ilc.com.au
- *Disability Services Commission Community Aids and Equipment Programme (CAEP)* www.disability.wa.gov.au/dscwr/_assets/main/.../caep_brochure.doc
- *Home and Community Care (HACC) - Provision of Goods and Equipment Programme* www.health.wa.gov.au/hacc
- *Equipment for Living Grants* http://ww.ilc.com.au/pages/equipment-for-living

Both the above grants are means tested. Applications will require verification by a professional that the equipment is appropriate and that the individual will benefit in their ability to maintain independence. Senses Foundation may be able to support with an application.

If you are considering applying for one of these grants refer to the above websites for further information relating to eligibility criteria.

The Association for the Blind administers the Disability Equipment Grant on behalf of the Independent Living Centre for equipment for people with vision impairments.

Other organisations such as Telstra and Australian Hearing have Disability Equipment Programmes. Eligibility applies.

Alerting Devices

Devices for a person with sight and hearing difficulties to alert them to what is happening in the home eg. a caller at the door, activated smoke alarm or alarm clock, telephone ringing etc.

This section provides examples of alert systems that use flashing lights, increased volume and/or vibrating systems in the home (devices can also be used in the workplace).

NOTE: People who are sensitive to strobe flashing lights may find some of these products unsuitable.

Door Chimes

Door chimes are available with settings that can alert a person with dual sensory loss to visitors.

HPM Doorbell

- Portable door chime
- Adjustable chime with high and low setting
- Flashing alert
- Works within a 70m range
- Use with batteries or mains adaptor

Wireless Door Chime with LED Light

- Door chime can be wall mounted or portable
- Adjustable high/low volume setting
- Flashing alert
- Option to use volume and flashing light together or as single setting

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High Volume Wireless Doorbell

- Doorbell is portable
- Can also be used outdoors up to 30 metres from transmitter
- Volume can be adjusted to medium or loud setting

Phoenix Hearing Instruments
www.phoenixhearing.com.au

Alerting Devices

Alert Systems

Alert systems are wireless systems set up to alert people who are Deaf, hard of hearing or Deafblind by transmitting signals to a receiver either by flashing light signals, or vibrating signals via a receiver in the form of a pager worn on clothing. Depending on individual circumstances at home or in the workplace, these systems operate through transmitters to alert the user to callers at the door; telephone/fax ringing; activated smoke alarm or baby monitor.

Bellman Visit Transmitters

Bellman Visit transmitters detect what is happening around your home…

The door transmitter helps you to know when someone is at the door.

The Telephone transmitter helps you to notice incoming calls.

The Smoke Alarm transmitter helps to detect fires.

The baby-cry transmitter helps you know when your baby is crying.

wireless

Vibration

Light

Flash

Sound

Bellman Visit Receivers

Bellman Visit receivers alert you when a transmitter is activated...

Bellman Visit Pager Receiver.   Pager Charger.

Bellman Visit Alarm Clock Receiver.   INCLUDES BED SHAKER

Bellman Visit Flash Receiver.   Bed shaker.

Bellman Visit Portable Receiver.   Bed shaker.

*Word of Mouth Technology **www.wom.com.au***

Alerting Devices

The Bellman
Visit

Alerting System

Printacall **www.printacall.com.au**

Transmitters

Receivers

Bellman Visit Alert System

- Stand alone wireless alerting system (requires minimum of two devices, a transmitter and receiver)
- Alerts user to door, telephone, baby crying or smoke alarm
- Compatible with most security systems
- The user is alerted via either flashing light, extra loud ring or a pager
- A pager is clipped to clothing or can be carried in the pocket alerting the user through vibrating signals

Bellman Visit Flash

- Portable receiver works with wireless transmitter for use with Bellman Visit Alert System (see above)
- Different flash signals to alert to callers at the door, activated smoke alarm, telephone/fax ringing or baby alarm

Alerting Devices

Baby Monitor

- Can be integrated with other Bellman alerts and receivers
- Alerts a parent/carer who is Deaf, hard of hearing or deafblind to a baby crying
- Device must be set up using flashing light and/or vibrating pager receivers

Pager

- Pager is clipped to clothing or can be carried in the pocket
- Pager alerts user through vibrating signals

Bed Shaker

- Placed under the pillow at night
- Pad will vibrate to alert the user that systems connected to it have been activated
- Alerts to smoke alarm, alarm clock etc.
- Requires connections to Flash or pager charger

Alerting Devices

Serene Innovations Central Alert System

Alerts to alarm clock, doorbell, phone/fax calls, baby crying. Also acts as a motion detector.

- Flashing alert—bright LED strobe light
- Adjustable loud audible alert
- Vibrating alert (bed shaker)
- Works within 60 metre range
- Large LED display on clock
- Can be connected to other central alert systems

Phoenix Hearing Instruments
www.phoenixhearing.com.au

Smoke Alarms

Smoke alarms can be installed in the home or in the workplace using extra loud, flashing light or vibrating alerts.

For a person with sight and hearing loss who is unable to detect a flashing light or hear the extra loud alert it may be advisable to have a smoke alarm installed with an alerting system. A vibrating pager would be worn during the day; at night the system is connected to a vibrating pad placed under the pillow, both systems would alert the user when a smoke alarm is activated

Depending on an individual's level of vision and hearing, a combination of these systems may be suitable; ie using extra loud or flashing alert during the day, and at night when the hearing aid is not worn using a vibrating alert system.

Assistive Listening Devices

Improving communication using increased amplification and/or clarification using assistive listening devices or loop systems could benefit people who have dual sensory loss.

Listening to the television or audio equipment can also be improved with the use of other types of assistive listening devices depending on the type and level of hearing loss.

Personal Listening Devices

People who are hard of hearing may benefit from an personal listening device (or personal amplifier) to improve communication in one-to-one conversations. For some people with mild hearing loss a personal listening device could be an alternative to hearing aids, depending on the type and level of hearing loss.

For a person who wears hearing aids a personal amplifier used with a neck-loop could provide similar benefits with the Telecoil ("T" Switch) switched on. However, not all hearing aids are fitted with Telecoil. Digital hearing aids would need to be programmed to use Telecoil. Seek advice from your Audiologist.

NOTE: Consult a professional for advice if using as an alternative to hearing aids.

Bellman Audio Maxi

• Background noise reduced
• Clarity of speech amplified
• Use with earphones or neckloop
• Can also be connected to the television via a Cable Kit (available separately)

Assistive Listening Devices

FM Listening Systems

An FM System is wireless, using radio transmission to transfer sound directly from a microphone in the transmitter to a receiver worn on a hearing aid. FM Systems have improved sound quality with reduction in background noise. Receivers are available to work in a similar way for use with bone-anchored hearing aids and cochlear implants.

The receiver (left) is attached to the bottom of the hearing aid (circled in illustration right)

Sound is picked up by the transmitter's microphone ...

... and carried to the hearing aid receiver

Word of Mouth Technology
www.wom.com.au

Inspiro Dynamic FM Transmitter

- Auto-tuning into FM channel
- Operates within 15 metres range (indoors)
- Can be used with DynaMic MultiTalker Network in meetings, classrooms etc

Assistive Listening Devices

Listening to the television and other audio equipment

Loop systems, wireless or infrared headphones increase clarity and amplification when listening to the television, radio or other audio equipment. Suitability will depend on the individual's type and level of hearing loss.

Wireless and infrared devices are portable, reducing the risk of falls on trailing cables.

Good quality headphones are also available from a number of major electrical retailers.

Features to look for are amplification capabilities, listening range and ease of use of controls. Wireless systems will reduce accidents.

Sennheiser RS180 Wireless Headphones

- Portable digital wireless headphones with frequency range of 100m
- Transmitter connects to television or other audio equipment
- Headphones rechargeable on docking station
- Adjustable left and right volume controls on headphone

Word of Mouth Technology **www.wom.com.au**

Sennheiser Set 900 Stereo Listening System

- Infrared listening system
- Wireless headphones with listening range of 12m
- Three listening settings with option to use for one-to-one communication
- Volume control on receiver for balancing and adjusting volume for left and right ear

Printacall **www.printacall.com.au**

Loop Systems

Loop Systems

Most hearing aids and cochlear implants are fitted with a "T" Switch (the "T" means Telecoil). Digital hearing aids and cochlear implants may need to be programmed by an audiologist to activate for use with Telecoil.

When a hearing aid is switched to the "T" position sounds will only be received by the hearing aid or implant via a loop system. Sounds are converted to a magnetic signal via an induction loop or auditory loop. These signals are then picked up by the Telecoil in the hearing device.

When no longer using the loop system the "T" switch will need to be changed back to the usual setting.

Neck loops, portable loops and fitted room loop systems all work on a similar principle. Check whether your telephone is compatible for use with Telecoil.

Loop systems can improve clarity of sound by reducing echo and background noise for :
- **one-to-one conversations**
- **conversations in meetings/educational settings**
- **television and other audio equipment**

With advances in technology FM systems are being used as an alternative to loop systems.

Many public places that have loop systems installed will display this symbol.

HEARING LOOP INSTALLED
Switch hearing aid to T-coil
www.hearingloop.org

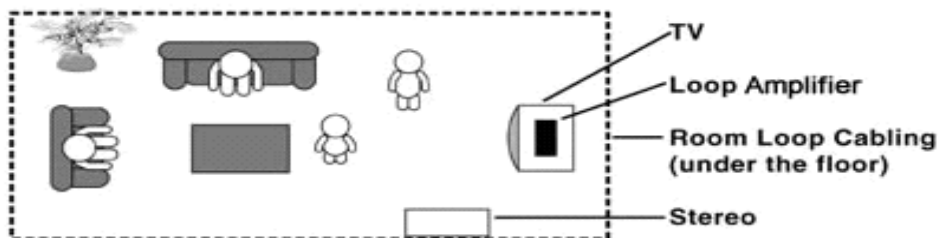# Loop Systems

Room Loop Systems

Room Loop Systems are set up with a loop amplifier connected to cable fitted around the perimeter of the room. Hearing aid users positioned inside the loop receive sounds with reduced background noise.

Portable loop systems are another option.

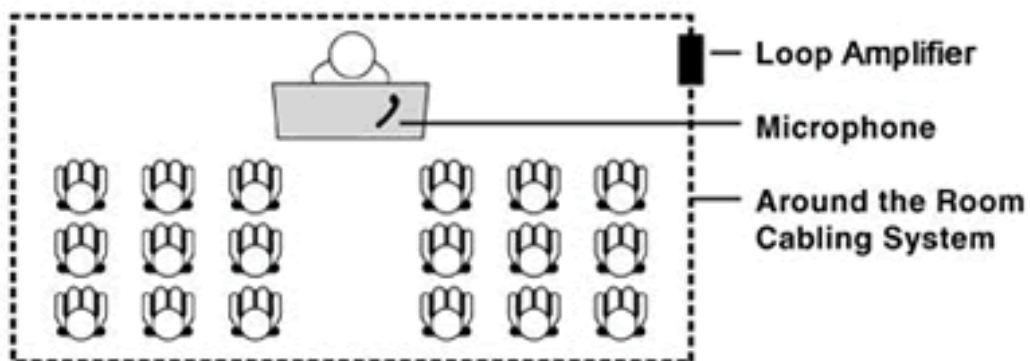A loop works only with hearing aids that are T-Switch equipped.

Printall...
Home Room Loop Systems For Hearing Impaired People

- TV
- Loop Amplifier
- Room Loop Cabling (under the floor)
- Stereo

Printacall
www.printacall.com.au

Hearing Augmentation System
Commercial Loop Systems

- Loop Amplifier
- Microphone
- Around the Room Cabling System

Loop Systems

*Phoenix Hearing Instruments **www.phoenixhearing.com.au***

Univox Autoloop

- Automatic domestic hearing loop amplifier
- Connect TV, stereo or other audio sources to choice of loop system
- Transmits clear sound to hearing aid or cochlear implant receiver

*Word of Mouth Technology **www.wom.com.au***

Field Teleloop Amplifier

- Amplifier connects to induction loop (cable) installed around perimeter of the room
- Transmits sounds directly to hearing aid
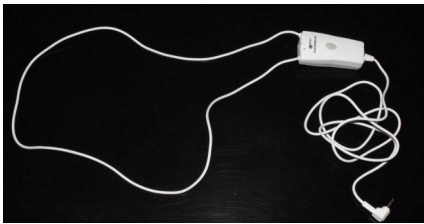

Sound Shuttle

- Portable loop system with inbuilt microphone
- Businesses can use on reception counters, in meeting rooms etc.

Loop Systems

Neck Loops

Neck loops are available for use with personal listening devices, mobile phones, television, audio equipment etc. Worn around the neck, the loop works in the same way as other loop systems.

CL i-Loop

Hands-free neck loop compatible with MP3, iPod, audio/CD players and PC's

Artone Bluetooth Loop Set

- Built-in microphone and volume control
- Wireless loop set is worn around the neck used with compatible Telecoil hearing aids
- Compatible with any Bluetooth capable mobile phone

Printacall www.printacall.com.au

Nokia LPS5

- Wireless Bluetooth neck loop set links with compatible hearing aids or cochlear implants fitted with Telecoil
- Increases amplification with compatible mobile phones

Word of Mouth Technology
www.wom.com.au

Sennheiser Set 830S and Set 840S Cordless Neck Loops

- Listening system similar to Set 900. Loop worn around the neck instead of wearing headphones
- Set 830S uses infrared, whereas Set 840S uses Radio Frequency to transmit sound via hearing loop direct to Telecoil on hearing aid

Word of Mouth Technology
www.wom.com.au

Telecommunication

Telephones

A wide range of telephones are available to assist easier communication for people with dual sensory loss. A fax machine for sending messages in large print is another alternative to using a telephone.

*Oricom **www.oricom.com.au***

Big Button Telephones

Before making a purchase look for some of the following features:

- Large button keypad with high contrast, large print and tactile button(s)
- Increased amplification
- Adjustable volume control
- Extra loud ringer
- Visual flash alerts for incoming calls
- Hearing aid compatibility (Telecoil)
- Memory storage buttons (some available with picture display)

Many department stores such Myer, Big W, Kmart, Bunnings etc stock Big Button Telephones

Both these phones are available to eligible Telstra customers for no additional rental charge through their Disability Equipment Programme. See website **www.telstra.com.au/ disability**

Telecommunication

Mobile phones

With advances in technology many standard mobile phones have in-built options that can be adjusted through the settings menu such as larger print screen displays and screen reading facilities.

Other features include the ability to programme frequently used names and telephone numbers and use voice recognition to automatically dial the number a person wishes to contact. Mobile phones send radio signals; some systems work better with hearing aids than others. *(See fact sheet by Australian Hearing - Hearing Aids and Mobile Phones www.hearing.com.au)*

Considering a mobile phone or software adapted for people with sensory impairments may be another option.

i-Pad and i-Phone applications enable the user to adjust the screen for greater accessibility (see *www.apple.com/accessibility*).

Oricom www.oricom.com.au

Oricom EZY120 Big Button Mobile Phone

- Large backlit keypad
- Extra loud ringer
- Vibration alert
- Amplified earpiece
- Hearing aid compatible
- 3 direct memory dial memory buttons

Telstra www.telstra.com.au/mobile-phones/mobile-phones/telstra/

Telstra Easy Touch Discovery 3

- Big buttons with easy to ready screen
- Audio feedback of dialed numbers
- Glare resistant screen
- Extra loud or vibrating alert
- Clear audio output
- Hearing aid and Bluetooth compatible
- Blue tick means recommended for rural handheld coverage outside regional centres and towns

www.senses.asn.au

Telecommunication

Telstra Easycall

Prepaid mobile phone with accessible features, including:

- Big buttons with large numbers on keypad
- Large numbers on screen display
- Audible key tones that speak numbers typed on keypad
- Hearing aid compatible
- Quick access switch on back of phone if needed to make a call in a hurry
- Blue tick means recommended for rural handheld coverage outside regional centres and towns

Telstra **www.telstra.com.au/shop/personal/Mobile-PrePaidMobils-TelstraEasyCall2NextGPrePaidPack?SMSESSION=NO**

Software

A number of software packages are available for use with mobile phones, for example Talks & Zooms that is compatible with mobile phones running on Symbian™ Series 60 (a number of Nokia phones may be suitable with this programme). Depending on a person's level of hearing or vision a person can access text on the mobile screen via speech and/or large print. The software enables the user to choose which option suits them best. Other options such as iPhone have inbuilt accessibility functions. (*For further information go to fact sheet on Vision Australia's website).* **http://www.visionaustralia.org.au/info.aspx?page=1502**

Mobile Phones with Talks & Zooms

Options may include:

- Vibrating and/or visual alert
- Screen reader programme that provides information on screen with speech output
- Options for Australian voices
- Facility for enlarged and/or contrasted font on screen with programme

When purchasing a mobile phone check for compatibility with software programmes.

Telstra **www.telstra.com.au**

Telecommunication

Teletypewriters (TTY's)

For people who are aurally deaf, Deaf, hard of hearing or deafblind, using a TTY can enable communication over the telephone network. A TTY has a text display, so that people who have a speech difficulty or cannot hear conversation on a standard telephone, can send and receive written messages on an LCD display screen.

A text-to-text conversation with other TTY users can take place by dialling the number as you would when using a standard telephone. Messages are typed at a rate that suits the individual user for sending and receiving.

A TTY can also be set up so that it works alongside a standard telephone handset for hearing people living in the same household as a TTY user.

Alternatively, the National Relay Service supports communication between TTY and non-TTY users. The National Relay Service can also be set up to work through a personal computer.
See *www.relayservice.com.au*

A number of models are available for purchase or rental through Telstra's Disability Equipment Programme. Check with your telephone provider for information of services to people with disabilities.

With advances in technology many people use PC based internet systems such as MSM, Skype, OoVoO or FaceTime to keep in touch with family and friends.

Telstra
www.telstra.com.au/ disability

Superprint 4425 and Miniprint 425

Some features include:
- Built-in ring flasher alerts to incoming calls
- Compatible with Visit Alert Systems
- Telephone number storage facility
- The Miniprint 425 has a built-in printer for recording printed version of conversations

Telecommunication

Uniphone 1150

- For use as either a standard telephone with voice and amplification or as a TTY
- Compatible with hearing aid with volume control
- Built-in flashing ring indicator

Telstra
www.telstra.com.au/ disability

Large Visual Display and Braille TTY's

- Similar features to standard TTY's
- Large visual display with bright, bold magnified characters or Braille output *
- The Braille TTY has wireless vibrating alert for incoming calls

*Note: The US manufacturer of Large Visual Display units (LVDs) for Teletypewriters (TTYs) has advised that these devices are longer being manufactured. The Australian supplier has been unable to source additional LVD units from the manufacturer for some time.

Telstra is investigating options for a suitable replacement for LVDs. In the meantime, stocks are in very short supply.

Telstra encourages customers who are Deafblind who believe they may be eligible for LVD TTY's through their Disability Equipment Programme to contact their Disability Enquiry Hotline for advice. If there are no LVD units available at the time of their enquiry, customers can leave their contact details and will be contacted when an LVD or a suitable replacement device becomes available.

Fax Machines

A fax machine is another way of keeping in touch with family and friends.   Messages that are written in clear, bold, large print will be easier for the person with low vision to read. With advances in technology many people now own personal computers with printers that also have fax options.

Telecommunication

Free community broadcasting for people who are Deaf, hearing impaired or deafblind
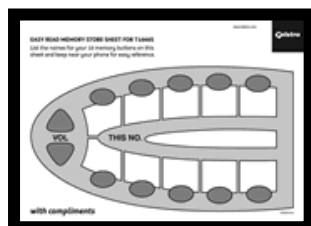

Australian Communication Exchange (ACE)
www.aceinfo.net.au or email info@aceinfo.net.au

Telecommunication

Telstra Disability Equipment Programme

Telstra has a range of accessories available through their Disability Equipment Programme. Contact Telstra direct for further information. *www.telstra.com.au/disability*

EasyRead Memory Storage Sheet

Record numbers stored in your telephone's memory system in large print on this A4 size card for easier access

EasyRead Stickers

Easy peel stickers with large print numbers on high contrast background to stick on keys of telephone keypad

Extension Ringer General Purpose Alarm

- Install with standard telephone
- Extra loud ring
- Adjustable tone and volume

Visual Signal Alert

Connects to telephone line and power socket. Lamp plugs into socket of alerter flashing on/off when telephone rings, lamp not provided.

Cochlear Implant Telephone Adaptor

- Connects telephone directly with cochlear implant speech processor
- Provides clearer telephone reception
- Compatible with a wide range of telephones
- Adjustable volume control

Telecommunication

Telephone Amplifiers

Amplifiers increase the volume for a person who has difficulty hearing on the telephone.

Portable In-Line Amplifiers shown below are an option where the device is connected between the telephone handset and the base of the telephone (see image to the right). These devices have tone and volume controls that can be adjusted to suit the user.

Although compatible with most analogue and digital corded telephones, **some amplifiers are not** compatible with Telstra branded telephones. *Before making a choice ensure the amplifier is compatible.*

Technology using Bluetooth is another option that can be explored.

Ameriphone HA40 Handset Amplifier

Amplifies volume by up to 40 dB

Word of Mouth Technology
www.wom.com.au

IL-95 In-Line Amplifier

Amplifies volume by up to 40 dB with boost button. Compatible with Telstra phones.

IntelliCall UA45 Universal Telephone Amplifier

Amplifies by up to 45 dB with boost button. Compatible with Telstra phones.

Phoenix Hearing Instruments
www.phoenixhearing.com.au

www.senses.asn.au

Telecommunication

TA1 Strap-on Telephone Amplifier

An alternative to an in-line amplifier is a portable strap-on amplifier that clips onto the receiver of a telephone handset

- Amplification up to 25 decibels
- Can be used with 3.5mm output jack to connect directly to compact head-phones, a variety of hearing aids and cochlear implant couplings

Phoenix Hearing Instruments
www.phoenixhearing.com.au

Telephone Ringers

Telephone ringers are connected to the telephone line to alert people who have difficulty hearing by amplifying the incoming ring tone. The ring tone can be adjusted to suit the individual. Some telephone ringers also have visual alerts.

CrystalTone Telephone Ringer

Connects to analogue telephone line and alerts to telephone ringing

- Visual alert with bright flashing light
- Adjustable tone
- Increased ring volume up to 95dB

Printacall **www.printacall.com.au**

Digitor Extra Loud Phone Ringer with flasher

- Connects to a corded telephone
- Incoming call indicated by choice of flashing light, loud ringer or both

Available through mainstream stores.
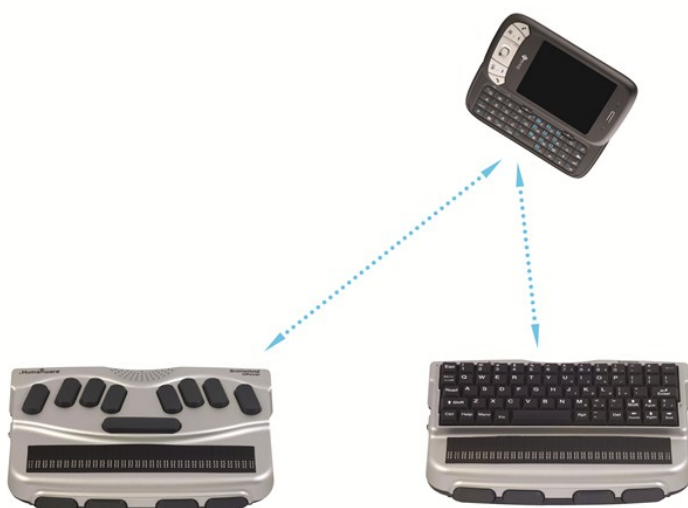
Deafblind Communication

Deafblind Communicator

A portable device consisting of a DB-Phone and DB-BrailleNote (with QWERTY or Perkins keyboard).

A sighted person types their message into the DB-Phone and sends to DB-BrailleNote where the Deafblind person receives and reads the message through Braille output. The Deafblind person types and then sends their message back to the DB-Phone for the sighted person to read the display on screen or listen through speech output. Conversations can go back and forth via this method.

- Enables a person who is Deafblind to communicate with hearing people
- The DB-Phone can be used for SMS Texting and with TTY
- Uses Braille output
- Communication takes place wirelessly via Bluetooth
- Software available for additional features

Humanware **www.humanware.com/en-australia/**

Telling the Time

Telling the Time

Clocks and watches that may be suitable for a person who has sight and hearing difficulties will vary depending on their level of sight and/or hearing.

Some large face or talking clocks and watches can be purchased from larger department stores.

Some features to look for in clocks and watches:

- **Large print with contrasting display**
- **Talking clocks and watches - quality of speech varies - some clocks and watches have male voices which may be easier to hear for a person who is hard of hearing**
- **Vibrating alarms**
- **Tactile or Braille markings**

Oricom www.oricom.com.au

Wake 'N' Shake - Loud Alarm with Jumbo Display

- Tell the time with large contrasting display
- Extra loud alert (up to 95 dB)
- Flashing strobe light
- Pillow pad with vibrating alert
- Connects to phone to alert to phone ringing using alerting options as above

Word of Mouth Technology www.wom.com.au

Bellman Pro Alarm Clock

- Extra loud 100 dB and flashing light
- Connects to a pillow pad that vibrates when alarm sounds
- Can also be used with Bellman Visit Alert System
- Large print numbers

Telling the Time

Talking Cube Alarm Clock

- Sturdy cube shape
- Press large contrasting button and the clock will speak the time
- Clear male voice (often easier for people with hearing loss to understand)

Vibralarm Clock

- Audible and/or vibrating alarm
- Adjustable volume and tone for alarm
- Vibrating pillow pad available to purchase separately
- Adjustable vibrating pulse

Printacall **www.printacall.com.au**

Vibrating Travel Alarm Clock Sonic Boom SBP 100

- Travel alarm clock with pillow strap
- Set on loud alarm or vibrating pad placed under the pillow
- Easy to read large LCD display

Printacall **www.printacall.com.au**

iLuv Vibe Plus

- Alarm Clock with Bed Shaker for iPod dock
- Large contrasting visual LCD display
- Time is syncronised with iPhone or iPod

Word of Mouth Technology
www.wom.com.au

Telling the Time

Meteor Vibrating Watch

- Ergonomically designed to rest in the hand
- Can be carried in the pocket
- Three raised braille "pins" vibrate in different patterns for hour, minutes and seconds to enable the user to tell the time

Alexandravision (Switzerland)
www.alexandravision.com

Easy to See Watches

For people who have enough vision to read large print watches with clear bold displays could make it easier to tell the time

Talking Watches

Talking watches speak the time, with some having additional features such as speaking calendars. A talking watch may be useful for some people - this will depend on their level of hearing. When considering a talking watch (or clock) it is advisable to test the quality of speech, male voices are sometimes better for some people with hearing loss.

Vision Australia www.visionaustralia.org

Tactile Watches (Braille Watches)

The glass cover opens enabling a person to tell the time by feeling the position of the hands lined with raised dots on the clock face.

Vision Australia www.visionaustralia.org

Reading and Writing

Reading and Writing Aids

In addition to lighting and low vision aids there are many low tech options to support a person to continue reading and writing.

Large Lined Paper

- Good contrast with bold lines on white paper
- Helps a person with low vision to see when writing and keep in a straight line

Writing Frame

- A4 size plastic template fits over a sheet of paper
- The frame provides a good contrast for use as a visual guide, keeping writing in a straight line
- The template can also be used as a tactile guide when writing

Signature Guide

- Place over paper where signature required
- Good contrast with tactile guide to indicate where signature required
- Credit card sized, fits easily into a wallet or purse
- Envelope guides are also available that work in the same way
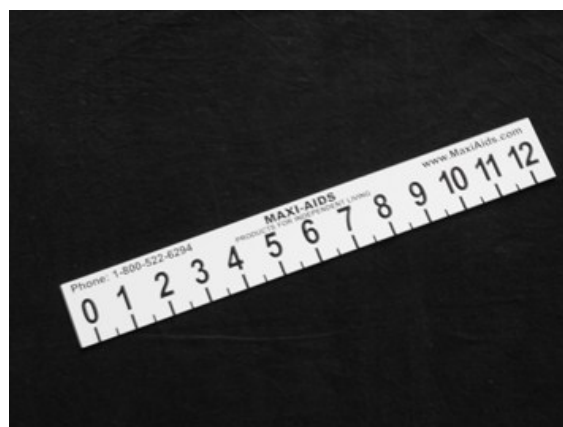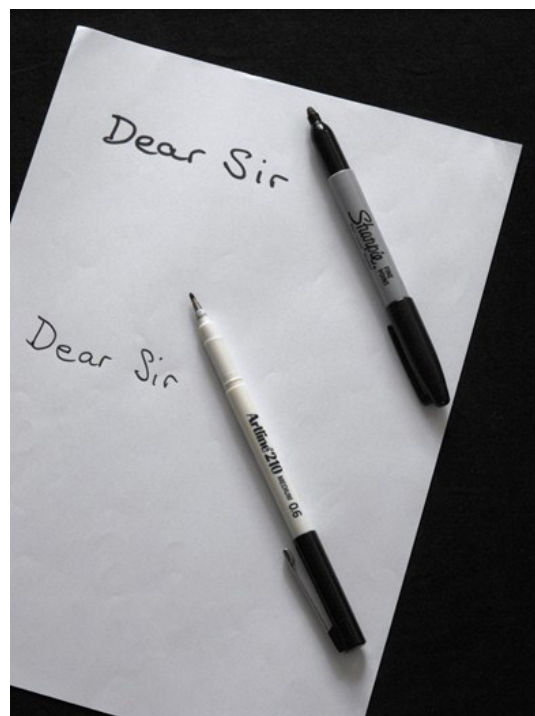
www.senses.asn.au

Reading and Writing

Stationery

Other options are available to make everyday life easier such as large print diaries, calendars, rulers etc.

Felt tip pens are available with varying thickness of nibs providing good contrast. Writing in large print with a felt tip pen can make it easier to read for a person who has low vision.

Lighting

Lighting

Additional illumination and contrast provided through the use of good lighting for close work such as reading, writing, crafts, artwork etc will assist people who have dual sensory loss to maintain independence. Improvements to lighting and contrast can make it easier to see.

Improving the quality of light can be achieved by making use of natural lighting where possible.

Alternatively, task lighting, using lamps with flexible arms will enable the light source to be angled and directed much closer to the task increasing the level and spread of light significantly in comparison to light directed from the ceiling or from wall lights.

Task lighting can be purchased from many department stores, office equipment stores, craft stores and specialist organisations providing services to people with vision impairment.

When choosing globes to lamps there are options such as daylight globes that add to the quality of light by simulating daylight. When choosing task lighting consider how close a person is going to position themselves to the lamp, fluorescent tube lighting and a plastic cover may be a preferred option being cooler to touch, avoiding risks such as burns to the facial area or hands.

Other options for lighting include pocket torches, or small lights with an LED light that can be carried in the pocket, a handbag or attached to a key-ring. Many mobile phones also have an inbuilt torch.

Lighting

Lamps

Choice of a lamp will depend on how it will be used. A floor standing lamp is less portable and therefore likely to be positioned in a place in the room that is used more frequently.

Other lamps are more portable and can be used at a desk or table.

Features to consider:
- Choice of bulbs **-** fluorescent tube will spread light more evenly; some bulbs simulate natural light to reduce glare
- Type of shade, eg a plastic light shade will be cooler to touch when used for longer periods avoiding the risk of burns if brought close to the face
- Flexibility of arm - lighting levels will be increased the closer the light source can be brought to the task
- Clamps for fixing to desktops
- Static or portable options

Flexi-Vision Floor

Twist Portable

Quantum Reading Learning Vision **www.quantumrlv.com.au**

Lighting

OttLite Portable Desk

Flex-Arm Plus

Slimline Task Lamp

Table Lamp / Flip up Task Lamp / Battery Task Lamp

Task Lamp and Rechargeable Task Lamp

Natural Daylight Desk Lamp

SSS Sewing & Craft Supplies www.sewingcraft.com

Lighting

Magnifying Lamps

Magnifying lamps - dual purpose of providing additional light whilst magnifying print, doing craftwork or other close tasks. Generally magnifying lamps are limited in the strength of magnification and therefore may not be suitable for people with severe vision impairment

Ultra-Slim Magnifying Lamp

Quantum Reading Learning Vision
www.quantumrlv.com.au

Other lighting options

Many mobile phones have an inbuilt torch; these and small torches or key ring torches can be useful for directing light when out and about or for example when locating a key into a lock.

Low Vision Aids

Low Vision Aids

Many people with dual sensory loss have some useful vision. Use of a low vision aid may mean easier access to reading print, seeing photos or pictures.

There are many types of low vision aids that will vary in strength from 1.5 x up to 20 x magnification. Magnifiers are an option with the advantage that many are portable and light weight. The way a magnifier is used will differ depending on the type and focal distance.

Electronic video magnifiers have more powerful magnification with options of adjusting colour and contrast to suit the user. Electronic video magnifiers are available as portable devices or a larger piece of equipment that will be more suitable for use on a desktop; although some desktop models are lighter in weight and can be transported easily. Using a desktop version of an electronic video magnifier has some additional advantages when using it for writing or viewing diagrams or maps etc.

Training the user in techniques that will ensure they can gain maximum benefit from a low vision aid may be necessary, particularly when using a higher strength magnifier or an electronic video magnifier.

Depending on the effects of the eye condition, what may be suitable for someone with Retinitis Pigmentosa will not necessarily be suitable for a person with Macular Degeneration.

Note: When choosing a low vision aid a person should seek support and advice from a professional to ensure the device is going to meet their individual needs.
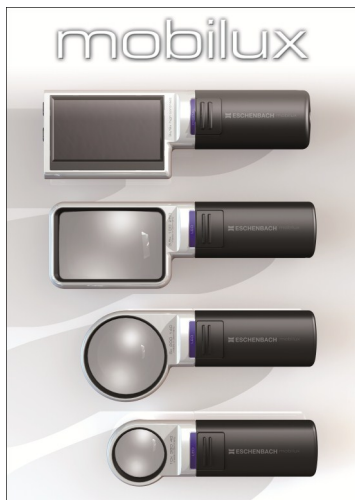
Low Vision Aids

Magnifiers

It is important for users to be aware that as magnification increases, the glass area of the magnifier becomes smaller reducing how much can be seen at once.

There are many different types of magnifiers, some that will fold away for carrying in the pocket or handbag when not in use. Others are larger and depending on the type will be used in different ways. Some magnifier types include:

• Handheld magnifiers that are held away from the page
• Stand magnifiers that may have a set focal range are placed directly on the page
• Magnifiers with inbuilt illumination
• Pocket magnifiers

Low Vision Aids

Handheld Illuminated Magnifiers

Eschenbach Mobilux

- Handheld illuminated magnifier distributes even light
- Available with round or rectangle lens
- Magnification ranges from 3x to 12.5x
- Large easy light switch easy to operate

Handheld Illuminated Pocket Magnifiers

Eschenbach easyPOCKET

- Illuminated pocket magnifier with case
- Size of a credit card when stored in protective case
- 3x and 4x magnification

Eschenbach Powerlux

- Compact illuminated magnifier
- Easy to hold
- 3.5x, 5x and 7x magnification

Illuminated Stand Magnifiers

Eschenbach scribolux

- Illuminated stand magnifier
- Can be used for reading and writing
- 2.8x magnification

Quantum Reading Learning Vision **www.quantumrlv.com.au**

Low Vision Aids

Video Magnifiers

Electronic video magnifiers are more powerful than standard magnifiers with some models having the capability of magnifying up to 60x. Video magnifiers can be used for people with low vision for greater clarity with tasks such as writing, reading print, viewing pictures, reading medicine packaging, photos and other graphics.

Video magnifier systems work with an inbuilt camera that picks up and enlarges images onto a screen. Video magnifiers are available as static or portable desktop equipment (CCTV's); or portable pocket devices. Prices will vary according to features

There is more flexibility for the user with some devices having adjustable levels of magnification, freeze frame, brightness controls, choice of screen background and print colour including negative and positive views.

Pocket and Portable Video Magnifiers

SmartView Versa+
Handheld Video Magnifier

Humanware (Australia) **www.humanware,com**

Ruby Handheld Video Magnifier

Pacific Vision (Australia) **www.lowvision.com.au**

SmartView 360
Portable Desktop Magnifier

Sapphire
Portable Video Magnifier

Low Vision Aids

Desktop Magnifiers (CCTV's)

SmartView Synergy PI 20"
Humanware (Australia)
www.humanware,com

ClearView+
Quantum Technology
www.quantumtechnology,com.au

Topaz
Pacific Vision (Australia)
www.lowvision.com.au

Everyday Living

This section provides information on a range of products that may be useful for people who have dual sensory loss. This list is not exhaustive. Examples of aids and devices are given, however, there will be many more options for products shown that may be just as effective.

Independent Living Centres (ILC's) are based in each state and are a good source of information. Demonstrations can be arranged to trial equipment, with advice and guidance on what may be suitable. ILC's do not sell equipment, they will however, provide a list of suppliers in local areas.

Another source of suppliers of some of these products are organisations providing services to people with vision impairment.

Many items can be found in mainstream stores and department stores.

Contrasting non-slip mats

- Textured non-slip mats are sold in many large stores either pre-cut or on a roll to be cut to size
- Contrasting colours make it easier for people with vision impairment to locate items placed on them
- Texture of mats also act as a tactile cue
- Mats grip to surface so that items placed on the mat will be less likely to slip

Everyday Living

Chopping board with swivel knife

- Knife tip pivoted
- Food is placed under blade, knife is swiveled into position, move free hand away before cutting to avoid injury to fingers
- Can be used with both hands holding knife to push down and cut food

Palm Peeler

- Easy to grip
- Slide along vegetables to peel

Safe Slice

- Protects fingers when preparing and slicing food
- Can be used as a tactile guide for knife without coming into contact with fingers

Everyday Living

Jar Openers

- Assists when opening jars and bottle lids
- Available in different styles and sizes

Hands free can opener

- Battery operated can opener
- Attaches to tin magnetically
- Press button to operate
- Removes lid off completely which can be released into bin without needing to handle

Ring pull openers

- Plastic hook lifts ring pull to peel back lid
- Available in different styles

Everyday Living

Silicon Shelf Guard

- Heat resistant strips clip on oven shelf
- Provides visual contrast when locating oven shelves
- Protects fingers and hands when reaching into oven

Independent Living Centre (WA) (Australia) www.ilc.com.au

Oven Gloves

- Silicon Oven Gloves are heat and slip resistant
- Protect hands when removing items from oven
- Can be used to pick up hot food items
- Washable in soapy water

Other options are available to protect against being burnt such as:

- Heat resistant woven gloves that fit more securely on hands
- Oven gloves with extra long sleeve

Everyday Living

Vision Australia
www.visionaustralia.org

Tactile markers

There are a number of options to mark control settings to enable people with dual sensory loss to maintain independence and operate appliances and remote controls independently.

Eg:

- Bump-ons
- Puff paint
- Velcro dots

Liquid Level Indicator (LLI)

- Hook LLI over side of cup/glass
- As liquid rises and makes contact with prongs the gadget buzzes and vibrates to alert user to stop pouring
- Avoids risk of scalding and spillage when pouring hot water

Self Opening Kitchen Scissors

- Lightweight spring loaded scissors
- Slip resistant grip on outside of handles

Everyday Living

Breville 6 L Stainless Steel Urn

- Reduces risks when making hot drinks
- Urn is placed on counter, no need to lift when pouring hot water
- Place cup/mug under water outlet and release tap lever

Breville
www.breville.com.au

Talking Measuring Jug

- Speaks liquid measurements in metric and imperial
- Male voice with adjustable volume
- At the press of a button reading can be re-set to zero to add additional liquid to be measured without having to empty the jug
- Holds up to 2 litres of liquid

Vision Australia
www.visionaustralia.org

Talking Kitchen Scales

- Weighs in metric and imperial
- Clear male voice
- Adjustable volume control
- Buttons are both tactile and large print

Mobility

People who have dual sensory loss may benefit from a mobility aid to provide confidence when out and about and to aid independence.

Mobility aids used by people with a vision impairment are usually white; white being a symbol of vision impairment. Canes usually have a red reflective strip for added visibility.

The purpose of an identity cane is to make the public aware that a person has a vision impairment. The identity cane is not sturdy enough to provide physical support or for testing ground surfaces when outdoors.

A long cane is used for scanning ground surfaces to detect obstacles and alert the user to steps, stairs, surface changes etc.

These canes are not designed to provide physical support . Where physical support is required a white walking stick may be an option.

The identity and long canes fold into four smaller sections for storage or carrying when not in use. Rigid non-folding canes are available if preferred.
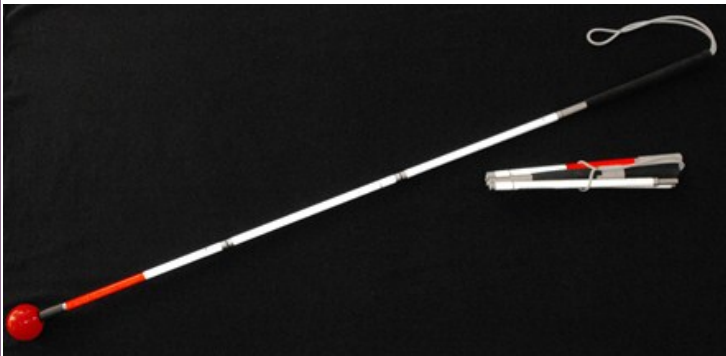
NOTE: Consult an Orientation and Mobility (O&M) Specialist for advice when considering a mobility aid. An assessment and training in the correct use of a cane is recommended. Using the wrong type or length of cane can have an effect on a person's posture and possibly put them at risk of accidents and/or injury.

Mobility

Identity Cane (ID Cane)

- Used to indicate a person has a vision impairment
- Not intended to be used for physical support
- Sizes range from 80cm - 105cm
- Cane folds into four pieces for easy storage

Long Cane

Requires training by an O&M Instructor

- Used to scan and detect obstacles and surface changes
- Sizes range from 110cm - 130cm
- Children's long canes range in size from 55cm - 80cm
- Cane folds into four pieces for easy storage

Sturdy Aluminium Support Cane

White reflective colour to indicate vision impairment whilst providing physical support

Seek advice from an O&M Specialist and/or Physiotherapist to ensure correct length and training in use of this cane

Mobility

Out and About - Accessories

When out and about consider using accessories such as UV shields or a peak cap. Both can help to minimise glare to enable a person to make best use of any remaining vision.

Other options include items like coin holders or a money gauge to identify notes reducing stress of having to deal with money.

Cane Tips

There are different types, styles and sizes of cane tips depending on preference and how the cane will be used.

Noir UV Shields

- Reduces discomfort of glare without reducing vision
- Reduces exposure to UV rays including protection to peripheral vision
- Available in small and large frames with different filters
- Fit over spectacles

Coin Holder

- Assists in identifying coins
- Available for different sized coins
- Helps to organize money prior to going out
- Reduces stress of sorting through loose change when shopping
- Wallets are another option with separate sleeves to assist in identifying

Equipment Suppliers

Some products referred to in this product guide can be purchased from larger department stores. The following organisations can be contacted for information on purchasing specialist equipment.

ACT Deafness Resource Centre
Website: actdrc.org.au
Email: enquiries@actdrc.org.au
Tel: (02) 6287 4393
Fax: (02) 6287 4395
TTY: (02) 6287 4394

Association for the Blind of WA
Guide Dogs WA
Western Australia
Website: www.guidedogswa.com.au
Email: hello@guidedogswa.com.au
Tel: (08) 9311 8202
Toll free:1800 658 388
Fax: (08) 9361 8696

Australian Communication Exchange, Queensland
Website: www.aceinfo.ne.au
Email: info@aceinfo.net.au
Tel: (07) 3815 7600
TTY: (07) 3815 7602
Fax: (07) 3815 7601

Connect Hearing
For information of nearest centre
Tel: 1300 656 858
Website:
www.connecthearing.com.au

DeafQuip, Queensland
Website: www.deafquip.com.au
Tel: (07) 5451 0199
Fax: (07) 5451 0188

Homewatch Security Services Queensland
Website:
        www.homewatchsecurity.com.au
Email: lockupsecurity@bigpond.com
Tel: (07) 3801 4190
Fax: (07) 3806 1533

HPM Australia
Website: www.hpm.com.au
Email:
sales.hpm@hpmlegrand.com.au
Tel: 1300 369 777
Fax: 1300 369 780

Humanware, New South Wales
Website: www.humanware.com
Email: au.sales@humanware.com
Tel: (02) 9686 2600
Fax: (02) 9686 2855

Listening Solutions Western Australia
Email: sales@waelect.com.au
Tel: (08) 6364 4805
Fax: (08) 6364 4807
TTY: Via Relay Service 133 677

Moore Hearing New South Wales
Website: www.moorehearing.com.au
Email: info@moorehearing.com.au
Tel: (02) 6632 2817

Equipment Suppliers

Multisense Technology
Western Australia
Website: www.multisense.com.au
Email: success@multisense.com.au
Tel: (08) 9375 8810
Fax: (08) 9375 7993

Optek Systems
New South Wales
Website: www.opteksystems.com.au
Email: opteksystems@bigpond.com
Tel: (02) 9680 0600
Fax: (02) 9880 0611

Optus
Disability Services
Website: www.optus.com.au
Email: Submit enquiry online
Toll free: 1800 780 219
TTY: 1800 500 002

Oricom International Pty Ltd
Website: www.oricom.com.au
Email: support@oricom.com.au
Tel: 1300 889 785 OR
          (02) 4574 8888
Fax: (02) 4574 8898

OTTlite Distributors Australia
SSS Sewing & Craft Supplies
Website: www.sewingcraft.com
Email: syd@sewgroup.com
Tel: (02) 9672 3888
Fax: (02) 9831 6088

Pacific Vision
Head Office, Victoria
Website: www.lowvision.com.au
Email: jon@pacificvision.com.au
Toll free: 1800 859 594
Fax: (03) 9482 9359

Phoenix Hearing Instruments
Queensland
Website:
www.phoenixhearing.com.au
Email: bjc@phoenixhearing.com.au
Tel: (07) 3852 4622
Fax: (07) 3852 4633

Printacall Communications
Technology
New South Wales
Website: www.printacall.com.au
Email: sales@printacall.com.au
Tel: (02) 9809 2392
TTY: (02) 9809 1283
Fax: (02) 9809 2345

Quantum Reading Learning
Vision Pty Ltd, Head Office
New South Wales
Website:
www.quantumrlv.com.au
Email: info@quantumrlv.com.au
Tel: (02) 9479 3100
Fax: (02) 9875 1646

Queensland Blind Association Inc
Website: www.qba.asn.au
Email: qba@qba.asn.au
Toll free: 1800 753 253
Tel: (07) 3848 8888
Fax: (07) 3848 6989

Equipment Suppliers

**Royal Society for the Blind
South Australia**
Website: www.rsb.org.au
Tel: (08) 8223 6222
Fax: (08) 8223 7836

**Technical Solutions
Victoria**
Website: www.tecsol.com.au
Email: enquire@tecsol.com.au
Tel: (03) 9737 9000
Fax: (03) 9737 9111

Telstra
Website: www.telstra.com.au
Email:
disability@online.telsta.com.au
Toll free: 1800 068 424
Fax: 1800 814 777 (Freefax)
TTY: 1800 808 981 (Freecall)

**Vision Australia
Equipment Solutions**
Website: www.visionaustralia.org
Email: equipment.solutions
@visionaustralia.org
Tel: 1300 847 466
Fax: (02) 9747 5993
TTY: (02) 9334 3260

Visitech Magnifiers
(Australian distributor for Enhanced
Vision, USA)
Website: www.enhancedvision.com
Email:
s_griffin_visitech@bigpond.com
Tel: 1300 847 466

**Word of Mouth Technology Pty
Ltd, Victoria**
Website: www.wom.com.au
Tel: (03) 9761 2211
Fax: (03) 9761 1834
TTY: (03) 9761 2184

Other Contacts

Able Australia
Website: www.ableaustralia.org.au
Email: info@ableaustralia.org.au
Tel: 1300 225 369
TTY: (03) 9882 6786
Fax: (03) 9882 9210
(Services also based in ACT and Tasmania)

Australian Communication Exchange Ltd (QLD)
Website: www.aceinfo.net.au
Email: info@aceinfo.net.au
Tel: (07) 3815 7618
Fax: (07) 3815 7670
SMS: 04127 52880

Australian Deafblind Council
Website: www.deafblind.org.au
Email: info@deafblind.org.au
Tel: (03) 9882 8596

Australian Hearing
Website: www.hearing.com.au
Email: Submit queries online
Tel: (02) 9412 6800
TTY: (02) 9413 3362
Fax: (02) 9412 6802

Better Hearing Australia
Website:
www.betterhearingaustralia.org.au
Email: nation-
al@betterhearing.org.au
Tel: 1300 242 842
Fax: (03) 9510 6076
TTY: (03) 9510 3499

Better Hearing Australia
Website:
www.betterhearingaustralia.org.au
Email: national@betterhearing.org.au
Tel: 1300 242 842
Fax: (03) 9510 6076
TTY: (03) 9510 3499

Blind Citizens Australia
Website: www.bca.org.au
Email: bca@bca.org.au
Toll free: 1800 033 660
Tel: (03) 9654 1400
Fax: (03) 9650 3200
TTY: (03) 9639 1728

Deaf Australia Inc
Website: www.deafau.org.au
Email: info@deafau.org.au
Tel: (07) 3357 8266
Fax: (07) 3357 8377
TTY: (07) 3357 8277

DeafBlind Association (NSW)
Website: www.dbansw.org.au
Email: dba@dbansw.org.au
Tel: (02) 9744 0160
Fax: (02) 9744 0171
TTY: (02) 9744 0160

DeafNT
Website: www.deafnt.webs.com
Email: deafnt@bigpond.net.au
Tel/Fax: (08) 8945 2016
TTY: (08) 8945 1880
SMS: 04294 52016

Other Contacts

Guide Dogs NSW/ACT
Website: www.guidedogs.com.au
Email:
     chatswood@guidedogs.com.au
Tel: (02) 9412 9300
Fax: (02) 9412 9388

Guide Dogs Queensland
Website:
www.guidedogsqld.com.au
Toll free: 1800 810 122

Guide Dogs SA.NT
Website: www.guidedogs.org.au
Toll free: 1800 810 122
Tel: (08) 8203 8333 S.A.
TTY: (08) 8203 8391
Fax: (08) 8203 8332
Tel: (08) 8995 2222 N.T.
Fax: (08) 8995 2223

Independent Living Centres Australia
Website: www.ilcaustralia.org

National Relay Service
Website: www.relayservice.com.au
Email:
helpdesk@relayservice.com.au
Toll free: 1800 555 660
TTY: 1800 555 630
Fax: 1800 555 690 (freefax)
SMS: 04160 01350

Royal South Australian Deaf Society
Email: sales@sadeaf.org.au
Tel: (08) 8223 3335
TTY: (08) 8223 6530
Fax: (08) 8232 2217

Seeing Eye Dogs Australia
Website: www.seda.org.au
Email: info@seda.org.au
Tel: 1300 847 466

Senses Foundation (Inc)
Email: admin@senses.asn.au
Website: www.senses.asn.au
Tel: (08) 9473 5400
TTY: (08) 9473 5488
Fax: (08) 9473 5499

WA Deaf Society
Website: www.wadeaf.org.au
Email: info@wadeaf.org.au
Tel: (08) 9441 2677
TTY: (08) 9441 2655

Equipment and
Devices for people
who have
Dual Sensory Loss
(2013)

Developed by Senses Foundation