# Standard Charger & Custom Charger

OPERATIONS MANUAL





Starkey

# **Standard Charger Custom Charger**





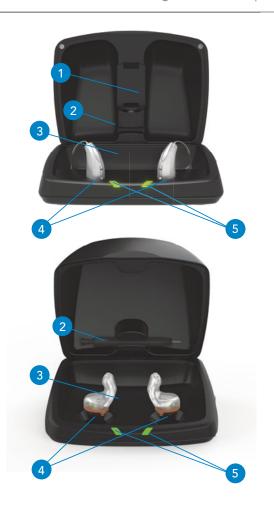
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The Standard Charger is designed to be a portable charger for *standard*-style, lithium-ion rechargeable hearing aids. The Custom Charger is designed to be a portable charger for *custom*-style, lithium-ion rechargeable hearing aids. Both chargers work when plugged into a wall, or on-the-go with an on-board battery that will charge a pair of hearing aids up to three times.

- Desiccant puck holder\*
- Cleaning brush
- Earbud/earmold reservoir\*
- Charging ports/posts
- Hearing aid charging LEDs 5.
- On-board battery LEDs
- Power supply port





# **Charging Your Hearing Aids**





- Place your hearing aids in the charger
  - Standard Charger: place hearing aids into charging ports with earbuds/earmolds resting in the reservoir
  - Custom Charger: place hearing aid faceplate facing downward so battery contacts on hearing aid align with charging posts within charger
- Hearing aids will turn off automatically and begin to charge
- The LEDs corresponding to each hearing aid:
  - Glowing Green = Charging
  - Solid Green = Fully Charged\*
  - Blinking Red = Fault State. To reset, remove the hearing aids from charger, wait until LED turns off and re-insert aids. If Fault State continues, call your hearing professional.

- When charging without the charger cord, the LEDs turn off when the hearing aids are fully charged to preserve the on-board battery.
- Charging occurs with the lid open or closed
- Hearing aids will be fully charged in under 3 ½ hours
- It is safe to store hearing aids in the charger after they are fully charged and any time that you are not wearing them
- Hearing aids will automatically power on when removed from the charger
- To illuminate LEDs when the charger is not plugged in, remove a hearing aid from its charging port/post for three seconds and then reinsert it. LEDs illuminate for 10 seconds before turning off.
- The desiccant puck provided with the Standard Charger will be effective for 3-6 months depending on moisture in the hearing aids and humidity. When the desiccant puck fades from blue to white, it should be replaced.
- If you will not be wearing your hearing aids for an extended period of time (i.e. weeks), remove both the plug from the charger and the hearing aids from the charging ports/posts. You will need to manually power off the hearing aids by pressing the user control on each hearing aid for three seconds.

# Charger On-Board Battery LEDs

 While charging the onboard battery with the power cord, the 4 LEDs will be:



- Glowing while charging
- Solid when charged
- When charging the hearing aids without the power cord attached, the LEDs turn off after 10 seconds.
- To illuminate LEDs, remove a hearing aid from its charging port/post for three seconds and then replace it. LEDs illuminate for 10 seconds before turning off again.
  - -4 Solid > 75%
  - 3 Solid < 75%
  - 2 Solid < 50%
  - 1 Solid < 25%
  - 1 Blinking = Charge Low

### Power On & Off

- **ON -** The hearing aids will power on automatically after removing them from the charger. There is a delay that allows you time to insert your hearing aid into your ear.
- ON If the hearing aid is manually powered off, pressing the user control for three seconds will power it on. The delay exists to give you time to insert the hearing aid into your ear.
- **OFF** The hearing aids will power off automatically when placed in the charging port/post and charging begins.
- **OFF** The hearing aids can be powered off manually by pressing the user control for three seconds.

# **Charger Care**

- Keep your charger clean. Heat, moisture and foreign materials can result in poor performance.
  - Using the provided cleaning brush keep the charging ports/posts and hearing aid microphones clear of debris.
  - Do not use water, solvents or cleaning fluids to clean the charger.
  - Keep lid closed as much as possible to avoid dust and debris build up.
  - Store your charger in a clean and dry location, such as a dresser or shelf rather than the bathroom or kitchen.
- To ensure the longest life of your rechargeable hearing aid batteries and the batteries in the charger:
  - Fully charge hearing aid batteries every night.
  - Do not expose to excess heat, i.e. do not store on a window sill or in a hot car.

# **Charger Troubleshooting Guide**

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
No LED indicator when hearing aids are inserted into the charging port/post	Incorrect hearing aid orientation	Reposition your hearing aids in the charging port/post.
	Depleted on- board battery	Connect the power supply cord to your charger and plug it into the wall. The on-board battery LEDs will turn on for a few seconds to indicate connection to the power source. If they do not, contact your hearing professional.
Red blinking LED next to charging port/post	Fault occurred	Remove your hearing aids from the charging port/ post, wait until the LED turns off, then reinsert. If the red blinking LED persists, contact your hearing professional.
While charging hearing aids, no LEDs are illuminated	On-board battery save mode	To illuminate LEDs, remove hearing aid from its charging port/post for three seconds, then reinsert it. LEDs will remain illuminated for 10 seconds.

# **Charger Troubleshooting Guide**

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
	Incorrect hearing aid orientation	Reposition your hearing aids in the charging ports/ posts. Confirm that the charging LED begins to glow.
Hearing aids whistling in the charger	Depleted on- board battery	Your charger's on-board battery may be fully depleted. Apply external power to your charger. If you do not have the cord, push and hold the hearing aid's user control for three seconds to turn it off.

# **Safety Information**

INTENDED USE: An air conduction hearing aid is a wearable soundamplifying device intended to compensate for impaired hearing. Hearing aids are available in multiple gain/output levels appropriate to treat hearing losses ranging from mild-to-profound.

Your hearing aids are designed to operate in public and residential environments and are designed to comply with international Electromagnetic Compatibility emissions and immunity standards for medical devices. However, it is still possible that you may experience interference caused by power line disturbances, airport metal detectors, electromagnetic fields from other medical devices, radio signals and electrostatic discharges.

If you use other medical devices or wear implantable medical devices such as defibrillators or pacemakers and are concerned that your hearing aids might cause interference with your medical device, please contact your physician or the manufacturer of your medical device for information about the risk of

Your charger should not be worn during an MRI procedure or in a hyperbaric chamber.

Your charger is not formally certified to operate in explosive atmospheres such as may be found in coal mines or certain chemical factories.

Your charger should be stored within the temperature and humidity ranges of -10°C (14°F) to +45°C (113°F) and 10%-95% rH.

The charging temperature range is between 0°C (32°F) and 40°C (104°F).

#### Cautions:

- If the charger is hot, do not touch it until cool.
- If the charger is not working, do not disassemble. Due to a shock hazard, please send in for repair.
- Keep out of reach from children. Do not ingest anything in the package, including desiccant, cleaning tool, etc.
- Any cords and AC adapters must be approved or listed by a Nationally Recognized Testing Laboratory.

We are required by regulations to provide the following warnings:

WARNING: Use of wireless hearing aids or charger directly next to other electronic equipment should be avoided because it could result in improper performance. If such use is necessary, note as to whether your hearing aids and the other equipment are operating normally.

WARNING: Use of accessories, components or replacement parts other than those provided by the manufacturer of your hearing aids or charger could result in increased electromagnetic emissions and decreased electromagnetic immunity and could result in degradation of performance.

**WARNING:** If Portable Radio Frequency communications equipment is used closer than 30 cm (12 inches) from your hearing aid or charger, degradation of the performance of your hearing aid or charger could result. If this occurs, move away from the communications equipment.

#### DO NOT OPEN HEARING AID OR CHARGER, NO USER-SERVICEABLE PARTS INSIDE

The Standard Charger and Custom Charger have a rating of IP 5X per IEC 60529. This means that the chargers are protected from dust.

The service life of both the Standard Charger and Custom Charger is 3 years.

The Standard Charger and Custom Charger have been tested to, and have passed, the following emissions and immunity tests:

- IEC 60601-1-2 radiated and conducted emissions requirements for a Group 1 Class B device as stated in CISPR 11.
- Harmonic distortion and voltage fluctuations affecting the power input source as stated in Table 2 of IEC 60601-1-2.
- RF radiated immunity at a field level of 10 V/m between 80 MHz and 2.7 GHz as well as higher field levels from communications devices as stated in Table 9 of IEC 60601-1-2.
- Immunity to power frequency magnetic fields at a field level of 30 A/m.
- Immunity to ESD levels of +/- 8 kV conducted discharge and +/- 15 kV air discharge.
- Immunity to Electrical fast transients on the power input at a level of +/- 2 kV at a 100 Hz repetition rate.
- Immunity to Surges on the power input of +/- 1 kV line to line.
- Immunity to conducted disturbances induced by RF fields on the power input as stated in Table 6 of IEC 60601-1-2.
- Immunity to voltage dips and interruptions on the power input as stated in Table 6 of IEC 60601-1-2.

#### FCC NOTICE

These devices comply with part 15 of the FCC rules and with ISED Canada license-exempt RSS standards. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### Starkey Hearing Technologies

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Class II Device



Waste from electronic equipment must be handled according to local regulations



Consult Operations Manual



#### INSTRUCTIONS FOR DISPOSAL OF OLD FLECTRONICS

Starkey Hearing Technologies encourages, the EU requires, and your local community laws may require, that your hearing aids and charger be disposed of via your local electronics recycling/disposal process.

The instructions below are provided for the benefit of disposal/recycling personnel. Please include this manual when disposing of your charger.

#### FOR DISPOSAL/RECYCLING PERSONNEL ONLY

These chargers contain a Lithium Ion Polymer battery. To remove the battery from the charger, follow one of two options:

#### Option 1

- Insert pry bars between the plastic and the microUSB metal housing (top and bottom)
- Pry apart to break the seam
- Clip battery wires and dispose battery

#### Option 2

- Using the style groove as a guide, sever the plastic case on all 4 sides with a dremel blade, ultrasonic knife, hot wire, or band saw blade
- In each case, establish a limit guide so entrance over 3/32 inch beyond the outer shell is prevented
- Clip battery wires and dispose battery

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