Unitron Charger S user guide

Unitron Charger RIC S Unitron ChargerGo RIC S







This user guide applies to the following models:

Charging accessories



Rechargeable model:

Unitron ChargerGo RIC S

Non Rechargeable model:

Unitron Charger RIC S

Your charger details

- If no box is checked and you do not know the model of your charging accessory, please ask your hearing care professional.
- (i) Please also read safety information regarding handling rechargeable hearing aids (chapter 10).
- The charger contains a built-in and non-removable rechargeable lithium-ion battery*.

Device:		Compatible hearing aid model:	
	Unitron Charger RIC S Unitron ChargerGo RIC S	Moxi S-R Moxi S-R	



^{*} Only applicable for rechargeable models.

Thank you for choosing this device.

Unitron is a hearing solution brand that believes people should feel really good about the entire hearing care experience, start to finish. Our ingenious products, technologies, services and programs offer a level of personalization you can't get anywhere else.

Get ready to Love the experience:

Please read the User guide carefully to make sure that you understand and get the best out of your device. Training is not required for handling of this device. A hearing care professional will help setup the charger and compatible hearing aids to your individual preferences during the sales consultation.

For more information regarding features, benefits, setup, use and maintenance or repairs of your hearing aid and accessories – contact your hearing care professional or manufacturer representative. Additional information can be found in the Datasheet of your product.

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1. Parts of the charger

Unitron Charger RIC S/ ChargerGo RIC S

- 1 Charger case lid
- 2 Hearing aid charging slots with left and right indicators
- 3 Cavity for earpieces
- 4 Indicator light for internal battery status*
- 5 USB-C connection to external power supply





^{*} Only applicable for rechargeable models.

External power supply







Power supply with wall plug adapter

Power adapter and charger specification

Power adapter output voltage: 5 VDC +/-5%, current

ower adapter output voltage. 500 mA - 1 A

Power adapter input voltage: 100-240 VAC, 50/60Hz,

current 0.2 A

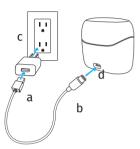
Charger input voltage: 5 VDC +/-5%, current 350 mA

USB cable specifications: 5 V min. 1 A, USB-A to USB-C,

maximum length 3 m

2. Preparing the charger

Connecting to the power supply



- a) Plug the larger end of the charging cable into the power adapter.
- b) Plug the smaller end into the USB port on the charger.
- c) Plug the power adapter into a power outlet.
- d) The indicator light around the USB port is green when the charger is connected to the power supply.
- e) Make sure you have access to the power adapter during charging.

3. Charging

3.1 Using and charging the charger

if the built-in battery is fully charged, the hearing aids can be charged up to 3 times*.

Always make sure that the hearing aids and charger are dry and clean before charging.

Before using your charger, pull the insulating tab out to activate the internal battery. After pulling out the insulating tab, the indicator light will be red for 10 seconds.**



^{*} For specific information please check the hearing aids User Guide or consult your hearing care professional.

Rechargeable models have an internal battery, which means they can't be switched off. Even when unplugged from a power outlet, it will continue charging the hearing aids until its internal battery runs out. Once it runs out, the charger effectively switches off as it can no longer provide power to charge the hearing aids. Even when the charger's internal battery is completely discharged, the charger can still charge the hearing aids once connected to a power supply. The indicator light on the charger shows the status of the charger's internal batterv.

To switch off non rechargeable models, unplug the charger from the power outlet.

^{**} Only applicable for rechargeable models.

Rechargeable charger connected to a power supply

Indicator light of the charger	Battery status	Description and actions
Solid green	Fully charged	The internal battery of the charger is fully charged. No action needed.
Blinking green	Charging >1 charging cycle	The internal battery of the charger has enough power to charge your hearing aids at least once while not connected to a power supply.
Blinking red	Charging <1 charging cycle	The internal battery of the charger does not have enough power to charge your hearing aids at least once while not connected to a power supply. Keep the charger connected to a power supply until it is completely charged.
Solid red	Battery error / charging error	An error was detected while trying to charge the internal battery of the charger. Check if your hearing aids still can be charged. Contact your hearing care professional.

Rechargeable charger not connected to a power supply

Indicator light turns off after a short time to save battery

Indicator light of the charger	Battery status	Description and actions
Solid green	>1 charging cycle left	The internal battery of the charger has enough power to charge your hearing aids at least once. No action needed.
Blinking green	<1 charging cycle left	The internal battery of the charger is running low. Connect the charger to a power supply.
No indicator light	Discharged battery	The internal battery is completely discharged. Connect the charger to a power supply.

3.2 Charging the hearing aids

- ① Low power: You will hear two beeps when the hearing aids battery is low. You will have approximately 60 minutes before you have to charge the hearing aids (this can vary, depending on the hearing aid settings).
- Before using your hearing aids for the first time, it is recommended to charge them for 3 hours.
- The hearing aids must be dry before charging.
- Please ensure to charge and use the hearing aids within operating temperature range: +5° to +40° Celsius (41° to 104° Fahrenheit).

Please refer to chapter 2 for how to set up the charger.

 Insert the hearing aids into the charging slots. The hearing aids will automatically switch off when inserted into the charger.



Make sure the left and right hearing aid markings match the left (L) and right (R) indicators next to the charging slots.

 The indicator light on the hearing aids will show the charging state of their battery until the hearing aids are fully charged. When fully charged, the green indicator light on the hearing aids will remain on.



The charging process will automatically stop when the batteries are fully charged, so the hearing aids can be safely left in the charger. It can take up to 3 hours to charge the hearing aids. The charger lid can be closed while charging the hearing aids.

Charging times (representative values)*

Indicator light of the hearing aid	Charging state	Approx. charging times
Blinking red	0 – 10%	
Blinking orange	11 – 70%	30 min (20%) 60 min (40%) 90 min (70%)
Blinking green	71 – 99%	
Solid green	100%	3 h (charging time may be affected by tempera- ture conditions)

^{*} For specific charging times please check your hearing aids User Guide or consult your hearing care professional.

- 3. Remove the hearing aids from the charging slots by lifting them out of the charger.
- ① Do not hold the tubes to remove the hearing aids from the charger as this can damage the tubes.

The hearing aid can be set to switch on automatically when removed from the charger. In this case the indicator light will start blinking. The solid green light indicates the hearing aid is ready for use. By default, the hearing aids are programmed so that they turn on automatically when they are removed from a charger that is connected to the power supply. Your hearing care professional can turn this setting off. In this case, you will need to switch the hearing aid on manually.

- The charging process will automatically stop when the batteries are fully charged, so the hearing aids can be safely left in the charger
- (i) Always close the lid when charging your hearing aids in a humid environment.

4. Environmental conditions

Please ensure to use, charge, transport and store the charging accessories according to the following conditions:

	Charging Operating	Transport	Storage
Temperature	+ 5 to + 40 °C	- 20 to + 60 °C	- 20 to + 60 °C
	(+ 41 to + 104° F)	(- 4 to + 140 °F)	(- 4 to + 140 °F)
Humidity (non-condensing)	0 % to 90 %	0 % to 93 %	0 % to 93 %
Atmopheric pressure	500 hPa to	500 hPa to	500 hPa to
	1060 hPa	1060 hPa	1060 hPa

Prolonged storage at temperature lower than +10 °C and higher than +30 °C may negatively affect the battery performance of the product. For information on the operating condition of your hearing aids, please refer to the user guide of your hearing aids.

If the device has been subject to storage and transportation conditions outside of the recommended use conditions, wait 15 minutes before starting the device.

Non rechargeable models are classified as IP21. This means that the chargers are protected from vertically falling drops of water e.g. condensation. IP21 is satisfied when the charger lid is closed.

Rechargeable models are classified as IP22. This means that the charger is protected from vertically falling drops of water when the charger is tilted up to 15 degrees from the horizontal. IP22 is satisfied when the charger lid is closed.

5. Care and maintenance

Expected service life

The charger has the expected service life of five years. The device is expected to remain safe for use for this duration.

Commercial service period

Routine and diligent care of your charger will contribute to the outstanding performance for the duration of the expected service life of your devices. Sonova AG will provide a minimum of a five years repair service period after the respective charger and essential components have been phased out of the product portfolio.

Please use the following specifications as a guideline. Further information regarding product safety, see chapter 10.

General information

Please make sure that the charger is used and maintained as described in this user guide.

Daily

Make sure that charging slots are clean. Otherwise, clean the surfaces with a soft, lint-free cloth. Never use cleaning agents such as household detergents, soap, etc. for cleaning your charger. Do not rinse your charger with water.

Weekly

Remove dust or dirt from the charging slots with a soft, lint-free cloth.

- (i) Always make sure that the hearing aids and charger are dry and clean before charging.
- (i) Always make sure that the charger is disconnected from the power mains before cleaning.

6. Service and warranty

Local warranty

Please ask the hearing care professional where you purchased your hearing aids about the terms of the local warranty.

International warranty

Sonova AG offers a one year limited international warranty, valid from the date of purchase. This limited warranty covers manufacturing and material defects in the charger. The warranty only comes into force if a proof of purchase is shown.

The international warranty does not affect any legal rights that you might have under applicable national legislation governing sale of consumer goods.

Warranty limitation

This warranty does not cover damage from improper handling or care, exposure to chemicals or undue stress. Damage caused by third parties or non-authorized service centers renders the warranty null and void. This warranty does not include any services performed by a hearing care professional in their office.

Charger:	
Serial number:	
Date of purchase:	

Authorized hearing care professional (stamp/signature):

7. Compliance information

Declaration of conformity for the hearing aid

Hereby Sonova AG declares that this product meets the requirements of the Medical Devices Regulation (EU) 2017/745 and the UK Medical Device Regulation 2002.

Notice 1:

This device complies with part 15 of the FCC Rules and ICES-003 of Industry Canada. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Notice 2:

Changes or modifications made to this device not expressly approved by Sonova AG may void the FCC authorization to operate this device.

Notice 3:

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules and ICES-003 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device

generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures::

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Please keep at least 20 cm separation distance between the charger and the human body during operation.

Electromagnetic emissions

Manufacturer's Declaration: The device is intended for use in the electromagnetic environments listed below. The user should assure that they are used in such environments.

Emissions Test	Compliance	Electromagnetic environment guidance
RF emissions CISPR 11	Group 1	The device generates or uses RF energy only for their internal functioning. Therefore, the RF emissions are very low and are not likely to cause any interference to nearby electronic equipment.
RF emissions CISPR 11	Class B	The device is suitable for use in domestic establishment and in establishment directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Electromagnetic immunity

Immunity Test	IEC60601-1-2 Test Level	Compliance Level
Electrostatic Discharge (ESD) IEC 61000-4-2	+/- 8 kV contact +/- 2 kV , +/- 4 kV, +/- 8 kV, +/- 15 kV air	+/- 8 kV contact +/- 2 kV , +/- 4 kV, +/- 8 kV, +/- 15 kV air
Radiated RF Electromag- netic Field Immunity Test IEC 61000-4-3	10 V/m 80 MHz – 2.7 GHz 80% AM at 1 kHz	10 V/m 80 MHz – 2.7 GHz 80% AM at 1 kHz

Immunity Test	IEC60601-1-2 Test Level	Compliance Level
	9 V/m; 710, 745, 780 MHz; Pulse modulation 18 Hz	9 V/m; 710, 745, 780 MHz; Pulse modulation 18 Hz
	9 V/m; 5240, 5500, 5785 MHz; Pulse modulation 217 Hz	9 V/m; 5240, 5500, 5785 MHz; Pulse modulation 217 Hz
Proximity	27 V/m; 385 MHz; Pulse modulation 18 Hz	27 V/m; 385 MHz; Pulse modulation 18 Hz
Magnetic Field IEC 61000-4-3	28 V/m; 450 MHz FM +/- 5 kHz deviation; 1 kHz sine	28 V/m; 450 MHz FM +/- 5 kHz deviation; 1 kHz sine
	28 V/m; 810, 870, 930 MHz; Pulse modulation 18 Hz	28 V/m; 810, 870, 930 MHz; Pulse modulation 18 Hz
	28 V/m; 1720, 1845, 1970, 2450 MHz; Pulse modulation 217 Hz	28 V/m; 1720, 1845, 1970, 2450 MHz; Pulse modulation 217 Hz

Immunity Test	IEC60601-1-2 Test Level	Compliance Level
Rated power frequency magnetic fields IEC 61000-4-8	30 A/m 50 Hz or 60 Hz	30 A/m 50 Hz or 60 Hz
51000-4-8		

8. Information and explanation of symbols



With the CE symbol, Sonova AG confirms that this product – including accessories – meets the requirements of the Medical Devices Regulation (EU) 2017/745 as well as the Radio Equipment Directive 2014/53/EU. The numbers after the CE symbol correspond to the code of certified institutions that were consulted under the above-mentioned regulation and directive.



Indicates the medical device manufacturer, as defined in Medical Devices Regulation (EU) 2017/745.



Indicates the date when the medical device was manufactured.



Indicates the Authorized representative in the European Community. The EC REP is also the importer to the European Union.



This symbol indicates that it is important for the user to read and take into account the relevant information in these user guides.

\triangle	This symbol indicates that it is important for the user to pay attention to the relevant warning
	notices in this user guide.

(j) Important information for handling and product safety.



This symbol confers that the electromagnetic interference from the device is under limits approved by the US Federal Communications Commission.



Indicates a device's compliance with applicable Radio Spectrum Management's (RSM) and Australian Communications and Media Authority (ACMA) regulatory arrangements for the legal sale in New Zealand and Australia.



With the UK Conformity Assessed mark, Sonova AG confirms that the product is conform to applicable Great Britain legislations.



Indicates the manufacturer's serial number so that a specific medical device can be identified.



Indicates the manufacturer's catalogue number so that the medical device can be identified.

MD

Indicates that the device is a medical device.



An indication that electronic instructions for use are available.

IP21

IP Rating = Ingress Protection Rating. IP21 rating indicates that the device is protected against solid foreign objects of 12.5 mm diameter and greater and is additionally protected against vertically falling water drops.

IP22

IP Rating = Ingress Protection Rating. IP22 rating indicates that the device is protected against solid foreign objects of 12.5 mm diameter and greater and is additionally protected against vertically falling water drops when enclosure tilted up to 15°.



Indicates the temperature limits to which the medical device can be safely exposed.



Indicates the range of humidity to which the medical device can be safely exposed.



Indicates the range of atmospheric pressure to which the medical device can be safely exposed.



During transportation keep dry.



The symbol with the crossed-out garbage bin is to make you aware that this device may not be thrown away as normal household waste. Please dispose of old or unused devices, at waste disposal sites intended for electronic waste, or give your device to your hearing care professional for disposal. Proper disposal protects the environment and health.



This symbol indicates a device that is not safe to use in magnetic resonance (MR) environment (e.g. during an MRI scan).

Symbols applicable to the European power supply only



Power supply with double isolation.



Device designed for indoor use only.



Safety isolating transformer, short circuit proof.

9. Troubleshooting

Cause	Possible remedy
Issue: Charging of the hearing aid does not star	
Internal battery of the charger discharged*.	Connect the charger to the power supply (chapter 2).
Hearing aids not inserted correctly into charger.	Insert hearing aid correctly into charger (chapter 3).

 If the problem persists, contact your hearing care professional for assistance.

10. Important safety information

Please read the relevant safety information and limitations-of-use information on the following pages before using your device.

Intended use

The chargers are intended to charge the battery of the rechargeable hearing aid.

Intended user

Intended for people with hearing loss using the compatible rechargeable hearing aid, their caregivers and hearing care professional.

Intended patient population

The intended patient population for the chargers is the intended patient population of the compatible hearing aids.

Intended medical indication

Indications are not derived from charger but from the compatible hearing aids.

^{*} Only applicable for rechargeable models.

Intended medical contraindications

Contraindications are not derived from the charging accessories, but from the compatible hearing aids.

Clinical benefit:

The charger itself does not provide a direct clinical benefit. An indirect clinical benefit is provided by enabling the parent device (rechargeable hearing aids) to achieve their intended purpose.

Side effects:

Side effects are not derived from the charger, but from the compatible hearing aids.

Any serious incident that has occurred in relation to the charging accessories, should be reported to the manufacturer representative and the competent authority of the state of residence. The serious incident is described as any incident that directly or indirectly led, might have led or might lead to any of the following:

- a) the death of a patient, user or other person
- b) the temporary or permanent serious deterioration of a patient's, user's or other person's state of health
- c) a serious public health threat
 To report an unexpected operation or
 event, please contact the manufacturer or a
 representative.

10.1 Warnings

⚠ Charger and power supply must be protected from shocks. If the charger or power supply is damaged after a shock, the devices must not be used anymore.

Protect your charging accessories from heat and sunlight (never leave near a window or in the car). Never use a microwave or other heating devices to dry your hearing aid (due to risk of fire or explosion). Ask your hearing care professional about suitable drying methods.

⚠ Only authorized personnel are allowed to open the charging accessory due to possible electrical hazard.

△ Cables and cords wrapped around the neck may cause strangulation. Do not leave the device and its components unattended with children, individuals with cognitive impairment or pets.

⚠ Do not use the device in explosive areas (mines or industrial areas with danger of explosions, oxygen-rich environments or areas where flammable anesthetics are handled). The device is not ATEX certified.

Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

⚠ Do not place these rechargeable devices in your checked-in luggage when traveling by plane as they contain lithium-ion batteries. The devices should be placed in your carry-on/hand luggage*.

A Ship the rechargeable devices according to local regulations as the devices contain lithium-ion batteries. For shipping, they are classified as dangerous goods. If in doubt ask the courier responsible for shipping how to ship the devices properly*.

⚠ Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation

⚠ To supply power to the charging accessories, use only IEC 60950-1**, IEC 62368-1 or IEC60601-1 certified charging equipment (e.g. power supply) within the specification in Chapter 1, Parts of the charger.

Always make sure that the hearing aids and charger are dry and clean. If the charger or power supply is damaged, the device must not be used anymore as it may cause electric shock.

The charger contains Lithium-Ion rechargeable battery that might swell and deform the housing of the charger. If you notice any swelling or deformation in the charger, stop using it immediately. Swollen batteries can be a serious safety hazard, posing risks such as leakage, overheating, or even explosion. Do not attempt to remove, charge, puncture or modify the swollen

[⚠] Do not place the charging accessories close to an induction cooking surface. Conductive structures inside the charging accessories could absorb inductive energy resulting in thermal destruction.

^{*} Only applicable for rechargeable models.

^{**} Note: this standard may not be valid anymore in your country, please refer to IEC 62368-1

battery. Do not ignore signs of battery damage. Using the charger with a damaged battery can affect the charger performance and permanently damage the charger.

Avoid handling the charger with bare hands if it shows signs of damage or leakage. Avoid direct contact with the leaked electrolyte. If contact occurs, rinse with water and seek medical attention if needed.

If you have any questions or concerns, seek professional guidance at your hearing care professional before using the charger.

Dispose of the charger at waste disposal sites intended for electronic waste, or give your charger to your hearing care professional for disposal*.

- Keep the charging device at least 15 cm (6 inches) away from the active implant. If you experience any interference do not use the charging device and contact the manufacturer of the active implant. Please, note that the interference can also be caused by powerlines, electrostatic discharge, airport metal detectors etc.
- ⚠ Do not touch the contacts of the charger when powered.
- Do not expose your device to temperatures outside the operation conditions indicated in the User Guide (see chapter 4). They contain lithium-ion batteries, which might swell, leak or explode upon exposure to temperatures outside those conditions*.

[↑] The following is only applicable for persons with active implantable medical devices (i.e. pacemakers, defibrillators, etc.):

^{*} Only applicable for rechargeable models.

⚠ Do not use your hearing aid or charger in areas where electronic equipment is prohibited.

Only use approved chargers described in this user guide for charging your hearing aids, otherwise the devices may be damaged.

Changes or modification to the device that were not explicitely approved by Sonova AG are not permitted. Such changes may damage the device.

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the hearing aid or accessory, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

⚠ Only use the device according to Chapter 4, Environmental conditions. Using the device otherwise may heat the hearing aid up to temperatures, which in the worst-case can lead to skin burns.

10.3 Notes

- Do not drop your charging accessories!
 Dropping onto a hard surface can damage your charging accessories.
- Always keep the USB socket of the device and the USB plug of the cable clean and dry. Foreign particles or moisture in the USB connection can lead to an electrical fault, which can heat up the USB connection and, in the worst case, cause it to melt. Use the provided cable to supply power to the device. If you notice the indicator light around the USB port of the device went off during charging, check the USB connection for proper conditions.

^{10.2} Cautions

^{*} Only applicable for rechargeable models.

① The built-in battery of the rechargeable charger must be recharged every 3 months. This will prevent a deep discharge of the built-in battery. Deep discharged batteries may be damaged if recharged and could catch fire.

Your feedback

Record your specific needs or concerns and bring to your first office visit after getting your devices.

This will help your hearing care professional to address your needs.

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