

Product information

Bernafon CROS MNR T R

The Bernafon CROS transmitter is a device designed for people with single-sided deafness.

CROS/BiCROS

Bernafon CROS paired with a compatible Bernafon hearing aid is a contralateral routing of signal (CROS) amplification system. Sounds are picked up by the microphones in the CROS transmitter located on the poorer ear. Then, they are transmitted via near-field magnetic induction (NFMI) to a receiving hearing aid located on the better ear. If some hearing loss is present in the better ear, the solution is set up as a bilateral contralateral routing of signal (BiCROS) configuration.



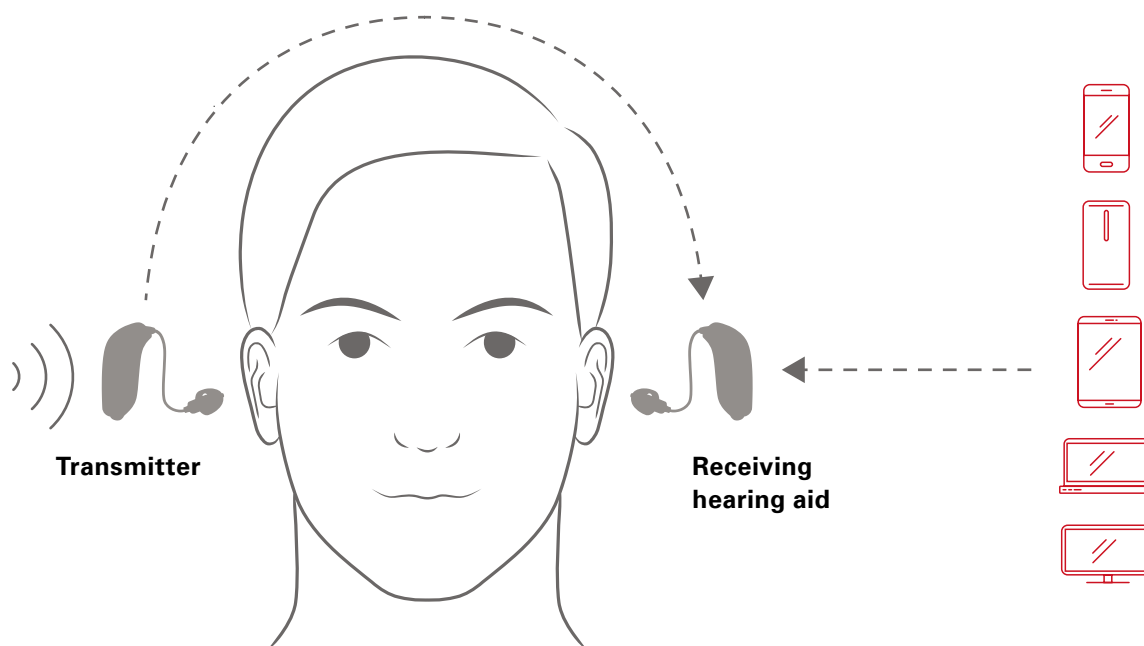
Bernafon CROS uses Bernafon Alpha / Alpha XT's premium Hybrid Technology™ to enable transmission of sound from the poorer ear to the better ear.

Hybrid Noise Management™

Bernafon CROS uses Hybrid Noise Management™ to provide the best signal-to-noise ratio (SNR) when transmitting sound to a Bernafon hearing aid. Binaural coordination allows the CROS to wirelessly transmit sounds to the hearing aid to give the user access to sounds from all directions, improving localization, and still avoiding excessive loudness or feedback.

Dual-radio technology

The Bernafon CROS system uses NFMI dual-radio technology between the CROS transmitter and the hearing aid. This power efficient solution allows the hearing aid to connect to external sound sources with 2.4 GHz Bluetooth® Low Energy while still synchronously streaming sound from the poorer ear to the better ear. Users can stream music, phone conversations, or TV and still enjoy the full sound experience from their surroundings.



bernafon®
Your hearing · Our passion

Technical data



Technical data

Name/model	Bernafon CROS MNR T R
Style	Same design as Bernafon miniRITE T R
Earpiece	Choice of miniFit standard speaker and dome or customized earpiece
System features	Dual microphone sound pickup Pre-processing and noise reduction Wireless transmission to Bernafon hearing instrument
Compatibility	Bernafon CROS can transmit to the following Bernafon hearing instruments: Bernafon Alpha or newer miniRITE and miniBTE instruments For full and updated compatibility overview see www.bernafon.com/hearing-aid-users/hearing-aids/connectivity/compatibility
Water resistant	IP68
Battery type	Li-ion
Typical operating hours	24 hours
Status indications	Acoustic signals in hearing instrument
Operating and charging conditions	Temperature: +5 °C to +40 °C (+41 °F to +104 °F) Humidity: 5 % to 93 %, non-condensing Atmospheric pressure: 700 hPa to 1060 hPa
Transportation conditions	Temperature: -20 °C to +60 °C (-4 °F to 140 °F) Relative humidity: 5 % to 93 %, non-condensing Atmospheric pressure: 700 hPa to 1060 hPa
Storage conditions	Temperature: -20 °C to +30 °C (-4 °F to 86 °F) Relative humidity: 5 % to 93 %, non-condensing Atmospheric pressure: 700 hPa to 1060 hPa

Audio

Audio quality	G722 encoding
Audio bandwidth	Up to 10 kHz – depending on receiver hearing aid

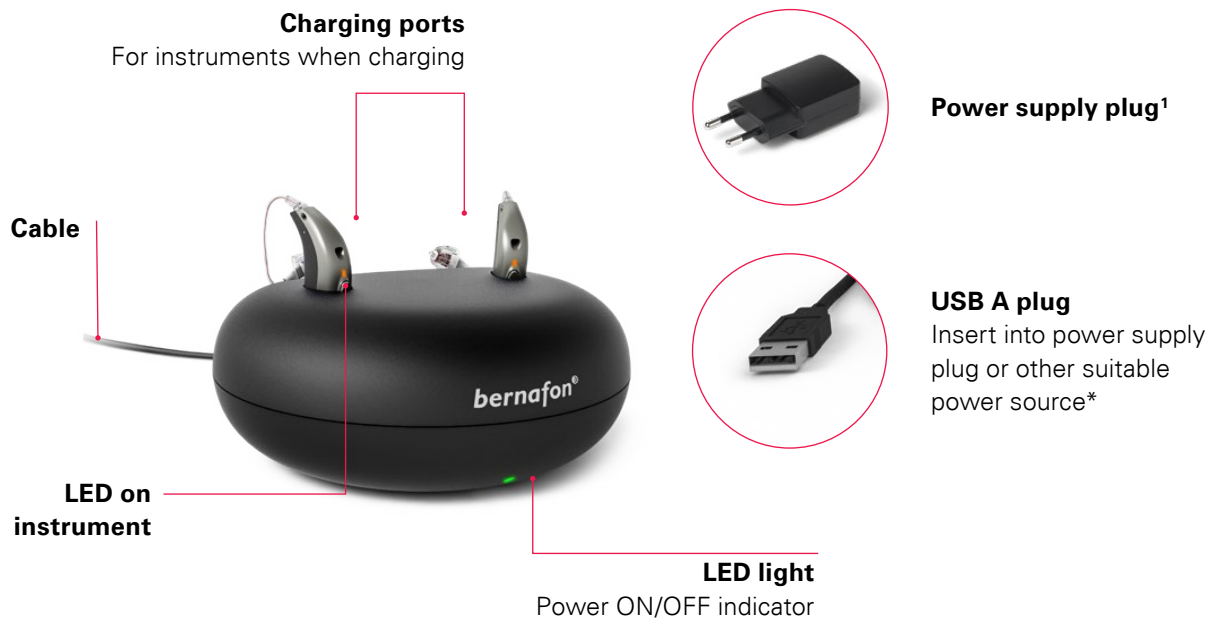
Radio specification

Wireless range	17 cm ear to ear
Frequency	3.84 MHz
Modulation	MSK
Duty cycle	50%
Field strength	-51 dBμA/m @10m
Standards and approval (FCC/IC)	Bernafon CROS Transmitter contains a radio module (DA AU5 MNR R) with the following certification ID numbers: FCC ID: 2ACAHAU5MRTRC IC: 11936A-AU5MRTRC

Charger, miniRITE T R

The charger for CROS miniRITE T R uses inductive technology that allows contactless charging of two instruments via induction coil. Furthermore, the magnetic connection in the charger prevents the

instruments from falling out. When the instruments are inserted into the charger, it automatically starts charging. The instruments turn ON when they are removed from the charger.



Packaging set

- Travel pouch
- Instructions for use
- Power supply plug

Charging time of lithium-ion battery

- 3 h = Fully charged
- 1 h = 50 % charged
- 30 min = 25 % charged

¹ Power plug will vary from country to country
* USB 2.0 high power (500 mA output) required.

Charger, miniRITE T R – Technical data

Charger, miniRITE T R

Designed for/compatibility	Alpha, Alpha XT miniRITE T R and CROS miniRITE T R
Dimensions	Ø95 mm /total height of 39 mm
Weight	135 grams (5 oz)
Color	Black
Power supply plug	USB A
Status indications	LED on charger indicates Charger ON/OFF status LED on hearing instrument indicates charging status
Charging time of hearing instruments	Max 3 hours depending on initial state of the battery (Temperature: +10 °C to +35 °C (+50°F to +95°F)) Max 4 hours depending on initial state of the battery (Temperature: +5 °C to +10 °C (+41°F to +50°F) / +35 °C to +40 °C (+95°F to +104°F))
Power source	Supplied power supply unit
Input voltage	5 V DC
Input current	< 0.2 A (charging two instruments) <10 mA stand-by (no instruments inserted)
Cable	Fixed mounted cable / 150 cm
Connected to external equipment	When connected to external equipment plugged into a wall outlet, this equipment must comply with IEC-62368 (or IEC-60065, IEC-60950 until June 20, 2019) or equivalent safety standards.

Conditions of use

Operating conditions	Temperature: +5 °C to +40 °C (+41°F to +104°F) Relative humidity: 5 % to 93 %, non-condensing
Storage and transportation conditions	Temperature: -25 °C to +70 °C (-13°F to +158°F) Relative humidity: 5 % to 93 %, non-condensing
Atmospheric pressure	700 hPa to 1060 hPa

Technical data: Power supply unit

Power supply unit	AN05x – 050A
Input voltage	100 – 240 V AC
Input current	0.2 A
Input frequency	50 – 60 Hz
Output voltage	5 V DC
Output current	1 A