Operating Manual

ClearSounds® QUATTRO Bluetooth Amplified Stereo Neckloop Accessory

TABLE OF CONTENTS

PRIOR TO USE

Congratulations on your purchase of the QUATTRO Amplified Neckloop from ClearSounds Communications®. Please read this User Manual carefully in order to get the best use out of your new accessory. Keep this manual safe for easy reference.

Please visit our website at www.clearsounds.com to register your product, download additional manuals and review trouble-shooting tips.

Be sure to save your sales receipt as your proof of purchase should you need warranty service. The serial number for this product is located on the backside of the unit.

The QUATTRO generates an amplified induction (loop) signal that is picked up by the telecoil of your hearing aid(s) or cochlear implant processor(s). This option in the hearing device is activated by setting the hearing aid(s) or cochlear processor to the "T" or "MT" position. The QUATTRO has been developed to facilitate the use of a Bluetooth capable cellular phone, landline phone, or audio device including stereo audio devices with a t-coil equipped hearing device for hands-free wireless operation. The QUATTRO now also accommodates a 3.5mm headset jack for users without t-coils, hearing aids, or cochlear implants to enjoy the same hands-free functionality of this stereo device by using a regular 3.5mm headset or ear buds.

Warranty Service – This product is designed to provide years of quality service. However, if there is a malfunction and the troubleshooting recommendations on page 18 do not resolve the problem, follow the warranty procedure on page 20.

▌IMPORTANT SAFETY INSTRUCTIONS

This product is a mobile solution built on Bluetooth technology. Please read and understand the Installation Guide and User Manual before using your QUATTRO.

Electromagnetic Interference/Compatibility: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

Facilities: To avoid electromagnetic interference and/or compatibility conflicts, turn off your QUATTRO in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft: When instructed to do so, turn off your device when on board an aircraft. Any use of a device must be in accordance with applicable regulations per airline crew instructions.

Medical Devices: If you use any personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

WARNING: The QUATTRO is capable of amplifying sounds to a loud volume. It is important to instruct all potential users of its proper operation. It is advised to adjust the volume control to the minimum level (Low) when not in use and alert other users that hearing damage can potentially result from misuse.
WARNING: Use only the power supply indicated in the User's Manual.
WARNING: To avoid the possibility of electrical shock, do not use this product near water (For example, near a bathtub, wash basin, kitchen sink or laundry tub, in a wet basement or near a swimming pool) while in the bathtub or shower or when you are wet.
WARNING: Avoid using the unit during electrical storms. There

may be a remote risk of electric shock from lightning. If the electrical storm is present in your immediate area, possibility of electrical shock exists.

WARNING: Occasionally a power surge can occur on electrical lines without warning. With any electrical device that you plug into an outlet, it is suggested you use a surge protector. surge protector will prevent power surges from damaging your phone. Surge protectors are simple devices available at your local hardware store.

WARNING: Do not use a phone if you suspect a gas leak in the area. The phone's electrical contacts could create a spark, which could ignite any heavy concentration of leaking gas.
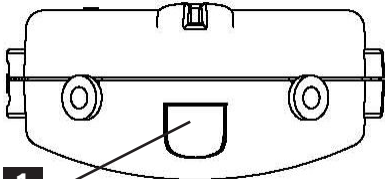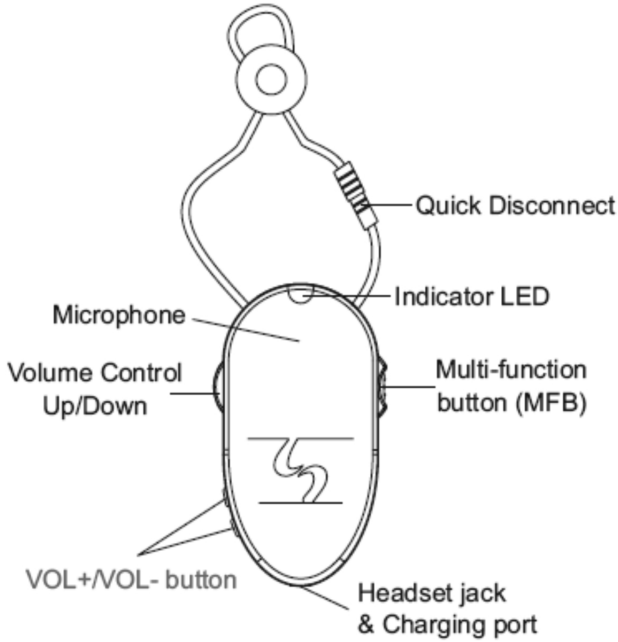
The QUATTRO Amplified Stereo Neckloop has been designed to give you years of dependable service. To ensure the utmost in performance, follow these guidelines in caring for your QUATTRO Neckloop:

1. Keep the unit out of the reach of small children.
2. If the QUATTRO is not in use do not store the QUATTRO with batteries installed for an extended length of time.
3. Store your QUATTRO in a dry place.
4. Do not expose your QUATTRO to excessive moisture, humidity or steam.
5. Avoid dropping or knocking the unit.
6. Do not clean with harsh chemicals, cleaning solvents or abrasive detergents. To clean, wipe with a soft cloth slightly dampened in a mild soap-and-water solution.

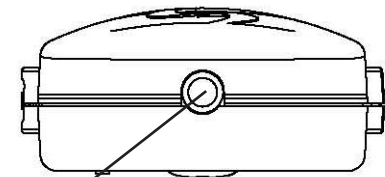**IMPORTANT:** YOUR RECEIPT IS PART OF YOUR WARRANTY AND MUST BE RETAINED AND PRODUCED IN THE EVENT OF A WARRANTY CLAIM.

PLEASE SAVE THESE INSTRUCTIONS

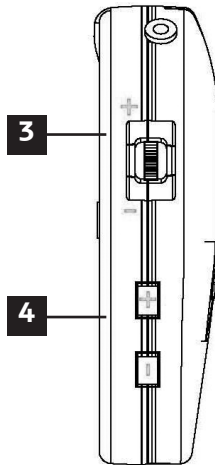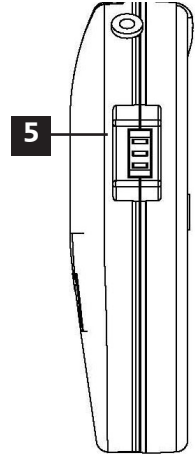## LOCATION OF CONTROLS

Quick Disconnect

Indicator LED

Microphone

Volume Control
Up/Down

Multi-function
button (MFB)

VOL+/VOL- button

Headset jack
& Charging port

1

TOP

2 **BOTTOM**

3

4

LEFT SIDE

5

RIGHT SIDE

TOP SIDE
1. Indicator LED

BOTTOM SIDE
2. Charging Port and Headset Jack

LEFT SIDE
3. Neckloop Volume Control
4. Headset Volume Control/Song Skip Key

RIGHT SIDE
5. Multi-function Button (MFB)

INTRODUCTION & SET UP

Bluetooth is a specification for short-range radio links between mobile computers, mobile phones, digital cameras and other portable devices. The radio operates on the globally available 2.45 GHz ISM 'free band', allowing users to use "Bluetooth" equipment worldwide. The Bluetooth devices communicate within a certain distance and do not need to be in line of sight.

The QUATTRO is Bluetooth V2.0 compliant, which means it is backward compatible with audio devices V1.2 or earlier and supports 4 profiles: Hands-Free Profile (HFP), Headset Profile (HSP), Advanced Audio Distribution Profile (A2DP) and Audio/Visual Remote Control Profile (AVRCP).

Installation of your **ClearSounds® QUATTRO Amplified Neckloop** is easy.

If at any time you have questions about your QUATTRO after reading this manual, please contact our ClearSounds® Customer Service Department at 1-800-965-9043.

█ PARTS CHECKLIST

Check the contents of the box - The QUATTRO should contain:

Neckloop ————

AC Charger ————

Car Charger ————

USB Cable ————

User Manual ————
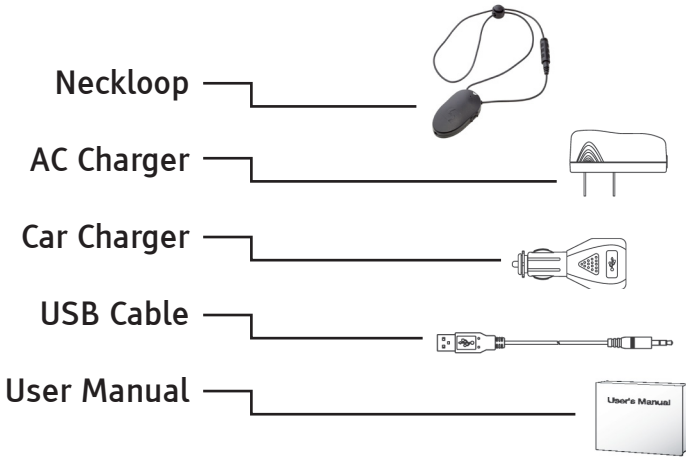
█ CHARGING THE QUATTRO

Before using your QUATTRO for the first time, you need to charge its self-contained Li-Polymer battery for approximately 2-3 hours, or until the LED Indicator stops flashing blue and turns off.

Method 1: Using the AC Power Supply
1. Connect the 3.5mm end of the USB cable into the charging port of the QUATTRO and then connect the other end into the USB jack of the base charger.
2. Plug the base charger into a standard AC wall outlet. The QUATTRO is fully charged when the light goes out. After a full charge, remove the charger from the wall outlet and detach the USB cable from the unit.
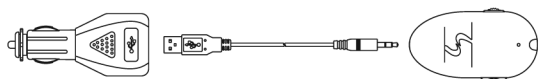
Method 2: Using the Car Charger
1. Connect the 3.5mm end of the USB cable into the charging port of the QUATTRO and then connect the other end into the USB jack of the car charger.

2. Plug the car charger into the car DC outlet of your vehicle. The QUATTRO is fully charged when the light goes out. After a full charge, remove the charger from the DC outlet and detach the USB cable from the unit.

Method 3: Using A Laptop

1. Connect the 3.5mm end of the USB cable into the charging port of the QUATTRO and then connect the other end into a USB jack on your PC. The QUATTRO is fully charged when the light goes out. After a full charge, remove the cable from the PC and detach the USB cable from the unit.
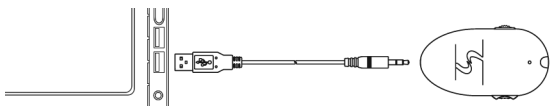
NOTE: During charging, you cannot use the QUATTRO. The batteries will have up to **3 hours of talk time and 120 hours of standby time** before needing recharging. Battery life will depend on actual usage and amplification levels.

Low Battery:

When your QUATTRO is on and the battery power is running low, it will beep once every 30 seconds and the LED indicator flashes red every 30 seconds. You will need to recharge the battery. The QUATTRO will shut off when the power voltage falls below necessary operating voltage.

After the battery is fully charged, the LED indicator will turn off. It takes approximately 1 to 1.5 hours to fully charge the battery. Do not charge for more than 24 hours.

▎ POWER ON AND OFF

To turn the QUATTRO ON:
Press and hold the Multi-Function Button on the side of the QUATTRO for 3 seconds. A series of 4 tones (low to high) can be heard from your hearing aid/cochlear processor when it is in t-coil mode or from the headset if connected. The LED flashes blue 4 times.

To turn the QUATTRO OFF:
Press and hold the Multi-Function Button on the side of the QUATTRO for 3 seconds. A series of 4 tones (high to low) can be heard from your hearing aid/cochlear processor when it is in t-coil mode or from the headset if connected. The LED flashes red 4 times before switching off.

▎ WEARING THE UNIT

1. Place the loop around your neck and insert the round connector plug into the Neckloop Quick Disconnect plug, forming a continuous loop.

IMPORTANT: To have the Neckloop operate properly, you will need to be sure the Quick Disconnect connection jack has been securely clicked in place. There will be two distinct clicks.

2. Make sure your QUATTRO is paired to the device you wish to use.
3. The QUATTRO allows non hearing aid/cochlear implant wearers or hearing aid/cochlear implant wearers without t-coils to connect a 3.5mm headset or ear bud (SmartSound Earbuds with Reverse Sound technology by ClearSounds are recommended). Connect your 3.5mm headset or ear buds directly into the charging jack located on the bottom of your QUATTRO (see Location of Controls diagram).
4. For hearing aid/cochlear implant wearers with t-coils, switch your device to "T."

FUNCTIONS

█ PAIRING TO A CELL PHONE

Before using your QUATTRO for the first time, you must pair it with your Bluetooth phone. "Pairing" creates a link between your Bluetooth equipped cell phone and the QUATTRO, and it allows your cell phone to remember the QUATTRO's unique ID by adding it to a list of paired devices in the phone. The QUATTRO should be paired once with the phone before use. Once your QUATTRO and phone are paired, your QUATTRO automatically connects to your phone if the phone supports that protocol. Some phones may ask if you want to manually connect to a Bluetooth device. Check your phone's manual for more details on how its Bluetooth functions operate.

Please Note: If the pairing information or log is deleted from your phone, the QUATTRO unit must be paired again with the phone prior to use.

To Pair:
1. Place the QUATTRO and phone close to each other (within 3 feet). Make sure that your phone is on.
2. With your QUATTRO off, press and hold the Multi Function Button for approx. 6 seconds. Make sure that you continue to hold the Multi Function Button until you see the LED indicator flash red and blue alternately. The QUATTRO is now in pairing mode and will stay in pairing mode for approx. 2 minutes.
3. Enter the Bluetooth menu on your phone and perform a device search (for the details on device search for your phone, refer to your owner's manual). When the scan is complete, the phone displays the devices discovered.
4. Select Cla7 STEREO BT from the list of devices discovered and confirm.
5. When prompted by the phone, enter the passkey as '0000'. Your phone will confirm that pairing has occurred and the QUATTRO will confirm it paired successfully with 10 rapid flashes.

6. The phone information is now stored in the QUATTRO memory.
7. The QUATTRO LED indicator will flash blue every 3 seconds when paired and is now in standby mode, ready to make or receive calls.

If the QUATTRO is not successfully paired within 2 minutes, it will automatically leave pairing mode. If you still want pairing, you will need to repeat the steps listed above.

IMPORTANT:
1. After the connection, if you want your cell phone to connect automatically the next time you power on the QUATTRO, set the QUATTRO as your authorized device or auto connect device on your cell phone menu.
2. If you want to connect your QUATTRO to another Bluetooth enabled device, you will need to disconnect the QUATTRO with the paired device before establishing a connection with the intended device.
3. Make sure the QUATTRO and phone you are using are no more than 33 feet apart so they are within operable range.
4. If the link disconnects, (for example, the device is out of range) the QUATTRO tries to re-establish the link and will search for the device for a period of time.
5. The QUATTRO will automatically try to connect to the last connected phone when powered ON for the first 90 seconds.

<u>Disconnect Options:</u>
1. Power off the QUATTRO
2. Switch off the Bluetooth function on the cell phone
3. Separate the QUATTRO from the cell phone at a distance of 65 feet or more.

▌ PAIRING TO ADDITIONAL DEVICES

The QUATTRO now includes the Advanced Audio Distribution Profile (A2DP) and can also connect to Bluetooth enabled stereo audio devices for streaming media. Your QUATTRO can

store pairing information for up to eight (8) different devices with Bluetooth wireless capability. Devices are stored in a "Paired Device List" in the memory in a time sequence. When an attempt to pair more than eight devices is made, the oldest paired device is removed from the memory list. Any of the eight paired devices can initiate a connection to the QUATTRO.

The QUATTRO will automatically initiate a connection (once turned on) with the last device to which it was connected. If you want to connect the QUATTRO to another device in the paired device list, you must initiate the connection from that device. When any of the eight devices initiates a connection to your QUATTRO, that device then becomes the "last connected" device.

▌ADJUSTING VOLUME

The receiving volume can be adjusted during a call or when listening to other audio sources. The volume setting on the cell phone or other device will add or remove amplification from the overall system. If amplification is low, check the volume level on both units. If there is distortion or other interference, lower the volume on one or both of the units. Too much amplification can cause distortion.

<u>Adjustment while using the neckloop with t-coils</u>
Use the volume control wheel located on the left side of the unit (on your right when it is being worn). Slide the wheel up to increase the volume and slide it down to decrease the volume.

<u>Adjustment while using a headset</u>
Use the volume control buttons located on the left side of the unit (on your right when it is being worn), which is below the volume control wheel used for the neckloop. Press the + button once to increase the volume and press the − button once to decrease the volume. To continue increasing or decreasing volume, pressthe + or − button

repeatedly, but do not press and hold for longer than 1 second as this will activate the Track Selection function (see page 18).

▋ MAKING AND RECEIVING CALLS

The QUATTRO supports Hands-Free, Headset, Advanced Audio Distribution (A2DP) and Audio/Visual Remote Control (AVRCP) Profiles. Accessing call functions depends on which profile your phone supports. You can activate all functions for Hands-Free Profile using the following table. NOTE: Some phones do not support all features listed. Please consult your phone's user guide.

Important Terms to know for pressing the Multi-Function button (MFB):

Press and Release - refers to a duration of less than 0.8 seconds. You should hear 1 beep to confirm the requested action.

Press and Hold - refers to a duration of more than 0.8 but less than 1.6 seconds. While holding the multi-function button you will hear one beep, release the Multi-Function button to confirm the requested action.

Press and Extend Hold - refers to a duration of more than 3 seconds. While holding the multi-function button you will hear one beep, release the Multi-Function button to confirm the requested action.

QUATTRO Function	Phone Condition	QUATTRO Start Point	Action: Phone in Hands-Free Profile
Power ON	--	OFF	**Press and Hold** the MFB until the QUATTRO is powered ON. A set of 4 tones plays (low to high) and the LED flashes blue 4 times.
Pairing	--	OFF	**Press and Extend** Hold the MFB for 6 seconds. The LED will flash blue 4 times and then alternately flash red and blue. The QUATTRO can then be discovered by another Bluetooth device for 2 minutes.

Power OFF	--	ON (idle)	**Press and Extend Hold** the MFB until the QUATTRO is powered OFF. A set of 4 tones plays (high to low) and the LED is off.
Make a Voice Dial Call	ON	ON (idle)	**Press and Release** the MFB twice quickly. Follow the phone's prompt and say the desired name and the phone will dial the number.
Redialing Last Number	ON	ON (idle)	**Press and Hold** the MFB to recall the last phone number dialed (number dialed automatically).
Receiving A Call	ON (ring)	ON (ring)	**Press and Release** the MFB to answer the call.
Ending A Call	ON (on call)	ON (on call)	**Press and Release** the MFB to end the call.
Rejecting a Call	ON (phone ring)	ON (ring)	**Press and Hold** the MFB to reject the call.
Put Call on Hold	ON (on call)	ON (on call)	**Press and Hold** the MFB to place the current call on HOLD.
Resume a Call On Hold	ON (active call on Hold)	On (active call on Hold)	**Press and Hold** the MFB to retrieve the call.
Answering 2nd Incoming Call	ON (on call)	ON (on call)	**Press and Hold** the MFB to put the 1st call on hold and answer the 2nd call.
To Switch Between 2 active calls	ON (on call)	ON	**Press and Hold** the MFB to place the 2nd call on hold and return to the first.
Transfer call from Neckloop to Phone	ON (on call)	ON	**Press and Extend** Hold the MFB to turn the QUATTRO off (4 tones high to low), and the call is transferred to the phone.
Transfer Call from Phone to Neckloop	ON (on call)	OFF (previously paired)	**Press and Hold** the MFB. Once a connection is established, the call is transferred to the QUATTRO.
User initiated Reconnect	ON (idle)	ON (not connected)	**Press and Release** the MFB, and the QUATTRO will try to reconnect to the last connected device.
Muting the Microphone	ON (on call)	ON (on call)	**Press and Hold** simultaneously the VOL + and VOL – buttons to mute the microphone. Press and hold the VOL + and VOL – buttons again to cancel the muting.

▌ LED INDICATOR

LED Indicator status with NO Charger Attached

LED Status	QUATTRO Action
OFF	Power OFF
Flashes red and blue alternately	Pairing Mode
10 rapid flashes	Pairing Successful
Flashes at 3 second intervals (0.1 seconds ON, 2.9 seconds OFF)	Standby (No Audio Connection)
Flashes at 8 second intervals (2.0 seconds ON, 6.0 seconds OFF)	Connected to Audio
Flashes red every 30 seconds	Battery Low

LED Indicator status with Charger Attached

LED Status	QUATTRO Action
OFF	Charging Complete
Flashes solid blue	Charging

Note: When the QUATTRO is paired to the phone and there is no operation for five minutes, the blue flashing LED turns off to preserve battery life. To confirm the QUATTRO is on, press and release the Multi-Function Button on the QUATTRO. This resets the timer, and the flashing resumes.

▌AUDIO TONES

Audio Tone	QUATTRO Action
Series of 4 tones (low to high)	Power ON
Series of 4 tones (high to low)	Power OFF
Single High Tone	Pairing Successful
Ring Tone	Incoming Call
Single High Tone	End Call
Beep once every 30 seconds	Battery Low
No Audio Indication (deteriorating audio quality)	Out of Range
Singe Low Tone (depends on phone)	Initiate Voice Activation
Dual High/Low tone if supported by the phone	Voice tag not recognized
5 Rapid tones repeated every 60 seconds after the phone goes out of network service for more than 20 seconds	No Network/Services (Hands-Free Profile)

▌STEREO AUDIO LISTENING

Your ClearSounds QUATTRO includes the Advanced Audio Distribution Profile (A2DP), which allows users to connect to other stereo audio devices that support similar Bluetooth connections including MP3 players, Smartphones and televisions (via stereo audio Bluetooth transmitters or dongles).

Follow the same pairing methods as was done when pairing with a cell phone and follow the pairing instructions for your audio device. Your cell phone or audio device may need to have a connection to the QUATTRO activated when switching between devices or there may be an automatic connection. Check with your various Bluetooth devices for their method of operation.

<u>Playing Music</u>
Find the desired music on your mobile phone or other Bluetooth device, then press the Multi-Function Button once to play it.

<u>Track Selection (Song Skip)</u>
If you have Audio/Video Remote Control Profile (AVRCP) on your audio device, you will be able to control the track selection on the QUATTRO. If you do not have AVRCP on your audio device, you can use your audio device to control the track selection.

<u>To select a track:</u>
Press and hold VOL + button for 2 seconds during music playing to skip to the next song or press and hold VOL - button for 2 seconds to return to the previous one.

Please Note: If you are listening to music on your mobile phone and there is an incoming call, upon hearing the ring, press the MFB to answer the call. This will mute the music and when you end the call, the QUATTRO will resume playing music.

TROUBLESHOOTING

No Sound
1. Make sure Hearing Aid T-coil is turned on and functional.
2. Battery may be dead and needs to be charged (page 8).
3. Verify that the QUATTRO is turned on (page 10).
4. Verify that the phone or audio device is turned on.
5. Check to verify that the QUATTRO is paired and connected with the device (page 11).

Weak Sound
1. Weak battery (page 8).
2. Turn up the volume on the QUATTRO (page 13).
3. Turn up the volume on the phone.
4. Check your hearing aid – weak battery.
5. Check your hearing aid – weak or non-functional t-coil.

TECHNICAL SPECIFICATIONS

Model Name: QUATTRO Bluetooth Stereo Amplified Neckloop

Bluetooth Compliance: Bluetooth Specifications version 2.0

Supported Profiles: Headset, **A2DP, AVRCP and Hands-free

Frequency Band: 2.4GHz ISM Spectrum; frequency hopping 79 channels

Modulation: GFSK (Gaussian Frequency Shift Keying)

RF Power: Class 2, -6-6dBm

Operating Range: Up to 10m/30ft (indoor)

Talk Time*: Up to 3hrs with neckloop, up to 13hrs with earbuds/earphone

Standby Time*: Up to 120hrs

Connection: Point-to-Point

Security: Security mode 3 (pairing, encryption, authentication)

Power Source: Rechargeable Li-Polymer 650mAh

Charging: Universal Adaptor 5V/500mA

Charging Time: 3hrs

Batteries: Rechargeable NICAD Battery – Included

Compatibility: Mobile phones supporting Bluetooth 1.1 (and above), Headset and/or Hands-free profiles. Other Stereo Audio Devices supporting Bluetooth 1.1 (and above), Headset and/or Hands-free profiles.

Dimension: 1.25"x2.5"x.75"

* May vary based on users operating environment, makes and models of phones and other Bluetooth devices.

** A2DP or Advanced Audio Distribution Protocol allows the user to connect the QUATTRO to other Bluetooth enabled stereo audio devices. Using the correct Bluetooth transmitters will enable the user to connect the QUATTRO to many types of audio devices, including the television, for streaming media.

Purchase accessories for your Clearsounds QUATTRO:

Optional Stereo Headset: CS-RS062 SmartSound Earbuds with Reverse Sound technology. Recommended for optimal sound quality.

Optional Bluetooth Hub: Used for connecting your QUATTRO to amulti-line office telephone system. Call ClearSounds for more information.

Optional Stereo Audio Transmitter: CS-BTDONGLE is used for connecting your Quattro to a stereo audio output or source including Televisions.

To learn more, call ClearSounds at 1-800-965-9043 or visit www.clearsounds.com

LIMITED ONE-YEAR WARRANTY

The QUATTRO is warranted by ClearSounds against manufacturing defect in material and workmanship under normal use for one (1) year from the date of purchase. The Charging Components are warranted by ClearSounds for 90 days. Should you experience a problem, contact our customer service department or visit our website at www.clearsounds.com.

Be sure to save your sale receipt as the proof of purchase date should you need warranty service.

In the event that this product fails to function properly within one year (90 days for Charging Components) of the original purchase due to defects in materials or workmanship, return the unit (freight prepaid) with proof of purchase (sales receipt or packing slip, no exceptions) to ClearSounds Communications. ClearSounds Communications will either repair or replace the unit (with a refurbished unit or unit of equal condition) and return it you (using UPS/USPS ground shipping) at no cost to you. The warranty replacement or repair will be warranted for a period of 90 days or the remainder of the original warranty period (from original purchase date); whichever is longer.

The warranty does not cover accidents, negligence or breakage to any parts. This includes shipping damage, failure to follow instructions, misuse, fire, floods, use of incompatible accessories, Acts of God or failure in your phone service carrier's line service. The product must not be tampered with or taken apart by anyone who is not an authorized ClearSounds Communications® representative. Tampering with the phone will void any written or implied warranties.

If a defect covered by this warranty should occur, promptly contact a Customer Service Representative by phone or log onto www.clearsounds.com to obtain a Return Merchandise Authorization number and shipping instructions before shipping the product to us. Any shipment without a (RMA) Return Merchandise Authorization number will not be accepted and will be returned to you at your expense. All authorized returned products must be accompanied with proof of purchase and a brief explanation of the problem.

For out of warranty repairs and service, please contact our Customer Service Department for instructions. The repair shall be warranted for 90 days.

IMPORTANT: YOU RECEIPT IS PART OF YOUR WARRANTY AND MUST BE RETAINED AND PRODUCED IN THE EVENT OF A WARRANTY CLAIM.

Service in United States and Canada, contact:
ClearSounds Communications
Attention: Repair Center
1743 Quincy Avenue, Suite 155
Naperville, IL 60540
USA
800-965-9043

Check our website www.clearsounds.com for additional information and to download additional manuals and information.