SuperEar® LoudandClear™

Manufactured and Distributed by: **Sonic Technology Products, Inc.** P.O. Box 539 Grass Valley, CA 95945 USA 1-800-247-5548 www.sonictechnology.com

16

Model LCS110/LCT100/LCR100 Wireless Auditory Assistance System Operating Manual

SuperEar® LoudandClear™

Model LCS110/LCT100/LCR100 Wireless Auditory Assistance System Operating Manual

Manufactured and Distributed by: Sonic Technology Products, Inc. P.O. Box 539 Grass Valley, CA 95945 USA

Jrass Valley, CA 95945 USA 1-800-247-5548 www.sonictechnology.com Thank you for purchasing the SuperEar® Loudand Clear FM Transmitter/Receiver Wireless Auditory Assistance System. The SuperEar® LoudandClear is designed and manufactured to provide clear, crisp stereo sound from either of two sources: (1) Transmission of normal voice using the supplied microphone or (2) Transmission of television, MP3 programming or any other sound source using the supplied 3.5mm auxiliary cable. The Transmitter then sends the signal, using one of three pre-selected FM Radio frequencies, to the Receiver.

The Receiver unit receives the audio signal from up to 150 feet away and converts it to sound waves that can be heard through the supplied earbuds and adjusted to the desired volume.

THE LOUDandCLEAR IS NOT AN FM RADIO!

FOR BEST RESULTS, USE IN LINE-OF-SIGHT COMMUNICATIONS. SOUND QUALITY WILL DEGRADE AS WALLS AND OTHER OBSTACLES MAY INTERFERE WITH SOUND TRANSMISSION.

The LoudandClear is ideal for

- Classroom or Lecture environments
- Worship Services
- Tour Groups
- · Hospitals and Long Term Care Facilities
- Television Viewing 2

Thank you for purchasing the SuperEar® Loudand Clear FM Transmitter/Receiver Wireless Auditory Assistance System. The SuperEar® LoudandClear is designed and manufactured to provide clear, crisp stereo sound from either of two sources: (1) Transmission of normal voice using the supplied microphone or (2) Transmission of television, MP3 programming or any other sound source using the supplied 3.5mm auxiliary cable. The Transmitter then sends the signal, using one of three pre-selected FM Radio frequencies, to the Receiver.

The Receiver unit receives the audio signal from up to 150 feet away and converts it to sound waves that can be heard through the supplied earbuds and adjusted to the desired volume.

THE LOUDandCLEAR IS NOT AN FM RADIO!

FOR BEST RESULTS, USE IN LINE-OF-SIGHT COMMUNICATIONS. SOUND QUALITY WILL DEGRADE AS WALLS AND OTHER OBSTACLES MAY INTERFERE WITH SOUND TRANSMISSION.

The LoudandClear is ideal for

- · Classroom or Lecture environments
- · Worship Services
- Tour Groups
- · Hospitals and Long Term Care Facilities
 - **Television Viewing**

15

Warranty

Sonic Technology Products warrants this product to be free from defects in workmanship and material under normal use and conditions for a period of three years from date of original purchase. Batteries and cables are not covered by this warranty. Warranty is void if damage is due to misuse, abuse, negligence, damage caused by heat or water, or unauthorized modifications or repairs. Sonic Technology is not liable for consequential damages arising out of any failure of the equipment to perform as intended. Sonic Technology shall bear no responsibility or obligation with respect to the manner or use of equipment sold by it. Sonic Technology specifically disclaims and negates any warranty of merchantability or fitness for a particular purpose of such equipment including, without limitation, any warranty that the use of such equipment for any purpose will comply with applicable laws and regulations.

Equipment may be repaired or replaced at the discretion of Sonic Technology. Should it be necessary to send in your SuperEar[®] Loud*and*Clear, return it in a well-packaged carton and ship postage prepaid to to P.O. Box 539, Grass Valley, CA 95945. Returns made under this warranty must be accompanied by US\$5.00 to handle the handling and return postage cost.

14

CONTENTS (LCS110 Only)

- 1 FM Transmitter (LCT100)
- 1 FM Receiver (LCR100)
- 1 Recharging Wall Plug
- 2 USB (USB to Mini USB) Recharging Cable
- 4 AA Rechargeable Batteries
- 2 Belt Clips
- 1 Microphone Assembly
- 1 Auxilliary (3.5mm jack to 3.5mm jack) Cable
- 1 EarBud Assembly
- 1 Instruction Manual

USE OF MULTIPLE TRANSMITTERS AND RECEIVERS

If two transmitters are operating on the same channel within 200 feet of one another, static and interference will result. Changing Channels on the Transmitter and Receiver will resolve this problem.

Important: The SuperEar[®] Loud*and*Clear is designed so that the Transmitter can be used with several Receivers set to the same Channel. Should you desire additional Receivers for multiple listeners, please contact your SuperEar[®] retailer or call, write or e-mail Sonic Technology Products, Inc.

3

Warranty

Sonic Technology Products warrants this product to be free from defects in workmanship and material under normal use and conditions for a period of three years from date of original purchase. Batteries and cables are not covered by this warranty. Warranty is void if damage is due to misuse, abuse, negligence, damage caused by heat or water, or unauthorized modifications or repairs. Sonic Technology is not liable for consequential damages arising out of any failure of the equipment to perform as intended. Sonic Technology shall bear no responsibility or obligation with respect to the manner or use of equipment sold by it. Sonic Technology specifically disclaims and negates any warranty of merchantability or fitness for a particular purpose of such equipment including, without limitation, any warranty that the use of such equipment for any purpose will comply with applicable laws and regulations.

Equipment may be repaired or replaced at the discretion of Sonic Technology. Should it be necessary to send in your SuperEar[®] Loud*and*Clear, return it in a well-packaged carton and ship postage prepaid to P.O. Box 539, Grass Valley, CA 95945. Returns made under this warranty must be accompanied by US\$5.00 to handle the handling and return postage cost.

CONTENTS (LCS110 Only)

- 1-FM Transmitter (LCT100)
- 1-FM Receiver (LCR100)
- 1 Recharging Wall Plug
- 2 USB (USB to Mini USB) Recharging Cable
- 4 AA Rechargeable Batteries
- 2 Belt Clips
- 1 Microphone Assembly
- 1 Auxilliary (3.5mm jack to 3.5mm jack) Cable
- 1 EarBud Assembly
- 1 Instruction Manual

USE OF MULTIPLE TRANSMITTERS AND RECEIVERS

If two transmitters are operating on the same channel within 200 feet of one another, static and interference will result. Changing Channels on the Transmitter and Receiver will resolve this problem.

Important: The SuperEar® Loud*and*Clear is designed so that the Transmitter can be used with several Receivers set to the same Channel. Should you desire additional Receivers for multiple listeners, please contact your SuperEar® retailer or call, write or e-mail Sonic Technology Products, Inc.



FCC Statement

This device complies with Part 15 of the FCC Rules. 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment 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 equipment 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 equipment and receiver. —Connect the equipment 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.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1	2
1	



FCC Statement

This device complies with Part 15 of the FCC Rules. 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment 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 equipment 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 equipment and receiver.
Connect the equipment 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.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CARE AND MAINTENANCE

• Avoid excessive heat. Do not leave the Transmitter or Receiver in hot sun or near other sources of high temperature.

• Avoid dropping. The Receiver and Transmitter may be damaged if dropped.

 Keep battery terminals and contacts clean. Inspect to ensure they are not corroded.
Polish with a pencil eraser to clean.

Remove rechargeable batteries when Receivers and Transmitters are being stored. Inspect batteries periodically for leakage.

■ Use care when removing Ear Buds and Microphones. Do not pull on wire leads, as this may loosen connections and cause failure.



5

12

CARE AND MAINTENANCE

• Avoid excessive heat. Do not leave the Transmitter or Receiver in hot sun or near other sources of high temperature.

• Avoid dropping. The Receiver and Transmitter may be damaged if dropped.

 Keep battery terminals and contacts clean. Inspect to ensure they are not corroded.
Polish with a pencil eraser to clean.

Remove rechargeable batteries when Receivers and Transmitters are being stored. Inspect batteries periodically for leakage.

■ Use care when removing Ear Buds and Microphones. Do not pull on wire leads, as this may loosen connections and cause failure.



GETTING STARTED

Battery Placement

Open the battery compartment by sliding the battery door on the back of the Receiver down and insert the 2 Rechargeable batteries as indicated (+ and – symbols are molded into the bottom of the battery compartment to ensure proper placement). Repeat the process for the Transmitter.

Channel Selection

The SuperEar Loud*and*Clear provides a choice of three channels, with the Frequency Selector Switch located inside the battery compartment, above the batteries:

Channel 1 – Far Left Position – 72.2 MHz Channel 2 - Center Position – 72.8 MHz Channel 3 – Far Right Position – 75.8 MHz

The Channel Frequency can be easily changed for the best possible reception. THE SAME CHANNEL FREQUENCY MUST BE SELECTED FOR BOTH THE RECEIVER AND THE TRANSMITTER. IF CHANNEL FREQUENCIES ARE NOT SYNCHRONIZED, TRANSMISSION AND RECEPTION WILL FAIL. Channel frequencies are printed on the inside of the

battery compartment door for quick reference.

6

GETTING STARTED

Battery Placement

Open the battery compartment by sliding the battery door on the back of the Receiver down and insert the 2 Rechargeable batteries as indicated (+ and – symbols are molded into the bottom of the battery compartment to ensure proper placement). Repeat the process for the Transmitter.

Channel Selection

The SuperEar Loud*and*Clear provides a choice of three channels, with the Frequency Selector Switch located inside the battery compartment, above the batteries:

Channel 1 – Far Left Position – 72.2 MHz Channel 2 - Center Position – 72.8 MHz Channel 3 – Far Right Position –75.8 MHz

The Channel Frequency can be easily changed for the best possible reception. THE SAME CHANNEL FRE-QUENCY MUST BE SELECTED FOR BOTH THE RE-CEIVER AND THE TRANSMITTER. IF CHANNEL FREQUENCIES ARE NOT SYNCHRONIZED, TRANSMISSION AND RECEPTION WILL FAIL.

Channel frequencies are printed on the inside of the battery compartment door for quick reference.

Belt Clip Installation/Removal

1) Place belt clip over the Battery Compartment Door, with the top hinge centered between the two antiscuff pads and the clips over the retaining slots.

2) Slip the small joint into the slot located above the Battery Compartment Door.

3) Apply pressure on both sides of the clip until the clip retainers snap into the slots on the sides of the unit.

4) To remove, flex out one side of the clip retainer, unsnap from the retaining slot and remove the clip.

Troubleshooting

If noise, distortion or static is present, check that:

- batteries are high quality and fully charged.
 - Transmitter and Receiver are set to the same Channel.
 - there are no other Transmitters in the immediate vicinity transmitting on the same frequency.
 - all cables are fully connected.
 - the Microphone has not been damaged with excessive heat or moisture.
 - Ear Buds have not been damaged by pulling on the wires.

If the above steps do not correct the problem, contact Sonic Technology Products, Inc. for repair or replacement.

11

Belt Clip Installation/Removal

1) Place belt clip over the Battery Compartment Door, with the top hinge centered between the two antiscuff pads and the clips over the retaining slots.

2) Slip the small joint into the slot located above the Battery Compartment Door.

3) Apply pressure on both sides of the clip until the clip retainers snap into the slots on the sides of the unit.

4) To remove, flex out one side of the clip retainer, unsnap from the retaining slot and remove the clip.

Troubleshooting

If noise, distortion or static is present, check that:

- batteries are high guality and fully charged.
 - Transmitter and Receiver are set to the same Channel.
 - there are no other Transmitters in the immediate vicinity transmitting on the same frequency.
 - · all cables are fully connected.
 - the Microphone has not been damaged with excessive heat or moisture.
 - Ear Buds have not been damaged by pulling on the wires.

If the above steps do not correct the problem, contact Sonic Technology Products, Inc. for repair or replacement.

TRANSMITTER OPERATION FOR TELEVISION/MP3/AUXILLIARY SOUND TRANSMISSION

Transmitter

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option

3) Plug in the 3.5mm Auxillary Cable Jack into the Microphone Plug

4) Plug in the other end of the Auxillary Cable into the Speaker/Aux. Output plug of the television, radio, computer or MP3 Player.

5) Position the "On/Off/Mute" Switch to the "On" position. The Green LED will light to indicate the unit is operating.

Receiver

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option to match Transmitter Channel

3) Plug in the 3.5mm Headphone or Earbud jack into the Headphone plug

4) Turn the "On/Off/Volume" Control wheel until it clicks and the Green LED light goes on. Adjust volume to preferred level.

10

Battery Charging

To charge the batteries in the Receiver or Transmitter, place the rechargeable batteries in the battery compartment as explained above. Plug the recharging Mini USB end of the Recharging cable into the recharging port. The other end of the cable with the USB connector may be either plugged into a USB port on your computer or plugged into the Recharging Wall Plug, which is in turn plugged into a 110VAC outlet. Once charging begins, the green Recharging Indicator LED will flash until the LED turns to solid green. This indicates charging is complete.

• Allow Ni-MH Batteries (provided) to charge 12-16 hours for up to 11 hours of useage for Transmitter (102 mA/ hour) and up to 15 hours useage for Receiver (55 mA/hour).

 Excessive charging may reduce the life expectancy and capacity

• The LED light will flash red when the unit is in a low battery state.

• Charging may be accomplished with the "Power" either ON or OFF.

• Normal operation may continue while recharging, if the "Power" mode is ON.

7

TRANSMITTER OPERATION FOR TELEVISION/MP3/AUXILLIARY SOUND TRANSMISSION

Transmitter

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option

3) Plug in the 3.5mm Auxillary Cable Jack into the Microphone Plug

4) Plug in the other end of the Auxillary Cable into the Speaker/Aux. Output plug of the television, radio, computer or MP3 Player.

5) Position the "On/Off/Mute" Switch to the "On" position. The Green LED will light to indicate the unit is operating.

Receiver

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option to match Transmitter Channel

3) Plug in the 3.5mm Headphone or Earbud jack into the Headphone plug

4) Turn the "On/Off/Volume" Control wheel until it clicks and the Green LED light goes on. Adjust volume to preferred level.

Battery Charging

To charge the batteries in the Receiver or Transmitter, place the rechargeable batteries in the battery compartment as explained above. Plug the recharging Mini USB end of the Recharging cable into the recharging port. The other end of the cable with the USB connector may be either plugged into a USB port on your computer or plugged into the Recharging Wall Plug, which is in turn plugged into a 110VAC outlet. Once charging begins, the green Recharging Indicator LED will flash until the LED turns to solid green. This indicates charging is complete.

- Allow Ni-MH Batteries (provided) to charge 12-16 hours for up to 11 hours of useage for Transmitter (102 mA/ hour) and up to 15 hours useage for Receiver (55 mA/hour).

 Excessive charging may reduce the life expectancy and capacity

• The LED light will flash red when the unit is in a low battery state.

• Charging may be accomplished with the "Power" either ON or OFF.

• Normal operation may continue while recharging, if the "Power" mode is ON.

OPERATION WITHOUT USING RECHARGEABLE BATTERIES

The SuperEar[®] LoudandClear was designed to operate using batteries or 110VAC household current. To power the Transmitter or Receiver using household current, plug in the Recharging cable to the unit and the Recharging Wall Plug just as you would for recharging. Batteries must be in the unit to operate while plugged into 110v wall plug. If batteries are not in the unit, it will not operate.

Any rechargeable Ni-MH AA batteries or premium Alkaline batteries may be used in the SuperEar® LoudandClear. CAUTION: DO NOT ATTEMPT TO RE-CHARGE NON-RECHARGEABLE BATTERIES. THIS MAY DAMAGE THE UNIT.

LED Indicators

Power LED

Green indicates "Power" is ON *Red* indicates "Mute" is ON *No light* indicates "Power" is OFF

Charging LED

Red Flashing (when "Power" is ON) indicates Low Battery Status

Green Flashing indicates Batteries are Charging *Solid Green* indicates Batteries Fully Charged *No light* indicates Batteries are NOT Charging

8

OPERATION FOR VOICE TRANSMISSION

Transmitter

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option

3) Plug in the 3.5 mm microphone jack into the microphone plug on the transmitter

4) Clip the microphone to a lapel or collar near the mouth. HOLDING THE MICROPHONE, AND NOT CLIPPING IT TO CLOTHING, WILL RESULT IN SCRATCHY AND DEGRADED SOUND QUALITY.

5) Position the "On/Off/Mute" Switch to the "On" position. The Green LED will light to indicate the unit is operating.

6) To disable the transmission momentarily, turn the Switch to "Mute". This will cause the transmitter audio output to cease, without transmitting any static or back-ground noise. In the "Mute" position, the LED light will indicate Red.

Receiver

1) Install Batteries and charge as indicated above

2) Select Channel Option to match Transmitter Channel

3) Plug in the 3.5mm Earbud jack into the plug

4) Turn the "On/Off/Volume" Control wheel until it clicks and the Green LED light goes on. Adjust volume to preferred level

9

OPERATION WITHOUT USING RECHARGEABLE BATTERIES

The SuperEar[®] LoudandClear was designed to operate using batteries or 110VAC household current. To power the Transmitter or Receiver using household current, plug in the Recharging cable to the unit and the Recharging Wall Plug just as you would for recharging. Batteries must be in the unit to operate while plugged into 110v wall plug. If batteries are not in the unit, it will not operate.

Any rechargeable Ni-MH AA batteries or premium Alkaline batteries may be used in the SuperEar® LoudandClear. CAUTION: DO NOT ATTEMPT TO RE-CHARGE NON-RECHARGEABLE BATTERIES. THIS MAY DAMAGE THE UNIT.

LED Indicators

Power LED

Green indicates "Power" is ON *Red* indicates "Mute" is ON *No light* indicates "Power" is OFF

Charging LED

Red Flashing (when "Power" is ON) indicates Low Battery Status

Green Flashing indicates Batteries are Charging *Solid Green* indicates Batteries Fully Charged *No light* indicates Batteries are NOT Charging

OPERATION FOR VOICE TRANSMISSION

Transmitter

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option

3) Plug in the 3.5 mm microphone jack into the microphone plug on the transmitter

4) Clip the microphone to a lapel or collar near the mouth. HOLDING THE MICROPHONE, AND NOT CLIPPING IT TO CLOTHING, WILL RESULT IN SCRATCHY AND DEGRADED SOUND QUALITY.

5) Position the "On/Off/Mute" Switch to the "On" position. The Green LED will light to indicate the unit is operating.

6) To disable the transmission momentarily, turn the Switch to "Mute". This will cause the transmitter audio output to cease, without transmitting any static or back-ground noise. In the "Mute" position, the LED light will indicate Red.

Receiver

1) Install Rechargeable Batteries and charge as indicated

2) Select Channel Option to match Transmitter Channel

3) Plug in the 3.5mm Earbud jack into the plug

4) Turn the "On/Off/Volume" Control wheel until it clicks and the Green LED light goes on. Adjust volume to preferred level