

MobilitySound BTH-300

Bluetooth headset w/Dual Connections

The **MobilitySound BTH-300** is a wireless microphone kit designed for use with a MobilitySound Adapter and a two-way radio (sold separately).



Federal Communication Commission Interference Statement

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 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.

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

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 complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

Please keep product 20cm away from your body or bystander during the radio operation. The typical handheld two-way radios were certified under mobile usage condition (i.e. keep 20cm away from the user body) and use of such radio closer than 20cm may exceed the US RF exposure limit and shall be avoided.

Controls and Connection

EARPHONE JACK

Any standard 3.5 mm mono or stereo listen-only earphone can be plugged into this jack. Received calls can be heard over the earphone.

Can also be used with 3.5 mm 4-conductor (Apple iPhone compatible) audio accessories that contain both earphones and a microphone. Received calls can be heard over the accessory earphones and transmit audio will be taken from the accessory microphone. Install the supplied dust cover when the jack is not in use.



EARPHONE Included

Other earphones/audio accessories are sold separately.

BUILT-IN MICROPHONE

This microphone picks up the user's voice audio to send over-the-air



PTT BUTTON

When the **MobilitySound BTH-300** Bluetooth headset is paired with a **MobilitySound** Adapter, holding this button down activates the Push-to-Talk feature of the two-way radio.

"COVERT" STATUS LED

Located on the rear of the **MobilitySound BTH-300**, the status LED flashes messages that let the user know the current status of the device.

VOLUME UP/DOWN BUTTONS

These buttons can be used to set the volume level of the BTH-LMIC's earphone

POWER BUTTON

Turns the MobilitySound BTH-300 on and off. Also, used to place the Mobility Sound BTH-300 in pairing mode so that it can be connected wirelessly to a MobilitySound Audio Adapter or cellular phone.



CLOTHING CLIP

The alligator-type clip secures the **MobilitySound BTH-300** to the user's clothing during use. The clip can be rotated to allow the mic to be better positioned.

CHARGE JACK

This mini-USB jack is used to connect the supplied charger in order to recharge the **MobilitySound BTH-300's** internal battery pack



Connecting an Audio Accessory to the BTH-300

The Mobility Sound BTH-300 has an internal Lithium Ion rechargeable battery pack which must be charged prior to operation, and must be recharged regularly. A fully charged battery will provide approximately 12 hours (or more) of operation before needing to be recharged. However, operating time can vary depending on usage and the condition of the battery pack. Recharge the battery regularly.

STEP ONE: Power On the BTH-300



In order to hear incoming signals received by the two-way radio, the **MobilitySound BTH-300** must be used with an earphone. A ear bud-style earphone is included with the **MobilitySound BTH-300** Bluetooth headset.

STEP TWO: Connecting the Earphone to the BTH-300





1. Plug the earphone into the 3.5 mm audio jack located on the top of the **MobilitySound BTH-300**. Make sure that the connector on the earphone is pushed all the way into the jack on the BTH-300.
2. You can adjust the volume of received signals by using the Volume Up and Volume Down buttons on the side of the BTH-300.

Other Audio Accessories:

Although the BTH-300 includes a ear acoustic-style earphone, it is possible to use a different audio accessory, if you wish. The 3.5 mm audio jack on BTH-300 will accept any mono or stereo earphone with a 3.5 mm audio plug. You can also use any Apple iPhone compatible audio accessory with a 3.5 mm 4-conductor plug. If the audio accessory has a built-in microphone, transmit audio will be taken from the accessory microphone.

MobilitySound makes a variety of listen-only earphones in different styles that will work with the BTH-300, check next page for the option list.

Optional Earphone accessories:

Model	Style	Picture
300-EP31	<i>Acoustic Tube listen-only</i>	 <p>The image shows a black earphone with a green connector. It features a coiled cable and a white acoustic tube with a small orange tip. The earphone is shown from a side profile.</p>
300-EP63	<i>D-shape earset with boom Microphone</i>	 <p>The image shows a black earphone with a green connector. It has a D-shaped earset and a boom microphone. The cable is coiled and ends in a green connector.</p>
300-EP67	<i>G-Hook listen-only</i>	 <p>The image shows a black earphone with a green connector. It has a G-hook earset and a coiled cable. The earphone is shown from a side profile.</p>
300-EP68	<i>Acoustic Tube listen-only</i>	 <p>The image shows a black earphone with a green connector. It features a coiled cable and a white acoustic tube with a small orange tip. The earphone is shown from a side profile.</p>

<p>300-01</p>	<p><i>Low Profile ear phone</i></p>	 A pair of black, low-profile earbuds with a thin, flexible cable. One earbud is shown in profile, highlighting its compact design. The other earbud is partially visible behind it. The cable is coiled and ends in a standard 3.5mm audio jack.
<p>300-02</p>	<p><i>HP90 Ear Muff cable</i></p>	 A black cable for an HP90 ear muff. It features a large, cylindrical, ribbed ear muff at one end and a 3.5mm audio jack at the other. The cable is shown in a U-shape, with the ear muff resting on the surface.
<p>300-Peltor</p>	<p><i>Peltor Muff cable</i></p>	 A black cable for a Peltor muff. It has a 3.5mm audio jack at one end and a two-prong electrical plug at the other. A coiled section of the cable is visible, likely for flexibility or to fit into a specific device.
<p>300-HP02</p>	<p><i>Motocycle helmet solution</i></p>	 A motorcycle helmet communication system. It includes two large, circular, black ear muffs with a mesh grille. A microphone is attached to the side of the ear muffs. The system is connected to a 3.5mm audio jack via a black cable.

Pairing With MobilitySound Adapter and 2-Way Radio

STEP THREE: Pairing with a MobilitySound Audio Adapter for radios

When pairing the MobilitySound BTH-300 with an Adapter, make sure that the BTH-300, adapter, and the two-way radio the adapter is connected to are all powered off.

If your Adapter gets power directly from the two-way radio it is attached to:

- Hold down the TALK button on the **MobilitySound** Adapter then turning the two-way radio ON.
- Continue to hold the Talk button on **MobilitySound** adapter down for approximately three seconds. Release the Talk button when the status LED on the **MobilitySound** adapter begins to flash two times per second. The **MobilitySound** Adapter is now in audio accessory pairing mode.
- Hold down the Multifunction Button on the **MobilitySound BTH-300**. Continue to hold the button down for approximately 3 seconds, until the LED on BTH-300 begin to quickly flash RED-BLUE-RED-BLUE. The **MobilitySound** Adapter is now in pairing mode.
- After a few seconds, the two devices should synch to one another. Once the **MobilitySound BTH-300** and Adapter are paired with each other, the status LED on the adapter will show a solid blue light for three seconds. The LED on the adapter will then show a periodical blue flash. The LED on BTH-300 will initially show a solid blue light.
- If the **MobilitySound** Adapter does not detect BTH-300 within 60 seconds of being put into pairing mode, the adapter will exit the pairing mode and resume normal operation.



Once successfully paired, you will be able to operate your 2-way radio using the **MobilitySound**.

Reconnecting to a Previously Paired Bluetooth Device

Once the **MobilitySound BTH-300** and Adapter have been successfully paired together, both devices will remember that connection. The adapter and BTH-300 will attempt to re-establish their link whenever when the radio/adapter and headset are both turned on and in within range of each other. Re-establishing this connection can take 10-60 seconds.

Testing and Using the MobilitySound Adapter

Once your MobilitySound BTH-300 and MobilitySound audio adapter have been paired together:

Received signals will be heard over the **MobilitySound BTH-300's** earphone. The volume of received calls can be adjusted using the Volume UP and Volume DOWN buttons on the **MobilitySound BTH-300**. The volume can also be adjusted using the volume control on the two-way radio (for most models).

Push-to-Talk can be activated one of several different ways:

- By pressing and holding the PTT button on the **MobilitySound BTH-300**.
- By pressing and holding the Talk button on the **MobilitySound Adapter**.
- Using an optional wired PTT that is compatible with the **MobilitySound Adapter**.
- Using an optional **MobilitySound** Wireless Bluetooth PTT (model BT-PTT or BT-PTT2, sold separately).

Note that if you are using a wireless Bluetooth PTT, you will first need to pair the adapter with the PTT using the instructions located in the MobilitySound PTT User's Guide.

When transmitting, the type of audio accessory that is connected to the **MobilitySound BTH-300** determines which microphone will be selected as the audio source.

If a listen-only earphone is used, transmit audio is taken from the internal microphone in the **MobilitySound BTH-300**.

If an audio accessory that has both an earphone and microphone is used, transmit audio is taken from the accessory microphone.

Operate the BTH-300 and STATUS LED MESSAGES

The meanings of the various status LED messages indicated by the **MobilitySound BTH-300** are shown on the following table:

State and Action	LED MESSAGE	MEANING
BTH-300 No link and not paired		
Device is off	No indication	BTH-300 is off
When device is off, press power key for 3 seconds	Solid Blue & Red LED ON for 1 second then OFF	BTH-300 is ON
When device is off, press power key for 6 seconds	Blue & Red LED flashes alternately	Get BTH-300 into pairing mode
When device is ON, press power key for 3 seconds	Red LED flashes 3 times then off	Turn BTH-300 off
Device ON, no paired or lost link	Blue LED flashes once every 2 seconds	Not paired or lost link
BTH-300 linked with audio dongle only		
Single link with dongle	Blue LED flashes once every 6 seconds	Linked with adapter only
Press/release the PTT button	When PTT pressed, Red LED solid ON, OFF when released	Linked with dongle
Press the volume keys	Blue LED flashes once every 6 seconds	Adjust audio dongle volume

STATUS LED MESSAGES TABLE(CONTINUED)

BTH-300 linked with cell phone only		
Press the TALK/END key	Blue LED flashes once every 6 seconds	If paired with iPhone, this will start/stop the music playing
Music is playing, press the volume keys	Blue LED flashes once every 6 seconds	Adjust the music volume of iPhone
Music playing, double press the volume keys	Blue LED flashes once every 6 seconds	Skip to Next/Previous track
Linked with iPhone, press TALK/END key when a incoming call	Blue LED flashes once every 6 seconds	Will pickup/End the call, the music will stop during the call and resume when call ends
During the call, press volume keys	Blue LED flashes once every 6 seconds	Adjust the speaker volume of the cell phone
Stand by mode, double press TALK/End key	Blue LED flashes once every 6 seconds	Redial last number
BTH-300 linked dongle and cell phone at the same time		
Dual link activated	Blue LED flashes once every 6 seconds	When dual link activated, playing music is disabled
Dual link stand by mode	Blue LED flashes once every 6 seconds	PTT and volume keys are to control audio dongle
Dual link with incoming call	Blue LED flashes once every 6 seconds	After call is pickup, use TALK/END and volume keys to control the phone
Charging BTH-300		
During charging	Red LED continuous ON	
Charging complete	No LED ON	
Low battery	Red LED flashes once every 6 seconds	With beep sound every 6 seconds
Volume adjust		
Volume UP		5 steps in volume adjust, when reach the max volume, a long beep is heard
Volume down		5 steps, when reach the min volume(Mute), a short beeps is heard
Earphone		
When a 3-pole earphone is plugged, only speaker is switched to the earpiece, need to use BTH-300 built-in Microphone to talk		
When a 4-pole iPhone standard earphone is plugged, both speaker and microphone are switched to the earpiece, BTH-300 built-in microphone will not work.		

Using the BTH-300 with a Cellular Phone or MP3 Player

Although the **MobilitySound BTH-300** Bluetooth headset is primarily designed for two-way radio use, it can be paired to a Bluetooth enabled cellular phone or MP3 player in place of a standard Bluetooth headset. In order to pair your BTH-300 and cellular phone, do the following:

- First, activate the Bluetooth feature of your cellular phone using the instructions provided by the manufacturer. For most phones, select Settings/Tools > Connections > Bluetooth > On See your phone's user guide for more information.
- Hold down the Multifunction Button on the MobilitySound BTH-300. Continue to hold the button down for approximately 3 seconds, until the LED on the BTH-300 begin to quickly flash RED-BLUE-RED-BLUE. The MobilitySound Adapter is now in pairing mode.
- On your phone, chose the newly discovered Bluetooth device (device name "BTH-300") as the active connection. See your phone's user guide for more information.
- If prompted for the Passkey (PIN code), enter 0000. Pairing is successful! You should now be able to use the MobilitySound BTH-300 with your cellular phone.

Note that the MobilitySound BTH-300 does support pairing to multiple devices. You can pair BTH-300 with a MobilitySound Adapter / two-way radio OR with a cellular phone, but not both at the same time.

When connected with a cellular phone, the Multifunction Button of the **MobilitySound BTH-300** has the following functions:

CALL STATE	BUTTON PRESS	FUNCTION
Incoming call	Press TALK/END Button once	Answer call
Incoming call	Long press(5 seconds) on TALK/END button	Reject call
On a call	Press TALK/END Button once	End the call
No call	Double press TALK/END button	Redial last number

When used with an MP3 music player, the following buttons on the **MobilitySound BTH-300** have different functions as well:

BUTTON	FUNCTION
Multifunction Button	Play / Pause music
Volume Up	Adjust music volume up
Volume Down	Adjust music volume down
Press Volume Up twice	Skip to previous track
Press Volume Down twice	Skip to next track

Note that you should set the volume level on the MobilitySound BTH-300 using the Volume Up / Volume Down buttons before connecting the BTH-300 to a MP3 music player since the volume control functions are remapped when a music player is connected.

SPECIFICATIONS

Dimension	65mm X 30mm X 12mm
Weight	21.6g(not included the earphone)
Version	3.0
Profiles	HSP, HFP, A2DP, AVRCP
R.F. Spec	Class 2
Power	Max 4dB
Sensitivity	-90dB
Range (typical)	10 meters
Built-in Battery	190mAH
Standby Current	6mA
Standby Time	50 hours
Average Talk Time	10 hours
Operating Temp. Range	-15° C to +50° C
Battery charging	Micro USB DC 5V (charging only)

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

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

SUPPORT AND WARRANTY

MobilitySound Radio Products warrants this product against defects in materials or workmanship for a period of **one year** from the date of retail purchase. **MobilitySound** will repair or replace a defective unit, at our option, without charge for parts or labor. The limited warranty is extended only to the original purchaser. It does not cover damage or failure caused by or attributable to Acts of God, abuse, misuse, improper or abnormal usage, faulty installation, improper maintenance, lightning, or other incidences of excessive voltage, or any tampering or repairs by other than a **MobilitySound** authorized repair facility. It does not cover replacement of consumable parts, transportation costs, or damage in transit.

Repair or replacement under the terms of this warranty does not extend the terms of this warranty. This warranty can only be modified by an officer of **MobilitySound** Radio Products, and then only in writing. Should this product prove defective in workmanship or material, the consumer's sole remedies shall be such repair or replacement as provided by the terms of this warranty. Under no circumstances shall **MobilitySound** Radio Products be liable for any loss or damage, direct, consequential, or incidental, arising out of the use of or inability to use this product. Some states do not allow limitations on how long an implied warranty lasts or the exclusions or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights, which may vary, from country to country.

For support or warranty service on your **MobilitySound** product, visit us on the web at <http://www.MobilitySound.com>

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