

# PRYME®

## PRYMEBLU® BT-501-DIRECT-V2 USER'S GUIDE ADVANCED BT ADAPTER for Kenwood 2-Pin Portable Radios\*

The PRYMEBLU advanced adapter allows you to use a compatible wireless headset or other audio accessory with your portable two-way radio.



**BT-501-DIRECT-V2**



**BT-PTT-Z (mini)**  
(Optional Push-To-Talk button sold separately.)

### Advanced BT Adapter

\* This manual applies to the BT-501-DIRECT when used with Kenwood radios that supply power to the accessory connector such as: TK-2170/TK-3170, TK-2360/TK-3360, TK-2173/TK-3173, TK-2312/TK-3312, TK-2402/TK-3402, NX-220/NX-320, and NX-240/NX-340

Made in Taiwan  
FCC ID: XTS-BT-5

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### Federal Communication Commission Interference Statement

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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.

### RF Exposure Warning!

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.

911 Mariner St., Brea, CA 92821  
PH: 714.257.0300 FAX: 714.257.0600  
TOLL FREE: 800.666.2654  
WWW.PRYME.COM

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## QUICK START

1. Connect the PRYMEBLU Advanced Adapter to a compatible two-way radio.
2. Pair the PRYMEBLU Radio Adapter with a compatible wireless audio accessory.
3. Pair a PRYMEBLU Wireless Push-to-Talk button with the PRYMEBLU Advanced Adapter (optional).
4. Test and use.

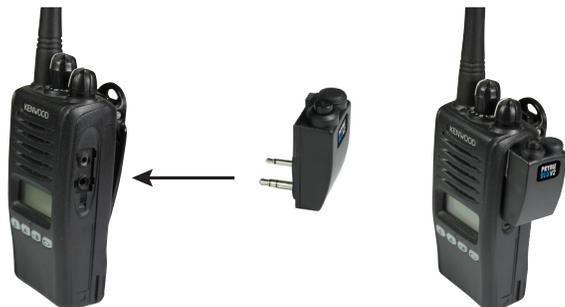
### Connecting the Adapter to Radio

To connect your PRYMEBLU Advanced Adapter to a two-way radio, follow these steps:

- \* Always turn off your two-way radio before connecting the PRYMEBLU Advanced Adapter.
- \* Plug the PRYMEBLU Advanced Adapter into the speaker mic jack of your two-way radio. Press gently but firmly until the connector is fully seated.

Turn on your two-way radio and verify that the LED indicator on the PRYMEBLU Advanced Adapter flashes periodically. If it does not, verify that the radio you are attempting to use the adapter with is a supported Kenwood model. Some Kenwood radios do not supply power to the accessory connector. For these radios, you will need to use the model PRYMEBLU BT-501-V2 (which has its own internal battery pack) instead.

\* NOTE: While the PRYMEBLU Advanced Adapter is attached to the radio and no wireless audio accessory is paired to the adapter, the radio's internal speaker will be muted and you will be unable to hear incoming calls through the radio's speaker. Similarly, while you will be able to cause the radio to transmit by pressing either the PTT button on the side of the radio or the Talk button on the PRYMEBLU Advanced Adapter. However, you will not have any transmit audio because the microphone inside the radio is muted. If you wish to use the radio with no wireless audio accessory, you must unplug the PRYMEBLU Advanced Adapter from the radio.



## Controls and Connection

### Multi-Function Talk Switch / Status LED

Used to place the PRYMEBLU Adapter in pairing mode. The LED flashes messages that let the user know the current status of the PRYMEBLU Adapter. This button is also used to activate the Push-To-Talk function of the two-way radio.

### Radio Connector

This two-pin connector plugs into the SP/MIC jack on a compatible two-way radio.



### Pairing with a Wireless Audio Accessory

- \* Power off the two-way radio and all BT devices to be used, including the wireless BT PTT Button, and any BT audio accessories. You should also power off phones, tablets, and other nearby devices with BT technology during the pairing process.
- \* Power on the two way radio while holding down the TALK button on the PRYMEBLU Advanced Adapter. Continue to hold the button down even after the radio fully boots up.
- \* Continue to hold the Talk button down until the status LED begins to flash two times per second. This can take approx. 3-5 seconds.
- \* Release the Talk button. The PRYMEBLU Advanced Adapter is now in audio accessory pairing mode.
- \* Activate the pairing mode on your compatible wireless audio accessory using the process provided by that device's manufacturer.
- \* Keep the PRYMEBLU Advanced Adapter and wireless audio accessory close to each other and wait a few seconds.
- \* Once the audio accessory and adapter are paired with each other, the status LED on the adapter will show a long blue flash and then begin to flash approximately once every second. Once successfully paired, you will be able to operate your two-way radio using your compatible wireless accessory.



### Pairing with a Wireless PTT Button

The PRYMEBLU Advanced Adapter is compatible with a few different wireless PTT buttons:

- PRYMEBLU BT-PTT2, which uses conventional BT.
- PRYMEBLU BT-PTT-Z or PRYMEBLU BT-PTT-ZU, which use a special form of BT called BT Low Energy (BLE).



To pair the adapter with a PTT button, follow these steps:

- \* Power off the two-way radio and all BT devices to be used, including the wireless BT PTT Button, and any BT audio accessories. You should also power off phones, tablets, and other nearby devices with BT technology during the pairing process.
- \* Power on the two way radio while holding down the TALK button on the PRYMEBLU Advanced Adapter. Continue to hold the button down even after the radio fully boots up.
- \* Continue to hold the Talk button down until the status LED begins to flash two times per second. Note that the LED on the adapter may show several single flashes before shows double flashes. This can take approximately three to five seconds.
- \* Release the Talk button. The PRYMEBLU Advanced Adapter is now in audio accessory pairing mode. To enter PTT pairing mode, proceed to the next step.

Continued on next page

- \* Press and release the Talk button again. The LED on the PRYMEBLU Advanced Adapter will now change to three flashes per second. The PRYMEBLU Advanced Adapter is now in Push-to-Talk pairing mode.
- \* IF YOU ARE USING A CONVENTIONAL PTT BUTTON (BT-PTT2): Place the button into pairing mode by holding down the PTT button and pressing the power switch. Continue to hold the button down until the LED on the BT-PTT2 flashes two times per second.
- \* IF YOU ARE USING A BT LOW ENERGY BUTTON (BT-PTT-Z, BT-PTT-ZU): Power the button on using the slide switch and then press and release the PTT button two to three times.
- \* Keep the PRYMEBLU Advanced Adapter and wireless PTT button close to each other and wait a few seconds.
- \* Once the devices are paired with each other, the LED on the PRYMEBLU Advanced Adapter will revert to one flash every second.
- \* You can now power back on the headset or audio accessory that you previously paired with the PRYMEBLU Advanced Adapter and let it reconnect.
- \* Once the audio accessory has reconnected, pressing the PTT on the wireless button will cause the radio to transmit.

**Reconnecting to a Previously Paired Headset or PTT Button**

Once the PRYMEBLU Advanced Adapter has been successfully paired to a wireless audio accessory and/or PTT button, it will remember that connection. You only need to complete the pairing process for each device once.

If the wireless accessory is powered off or loses connection, the adapter will attempt to re-establish the link as long as both turned on and in within range of each other. Re-establishing this connection can take 10-60 seconds.

**AUDIO ACCESSORY CONFIGURATIONS**

All of the following are valid ways to use the PRYMEBLU Advanced Adapter:

- A PRYMEBLU wireless audio accessory with a built-in PTT button (BTH-600, BTH-550, or BTH-300)
- A PRYMEBLU wireless audio accessory (BTH-600, BTH-550, or BTH-300) with a PRYMEBLU wireless PTT button (PRYMEBLU BT-PTT2, BT-PTT-Z, or BT-PTT-ZU)
- A wireless headset using the multifunction TALK button of the PRYMEBLU Adapter as a PTT button.
- A wireless headset with a PRYMEBLU wireless PTT button (PRYMEBLU BT-PTT2, BT-PTT-Z, or BT-PTT-ZU)

**STATUS LED MESSAGES**

The meanings of the various status LED messages shown by the PRYMEBLU Radio Adapter are shown on the following table:

LED INDICATION	MEANING
One blue flash per second	Normal operation
Two blue flashes per second	Adapter is in pairing mode for BT audio accessories
Three blue flashes per second	Adapter is in pairing mode for PTT devices
One long blue flash	BT accessory connected or reconnected successfully
No indication	Adapter is powered off



**TROUBLESHOOTING**

**My wireless audio accessory or PTT button will not pair with the PRYMEBLU Adapter.**

If you are correctly following the pairing processes shown on page 4 and 5 of this manual and cannot get the devices to connect, the most likely problem is that another nearby wireless device is interfering with the pairing process. Please disable BT in all nearby devices other than the adapter and accessory that you are attempting to pair. This includes phones, tablets, wireless headsets, keyboards, printers, and other consumer devices. If you cannot disable (or locate) the wireless device that might be interfering, then we recommend taking the radio, adapter, and accessory to a different area at least 50 feet away from the original location and trying again.

**When the PRYMEBLU Advanced Adapter is connected to my radio but no audio accessory is connected, I cannot send/receive radio calls.**

When the PRYMEBLU Advanced Adapter is connected to the two-way radio, the radio's internal microphone and speaker will be muted. This is a function of the radio itself rather than of the PRYMEBLU Advanced Adapter. If you wish to use the two-way radio without using a wireless audio accessory, you should detach the PRYMEBLU Advanced Adapter.

**USING THE ADAPTER**

Once your PRYMEBLU Adapter and wireless audio accessory have been paired together:

- Received signals will be heard over your wireless audio accessory speaker
- When transmitting, the operator's voice is picked-up by the microphone in the wireless audio accessory.
- Push-to-Talk can be activated one of two ways:
  - \* By pressing and holding the Talk button on the PRYMEBLU Adapter
  - \* Using an optional PRYMEBLU Wireless PTT (models BT-PTT2, BT-PTT-Z, or BT-PTT-ZU, sold separately) that has been paired to the Adapter.

**IMPORTANT NOTE:** If no wireless audio accessory is connected to the PRYMEBLU Advanced Adapter, and the adapter is plugged into your two-way radio, both the speaker and microphone that are built into the radio will be muted. This will prevent you from making or receiving radio calls. This is a function of the two-way radio itself rather than of the PRYMEBLU Advanced Adapter.

If you wish to use your two-way radio without using a wireless BT audio accessory, you should disconnect the PRYMEBLU Advanced Adapter from the radio.

**CHOOSING A WIRELESS HEADSET FOR USE WITH THE ADAPTER**

The PRYMEBLU Advanced Adapter should work well with most cellular style wireless headsets. To be compatible with the adapter, we recommend that the headset should meet all the following specifications:

- \* BT version 3.0 or higher
- \* Supports BT profiles HSP (Headset) and HFP (Hands Free)
- \* Has a battery *talk time* rating in excess of the amount of time you intend to use it between charges. (For example, 9 or 10 hours if you intend to use the headset for an 8-hour period.) Note that the *talk time* specification is different than the battery *standby time*.

**SUPPORT AND WARRANTY**

PRYME Radio Products warrants this product against defects in materials or workmanship for a period of one year from the date of retail purchase. PRYME 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 and is valid only to consumers in the United States and Canada. 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 PRYME 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 PRYME 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 PRYME 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 state to state.

For support or warranty service on your PRYME product, contact us at 1-800-666-2654 or visit us on the web at [www.PRYME.com](http://www.PRYME.com).

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**DISCLAIMER:** The wireless link used by PRYMEBLU products is an open standard, unsecured technology. Additionally, this product can mute the portable radios internal speaker and microphone if used with no wireless or wired audio accessory connected. This product is not recommended for first-responder or other mission critical users.