

# PRYME<sup>®</sup> RADIO PRODUCTS

## PRYMEBLU<sup>®</sup> BTH-300-ZU Bluetooth Microphone Kit

For use with Zello and Wave Communicator Push-to-Talk apps on both Apple iOS and Android smartphones.



KIT 1 SHOWN

PRYMEBLU BTH-300-ZU

Made in Taiwan

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### 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.

# PRYME<sup>®</sup> RADIO PRODUCTS

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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### CHARGING THE BTH-300-ZU LAPEL MICROPHONE

The PRYMEBLU BTH-300-ZU lapel microphone has an internal Lithium Ion rechargeable battery pack which must be charged prior to operation. A fully charged battery will provide approximately 10 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.

#### To charge the PRYMEBLU BTH-300-ZU lapel microphone:

1. Ensure the PRYMEBLU Lapel Microphone is turned off using the Power Button.
2. Plug the supplied wall charger into a standard 120 volt AC outlet.
3. Plug the charge cable into the AC wall charger and then into the charge jack on the side of the lapel microphone. You will need to remove the protective rubber cover that is inserted into the charge jack. (To prevent dust and moisture from damaging your lapel microphone, always ensure this cover is in place when you are not charging the lapel mic.)
4. Once the charging process has begun, the LED indicator on the back of the PRYMEBLU Lapel Microphone will show a continuous red light. When the battery is done charging, the LED light will turn off.
5. Typical charge time is approximately 4 hours. Actual charge time will vary depending on several factors including the battery's charge state, condition, and age.
6. Disconnect the charger from the lapel mic when charging is completed.

#### Charging Cautions:

- Use only the wall charger supplied by the manufacturer. Do not use any other charger.
- Do not use a wall charger that appears to be damaged. (Example: frayed wires, melted plastic, etc.) Contact PRYME to get a new manufacturer-approved replacement charger.
- Do not tamper with or modify the PRYMEBLU BTH-300-ZU lapel microphone or charger.
- Always turn the power switch to the off position when charging the PRYMEBLU Lapel Microphone.

P-CBL-BT-USB charger cable and P-CHA-BT-USB wall charger included with BTH-300-ZU.



## Controls and Connection

### BUILT-IN MICROPHONE

When the BTH-300-ZU is used with a listen-only earphone, this microphone picks up the user's voice audio to send over-the-air. When an accessory containing a microphone is used, the internal microphone is muted.



TOP VIEW

### STATUS LED

The status LED flashes messages that let the user know the current status of the device. For a complete list of the LED messages, see page 7.

### PUSH-TO-TALK BUTTON

This button is used to activate the push-to-talk feature of the PTT app.

### PHONE BUTTON

This button can be used to manage telephone functions such as answering or hanging up a call.



### EARPHONE/ACCESSORY JACK

Any standard 3.5 mm mono or stereo listen-only earphone can be plugged into this jack. Received calls will be heard over the earphone. This jack can also be used with a 3.5 mm 4-conductor (Apple iPhone compatible) audio accessory that contains both an earphone and a microphone such as Apple part numbers ME186LL/A, or MD827LL/A. (Not included.) When used with such an accessory, received calls can be heard over the accessory earphones and transmit audio will be taken from the accessory microphone.

### POWER BUTTON

Pressing this button for one second turns the PRYMEBLU BTH-300-ZU lapel microphone on or off. This button is also used to place the lapel microphone in pairing mode so that it can be connected wirelessly to a cellular telephone.

### VOLUME UP/DOWN BUTTONS

These buttons can be used to set the volume level of the earphone connected to the BTH-300-ZU's Earphone/Accessory Jack.

### USB CHARGE JACK

This micro-USB jack is used to connect the supplied charge cable to the BTH-300-ZU in order to recharge the device's internal lithium-ion battery pack.

### CLOTHING CLIP

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



### EARPHONE/AUDIO ACCESSORY

PRYME EH-1189SC shown. Other earphones/ audio accessories are listed below.



### CONNECTING AN AUDIO ACCESSORY TO THE BTH-300-ZU LAPEL MICROPHONE

In order to be able to hear incoming signals received by the cellphone, the PRYMEBLU BTH-300-ZU lapel microphone must be used with a wired audio accessory that includes an earphone. A PRYME EH-1189SC ear bud-style earphone is included with the lapel microphone kit. However, many different optional wired audio accessories are also available.



#### To connect an audio accessory to the BTH-300-ZU lapel microphone:

1. Plug the audio accessory into the 3.5 mm audio jack located on the top of the PRYMEBLU BTH-300-ZU lapel microphone. Make sure that the connector on the audio accessory is pushed all the way into the jack on the lapel microphone.
2. You can adjust the volume of received signals by using the Volume Up and Volume Down buttons on the lapel microphone or by adjusting the volume setting on the cellular telephone.

#### Optional Audio Accessories:

Although the BTH-300-ZU KIT 1 includes a PRYME ear bud-style earphone, it is possible to use a different audio accessory, if you wish. The 3.5 mm audio jack on the lapel mic will accept any mono or stereo earphone with a 3.5 mm audio plug. You can also use any 3.5 mm 4-conductor (Apple iPhone compatible) audio accessory that includes both an earphone and a microphone, such as Apple part numbers ME186LL/A, or MD827LL/A (not included). If the audio accessory has a built-in microphone, transmit audio will be taken from the accessory microphone.

PRYME makes a variety of listen-only earphones and accessory microphones in different styles that will work with the BTH-300-ZU:

KIT	MODEL	TYPE	STYLE
BTH-300-ZU KIT 1	EH-1189SC	Listen-only	Ear Bud Earphone
BTH-300-ZU KIT 2	EH-1399SC Recon™	Listen-only	Acoustic Tube Earphone
BTH-300-ZU KIT 3	EH-3099SC Bullet™	Listen-only	Bullet Transducer Acoustic Tube Earphone
BTH-300-ZU KIT 4	EH-GH99SC G-Hook™	Listen-only	G-hook Swivel Earphone
BTH-300-ZU KIT 5	SPM-499D Ranger™	Mic+Earphone	Boom Mic Headset with D-ring Earphone
BTH-300-ZU KIT 6	SPM-1599 Gladiator™	Mic+Earphone	Throat Mic Headset with Acoustic Tube Earphone
BTH-300-ZU KIT 7	SPM-899B Highway™	Mic+Earphone	Motorcycle Helmet Boom Mic Kit

## PAIRING THE BTH-300-ZU WITH A SMARTPHONE

The BTH-300-ZU lapel microphone is designed to work with smartphones running either the Android or Apple iOS operating systems. Prior to normal operation, the phone and lapel microphone must be paired together using the following process:



- When pairing the lapel microphone with a cellular phone, first make sure that the BTH-300-ZU and all other nearby Bluetooth devices are powered off before beginning.
- Press and hold down the Power Button on the BTH-300-ZU for five seconds, until the LED on the lapel microphone flashes RED-BLUE-RED-BLUE continuously in sequence. The BTH-300-ZU lapel microphone is now in pairing mode.
- Activate the Bluetooth feature on your phone.
- Activate the "scan/discover new Bluetooth devices" feature on the phone. The exact steps needed to do this will vary depending on the brand/model of phone you are using.
- Select the PRYMEBLU BTH-300-ZU from the list of Bluetooth devices shown on your phone. If the phone asks for a passcode, enter "0000". The phone may also prompt you to confirm the connection.
- After a few seconds, the two devices should sync to one another. Once the PRYMEBLU lapel microphone and phone are paired with each other, the status LED on the microphone will revert back to a single blue flash every few seconds.
- Once successfully paired, you will be able to make and receive telephone calls using the PRYMEBLU BTH-300-ZU lapel microphone.

### Reconnecting a Previously Paired Lapel Microphone and Cellular Phone

Once the PRYMEBLU BTH-300-ZU lapel microphone and cellular telephone have been successfully paired together, both devices will remember that connection. The lapel microphone and phone will attempt to reestablish their link whenever they are both powered on and in within range of each other. Re-establishing this connection can take 10-60 seconds.

### USING THE BTH-300-ZU LAPEL MICROPHONE

Once your PRYMEBLU BTH-300-ZU lapel microphone and cellular phone have been paired together:

Received calls and phone audio will be heard through the earphone that is plugged into your BTH-300-ZU lapel microphone. The volume of received calls can be adjusted using the Volume Up and Volume Down buttons on the lapel microphone or the volume control on the cellular phone.

As long as you are using a listen-only earphone, when transmitting or on a phone call, the operator's voice is picked-up by the microphone in the PRYMEBLU lapel microphone. If you are using a wired accessory with a built-in microphone, the accessory microphone will be used instead.

Telephone functions are provided by using the BTH-300-ZU's Phone Button.

Call State	Button Press	Function
Incoming call	Press Phone Button once	Answer call
Incoming call	Press and hold Phone Button for 5 seconds	Reject call
On a call	Press Phone Button once	Hang up call
No call	Press Phone Button once	Activate voice dialer

NOTE: If you are using a wired accessory with phone control buttons (such as Apple ME186LL/A) with the BTH-300-ZU, the phone control buttons on the accessory will NOT function and should not be pressed.

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## Using the Microphone with your PTT App

Once setup, you will be able to use the lapel microphone with the push-to-talk app, even if the app is running the background.

### Please see insert for instructions on how to set up in Zello or WAVE.

- To activate the app's push-to-talk feature, press and hold the PTT button on the lapel microphone.
- When the app is transmitting a call, audio will be picked up by the BTH-300-ZU's built-in microphone.
- Incoming calls received by Zello will be heard over the BTH-300-ZU's built-in speaker or through the optional earphone if you are using one.

### Making and Receiving Phone Calls

You can also use the lapel microphone to make and receive phone calls.

- You can initiate a phone call by using the Phone Dialer app in the phone.
- Phone audio will be routed to the BTH-300-ZU's built-in microphone and speaker (or earphone, if you are using one).
- To answer an incoming call, press the Phone button on the lapel microphone.
- While on a call, you can press the Phone button on the lapel microphone to hang up the phone and end the call.

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### STATUS LED MESSAGES

The meanings of the various status LED messages shown by the PRYMEBLU BTH-300-ZU lapel microphone are shown on the following table:

LED INDICATION	MESSAGE MEANING
No indication	Device is off
Blue-Red-Blue-Red continuous	Pairing mode
Two short blue flashes	Device turned on
Three red flashes, then off	Device turned off
One blue flash every 2 seconds	Not paired or link lost
One blue flash every 6 seconds	Normal (paired) operation
Continuous red when PTT pressed	PTT operation
One red flash every 6 seconds	Low battery
Continuous red (when connected to charger)	Charging
No indication (when connected to charger)	Charging is finished

### SPECIFICATIONS

Dimensions:	65 x 30 x 12 mm
Weight:	22 grams (excluding earphone)
Bluetooth Version:	3.0
Bluetooth Profiles:	HSP, HFP, A2DP, AVRCP
Bluetooth Power Class:	Class 2
Sensitivity:	-90 dB
Range (Typical):	10 meters (30 feet)
Built-in Battery:	3.7V, 190 mAh Lithium-Ion
Standby Current Draw:	6 mA
Standby Time:	50 hours (max)
Operating Time:	10 hours (max)
Operating Temperature Range:	-15° C to + 50° C

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### 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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ZELLO is a trademark of Zello, Inc..

WAVE and WAVE COMMUNICATOR are trademarks of Twisted Pair Solutions.

All other product or service names are the property of their respective owners.

**DISCLAIMER:** The Bluetooth wireless link used by PRYMEBLU products is an open standard, unsecured technology. As such, it is not recommended for first-responder or other mission critical users.

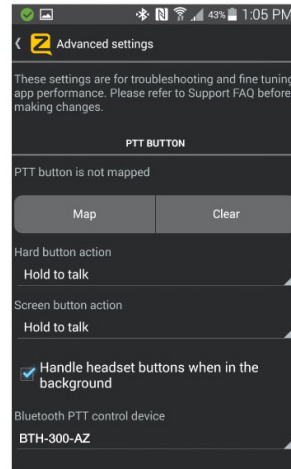
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## App Setup (ZELLO)

To get the Zello app on your phone, install Zello from your Zello@Work network, or download the app from the Google Play store or Apple App Store

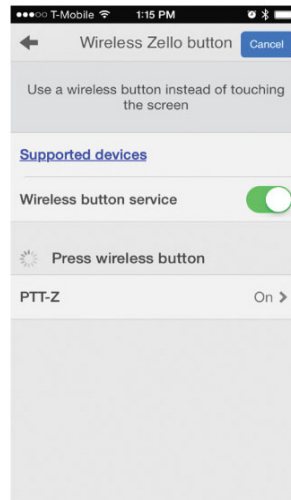
### Setting up Zello (Android)

1. Make sure that your phone's Bluetooth radio is enabled, and that the lapel microphone is powered on and that the microphone and phone are connected to each other.
2. Open Zello and go to Menu > Options > Under the Hood.
3. Under "Bluetooth PTT Control," choose "BTH-300-AZ". You should see a popup indicating the device control has been activated. If you don't see it, you may need to power cycle the lapel microphone and repeat this step.
4. Open the Talk screen in Zello (the screen with a big round button). In the bottom-left corner of the screen, tap-hold and slide to the Bluetooth icon to activate the lapel microphone in Zello.



### Setting up Zello (iOS)

1. Make sure that your phone's Bluetooth radio is enabled, and that the lapel microphone is powered on and that the microphone and phone are connected to each other.
2. Open Zello and go to: Settings > PTT Button > Wireless Zello Button.
3. Make sure that the "Wireless Button Service" is turned on by sliding the button to the right.
4. Press and hold the PTT button on the BTH-300-ZU.
5. Select "PTT-Z" from the list of PTT devices shown on the screen.
6. Open the Talk screen in Zello (the screen with a big round button). Pressing the PTT button on the lapel microphone should now cause Zello to transmit.



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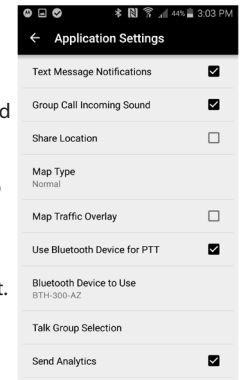
## App Setup (Wave Communicator)

To get the WAVE Communicator app on your phone, download the app from the Google Play store or Apple App Store.

For Android phones the PTT function of the BTH-300-ZU can be enabled to work with the Wave Communicator app in one of two different ways, either using Serial Port Protocol (SPP) over conventional Bluetooth or using a special version of Bluetooth called Bluetooth Low Energy (BLE). The BLE option can only be used with handsets that have hardware support for BLE and are using Android version 5.0 (Lollipop) or newer. Choose the option that is right for your phone and follow the instructions below:

### Setting up WAVE Communicator (Android-SPP)

1. Make sure that your phone's Bluetooth radio is enabled, and that the lapel microphone is powered on and that the microphone and phone are connected (paired) to each other.
2. Open WAVE Communicator and log in using your username and password.
3. Tap on the More Options symbol "⋮" in the top right hand corner of the app and then tap "App Settings."
4. Make sure that "Use Bluetooth Device for PTT" is selected. If it isn't, tap it to select it.
5. Tap on "Bluetooth Device to Use" and then select "BTH-300-AZ" from the list.
6. The app will then prompt you to press the PTT button on the BTH-300-ZU to confirm that the setup was successful.



### Setting up WAVE Communicator (Android - Bluetooth Low Energy)

1. Make sure that your phone's Bluetooth radio is enabled, and that the lapel microphone is powered on and that the microphone and phone are connected (paired) to each other.
2. Press and hold the PTT button on the BTH-300-ZU lapel microphone.
3. On your phone, go to Settings > Bluetooth. Select "Search for Devices" from the phone's Bluetooth menu. The phone will scan for nearby Bluetooth devices and a list showing the names of nearby Bluetooth devices will be shown on the screen.
4. Choose "PTT-Z" from the list.
5. Keep the phone and speaker mic near each other and wait a few seconds. The devices will pair to each other.
6. Open WAVE Communicator and log in using your username and password.
7. Tap on the More Options symbol "⋮" in the top right hand corner of the app and then tap "App Settings."
8. Make sure that "Use Bluetooth Device for PTT" is selected. If it isn't, tap it to select it.
9. Tap on "Bluetooth Device to Use" and then select "PTT-Z" from the list.
10. Release the PTT button on the BTH-300-ZU.

### Setting up WAVE Communicator (iOS)

1. Make sure that your phone's Bluetooth radio is enabled, and that the lapel microphone is powered on and that the microphone and phone are connected (paired) to each other.
2. Open WAVE Communicator and log in using your username and password.
3. Tap on the More Options symbol "⋮" in the top right hand corner of the app and then tap "App Settings."
4. Press and hold the PTT button on the BTH-300-ZU lapel microphone.
5. Make sure that "Use Bluetooth Device for PTT" is selected. If it isn't, tap it to select it.
6. Tap on "Bluetooth Device to Use" and then select "PTT-Z" from the list.
7. Release the PTT button on the BTH-300-ZU.

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