



# User Guide

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## INTRODUCTION

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### **PLEASE READ THIS FIRST**

Thank you for choosing the BikerCom as your motorcycle communications system; we know you have many choices available and are honored you have put your trust in the BikerCom system. The BikerCom has been designed to meet all your motorcycle communication requirements and expectations, if you have any comments, questions or feedback please contact us at [service@openroad.com.tw](mailto:service@openroad.com.tw) and you will receive a prompt reply.

Before using your BikerCom for the first time it is recommended you read this User Guide to give you a complete overview of all the system components and functionality; once you are familiar with the BikerCom, setup and use should be convenient and reliable.

The BikerCom is designed to be used in conjunction with a wide range of communications equipment such as two way radios, mobile phones, and navigation devices; before using another device with your BikerCom ensure you are familiar with its operation.

Whenever riding your motorcycle safety should be your first priority. The BikerCom is designed exclusively for motorcycle enthusiasts and safety was a constant consideration in its development. Ultimately it is the rider's responsibility to ensure that their safety and the safety of any passenger is in no way compromised by use of the BikerCom.

We take this opportunity to wish you safe and enjoyable motorcycling.

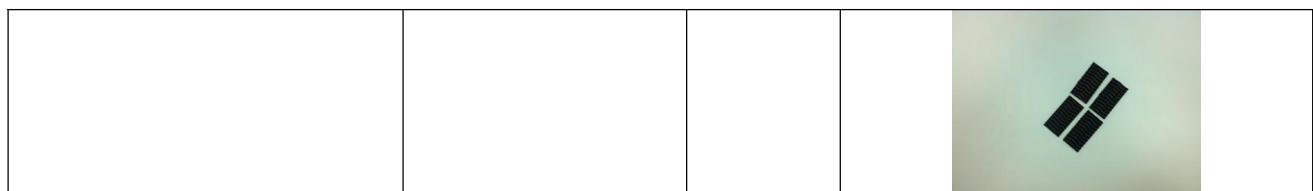
### **QUICK START**

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1. Connect the Control Box to your motorcycle battery.
2. Connect wired devices to the Control Box.
3. Power On wired devices.
4. Start your motorcycle.
5. Power On the Helmet Headsets.
6. Power On the Control Box.
7. Verify Helmet Headset success connect to Control Box.
8. Connect wireless devices to the Control Box.
9. Adjustment wired and wireless devices volume.

## **PACKAGE CONTENTS**

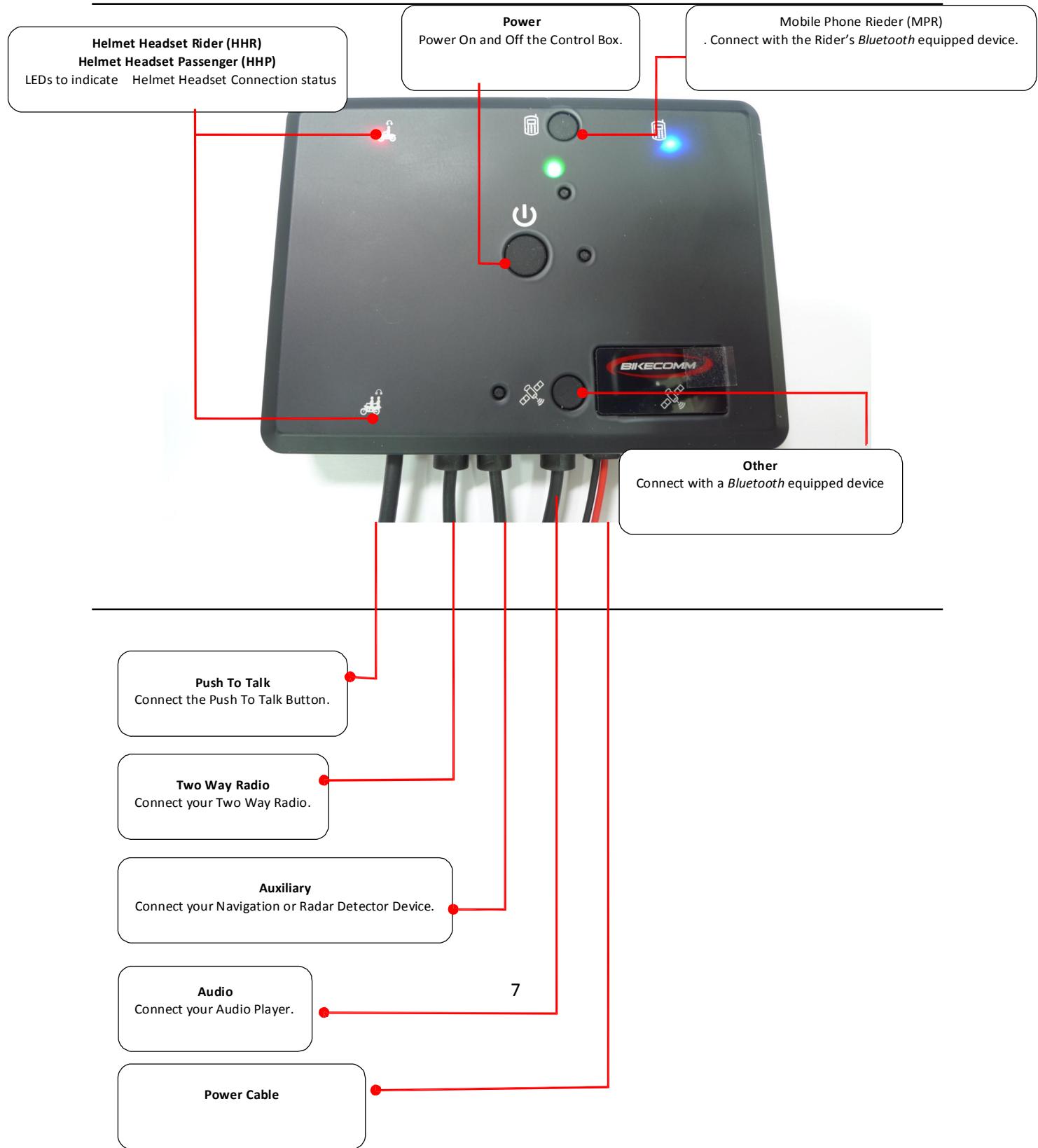
Control Box (CB)	Core of the BikerCom System	1		
Helmet Headset Unit Helmet Headset Rider (HHR, Color: Orange) Helmet Headset Passenger (HHP Color: Green)	Helmet Headset One for the Rider One for the Passenger	2		
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Speaker Ear Pocket Spacer Dot	For adjusting the Speaker space inside the helmet	10	
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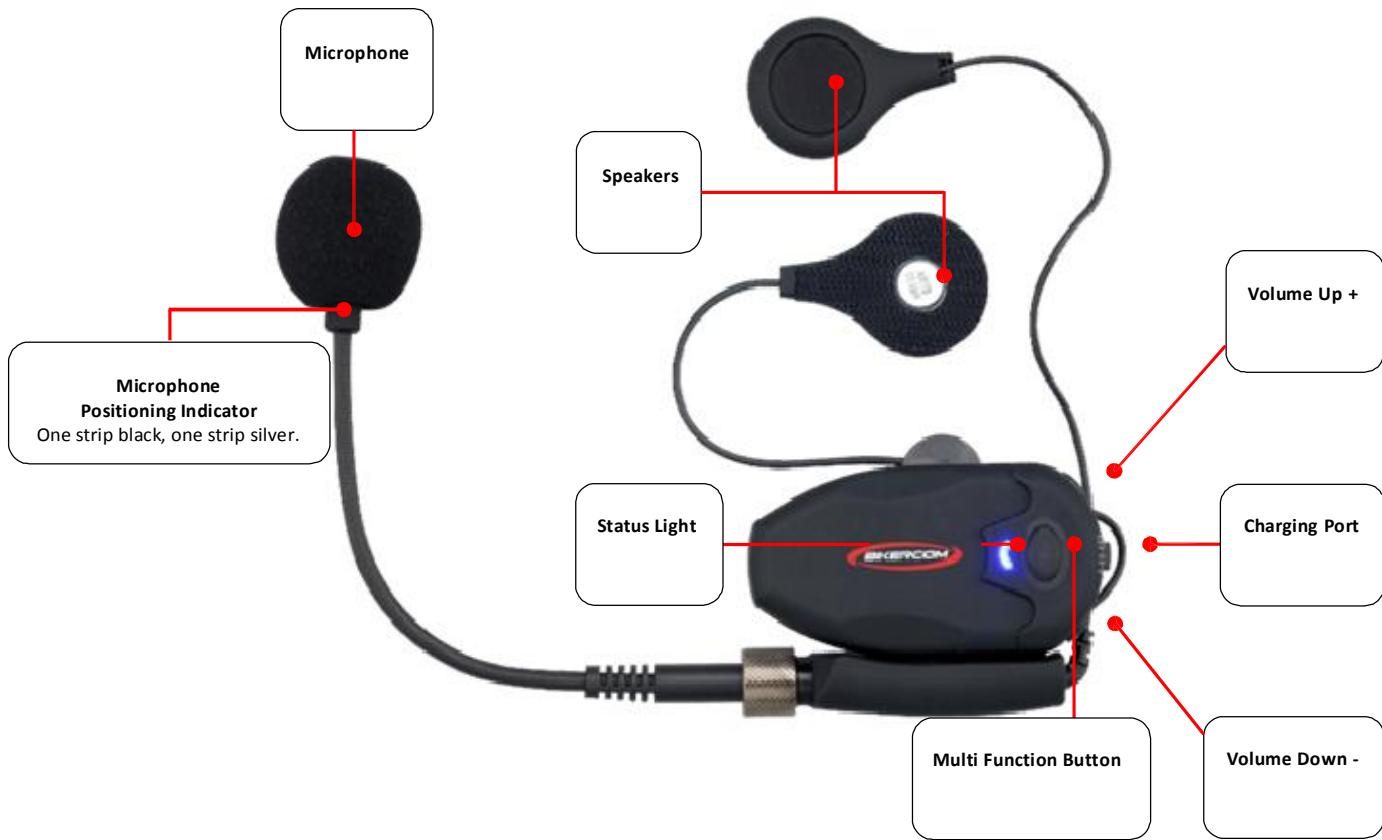
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## GETTING TO KNOW THE CONTROL BOX



## GETTING TO KNOW THE HELMET HEADSET

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## THE HELMET HEADSET

The BikerCom includes two Helmet Headsets; the Helmet Headset Rider (HHR, color: Orange) is for the Rider and the Helmet Headset Passenger (HHP, color: Green) is for the Passenger. The Helmet Headsets have a preset wireless connection with the Control Box; you do not need to perform any setup procedure between the Helmet Headsets and the Control Box.

### **HELMET HEADSET STATUS LIGHT**

The Helmet Headset has one status light that indicates the current status of the headset, such as the power and if the Headset is connected to the Control Box.

HELMET HEADSET STATUS LIGHT	HELMET HEADSET STATUS
No light	Power Off Mode
Steady four times blinking blue light	Power On Mode Not connected to Control Box Not ready for use

HELMET HEADSET STATUS LIGHT	HELMET HEADSET STATUS
Steady single blinking blue light	Power On Mode Connected to Control Box Ready for use
Steady four times blinking red light when power off	Battery Low
Steady four times blinking green light when power off	Battery Full
Still red light	Charging Connected to Power Supply Unit

### **POWERING ON THE HELMET HEADSET**

To Power On the Helmet Headset long press the Multi Function Button for approximately 3 seconds; when Powered On the status light will quickly blink red and blue.

### **POWERING OFF THE HELMET HEADSET**

To Power Off the Helmet Headset long press the Multi Function Button for approximately 7 seconds; the status light will quickly blink red or green (depends on battery status) 4 times and Power Off.

### **CHARGING THE HELMET HEADSET**

The two Helmet Headsets will have some power in the battery however completing a full charge is recommended before their first use.

To charge the Helmet Headset complete the following steps:

1. Connect the Power Supply Unit plug to the wall socket and connect the Mini USB plug to the Helmet Headset charging socket.
2. The Helmet Headset status light will display a still red light when charging.
3. When charging is complete the Helmet Headset status light will turn off.

**NOTE:** When the Helmet Headset battery is low and requires charging the status light will four blink red when power off process; under normal use the Helmet Headset battery life is up to 12 hours talk time and a complete charge will require up to 2.5 hours.

## **HELMET HEADSET VOLUME CONTROL**

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The Helmet Headset Volume can be adjusted to suit the preference of the Rider and/or Passenger. The Helmet Headset must be connected to the Control Box to adjust the volume level.

### **INCREASING THE HELMET HEADSET VOLUME**

To increase the Helmet Headset volume complete the following steps:

1. Ensure the Helmet Headset is in Power On mode and connected to the Control Box.
2. To increase the volume, press the Volume Up + button; the status light will flash red and blue indicating the volume has been increased one level.
3. To increase the volume another level repeat the above step.
4. The maximum Helmet Headset volume level has been achieved when the status light displays a still red.

### **DECREASING THE HELMET HEADSET VOLUME**

To decrease the Helmet Headset volume complete the following steps:

1. Ensure the Helmet Headset is in Power On mode and connected to the Control Box.
2. To decrease the volume, press the Volume Down – button; the status light will flash red and blue indicating the volume has been decreased one level.
3. To decrease the volume another level repeat the above step.
4. The minimum Helmet Headset volume level has been achieved when the status light displays a still red.

## **HELMET HEADSET WIRELESS TECHNOLOGY**

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The Helmet Headset uses proprietary 2.4 GHz wireless technology to connect with the Control Box and is designed and supported only for connecting with the Control Box. It is possible but not recommended to connect the Helmet Headset directly with a *Bluetooth* equipped device such as a mobile phone however doing so may cause reconnection difficulties between the Helmet Headset and Control Box thus requiring the wireless connection between the Helmet Headset and Control Box to be reset. The Helmet Headset is not a qualified device by the *Bluetooth* Qualification Body (BQB); reliable performance when paired with *Bluetooth* equipped devices is not guaranteed.

## **INSTALLING THE HELMET HEADSET**

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When installing the Helmet Headset on your helmet make sure that you install the Helmet Headset Rider (HHR) on the Rider's helmet and the Helmet Headset Passenger (HHP) on the Passenger's helmet; the Helmet Headset always installs on the left side of your helmet.

### **INSTALLATION USING THE HELMET HEADSET CLIP**

To install the Helmet Headset using the Helmet Headset Clip complete the following steps:

1. Position the Headset Back Plate between the internal padding and the external shell of your helmet.
2. Position the Headset Clip on the outside of your helmet and align the screw holes with the Headset Back Plate; using the Hex Key tighten the screws until the Headset Clip is secure.
3. Ensure that the microphone is in a position in front of where your mouth will be when wearing your helmet; readjust as necessary. The Microphone Positioning Indicator is a silver strip to aid in microphone positioning; the silver strip should face into your mouth.
4. Slide the Headset Unit down the Headset Clip until it firmly locks into place.
5. Position the Headset Speakers at the height of your ears in the left and right ear pockets of your helmet; you will need to test the position several times to ensure you have selected the optimal position for you and your helmet. Using the included Speaker Ear Pocket Spacer Dots will aid in obtaining optimal speaker position.

### **INSTALLING THE HELMET HEADSET SPEAKERS**

The Helmet Headset speakers also use hook and loop fasteners to attach inside the ear pockets of your helmet; the back of each speaker is covered with the hook side and the

Speaker Fastening Dot is the loop side. Before affixing the Speaker Fastening Dot inside the ear pockets consider using the Speaker Ear Pocket Spacer Dots to adjust the distance between the speakers and your ears.

### **QUICK REMOVAL OF THE HEADSET UNIT**

To quickly remove the Headset Unit from the Headset Clip slide the Headset Unit upwards; for convenience and protection store the Headset Unit in the included Carry Case.

## THE CONTROL BOX

The Control Box is the core of the BikerCom system, all wired and wireless devices connect to the Control Box and the Control Box then wirelessly transmits the audio signals to the Helmet Headsets. The Control Box has five 2.5mm Audio Jack sockets for connecting a variety of input devices and is equipped with *Bluetooth*® wireless technology enabling two connections with other devices also equipped with *Bluetooth* wireless technology such as a mobile phone or navigation device. The Control Box contains electronic components and care must be taken when handling the unit.

### CONTROL BOX STATUS LIGHTS

The Control Box has five status lights that indicate the current status of each connection, such as the power and if the Helmet Headsets are connected to the Control Box.

CONNECTION NAME	CONNECTION STATUS LIGHT	CONNECTION STATUS
Power	No light	Power Off Mode
	Still green light	Power On Mode Ready for use
HHR	No light	Power Off Mode The HHR switch is set to OFF
	Quickly blinking red light	Ready to connect with the Rider's Helmet Headset
	Still blue light with blinking red light	Connected with the Helmet Headset Rider Ready for use
HHP	No light	Power Off Mode The HHP switch is set to OFF
	Quickly blinking red light	Ready to connect with the Passenger's Helmet Headset
	Still blue light with blinking red light	Connected with the Helmet Headset Passenger Ready for use
Other	Steady blinking blue light	Ready to connect with a <i>Bluetooth</i> equipped device
	Still blue light	Connected with a <i>Bluetooth</i> equipped device Ready for use

CONNECTION NAME	CONNECTION STATUS LIGHT	CONNECTION STATUS
MPR	Steady blinking blue light	Ready to connect with the Rider's <i>Bluetooth</i> equipped device
	Still blue light	Connected with the Rider's <i>Bluetooth</i> equipped device Ready for use
Push To Talk Button	No light	Power Off Mode
	Still Green light	Power On Mode
	Still Blue light	Connect devices success

### **POWERING ON THE CONTROL BOX**

There are two options for Powering On the Control Box using either the PTT Button or the Control Box Power Button.

#### **OPTION ONE – POWER ON USING THE PTT BUTTON**

To Power On the Control Box using the PTT Button complete the following steps:

1. Long press the PTT Button for approximately 5 seconds.
- ↳ When successfully Powered On the Control Box Power status light will display a still green light and the PTT Button status light will display a still green light.

#### **OPTION TWO – POWER ON USING THE CONTROL BOX POWER BUTTON**

To Power On the Control Box using the Control Box Power Button complete the following steps:

1. Long press the Control Box Power Button for approximately 5 seconds.
- ↳ When successfully Powered On the Control Box Power status light will display a still green light and the PTT Button status light will display a still green light.

#### **GENERAL GUIDELINES FOR POWERING ON THE CONTROL BOX**

The following steps are recommended for general Powering On of the BikerCom system:

1. Connect the Control Box to your motorcycle battery.
2. Connect wired devices to the Control Box.
3. Power On wired devices.
4. Start your motorcycle.
5. Power On the Helmet Headset.
6. Power On the Control Box.
7. Verify Helmet Headset success connect to Control Box.
8. Connect wireless devices to the Control Box.
9. Adjustment wired and wireless devices volume.

## **POWERING OFF THE CONTROL BOX**

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There are two options for Powering Off the Control Box using either the PTT Button or the Control Box Power Button.

### **OPTION ONE – POWER OFF USING THE PTT POWER OFF BUTTON**

For safety and convenience the PTT Button has a dedicated Power Off Button positioned on the end of the PTT Button.

To Power Off the Control Box using the PTT Power Off Button complete the following steps:

1. Long press the PTT Power Off Button for approximately 5 seconds.
2. The PTT Button status light and Control Box Power status light will turn off; you can now stop long pressing the PTT Power Off Button. Helmet Headset will automatically power off when Control Box power oof.
3. The remaining Control Box status lights turn off after approximately 30 seconds.

### **OPTION TWO – POWER OFF USING THE CONTROL BOX POWER BUTTON**

To Power Off the Control Box using the Power Button complete the following steps:

1. Long press the Control Box Power Button for approximately 5 seconds.
2. The Control Box Power Button status light will turns off; you can now stop pressing the Control Box Power Button. Helmet Headset will automatically power off when Control Box power oof.
3. The remaining Control Box status lights turn off after approximately 30 seconds.

## **GENERAL GUIDELINES FOR POWERING OFF THE CONTROL BOX**

The following steps are recommended for general Powering Off of the BikerCom system:

1. Turn off your motorcycle.
2. Power Off the Control Box.
3. Power Off and disconnect devices.

**NOTE:** Ensure you have Powered Off the Control Box before disconnecting the Power Cable from the motorcycle battery.

**CAUTION:** It is recommended to Power Off the Control Box, Helmet Headsets and all connecting devices when refueling your motorcycle or if you are near any explosive environment.

## **PLACEMENT OF THE CONTROL BOX**

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Placement of the Control Box on your motorcycle should ensure the Control Box is protected from any liquids, is not near areas that are prone to excessive heat such as the engine or exhaust, and that nothing is placed on the top side of the Control Box that will interfere with the wireless connections. Ensure that the Control Box is securely positioned and prevented from movement when in use, movement when in use results in an unstable wireless connection. It is recommended that you align each Helmet Headset with the corresponding connection on the Control Box to ensure a stable wireless connection, for example the Helmet Headsets install on the left side of your helmet, therefore orient the HHR and HHP wireless connections on the Control Box to the left side so they are aligned with the Helmet Headsets.

### TESTING THE WIRELESS CONNECTION

If the Control Box is placed under your motorcycle seat it is recommended to test the wireless connection between the Helmet Headsets and Control Box because the wireless connection performance is affected by environmental factors which include having one or two human bodies sitting above the Control Box. The testing procedure should be carried out with one or two people sitting on the motorcycle to simulate real use conditions.

To test the Helmet Headset wireless connection complete the following steps:

1. Place the Control Box as in the desired position under the seat.
2. Connect the Control Box to your motorcycle battery
3. Connect your Audio Player to the Control Box Audio socket.
4. Power On the Helmet Headset Rider and Helmet Headset Passenger.
5. Power On the Control Box and wait for the connection with the Helmet Headsets to be established.
6. Keep the Helmet Headset Passenger within 30cm range of the Control Box.
7. Take the Helmet Headset Rider and walk away from the Control Box; good placement of the Control Box should enable at least 10m of music streaming for the Helmet Headset Rider.
8. Next, keep Helmet Headset Rider within 30cm range of the Control Box.
9. Take the Helmet Headset Passenger and walk away from the Control Box; good placement of the Control Box should enable at least 10m of music streaming for the Helmet Headset Passenger.
10. If the test results are not satisfactory reposition the Control Box and retest.

**NOTE:** Some trial and error is required to determine the optimal placement of the Control Box.

### CONNECTING THE CONTROL BOX TO YOUR BATTERY

The Control Box is powered by your motorcycle battery, the battery output must be 12 volts or higher. Caution is advised when working with your battery; it is recommended to consult your motorcycle owner's manual for detailed instructions about working with the battery. When connecting the Control Box to your motorcycle battery you need to use the included Power Cable with Fuse.

To connect the Control Box to your motorcycle battery complete the following steps:

1. Access your motorcycle battery.
2. Locate suitable placement on your motorcycle of the Control Box.
3. Using the Power Cable with Fuse connect the negative (black) power lead to the negative terminal of the battery.
4. Using the Power Cable with Fuse connect the positive (red) power lead to the positive terminal of the battery.
5. Connect the Power Cable with Fuse to the Control Box Power Cable.
6. Securely replace any parts you have moved and ensure that the power leads are free from pinching.

## **CONTROL BOX VOLUME SETTING**

The Control Box operates a fixed gain volume level with connected devices to ensure consistent and audible volume. It is recommended that the volume level between the Control Box and each individual connected device is separately tuned as the optimum volume level is a matter of personal preference. Before tuning a connected device's volume level with the Control Box you must set the Rider To Passenger Intercom Activation Volume (see RIDER TO PASSENGER INTERCOM ACTIVATION VOLUME p26).

To set the volume level between the Control Box and a connected device complete the following steps:

1. Ensure you have set the Rider to Passenger Intercom Activation Volume.
2. Ensure the device is powered on and connected to the Control Box.
3. Adjust the volume level on the device and check the volume output by listening to the Helmet Headset speakers until an audible level is reached.

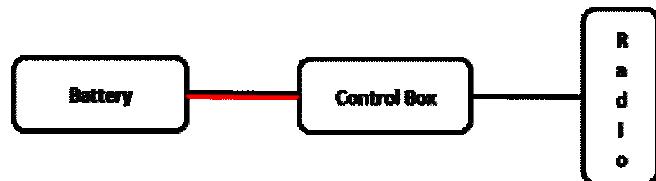
**NOTE:** Some trial and error is required to determine the optimal volume level between the Control Box and a connected device.

## **CONNECTING YOUR TWO WAY RADIO TO THE CONTROL BOX**

Two Way Radios are popularly used by motorcyclists for communication; the BikerCom connects with your Two Way Radio to enable Bike To Bike intercom functionality. Due to the variety of Two Way Radios available and different configuration options, the following instructions will guide you to ensure the best performance from using your Two Way Radio with the BikerCom. Generally there are three options for connecting your Two Way Radio with the BikerCom; the different options depend on the Two Way Radio power source and if you are using an external antenna.

### **OPTION ONE – STANDARD POWER SETUP**

Using the standard power setup your Two Way Radio is powered using the radio's battery and you are not using an external antenna (see CONNECTING TO THE CONTROL BOX RADIO SOCKET p21).

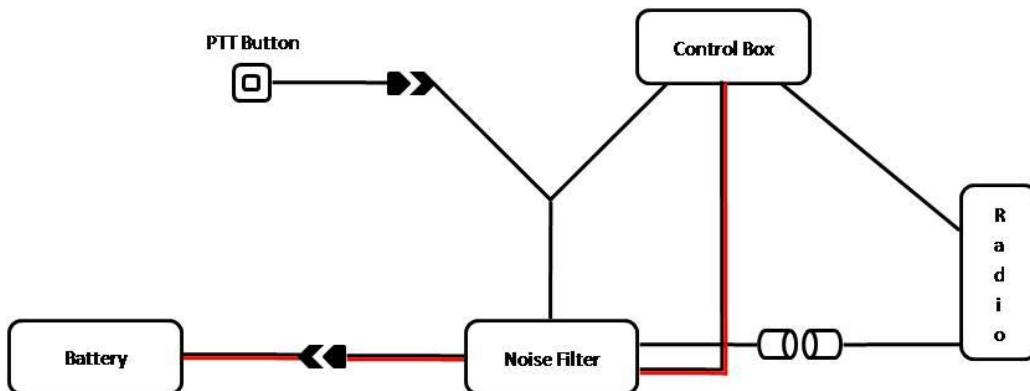


#### OPTION TWO – BIKE POWER SETUP

Using the bike power setup your Two Way Radio is powered by the motorcycle battery when using a charging/power adapter usually connected to the motorcycle cigarette lighter socket. To connect your Two Way Radio using the bike power setup it is recommended to use the Noise Filter accessory to prevent the transmission of conductive noise from the motorcycle through the BikerCom system. The Noise Filter accessory is sold separately and not included in the BikerCom package contents (see NOISE FILTER ACCESSORY p19).

To connect your Two Way Radio using the bike power setup with Noise Filter accessory complete the following steps:

1. Connect the Noise Filter accessory to the Control Box.
2. Connect the Noise Filter accessory to the motorcycle battery.
3. Connect the Noise Filter to the Two Way Radio charging/power adapter.
4. Connect the Noise Filter to the Push To Talk button.
5. Proceed with standard BikerCom setup.



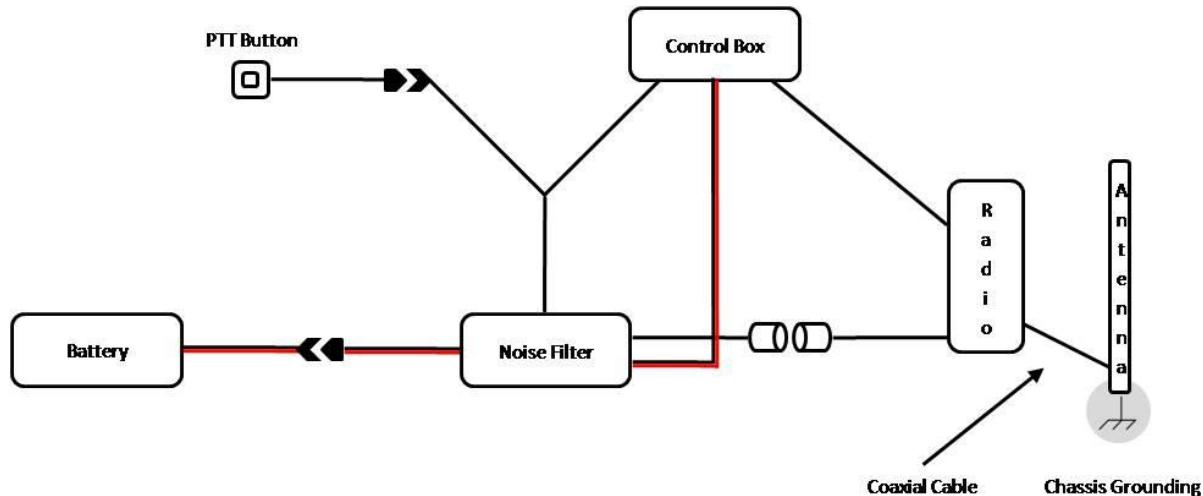
#### OPTION THREE – EXTERNAL ANTENNA SETUP

Using the external antenna setup your Two Way Radio is connected to an external antenna to extend Two Way radio range. To connect your Two Way Radio using the external antenna setup it is recommended to use the Noise Filter accessory to prevent the transmission of conductive noise from the motorcycle through the BikerCom system; the ground shielding conductor should be disconnected from the motorcycle body at the antenna feed point, the disconnection of the grounding will not affect the performance of the antenna.

To connect your Two Way Radio using the external antenna setup complete the following steps:

1. Ensure the external antenna is connected to your Two Way Radio.
2. Connect the Noise Filter to the motorcycle battery.
3. Connect the Noise Filter to the Two Way Radio charging/power adapter.
4. Connect the Noise Filter to the Push To Talk button.
5. Proceed with standard BikerCom setup.

*Option Three – External Antenna Setup Continued...*



**NOTE:** If the external antenna produces unwanted feedback noise it is recommended to disconnect the ground shielding from the motorcycle body at the antenna feed point; disconnection will not affect antenna performance. For more information about chassis grounding an electrical circuit contact the external antenna manufacturer or email: [service@openroad.com.tw](mailto:service@openroad.com.tw)

#### **NOISE FILTER ACCESSORY**

As mentioned previously the Noise Filter accessory should be used when your Two Way Radio is powered by the motorcycle battery and/or your Two Way Radio is connected to an external antenna to extend Two Way radio range. Using the Noise Filter Accessory prevents the transmission of conductive noise from the motorcycle through the BikerCom system. The Noise Filter accessory is sold separately and not included in the BikerCom package contents. To purchase the Noise Filter accessory first contact the original place of purchase, alternatively you can contact an authorised distributor in your region or the manufacturer.

When using the Noise Filter Accessory the Push To Talk button must be connected to the Noise Filter even if a two way radio is not being used; when the Noise Filter accessory is in use only the Push To Talk button can be used for Powering On and Off the Control Box.

To use the Noise Filter accessory complete the following steps:

1. Connect the Noise Filter accessory lead labeled Power to the Power Cable with Fuse which is connected to the motorcycle battery.
2. Connect the Noise Filter accessory lead labeled Control Box to the Control Box.
3. Connect the Noise Filter accessory lead labeled Power Adapter to the Two Way Radio charging/power adapter.
4. Connect the Noise Filter accessory lead labeled PTT to the Control Box socket labeled PTT; this is a dual lead, insert the 2.5mm pin.
5. Connect the Noise Filter accessory lead labeled PTT to the Push To Talk button; this is a dual lead, insert the Push To Talk button 2.5mm pin.

↳ Proceed with standard BikerCom setup.

Noise Filter Accessory Continued...

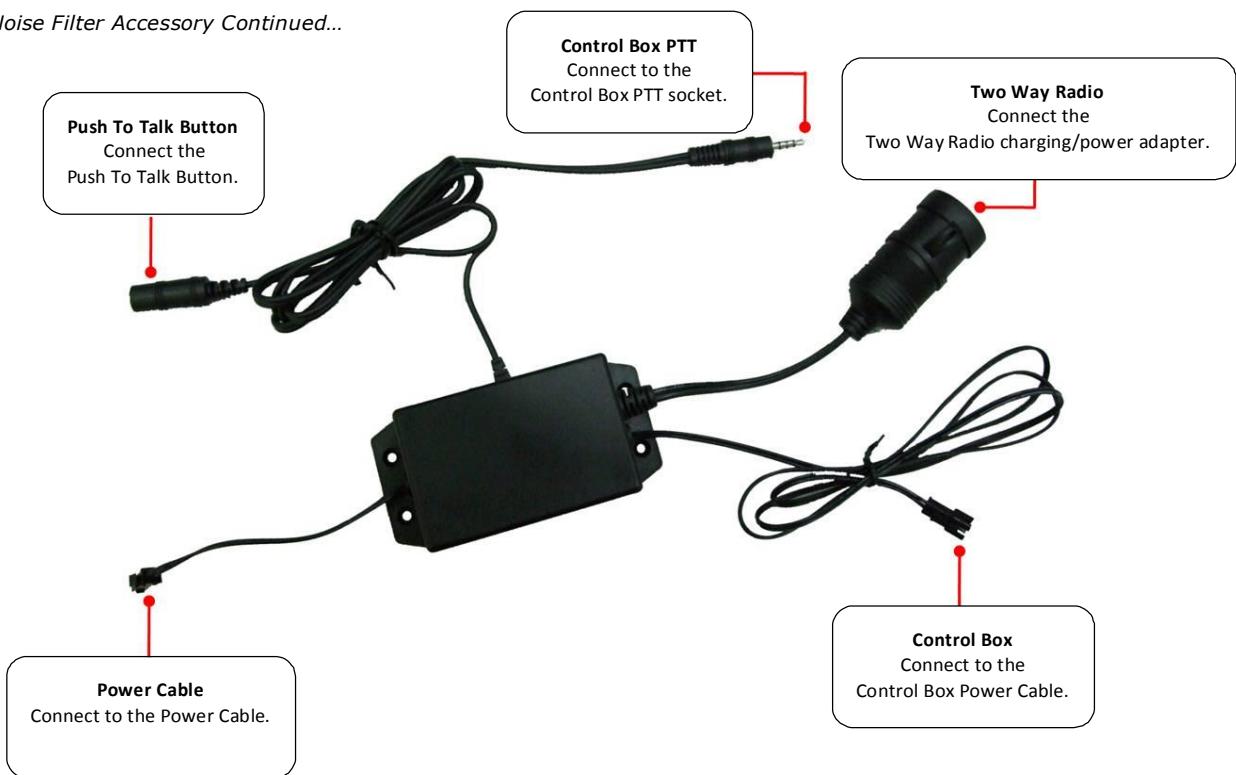


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## CONNECTING WIRED DEVICES TO THE CONTROL BOX

### CONNECTING THE PUSH TO TALK BUTTON

The Push To Talk Button activates transmission of the Rider and/or Passenger's voice over the Two Way Radio.

To connect the PTT Button to the Control Box complete the following steps:

1. Ensure that the Control Box is in Power Off mode.
2. Insert the PTT Button Connection Cable 2.5mm pin into the Control Box socket labeled PTT.
3. Using the PTT Adhesive Pad affix the PTT Button to the left handlebar grip in a position that is easily accessible with your left thumb.

**NOTE:** Continuous and repetitious activation of the PTT Button may cause malfunction and require the BikerCom system to be restarted.

## **CONNECTING TO THE CONTROL BOX RADIO SOCKET**

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The Radio socket is for connecting your Two Way Radio.

To connect your Two Way Radio to the Control Box complete the following steps:

1. Ensure that the Control Box and Two Way Radio are in Power Off mode.
2. Insert the Two Way Radio Connection Cable 2.5mm pin into the Control Box socket labeled Radio.
3. Insert the other end of the Two Way Radio Connection Cable into your Two Way Radio.

↳ You can now Power On your Two Way Radio and adjust any settings as required.

**NOTE:** Some trial and error is required to determine the optimal placement of your Two Way Radio in relation to the Control Box to reduce any feedback.

## **CONNECTING TO THE CONTROL BOX AUX SOCKET**

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The AUX sockets are identical and are normally used for connecting your Navigation Device or Radar Detector.

To connect to the AUX sockets complete the following steps:

1. Ensure that the Control Box and device are in Power Off mode.
2. Insert the included Connection Cable into the device; insert the other end of the cable into the Control Box socket labeled AUX.

↳ You can now Power On your device and adjust any settings as required.

## **CONNECTING TO THE CONTROL BOX AUDIO SOCKET**

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The Audio socket is normally used for connecting your Audio Player.

To connect to the Audio socket complete the following steps:

1. Ensure that the Control Box and Audio Player are in Power Off mode.
2. Insert the included Connection Cable into the Audio Player; insert the other end of the cable into the Control Box socket labeled Audio.

↳ You can now Power On your Audio Player and adjust any settings as required.

## **CONNECTING WIRELESS DEVICES TO THE CONTROL BOX**

The Control Box is equipped with *Bluetooth*<sup>®</sup> wireless technology enabling up to two connections with other devices also equipped with *Bluetooth* wireless technology such as a mobile phone or navigation device. Additionally the Control Box maintains two preset wireless connections with the two Helmet Headsets; you do not need to perform any setup procedure between the Helmet Headsets and the Control Box.

## **CONNECTING THE HELMET HEADSETS TO THE CONTROL BOX**

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The Helmet Headsets have a preset wireless connection with the Control Box; you do not need to perform any setup procedure between the Helmet Headsets and the Control Box. For simplicity the Control Box connects with each Helmet Headset successively, first connecting with the Helmet Headset Rider and then with the Helmet Headset Passenger. When connecting the Helmet Headsets to the Control Box you should first Power On both the Helmet Headset Rider and the Helmet Headset Passenger, then Power On the Control Box.

## **CONNECTING THE HELMET HEADSET TO THE CONTROL BOX**

The Helmet Headset enables the Rider to receive all audio signals from the Control Box; only the Helmet Headset can receive audio signals using the MPR wireless connection; full duplex intercom with the Passenger is enabled.

For simplicity the Control Box connects with each Helmet Headset successively, first connecting with the Helmet Headset Rider and then with the Helmet Headset Passenger.

To connect the Helmet Headset Rider to the Control Box complete the following steps:

1. Ensure the Helmet Headset Rider (Orange) and Helmet Headset Passenger (Green) are Powered On.
2. The Helmet Headset Rider (Orange) status light will blink blue.
3. Power On the Control Box.
4. The Helmet Headset Rider and the Control Box will automatically connect.
  - ❖ When successfully connected the Control Box HHR status light will display a still blue light with a blinking red light and the Helmet Headset Rider status light will display a steady single blinking blue light. PTT control cable display a steady blue at orange and green point.

## **CONNECTING TO THE CONTROL BOX MPR CONNECTION**

The Mobile Phone Rider (MPR) wireless connection enables the connection of the Rider's mobile phone or a navigation device to make and receive mobile phone calls, listen music from mobile phone and/or receive navigation instructions. The recommended setup for the MPR connection is to connect the Rider's mobile phone or you can connect a Garmin zūmo® 550 and then connect the Rider's mobile phone to the Garmin device to make and receive mobile phone calls. When devices are connected to the MPR connection only the Rider can hear the audio signal; the Passenger cannot hear the audio signal. To connect the Rider's mobile phone or navigation device to the Control Box the device must be equipped with *Bluetooth* wireless technology, if you are unsure about your devices specifications please check with the manufacturer.

The Control Box MPR Connection stores the pairing information of the current or last used *Bluetooth* device. For example if you pair a Motorola mobile phone with the MPR connection the Control Box MPR connection will remember it. After you Power Off the Control Box, the next time you Power On the Control Box, the MPR connection will automatically search for the previously paired Motorola mobile phone; the searching and reconnection process should occur within 30 seconds. However, for example if you first pair a Motorola mobile phone with the MPR connection and later change, and pair a Nokia mobile phone with the MPR connection, the Nokia mobile phone becomes the current or last used *Bluetooth* device. If you want to reconnect the original Motorola mobile phone with the MPR connection you will need to repeat the pairing process.

To connect to the MPR wireless connection complete the following steps:

1. Press the MPR Button on the Control Box.
2. The MPR status light will quickly blink red and blue indicating it is in *Bluetooth* pairing mode.
3. Activate the *Bluetooth* function on your device and search for a new device.
4. Your device will now search for *Bluetooth* equipped devices within range and display them in a list on your device screen.

5. On your device select BC-MPR.
6. When prompted for the Passcode enter 0000.
7. The Control Box BC-MPR *Bluetooth* connection is now added to your device; depending on your device make and model you may need to connect to the BC-MPR.
8. When successfully connected the MPR status light will display a still blue light. PTT control cable Purple spot display a still blue light.

**NOTE:** To avoid interference it is recommended to maintain a distance of at least 30cm between your mobile phone and the Control Box.

#### **CONNECTING TO THE CONTROL BOX OTHER CONNECTION**

The Other wireless connection enables the connection of an additional device equipped with *Bluetooth* wireless technology such as a navigation device; both the Rider and Passenger can receive the audio signal. To connect to the Other connection the device must be equipped with *Bluetooth* wireless technology, if you are unsure about your devices specifications please check with the manufacturer.

The Control Box Other Connection stores the pairing information of the current or last used *Bluetooth* device. For example if you pair a Garmin zūmo 550 with the Other connection the Control Box Other connection will remember it. After you Power Off the Control Box, the next time you Power On the Control Box, the Other connection will automatically search for the previously paired Garmin zūmo 550; the searching and reconnection process should occur within 30 seconds.

*Connecting to the Control Box Other Connection Continued...*

However, for example if you first pair a Garmin zūmo 550 with the Other connection and later change, and pair a Garmin zūmo 660 with the Other connection, the Garmin zūmo 660 becomes the current or last used *Bluetooth* device. If you want to reconnect the original Garmin zūmo 550 with the Other connection you will need to repeat the pairing process.

The procedure for connecting to the Other connection is similar to connecting to the MPR connection; complete the following steps:

1. Press the Other Button on the Control Box.
2. The Other status light will quickly blink red and blue indicating it is in *Bluetooth* pairing mode.
3. Activate the *Bluetooth* function on your device and search for a new device.
4. Your device will now search for *Bluetooth* equipped devices within range and display them in a list on your device screen.
5. On your device select BC-OTHER.
6. When prompted for the Passcode enter 0000.
7. The Control Box BC-OTHER wireless connection is now added to your device; depending on your device make and model you may need to connect to the BC-OTHER.
8. When successfully connected the OTHER status light will display a still blue light. PTT control cable Sliver spot display a still blue light.

## **CONNECTING YOUR Garmin zūmo® 550**

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The Garmin zūmo® 550 is popularly used by motorcyclists for GPS navigation and other communication functions. The Garmin zūmo® 550 is equipped with *Bluetooth* wireless technology and there are two different options for wirelessly connecting this device to the Control Box. The difference between the two connection options affects the functionality of the Garmin device, such as the connecting of your *Bluetooth* equipped mobile phone directly with the Garmin device. It is recommended you consult the relevant section of your Garmin devices owner's manual to ensure you are familiar its *Bluetooth* operation.

### **OPTION ONE – CONNECTING TO THE MPR WIRELESS CONNECTION**

Connecting a Garmin device to the MPR connection is the standard and recommended setup option as it allows you to make greater use of the Garmin device's functionality, such as connecting your *Bluetooth* equipped mobile phone directly with the Garmin device.

The procedure for connecting your Garmin device to the MPR connection is similar to connecting to the MPR connection; complete the following steps:

1. Press the MPR Button on the Control Box.
2. The MPR status light will quickly blink red and blue indicating it is in *Bluetooth* pairing mode.
3. Activate the *Bluetooth* function on your Garmin device and search for a new device.
4. Your Garmin device will now search for *Bluetooth* equipped devices within range and display them in a list on your device screen.
5. On your Garmin device select BC-MPR.
6. When prompted for the Passcode enter 0000.
7. The Control Box MPR wireless connection is now connected to your Garmin device.
8. You can now proceed to connect other devices such as your *Bluetooth* equipped mobile phone directly with your Garmin device.
9. When successfully connected the MPR status light will display a still blue light. PTT control cable Purple spot display a still blue light.

**NOTE:** When connecting the Garmin device to the Control Box MPR wireless connection the audio signal is only transmitted to the Rider's Helmet Headset (Orange) the Passenger's Helmet Headset (Green) does not receive the audio signal.

### **OPTION TWO – CONNECTING TO THE OTHER WIRELESS CONNECTION**

Connecting a Garmin device to the Other wireless connection is the secondary setup option; using this setup option the Rider and Passenger will receive navigation instructions from the Garmin device. To connect your Garmin device to the Control Box Other wireless connection see CONNECTING TO THE CONTROL BOX OTHER CONNECTION [p23](#).

**NOTE:** When using *Bluetooth* wireless technology to connect to the Control Box the connection process should be completed within two minutes; if after two minutes the devices are not connected it is recommended to Power Off the Control Box and devices, and attempt to connect again.

## BIKERCOM OPERATION

### **CONNECTION PRIORITIES**

The Rider's mobile phone MPR wireless connection is always the priority; thereafter there are two connection priority scenarios dependant on the connection status of the Control Box MPR connection. The difference between the two priority scenarios only affects the functionality of the Helmet Headset Passenger.

#### **SCENARIO ONE**

MPR Connection Inactive - i.e. the Rider is not on a phone call.

In this scenario the following connection types take communication priority:

1. **MPR**

The Mobile Phone Rider wireless connection is the first priority; the Rider's mobile phone will always automatically answer an incoming call and can only be heard by the Rider.

2. **HHR – HHP – Other – PTT – Radio – AUX**

The Helmet Headset Rider & Passenger, Other wireless connection, Push To Talk Button, Two Way Radio, and Auxiliary wired connections all maintain equal secondary priority. The Rider is ready to receive a phone call, Rider and Passenger wireless intercom is enabled, bike to bike Two Way Radio intercom is enabled, Rider and Passenger can receive navigation instructions and radar detector alerts. Audio is enabled; Rider and Passenger can listen to music.

#### **SCENARIO TWO**

MPR Connection Active - i.e. the Rider is on a phone call.

In this scenario the following connection types take communication priority:

1. **MPR**

The Mobile Phone Rider wireless connection is active and is the first priority; the Rider is currently on a phone call therefore the MPR and current phone call is the priority.

2. **HHR - Other - PTT - Radio - AUX**

The Helmet Headset Rider & Other wireless connection, Push To Talk Button, Two Way Radio, and Auxiliary wired connections all maintain equal secondary priority. The Rider can maintain the phone call, communicate using Two Way Radio by pressing the PTT Button, and receive navigation instructions and radar detector alerts.

3. **HHP – Audio**

The Helmet Headset Passenger wireless connection and Audio wired connection are the last priority. When the Rider is on a phone call the Passenger will not receive any audio signals until the Rider has ended the phone call and the MPR connection is inactive. Audio is disabled; Rider and Passenger cannot listen to music.

## **OPERATING RIDER TO PASSENGER INTERCOM**

Full duplex wireless intercom communication is enabled between the Rider and Passenger. The following instructions will guide you through Rider to Passenger Intercom operation:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning.
2. To communicate with the other person speak into the Helmet Headset microphone.
3. You will hear a beep to confirm your voice is loud enough to communicate; if no beep is heard your voice is too quiet and the other person will not hear you, speak again in a louder voice.
4. The other person will hear your voice in their Helmet Headset speakers.
5. If you are listening to music the music will automatically mute; music will return approximately 10 seconds after the last communication.

## **RIDER TO PASSENGER INTERCOM ACTIVATION VOLUME**

Speaking into the microphone activates the intercom between Rider and Passenger; generally you need to speak in a louder voice to successfully activate the intercom function. To accommodate the variation in the volume of individual's voices and external noise levels in different environments the intercom activation volume is adjustable. For example, when listening to music using your BikerCom you may like to sing, to avoid unwanted activation of the intercom you would set the intercom activation volume at a high level requiring you to speak with a very loud voice to activate the intercom. Conversely if you have a quiet voice you would set the intercom activation volume at a low level allowing you to speak with a quieter voice to activate the intercom.

### **INCREASING THE INTERCOM ACTIVATION VOLUME**

Increasing the intercom activation volume requires a louder voice to activate the Rider to Passenger intercom; complete the following steps:

1. Ensure the Helmet Headset is in Power On mode and connected to the Control Box.
2. Long press the Volume Up + button.
3. The Helmet Headset status light will display a still red light and double blinking blue light thus increasing the intercom activation volume by one level.
4. Test the Rider to Passenger intercom activation volume.
5. To increase the volume another level repeat the above steps.
6. The maximum intercom activation volume level has been achieved when the status light displays a still red and blue light for four seconds.

### **DECREASING THE INTERCOM ACTIVATION VOLUME**

Decreasing the intercom activation volume allows a quieter voice to activate the Rider to Passenger intercom. Decreasing the intercom activation volume is similar to increasing the volume; complete the following steps:

1. Ensure the Headset is in Power On mode and connected to the Control Box.
2. Long press the Volume Down - button.
3. The Headset Status light will display a still red light and double blinking blue light thus decreasing the intercom activation volume by one level.
4. Test the Rider to Passenger intercom activation volume.
5. To decrease the volume another level repeat the above steps.

6. The minimum intercom activation volume level has been achieved when the status light displays a still red and blue light for four seconds.

**NOTE:** Some trial and error is required to determine the appropriate intercom activation volume.

#### **OPERATING BIKE TO BIKE INTERCOM**

Half duplex intercom communication is enabled between two or more bikes equipped with a BikerCom system and connected Two Way Radio; Bike to Bike Intercom is enabled using Two Way Radio service. Only the Rider's voice can be transmitted over the Two Way Radio; the Passenger can only receive the Two Way Radio transmission.

The following instructions will guide you through Bike to Bike Intercom operation:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning on all bikes.
2. To transmit a message press and hold the Push To Talk Button on the left handlebar and speak into the Helmet Headset microphone, if you are listening to music the music will automatically mute.
3. When you have finished transmitting your message release the Push To Talk Button; if you were listening to music the music will return after approximately 10 seconds.

#### **OPERATING AUX1 AND AUX2 WIRED CONNECTIONS**

The AUX1 and AUX2 sockets are identical and normally used for connecting a navigation device or a radar detector; connecting a navigation device enables you receive navigation instructions, connecting a radar detector enables you to receive radar detector alerts.

The following instructions will guide you through operating a device connected to the AUX1 and AUX2 wired connection:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning.
2. Ensure that the device is connected to the Control Box and functioning.
3. Navigation instructions and radar detector alerts are heard by both the Rider and Passenger.

### **OPERATING THE AUDIO WIRED CONNECTION**

The Audio socket is used for connecting an audio player enabling you to listen to music.

The following instructions will guide you through operating a device connected to the Audio wired connection:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning.
2. Ensure that the audio player is connected to the Control Box and functioning.
3. Music is heard by the Rider and Passenger.
4. When the Rider or Passenger speak the music is muted and returns after approximately 10 seconds.

### **OPERATING THE MPR WIRELESS CONNECTION WITH A MOBILE PHONE**

Connecting the Rider's *Bluetooth* equipped mobile phone enables the Rider to make and receive mobile phone calls; for safety and convenience purposes incoming calls are automatically answered, for privacy purposes the Passenger cannot hear the Rider's mobile phone connection.

The following instructions will guide you through operating a mobile phone connected to the MPR wireless connection:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning.
2. Ensure that the Rider's mobile phone is connected to the Control Box and functioning.
3. Upon receiving or making a call, if listening to music the music will automatically mute for the Rider and Passenger, the music will return approximately 10 seconds after the call is ended.

#### RECEIVING AN INCOMING CALL

4. Upon receiving an incoming call the Rider will hear one ring tone then the call will be automatically answered.

#### MAKING AN OUTGOING CALL

For safety purposes it is generally not advisable for the Rider to make an outgoing call.

There are two options for making an outgoing call:

5. The first option involves dialing the number on the phones keypad or accessing the phones stored phone book; using this option is the same as the usual manner that you would make a call.
6. The second and safer option involves using your phones voice dialing functionality; this function is dependent on your mobile phone make and model, please consult your mobile phone user guide to ensure you are familiar with voice dialing operation. To activate your mobile phones voice dialing function press the Multi Function Button on the Helmet Headset and follow the instructions as set out by your mobile phone manufacturer.

## ENDING A CALL

There are three options for ending a call:

7. The first and safest option is for the other party to end the call; the Rider does not need to take any action.
8. The second option requires the Rider to press the Multi Function Button on the Helmet Headset.
9. The third option requires the Rider to end the call on the phones keypad; using this option is the same as the usual manner that you would end a call.

## **OPERATING THE MPR WIRELESS CONNECTION WITH A Garmin zūmo® 550**

Connecting the Rider's Garmin zūmo® 550 enables the Rider to receive navigation instructions and additionally connect a *Bluetooth* equipped mobile phone with the Garmin device. For privacy purposes the Passenger cannot hear the Rider's mobile phone connection and cannot receive navigation instructions. The use of your mobile phone, such as receiving or making a call, is determined by the settings on your Garmin device, it is recommended you read the relevant section of your Garmin devices Owner's Manual to ensure you are familiar its mobile phone operation.

The following instructions are a quick guide to operating a Garmin zūmo® 550 connected to the MPR wireless connection:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning.
2. Ensure that the Garmin zūmo® 550 is connected to the Control Box and functioning.
3. Upon receiving navigation instructions and/or receiving or making a call if listening to music the music will automatically mute for the Rider and Passenger, the Passenger will not receive any audio signals, the music will return approximately 10 seconds after the audio transmission is ended.

## **OPERATING THE OTHER WIRELESS CONNECTION**

The Other wireless connection is normally used for connecting a navigation device enabled with *Bluetooth* wireless technology such as the Garmin zūmo® 550. Connecting a wireless navigation device enables the Rider and Passenger to receive navigation directions or other audio signals.

The following instructions will guide you through operating a device connected to the Other wireless connection:

1. Ensure that the Helmet Headset Rider and Passenger are connected to the Control Box and functioning.
2. Ensure that the Other device is connected to the Control Box and functioning.
3. Audio signals are heard by both the Rider and Passenger.

**NOTE:** The maximum distance permitted by Class 2 *Bluetooth* wireless technology is 10 meters or 30 feet with devices in line of sight, therefore to maintain an active wireless connection any devices equipped with *Bluetooth* wireless technology that connect to the MPR or Other wireless connection must remain within this range of the Control Box; going outside this range will result in disconnection, when the devices return within the *Bluetooth* range they will automatically reconnect to the Control Box.

## SPECIFICATIONS

HELMET HEADSET SPECIFICATIONS	
Part Name	Helmet Headset Rider (Orange) Helmet Headset Passenger (Green)
Wearing Method	Clamp to helmet
Buttons	Multi Function Button (MFB) Volume Up Button + Volume Down Button -
Status Lights	1 X LED - Red/Blue/Green
Headset Unit Dimensions	Width: 40 mm Length: 78 mm Thickness: 17 mm
Microphone Type	Noise Cancellation
Microphone Dimensions	Length: 200 mm
Speaker Type	Slim Dual Stereo
Speaker Dimensions	Diameter: 32 mm
Total Helmet Headset Weight	100 g
Talk Time	15 hours
Charging Time	6 hours
Power Supply Type	Input: 100-240V Output: 5.0V
Charging Interface	Mini USB
Battery	Type: Lithium-ion Polymer 3.7V Capacity: 280-750 mAh
Operating Temperature	-10°C - 50°C
FCC ID	WTU28658913710058

Certification	CE - FCC - DGT
<b>CONTROL BOX SPECIFICATIONS</b>	
Part Name	Control Box (CB)
Buttons	Power Button Helmet Headset Pairing Button Other Button Mobile Phone Rider (MPR) Button
Status Lights	5 X LED - Red/Blue/Green
Dimensions	Width: 72 mm Length: 100 mm Thickness: 20 mm
Total Weight	150 g
Power Supply Type	Input: 12V Motorcycle Battery
Mobile Phone Rider Connection Interface (MPR)	Bluetooth Version: 2.0 Bluetooth Profile: Headset (HSP)
Other Connection Interface	Bluetooth Version: 2.0 Bluetooth Profile: Headset (HFP)

Push To Talk Button Connection Interface (PTT)	USB Jack
Radio Connection Interface	2.5mm Audio Jack
Auxiliary 1 Connection Interface (AUX 1)	2.5mm Audio Jack
Audio Connection Interface	2.5mm Audio Jack
Operating Temperature	-10°C - 60°C
FCC ID	WTU28658913000001
Certification	CE - FCC - DGT - BQB

## WARRANTY

### **WARRANTY TERMS AND CONDITIONS**

1. Open Road Solutions, Inc. provide warranty and product support only to the original purchaser of the BikerCom.
2. Open Road Solutions, Inc. will replace, repair or refund any faulty BikerCom product or part at its discretion provided it has not been misused in any way.
3. The BikerCom has no user serviceable parts; using a non-authorised repairer will void the warranty.
4. The BikerCom Product Warranty is valid for 12 months from the date of purchase.
5. Proof of purchase must be supplied to obtain warranty.

### **MAKING A WARRANTY CLAIM**

To receive warranty service first contact the original place of purchase, alternatively you can contact an authorised distributor in your region or the manufacturer. For a list of authorised distributors please visit the manufacturer's website: [www.openroad.com.tw](http://www.openroad.com.tw). To contact the manufacturer email: [service@openroad.com.tw](mailto:service@openroad.com.tw).

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## NOTICES

### **BikerCom User Guide**

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### **CE Statement**

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- EN 60950-1: 2009
- EN 62311: 2008
- EN 300 328 V1.7.1 (2006-10)
- EN 301 489-17 V2.1.1 (2009-05) and EN 301 489-1 V1.8.1 (2008-04)

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 100 mW EIRP in the frequency range of 2412 – 2472 MHz. For detailed information the end-user should contact the national spectrum authority in France.



### **FCC Notices**

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.

### **Other**

Product specifications are subject to change without notice.

**This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.**