BIKECOMM

BK-S2

Bluetooth Headset
Operation Manual

V1.01 2021.07.16

Table of contents

Safety remarks   0

Please read the following safety remarks to correctly use the product and to avoid possible severe injury, death, and/ or asset loss.

Use of product

Please read the following notices to avoid injury to the body or damage to the product.

1

Warning

1. To use the product at a high volume for a long period of time may damage your ears and hearing.

2. If there is an unusual smell, high heat, or other abnormal phenomena during the use and/or the charging of the product, stops using the product immediately, otherwise, there could be damage, an explosion or fire. If any of the above occurs, contact the dealer. It's dangerous to use the product without caution while riding a motorbike. The effect could be injury, death, or damage. Please understand the safety-related issues of the product while riding to lower the risk of danger.

3. In any radio communication prohibited area, such as hospitals or on a plane, please shut down the product to avoid the possible danger or accident caused by radio signals.

4. Make sure the product is stable and correctly fixed onto the helmet. The product falling apart from the helmet during riding will cause damage to the product as well as unexpected accidents.

5. Do not use the product in an explosive area. In this kind ofenvironment, follow the rules, signs, and instructions.

6. While using the product during the operation of transportation, follow the safety regulations of the operator. The transportation means motorbikes, scooters, bicycles, vehicles or trains.

7. While using the product, you must be in good condition and not under the influence of alcohol & drugs, nor should you be lacking sleep.

Note

1. The product is to be used with a helmet. Follow the user manual to install the product.

2. Keep sharp-pointed items away from the product to avoid damage.

3. Keep children or pets away from the product to avoid damage.

4. Any unauthorized disassembly, maintenance or modifications to the products will cause the warranty to be void.

Battery

A battery is included in the product. Read the user's manual carefully to understand all the safety information. Improper use of the product might cause the possible battery to overheat, explode, combust or damage to those nearby.

Warning

1. Do not continuously charge after the battery is fully charged as this might cause the battery to overheat, explode or combust.

2. Keep the product away from fire as this might cause battery to overheat, explode or combust.

3. Do not use an already damaged power adapter to charge the product to avoid possible explosion and accidents.

4. The certified low-power radio frequency device is not allowed to change operating frequency whether it is done by firms or users.

Enlarging the transmission power or changing the features or functionality of the original design is also not allowed. The low power radio frequency devices can not affect aircraft flying safety and legal radio communication. If there is a case of interference, stop using the device and do not use it again until the interference is removed. The legal radio communication mentioned above means the operation under the government telecommunication regulations. The certified low power radio frequency device must withstand the interference from the radio equipment of legal communication and other radio radiation devices of industry, science and medical.

FEDERAL COMMUNICATIONS 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 or more of the following measures:

1. Reorient or relocate the receiving antenna.

2. Increase the separation between the equipment and receiver.

3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

4. Consult the dealer or an experienced radio/ TV technician for help.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

RF Exposure Information (SAR)
This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for

exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/eot/ea/fccid after searching on FCCI D:WTU-28658913-A5.

To ensure that RF exposure levels remain at or below the tested levels, use a belt-clip, holster, or similar accessory that maintains a minimum separation distance of mm between your body and the device.
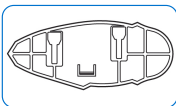
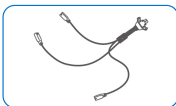## Package contents 1

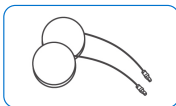Contact the dealer for any missing items.
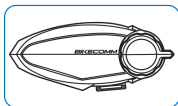
BK-S2 headset*1

BK-S2 headset fixture*1
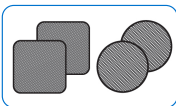

BK-S2 USB Type C speaker and microphone cable*1
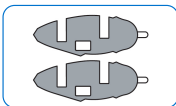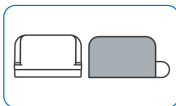

BK-S2 speaker*2

BK-S2 USB Type C speaker and microphone cable*1

Velcro for 3/4 face microphone & full face microphone

3M adhesive pad for fixture*2

Cable protection cover & 3M adhesive pad
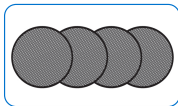
Speaker velcor pad*4
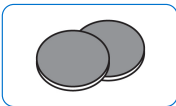
Speaker velcor adjustment pad*2
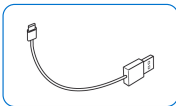
Velcro USB Type C charging line*1

Alcohol Prep Pad

Alcohol cleaning pad*1
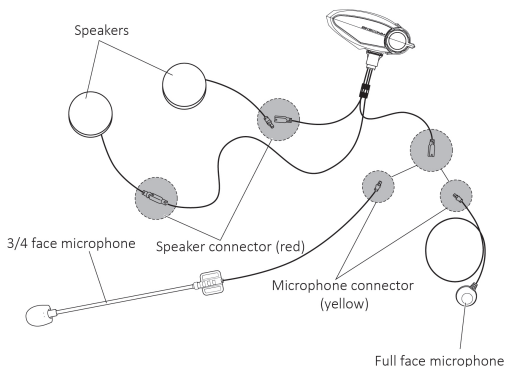
Speakers

3/4 face microphone   Speaker connector (red)

Microphone connector (yellow)

Full face microphone

Speaker pad

Speaker

Speaker velcro

Velcro pad
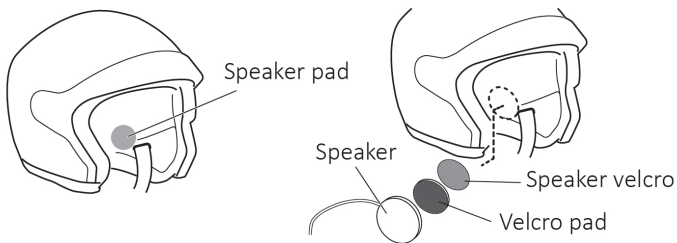
Note:Clean the area with a cleaning wipe before applying the adhesive pads.

3-1 Speaker installation

There are two cables for USB Type C. The longer one is for the speaker on the right and the short one is for the speaker on the left.

3-1.1 Tear off the paper cover of the speaker pad and paste it to the helmet headphone jack. Locate the proper positions for the speakers before pasting.

3-1.2 While there is an obvious gap between the ear and the speaker, paste the velcro adjustment pad to narrow it.

3-1.3 Follow the arrow sign to connect the USB Type C speaker cable (red connector) with the speaker connector (red connector).

3-2 Microphone installation

3-2-1 Microphone for 3/4 face helmet

3-2-1.1 Remove the paper on the microphone pad and attach it to the velcro pad inside the left side of the helmet.

3-2-1.2 Put back the inner lining.

3-2-1.3 Move the microphone white triangle spot toward the mouth position.

3-2-1.4 Follow the arrow sign to connect the USB Type C microphone cable (yellow connector) with the 3/4 face helmet microphone connector (yellow connector).

Microphone velcro

White triangle spot
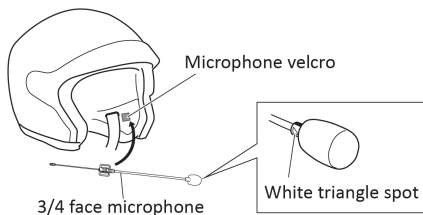
3/4 face microphone

3-2-2 Microphone for full face helmet

3-2-2.1 Remove the paper on the microphone pad and attach it to the velcro pad inside the left side of the helmet.

3-2-2.2 Follow the arrow sign to connect the USB Type C microphone cable (yellow connector) with the full face helmet microphone connector (yellow connector).

Microphone velcro

Full face microphone

3-3 Headset fixture installation

3-3-1.1 Remove the cover of the adhesive pad on the back of the headset fixture and fix it to the helmet. Do not remove the fixture from the helmet for 12 hours to assure maximum adhesion.

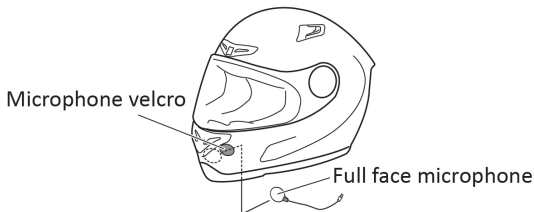Note: Clean the area with a cleaning wipe before applying the adhesive pad.
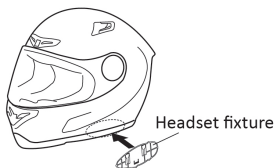
Headset fixture

3-3-1.2 Fix the headset: Insert the two raised tenons in the back of the headset into the two holes of the fixture and slide down to secure the headset tightly.

Headset fixture

Raised tenons
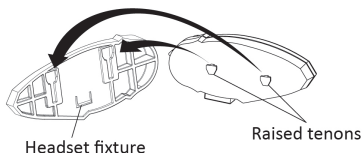
3-3-1.3 Remove the headset: Push the headset upwards to remove the headset from the fixture.
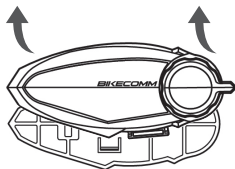
3-3-2 USB Type C speaker and microphone cable

3-3-2.1 Connect the USB Type C speaker and microphone cable to the headset and tighten the clasp.

3-3-2.2 Untie the clasp to remove the headset from the fixture.

Clasp
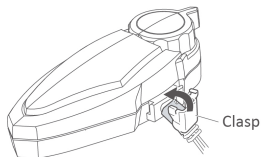
3-3-3 Fix the USB Type C speaker and microphone cable protection cover

3-3-3.1 Remove the paper on the protection cover and attach it to the helmet tightly.

3-3-3.2 While not connecting to the headset, always fix the USB Type C speaker and microphone cable to the protection cover.

Adhensive pad

Protection cover
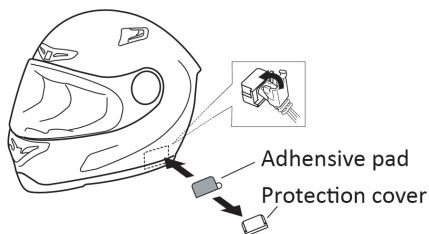
Headset layout 4
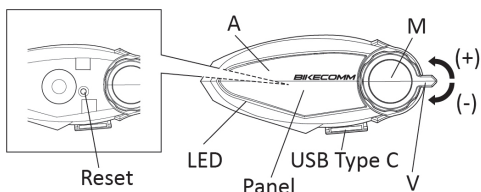
Button	Function
V	Adjust volume / select previous or next track
A	Activate intercom / stop intercom
M	BT device pairing / mobile phone operation / Play music/Pause music
USB Type C	Connect to speaker and microphone cable, and is also for charging the battery
LED	LED indicator
Panel	The standard panel is black. Other colors are optional purchases.
Reset	Remove the panel to access the headset reset button.

Power on

Hold V control down and A button at the same time for 2 seconds until the LED flashes blue to power on.

ON
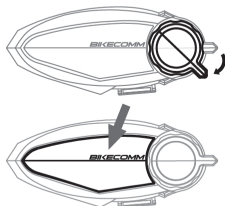
Power off

Hold V control down and A button at the same time for 2 seconds until the LED flashes red to power off. The firmware version and the battery remaining capacity will be heard upon power off.

OFF
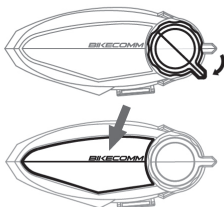
Charge

Use the USB Type C charging cable with a commercially available DC 5V adapter to charge the headset. The LED flashes red while charging and it flashes blue when the charging is completed. The full charging time takes about 2.5 hours.

Note: The USB Type C charging cable does not support fast charging devices. Please do not use the cable to connect to fast charging devices.)

USB Type C charging cable

5V adapter
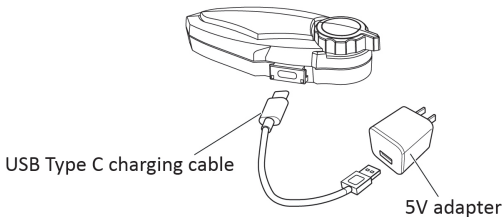
6-1 Adjust voice prompts volume

While the headset is in pairing status and a "Do Do" sound is played, use control up and V control down to adjust the volume of voice prompts. During the adjustment process, a voice notification is played. After finishing the adjustment, cancel the headset pairing or power off to complete the adjustment.

6-2 Adjustment of headset audio volume

During the headset operation, use V control up and V control down to adjust audio volume. During the adjustment process, a "Don Don" notification sound is played. When the audio volume reaches the highest level or the lowest level,a "Bee Bee" notification sound is played. The audio volume adjustment is independent for each audio source, and the adjustment is only effective during the headset operation when using that audio source. The adjustment setting will be saved even after powered off.

Increase volume

Upward one time

Decrease volume

Downward one time

To use headset operating with other BT devices for the first time, it's necessary to do the pairing. The headset can pair with mobile phone, another headset, a GPS or other BT devices, such as mobile phone, GPS navigator and BT MP3 player.

To use a headset operating with other BT devices for the first time, it's necessary to pair them. The headset can be paired with a mobile phone, another headset, a GPS, or other BT devices, such as a mobile phone, GPS navigator and BT MP3 player.

7-1 Pairing with mobile phone

7-1-1 Press and hold the M button for 5 seconds until the LED flashes red and blue to enter pairing

7-1-2 Activate mobile phone BT and search for a device to pair. If a PIN is required by the mobile phone, enter 0000.

7-1-3 After the pairing completes, a voice prompt "Bluetooth device is paired." is played and the LED flashes blue slowly.

7-1-4 To cancel the pairing operation, press and hold the M button for 2 seconds.

7-1-5 If the connection between the headset and mobile phone is lost, press the M button once to resume the BT connection.

7-1-6 The headset can connect two mobile phones or two BT devices at the same time, but during the group intercom with the headset connecting to two other headsets, the headset will disconnect with one of the two BT devices.

Mobile phone pairing

Press 5 seconds

Phone LED

LED flashes red/ blue to enter into pairing available status

Pin

Pin：0000

7-2 Pairing with other BT devices (HFP device)

7-2-1 With the headset powered on, press and hold the M button for 5 seconds, and the LED will flash red and blue to enter pairing status.

7-2-2 The BT device activates pairing operation and searches for other BT devices. If a PIN is required by the BT device, enter 0000.

7-2-3 After the pairing completes, a voice prompt "Bluetooth device is paired." is played and the LED flashes blue slowly.

7-2-4 To cancel the pairing operation, press the M button for 2 seconds.

7-2-5 If the connection between the headset and mobile phone is lost, press the M button once to resume the BT connection.

BT device

Press
5 seconds

Phone LED

LED flashes red/ blue to enter into pairing available status

Pin

Pin：0000

8-1 Headset answering/ dialing operation

8-1-1 Press the M button once to answer an incoming call.

8-1-2 Press the M button once to hang up the call.

8-1-3 Reject the call: Press and hold the M button for 2 seconds to reject the call.

8-1-4 Press the M button once to activate Siri or Google assistant.

8-1-5 Last code redial: Press the M button quickly 2 times to redial the last code.

8-1-6 Speed dial: Use the Setting tool to set 3 phone numbers first and press the M button quickly 3 times to dial the first phone number, 4 times to dial the second phone number and 5 times to dial the third phone number. (Link to www.openroad.com.tw to download BK-S2 Tool)

8-1-7 Answering incoming calls automatically: After the call rings for 8 seconds, the call will automatically be answered. (Refer to Phone answering mode operation)

M
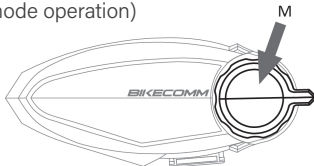
8-2 Phone answering mode operation

With the headset powered on and press and hold the M and V control up buttons at the same time for 8 seconds to switch the Phone answering mode between manual answering and automatic answering. After completing the

setting, a voice prompt "Automatic answering mode" or "Manual answering mode" is played. (The default setting is Manual answering mode.)
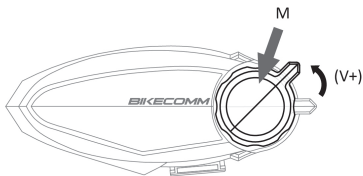
Play music (Play the music of BT devices)

9

Play/Pause : Press and hold the M button for 2 seconds, then release.
Next track: Hold V control up for 2 seconds, then release.
Previous track: Hold V control down 2 seconds, then release.

Instant Link and Dual Music Chatting (DMC) Mode Switching

10

10-1 Feature Description - with two headsets (1 and 2) in intercom mode, they can also listen to music from the same mobile phone. To use this function, switch the two headsets to dual music chatting mode. See Note 1 below

10-2 To switch between Instant Link and Dual Music Chatting modes (from Instant Link Mode)

10-2-1 Power the headsets OFF. See 5 Power on/Power off

10-2-2 Press and hold the A and M buttons simultaneously for 2 seconds until the LED flashes 5 times, release the buttons, the voice prompt "Dual Chatting Mode" is heard and the headset will be OFF. See Note 2 below.

10-3 Headset 1 and 2 pairing/repairing

10-3-1 Turn headset 1 and 2 ON (hold V control down and A button for 2 seconds until the LED flashes Blue, the headsets will boot up and then settle into standby mode).

10-3-2 On headset 1, press and hold the A button for 5 seconds until the LED goes into a rapid flashing blue; now press and hold the M button on headset 2 for 5 seconds until its LED flashes red and blue. Once paired, the intercom link is live, as confirmed by a voice prompt.

10-3-3 Reboot headsets after pairing process are completed.

10-4 Intercom Activation – if needed, activate the intercom link between headset 1 and 2 with a quick press of the A button (from headset 1 or 2), the confirmation voice prompt is heard.

10-5 Music Sharing Activation – press and hold the M button on headset 1 for 2 seconds and release, the voice prompt "Activate music sharing" is heard to indicate the operation is initiated. After few seconds, the music stream from headset 1 is heard in the headset 2 (shared); and the intercom can be used.

10-6 End Music Sharing - press the A button quickly 3 times and after a second or two, the music sharing ends while the intercom continues to operate.

Section 10 Notes:

Note 1 In Dual Music Chatting (DMC) mode, only two headsets can be paired for intercom use and subsequently for music sharing, thus the Dual Music Chatting Mode (DMC mode) identification.

Note 2 Switching between Instant Link Mode and Dual Music Chatting Mode- when the headsets are switched between Instant Link and Dual Music Chatting modes, all headsets (intercom) pairing data is erased, but the pairing data between the headsets and BT devices is not and will not need to be redone.

Note 3 Intercom Functionality - while the headset pairs with other headsets, they have to be in the same mode (instant link mode or dual music chatting mode) before they can intercom with each other. The details of instant link mode are listed in section 12 below.

Other BT device operation (HFP device)   11

Follow the instructions of other BT devices (HFP devices, such as a GPS navigation device) to pair with the headset, then you can listen to the audio navigation from the GPS navigation device to the headset. The headset provides the audio mixer feature with a GPS navigation device which can be set in the BK-S2 tool downloadable from www.openroad.com.tw.

Note: These BT devices need to support HFP format, such as the Garmin zumo

Instant Link mode   12

There can be a maximum of six headsets paired together for intercom in instant link mode. No matter what is the number of headsets to be paired, the pairing procedure is all the same. There will be one headset that acts as the active pairing device while all other headsets act as passive pairing devices.

The following are two examples to illustrate pairing two headsets and pairing six headsets.

After the pairing is completed, next time when any headset of the pairing group activates the intercom, the group intercom commences immediately. Even if any headset of the group leaves, the other group members stay on the intercom without being affected. When that member rejoins the group again, it will resume intercom automatically.

The pairing data of instant link mode is saved after power off, so there is no need to go through the pairing procedure while powering on again. However, if there are new members that join the group intercom, the pairing procedure needs to be executed again.

To pair more than three headsets (including three headsets), the headsets need to be set as instant link mode. With the headset powered off, press and hold the A and M buttons at the same time for 2 seconds until the LED flashes blue 5 times to complete the setting.

Note: The pairing data will be erased when the headsets switch between instant link mode and dual music sharing mode, while the pairing data between the headset and other BT devices will be kept. Make sure the headsets are in the same mode to pair and to intercom with other headsets.

12-1 Two headsets paired for Instant link mode

12-1-1 Power on headset 1 and headset 2.

12-1-2 **Headset 1:** Press and hold the A button for 5 seconds until the LED flashes blue quickly.

12-1-3 **Headset 2:** Press and hold the M button for 5 seconds until the LED flashes red and blue.

12-1-4 The headsets begin to pair and after the completion, a voice prompt "Headset is paired" is played.

LED blue

Headset 1 | Press 5 seconds

Pairing of 2 headsets
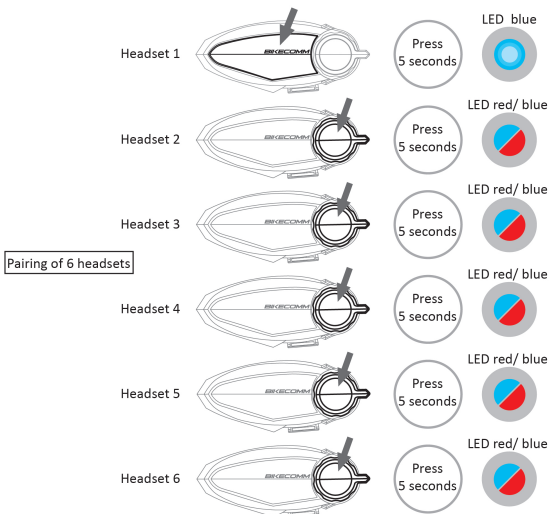
LED red/ blue

Headset 2 | Press 5 seconds
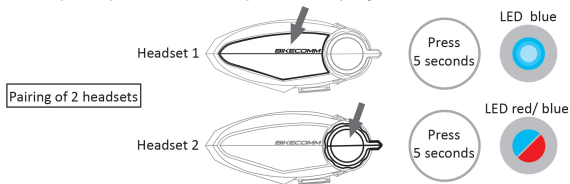
12-2 Six headsets paired for Instant link mode

12-2-1 Power on all headsets.

12-2-2 Press and hold the M button on headset 2, 3, 4, 5, and 6 for 5 seconds until the LED flashes red and blue.

12-2-3 Press and hold the A button on headset 1 for 5 seconds until the LED flashes blue quickly.

12-2-4 The headsets begin to pair automatically and after the completion, a voice prompt "Headset is paired" is played.

12-2-5 **Note:** The pairing for all six headsets to complete takes around 30 seconds and it is normal to hear the voice prompt "Intercom is ended." as the headset needs to end the connection with the currently paired headset before pairing with the next headset.

			LED blue
Headset 1		Press 5 seconds	

			LED red/ blue
Headset 2		Press 5 seconds	

			LED red/ blue
Headset 3		Press 5 seconds	

Pairing of 6 headsets

			LED red/ blue
Headset 4		Press 5 seconds	

			LED red/ blue
Headset 5		Press 5 seconds	

			LED red/ blue
Headset 6		Press 5 seconds	

Headset intercom for instant link mode and dual music chatting mode   **13**

Headset intercom operation for both instant link mode and dual music chatting mode is all the same as stated below. Make sure all headsets are paired according to the procedures in section 12-1 and section 12-2.

13-1 Activate intercom/ End intercom

Activate intercom: Press the A button once.
End intercom: Press and hold the A button for 2 seconds.

A

13-2 **When any member of a pairing group presses A button to activate the intercom, the group intercom commences immediately. Even if any headset of the group leaves, the other group members stay on the intercom without being affected. When that member rejoins the group again, it will resume the intercom automatically.**

To pair and operate BK-S2 headset with headsets of other makers — 14

BK-S2 headset can pair and intercom with other headsets.

14-1 Pairing procedures

14-1-1 With the BK-S2 headset powered on, press and hold the A button to enter pairing status.

14-1-2 Make other headsets enter into searchable pairing status.

14-1-3 BK-S2 headset starts the pairing with other headsets and completes the pairing.

14-2 Intercom procedures

Activate intercom: Press the BK-S2 headset A button 2 times quickly.
End intercom: Press and hold the BK-S2 headset A button for 2 seconds.

BK-S2 Tool Program / Mobile phone App connection — 15

There are two ways to use the BK-S2 Tool Program

A. Download BK-S2 Tool from www.openroad.com.tw and install it on the computer. After installation is completed, connect BK-S2 to the computer via USB cable and use BK-S2 Tool to adjust the settings.

B. BK-S2 Tool App is also available in the APP Store and Google Play for downloading. Search for BK-S2 Tool and install it on the mobile phone. Pair BK-S2 with the mobile phone to establish a connection and use BK-S2 Tool App to adjust the settings.

15-1 BK-S2 Tool Program for computer

15-1-1 Connect BK-S2 to the computer via USB cable. Open the BK-S2 Tool and select COM Port.

15-1-2 Speed dial setting: Input 3 phone numbers for speedy dialing.
15-1-3 A2DP music setting: To adjust the volume percentage between intercom voice and music/ GPS navigation app.
15-1-4 GPS audio setting: To adjust the volume of a HFP device (GPS navigation device etc⋯) or share the voice to other headsets.
15-1-5 Firmware upgrade: To upgrade the firmware version of the headset
15-1-6 Save: Save the settings after the adjustments.
15-1-7 Restore default settings: To restore the default settings of the headset manufacturer.
15-1-8 Exit: To exit from BK-S2 Tool.

Note: BK-S2 Tool Program does not support Windows 8 and Windows 8.1
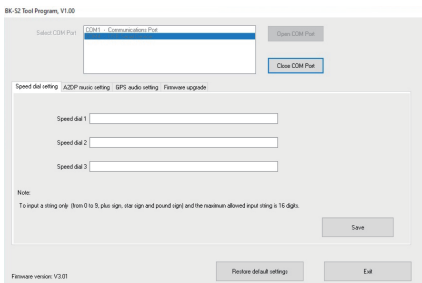
15-2 BK-S2 APP for mobile phone

15-2-1 For iOS
15-2-1.1 Open BK-S2 Tool App
15-2-1.2 Press and hold the headset A button and press the M button quickly 3 times to activate BLE mode. After activation the LED flashes green 3 times.
15-2-1.3 In the App, pull down to "Scan for devices," locate BK-S2 (BLE), and click "Agree to pair."
15-2-1.4 To adjust the necessary settings in BK-S2 in the Tool App.
15-2-1.5 After the settings are completed, power off the BK-S2 headset to shut down BLE.
15-2-1.6 Power on the headset again when you want to use it.

15-2-2 For Android
15-2-2.1 Use the mobile phone BT pairing function to pair with BK-S2.
15-2-2.2 Open the BK-S2 Tool App to establish a connection and to adjust the settings.

16-1 Clear pairing data

In power-off status, press and hold the A and V control up buttons for 8 seconds until the LED flashes red 5 times to clear pairing data, and a voice prompt "Clear pairing information" is played.

16-2 Reset for troubleshooting

If the BK-S2 headset operates abnormally or enters into a mistaken status caused by any unknown reasons, try to reset the headset to solve the problem first. You can remove the panel and find the reset button. After resetting the headset enters into power off and to use it again, power on the headset. The reset operation will not clear pairing data and will not restore the default settings of the manufacturer.

BK-S2 voice prompt list
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State	Voice Prompt beginning	Voice Prompt ending	
Battery Charge	**Battery Charge**	Full Above 80% Above 50%	Low approaching 25% Critical 10% Warning, Low battery
Pairing (for intercom Headset)		Bluetooth Device is paired Stop Pairing	Headset is paired The headset connection is successful
Intercom already in use		intercom cancelled Connection lost Auto-reconnection fail	Intercom is activated Intercom is ended
Answering Mode & Cell phone dialing	**Answering Mode**	Automatic Answering Mode Manual Answering Mode Speed Dial Number 1	Speed Dial Number 2 Speed Dial Number 3 Last Number Redialed
Cell phone must support AVRCP		Play Pause next track previous track	Activate music sharing End music sharing
Others		Dual Music Chatting Mode Instant link Mode Clear pairing information	