

KCA-HX7C

MOTORCYCLE BLUETOOTH CAMERA AND COMMUNICATION SYSTEM INSTRUCTION MANUAL

JVCKENWOOD Corporation

- Updated information (the latest Instruction Manual, system updates, new functions, etc.) is available from
<<https://www.kenwood.com/cs/ce/>>.

Take the time to read through this instruction manual.

Familiarity with installation and operation procedures will help you obtain the best performance from your new Communication System.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below.

Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on the product.

Model KCA-HX7C Serial number _____

US Residence Only

Register Online

Register your KENWOOD product at www.kenwood.com/usa/

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PACKAGE CONTENTS

Headset Main Unit		Gear Clamp Unit	
Glued Surface Mounting Plate			


Speaker

Speakers		Hook and Loop Fasteners for Speakers (4)	
Foam Speaker Covers (2)		Speaker Pads (Thick) (2)	
Speaker Pads (Thin) (2)			

Attachable Boom Microphone

Attachable Boom Microphone			
Hook and Loop Fastener for Attachable Boom Microphone		Microphone Sponges (2)	
Boom Microphone Holder		Hook and Loop Fastener for Boom Microphone Holder	

Wired Microphone

Wired Microphone		Hook and Loop Fastener for Wired Microphone	
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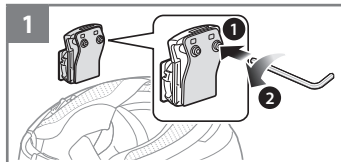
Others

USB Power & Data Cable		Allen Wrench	
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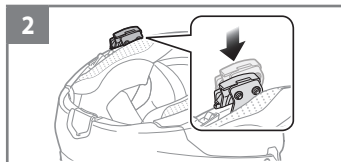
INSTALLING THE HEADSET ON YOUR HELMET

Installing the Main Unit

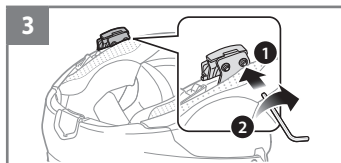
■ Using the Gear Clamp Unit



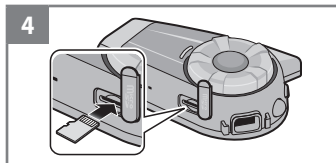
Loosen the two screws on the back plate of the clamp unit with the included allen wrench.



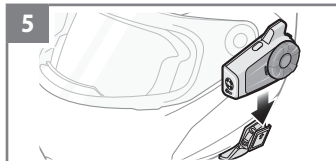
Insert the back plate of the clamp unit between the internal padding and external shell of the left side of the helmet.



Tighten the two screws until the clamp unit is fastened firmly to the helmet.



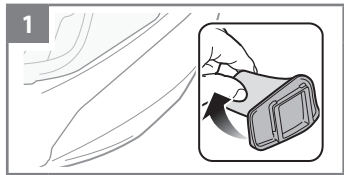
Insert a microSD card into the card slot to use camera.



Attach the main unit to the clamp unit until you hear a click.

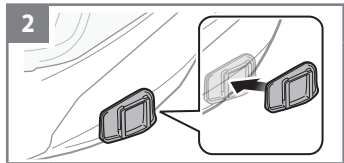
■ Using the Glued Surface Mounting Plate

If you cannot install the clamp unit on the helmet, you can use the glued surface mounting plate to attach the clamp unit to the surface of the helmet.



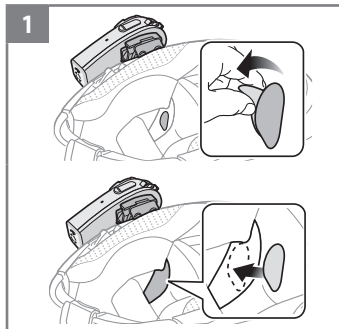
Attach adhesive tape of the glued surface mounting plate to the helmet.

- Make sure that the glued surface mounting plate sticks on the helmet firmly. Maximum adhesion occurs after 24 hours.

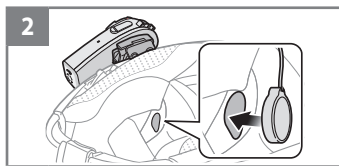


Attach the main unit to the glued surface mounting plate until you hear a click.

■ Installing the Speakers



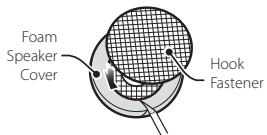
Attach the hook and loop fasteners for speakers to ear pockets inside the helmet.



Attach the speakers to the hook and loop fasteners for speakers inside the helmet.

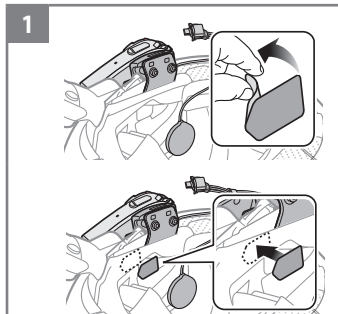
NOTE

- If the helmet has deep ear pockets, you can use the speaker pads to bring the speakers closer to your ears.
- To enhance the audio quality, you can make use of the foam speaker covers. Cover each speaker with the foam and attach the hook fastener at the back of the speaker. Then place the speakers in the helmet as described above. Foam covered speakers work most effectively when they are slightly touching your ears.

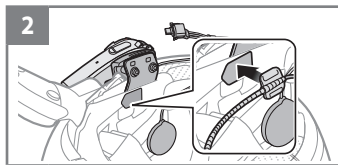


Installing the Microphone

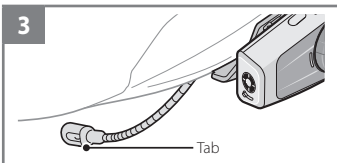
■ Using the Attachable Boom Microphone



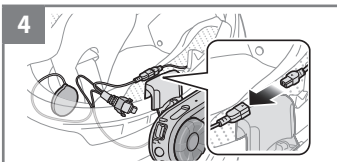
Attach the hook and loop fastener for attachable boom microphone on the inside surface of the left external shell.



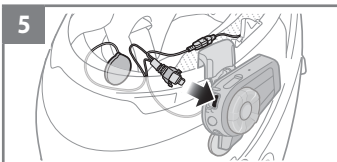
Attach the attachable boom microphone's mounting plate to the hook and loop fastener.



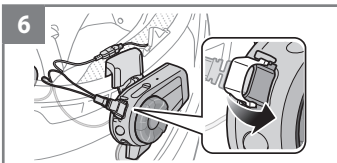
Adjust the head of the microphone so that the tab is facing away from your mouth.



Align the arrows on the microphone and speaker cables and insert the microphone cable into the speaker cable.



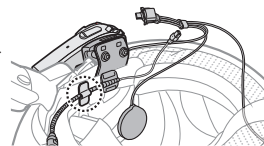
Insert the speaker connector into the speaker port to connect it to the main unit.



Close the cover of the speaker cable to lock the cable to the port.

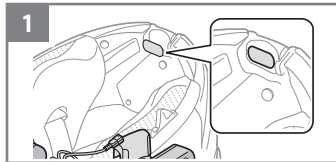
NOTE

- You can use the boom microphone holder after attaching the hook and loop fastener for boom microphone holder on it to ensure secure installation.

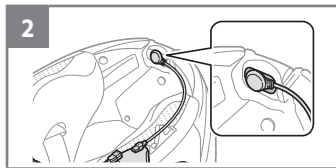


Using the Wired Microphone

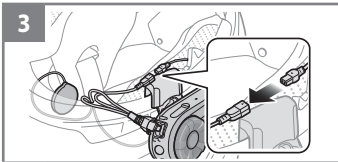
If you have a full face helmet, you can use the wired microphone.



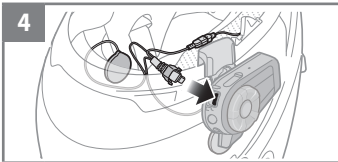
Attach the included hook and loop fastener for wired microphone to the inside of the helmet's chin guard.



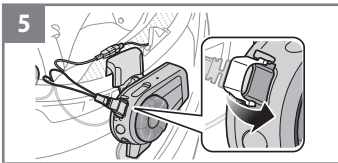
Attach the wired microphone to the hook and loop fastener for wired microphone.



Align the arrows on the microphone and speaker cables and insert the microphone cable into the speaker cable.



Insert the speaker connector into the speaker port to connect it to the main unit.

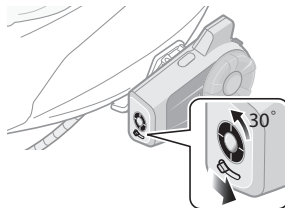


Close the cover of the speaker cable to lock the cable to the port.

Adjusting the angle

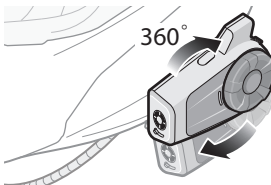
You can adjust the angle for taking photos or recording videos.

You can rotate the horizontal angle by 30°. Rotate the lever below the lens to set the desired angle.



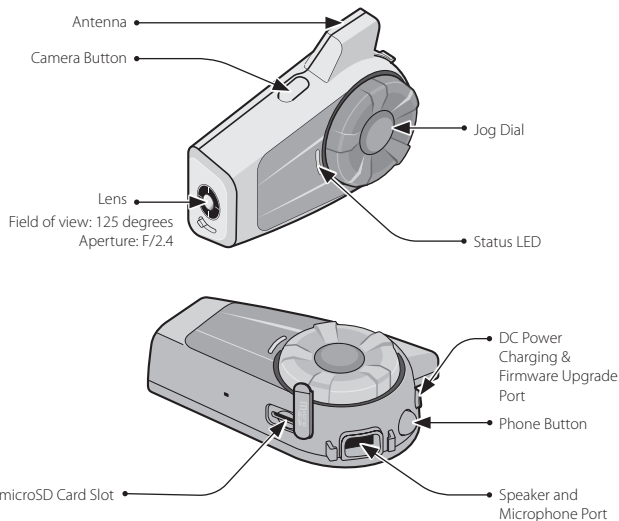
Using the Gear Clamp Unit

You can rotate the vertical angle by 360°. Loosen the wheel next to the main unit and rotate the main unit to set the desired angle. Tighten the wheel to lock it into position.



GETTING STARTED

Product Details



Powering On and Off

Press the Jog Dial and the Phone Button for 1 second to power on. Tap the Jog Dial and the Phone Button to power off.

* When the main unit is turned on, the camera turns on and video recording starts (**Auto Start Recording**).

Charging

The headset can be charged using many common methods via the supplied USB power & data cable. The LED turns red while the headset is charging and turns blue when it is fully charged. Depending upon the charging method, the headset will be fully charged in about 2.5 hours. The headset is compatible with 5 V input USB-charged devices only.

NOTE

- Using When Plugged Into a Power Source (USB-charging adapter or Powerbank)
When you want to record long videos and time lapse events, connect the KCA-HX7C to a power source and then use it.
 - If you connect the KCA-HX7C to the Powerbank while the camera is on, the KCA-HX7C will use the electricity stored in the Powerbank but the battery will not charge.
 - If you connect the KCA-HX7C to the Powerbank while the camera is off, you can use the KCA-HX7C while it charges.

Checking the Battery Level

LED Indicator

When the headset is powering on, the red LED flashes rapidly indicating the battery level.

4 flashes = High, 70~100%

3 flashes = Medium, 30~70%

2 flashes = Low, 0~30%

Voice Prompt Indicator

When you power on the headset, keep pressing the Jog Dial and the Phone Button simultaneously for about 5 seconds until you hear high tone triple beeps. Then you will hear a voice prompt indicating the battery level is high, medium, or low.

Volume Adjustment

You can raise or lower the volume by rotating the Jog Dial. Volume is set and maintained independently at different levels for each audio source, even when the headset is rebooted.

Softwares

Intercom Device Manager for KENWOOD

You can upgrade the headset's firmware and configure its settings directly from your PC or Apple computer. Download the Intercom Device Manager for KENWOOD, please visit www.kenwood.com/cs/ce/.

Intercom Utility for KENWOOD

By simply pairing your phone with your headset, you can use the Intercom Utility for KENWOOD for quicker and easier set up and management.

- App Features: Intercom, Music, FM Radio, Speed dial, Device settings, Quick Start Guide, and Instruction Manual.
- Download
Android: Google Play Store > 'Intercom Utility for KENWOOD'
iOS: App Store > 'Intercom Utility for KENWOOD'

Intercom Camera for KENWOOD

You can see a live preview from the camera, manage recorded videos as well as configure the video settings using the built-in Wireless LAN feature. When the camera and the Intercom Camera for KENWOOD are connected, the camera is synchronized with the smartphone's date and time.

- Download
Android: Google Play Store > 'Intercom Camera for KENWOOD'
iOS: App Store > 'Intercom Camera for KENWOOD'

NOTE

- When the camera is powered on, Wireless LAN is automatically powered on and set to its default settings.
- Wireless LAN will automatically be terminated if:
 - You do not use Wireless LAN on the product for 3 minutes.
 - You do not use the Intercom Camera for KENWOOD for 3 minutes.
- If you want to reactivate the Wireless LAN after it is terminated, you will need to restart the camera.

CAMERA OPERATION

Camera On or Off

When the main unit is turned on, the camera turns on and video recording starts (**Auto Start Recording**). When video is not being recorded, tap the Camera button to activate the camera.

The camera turns off automatically after 5 minutes of inactivity. To turn off the camera manually, tap the Camera Button and the Phone Button simultaneously.

Camera Modes

Mode	Application	Button
Video	Record video (normal recording, timelapse, loop recording)	Press and hold the Camera Button for 1 sec
Photo	Capture a single photo (Single Shot) or 8 photos (Burst Shot)	Tap the Camera Button

Video Recording

When the main unit is turned on, the camera turns on and video recording starts (**Auto Start Recording**). When video is not being recorded, tap the Camera button to activate the camera, then press and hold the Camera button for 1 second to start video recording.

The green LED will flash and you will hear a voice prompt, “**Recording**”. Press and hold the Camera Button for 1 second to stop recording. You will hear a voice prompt, “**Recording stopped**”.

Below is a table of approximate video recording times to microSD card size in specific resolutions and frame rates.

Video Resolution	16GB	32GB	64GB	128GB
2160P/30fps	33 min	1 h 07 min	2 h 15 min	4 h 30 min
1440P/30fps	1 h 05 min	2 h 11 min	4 h 25 min	8 h 52 min
1080P/60fps	1 h 24 min	2 h 51 min	5 h 44 min	11 h 31 min
1080P/30fps	1 h 52 min	3 h 47 min	7 h 38 min	15 h 20 min

NOTE

- microSD cards up to 128GB are compatible. Using a U3 microSD card is suggested. Your microSD card needs to be formatted using the camera.
- The camera gives a warning and automatically stops recording when the microSD card is full or the battery becomes low.
- The maximum size per video is limited to 4GB. Therefore, when the video reaches the 4GB size limit during recording, it saves and creates a new video to continue recording.
- When recording video, video files with two resolutions (the resolution set under **Video Resolution** and “576×320”) are recorded.

Video Mode (Default: Normal Recording Mode)

Timelapse Video Mode

Timelapse video records series of photos at timed intervals and makes it into a video.

Loop Recording Mode

Loop Recording mode continuously records videos to create footages of assigned length of time (3 minutes). If the memory reaches maximum, then the oldest footage will be deleted to store the most recent footage.

Photo Taking

Single Shot Mode

To take a single photo, set the photo mode setting in the camera configuration to be single shot mode. Tap the Camera Button to take a photo. The green LED will flash and you will hear a shutter sound.

Burst Shot Mode

Burst shot takes 8 photos. To take multiple photos, set the photo mode setting in the camera configuration to be burst shot mode. Tap the Camera Button to take multiple photos. The green LED will flash and you will hear shutter sounds.

NOTE

- If you are recording in 2160p/30fps of video resolution, you cannot take a photo.
- Burst shots cannot be taken while recording video. Even if the burst shot mode is set, only a single shot is taken when you tap the camera button while recording video.
- The camera resolution is fixed to 12MP. However, when you take a photo during video recording, the photo resolution is fixed to 8.3MP.

Video Tagging

Video Tagging allows the camera to record video continuously, but save only the important events.

It creates video files of past, present, and future with each footage having an assigned length of time (3 minutes).

- 1 When you encounter an event that is worth saving, press and hold the Camera Button for 3 seconds. You will hear a voice prompt, "Video tagging".**
- 2 When Video Tagging is completed, you will hear a voice prompt, "Tagging complete".**

NOTE

- Video Tagging can be operated only in the Loop Recording mode. In order for video files of past, present, and future to be saved, Video Tagging must be started at least 3 minutes after Loop Recording starts.
- Video Tagging recorded files are stored in **EVENT folder**.

Format SD Card

- 1 Press and hold the Camera Button for 5 seconds until you hear the voice prompt, **"Format SD card"**.
- 2 Tap the Phone Button to confirm.

Wireless LAN Channel (Default: 5 GHz)

- 1 Press and hold the Camera Button for 10 seconds until you hear the voice prompt, **"Wi-Fi channel"**.
- 2 Tap the Phone Button to confirm 2.4 GHz. You will hear triple beep.
- 3 Tap the Jog Dial to confirm 5 GHz. You will hear double beep.

NOTE

*IF YOUR SMARTPHONE OR REGION DOES NOT SUPPORT 5 GHz,
YOU MUST CHANGE THE WIRELESS LAN CHANNEL TO 2.4 GHz.*

PAIRING THE HEADSET WITH BLUETOOTH DEVICES

You can pair the headset with Bluetooth mobile phones, Bluetooth stereo devices such as MP3, or GPS, and with other Bluetooth headsets. The pairing operation is required only once for each Bluetooth device.

Mobile Phone Pairing - Mobile Phone, Bluetooth Stereo Device

- 1 Press and hold the Phone Button for 5 seconds and you will hear a voice prompt, **"Phone pairing"**.
- 2 Search for Bluetooth devices on your mobile phone. Select the KCA-HX7C in the list of the devices detected on the mobile phone.
- 3 If your mobile phone asks for a PIN, enter 0000.

Second Mobile Phone Pairing - Second Mobile Phone and GPS

- 1** Press and hold the Jog Dial for 5 seconds and you will hear a voice prompt, **"Intercom pairing"**.
- 2** Within 2 seconds, tap the Phone Button again and you will hear a voice prompt, **"Second mobile phone pairing"**.
- 3** Search for Bluetooth devices on your mobile phone. Select the KCA-HX7C in the list of the devices detected on the mobile phone.
- 4** If your mobile phone asks for a PIN, enter 0000.

Advanced Selective Pairing: A2DP Stereo or Handsfree

Phone Pairing allows the headset to establish two Bluetooth profiles: Hands-Free or A2DP Stereo. Advanced Selective Pairing allows the headset to separate the profiles to enable connection with two devices.

A2DP Stereo Music Only

- 1** Press the Phone Button for 5 seconds until the LED flashes red and blue alternately and you hear multiple beeps.
- 2** Within 2 seconds, tap the Jog Dial again and you will hear a voice prompt, **"Media selective pairing"**.
- 3** Search for Bluetooth devices on your smartphone. Select the KCA-HX7C in the list of devices detected on your phone.
- 4** If your mobile phone asks for a PIN, enter 0000.

HFP for Phone Call Only

- 1 Press the Phone Button for 5 seconds until the LED flashes red and blue alternately and you hear multiple beeps.
- 2 Within 2 seconds, tap the Phone Button again and you will hear a voice prompt, “**Phone selective pairing**”.
- 3 Search for Bluetooth devices on your smartphone. Select the KCA-HX7C in the list of devices detected on your phone.
- 4 If your mobile phone asks for a PIN, enter 0000.

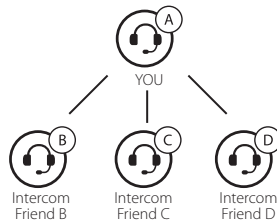
Intercom Pairing

Pairing with Other Headsets for Intercom Conversation

The headset can be paired with up to three other headsets for Bluetooth intercom conversation.

- 1 Press and hold the Jog Dial of the **headset A and B** for 5 seconds.
- 2 Simply tap the Jog Dial of any one of the two **headsets A and B**, and wait until the LEDs of both headsets turn to blue and intercom connection is automatically established.
- 3 You can make other pairings between **headsets A and C**, and between **headsets A and D** by following the same procedure as above.

- 4 The intercom pairing queue is ‘**Last-Come, First-Served**’. If a headset has multiple paired headsets for intercom conversations, the last paired headset is set as **first intercom friend**. The previous intercom friend becomes **second intercom friend**, and **third intercom friend**.



MOBILE PHONE, GPS

Mobile Phone Call Making and Answering

- 1 To answer a call, tap the Phone Button or the Jog Dial to answer the call.
- 2 You can also answer the incoming call by loudly speaking any word of your choice if VOX Phone (P. 28) is enabled, unless you are connected to intercom.
- 3 To end a call, tap the Phone Button or press the Jog Dial for 2 seconds until you hear a beep.
- 4 To reject a call, press the Jog Dial for 2 seconds until you hear a beep while the phone is ringing.
- 5 To transfer a call between the mobile phone and the headset during the phone conversation, press the Phone Button for 2 seconds until you hear a beep.
- 6 To make a call with voice dialer, Tap the Phone Button in stand-by mode to activate the voice dialer of your mobile phone.

Speed Dialing

- 1 Double tap the Phone Button and you will hear a voice prompt, "**Speed dial**".
- 2 Rotate the Jog Dial clockwise or counter clockwise to navigate between the menus. You will hear prompts for each menu item.
- 3 Tap the Phone Button to select a voice menu among the followings:
 - (1) Last number redial
 - (2) Speed dial 1
 - (3) Speed dial 2
 - (4) Speed dial 3
 - (5) Cancel
- 4 After selecting the last number redial menu, "**Last number redial**". Then, to redial the last phone call number, tap the Phone Button.
- 5 To call one of the speed dials, rotate the Jog Dial clockwise or counter clockwise to navigate between the menus until you hear a voice prompt, "**Speed dial (#)**". Then, tap the Phone Button.
- 6 If you want to exit the speed dial immediately, rotate the Jog Dial until you hear a voice prompt, "**Cancel**", and tap the Phone Button or the Jog Dial.

GPS Navigation

GPS Pairing

- 1 Press and hold the Jog Dial for 5 seconds until you will hear a voice prompt saying “**Intercom pairing**”.
- 2 Within 2 seconds, double tap the Phone Button and you will hear the voice prompt saying “**GPS pairing**”.
- 3 Search for Bluetooth devices on the GPS navigation. Select the KCA-HX7C in the list of the devices detected on the GPS.
- 4 Enter 0000 for the PIN.

NOTE

- When Audio Multitasking is enabled, if you pair your GPS device via GPS Pairing, its instructions will not interrupt your intercom conversations, but will overlay with them.

STEREO MUSIC

Bluetooth Stereo Music

- 1 To play or pause music, press and hold the Jog Dial for 1 second until you hear a double beep.
- 2 To adjust the volume, rotate the Jog Dial.
- 3 To track forward or track back, rotate while pressing the Jog Dial clockwise or counter clockwise.

Music Sharing

You can start sharing music with an intercom friend using Bluetooth stereo music during a two-way intercom conversation. When you terminate music sharing, you can go back to the intercom conversation. To start or terminate sharing music, press and hold the Jog Dial for 1 second during an intercom conversation until you hear a double beep.

NOTE

- 1) Both you and your intercom friend can remotely control music playback such as track forward and track back.
- 2) Music sharing will be paused when you are using your mobile phone or listening to GPS instructions.
- 3) When Audio Multitasking is enabled, if an intercom call is made when you are listening to music, music sharing will not work.

INTERCOM

Two-way Intercom

Starting Two-way Intercom

You can start an intercom conversation with one of any intercom friends by tapping the Jog Dial: single tap to intercom with the **first intercom friend**, double tap to intercom with the **second intercom friend**, and triple tap to intercom with the **third intercom friend**.

Ending Two-way Intercom

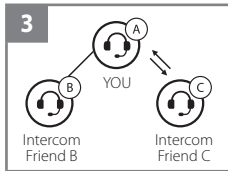
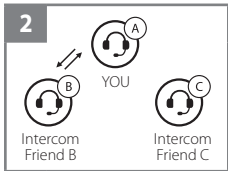
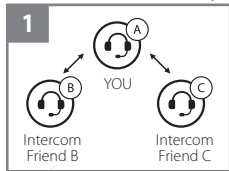
You can single tap to end intercom with the **first intercom friend**, double tap to end intercom with the **second intercom friend**, and triple tap to end intercom with the **third intercom friend**.

Multi-Way Intercom

Multi-Way Intercom enables conference-call-style conversations with up to three intercom friends at the same time. While multi-way intercom is in progress, mobile phone connection is temporarily disconnected. However, as soon as multi-way intercom terminates, the mobile phone connection will be reestablished.

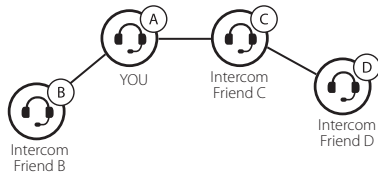
Starting Three-way Intercom

- 1** You (A) need to be paired with two other friends (B & C) for three way conference intercom.
- 2** Start an intercom conversation with one of the two friends in your intercom group.
- 3** You (A) can call the second intercom friend (C) by double tapping the Jog Dial, or the second intercom friend (C) may join the intercom by making an intercom call to you (A).



Starting Four-way Intercom

With three intercom friends connected, a new participant (D) can make it a four-way intercom conference by making an intercom call to either (B) or (C).



Ending Multi-Way Intercom

You can completely terminate the conference intercom or just disconnect an intercom connection with one of your active intercom friends.

- 1 Press and hold the Jog Dial for 3 seconds until you hear a beep to terminate all intercom connections.**
- 2 Tap the Jog Dial to disconnect from your first intercom friend. Double tap the Jog Dial to disconnect from your second intercom friend.**

NOTE

- Multiple headsets are connected during multi-way intercom. With various signals interfering each other, the intercom distance of multi-way intercom is relatively shorter than that of two-way intercom.

THREE-WAY CONFERENCE PHONE CALL WITH INTERCOM PARTICIPANT

You can have a three-way conference phone call by adding an intercom friend to the mobile phone conversation.

- 1 During a mobile phone call, tap the Jog Dial to invite one of your intercom friends to the conversation.**
- 2 To disconnect the intercom during a conference phone call, tap the Jog Dial.**
- 3 To disconnect the mobile phone call during a conference phone call, press the Jog Dial for 2 seconds or tap the Phone Button.**

GROUP INTERCOM

Group Intercom allows you to instantly create a multi-way conference intercom with three other most recently paired headsets.

- 1 Go through intercom pairing with up to three headsets you want to have Group Intercom with.**
- 2 Press the Jog Dial for 3 seconds to begin Group Intercom. The LED will flash green.**
- 3 To terminate Group Intercom, press the Jog Dial for 3 seconds during Group Intercom.**

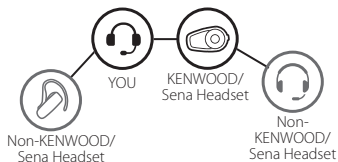
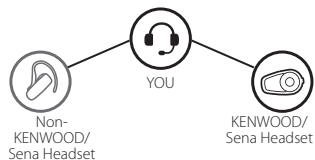
UNIVERSAL INTERCOM

Universal Intercom allows you to have intercom conversations with users of non-KENWOOD/Sena Bluetooth headsets. Non-KENWOOD/Sena Bluetooth headsets can be connected to the KENWOOD/Sena Bluetooth headset if they support the Bluetooth Hands-Free Profile (HFP). You can pair the headset with only one non-KENWOOD/Sena headset at a time. The intercom distance depends on the performance of the Bluetooth headset to which it's connected.

When a non-KENWOOD/Sena Bluetooth headset is paired with the headset, if another Bluetooth device is paired via Second Mobile Phone Pairing, it will be disconnected.

- 1 Press and hold the Jog Dial for 10 seconds to enter the headset configuration menu. Rotate the Jog Dial until you hear a voice prompt, "Universal intercom pairing". Tap the Phone Button to enter into Universal Intercom Pairing mode and you will hear multiple beeps.**
- 2 Put the non-KENWOOD/Sena Bluetooth headset in Pairing Mode. The headset will automatically pair with a non-KENWOOD/Sena Bluetooth headset.**

- 3** You can have a two-way intercom or multi-way intercom communication with up to three intercom friends using non-KENWOOD/Sena headset.



NOTE

- Some non-KENWOOD/Sena headsets may not support multi-way universal intercom.

FM RADIO

FM Radio On/Off

To turn on or off the FM radio, press and hold the Phone Button for 1 seconds.

Preset Stations

You can listen to preset stations while listening to the FM radio. Tap the Phone Button once to go upward to your next saved preset station.

Seek and Save

- 1** Rotate while pressing the Jog Dial clockwise or counter clockwise.
- 2** To save the current station, press and hold the Jog Dial for 1 second until you hear a voice prompt, **"Preset (#)"**.
- 3** Rotate the Jog Dial clockwise or counter clockwise, in order to select which preset number you want for that specific station. (You can save up to 10 preset stations.)
- 4** To save the current station, tap the Jog Dial again. You will then hear a voice prompt, **"Save preset (#)"**.
- 5** To delete the saved station in the preset number, tap the Phone Button. You will then hear a voice prompt **"Delete preset (#)"**.

Scan and Save

- 1 Double tap the Phone Button.
- 2 The tuner pauses at each station it finds for 8 seconds before moving to the next.
- 3 To save a station while scanning frequencies, tap the Phone Button when at that station. You will hear a voice prompt, **"Save preset (#)"**. The station will be saved as the next preset number.

Temporary Preset

The temporary station preset feature automatically finds and saves the nearest 10 radio stations without changing your existing preset stations.

- 1 Tap the Phone Button 3 times to automatically scan for 10 temporary preset stations.
- 2 The temporary preset stations will be cleared when the headset is powered off.

FM Sharing

You can listen to the radio during the intercom conversation. To start FM sharing, press and hold the Phone Button for 1 second during the intercom conversation. During FM sharing, you can move to the next preset station and you or your friend on the intercom can change frequencies. If either person changes the frequency, the other will listen to the same frequency. To terminate FM sharing, press and hold the Phone Button for 1 second or end the intercom call.

NOTE

- 1) FM sharing will be terminated if the headset starts a multi-way intercom conference.
- 2) When Audio Multitasking is enabled, if an intercom call is made while you are listening to the FM radio, FM sharing will not work.
- 3) FM sharing is only supported between KENWOOD/Sena headsets that currently support this feature.

Region Selection

You can select the proper FM frequency region from the Intercom Device Manager for KENWOOD. With the region setting, you may optimize the seek function to avoid unnecessary frequency ranges.

Region	Frequency Range	Step
Worldwide	76.0 ~ 108.0 MHz	± 100 kHz
Americas	87.5 ~ 107.9 MHz	± 200 kHz
Asia	87.5 ~ 108.0 MHz	± 100 kHz
Australia	87.5 ~ 107.9 MHz	± 200 kHz
Europe	87.5 ~ 108.0 MHz	± 100 kHz
Japan	76.0 ~ 95.0 MHz	± 100 kHz

FUNCTION PRIORITY

The headset operates in the following order of priority:

- (highest)** Mobile phone
Intercom/FM sharing
Music sharing by Bluetooth stereo music
Bluetooth stereo music
- (lowest)** FM radio

A lower priority function is always interrupted by a higher priority function.

NOTE

- If you select music as the audio source priority, the order of priority will change as below:

- (highest)** Mobile phone
Bluetooth stereo music
Intercom/FM sharing
Music sharing by Bluetooth stereo music
- (lowest)** FM radio

CONFIGURATION SETTING

Headset Configuration Setting

- 1 To enter into configuration menu, press and hold the Jog Dial for 10 seconds until you will hear a voice prompt, "**Configuration menu**".
- 2 Rotate the Jog Dial clockwise or counter clockwise to navigate between the menus. You will hear voice prompts for each menu item.
- 3 You can execute the command by tapping the Phone Button.

Configuration Menu	Tap Phone Button
Delete All Pairings	Execute
Remote Control Pairing	Execute
Universal Intercom Pairing	Execute
Exit Configuration	Execute

Remote Control Pairing

You can remotely control the headset using Sena Remote Control devices.

- 1 Turn on the headset and the Remote Control device.
- 2 Execute Remote Control Pairing.
- 3 Enter pairing mode in the Remote Control device. The headset will automatically connect with the Remote Control device in pairing mode.

Software Configuration Setting

You can change the settings of the headset through the Intercom Device Manager for KENWOOD or the Intercom Utility for KENWOOD.

Auto Start Recording (Default: Enable)

If **Auto Start Recording** is enabled, the camera turns on and video recording starts automatically when the main unit is turned on.

If **Auto Start Recording** is disabled, tap the Camera button to activate the camera, then press and hold the Camera button for 1 second to start video recording.

Speed Dial

Assign phone numbers for speed dialing to make a phone call quickly.

Audio Source Priority (Default: Intercom)

Audio Source Priority allows you to select the priority between the intercom and music (which includes GPS app instructions and message notifications) from a smartphone. If the intercom is selected as the audio source priority, your music will be interrupted during an intercom conversation. If music is selected as the audio source priority, intercom conversations will be interrupted while your music is heard.

NOTE

- Audio Source Priority is active only when Audio Multitasking is disabled.

Audio Boost (Default: Enable)

Enabling Audio Boost increases the overall maximum volume. Disabling Audio Boost reduces the overall maximum volume, but delivers more balanced sound.

VOX Phone (Default: Enable)

If this feature is enabled, you can answer incoming calls by voice. When you hear a ringtone for an incoming call, you can answer the phone by saying a word such as **“Hello”** loudly or by blowing air into the microphone. VOX phone is temporarily disabled if you are connected to intercom. If this feature is disabled, you have to tap the Phone Button to answer an incoming call.

VOX Intercom (Default: Disable)

If this feature is enabled, you can initiate an intercom conversation with the last connected intercom friend by voice. When you want to start intercom, say a word such as **“Hello”** loudly or blow air into the microphone. If you start an intercom conversation by voice, the intercom terminates automatically when you and your intercom friend remain silent for 20 seconds. However, if you manually start an intercom conversation by tapping the Jog Dial, you have to terminate the intercom conversation manually. However, if you start intercom by voice and end it manually by tapping the Jog Dial, you will not be able to start intercom by voice temporarily. In this case, you have to tap the Jog Dial to restart the intercom. This is to prevent repeated unintentional intercom connections by strong wind noise. After rebooting the headset, you can start intercom by voice again.

HD Voice (Default: Disable)

HD Voice allows you to communicate in high-definition during phone calls. This feature increases the quality so that the audio will be crisp and clear during phone call conversations.

If this feature is enabled, incoming phone calls will interrupt intercom conversations and audio from the Bluetooth device will not be heard during intercom conversations. Three-Way Conference Phone Call with Intercom Participant will not be available if HD Voice is enabled.

NOTE

- 1) Refer to the manufacturer of your Bluetooth device that will be connected to the headset to see if it supports HD Voice.
- 2) HD Voice is active only when Audio Multitasking is disabled.

HD Intercom (Default: Enable)

HD Intercom enhances the two-way intercom audio from normal quality to HD quality. HD Intercom will become temporarily disabled when you enter into a multi-way intercom. If this feature is disabled, the two-way intercom audio will change to normal quality.

NOTE

- 1) The intercom distance of HD Intercom is relatively shorter than that of normal intercom.
- 2) HD intercom is active only when Audio Multitasking is disabled.

Voice Prompts (Default: Enable)

You can disable voice prompts by software configuration setting, but the following voice prompts are always on.

- Headset configuration setting menu, battery level indicator, speed dial, FM radio functions

RDS AF Setting (Default: Disable)

Radio Data System (RDS) Alternative Frequency (AF) Setting allows a receiver to re-tune to the second frequency location when the first signal becomes too weak. With RDS AF enabled on the receiver, a radio station with more than one frequency can be used.

FM Station Guide (Default: Enable)

When FM Station Guide is enabled, FM station frequencies are given by voice prompts as you select preset stations. When FM Station Guide is disabled, the voice prompts on FM station frequencies will not be given as you select preset stations.

Sidetone (Default: Disable)

Sidetone is audible feedback of your own voice. It helps you to naturally speak at the correct level according to varying helmet noise conditions. If this feature is enabled, you can hear what you are speaking during an intercom conversation or a phone call.

Advanced Noise Control™ (Default: Enable)

When Advanced Noise Control is enabled, the background noise is reduced during an intercom conversation. When it is disabled, the background noise is mixed with your voice during intercom.

Audio Multitasking™ (Default: Disable)

Audio Multitasking allows you to hear the audio from two features simultaneously. When Audio Multitasking is enabled, phone calls, GPS instructions and intercom conversations can be overlaid with audio from the FM radio, music or GPS app instructions from a smartphone in the background with reduced volume. Increasing or decreasing the volume of the audio in the foreground will also increase or decrease the volume of the overlaid audio in the background. The volume of the foreground audio can be adjusted using the headset. How much background audio that is heard can be adjusted using the Intercom Utility for KENWOOD. HD Intercom, HD Voice and Audio Source Priority become disabled temporarily when Audio Multitasking is enabled.

Model	Foreground*1			Background*2	
	Phone	GPS	Intercom	FM Radio	Music or Smart Navi
KCA-HX7C	O ^A	O ^A			
		O	O		
			O ^B	O	O ^B
		O ^C		O ^C	O

Foreground and Background Combination Table

*1 Two audio sources in the foreground can be heard simultaneously with the same volume level.

*2 Only one background source can be heard at a time while listening to an audio source in the foreground.

A. GPS instructions can be heard during phone calls and the volume level of both audio sources can be adjusted using the headset.

B. GPS app directions will be heard in the background during intercom conversations.

C. The FM radio will be heard in the background when GPS instructions are heard.

NOTE

- 1) Audio Multitasking will be activated during two-way intercom conversations with a headset that also supports this feature.
- 2) When Audio Multitasking is disabled, the background audio source will return to its independent volume level.
- 3) For Audio Multitasking to work properly, you need to power the headset off and on. Please restart the headset.
- 4) Some GPS devices may not support this feature.

Background Volume (Default: Level 5)

The Background Volume can be adjustable only when the Audio Multitasking turns on. Level 9 is the highest volume and 0 is the lowest.

Camera Configuration Setting

You can change the settings of the camera through the Intercom Camera for KENWOOD.

Photo Mode (Default: Single Shot Mode)

You can select the photo mode to be either single shot or burst shot. Single shot takes a single photo while burst shot takes 8 photos.

Video Mode (Default: Normal Recording Mode)

You can select the video mode to be normal recording mode, timelapse mode, or loop recording mode. Timelapse mode records series of photos at timed intervals and makes it into a video. Loop recording mode constantly records videos at timed intervals, replacing old video files when memory is full.

Video Resolution (Default: 2160P/30fps)

You can select the video resolution to be 2160P/30fps, 1440P/30fps, 1080P/60fps, or 1080P/30fps.

NOTE

- When recording video, the following files are recorded:
 - Video file with the resolution set here
 - Video file with a resolution of 576 × 320

Timelapse Interval (Default: 1 sec)

You can select the timelapse interval to be 1 second, 2 seconds, 5 seconds or 10 seconds.

Video Microphone Gain (Default: Medium)

You can select the microphone gain for video recording to be low, medium, or high.

Date Caption (Default: Off)

You can record or hide date caption during video recording. If you select on, the date caption will be displayed on top of your recorded video. If you select off, the date caption will not be shown on your recorded video.

Smart Audio Mix™ (Always On)

Smart Audio Mix allows you to record everything you hear through your speakers as well as your voice during video recording. The function that governs **Smart Audio Mix** is called **Speaker Sound Recording**.

NOTE

- A phone conversation is not recorded.

Auto Camera Sleep (Default: On)

You can set the camera to automatically power off after 5 minutes of inactivity. This feature does not work while charging the camera.

Format SD Card

SD card format will remove all files from a microSD card. When you use a new card for the first time, always format it before using the camera.

FIRMWARE UPGRADE

The headset supports firmware upgrades. You can update the firmware using the Intercom Device Manager for KENWOOD.

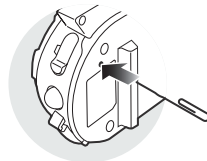
Please visit KENWOOD website at www.kenwood.com/cs/ce/ to check the latest software downloads.

TROUBLESHOOTING

Fault Reset

When the headset is not working properly, you can easily reset the unit:

- 1** Locate the pinhole reset button at the back of the headset main unit.
- 2** Gently insert a paperclip into the hole and tap the Fault Reset Button with light pressure.
- 3** The headset will shut down.



NOTE

- Fault Reset will not restore the headset to factory default settings.

Factory Reset

- 1** To restore the headset to factory default settings, press and hold the Phone Button for 10 seconds until the LED shows solid red.
- 2** Press the Jog Dial to confirm reset. The headset will be restored to factory setting and switched off automatically.

Appendix

Specifications

■ Wireless LAN section

- IEEE Standard: 802.11 a/b/g/n
- Working distance: within 15 m

■ Bluetooth section

- Technology: Bluetooth Ver.4.1
- Profile:
 - HSP (Headset Profile)
 - HFP (Hands Free Profile)
 - A2DP (Advanced Audio Distribution Profile)
 - AVRCP (Audio/Video Remote Control Profile)

■ Intercom section

- Working Distance: Up to 1.6 km (1.0 mile)* in open terrain
 - * Approximate straight line-of-sight distance. It may be shorter depending on the topography or weather.
- Supports up to 4 riders

■ Camera section

- Optical
 - Field of view: 125 degrees
 - Aperture: f/2.4
 - Lens rotation: 30 degrees
- Photo
 - 8.3/12MP (4:3)
 - Burst shot: 8 pics per second
 - Time-lapse mode: Single shot every 1 sec or every 2, 5 or 10 secs
- Video section
 - Video file format: MP4 (H.264)
 - Max video bit rate: 60 Mb/s (4K)

■ Audio section

- Noise Cancellation: Advanced Noise Control™
- FM Radio:
 - Radio frequency specifications: 76 – 108 MHz
 - 10 preset station memory

■ General

- Operating Temperature:
-10 – +50°C (14 – 122°F)
- Dimensions (W × H × D):
 - Main module:
95 × 59 × 31 mm (3.7 × 2.3 × 1.2 in)
 - Speaker driver unit:
40 mm – thickness 6.5 mm
- Weight:
 - Main module: 90 g (3.17 oz)
- Battery:
 - Talk time: 20 hours
(When **Auto Start Recording** is disabled)
 - Charging Time: 2.5 hours
 - Type: Lithium Polymer Battery

Specifications are subject to change
without prior notice.

KENWOOD