

# **PROFESSIONAL DIGITAL TWO-WAY RADIO**

CS760 SERIES
CS720/CS721/CS760/CS761
DIGITAL PORTABLE RADIOS

# **QUICK REFERENCE GUIDE**



**Connect Systems Inc.** 

#### Notice to the User:

- Please read this instruction manual before operating this radio.
- It's prohibited to use the radio or charge it at any area with a potentially explosive atmosphere where the air contains gas or dust, as well as while taking on fuel, or while parking at a gasoline service station; or any area where radio communication is prohibited (such as a hospital or a airport.)
- It's prohibited to operate the radio without permission in areas where the government laws prohibit radio communication.
- Please don't expose the radio to direct sunlight for a long time or place the radio near any heating devices.
- Please don't put the radio in extremely dusty, moist, or humid areas or on unstable surfaces.
- Only qualified personal, with proper tools and instruments are allowed to service and repair the radios. Do not disassemble the radio by yourself to avoid damages.

Connect Systems Inc.

# **€ 1313 ①**

This equipment can be used in member states of the European Union once the corresponding administrative licence is obtained.

#### **DECLARATION OF CONFORMITY**

The manufacturer of the product two way radio, declares that the said product complies with the essential requirements established in article 3 of the Council of Europe Directive 1999/5/CE, dated 9th March, 1999.

RF ENERGY EXPOSURE AWARENESS AND CONTROL INFORMATION, AND OPERATIONAL INSTRUCTIONS FOR THE OCCUPATIONAL USE REQUIREMENTS

BEFORE USING YOUR PORTABLE 2-WAY RADIO, READ THIS IMPORTANT RF ENERGY AWARENESS AND CONTROL INFORMATION AND OPERATIONAL

# INSTRUCTIONS TO ENSURE COMPLIANCE WITH THE FCC/IC'S RF EXPOSURE GUIDELINES

NOTICE: This radio is intended for use in occupational/controlled conditions, where users have full knowledge of their exposure and can exercise control over their exposure to meet FCC/IC limits. This radio device is NOT authorized for general population, consumer, or any other use.

This 2-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. It uses radio frequency (RF) energy or radio waves to send and receive calls. RF energy is one form of electromagnetic energy. Other forms include, but are not limited to, electric power, sunlight and x-rays. RF energy, however, should not be confused with these other forms of electromagnetic energy, which when used improperly can cause biological damage. Very high levels of x-rays, for example, can damage tissues and genetic material.

Experts in science, engineering, medicine, health and industry work with organizations to develop standards for exposure to RF energy. These standards provide recommended levels of RF exposure for both workers and the general public. These recommended RF exposure levels include substantial margins of protection, All 2-way radios marketed in North America are designed, manufactured and tested to ensure they meet government established RF exposure levels. In addition, manufacturers also recommend specific operating instructions to users of 2-way radios. These instructions are important because they inform users about RF energy exposure and provide simple procedures on how to control it. Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits.

http://www.fcc.gov/oet/rfsafety/rf-faqs.html http://www.osha.gov/SLTC/radiofrequencyradiation/index.html

#### **Federal Communications Commission Regulations**

The FCC rules require manufacturers to comply with the FCC RF energy exposure limits for portable 2-way radios before they can be marketed in the U.S. When 2-way radios are used as a consequence of employment, the FCC requires users to be fully aware of and able to control their exposure to meet occupational requirements. Exposure awareness can be facilitated by the use of a product label directing users to specific user awareness information. CSI 2-way radio has a RF exposure product label. Also, CSI's user manual, or product manual, or separate safety booklet includes information and operating instructions required to control your RF exposure and to satisfy compliance requirements.

#### **Compliance with RF Exposure Standards**

CSI's 2-way radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR §1.1307, 1.1310, 2.1091 and 2.1093
- •American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-2005, Canada RSS102 Issue 5 March 2015.
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-2005

# RF Exposure Compliance and Control Guidelines and Operating Instructions

To control your exposure and ensure compliance with the occupational/controlled environment exposure limits always adhere to the following procedures.

#### Guidelines:

- Do not remove the RF Exposure Label from the device.
- User awareness instructions should accompany device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

#### Operating Instructions:

Transmit no more than the rated duty factor of 50 % of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. Transmitting 50 % of thetime, or less, is important because this radio generates measurable RF energy exposure only when transmitting (in terms of measuring for standards compliance).

Hold the radio in a vertical position in front of face with the microphone (and the other parts of the radio, including the antenna) at least one inch (2.5 cm) away from the nose. Keeping the radio at the proper distance is important because RF exposures decrease with distance from the antenna. Antenna should be kept away from eyes.

- When worn on the body, always place the radio in a CSI's approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of CSI's or other manufacturer's non-approved accessories may result in exposure levels, which exceed the FCC/IC's occupational/controlled environment RF exposure limits
- If you are not using a body-worn accessory and are not using the radio in the intended use position in front of the face, then ensure the antenna and the radio are kept at least 2.5 cm (one inch) from the body when transmitting. Keeping the radio at the proper distance is important because RF exposures decrease with increasing distance from the antenna.
- Use only manufacturer's name approved supplied or replacement antennas, batteries, and accessories. Use of non-manufacturer-name approved antennas,

batteries, and accessories may exceed the FCC/IC RF exposure guidelines.

 For a list of CSI's approved accessories (see the user manual)

#### IC RF exposure statement:

The device meets the Ministry of Health(Canada) Safety Code 6& Industry Canada RSS-102 the occupational/controlled environment RF exposure limits

#### IC Warning:

Thisdevice complies with Industry Canada licenceexempt RSS standard(s). Operation is subject to the following two conditions:

(1)this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that, the equivalent isotropically radiated power (e.i.r.p.) is not more than

that necessary for successful communication.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that, the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

# FCC Warning:

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. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

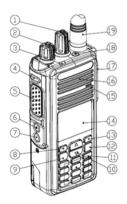
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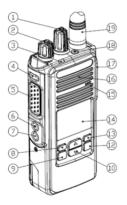
## **CS760 SERIES**

Digital Portable Radios
Quick Reference Guide
NOTE: Refer to User Guide for more details on your
radio's operations/features.

# Radio Controls Full Keypad Radio

Limited Keypad Radio





#### Non-Keypad Radio



Record your radio's programmable button functions in the blanks provided. SP represents short press, LP represents long press.

- ①Channel Selector Knob
- ②On/Off/Volume Control Knob
- ③LED Indicator
- ④ Side Button 1 (Programmable)
- SP: \_\_\_\_\_ LP: \_\_\_\_
- ⑤ Push-to-Talk (PTT) Button⑥ Side Button 2 (Programmable)
- SP: LP:
- (7) Side Button 3(Programmable)
- SP: LP:
- ® Front Button P1 (Programmable)
- SP: \_\_\_\_\_ LP: \_\_\_\_
- @2-Way Navigation Button
- ①Keypad
- @Return/Home Button
- ® Front Button P2 (Programmable)
- SP: \_\_\_\_\_LP: \_\_\_\_
- $^{\textcircled{1}}\textbf{Display}$
- ® Microphone
- ®Speaker
- **(17)** Universal Connector for
- Accessories
- ® Emergency Button (Programmable)
- <sup>®</sup> Antenna

# Display Icons

The following are the icons that appear on the radio's display.

T. No Signal

ዊ ዊ ዊ ነዊብ

Received Signal Strength Indicator (RSSI)

The number of bars displayed represents the radio signal strength. Four bars indicate the strongest signal. This icon is only displayed while receiving.

Battery

The number of bars (0 - 3) shown indicates the charge remaining in the battery.

Bluetooth

The Bluetooth feature is enabled but there is no remote Bluetooth device connected.

Bluetooth Connected

The Bluetooth feature is enabled. The icon stavs lit when one or more remote Bluetooth devices are connected.

Scanning 5

Scan land on Scan feature is enabled

Encryption Enable

The Privacy feature is enabled.

GPS Available

The GPS feature is enabled. The icon stays lit when a position fix is available.

GPS Not Available/Out of Range

The GPS feature is enabled. The icon stays lit when a position fix is available.

**₹** Accessories Connected

T/H Power Level

Radio is set at Low/High power.

DM: Direct Mode (Talk around Mode)

RM: Repeater Mode

:Unread Message

:Missed Call

: VOX Enable

Speaker Open



#### Call Icons

The following icons appear during a call, and in the Contacts list to indicate ID type.



Private Call

Indicates a Private Call in progress. In the Contacts list, it indicates a subscriber alias (name) or ID (number).



Group Call/All Call

Indicates a Group Call or All Call in progress. In the Contacts list, it indicates a group alias(name) or ID (number).

#### ■ Bluetooth Device Found List



Bluetooth Audio Device

Bluetooth-enabled audio device, such as a headset.

#### Sent Items Icons

The following icons appear at the top right corner of the radio's display in the Sent Items folder.



Sent Successfully



Send Failed

The text message to a subscriber alias or IDis pending transmission, followed by waitingfor acknowledgement. Or The text message to a group alias or ID is pending transmission.

## Switch Input Method:

Long press # key to switch input method between.



Lowercase



I**⊞** Uppercase



#### ■ LED Indicator

Blinking red – Radio is at low batterycondition Solid Orange - Powering up Solid green –Radio is receiving, or detecting activity over the air

Solid RED - Radio is transmitting Blinking Orang – Radio is scanning, or in selective call,

or emergency state

# ■ Powering Up and Turning Off the Radio

Rotate the On/Off/Volume Control Knob clockwise until you hear a click. You see a welcome message or welcome image.

The LED lights up solid orange and the Home screen lights up if the backlight setting is set to turn on automatically.

To turn off the radio, rotate this knob counterclockwise until you hear a click. You see a brief Powering Down on the radio's display.

#### Adjusting the Volume

To increase the volume, turn the On/Off Volume Control Knob clockwise.

To decrease the volume, turn this knob counterclockwise.

#### Accessing the Radio from Password

- 1. Power up the radio.
- 2. You hear a continuous tone.
- 3. Enter your current six-digit password with the radio's keypad. The display shows \*\*\*\*\*\* . Press on to proceed. You hear a positive indicator tone for every digit pressed. Press on the display.
- 4. If the password is correct:

Your radio proceeds to power up. See Powering Up and Turning Off the Radio part.

OR

If the password is incorrect:

The display shows Password Input Error. Repeat Step 3.

## ■ Selecting a Zone

A zone is a group of channels. The full keypad and limited keypad radio supports up to 2000 channels and 250 zones, with a maximum of 160 channels per zone. Use the following procedure to select a zone.

# ☐ Full Keypad Radio

Press the programmed Zone button and proceed to Step 2.  $\ensuremath{\mathsf{OR}}$ 

Follow the procedure below.

- 1. ok to access the menu.
- 2. A or to Zone and press on to select.
- 3. The current zone is displayed and indicated by a .

# ☐ Limited Keypad Radio

Press the programmed Zone button and proceed to Step

- 2.
- 1. ok to access the menu.
- 2. or to Zone and press or to select.
- 3. The current zone is displayed and indicated by a  $\odot$  .

# Non-Keypad Radio

The non-keypad radio supports up to 32 channels and 2 zones, with a maximum of 16 channels per zone.

- 1. Press the programmed Zone button.
- 2. You hear a positive indicator tone, indicating the radio has switched from Zone 1 to Zone 2.

#### OR

You hear a negative indicator tone, indicating the radio has switched from Zone 2 to Zone 1.

#### ■ Selecting a Channel

Once the required zone is displayed (if you have multiple zones in your radio), turn the programmed Channel Selector Knob to select the channel.

#### ■ Making a Group Call

- 1. Turn the Channel Selector Knob to select the channel with the active group alias or ID.
- 2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 3. Press the PTT button to make the call. The LED lights up solid red. The Group Call icon appears. The first text line shows the group call alias.
- 4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.

#### OR

Wait for the PTT Sidetone to finish (if enabled) and speak clearly into the microphone.

- 5. Release the PTT button to listen. When the target radio responds, the LED lights up green. You see the Group Call icon, the group alias or ID, and transmitting radio alias or ID on your display.
- 6. If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the target radio releases the PTT button, indicating the channel is free for you to respond. Press the PTT button to respond. OR

If there is no voice activity for a predetermined period of time, the call ends.

7. Radio returns to the screen you were on prior to initiating the call.

## ■ Making a Private Call

- 1. Turn the Channel Selector Knob to select the channel with the active subscriber alias or ID.
- 2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- 3. Press the PTT button to make the call. The LED lightsup red. The Private Call icon appears. The first text line shows the subscriberalias. The second text line displays the call status.
- 4. Wait for the Talk Permit Tone to finish (if enabled) and speak clearly into the microphone.
- 5. Release the PTT button to listen. When the target radio responds, the LED lights up green.
- 6. If the Channel Free Indication feature is enabled, you will hear a short alert tone the moment the target radio releases the PTT button, indicating the channel is free for you to respond. Press the PTT button to respond. OR

If there is no voice activity for a predetermined period of time, the call ends.

7. You hear a short tone. The display shows Call Ended.

#### ■ Scanning Channels

Press the programmed Scan button to turn scan on or off.

During scan, the LED blinks orange and the scan icon is displayed.

#### ■ Making a Call Alert

#### ☐ Full Keypad Radio and Limited **Keypad Radio**

Press the programmed One Touch Access button and proceed to Step 5.

OR

Follow the procedure below.

- 1. ok to access the menu.
- 2. or to Contacts and press ok to select.
- 3. or to the required subscriber alias or ID and press ok to select. OR

📤 or 🔻 to the required Quick Text and press 🌕 to select.

Enter the subscriber ID you want to page and press ok. NOTE: Not applicable for Limited Keypad Radio

- 4. A or to Call Alert and press on to select.
- 5. The display shows Call Alert and the subscriber alias or ID, indicating that the Call Alert has been sent. 6. The LED lights up solid red when your radio is sending the Call Alert.
- 7. If the Call Alert acknowledgement is received, the display shows positive mini notice.

OR

If the Call Alert acknowledgement is not received, the display shows negative mini notice.

# ■ Non-Keypad Radio

- 1. Press the programmed One Touch Access button to make a Call Alert to the predefined ID.
- 2. The LED lights up solid red when your radio is sending the Call Alert
- 3. If the Call Alert acknowledgement is received, two chirps sound.

OR

If the Call Alert acknowledgement is not received, a low-pitched tone sounds.

# Sending a Quick Text Message

# ☐ Full Keypad Radio

Press the programmed Text Message button and proceedto Step 3.

OR

Press the programmed One Touch Access button to senda predefined Quick Text message to a predefined alias or ID and proceed to Step 6.

OR

Follow the procedure below.

- 1. ok to access the menu.
- 2. A or to Messages and press to select.
- 3. A or to Quick Text and press on to select.
- 4. or to the required Quick Text and press •

to select

5. A blinking cursor appears.

Use the keypad to edit the message, if required.

Press (A) to move to the left.

Press to move to the right.

Press the \*DEL key to delete any unwanted characters. Press the # key to input one space to the right.

6.Press once message is composed.

7. • or • to the required alias or ID and press ok to select.

OR

or to Manual Dial and press or to select.

Key in the subscriber alias or ID and press ok,

OR

ato edit the message.

again to discard the message or save it to the Drafts folder.

8. The display shows transitional mini notice, confirming your message is being sent.

9. If the message is sent, a tone sounds and the display shows positive mini notice.

OR

If the message is not sent, a low tone sounds and the display shows negative mini notice.

#### ☐ Limited Keypad Radio

Press the programmed Text Message button and proceedto Step 3.
OR

Follow the procedure below.

1 ox to access the menu.

2. or to Messages and press description to select.

3. \_\_ or \_\_ to Quick Text and press @ to select.

4. or to the required Quick Text and press to select.

5. A or to the required alias or ID and press to select.

The display shows transitional mini notice, confirming your message is being sent.

6. If the message is sent, a tone sounds and the display shows positive mini notice.

OR

If the message is not sent, a low tone sounds and the display shows negative mini notice.

## ■ Non-Keypad Radio

You can send Quick Text messages, programmed by your dealer, via the programmable button.

- 1. Press the programmed One Touch Access button to send a predefined Quick Text message to a predefined ID.
- 2. The LED lights up solid red.
- 3. Two chirps indicate that the message is sent successfully.  $\ensuremath{\mathsf{OR}}$

A low-pitched tone indicates that the message cannot be sent.

#### ■ Sending an Emergency Alarm

NOTE: If your radio is set to Silent, it will not display anyaudio or visual indicators during Emergencymode.

- 1. Press the programmed Emergency On button.
- 2. The display shows Tx Alarm and the destination alias. The LED blinksred and the Emergency iconappears. OR
- The display shows Tx Telegram and the destination alias. The LED blinksred and the Emergency icon appears.
- 3. When an Emergency Alarm acknowledgment

is received, the Emergency tone sounds and the LED lights off. The display shows Alarm Sent. OR

If your radio does not receive an Emergency Alarm acknowledgement, and after all retries have been exhausted, a tone sounds and the display shows Alarm Failed

4. Radio exits the Emergency Alarm mode and returns to the Home screen.

# **■** Privacy

Press the programmed Privacy button to toggle privacy on or off.

# Finding and Connecting to a BluetoothDevice

NOTE: Do not turn off your Bluetooth-enabled device or press aduring the finding and connecting operation as this cancels the operation.

A pin code may be required to be programmed inyour radio before it can pair with some devices. Contact your dealer for more information.

## □ Full Keypad Radio

#### ☐ Limited Keypad Radio

- 1. Turn on your Bluetooth-enabled device and place it in pairing mode. Refer to respective Bluetooth-enabled device's user manual.
- 2.On your radio, press or to access the menu.

- 2.On your radio, press or to access the menu.
- 3. or to Accessories, then Bluetooth and press or to select.
- 4. A or to My Devices and press on to select. If you could not see "My Devices", you could turn on "BT Switch" to get it.
- 5. or to Bluetooth and press to select.
- or to Search Devices to locate available devices.
  or to the required device and press ok to select.
- 6. or to Connect and press to select. Display shows Connecting to <device>.Your Bluetooth-enabled device may require additional steps to complete the pairing. Refer to respectiveBluetooth-enabled device's user manual.
- 7. If successful, the radio display shows <Device> Connected. A tone sounds and  $\sqrt{}$  appears beside the connected device. The Bluetooth Connected iconappears on the status bar. OR

If unsuccessful, the radio display shows Connecting Failed.

## ■ Non-Keypad Radio

- 1. Turn on your Bluetooth-enabled device and place it inpairing mode. Refer to respective Bluetooth-enabled device's user manual.
- 2. On your radio, press the programmed Bluetooth Connect button.
- 3. A tone sounds and LED blinks orange.
- 4. Your Bluetooth-enabled device may require additionalsteps to complete the pairing. Refer to respective Bluetooth-enabled device's user manual.
- 5. If successful, a positive tone sounds.

OR

If unsuccessful, a negative indicator tone sounds.



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