



BASIC MANUAL

VHF/UHF DUAL BAND TRANSCEIVER

ID-5200A ID-5200E



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.

Icom Inc.

Thank you for choosing this Icom product. This product was designed and built with Icom's state of the art technology and craftsmanship. With proper care, this product should provide you with years of trouble-free operation.

This product combines traditional analog technologies with Digital Smart Technologies for Amateur Radio (D-STAR), for a balanced package.

■ Important

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL— This instruction manual contains basic operating instructions for the ID-5200A/ID-5200E.

For advanced operating instructions, see the Advanced manual for details.

The Advanced manual can be downloaded from the following internet address:

<https://www.icomjapan.com/support/>

■ Features

- A 4.3 inch touch panel color display.
- The Dualwatch function to simultaneously receive and record 2 different bands or modes.
- A built-in GPS receiver to check your current location.
- The Voice recorder to record your QSO conversation, voice audio for TX.
- A microSD card slot that can accept different cards to backup settings, various memories, the GPS log, and so on.
- A USB connector for data transmission.
- The Bluetooth function to connect to Bluetooth devices.
- The Wireless LAN (Wi-Fi) function that can connect to a network.
- The waterfall display of the Band Scope function or Memory Scope function to display signal strengths over time.
- The DV Gateway function only with the transceiver itself by setting the Internal Gateway.
- The DV Repeater Monitor function through the Internet.

■ Explicit definitions

WORD	DEFINITION
⚠ DANGER!	Personal death, serious injury or an explosion may occur.
⚠ WARNING!	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	Recommended for optimum use. No risk of personal injury, fire or electric shock.

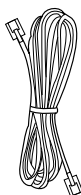
Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:

- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, or other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom transceivers with any equipment that is not manufactured or approved by Icom.

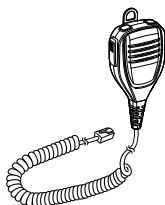
■ Supplied accessories



DC power cable
(3 m: 9.8 ft)



Controller cable
(3.5 m: 11.4 ft)



Hand microphone

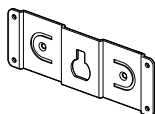


Microphone
hanger



Spare fuse
(FGB0 125 V 20 A)

Only the ID-5200A



Controller bracket



Magnets



Screws

NOTE: Some accessories are not supplied, or the shape is different, depending on the transceiver version.

■ About CE and DOC

CE Hereby, Icom Inc. declares that the versions of ID-5200E which have the “CE” symbol on the product, comply with the essential requirements of the Radio Equipment Directive, 2014/53/EU, and the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:
<https://www.icomjapan.com/support/>

These versions also comply with the essential requirements of the Battery Regulation, (EU) 2023/1542.

■ About UKCA DOC

To obtain the UKCA Declaration of Conformity, please contact Icom UK Limited by email at info@icomuk.co.uk or alternatively call + 44(0) 1227 741741.

■ Disposal



The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

About E-marking: Detailed installation notes for Icom mobile transceivers to be fitted into vehicles are available. Please contact your Icom dealer or distributor.

■ FCC information

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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

- **CAUTION:** Changes or modifications to this device, not expressly approved by Icom Inc., could void your authority to operate this device under FCC regulations.
- Keep the main unit of this device at least 20 cm (7.9 inches) away from any person when using only the Wi-Fi/Bluetooth transmitter.
- Keep at a distance of 176 cm (69.3 inches) or more between the antenna for this device and any persons during operation.

Supplier's Declaration of Conformity

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.

• **Model Name** ID-5200A

• **Responsible Party**

Company Name: Icom America Inc.

Address: 12421 Willows Road NE,
Kirkland, WA 98034

• **U.S. Contact Information**

800-USA-ICOM (800-872-4266)

Monday – Friday 7 AM to 5 PM PST

For Canada:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada (ISED)'s licence-exempt RSS(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.

The device for operation in the band 5150–5350 MHz is only for indoor use to reduce the potential for harmful interference to cochannel mobile satellite systems.

■ Voice Coding Technology

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Communications Equipment.

The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form.

U.S. Patent No. #8,359,197.

About weld lines

This product's surfaces may have streaks called "weld lines," that occur during the molding process, and are not cracks or flaws.

■ About the ID-5200A/ID-5200E manuals

You can use the following manuals to understand and operate this transceiver.

(As of July 2026)

TIP: You can download each manual and guide from the Icom website:

<https://www.icomjapan.com/support/>

Enter "ID-5200A" or "ID-5200E" into the Search box on the site.

Basic manual (This manual)

Instructions for basic operations and precautions.

Connection guide (Leaflet)

Instructions for connecting and installing the controller and main unit.

Advanced manual (PDF type)

Instructions for the advanced operations, as shown below.

- Using a microSD card
- Scope operation
- D-STAR operation
- GPS operation
- Voice TX operation
- Voice recorder operation
- Memory operation
- Scan operation
- Repeater and duplex operations
- Set mode
- Bluetooth® operation
- Other functions
- Maintenance
- Firmware updating
- Options

Updating the repeater list (PDF type)

Instructions for the steps to update the repeater list.

Using the GPS Logger function (PDF type)

Instructions for operating the GPS Logger function, that saves location data from a GPS receiver onto a microSD card as a log.

D-PRS Guide (PDF type)

Instructions for the system requirements or operations to use the D-PRS function.

About the DV Gateway function for the Mobile transceiver (PDF type)

Instructions for the system requirements or operations to use the DV Gateway function.

About the Share Pictures function (PDF type)

Describes how to use the Share Pictures function.

CI-V Reference Guide (PDF type)

Describes the control commands used in remote control operation (serial communication using CI-V).

① If necessary, you can see a glossary of HAM radio terms that can be downloaded from the Icom website.

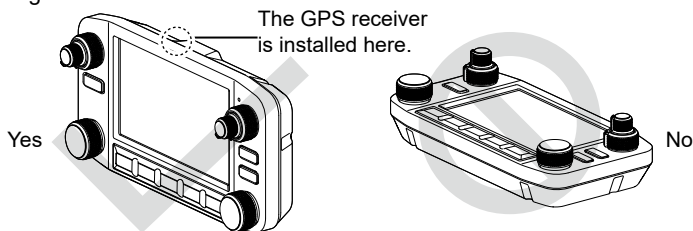
■ Important Notes

◇ When using the GPS receiver

- GPS signals cannot pass through metal objects. When using the transceiver inside a vehicle, you may not receive GPS signals. We recommend you use it near a window. Please avoid the areas where:
 - The driver's view will be blocked.
 - The air bags could deploy.
 - The unit becomes a driving obstacle.
- The Global Positioning System (GPS) is built and operated by the U.S. Department of Defense. The Department is responsible for accuracy and maintenance of the system. Any changes by the Department may affect the accuracy and function of the GPS system.
- When the GPS receiver is activated, please do not cover the remote controller with anything that will block the satellite signals.
- The GPS receiver may not work if used in the following locations:
 - Tunnels or high-rise buildings
 - Underground parking lots
 - Under a bridge or viaduct
 - In remote forested areas
 - Under bad weather conditions (rainy or cloudy day)

◇ About GPS antenna

This transceiver's GPS antenna is located at the top back of the controller. If the controller's rear panel is covered with any object that interrupts the GPS signals from the satellites, the GPS receiver will not calculate its position. Therefore, when you are using the GPS feature, be sure the controller is positioned so that the antenna has a clear view to receive signals from the satellites.



◇ Electromagnetic Interference

When you use a Wireless LAN or Bluetooth function, pay attention to the following:

- Wireless LAN products and Bluetooth devices operate in the 2.4 GHz band. The 2.4 GHz band is also used by other devices, such as microwave ovens, RFID systems, amateur radio stations, and so on.

When using this device near such devices, interference may occur, causing a decrease in communication speed, and an unstable connection. In such cases, use this device away from the other devices, or stop using those devices.

- **DO NOT** modify the device. The device warranty does not cover any problems caused by unauthorized modification.

◇ Spurious signals

Spurious signals may occur at some frequencies. These are created in the internal circuit and do not indicate a transceiver malfunction.

You may avoid the spurious signals with the IF exchange function. See the Advanced manual for details.

◇ Magnets

The supplied or optional MBA-20/MBA-19/MBF-11 CONTROLLER BRACKET uses strong magnets to attach the bracket to the controller's rear panel.

⚠ **DANGER! NEVER** place or attach the magnets on electronic medical equipment, such as an implanted cardiac pacemaker. It may affect the operation of the equipment. This could be life endangering.

BE CAREFUL not to pinch your finger when you attach the bracket to the controller's rear panel.

DO NOT put the controller near a clock, television set (CRT type), magnetic compass or any magnetic/IC cards, credit cards, and so on. The magnets may cause the products to malfunction or may erase the contents of magnetic storage devices.

■ Trademarks

Icom and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Icom Inc. is under license.

AMBE+2 is a trademark and property of Digital Voice Systems Inc.

Wi-Fi is a registered trademark of Wi-Fi Alliance®.

All other products or brands are registered trademarks or trademarks of their respective holders.

This product includes RTOS "RTX" software, and is licensed according to the software license.

This product includes "zlib" open source software, and is licensed according to the open source software license.

This product includes "libpng" open source software, and is licensed according to the open source software license.

This product includes "mbed TLS" open source software, and is licensed according to the open source software license.

This product includes "FreeType library" open source software, and is licensed according to the open source software license.

This software is based in part on the work of the Independent JPEG Group, and is licensed according to the open source software license.

Refer to the "About the Licenses" page at the end of the manual in English for information on the open source software "zlib," "libpng," "RTX," and "mbed TLS."

■ Precautions

⚠ **DANGER HIGH RF VOLTAGE! NEVER** touch an antenna or antenna connector while transmitting. This could cause an electric shock or burn.

⚠ **DANGER! NEVER** operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere. This could cause an explosion and death.

⚠ **DANGER! NEVER** place the transceiver where air bag deployment may be obstructed during mobile operations.

⚠ **WARNING RF EXPOSURE!** This transceiver emits Radio Frequency (RF) energy. Extreme caution should be observed when operating this transceiver. If you have any questions regarding RF exposure and safety standards, please refer to the Federal Communications Commission Office of Engineering and Technology's report on Evaluating Compliance with FCC Guidelines for Human Radio Frequency Electromagnetic Fields (OET Bulletin 65).

⚠ **WARNING! NEVER** operate or touch the transceiver with wet hands. This could cause an electric shock or damage the transceiver.

⚠ **WARNING! NEVER** operate the transceiver with earphones, a headset, or other audio accessories at high volume levels. The continuous high volume operation may cause a ringing in your ears. If you experience the ringing in your ears, reduce a volume level or discontinue use.

⚠ **WARNING! NEVER** apply AC power to the [DC13.8 V] socket on the transceiver rear panel. This could cause a fire or damage the transceiver.

⚠ **WARNING! NEVER** apply more than 16 V DC to the [DC 13.8 V] socket on the transceiver rear panel. This could cause a fire or damage the transceiver.

⚠ **WARNING! NEVER** remove the fuse holders on the DC power cable. Excessive current caused by a short could cause a fire or damage the transceiver.

⚠ **WARNING! NEVER** let metal, wire or other objects contact the inside of the transceiver, or make incorrect contact with connectors on the rear panel. This could cause an electric shock or damage the transceiver.

⚠ **WARNING! NEVER** operate the equipment if you notice an abnormal odor, sound, or smoke. Immediately turn OFF the power and/or remove the DC power cable. Contact your Icom dealer or distributor for advice.

⚠ **WARNING! NEVER** place the transceiver where normal operation of the vehicle may be hindered, or where it could cause bodily injury.

⚠ **WARNING! NEVER** operate the transceiver during a lightning storm. It may result in an electric shock, cause a fire, or damage the transceiver. Always disconnect the power source and antenna before a storm.

CAUTION: DO NOT reverse the DC power cable polarity. This could damage the transceiver.

CAUTION: DO NOT use or leave the transceiver in excessively dusty environments. This could damage the transceiver.

CAUTION: DO NOT change the internal settings of the transceiver. This may reduce equipment performance and/or cause damage to the transceiver. The transceiver warranty does not cover any problems caused by unauthorized internal adjustments.

CAUTION: Confirm that all connectors and jacks are dry and clean before attachment. Exposing them to dust or water will result in serious damage to the transceiver.

CAUTION: DO NOT operate the transceiver while driving a vehicle. Safe driving requires your full attention—anything less may result in an accident.

CAUTION: DO NOT use harsh solvents such as Benzine or alcohol when cleaning. This could damage the equipment surfaces. If the surface becomes dusty or dirty, wipe it clean with a soft, dry cloth.

CAUTION: DO NOT start the vehicle engine when the transceiver's power is ON. Ignition voltage spikes can damage the transceiver.

CAUTION: DO NOT operate the transceiver without running the vehicle's engine. The vehicle's battery will quickly run out when the transceiver transmits while the vehicle's engine is OFF.

CAUTION: DO NOT use a non-specified microphone. Other microphones may have different pin assignments and may damage the transceiver.

CAUTION: DO NOT expose the transceiver to rain, snow or any liquids. They could damage the transceiver.

BE CAREFUL! The transceiver may become hot after continuously transmitting for long periods of time.

NOTE: DO NOT use or leave the transceiver in areas with temperatures below -10°C ($+14^{\circ}\text{F}$) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$), or in areas subject to direct sunlight, such as the dashboard for mobile operations.

NEVER place the transceiver in an insecure place to avoid inadvertent use by unauthorized persons.

DO NOT place the transceiver against walls or put anything on top of the transceiver. This will obstruct heat dissipation.

DO NOT place the transceiver where hot or cold air blows directly onto it, during mobile operations.

The LCD display may have cosmetic imperfections that appear as small dark or light spots. This is not a malfunction or defect, but a normal characteristic of LCD displays.

Operate the transceiver that complies with your local laws and regulations. Depending on countries and/or regions, transceiver's output power and/or operations on specific frequencies may be restricted to avoid interferences with existing radio stations or services.

◇ Coin cell battery cautions

⚠ **DANGER!** The main unit contains a coin cell battery. **NEVER** swallow the battery. This could cause severe internal burns in just 2 hours, and could lead to death.

Keep new and used batteries away from children.

Also, **DO NOT** use or leave the transceiver with the unit cover open (the battery compartment is easily accessible). It must be away from children.

If the battery might have been swallowed or placed inside any part of the body, immediately go to the doctor.

⚠ **WARNING! NEVER** charge, short-circuit, disassemble, deform, heat, or incinerate the coin cell battery. The internal flammable materials may cause them to overheat, explode, or catch fire.

⚠ **WARNING! NEVER** solder the coin cell battery terminals. This may cause them to overheat, explode, or catch fire.

⚠ **WARNING!** When disposing of batteries, wrap the terminals in tape to insulate them. Shorting may occur if the terminals touch metal objects. This could cause them to overheat, explode, or catch fire. Dispose of used batteries in accordance with local regulations.

⚠ **WARNING! NEVER** reverse the coin cell battery polarity. This could cause a fire or damage the transceiver.

⚠ **WARNING! NEVER** leave the coin cell battery in places with direct sunlight, high temperature, or high humidity. This could cause a fire.

Coin cell battery manufacturer:

Name: Panasonic Energy Co., Ltd.

Address: 1-1 Matsushita-cho, Moriguchi City, Osaka
570-8511, Japan

■ About the touch screen

◇ Touch operation

In the Advanced manual and the Basic manual, the touch operation is described as shown below, with the beep tone ON.



Touch

If the display is touched briefly,
1 short beep sounds.



Touch for 1 second

If the display is touched for
1 second, one short and one long
beep sound.

◇ Touch screen precautions

- The touch screen may not properly work when the LCD protection film or sheet is attached.
- Touching the screen with your fingernails, sharp-tipped object and so on, or touching the screen hard may damage it.
- Tablet PC operations such as flick, pinch in, and pinch out cannot be performed on this touch screen.

◇ Touch screen maintenance

- If the touch screen becomes dusty or dirty, wipe it clean with a soft, dry cloth.
- When you wipe the touch screen, be careful not to push it too hard or scratch it with your fingernails. Otherwise, you may damage the screen.

■ About the instructions

The Advanced and Basic manuals are described in the following manner.

“ ” (Quotation marks):

Used to indicate icons, setting items, and screen titles displayed on the screen.

The screen titles are also written in uppercase letters. (Example: FUNCTION screen)

[] (brackets):

Used to indicate keys.

Routes to the Set modes and Setting screens:

Routes to the Set mode, Setting screens and the setting items are described in the following manner.

[MENU] > SET > Time Set > Date/Time
> Date

Instruction example:

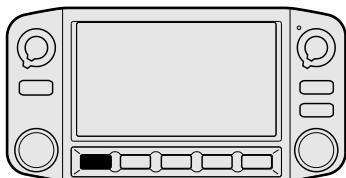
◇ Setting the date

[MENU] > SET > Time Set > Date/Time
> Date

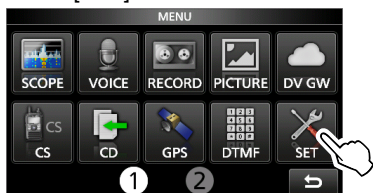
1. Open the “Date” screen.
2. Touch [+] or [-] to set the date.

Detailed instruction:

1. Push [MENU].

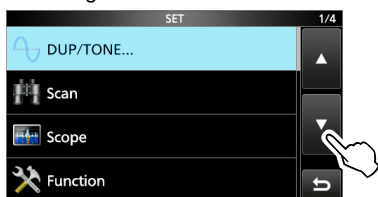


2. Touch [SET].

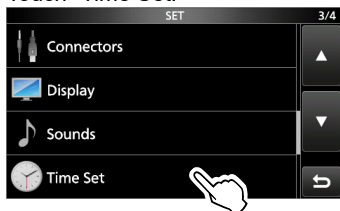


3. Touch [▲] or [▼] to scroll through the items.

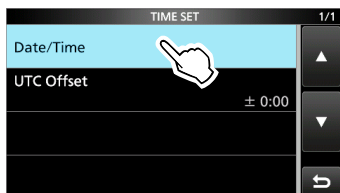
① You can also rotate [DIAL] to scroll through the items.



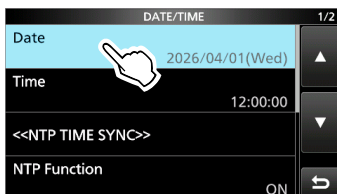
4. Touch "Time Set."



5. Touch "Date/Time."



6. Touch "Date."



- Opens the "Date" screen.

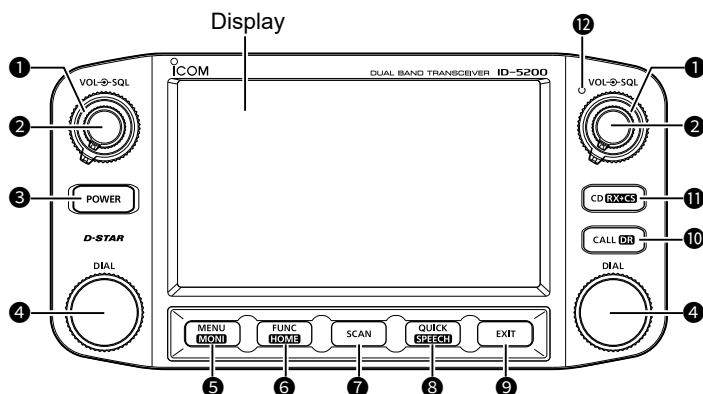
■ Table of contents

■ Important.....	2	2	BASIC OPERATION	22
■ Features	2		■ Turning power ON or OFF	22
■ Explicit definitions.....	2		■ Setting audio volume and squelch level	22
■ Supplied accessories	3		■ Monitor function.....	22
■ About CE and DOC.....	3		■ Selecting the watch mode.....	23
■ About UKCA DOC.....	3		◇ Dualwatch mode.....	23
■ Disposal	3		◇ Single watch mode	23
■ FCC information.....	4		◇ Selecting the Dualwatch mode or Single watch mode	23
■ Voice Coding Technology.....	4		■ Selecting the Mode	24
■ About the ID-5200A/ID-5200E manuals	5		■ DR function operation	25
■ Important Notes.....	6		■ Selecting the operating band	25
◇ When using the GPS receiver	6		■ Selecting the operating mode	26
◇ About GPS antenna.....	6		■ Setting a frequency	26
◇ Electromagnetic Interference.....	6		◇ Selecting a tuning step	26
◇ Spurious signals	7		◇ Selecting the 1 MHz tuning.....	27
◇ Magnets.....	7		■ Scan operation	27
■ Trademarks	7		■ Home Channel function.....	28
■ Precautions	8		◇ Setting a Home Channel	28
◇ Coin cell battery cautions	9		■ Speech function	28
■ About the touch screen	10		■ Transmitting	29
◇ Touch operation	10		◇ Transmitting on an Amateur band ..	29
◇ Touch screen precautions.....	10		■ Band Scope/Memory Scope function	30
◇ Touch screen maintenance.....	10		■ Lock function	30
■ About the instructions.....	10			
1 PANEL DESCRIPTION	14	3	MEMORY OPERATION	31
■ Controller — Front panel.....	14		■ Entering Memory channels	31
■ Controller — Rear panel	15		■ Selecting a Memory channel.....	32
■ Controller — Touch screen display ..	16		◇ Selecting with [DIAL]	32
◇ MENU screen	18		■ Viewing the Memory channel contents	32
◇ FUNCTION screen	18			
◇ TOUCH ASSIST screen	19		4 RECORDING A QSO ONTO A microSD CARD	33
◇ QUICK MENU window.....	19		■ About the microSD card	33
■ Main unit.....	20		■ Inserting a microSD card.....	34
◇ Microphone connector information.....	21		■ Formatting the microSD card	34
■ Microphone (HM-232)	21		■ Saving the settings.....	35
			■ Setting the Record operation	35
			■ Recording a QSO audio	36
			■ Playing a recorded audio	36
			■ Unmounting.....	37

5	GPS OPERATION.....	38
■	Confirming the GPS signal receiving	38
■	Checking your location	39
■	GPS Logger function	40
6	Bluetooth® OPERATION	41
■	Turning ON the Bluetooth® function	41
■	Connecting a Bluetooth® headset	42
■	Disconnecting a Bluetooth® device	43
■	Deleting a Bluetooth® device from the pairing list	43
7	MAINTENANCE.....	44
■	Resetting	44
◇	Partial Reset	44
■	Cleaning	45
■	Fuse replacement	45
■	Power protect function	45
■	Troubleshooting	46
8	SPECIFICATIONS	48
◇	General	48
◇	Transmitter	49
◇	Receiver	49
◇	Bluetooth	50
◇	Wireless LAN	50
	D-STAR GUIDE.....	51
	INDEX.....	76
	ABOUT THE LICENSES.....	78
	MENU SCREEN ITEMS	80

	D-STAR GUIDE	
	INTRODUCTION	52
■	Unique features of D-STAR.....	52
■	What is D-STAR?	53
■	About the DR function	54
■	Ways to Communicate with the DR function	54
■	Enter your call sign (MY) into the transceiver	56
■	Register your call sign at a gateway repeater	57
	D-STAR OPERATION	58
■	Making a Simplex call	58
■	Accessing repeaters.....	59
■	Receiving	61
■	Capturing a call sign.....	64
■	Making a Local CQ call	65
■	Making a Gateway CQ call.....	66
■	Calling an individual station.....	67
■	About reflectors	68
◇	What is a reflector?.....	68
◇	Unlinking a reflector.....	68
◇	Linking to a reflector	69
◇	Using a reflector	70
◇	Reflector Echo Testing.....	70
◇	Requesting repeater information ..	71
■	"FROM" (Access repeater) setting..	72
■	"TO" (Destination) setting.....	73
■	When receiving no reply.....	74
■	Updating the repeater list.....	75

■ Controller — Front panel



About control's operation

In the Dualwatch mode, the left side controls are used for the left side band, and the right side controls are used for the right side band.

In the Single watch mode, the left side controls are used for the A band, and the right side controls are used for the B band.

① SQUELCH CONTROL [SQL] (p. 22)

Rotate to adjust the squelch level.

① Normally, set the squelch level to where noise and the "BUSY" icon just disappear. (closed)

① You can use the S-Meter Squelch or Attenuator function by rotating the control clockwise beyond the center position.

② VOLUME CONTROL [VOL] (p. 22)

Rotate to adjust the audio level.

③ POWER KEY [POWER]

- Hold down for 1 second to turn the transceiver ON or OFF. (p. 22)

- When "Screen Capture [POWER] Switch" is set to "ON," push to capture the transceiver display onto a microSD card.

([MENU] > SET > Function > **Screen Capture [POWER] Switch**)

④ TUNING DIAL [DIAL]

- In the VFO mode, rotate to select an operating frequency.

- In the Memory mode, rotate to select a Memory channel.

- Rotate to select a setting item or value.

- Push to select an option of the MENU or QUICK MENU item.

- Push to set the A or B band as the MAIN band. (p. 23)

- Hold down for 1 second to turn the Dualwatch function ON or OFF.

- On the MAIN band, push to open the TOUCH ASSIST MENU screen. (p. 19)

⑤ MENU/MONITOR KEY [MENU]/[MONI]

- Push to open the MENU screen. (p. 18)

- Hold down to turn the Monitor function ON or OFF. (p. 22)

6 FUNCTION/HOME KEY [FUNC]/[HOME]

- Push to open the FUNCTION screen. (p. 18)
- Hold down for 1 second to select the Home Channel. (p. 28)

7 SCAN KEY [SCAN]

- Push to open the SCAN SELECT window. (p. 27)
- Hold down for 1 second to start the previously selected scan.

8 QUICK/SPEECH KEY [QUICK]/[SPEECH]

- Push to open the QUICK MENU window. (p. 19)
- Hold down for 1 second to audibly announce the displayed frequency and operating mode, or call sign. (p. 28)

9 EXIT KEY [EXIT]

Push to exit a setting screen or return to the previous screen.

10 CALL/DR KEY [CALL]/[DR]

- Push to enter the Call Channel mode. (p. 24)
- Hold down for 1 second to turn the DR function ON. (p. 25)

11 RX CALL SIGN DISPLAY/RX CALL SIGN CAPTURE KEY [CD]/[RX→CS]

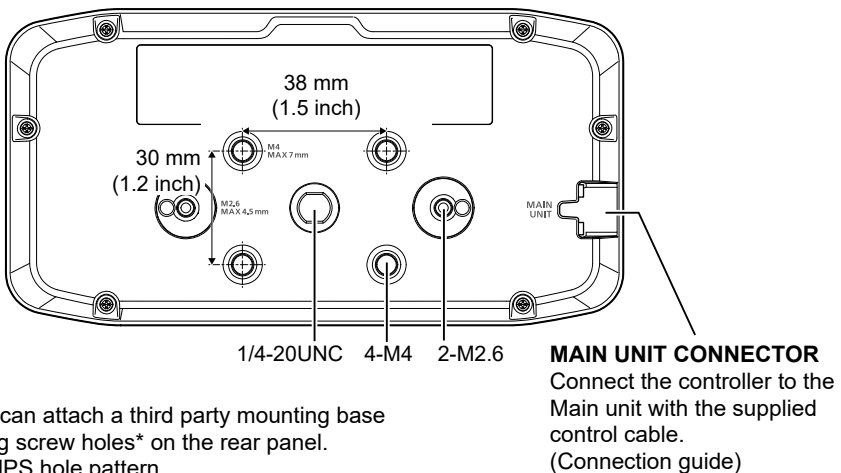
- Push to open the RX HISTORY screen. (p. 61)
- Hold down for 1 second to open the RX>CS screen. (p. 64)

12 AMBIENT LIGHT SENSOR

Used to automatically adjust the display's backlight brightness.

- ① **DO NOT** cover the sensor.

■ Controller — Rear panel

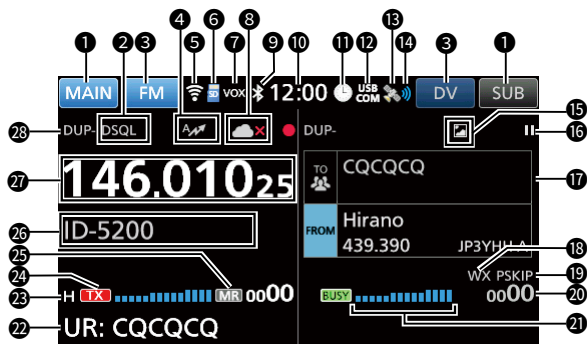


You can attach a third party mounting base using screw holes* on the rear panel.

* AMPS hole pattern

1 PANEL DESCRIPTION

■ Controller — Touch screen display



1 MAIN/SUB BAND ICON

- Dualwatch mode
Indicates the MAIN band and the SUB band.
- Single watch mode
Indicates the selected band (A or B).

2 TONE ICONS

Displayed when the Tone or Digital Squelch function is ON.

3 OPERATING MODE ICONS

Displays the selected operating mode. (p. 26)

4 EMR/BK/PACKET LOSS/AUTO REPLAY/KISS ICONS

- EMR: Displayed when the Enhanced Monitor Request (EMR) function is ON.
- BK: Displayed when the Break-in (BK) function is ON.
- L: Displayed when packet loss has occurred.
- : Displayed when the Auto Reply function is ON.
- KISS 96: Displayed when the KISS data speed is set to 9600 bps.
- KISS 12: Displayed when the KISS data speed is set to 1200 bps.

5 WLAN ICON

Displays while connected to a wireless network.

6 microSD ICON (p. 34)

- Displayed when a microSD card is inserted.
- Blinks while accessing the microSD card.

7 VOX ICON

Displayed when the VOX function is ON.

8 INTERNAL GATEWAY

Displays the communication status while using the Internal Gateway function.

9 Bluetooth ICON (p. 42)

Displayed when a Bluetooth device is connected.

10 CLOCK READOUT

Displays the current local time. Touch the readout to display both the current local time and UTC time.

- When "Clock/Voltage Display" is set to "Voltage," power source voltage is displayed. ([MENU] > SET > Display > Clock/Voltage Display)

11 AUTO POWER OFF ICON

Displayed when the Auto Power OFF function is ON.

12 USB CONNECTION INDICATOR

Displayed when a USB device is connected through a USB cable, and "USB Connect" is set to "Serialport." ([MENU] > SET > Connectors > USB Connect)

13 GPS ICON

Displays the status of the GPS receiver. (p. 38)

14 GPS ALARM ICON

Displayed when the GPS Alarm function is ON.

15 PICTURE SHARE ICON

Displayed when the Share Pictures function is ON.

16 RECORD ICONS (p. 36)

-  : Displayed while the transceiver is recording.
-  : Displayed while the recording is paused.

17 DR SCREEN (pp. 25, 54)

Displayed the preset repeater or frequency in "FROM" (access repeater), and Your call sign in "TO" (destination) with the D-STAR Repeater (DR) function.

18 WEATHER ALERT ICON

Displayed when the Weather Alert function is ON. (Only the ID-5200A)

19 SKIP ICONS

- SKIP: Displayed when Memory Skip is selected.
- PSKIP: Displayed when Program Skip is selected.

20 MEMORY CHANNEL NUMBER

- Displays the selected Memory group and Memory channel number.
- In the Call Channel mode, displays "144" or "430" and "C1" or "C2."
- "WX" is displayed while in the Weather Channel mode. (Only the ID-5200A)

21 S/RF METER

- Displays the relative signal strength of the received signal.
- Displays the output power level of the transmit signal.

22 INFORMATION DISPLAY

- Displays the status after transmitting or the RX call sign and message in DV mode.
- Displays the scope screen when the Scope function is ON.

23 POWER ICONS

Displays the output power level of the transmit signal in 3 levels (LOW/MID/HIGH).

① In the Dualwatch mode:

- "H" is displayed when you select high power.
- "M" is displayed when you select mid power.
- "L" is displayed when you select low power.

24 BUSY/MUTE/TX ICON

- BUSY: Displayed while a signal is being received or the squelch is open.
Blinks while the monitor function is activated.
-  : Displayed while the mute is activated.
- TX: Displayed while transmitting.
① Displayed in orange when the transceiver is in the Terminal mode.

25 MEMORY MODE ICON

Displayed while in the Memory mode.

26 MEMORY NAME DISPLAY

① You can change the display type in the QUICK MENU window.

27 FREQUENCY READOUT

Displays an operating frequency.

28 DUPLEX ICONS

- DUP+: Displayed during plus duplex operation.
- DUP-: Displayed during minus duplex operation.

1 PANEL DESCRIPTION

■ Controller — Touch screen display

◇ MENU screen



- Push [MENU] to open the MENU screen in the selected mode.
 - ① To close the MENU screen, push [EXIT].
 - ① Touching [①] or [②] at the bottom of the screen selects MENU screen 1 or 2.

◇ FUNCTION screen



- Push [FUNC] to open the FUNCTION screen in the selected mode.

FUNCTION screen list

* Touch for 1 second to open its function menu.

Lights blue when in use.

Displayed only the ID-5200E.

DUP*	TONE*				RPT MONI	
OFF	OFF	TSQ-L-R	DTCS (T) / TSQ-L (R)		OFF	
DUP-	TONE	DTCS-R	TONE (T) / TSQ-L (R)		ON	
DUP+	TSQ-L	DTCS (T)				
	DTCS	TONE (T) / DTCS (R)				
KISS*	USB	Bluetooth*	Wi-Fi*	Touch Assist	T-CALL (1750Hz)	LOCK
OFF	COM	OFF	OFF	OFF		OFF
ON	SD Card	ON	ON	ON		

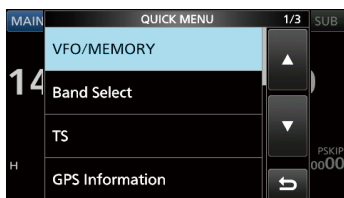
◇ TOUCH ASSIST screen



Lights blue when in use

- Push [DIAL] on the MAIN band to open the TOUCH ASSIST screen.
 - ① When "Touch Assist" is set to "OFF," the TOUCH ASSIST screen is not displayed. ([MENU] > SET > Function > **Touch Assist**)

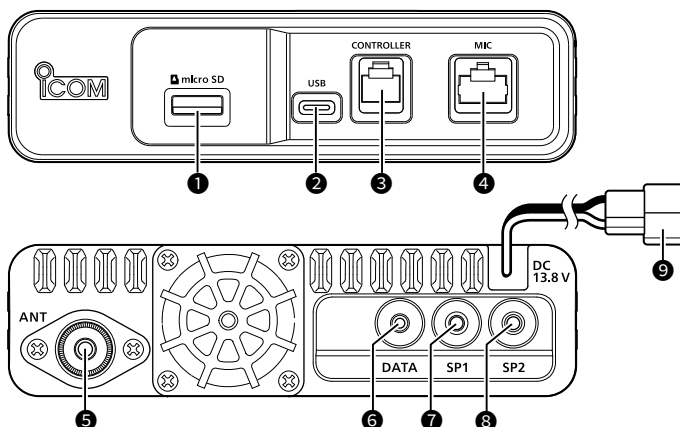
◇ QUICK MENU window



- Push [QUICK] to open the QUICK MENU window.

1 PANEL DESCRIPTION

■ Main unit



❶ microSD CARD SLOT [microSD]

Insert a microSD card (user supplied).

❷ USB PORT (Type-C) [USB]

Use as the SD card mode or USB Serial Port.

SD card mode

Transferring the files between the inserted microSD card and a PC, using a USB cable.

USB Serial Port

- Inputting weather data for weather station transmission.
- Interface for remote control using CI-V commands.
- Cloning settings using the CS-5200 PROGRAMMING SOFTWARE.
- Using the External Gateway function.
 - ❶ You can communicate regardless of the PC software's baud rate setting.
 - ❶ You can download the USB driver and installation guide from the Icom website.
<https://www.icomjapan.com/support/>

❸ CONTROLLER CONNECTOR [CONTROLLER]

Connect to the controller with the supplied control cable.

❹ MICROPHONE CONNECTOR [MIC]

Connect the supplied or an optional microphone.

- ❶ Confirm that the transceiver is OFF before connecting or disconnecting optional equipment.

❺ ANTENNA CONNECTOR [ANT]

Connect to a 50 Ω impedance antenna with a PL-259 connector.

- ❶ The transceiver has a built-in duplexer, so you can use a 144 and 430 MHz dual-band antenna without needing an external duplexer.

❻ DATA JACK [DATA]

2.5 mm (d)

- Connect to a PC with the optional data communication cable for data communication.
- Connect to an external GPS receiver compatible with a NMEA format to receive position information.

⑦ EXTERNAL SPEAKER JACK 1 [SP1]

⑧ EXTERNAL SPEAKER JACK 2 [SP2]

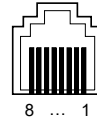
Connect to an 8 Ω external speaker.
3.5 mm (1/8 inch) (d)

- When you connect external speakers to [SP1] and [SP2], the A band audio is heard from [SP1] and the B band audio is heard from [SP2].
- When you connect an external speaker to [SP1], the A and B band audio is heard from [SP1].
① The internal speaker is disabled.
- When you connect an external speaker to [SP2], the A band audio is heard from the internal speaker and the B band audio is heard from [SP2].

⑨ DC POWER SOCKET [DC 13.8 V]

Connect 13.8 V DC power source through the supplied DC power cable.

◇ Microphone connector information



Front panel view

1: 8 V

+8 V DC output (Maximum 10 mA)

2: MIC U/D

Frequency Up/Down

UP: Ground

DN: Ground through 470 Ω

3: M8V SW

Grounds when the HM-207 is connected.

4: PTT

PTT input (Ground for transmission)

5: MIC E

Microphone ground

6: MIC

Microphone input

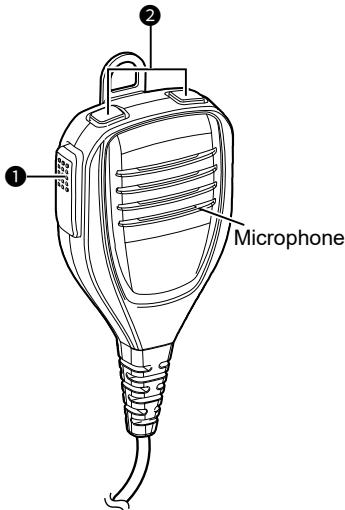
7: GND

PTT ground

8: DATA IN

When the HM-207 is connected, inputs HM-207 data.

■ Microphone (HM-232)



① [PTT] SWITCH

Hold down to transmit, release to receive.

② UP/DOWN KEYS [UP]/[DN]

- Push to change the operating frequency or Memory channel.
- Hold down to continuously change the frequency or Memory channel.

TIP: You can change the assigned function of the [UP] and [DN] keys in the following item.

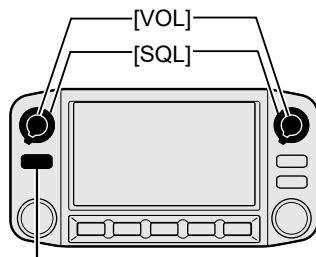
([MENU] > SET > Function > Up/Down MIC Key)

- ① With the HM-207, you can input numbers for frequency or Memory channel setting, and easily adjust the audio volume or squelch level. See the Advanced manual for details.

2 BASIC OPERATION

■ Turning power ON or OFF

- Hold down [POWER] for 1 second to turn ON the transceiver.
 - A beep sounds.
 - After the opening message and power source voltage are displayed, the operating frequency or repeater name is displayed.
- To turn OFF the transceiver, hold down [POWER] for 1 second until "POWER OFF..." is displayed.



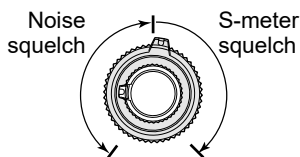
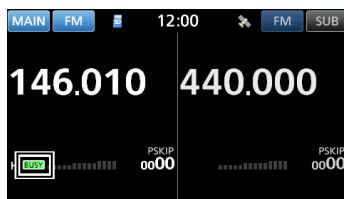
[POWER]

■ Setting audio volume and squelch level

1. Rotate [VOL] to adjust the audio level.
2. Rotate [SQL] until the noise and "BUSY" just disappear.

① Information

- Rotating [SQL] clockwise makes the squelch tight. Tight squelch is for strong signals.
- When rotating [SQL] clockwise beyond the center position, [SQL] can be used as 'S-meter Squelch' or 'Attenuator.' Select the [SQL] option on the MENU screen. ([MENU] > SET > Function > **Squelch/ATT Select**)

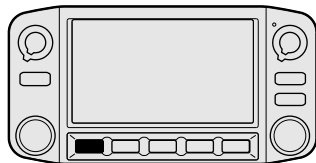


S-meter Squelch

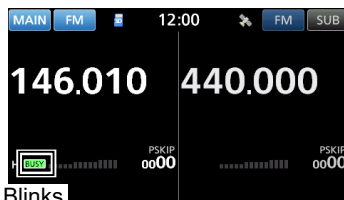
■ Monitor function

The Monitor function is used to listen to weak signals without disturbing the squelch setting.

1. Hold down [MONI] to open the squelch.
 - "BUSY" blinks, and audio is heard when the squelch is open.
2. To close the squelch, push [MONI].



[MONI]



Blinks

■ Selecting the watch mode

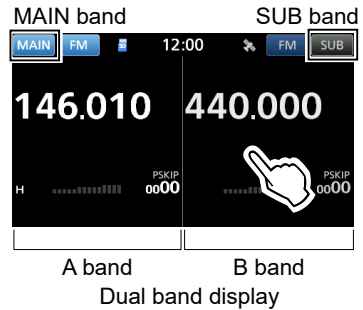
The transceiver has 2 independent watch modes: Dualwatch mode and Single watch mode.

◇ Dualwatch mode

The Dualwatch mode uses the MAIN and SUB bands, and you can simultaneously monitor both bands.

In the Dualwatch mode, both MAIN and SUB bands are displayed side by side.

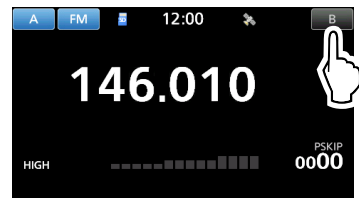
- ① The selectable frequency differs, depending on the transceiver version. See the specifications for details. (p. 48)
- ① The audio output may be interrupted when the frequency is switched while scanning or by other factors.
- ① The SUB band can be automatically muted on the MENU screen. ([MENU] > SET > Sounds > **Sub Band Mute (Main RX), Sub Band Mute (TX)**)
- Touch the SUB band area or push [DIAL] to toggle the displayed band between the MAIN band and the SUB band.



◇ Single watch mode

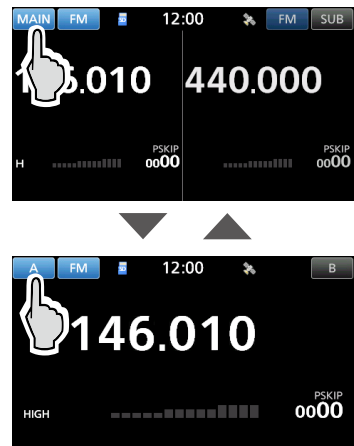
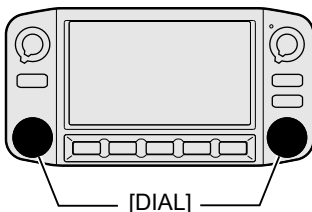
The Single watch mode uses the A and B bands, instead of the MAIN and SUB bands, and you can monitor one of them at a time.

- Touch [A] or [B], or push [DIAL] to set the A band or B band as the MAIN band.



◇ Selecting the Dualwatch mode or Single watch mode

- Hold down [MAIN] or [DIAL] for 1 second to select the Single watch mode in the Dualwatch mode.
- Hold down [A], [B], or [DIAL] for 1 second to select the Dualwatch mode in the Single watch mode.



2 BASIC OPERATION

■ Selecting the Mode

VFO mode

Rotate [DIAL] to set an operating frequency.

Memory mode

Select a Memory channel where the operating frequency and other parameters are saved.

① In the Memory mode, “MR” is displayed.

Call Channel mode

Select a Call channel to quickly recall your most-used frequencies.

① Two Call channels are assigned on each of the 144 and 430 bands.

① In the Call Channel mode, “144 C1,” “144 C2,” “430 C1,” or “430 C2” is displayed.

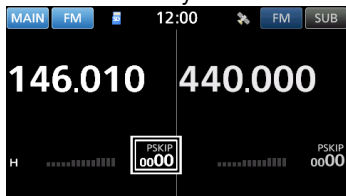
Weather Channel mode (For only the ID-5200A)

Weather Channels are used for monitoring broadcasts from the National Oceanographic and Atmospheric Administration (NOAA).

① In the Weather Channel mode, “WX” is displayed.

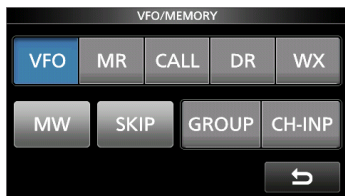
① See the Advanced Manual for details.

1. Touch the Memory channel number.



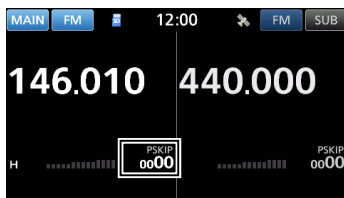
• Opens the VFO/MEMORY screen.

2. Touch the desired mode.

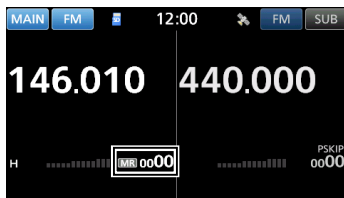


① You can also select the Call Channel mode by pushing [CALL].

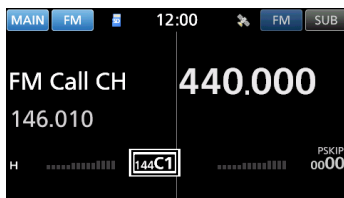
3. Rotate [DIAL] to select an operating frequency or a channel.



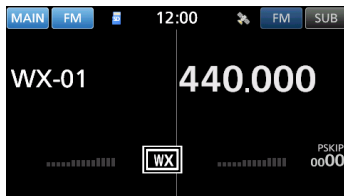
VFO mode



Memory mode



Call Channel mode



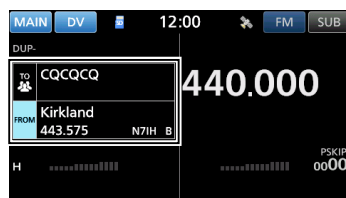
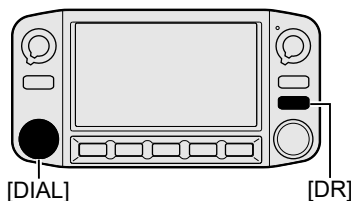
Weather Channel mode

■ DR function operation

Using the D-STAR Repeater (DR) function, you can easily select the entered repeaters and Your call signs by rotating [DIAL]. You can make not only a repeater call but also a simplex call.

① See D-STAR GUIDE (p. 54) for the DR function details.

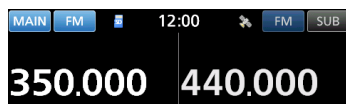
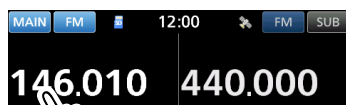
1. Hold down [DR] for 1 second.
 - Displays the DR screen.
2. Rotate [DIAL] to select a desired access repeater.



DR screen

■ Selecting the operating band

1. Touch the MHz digits. (Example: 146)
 - Opens the BAND screen.
 2. Touch the desired operating band. (Example: 350.000)
 - Sets the operating band, then returns to the standby screen.
- ① You can transmit on only the 144 MHz and 430 MHz bands.
- ① Selectable frequency bands differ, depending on the transceiver version. See the specifications for details. (p. 48)

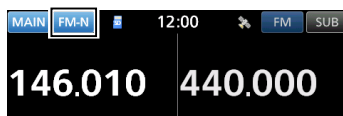
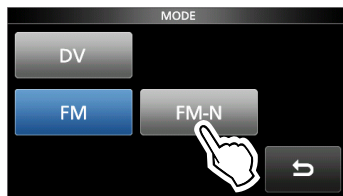
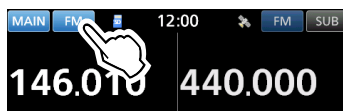


2 BASIC OPERATION

■ Selecting the operating mode

The transceiver has 5 operating modes, FM, FM-N, AM, AM-N, and DV.

1. Touch the operating mode icon.
 - Opens the MODE screen.
2. Touch the desired mode key (Example: FM-N).
 - Sets the operating mode, and then returns to the standby screen.



① Information

- In the FM-N mode, the TX modulation is automatically set to narrow (approximately ± 2.5 kHz).
- On 118.000 ~ 136.991 MHz, you can use only AM or AM-N.
- The AM or AM-N mode can be used for only 118.000 ~ 143.995 MHz, 230 MHz band and 300 MHz band.
- The DV mode can be used for only the 144 MHz band and 430 MHz band.
- For the 144 MHz band and 430 MHz band, you can use only FM, FM-N or DV.
- When the GPS TX mode is selected in the DV mode, "GPS" is displayed.
([MENU] > GPS > **GPS TX Mode**)

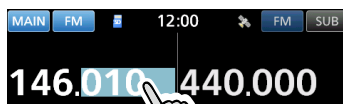
TIP: You can make a simplex call not only in the FM mode but also in the DV mode.

■ Setting a frequency

◇ Selecting a tuning step

When you select the frequency by rotating [DIAL] in the VFO mode, it changes in the selected tuning step.

1. Touch the kHz digit for 1 second.
 - Opens the TS screen.
2. Touch the desired tuning step. (Example: 5k)
 - Sets the tuning step, and then returns to the standby screen.



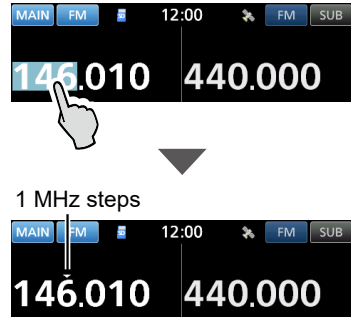
① Information

- You can set the tuning step for both the VFO and Memory mode.
- The VFO mode scan and the Band Scope function also use this step to search for signals.
- On 118.000 ~ 136.991 MHz, you can select only 8.33k, 25k, or Auto.
- 8.33k is for only 118.000 ~ 136.99166 MHz.

◇ Selecting the 1 MHz tuning

You can change the operating frequency in 1 MHz steps for quick tuning.

1. In the VFO mode, touch the MHz digits for 1 second.
 - The Tuning Step function's icon "▼" is displayed above the 1 MHz digit.
2. Rotate [DIAL].
 - The frequency changes in 1 MHz steps.
3. Touch the MHz digits for 1 second to exit the 1 MHz Tuning Select mode.
 - ① The tuning step setting remains.



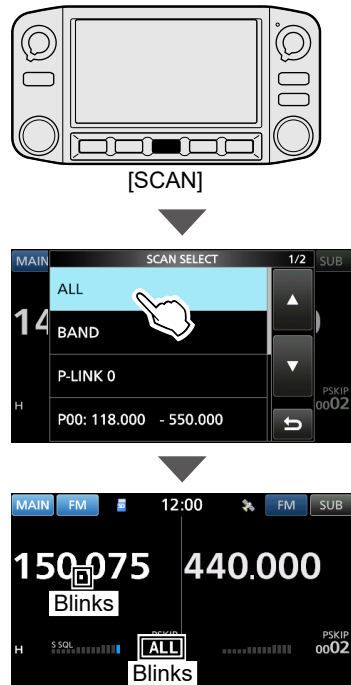
2

■ Scan operation

Scanning is a versatile function that can automatically search for signals. A scan makes it easier to locate stations to contact or listen to, or to skip unwanted channels or frequencies. This section describes the basic scan operation. See the Advanced manual for details.

Example: Scanning in the VFO mode

1. Select the VFO mode. (p. 24)
2. Push [SCAN].
 - Opens the SCAN SELECT window.
3. Touch "ALL."
 - The scan starts.
 - The decimal point and the selected scan type icon blink.
 - ① When receiving a signal, the S-meter displays the received signal strength.
4. Push [SCAN].
 - Cancels the scan.



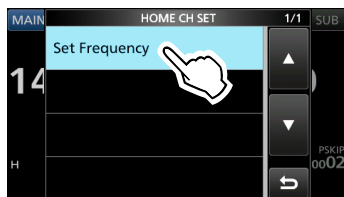
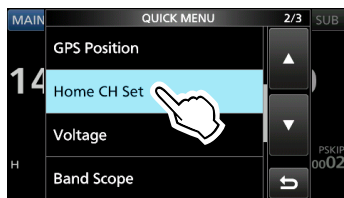
2 BASIC OPERATION

■ Home Channel function

You can preset an often-used frequency, Memory channel, or repeater in the VFO mode, Memory mode, and DR screen as a Home Channel by holding down [HOME] for 1 second. Also, when a Home Channel is selected by rotating [DIAL], a beep sounds. You will know the Home CH selection without looking at the display.

◇ Setting a Home Channel

1. Select the VFO or Memory mode, or the DR screen to set a Home Channel.
(pp. 24, 25)
2. Select a frequency, Memory channel, or an access repeater to be set as a Home Channel.
3. Push [QUICK].
4. Touch "Home CH Set."
5. Touch "Set Frequency" (VFO mode), "Set Channel" (Memory mode), or "Set Repeater" (DR screen).
 - Sets a Home Channel, and then returns to the standby screen.

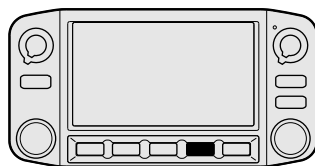


■ Speech function

The Speech function audibly announces the displayed frequency and mode by holding down [SPEECH] for 1 second.

Also, you can set various Speech functions, such as the DIAL Speech function or Mode Speech function in the MENU screen.

([MENU] > SET > Function > SPEECH > **DIAL SPEECH, MODE SPEECH**)



① Information

- In the VFO, Memory, or Call Channel mode, the Speech function announces the current frequency and operating mode.
- When using the DR function, the Speech function announces the displayed call sign.

■ Transmitting

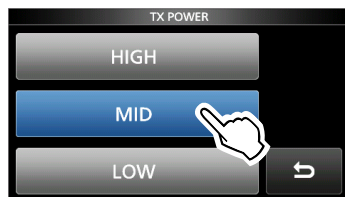
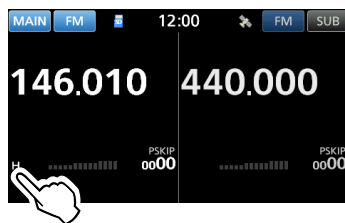
◇ Transmitting on an Amateur band

CAUTION: DO NOT transmit without an antenna.

NOTE: You can transmit only on the amateur frequency bands.

IMPORTANT: Before transmitting, monitor the operating frequency to make sure transmitting will not cause interference to other stations on the same frequency.

1. Rotate [DIAL] to set the operating frequency.
(p. 26)
2. Touch the power icon.
• Opens the TX POWER screen.
3. Select an output power.
① Select a level to suit your operating requirements.
4. Hold down [PTT] to transmit, and speak into the microphone at your normal voice level.
• The S/RF meter displays the output power level.
5. Release [PTT] to receive.



TIP: To maximize the readability of your signal

1. After pushing [PTT], pause briefly before you start speaking.
2. Hold the microphone 5 to 10 cm (2 to 4 inches) from your mouth, and then speak at your normal voice level.

2 BASIC OPERATION

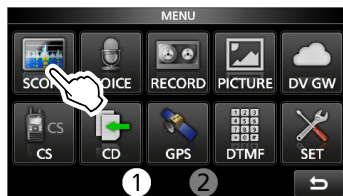
■ Band Scope/Memory Scope function

Use the Scope function to visually search a specified range around the displayed frequency or channels. You can use this function to search for a signal and see the relative received signal strength level.

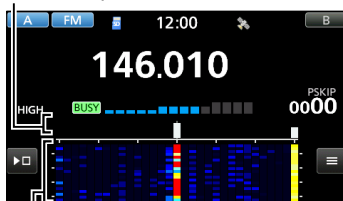
On the single band display, you can confirm the signal strengths over time using the Waterfall function.

See the Advanced manual for details.

1. Push [MENU].
 - Opens the MENU screen.
2. Touch "SCOPE."
 - Returns to the standby screen and starts the continuous sweep.
3. Push [EXIT] twice to turn OFF the Scope function.



Band Scope zone

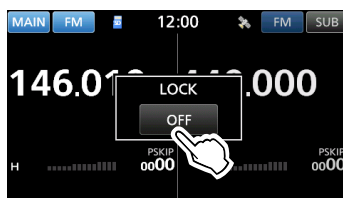


Waterfall zone

■ Lock function

Activate to prevent accidental frequency changes and unnecessary function access.

1. Push [FUNC].
 - Opens the FUNCTION screen.
2. Touch "LOCK" to turn ON the Key Lock function.
 - When the Key Lock function is ON, and the locked key or [DIAL] is pushed or rotated, "LOCK" is displayed.
 - ① [POWER], [PTT], [SQL], and [VOL] can be used even if the Key Lock function is ON.
3. To turn OFF the function, touch [OFF] in the LOCK popup window.
 - "LOCK OFF" is displayed.

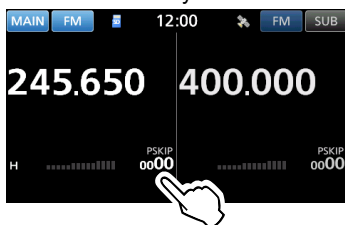


■ Entering Memory channels

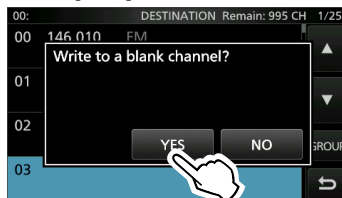
The transceiver has a total of 1000 Memory channels to save often-used frequencies. In the Memory mode, you can quickly select the saved memories. This section describes the basic channel content entry.

NOTE: New content you enter will overwrite any content already in the selected memory.

1. Select the VFO mode. (p. 24)
2. Set the frequency, operating mode, and other parameters.
3. Touch the Memory channel number.



7. Touch [YES].



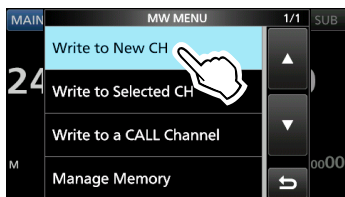
- The contents are entered in the selected Memory channel.

4. Touch [MW].

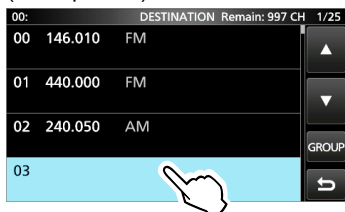


TIP: Touching [MW] for 1 second in step 4 enters the contents into a blank channel in the selected group.

5. Touch "Write to New CH."



6. Touch the desired Memory channel.
(Example: 03)



- ① To change a Memory group, touch [GROUP].

3 MEMORY OPERATION

■ Selecting a Memory channel

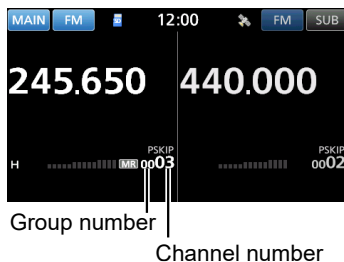
In the Memory mode, you can select the Memory channels by rotating [DIAL].

◇ Selecting with [DIAL]

1. Select the Memory mode. (p. 24)
2. Rotate [DIAL] until you select the Memory channel you want to use.
 - ① To select the Memory group, push [QUICK], and then touch “Group Select.”
 - ② Blank channels are not selected.

TIP:

- To sequentially select a channel in a different group, set “Channel Select Group Range” to “All Groups” in the QUICK MENU window.
- You can also select a Memory channel by touching the channel option in step 3 below.

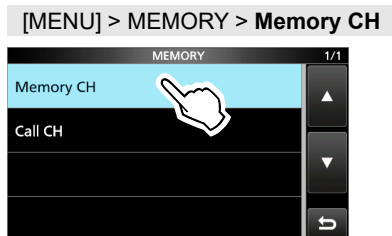


■ Viewing the Memory channel contents

You can view the Memory channel contents on the MEMORY screen.

Example: Viewing the contents of Channel 01 in Group 00.

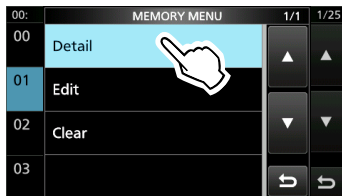
1. Open the MEMORY CH screen.



2. Touch a memory group.
3. Touch  of the channel that you want to view.



4. Touch “Detail.”



- Channel contents are displayed.

- ① Rotate [DIAL] to scroll the screen.
5. To close the Memory channel screen, push [EXIT] several times.

About the microSD card

NOTE: The microSD, microSDHC, and microSDXC cards are not available from Icom (User supplied).

A microSD card of up to 2 GB, a microSDHC of up to 32 GB, or a microSDXC of up to 256 GB can be used in this transceiver. Icom has checked the compatibility with the following cards. (As of July 2026)

Brand	Type	Capacity
SanDisk®	microSD	2 GB
		4 GB
	microSDHC	8 GB
		16 GB
		32 GB
		64 GB
	microSDXC	128 GB
		256 GB

- ① The performance of the cards listed to the left is not guaranteed.
- ① Throughout this document, the microSD card, microSDHC, and microSDXC card are simply called the microSD card or the card.

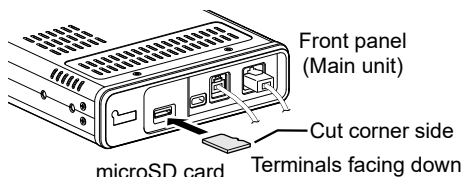
TIP: Saving the factory default data is recommended. (p. 35)
([MENU] > SET > SD Card > **Save Setting**)

NOTE:

- Before using the microSD card, thoroughly read the instructions of the card.
- If you do any of the following, the card data may be corrupted or deleted.
 - You remove the card from the transceiver while accessing the card.
 - A power failure occurs, or the power cable is disconnected, while accessing the card.
 - You drop, impact, or vibrate the card.
- **DO NOT** touch the contacts of the card.
- The transceiver takes a longer time to recognize a high capacity card.
- The card will get warm if used continuously for a long period of time.
- The card has a certain lifetime, so data reading or writing may not be possible after using it for a long period of time. In that case, use a new one. We recommend that you make a backup of the data onto another device.
- Icom will not be responsible for any damage caused by data corruption of a card.

4 RECORDING A QSO ONTO A microSD CARD

■ Inserting a microSD card



Insert the microSD card as shown to the left.

- A  is displayed on the Touch screen when a microSD card is inserted.

- ① Insert the microSD card into the slot until it locks in place, and makes a 'click' sound.
- ① Be sure to check the card orientation before inserting.

NOTE:

Before using a microSD card for the first time, format it in the transceiver.

- Formatting a card erases all its data. Before formatting any used card, back up its data onto another device.
- After inserting or formatting, a special folder on the card is created for operations like firmware updates.

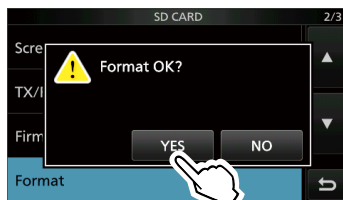
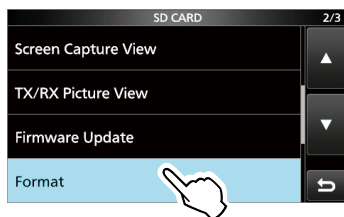
IMPORTANT: Even if you have formatted a microSD card, some data may still remain on it. When you dispose of the card, be sure to physically destroy it to prevent unauthorized access to any remaining data.

■ Formatting the microSD card

1. Open the SD CARD screen.
3. Touch [YES] to start formatting.

[MENU] > SET > SD Card

2. Touch "Format."



- ① If "The GPS Logger function is activated." and/or "The QSO Log function is activated." are displayed, turn OFF the functions or ignore the messages and touch "YES."

- After formatting, returns to the SD CARD screen.
- ① To cancel formatting, touch [NO].
 4. To close the SD CARD screen, push [EXIT] several times.

Saving the settings

The Memory channels and the transceiver's settings can be saved onto a microSD card.

1. Open the SAVE SETTING screen.

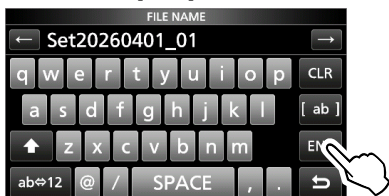
[MENU] > SET > SD Card >
Save Setting

2. Touch "<<New File>>."



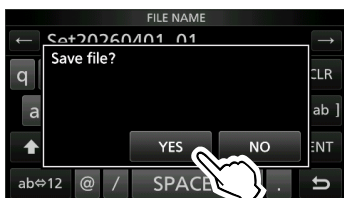
- ① The file name is automatically set in the following format:
SetYYYYMMDD_xx (YYYY: Year, MM: month, DD: day, xx: serial number).

3. To save the file with the displayed name, touch [ENT].



- ① If you want to change the name, delete the name and re-enter it, and then touch [ENT].

4. Touch [YES].



- Saves the settings.

5. To close the SD CARD screen, push [EXIT].

TIP: You can edit the saved settings on your PC using the optional CS-5200 PROGRAMMING SOFTWARE.

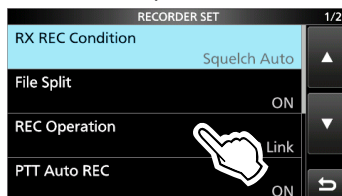
Setting the Record operation

You can select whether or not to start or stop an audio recording only on the MAIN band.

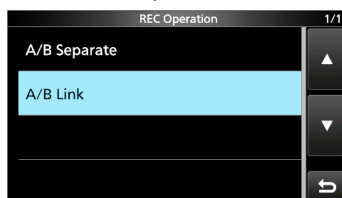
1. Open the RECORDER SET screen.

[MENU] > RECORD > **Recorder Set**

2. Touch "REC Operation."



3. Touch "A/B Separate" or "A/B Link."



- A/B Separate:

The recording function is separately active/inactive on the selected band (MAIN band) when the function is started or stopped.

- A/B Link:

The recording function is simultaneously active/inactive on both MAIN and SUB bands when the function is started or stopped.

- ① On the single band display, only displayed band (A or B) is recorded.

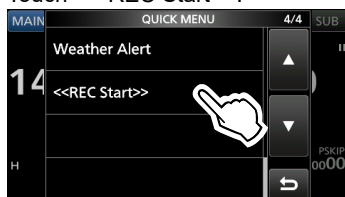
4. To close the RECORDER SET screen, push [EXIT].

4 RECORDING A QSO ONTO A microSD CARD

■ Recording a QSO audio

NOTE: Once a voice recording starts, the Recording function will be continuously turned ON until you stop recording, even if you turn OFF the transceiver.

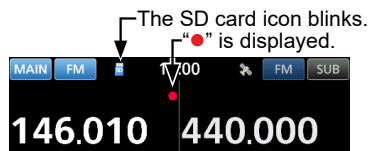
1. Push [QUICK].
2. Touch "<<REC Start>>."



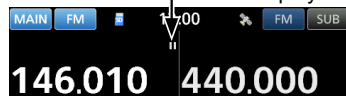
- "Recording started." is displayed.
- ① Recording continues until you stop recording or the card becomes full.
 - ① To stop recording, open the QUICK MENU window again and touch "<<REC Stop>>."

TIP: About the icons

- While recording, "●" is displayed and the microSD card icon blinks blue.

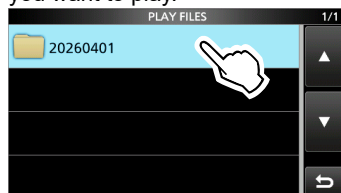


- While pausing, "||" is displayed.

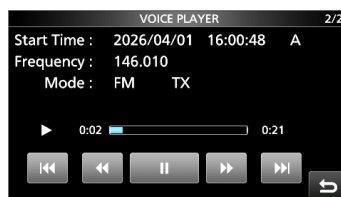
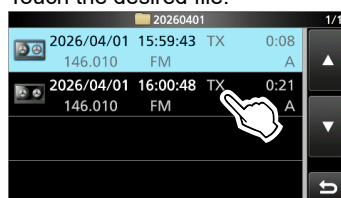


■ Playing a recorded audio

1. Open the PLAY FILES screen.
[MENU] > RECORD > Play Files
2. Touch the folder that contains the file you want to play.



- ① The folder is named in the following format: YYYYMMDD (YYYY: Year, MM: month, DD: day).
3. Touch the desired file.



- The VOICE PLAYER screen is displayed and starts playing.
- ① Playback continues to the next file and stops when the last file in the folder is played back.

VOICE PLAYER screen operation:

- : Plays the previous file.
- ① While the oldest file is playing back, pushing  starts playing the beginning of the oldest file, even if there are other files in the folder.
- : Plays the next file.
- ① While the most recent file is playing back, pushing  stops the playback, even if there are other files in the folder.
- : Rewinds to the skip time point. (Default: 10 seconds)
- ① If you touch  within the first 1 second of the file, the end of the previously recorded file will play back.
- : Fast forwards to the skip time point. (Default: 10 seconds)
- : Pauses while playing.
- ①  is displayed while pausing.
- : Plays the file.
- ①  is displayed while playing.
- ① You can change the skip time in the following item. ([MENU] > RECORD > Player Set > **Skip Time**)
- To close the PLAY FILES screen, push [EXIT] several times.

TIP: As the default setting

- The recording is paused while the squelch is closed, and resumes when a signal is received. ([MENU] > RECORD > Recorder Set > **RX REC Condition**)
- The recording automatically starts when you start to transmit, even if the Recording function is turned OFF. ([MENU] > RECORD > Recorder Set > **PTT Auto REC**)

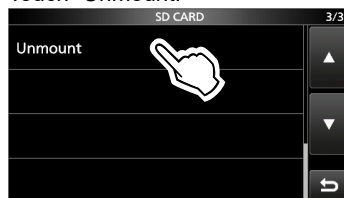
Unmounting

Before you remove a card when the transceiver is ON, be sure to electrically unmount it, as shown below. Otherwise, the data may be corrupted or deleted.

- Open the SD CARD screen.

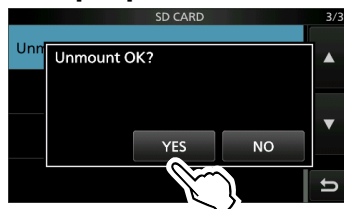
[MENU] > SET > **SD Card**

- Touch "Unmount."



- The confirmation dialog is displayed.

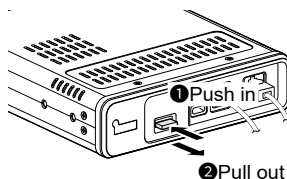
- Touch [YES] to unmount.



- After unmounting, returns to the SD CARD screen.

- ① To cancel unmounting, touch [NO].

- Remove the card from the transceiver.



- Push in the card until a 'click' sounds to unlock the card, and then pull it out.

- To close the SD CARD screen, push [EXIT] several times.

TIP: When the transceiver is OFF

You can remove the card starting from step 4 of the steps described above.

NOTE: The built-in GPS receiver cannot calculate its position if it cannot receive signals from the GPS satellites. Refer to page 6 for details.

■ Confirming the GPS signal receiving

The transceiver has a built-in GPS receiver. You can check your current location and transmit GPS data in the DV mode. See the Advanced Manual for details.

Confirm the GPS receiver is receiving satellite data.

The GPS icon blinks when searching for satellites.



The GPS icon stops blinking when the minimum needed number of satellites are found.



- ① It may take only a few seconds to receive, or a few minutes, depending on your operating environment. If you are having difficulty receiving, we recommend trying a different location.
- ① When "GPS Select" is set to "Manual," the icon is not displayed.
([MENU] > GPS > GPS Set > **GPS Select**)

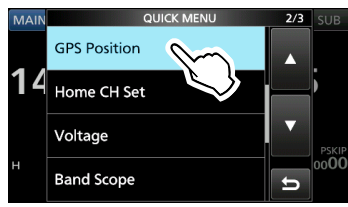
NOTE: If you cannot receive GPS data, manually set the date and time.
([MENU] > SET > Time Set > **Date/Time**)

■ Checking your location

You can check your current location.

① If you transmit while the GPS POSITION screen is displayed, the screen closes.

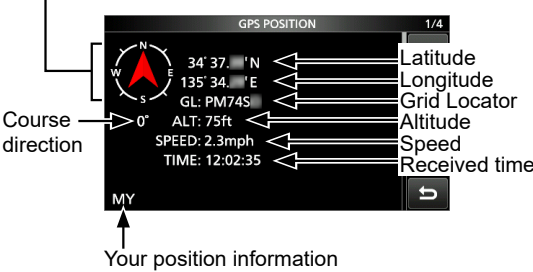
- 1. Push [QUICK].
- 2. Touch "GPS Position."



- Opens the GPS POSITION screen.
- 3. Rotate [DIAL].
 - Changes between the MY (My position), RX (Received position), MEM (GPS Memory position), or ALM (GPS Alarm position) screen.
- 4. To close the GPS POSITION screen, push [EXIT].

GPS POSITION (MY) screen:

Your course heading



① When "GPS Select" is set to "Manual," SPEED, Compass, and Compass Direction are not displayed.

5 GPS OPERATION

■ GPS Logger function

The GPS Logger function enables you to save the location data from a GPS receiver onto a microSD card as a log.

The GPS Logger saves Latitude, Longitude, Altitude, Positioning state, Course, Speed, Date, and Time.

If you use this GPS Logger while traveling, you can check your trip history on a mapping software.

About the log file:

If you have the log file imported into a mapping software, you can display your route as you move on the software map.

- ① The log files may not be compatible with all mapping software.
- ① See the D-STAR Using the GPS Logger function from the Icom website for details on copying the log files onto your PC.

NOTE:

- The GPS logger function requires a microSD card (User supplied). (p. 34)
- This function is turned ON as the default setting. Therefore, when you insert a microSD card, this function continuously saves GPS location data from the GPS receiver, even if you turn the transceiver OFF, and then turn it ON again.
- You can turn this function ON or OFF in the following item.
([MENU] > GPS > GPS Logger > **GPS Logger**)
- When the microSD card is full, this function will automatically be paused.

The transceiver has a built-in Bluetooth unit. You can connect Bluetooth headsets or other Bluetooth devices. When you connect a Bluetooth headset to the transceiver, you can wirelessly transmit and receive. Refer to the Advanced manual for more details on the Bluetooth function or Bluetooth device operation.

① The communication range of Bluetooth is approximately 10 meters (33 feet).

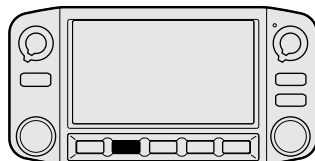
IMPORTANT: The Bluetooth communication range may vary, depending on the environment in which the device operates. Microwave ovens or Wireless LAN may cause interference. In that case, stop using those devices or increase the space between the Bluetooth device and the other devices. All Bluetooth devices have a range of use. If the communication is unstable, use the device within the range.

NOTE: Connect with a device that complies with the standards set by Bluetooth SIG and has been certified.

Even if the device complies with the Bluetooth standard, it may not be able to connect to the receiver, depending on the specifications and settings of the device, and not all operations are guaranteed.

■ Turning ON the Bluetooth® function

1. Push [FUNC].
• The FUNCTION screen is displayed.
2. Touch "Bluetooth" to turn ON the Bluetooth function.
3. Push [EXIT] to exit the FUNCTION screen.



[FUNC]



6 Bluetooth® OPERATION

■ Connecting a Bluetooth® headset

Connect your Bluetooth headset by following the steps below.

Step 1. Selecting the pairing mode of the headset (Bluetooth headset)

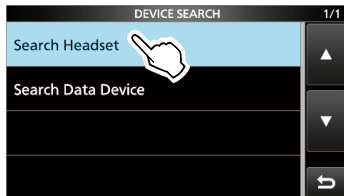
See the headset's instruction manual to select the pairing mode.

Step 2. Searching for the headset (Transceiver)

1. Open the PAIRING/CONNECT screen.

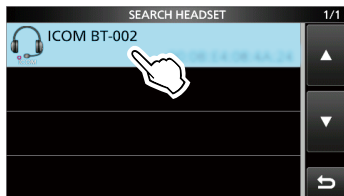
[MENU] > SET > Bluetooth Set > **Pairing/Connect**

2. Touch "Device Search."
3. Touch "Search Headset."



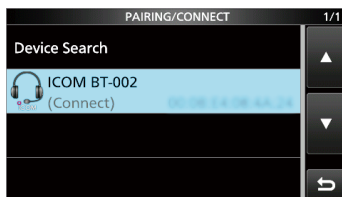
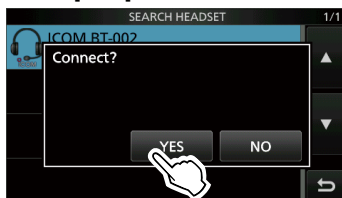
- Displays the usable headsets in the pairing list.

4. Touch the device name that you want to connect to.



- The confirmation dialog "Connect?" is displayed.

5. Touch [YES].



- Connects the headset.
- After connecting, "(Connect)" is displayed in the pairing list.

6. To close the PAIRING/CONNECT screen, push [EXIT].

- ① While connected to a Bluetooth device, the Bluetooth icon (B) is displayed on the Standby screen.
- ① When "AF Output" is set to "Only Headset" and the Bluetooth connection is accidentally disconnected, a dialog is displayed to select whether or not to output the audio from the transceiver's speaker.

■ Disconnecting a Bluetooth® device

If your Bluetooth device is not being used, disconnect it by following the steps below.

1. Open the PAIRING/CONNECT screen.

[MENU] > SET > Bluetooth Set >
Pairing/Connect

2. Paired devices are displayed.
3. Touch the Bluetooth device.
 - The confirmation dialog "Disconnect?" is displayed.
4. Touch [YES].
 - The transceiver disconnects from the Bluetooth device, and "(Connect)" disappears from the list. However, the transceiver is still paired with the device.
5. To close the PAIRING/CONNECT screen, push [EXIT] several times.
 - ① When you touch the unconnected device displayed in the pairing list, the transceiver displays "Connect?". To connect to the device, touch [YES].



6

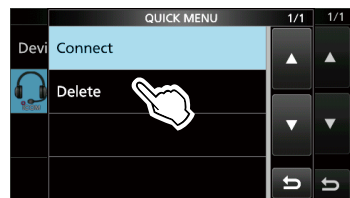
■ Deleting a Bluetooth® device from the pairing list

Before deleting a connected Bluetooth device, disconnect it.

1. Open the PAIRING/CONNECT screen.

[MENU] > SET > Bluetooth Set >
Pairing/Connect

2. Touch the Bluetooth device for 1 second.
3. Touch "Delete."
 - The confirmation dialog is displayed.
4. Touch [YES].
 - Deletes the selected device from the pairing list.
5. To close the PAIRING/CONNECT screen, push [EXIT] several times.
 - ① To connect to a deleted device, you must first pair with it again. (p. 42)

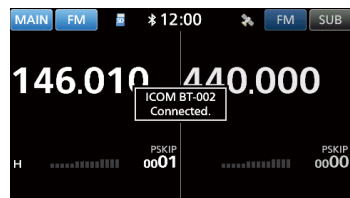


TIP:

Auto Connect function

The transceiver automatically connects to a paired Bluetooth device.

([MENU] > SET > Bluetooth Set > **Auto Connect**)



Re-searching the Bluetooth device

"No Device Found" is displayed if the transceiver could not find a Bluetooth device.

1. Push [QUICK].
2. Touch "Re-search."



■ Resetting

Occasionally, erroneous information is displayed, for example, when first applying power. This may be caused externally by static electricity or by other factors.

If this problem occurs, perform a Partial reset or an All reset.

BE CAREFUL! An All reset clears all programming and returns all settings to the factory defaults. See the Advanced manual for details.

After performing an All reset, you cannot use the DR function because the Repeater List contents are also cleared.

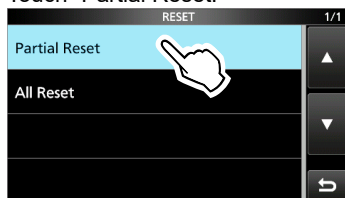
① A Bluetooth pairing list is not deleted.

◇ Partial Reset

1. Open the RESET screen.

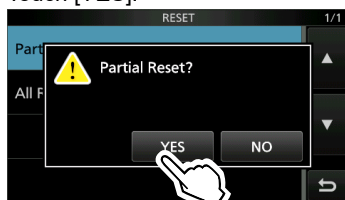
[MENU] > SET > Others > **Reset**

2. Touch “Partial Reset.”



- The confirmation dialog is displayed.

3. Touch [YES].



- “PARTIAL RESET” is displayed, and then the display automatically returns to the default screen.

TIP: A Partial reset resets the operating settings to their default values (VFO frequency, VFO settings, menu contents) without clearing the following:

- | | | |
|---------------------------|--------------------------|-----------------------|
| • Memory Channel contents | • Call Channel contents | • Wi-Fi settings |
| • Scan Edge contents | • Message data | • GPS memory contents |
| • Call sign memories | • DTMF memory contents | • Repeater list |
| • Bluetooth pairing list | • Allowed call sign list | |

Cleaning



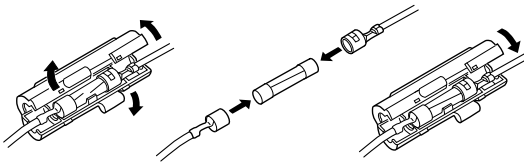
DO NOT use harsh solvents such as benzine or alcohol when cleaning, because they will damage the transceiver surfaces.



If the transceiver becomes dusty or dirty, wipe it clean with a dry, soft cloth.

Fuse replacement

A fuse is installed in each fuse holder of the supplied DC power cable. If the transceiver does not turn ON because a fuse blows, find and repair the cause of the problem. Then replace any blown fuse with a new, adequately rated fuse. (FGB0 125 V 20 A)
 ① Spare fuses are supplied with the transceiver.



WARNING!

- Disconnect the DC power cable from the power supply before replacing the fuse.
- **NEVER** use fuses other than specified ones.

Fuse Cording explanation

Fuse Coding: FUSE 32 V–250 V 20 A
 Fuse Voltage Rating: 32 to 250 Volts
 Fuse Current Rating: 20 Amperes

Power protect function

The transceiver is equipped with a protection circuit for the power amplifier. The circuit activates when the transceiver continuously transmits at high power, and then the temperature becomes extremely high.

In this case, the transceiver automatically reduces the transmit power to a low level (approximately 5 W).

When the Power Protect function activates, wait until the transceiver's temperature returns to normal.

NOTE: When the power supply voltage is high, the transceiver automatically displays "Over Voltage" and then sounds a warning beep. In this case, the transceiver may be damaged. In that case, contact your nearest Icom Dealer or Service Center.

■ Troubleshooting

The following chart is designed to help you correct problems that are not equipment malfunctions.

If you are unable to locate the cause of a problem or solve it through the use of this chart, contact your nearest Icom Dealer or Service Center.

① Information

- “AM” indicates the Advanced manual (PDF type).
- “CG” indicates the Connection guide boxed with the transceiver.
- Updating the firmware may also solve the problem. See the Advanced manual for details.

The transceiver does not turn ON.

- The DC power cable is not connected properly.
 - Reconnect the DC power cable properly. (CG)
- The external power supply is turned OFF.
 - Turn ON the external power supply.
- The DC power cable fuses or the circuitry fuse is blown.
 - Find and repair the cause of the problem, and then replace the damaged fuse with a new one.

No sound comes from the speaker.

- The volume level is too low.
 - Rotate [VOL] to adjust the level. (p. 22)
- The squelch is closed.
 - Adjust the squelch level. (p. 22)
- The tone or digital squelch function is turned ON.
 - Turn OFF the tone or digital squelch function. (AM)
- An external speaker is connected.
 - Check the external speaker connection.
- A Bluetooth device is connected.
 - Disconnect the device. (p. 43)

“MUTE” is displayed.

- “Sub Band Mute” is set to “Mute” or “Mute & Beep.”
 - Set the “Sub Band Mute (Main RX)” to “OFF” or “Beep.” ([MENU] > SET > Sounds > **Sub Band Mute (Main RX)**, **Sub Band Mute (TX)**)

Sensitivity is too low, and only strong signals are heard.

- The antenna is defective, or the coaxial cable connector is shorted or cut.
 - Reconnect to the antenna connector.
- The Attenuator function is turned ON.
 - Turn OFF the attenuator. (p. 22)
- The squelch is closed.
 - Adjust the squelch level. (p. 22)

No reply is received after a call.

- The duplex function is set, and the receive and transmit frequencies are different.
 - Set for simplex operation. (AM)
- No station is in range or on the same frequency.
 - Wait for a while, and try again.
- The band you are receiving on is the SUB band.
 - Change to the MAIN band. (p. 23)

Frequency cannot be set.

- The Key Lock function is activated.
 - Cancel the Key Lock function. (p. 30)
- The VFO mode is not selected.
 - Open the VFO/MEMORY screen to select the VFO mode. (p. 24)
- The DR screen is displayed.
 - Push [DR] to turn OFF the DR function.

The LCD screen display is abnormal.

- The CPU has malfunctioned.
 - Reset the transceiver. (p. 44)
- External factors have caused a fault.
 - Disconnect and connect to the DC power supply. (CG)

Transmitting is impossible.

- The transmit power level is set to Low or Mid.
 - Set the transmit power level to High. (p. 29)
- The PTT Lock function is activated.
 - Turn OFF the PTT Lock function on the MENU screen. (AM)
- The Busy Lockout function is activated.
 - Turn OFF the Busy Lockout function on the MENU screen. (AM)
- The transmit frequency is out of the amateur radio band.
 - Set the transmit frequency within the amateur radio band. (p. 26)

A Program Scan does not start.

- The VFO mode is not selected.
 - Open the VFO/MEMORY screen to select the VFO mode. (p. 24)
- The same frequencies are entered into the scan edges.
 - Enter different frequencies into the scan edges. (AM)

A Memory Scan does not start.

- The Memory mode is not selected.
 - Open the VFO/MEMORY screen to select the Memory mode. (p. 24)
- Only one or no memory channel is entered.
 - Enter 2 or more memory channels. (p. 31)

The clock setting has been reset.

- The coin cell battery inside the main unit to back up the internal clock is exhausted.
 - Replacing the coin cell battery (CR1220). (AM)

Failed to Bluetooth pairing.

- The Bluetooth device is not in the Pairing mode.
 - Confirm the Bluetooth device is in the Pairing mode, and then try again. (p. 42)
- There are other active Bluetooth devices nearby.
 - Stop using other Bluetooth devices.
 - Use the transceiver away from other Bluetooth devices.
- There are other devices that are operating in the 2.4 GHz band.
 - Use the transceiver away from the other devices, or stop using those devices.

“No SD Card is found.” is displayed.

- A microSD card is not recognized.
 - Confirm that a microSD card is inserted.
 - Reinsert a microSD card. (p. 34)
 - Exchange with a new microSD card.

The display turns OFF.

- The Screen Saver function is ON.
 - Operate something (push a key, and so on) to reset the screen saver startup time. (AM)

The backlight brightness automatically changes.

- The Auto Adjust function is ON.
 - Touch [Auto Adjust] in the “LCD Backlight” screen to turn OFF the Auto Adjust function. (AM)

The touch screen is not working correctly.

- The touch point and the detected point may be different.
 - Calibrate the touch screen on the OTHERS screen. (AM)

◇ General

• Frequency coverage (unit: MHz):

USA version

[A band]	Receive:	118.000 ~ 174.000 (Guaranteed only 144 ~ 148 MHz) 225.000 ~ 550.000 (Guaranteed only 440 ~ 450 MHz)
	Transmit:	144.000 ~ 148.000 430.000 ~ 450.000 (Guaranteed only 440 ~ 450 MHz)
[B band]	Receive:	118.000 ~ 174.000 (Guaranteed only 144 ~ 148 MHz) 225.000 ~ 550.000 (Guaranteed only 440 ~ 450 MHz)
	Transmit:	144.000 ~ 148.000 430.000 ~ 450.000 (Guaranteed only 440 ~ 450 MHz)

EUR version

[A band]	Receive:	118.000 ~ 174.000 (Guaranteed only 144 ~ 146 MHz) 225.000 ~ 550.000 (Guaranteed only 430 ~ 440 MHz)
	Transmit:	144.000 ~ 146.000 430.000 ~ 440.000
[B band]	Receive:	118.000 ~ 174.000 (Guaranteed only 144 ~ 146 MHz) 225.000 ~ 550.000 (Guaranteed only 430 ~ 440 MHz)
	Transmit:	144.000 ~ 146.000 430.000 ~ 440.000

- Modes: FM/FM-N (F1D/F2D/F3E), AM/AM-N(A3E)*, DV (F7W)
* RX only
- The number of Memory channels: 1000 channels (in 100 groups)
- The number of Skip channels: 100 channels
- The number of Program Scan Edge: 50
- The number of Call channels: 4 channels (2 channels × 2 bands)
- The number of repeater memories: 2500 (in 50 groups)
- The number of GPS memories: 300
- Usable temperature range: -10°C ~ +60°C, 14°F ~ 140°F
- Tuning steps: 5, 6.25, 8.33*, 10, 12.5, 15, 20, 25, 30, 50, 100, 125, and 200 kHz
* For only 118.000 MHz ~ 136.991 MHz
- Frequency stability: ±2.5 ppm (-10°C ~ +60°C, 14°F ~ 140°F)
- Power supply: 13.8 V DC ±15% (negative ground)
- Antenna impedance: 50 Ω
- Dimensions (projections not included):

Main unit	150 (W) × 40 (H) × 171.5 (D) mm, 5.9 (W) × 1.6 (H) × 6.8 (D) inches
Controller	163 (W) × 83.5 (H) × 24.1 (D) mm, 6.4 (W) × 3.3 (H) × 0.9 (D) inches
- Weight (approximate):

Main unit	1.28 kg, 2.8 lb
Controller	0.26 kg, 9.2 oz

◇ Transmitter

- Modulation system:
FM/FM-N Variable reactance frequency modulation
DV GMSK reactance frequency modulation
- Output power: High: 50 W, Mid: 15 W, Low: 5 W
- Current drain : High: 13.0 A or less
- Maximum frequency deviation:
FM ± 5.0 kHz or less
FM-N ± 2.5 kHz or less
- Spurious emissions: -60 dBc or less
- Microphone impedance: 600Ω

◇ Receiver

- Receive system: Double Conversion Superheterodyne
- Intermediate frequencies:
A band 1st IF 58.05 MHz, 2nd IF 450 kHz
B band 1st IF 57.15 MHz, 2nd IF 450 kHz
- Sensitivity:
Ham band FM/FM-N $0.18 \mu\text{V}$ or less (at 12 dB SINAD)
DV $0.18 \mu\text{V}$ or less (at 1% BER)
Outside Ham band

	Frequency range (MHz)	FM/FM-N (12 dB SINAD)	AM/AM-N (10 dB S/N)
A band, B band	118.000 ~ 136.99166	—	$1 \mu\text{V}$ or less
	137.000 ~ 143.995	$0.32 \mu\text{V}$ or less	$1 \mu\text{V}$ or less
	144.000 ~ 159.995	$0.32 \mu\text{V}$ or less	—
	160.000 ~ 174.000	$1 \mu\text{V}$ or less	—
	225.000 ~ 249.995	$1 \mu\text{V}$ or less	$3.2 \mu\text{V}$ or less
	250.000 ~ 299.995	$0.32 \mu\text{V}$ or less	$1 \mu\text{V}$ or less
	300.000 ~ 374.995	$1 \mu\text{V}$ or less	$3.2 \mu\text{V}$ or less
	375.000 ~ 399.995	$1 \mu\text{V}$ or less	$3.2 \mu\text{V}$ or less
	400.000 ~ 499.995	$0.32 \mu\text{V}$ or less	—
	500.000 ~ 550.000	$0.56 \mu\text{V}$ or less	—

- Audio output power:
Internal speaker 0.75 W or more at 10% distortion into an 8Ω load
External speaker 0.2 W or more at 10% distortion into an 8Ω load
- Selectivity:
FM 60 dB or more
FM-N 55 dB or more
DV 50 dB or more
- Current drain :
Standby 1.2 A or less
Maximum audio 1.8 A or less (Dualwatch with External Speaker 8Ω load)

8 SPECIFICATIONS

◇ Receiver

- Spurious and image rejection ratio:
60 dB or more
- Squelch Sensitivity:
Ham band 0.13 μV or less (threshold)
Outside Ham band

	Frequency range (MHz)	FM/FM-N	AM/AM-N
A band, B band	118.000 ~ 136.995	—	1 μV or less
	137.000 ~ 143.995	0.32 μV or less	1 μV or less
	144.000 ~ 159.995	0.32 μV or less	—
	160.000 ~ 174.000	1 μV or less	—
	225.000 ~ 249.995	1 μV or less	3.2 μV or less
	250.000 ~ 299.995	0.32 μV or less	1 μV or less
	300.000 ~ 374.995	1 μV or less	3.2 μV or less
	375.000 ~ 399.995	1 μV or less	3.2 μV or less
	400.000 ~ 499.995	0.32 μV or less	—
	500.000 ~ 550.000	0.56 μV or less	—

◇ Bluetooth

- Version: Bluetooth Version 5.3
- Transmission Output: Class 1
- Profile: HFP, HSP, SPP, GATT over serial
- The maximum number of paired Bluetooth devices:
7 devices
 - ① Maximum headsets or data devices are 4 devices each, and the maximum combination is 5 devices in total. Maximum Bluetooth Low Energy devices are 2 devices.
- Device Name: ICOM BT(ID-5200) (at default)
- Passkey: 0000 (four zeros)
- Operation Frequency Range:
BR, EDR 2.4G ISM band (2402 MHz ~ 2480 MHz)
- Maximum RF Output Power:
8.24 dBm (E.I.R.P)

◇ Wireless LAN

- Wireless LAN standard: IEEE802.11 a/b/g/n/ac/ax
- Authentication and Encryption:
WPA, WPA2
- Frequency Range and Output Power:
2.4 GHz band 2400 ~ 2483.5 MHz, 17 dBm
5 GHz band 5150 ~ 5250 MHz, 17.5 dBm
5250 ~ 5350 MHz, 18 dBm
5470 ~ 5725 MHz, 17 dBm
5725 ~ 5850 MHz, 10 dBm

① All stated specifications are typical and subject to change without notice or obligation.

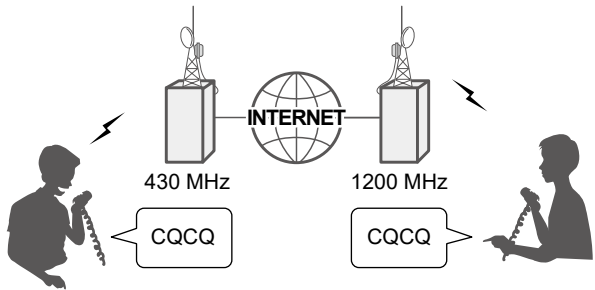
D-STAR GUIDE

for the ID-5200A/ID-5200E

INTRODUCTION

■ Unique features of D-STAR

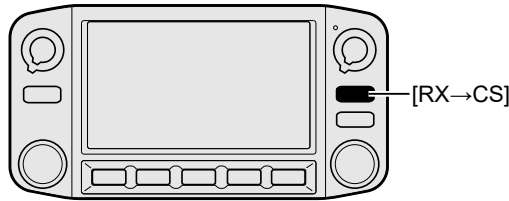
- Easy Cross band operation through the repeater!



- Easy call sign entry with the Repeater list or TX/RX History!



- The Call Sign Capture key [RX→CS] makes call sign capture easy!

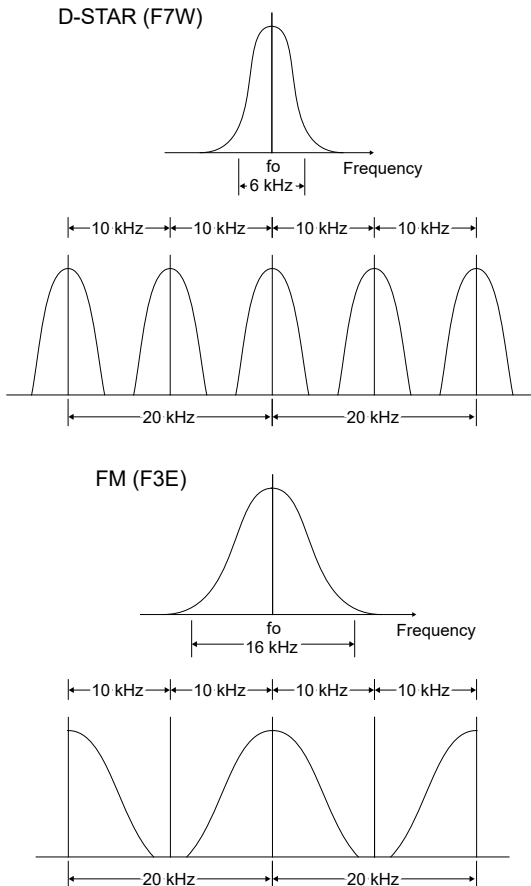


■ What is D-STAR?

- D-STAR is a digital protocol standard developed by the Japan Amateur Radio League (JARL). The system includes the DV mode for Digital Voice and the DD mode for Digital Data communications.
- D-STAR supports the DV mode at 4.8 kbps. Your call sign data, and either a short message or GPS data can be transmitted simultaneously with your voice signal.
- D-STAR supports a comprehensive repeater system linked through the Internet, enabling you to make QSOs with stations near or far from your location.

Advanced Amateur radio technology of D-STAR

The DV mode has a bandwidth of only 6 kHz, compared to 16 kHz for the analog FM mode, with 5 kHz deviation. D-STAR utilizes the well-known GMSK modulation method that makes very efficient use of occupied bandwidth.



D-STAR occupies 10 kHz. The sound quality is good even though the bandwidth is narrow.

The regular FM mode occupies 20 kHz that is double the bandwidth of D-STAR.

INTRODUCTION

IMPORTANT! Before starting D-STAR, the following steps are needed.
STEP 1. Enter your call sign (MY) into the transceiver. (p. 56)
STEP 2. Register your call sign (MY) to a gateway repeater. (p. 57)
STEP 3. Enter your D-STAR equipment into your registration form. (p. 57)

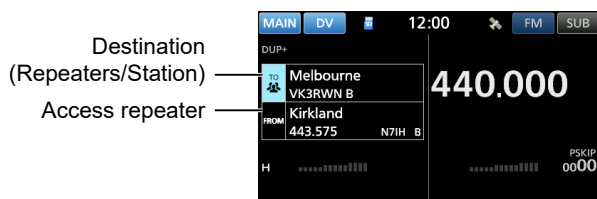
► **You have completed the steps!!**

■ About the DR function

You can easily use D-STAR repeaters with the D-STAR Repeater (DR) function. With this function, you can select the preset repeater or frequency in "FROM" (access repeater), and Your call sign in "TO" (destination) on the DR screen, as shown below.

- To display the DR screen, hold down [DR] for 1 second.

NOTE: If the repeater set in "FROM" (Access Repeater) has no Gateway, you cannot make a Gateway call.



The DR screen (Example)

■ Ways to Communicate with the DR function

With the DR function, the transceiver has 3 ways to communicate.

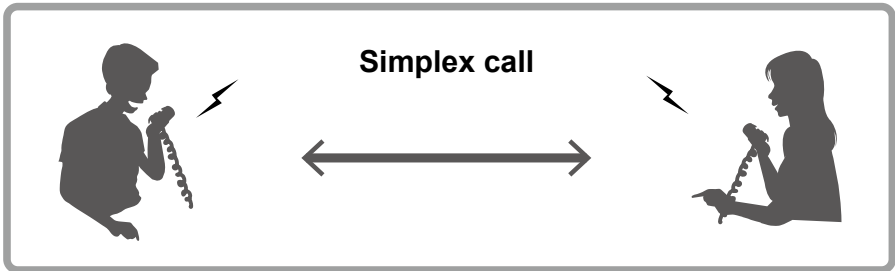
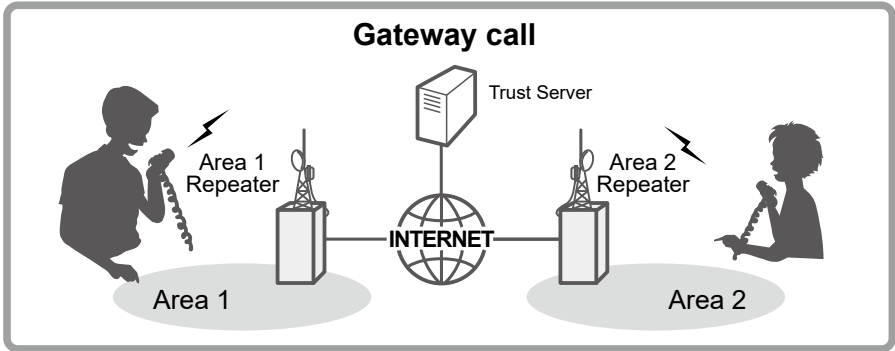
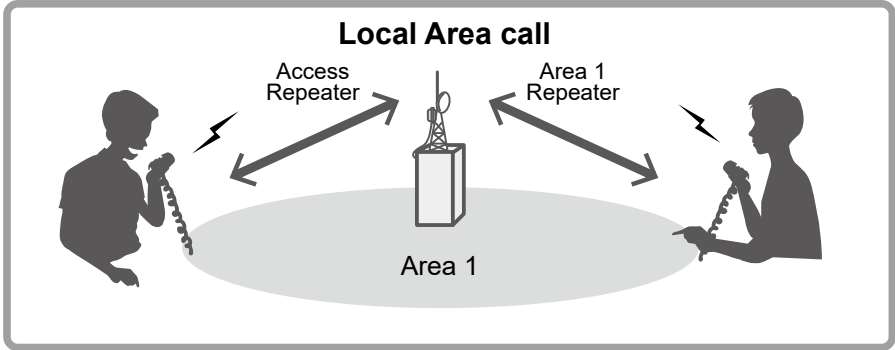
Local Area call: To call through your local area (access) repeater.

① You can use an FM repeater.

Gateway call: To call through your local area (access) repeater, repeater gateway, and the Internet to your destination repeater or individual station's last used repeater, using Call Sign Routing.

Simplex call*: To call another station not using a repeater.

* You can make a simplex call in the VFO mode.



NOTE:

- Using the repeater list is required to use the DR function. (p. 75)
- Before operating in the Duplex mode, **BE SURE** to check whether the repeater is busy or not. If the repeater is busy, wait until it is clear, or ask for a 'break' using a method acceptable to your local procedures.
- The transceiver has the Time-Out Timer function for the DV Repeater operation. The timer limits a continuous transmission. Warning beeps will sound approximately 30 seconds before timeout and then again immediately before the time-out.

INTRODUCTION

■ Enter your call sign (MY) into the transceiver

To operate D-STAR, you must first enter your call sign into the MY call sign memory. You can enter up to 6 MY call signs.

NOTE:

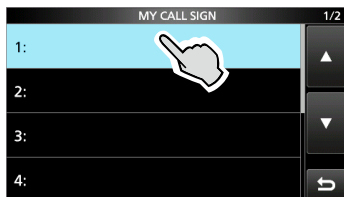
- Your MY call sign must match the call sign registered on a gateway repeater. (p. 57)
- The MY Call sign in the instructions is only an example used for explanation. You **MUST** enter your own call sign, the one that was assigned to you and is on your license.

Example: Enter “JA3YUA” as your own call sign into “MY1.”

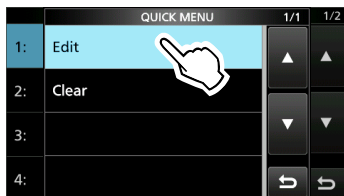
1. Open the My Call Sign screen.

[MENU] > SET > My Station >
My Call Sign

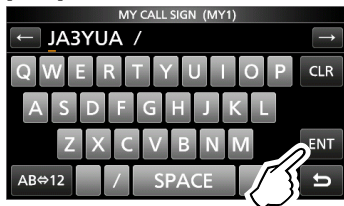
2. Touch the number for 1 second.



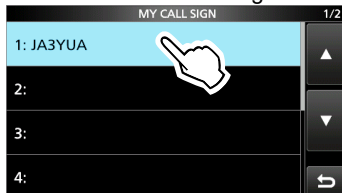
3. Touch “Edit.”



4. Enter your own call sign, then touch [ENT].



5. Touch the entered call sign.



- Sets the call sign to be used as MY call sign.

6. To close the MY STATION screen, push [EXIT].

TIP: You can enter a note of up to 4 characters, such as the transceiver model, name, or area name, after your call sign.

■ Register your call sign at a gateway repeater

To make a Gateway call through the Internet, you must register your call sign at a repeater that has a gateway, usually one near you.

About the registration process described:

This section describes the call sign registration process at a repeater that is connected to the US Trust server. There are other systems as well, and they have their own registration process. For information on how to register on one of them, contact the administrator of a repeater that uses the alternate system.

NOTE: If needed, ask the gateway repeater administrator for call sign registration instructions.

Step 1: Access the call sign registration screen

1. Access the following URL to find the gateway repeater closest to you.
<https://www.dstarusers.org/repeaters.php>
2. Click the call sign of the repeater that you want to register to.
3. Click the "Gateway Registration URL:" link address.
4. The "D-STAR Gateway System" screen is displayed.
Click <Register> to start the New User registration.

(Sample)

Step 2: Register your call sign

1. Follow the registration instructions found there.
2. When you receive a notification from the administrator, your call sign registration has been approved.

NOTE: It may take a few days for the administrator to approve you.

Step 3: Register your personal information

After your registration is approved, log in to your personal account with your registered call sign and password.

(Sample)

Step 4: Register your D-Star equipment

1. Register your D-STAR equipment information. Ask the gateway repeater administrator for details.
2. When your registration is complete, log out of your personal account and start using the D-STAR network.

NOTE: You must register your D-STAR equipment **BEFORE** you can make Gateway Repeater calls.

D-STAR OPERATION

■ Making a Simplex call

This section describes making a Simplex call (not through a repeater).

NOTE: The frequencies may be different, depending on the transceiver's version. Check for usable frequencies for your operating area.

What is a Simplex Call?

A Simplex call is a direct call to another station on a single frequency, not using a repeater.

Example: Making a simplex call on 445.670 MHz.

Step 1: Set "FROM" (Simplex channel).

1. Hold down [DR] for 1 second to display the DR screen.
2. Touch "FROM" to select, and then touch "FROM" again.

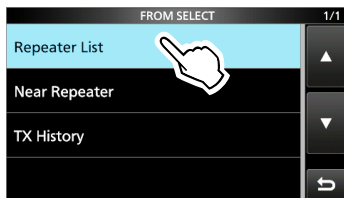


Step 2: Hold down [PTT] to transmit.

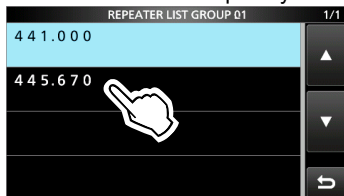
1. Hold down [PTT] to transmit.
2. Release [PTT] to receive.

TIP: You can change the simplex frequencies on the MENU screen. ([MENU] > DV MEMORY > **Repeater List**) See the Advanced manual for details.

3. Touch "Repeater List."



4. Touch "Simplex."
5. Touch the desired frequency.



- Returns to the DR screen, and the selected frequency is displayed in "FROM."
- "CQCQCQ" is displayed in "TO."
- ① If a station call sign is set in "TO," select "Local CQ" in the TO SELECT screen.

■ Accessing repeaters

This section describes how to access your local area repeater (access repeater), and check whether or not your signal is successfully sent to a destination repeater.

TIP: If your call sign (MY) has not been set, or your call sign and D-STAR equipment have not been registered at a D-STAR repeater, see pages 56 ~ 57.

Step 1: Set “FROM” (Access repeater).

1. Hold down [DR] for 1 second to display the DR screen.
2. Touch “FROM” to select, and then touch “FROM” again.



3. Touch “Repeater List.”
 - Displays the REPEATER GROUP screen.
4. Touch the repeater group where your access repeater is listed.
5. Touch your access repeater.
(Example: Kirkland)



- Returns to the DR screen, and the selected repeater name is displayed in “FROM.”

- ① By just selecting the repeater name, the repeater call sign, its frequency, duplex setting, and frequency offset are automatically set.
- ① A repeater list here is just an example.

Step 2: Set “TO” (Destination).

1. Touch “TO” twice.



2. Touch “Gateway CQ.”
 - Displays the REPEATER GROUP screen.
3. Touch the repeater group where your destination repeater is listed.
4. Touch your destination repeater.
(Example: Melbourne)



- Returns to the DR screen, and the selected repeater name is displayed in “TO.”

TIP: There are several ways to set your access repeater. (p. 72)

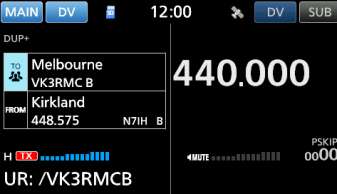
- Touching “FROM” and then rotating [DIAL] on the DR screen
- Searching for a repeater using the DR scan
- Searching for nearby repeaters
- Setting from the TX History

D-STAR OPERATION

■ Accessing repeaters

Step 3: Check whether you can access the repeater.

Hold down [PTT] for 1 second to transmit.



- If you get a reply call or “UR?” is displayed within 3 seconds, your signal reached your access repeater, and your call was successfully sent from your destination repeater.



TIP: See page 74 for status indications after a reply is received.

■ Receiving

When a DV call is received, the call signs of the caller, the called station, and the called station's access repeater are saved in the RX History. Up to 50 calls can be saved.

Even if you turn OFF the transceiver, the RX History is retained.

This section describes how to display the RX History screen and how to save the call sign to your memory.

When receiving a call from "JM1ZLK":

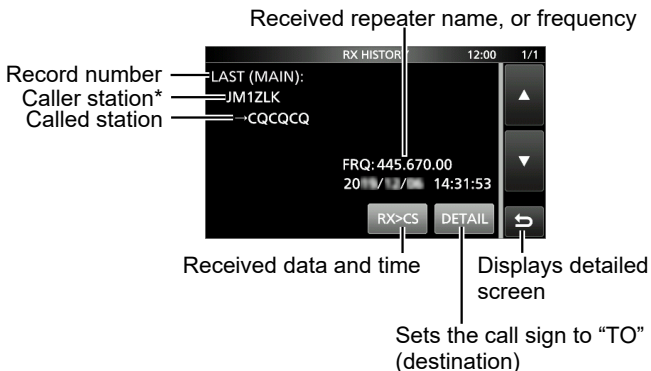


The S-meter and the caller's call sign are displayed.

Step 1: Display a received call sign.

1. Push [CD] for 1 second.
 - Displays the RX HISTORY screen.
2. Rotate [DIAL].
 - Displays other RX history records.

RX HISTORY screen (LAST(MAIN))



* The caller's name is displayed when the name is set in the "Your Call Sign" list.

Push [QUICK] to switch between name display and call sign display.

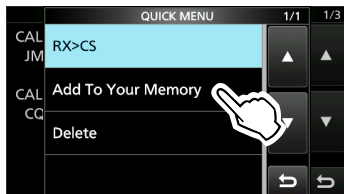
- ① "/" and a note may be displayed after the call sign.
- ① If a call is received from an area, not from a specific station, "CQCQCQ" is displayed.

D-STAR OPERATION

■ Receiving

Step 2: Save the destination call sign into your call sign memory from RX History.

1. Rotate [DIAL] to select the RX history record with the call sign that you want to save to memory.
2. Touch [DETAIL].
3. Push [QUICK].
4. Touch "Add To Your Memory."



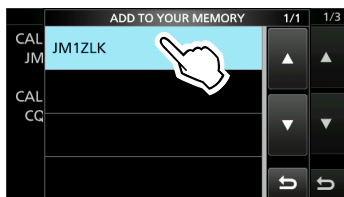
9. Touch [YES].



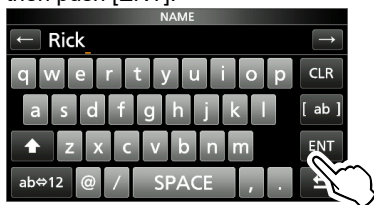
- Returns to the RX HISTORY DETAIL screen.

10. To close the RX HISTORY screen, push [EXIT] several times.

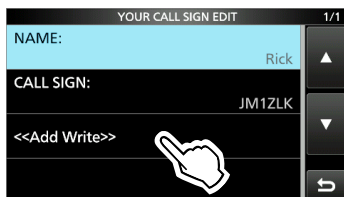
5. Touch the call sign that you want to save. (Example: "JM1ZLK")



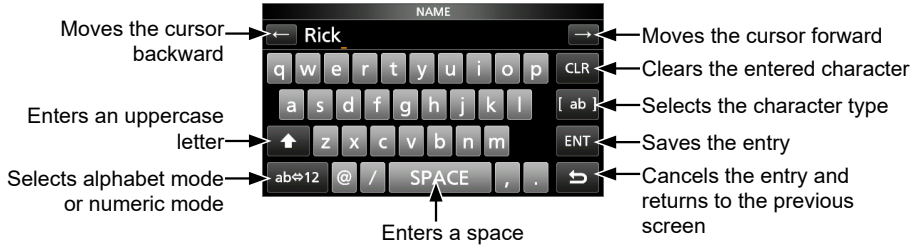
6. Touch "NAME."
7. Enter a name of up to 16 characters, then push [ENT].



8. Touch "<<Add Write>>."



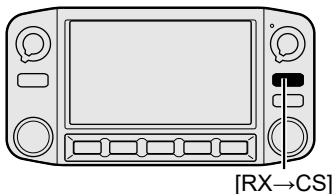
Entering and editing:



D-STAR OPERATION

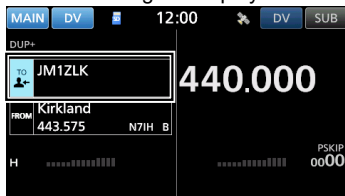
■ Capturing a call sign

After you receive a signal, the calling station's call sign can be captured in the RX>CS screen by holding down the Call Sign Capture key ([RX→CS]) for 1 second. In the RX>CS screen, you can quickly select the received station's call sign and easily reply to the call.



Step 1: Set the received call sign to "TO" (Destination).

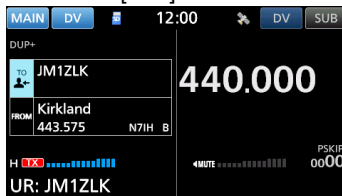
1. Hold down [RX→CS] for 1 second.
 - Displays the RX>CS screen.
2. Touch the call sign.
 - Returns to the DR screen, and the selected call sign is displayed in "TO."



- ① When a received signal is weak, or during a DV scan, the call sign may not be correctly received. In that case, you cannot capture the call sign.
- ① When "RX>CS SPEECH" is set to "OFF," the transceiver does not announce the call sign. ([MENU] > SET > Function > SPEECH > RX>CS SPEECH)

Step 2: Hold down [PTT] to transmit.

1. Hold down [PTT] to transmit.



2. Release [PTT] to receive.
 - ① Push [CALL] to return to the previous call sign setting.

■ Making a Local CQ call

You can make a Local CQ call when “Local CQ” is set to “TO” (Destination).

What is a Local CQ Call?

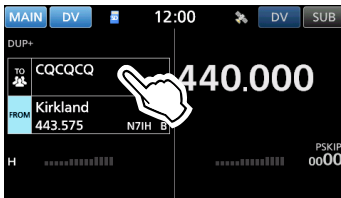
To call CQ through only your local area (access) repeater.

Step 1: Set “FROM” (Access repeater).

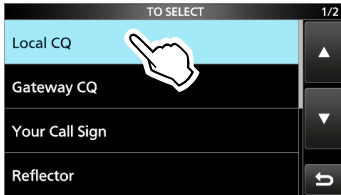
① Same as described in page 59.

Step 2: Set “TO” (Destination).

1. Touch “TO” twice.



2. Touch “Local CQ.”



- Returns to the DR screen, and “CQ CQ CQ” is displayed in “TO.”

Step 3: Hold down [PTT] to transmit.

1. Hold down [PTT] to transmit.



2. Release [PTT] to receive.

TIP: The Local CQ call is used to call anyone, but you can call a specific station by simply saying their call sign.

D-STAR OPERATION

■ Making a Gateway CQ call

You can make a Gateway CQ call when a destination repeater is selected in “TO” (Destination).

What is a Gateway CQ call?

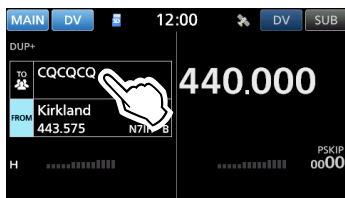
- To call a CQ through a repeater connected to the Internet.
- You can call a CQ to the areas where you cannot directly access because the communication is routed through the Internet.

Step 1: Set “FROM” (Access repeater).

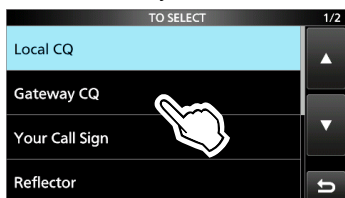
- ① Same as described in page 59.

Step 2: Set “TO” (Destination).

1. Touch “TO” twice.



2. Touch “Gateway CQ.”



- Displays the REPEATER GROUP screen.

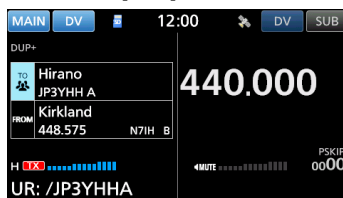
3. Touch the repeater group where your destination repeater is listed.
4. Touch your destination repeater.
(Example: Hirano)



- Returns to the DR screen, and the selected repeater name is displayed in “TO.”

Step 3: Hold down [PTT] to transmit.

1. Hold down [PTT] to transmit.



2. Release [PTT] to receive.

NOTE: If the selected Access repeater is not connected to the Internet, **XGW** is displayed. In that case, you cannot select “Gateway CQ.”

■ Calling an individual station

You can make a call to an individual station when the station call sign is selected in “TO” (Destination).

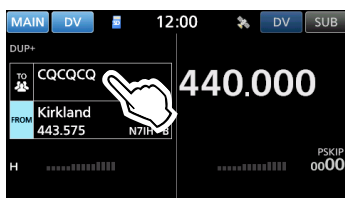
When you call an individual station through a gateway, your call is automatically sent to the last repeater that the station accessed. So, even if you don't know where the station is, you can make a call using Call Sign Routing.

Step 1: Set “FROM” (Access repeater).

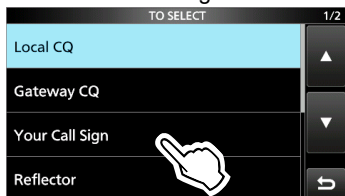
- ① Same as described in page 59.

Step 2: Set “TO” (Destination).

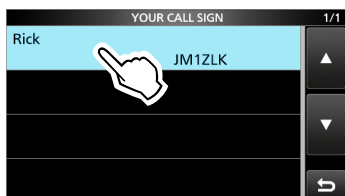
1. Touch “TO” twice.



2. Touch “Your Call Sign.”



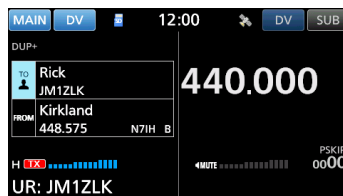
3. Touch your destination station.
(Example: Rick)



- Returns to the DR screen, and the selected station name is displayed in “TO.”

Step 3: Hold down [PTT] to transmit.

1. Hold down [PTT] to transmit.



2. Release [PTT] to receive.

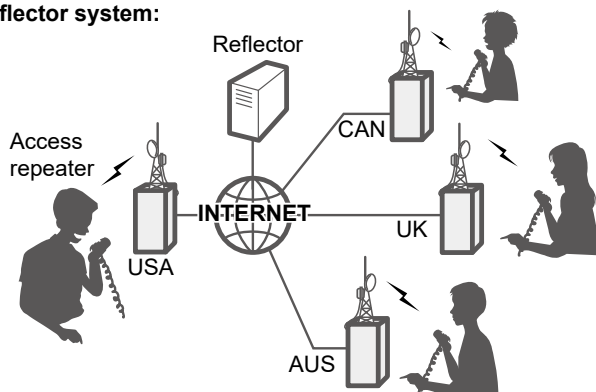
D-STAR OPERATION

■ About reflectors

◇ What is a reflector?

A reflector is a special server connected to the Internet and running a version of the D-Plus software. If the D-Plus software is installed on your Access repeater, it provides various functions, including gateway and reflector linking capabilities (It is known as the D-STAR reflector system). The D-STAR reflector system enables a number of D-STAR repeaters anywhere to link to a reflector. This means that when you transmit through a D-STAR repeater linked to a reflector, your voice can be heard on other repeaters linked to the reflector, and you can hear other stations that are connected to the reflector.

D-STAR reflector system:

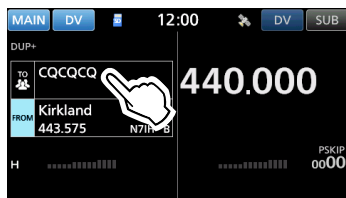


◇ Unlinking a reflector

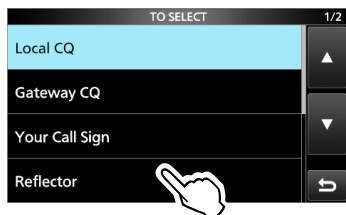
Before trying to link to another reflector, **BE SURE** to unlink the reflector that is currently connected to the repeater.

NOTE: If a reflector is already connected, ask on the air whether or not you can change reflectors and wait for responses. **BE SURE** to reconnect back to the same reflector when you finish your conversation.

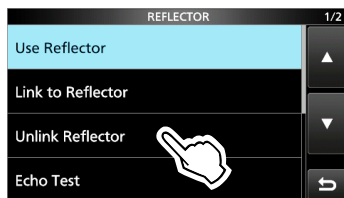
1. Touch "TO" twice.



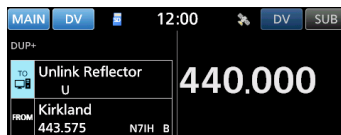
2. Touch "Reflector."



3. Touch "Unlink Reflector."



- Returns to the DR screen, and "Unlink Reflector" and "U" are displayed in "TO."



4. Hold down [PTT] to unlink the reflector.

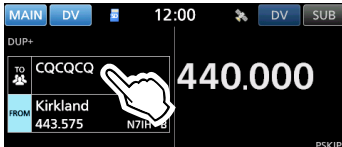
◇ Linking to a reflector

If your repeater is not currently linked to a reflector, or if you want to change it to another reflector, follow the steps below. Before linking to another reflector, **BE SURE** to unlink the current reflector. (p. 68)

Direct inputting a reflector

Example: Directly enter “REF030CL.”

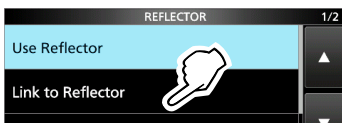
1. Touch “TO” twice.



2. Touch “Reflector.”



3. Touch “Link to Reflector.”



4. Touch “Direct Input.”



5. Touch [+] or [-] to select the reflector type, reflector number, and module letter, then touch [SET].



- Returns to the DR screen, and “Link to Reflector” and entered reflector are displayed in “TO.”

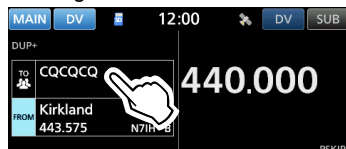
6. Hold down [PTT] to link to the reflector.

Using the TX History

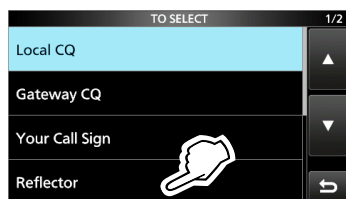
The TX History saves up to 5 reflectors that your Access repeater linked to before.

Example: Select the “REF030CL” in the TX History.

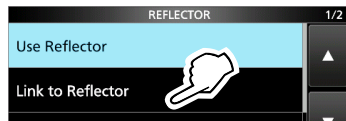
1. Touch “TO” to select, and then touch “TO” again.



2. Touch “Reflector.”



3. Touch “Link to Reflector.”



4. Touch the reflector that you want to link to.



- Returns to the DR screen, and “Link to Reflector” and “REF030CL” are displayed in “TO.”



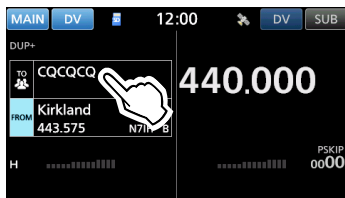
5. Hold down [PTT] to link to the reflector.

D-STAR OPERATION

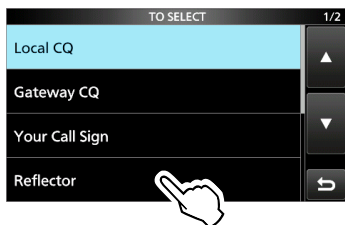
■ About reflectors

◇ Using a reflector

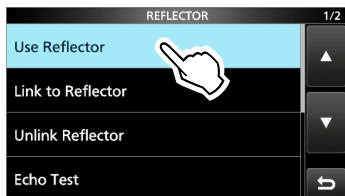
1. Touch "TO" twice.



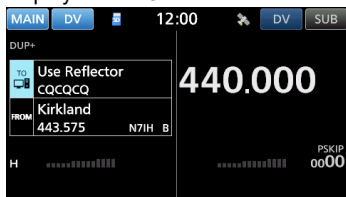
2. Touch "Reflector."



3. Touch "Use Reflector."



- Returns to the DR screen, and "Use Reflector" and "CQ CQ CQ" are displayed in "TO."



4. Hold down [PTT] to transmit.

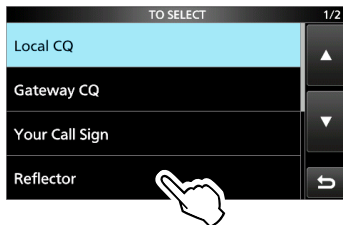
◇ Reflector Echo Testing

To confirm that your signal is correctly getting into the repeater, you can transmit a short message as a trial. After stopping transmission, your message will be played back.

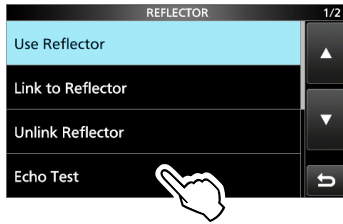
1. Touch "TO" twice.



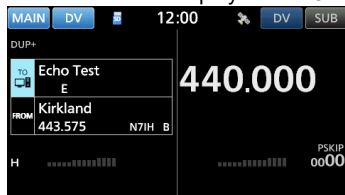
2. Touch "Reflector."



3. Touch "Echo Test."



- Returns to the DR screen, and "Echo Test" and "E" are displayed in "TO."

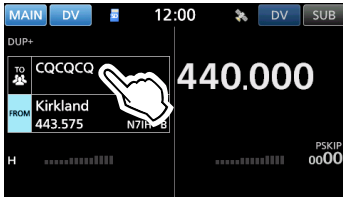


4. Hold down [PTT] and speak into the microphone.
5. Release [PTT] to hear your message.

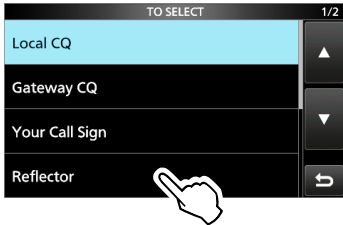
◇ Requesting repeater information

When you send the repeater information command, an ID message is sent back.

1. Touch "TO" twice.



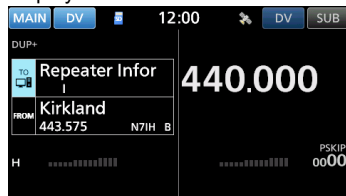
2. Touch "Reflector."



3. Touch "Repeater Information."



- Returns to the DR screen, and "Repeater Information" and "I" are displayed in "TO."



4. Hold down [PTT] to transmit the repeater Information command.
5. Release [PTT] to hear the repeater ID message.

■ “FROM” (Access repeater) setting

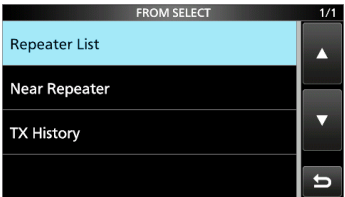
By rotating [DIAL]:

Select the preset repeater on the DR screen by touching “FROM” and then rotating [DIAL].

When you know your access repeater:

From the repeater list:

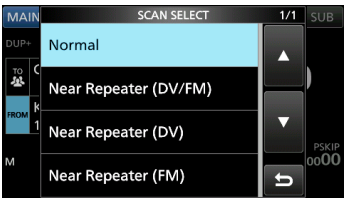
When your access repeater is in your transceiver’s repeater list, you can select it by selecting the repeater area and name, if entered, or call sign.



When you do not know which repeater you can access:

Search for a repeater using the DR scan:

The Normal DR scan searches for output repeater frequencies or simplex signals. You can also find FM repeaters.

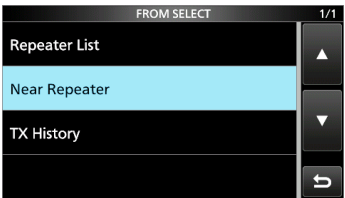


Search for the nearest repeater:

The transceiver searches for the nearest repeater by using your location and the repeater’s location, if it is entered in the Repeater List.

The nearest repeaters in your transceiver’s Repeater List are displayed as selectable choices.

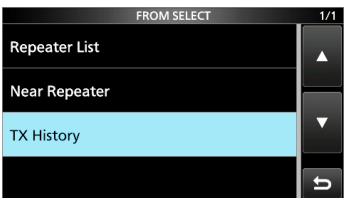
You can select a nearby DV or FM repeater type.



When the “FROM” data is saved in the TX History:

Select from the TX History:

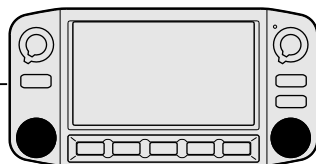
Select a repeater that you have accessed before from the TX History record.



■ “TO” (Destination) setting

By rotating [DIAL]:

Select the repeater or Your Call Sign that is displayed by rotating [DIAL] on the DR screen. (This operation is disabled when “CQCQCQ” is set.)



[DIAL]

[DIAL]

To make a Local Area CQ call:

Set “CQCQCQ” in “TO” (Destination).

To make a Gateway CQ call:

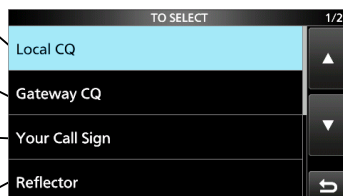
Select a repeater from the repeater list if you want to make a Gateway call.

To make a call to a specific station:

Select the station call sign in the Your Call Sign.

To make a call through a reflector:

Select a reflector that is connected to the repeater you want to call through.



To select from RX History:

When you receive a call, the caller's station data is saved in RX History. You can select the destination from the record.

To select from TX History:

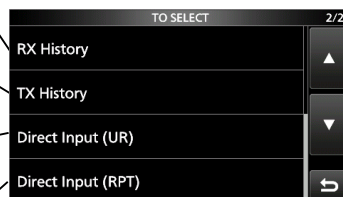
When you make a call, the destination repeater or called station data is saved in TX History. You can select the destination from the record.

To directly enter the destination station call sign:

Directly enter the destination station's call sign.

To directly enter the destination repeater call sign:

Directly enter the destination repeater's call sign.



TIP: After you receive the individual station or repeater's signal, the call sign can be captured in the RX>CS screen by holding down the Call Sign Capture key ([RX→CS]), and you can quickly select the received station's call sign and easily reply to the call.

■ When receiving no reply

To communicate through the repeater, your signal must access to the repeater. The following chart is designed to help you correct problems which are not equipment malfunctions.

① “AM” indicates the PDF type Advanced manual.

PROBLEM	POSSIBLE CAUSE	SOLUTION	REF.
After your call, the repeater does not return a status reply.	The repeater settings are incorrect.	Select the correct repeater.	p. 59
		Correct the repeater frequency, frequency offset, or duplex settings.	—
	Your transmission did not reach the repeater.	Wait until you are closer to the repeater and try again.	—
		Try to access another repeater.	—
After your call, ‘UR?’ and its call sign are displayed.	The call was successfully sent, but no station immediately replied.	Wait for a while, and try again.	—
After your call, ‘RX?’ or ‘RPT?’ and the access repeater’s call sign are displayed.	Your own call sign (MY) has not been set.	Set your own call sign (MY).	p. 56
	Your own call sign (MY) has not been registered on a gateway repeater, or the registered contents do not match your transceiver’s settings.	Register your own call sign (MY) on a gateway repeater, or confirm the registration of the call sign.	p. 57
After your call, ‘RPT?’ and the access repeater’s call sign are displayed.	The call sign of the destination repeater is incorrect.	Correctly set the destination repeater’s call sign.	—
After your call, ‘RPT?’ and the destination repeater’s call sign are displayed.	The repeater cannot connect to the destination repeater.	Check the repeater settings.	—
	The repeater is busy.	Wait for a while, and try it again.	
Even holding down [DR], the DR screen is not displayed.	There is no repeater list in your transceiver.	Import the list using a microSD card.	p. 75
		Directly enter the Repeater list data into the transceiver.	AM
	The Lock function is activated.	Touch [OFF] in the popup window to turn OFF the Lock function.	p. 30
	The DR function is not assigned to the [DR].	Check the assignable key functions for the [CALL/DR].	AM

PROBLEM	POSSIBLE CAUSE	SOLUTION	REF.
Even when you select from the RX>CS screen, the received call sign will not be set to the destination call sign.	The call sign has not been correctly received.	Try it again, after the transceiver has correctly received the call sign.	—
	When a received signal is weak, or a signal is received during scanning, the call sign may not be received correctly. In that case, “----” is displayed and error beeps sound, and a reply call cannot be made.		
A Local area call can be made, but the Gateway call or destination station call cannot be made.	MY call sign has not been registered.	Register your own call sign (MY) on a gateway repeater, or confirm the registration of the call sign.	p. 57
	The repeater set in “FROM” (Access Repeater) has no Gateway.	Check the repeater settings.	—
“L” is displayed.	While receiving through the Internet, some packets may be lost due to network errors (or poor data throughput performance).	Wait a while, and try it again. ① When the transceiver receives corrupted data, and misidentifies it is as packet loss, “L” is displayed, even if it is a Local area call.	—
“DV” and “FM” icons alternately blink.	While in the DV mode, an FM signal is received.	Use a different operating frequency until there are no FM signals on the original frequency. ① See the Automatic DV detection on the Advanced manual.	AM

■ Updating the repeater list

For easy operation, a repeater list is preloaded into your transceiver. You can download the repeater list from the Icom website.

NOTE:

- Before using a microSD card, see page 33 for details of a card.
- See “Updating the repeater list” that can be downloaded from the Icom website about how to update the repeater list using a microSD card.
<https://www.icomjapan.com/support/>

INDEX

1 MHz tuning 27

A

A band 23
Access repeater..... 59, 60
AM-N 26
Audio level 22
Auto Power OFF icon 16

B

Band Scope 30
Band Select 25
B band 23
BK 16
Bluetooth
 Connecting 42
 Deleting 43
 Disconnecting 43
 Icon 16
 Pairing 42
 Turning ON 41

C

Call
 Gateway 66
 Individual station 67
 Local 65
 Simplex 58
Call Channel mode 24
CALL key 15
Call sign 56
CD key 15
Character
 Entering and editing 63
Controller 15

D

Disposal 3
DOC 3
DR function 25, 54
DR key 15
D-STAR 51
Dual band display 23
Dualwatch 23
DV 26

E

Echo Test 70
EMR 16

F

FCC 4
FM 26
FM-N 26
FROM 72
FUNCTION screen 18

G

Gateway call 66–75
GPS 38
 GPS Alarm icon 17
 GPS Logger function 40
 GPS POSITION screen 39
 GPS receiver 6

H

Home Channel function 28

L

L 16
Link to Reflector 69
Local call 65
Lock function 30

M

MAIN band 23
Memory channel
 Entering 31
 Selecting 32
Memory mode 24
Memory Scope 30
MEMORY screen 32
MENU
 List 80
 MENU key 14
 MENU screen 18
Microphone 21
microSD card
 Formatting 34
 Inserting 34
 Unmounting 37
MONI key 14
Monitor function 22
My Call Sign 56

N	T
Near Repeater search function..... 72	TO..... 73
O	TOUCH ASSIST screen 19
Operating mode..... 26	Transmitting..... 29
P	Troubleshooting..... 46
Pairing/Connect..... 42	Troubleshooting, DR 74
Partial Reset..... 44	Tuning step..... 26
Playing a recorded audio..... 36	Turning ON 22
Q	TX POWER 29
QUICK key..... 15	U
QUICK MENU..... 19	UKCA DOC..... 3
R	Unlinking a reflector..... 68
Receiving	UR? 60
Receiving, DR..... 61, 62	USB COM..... 16
Recording a QSO audio 36	Use Reflector..... 70
Reflector 68	V
Echo Testing 70	VFO mode 24
Linking..... 69	Volume..... 22
Requesting repeater information.... 71	VOX..... 16
Unlinking 68	W
Using..... 70	Weather Channel mode..... 24
Repeater list 75	
Resetting 44	
RX>CS key..... 15	
RX history..... 61	
S	
Saving the setting..... 35	
SCAN key..... 15	
Scan operation 27	
Share Pictures function 17	
Simplex..... 58	
Single band display 23	
Specifications 48	
Speech function..... 28	
SPEECH key..... 15	
Squelch..... 22	
S/RF METER..... 17	

ABOUT THE LICENSES

Information on the open source software being used by this product.

ZLIB DATA COMPRESSION LIBRARY

zlib 1.2.8 is a general purpose data compression library. All the code is thread safe. The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://tools.ietf.org/html/rfc1950> (zlib format), [rfc1951](http://tools.ietf.org/html/rfc1951) (deflate format) and [rfc1952](http://tools.ietf.org/html/rfc1952) (gzip format).

All functions of the compression library are documented in the file `zlib.h` (volunteer to write man pages welcome, contact zlib@gzip.org). A usage example of the library is given in the file `test/example.c` which also tests that the library is working correctly. Another example is given in the file `test/minigzip.c`. The compression library itself is composed of all source files in the test directory. To compile all files and run the test program, follow the instructions given at the top of `Makefile.in`. In `./configure`, make test", and if that goes well, "make install" should work for most flavors of Unix. For Windows, use one of the special makefiles in `win32/` or `contrib/vstudio/`. For VMS, use `make_vms.com`. Questions about zlib should be sent to zlib@gzip.org, or to Gilles Vollant info@winimage.com for the Windows DLL version. The zlib home page is <http://zlib.net/>. Before reporting a problem, please check this site to verify that you have the latest version of zlib; otherwise get the latest version and check whether the problem still exists or not.

PLEASE read the zlib FAQ http://zlib.net/zlib_faq.html before asking for help.

Mark Nelson markn@ieee.org wrote an article about zlib for the Jan. 1997 issue of Dr. Dobbs' Journal; a copy of the article is available at <http://marknelson.us/1997/01/01/zlib-engine/>. The changes made in version 1.2.8 are documented in the file `ChangeLog`. Unsupported third party contributions are provided in directory `contrib/`. zlib is available in Java using the `java.util.zip` package, documented at <http://java.sun.com/developer/technicalArticles/Programming/compression/>.

A Perl interface to zlib written by Paul Marquess pmqs@cpan.org is available at CPAN (Comprehensive Perl Archive Network) sites, including <http://search.cpan.org/~pmqs/IO-Compress-Zlib/>.

A Python interface to zlib written by A.M.Kuchling amk@amk.ca is available in Python 1.5 and later versions, see <http://docs.python.org/library/zlib.html>. zlib is built into tcl: <http://wiki.tcl.tk/4610>.

An experimental package to read and write files in .zip format, written on top of zlib by Gilles Vollant info@winimage.com, is available in the `contrib/minizip` directory of zlib.

Notes for some targets:

- For Windows DLL versions, please see `win32/DLL_FAQ.txt`
- For 64-bit Irix, deflate.c must be compiled without any optimization. With -O, one library test fails. The test works in 32 bit mode (with the -n32 compiler flag). The compiler bug has been reported to SGI.
- zlib doesn't work with gcc 2.6.3 on a DEC 3000/300LX under OSF/1 2.1 it works when compiled with cc.
- On Digital Unix 4.0D (formerly OSF/1) on AlphaServer, the cc option -std1 is necessary to get gzprintf working correctly. This is done by configure.
- zlib doesn't work on HP-UX 9.05 with some versions of /bin/cc. It works with other compilers. Use "make test" to check your compiler.
- gzopen is not supported on RISCOS or BEOS.
- For PalmOS, see <http://palmzlib.sourceforge.net/>

Acknowledgments:

The deflate format used by zlib was defined by Phil Katz. The deflate and zlib specifications were written by L. Peter Deutsch. Thanks to all the people who reported problems and suggested various improvements in zlib; they are too numerous to cite here.

Copyright notice:

(C) 1995-2013 Jean-loup Gailly and Mark Adler
This software is provided 'as-is', without any express or implied warranty. In no event will the

authors be held liable for any damages arising from the use of this software.
Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu
If you use the zlib library in a product, we would appreciate "not" receiving lengthy legal documents to sign. The sources are provided for free but without warranty of any kind. The library has been entirely written by Jean-loup Gailly and Mark Adler; it does not include third-party code.

If you redistribute modified sources, we would appreciate that you include in the file `ChangeLog` history information documenting your changes. Please read the FAQ for more information on the distribution of modified source versions.

License for CMSIS-RTOS RTX Implementation

Copyright (c) 1999-2009 KEIL, 2009-2013 ARM
Germany GmbH All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of ARM nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL COPYRIGHT HOLDERS AND CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libpng you may insert additional notices immediately following this sentence.
This code is released under the libpng license.
libpng versions 1.2.6, August 15, 2004, through 1.6.12, June 12, 2014, are Copyright (c) 2004, 2006-2014 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.2.5 with the following individual added to the list of Contributing Authors:
Cosmin Truta
libpng versions 1.0.7, July 1, 2000, through 1.2.5,

October 3, 2002, are Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors:
Simon-Pierre Cadieux
Eric S. Raymond
Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999, 2000 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996, 1997 Andreas Dilger Distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler
Kevin Bracey
Sam Bushell
Magnus Holmgren
Greg Roelofs
Tom Tanfani

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger
Dave Martindale
Guy Eric Schalnat
Paul Schmidt
Tim Wegner

The PNG Reference Library is supplied "AS IS".

The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

A "png_get_copyright" function is available, for convenient use in "about" boxes and the like:
`printf("%s", png_get_copyright(NULL));`
Also, the PNG logo (in PNG format, of course) is supplied in the files "pngbar.png" and "pngbar.jpg" (88x31) and "pngnow.png" (98x31).

Libpng is OSI Certified Open Source Software. OSI Certified is a certification mark of the Open Source Initiative.

The contributing authors would like to thank all those who helped with testing, bug fixes, and patience. This wouldn't have been possible without all of you.

Thanks to Frank J. T. Wojcik for helping with the documentation.

mbed TLS

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION>

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual,

worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.
To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets [] replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

MENU SCREEN ITEMS

When pushing [MENU], the following MENU items are displayed.
Refer to the Advanced manual for each menu item's details.

SCOPE
VOICE
REC
SET
TX Monitor
Repeat Time
RECORD
<<REC Start>>
Play Files
Recorder Set
RX REC Condition
File Split
REC Operation
PTT Auto REC
PRE-REC for PTT Auto REC
Player Set
Skip Time
PICTURE
DV GW
<<Terminal Mode>>
<<Access Point Mode>>
Gateway Select
Internal Gateway Settings
Gateway Repeater (Server IP/Domain)
Terminal/AP Call sign
Gateway Type
UDP Hole Punch
Allowed Call Sign (Access Point Mode)
Allowed Call Sign List
CS
CD

GPS
GPS Set
GPS Select
Internal GPS Option
SBAS
GLONASS
Satellite Information Out
External GPS Baud Rate (DATA)
Manual Position
GPS TX Mode
OFF
D-PRS
Unproto Address
TX Format
NMEA
GPS Sentence
GPS Message
GPS Information
GPS Position
GPS Memory
GPS Alarm
Alarm Select
Alarm Area (Group)
Alarm Area (RX/Memory)
GPS Logger
GPS Logger
Record Interval
Record Sentence
GPS Auto TX
DTMF
SET > DUP/TONE...
Offset Frequency
Repeater Tone
TSQL Frequency
Tone Burst
DTCS Code
DTCS Polarity
Digital Code

SET > Scan
Pause Timer
Resume Timer
Temporary Skip Timer
Program Skip
Group Link
Program Scan Edge
Program Link
DUP Check During MR Scan
SET > Scope
Scope Mode (VFO/CALL)
Displayed Steps
Waterfall Function
Waterfall Speed
FIX Mode Center Frequency
AF Output (DUAL)
SET > Function
Auto Power OFF
Squelch/ATT Select
Squelch Delay
Fan Control
Time-Out Timer
One-Touch PTT (Remote MIC)
PTT Lock
Busy Lockout
MIC Gain
SPEECH
SPEECH Language
Alphabet
SPEECH Speed
SPEECH Level
RX Call Sign SPEECH
RX>CS SPEECH
DIAL SPEECH
MODE SPEECH
Auto Repeater
Active Band
Dial Speed-UP
Touch Operation (Sub)
Touch Assist

Front Key Customize
[CD/RX>CS]
[CALL/DR]
Remote MIC Key
During RX/Standby
During TX
Up/Down MIC Key
During RX/Standby
During TX
Keyboard Type
Full Keyboard Layout
Screen Capture [POWER] Switch
Screen Capture File Type
IF Exchange
Power OFF (With No Controller)
SET > My Station
My Call Sign
TX Message
My Call Sign (TM)
SET > DV Set
Tone Control
RX Bass
RX Treble
RX Bass Boost
TX Bass
TX Treble
Auto Reply
DV Data TX
DV Fast Data
Fast Data
GPS Data Speed
TX Delay (PTT)
Digital Monitor
Digital Repeater Set
DV Auto Detect
RX Record (RPT)
BK
EMR
EMR AF Level

① "Auto Repeater" is displayed depending on the transceiver version.

MENU SCREEN ITEMS

SET > DV Repeater Monitor Set
Connection IP Address List
SET > QSO/RX Log
QSO Log
RX History Log
CSV Format
Separator/Decimal
Date
SET > Connectors
CI-V
CI-V Address
CI-V Transceive
CI-V USB Echo Back
CI-V DATA Baud Rate
CI-V DATA Echo Back
USB Connect
USB Serialport (Power OFF)
Serialport Function
USB (A) Function
USB (B) Function
DATA Function
DV Data Baud Rate (DATA)
Weather Input Baud Rate (DATA)
SET > Display
LCD Backlight (Auto Adjusting)
Screen Saver
Group Name Popup
RX Call Sign Display
RX Position Indicator
RX Position Display
RX Position Display Timer
Reply Position Display
RX Picture Indicator
DV RX Backlight
TX Call Sign Display
Scroll Speed
Opening Message
Voltage (Power ON)
Clock/Voltage Display

Display Unit
Latitude/Longitude
Altitude/Distance
Speed
Temperature
Barometric
Rainfall
Wind Speed
Display Language
System Language
SET > Sounds
Beep Level
Key-Touch Beep
Home CH Beep
Band Edge Beep
Scan Stop Beep
Standby Beep
Sub Band Mute (Main RX)
Sub Band Mute (TX)
SET > Time Set
Date/Time
Date
Time
<<NTP TIME SYNC>>
NTP Function
NTP Server Address
GPS Time Correct
UTC Offset
SET > Bluetooth Set
Bluetooth
Auto Connect
Pairing/Connect
Device Search
Pairing List
<<Pairing Reception>>
Headset Set
AF Output
Headset Function Select
Auto Disconnect
VOX
Icom Headset

Data Device Set
Serialport Function
Bluetooth Device Information
Initialize Bluetooth Device
SET > Wi-Fi Set
Wi-Fi
Connection Settings (* Valid after Restart)
Access Point
Manual Connect
SSID
Security Type
Password
<<Connect>>
DHCP *
IP Address *
Subnet Mask *
Default Gateway *
Primary DNS Server *
Secondary DNS Server *
Network Name
SET > SD Card
Load Setting
Save Setting
Import/Export
Import
Export
CSV Format
Separator/Decimal
Date
SD Card Info
Screen Capture View
TX/RX Picture View
Firmware Update
Format
Unmount

SET > Others
Information
Voltage
Version
MAC Address
Clone
Clone Mode
Touch Screen Calibration
Reset
Partial Reset
All Reset
MEMORY
Memory CH
Call CH
DV MEMORY
Your Call Sign
Repeater List
DV A-RPLY
KISS
KISS Set
Data Speed
Data Band
DCD Sence
TX Delay
KISS Interface
KISS Interface Baud Rate (DATA)

- ① "Display Language" is displayed only when "System Language" is set to "Japanese."
 ① "Pairing List" indicates the Paired devices.



Icom Inc.

1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan

A7870D-1EX

Printed in Japan

© 2026 Icom Inc.

Jul. 2026
