

HIROYASU[®]

IC-980Pro Max



Amateur Mobile Radio

User's Manual

Contents

Safety Information.....	1
Packing Content.....	2
Product Introduction.....	3
Basic Operation.....	4
I . RF Options.....	5
II . Sub-audio	14
III . Scan	20
IV . Signal.....	22
V . Func	25
VI . Set	30
Steps to manually add a new channel.....	41
Fast Copy a channel from other Radios	42
FM Radio	43
Quick access menu settings.....	45
Key Technical Specifications.....	47

FCC Declaration of Conformity

This device complied 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.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 100cm between the radiator and your body.

Note: 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.

Important: Change or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

Safety Information

Please observe the following precautions to prevent fire, personal injury, or damage to the walkie-talkie.

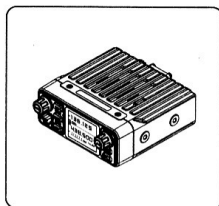
1. Do not use this device while driving, as it is highly dangerous.
2. This walkie-talkie is designed to operate on a 13.8V DC power supply; never use a 24V power source.
3. Do not place the device in dusty, damp, or wet locations, or on unstable surfaces.
4. If reception is affected by external interference, keep the device away from interfering equipment (such as TVs, generators, etc.).
5. Avoid prolonged exposure to direct sunlight or placement near heating devices.
6. If the device emits smoke or unusual odors, immediately disconnect the power supply. After confirming the issue, send it to the nearest service center for inspection.
7. Avoid prolonged high-power transmission, as it may cause the walkie-talkie to overheat.

•Supplied Accessories

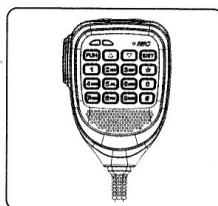
Thanks a lot for you purchasing Hiroyasu IC-980Pro Max amateur mini mobile Radio..
Before use, it is recommended that you:

- ①First, check the packaging box of this product for any signs of damage;
- ②Carefully open the packaging box and confirm whether the items listed in the table below are inside;
- ③If you find any loss or damage to this product or its accessories during handling, please contact the dealer immediately.

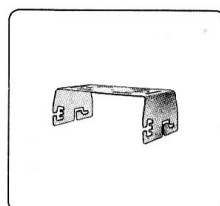
Packing Content



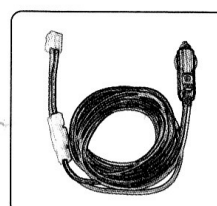
Body



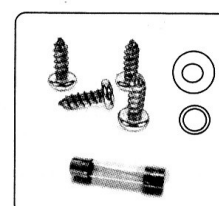
Microphone



Bracket

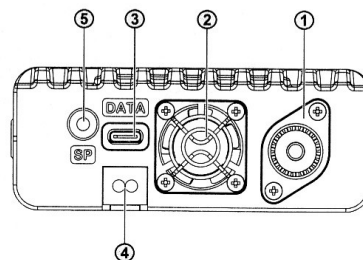
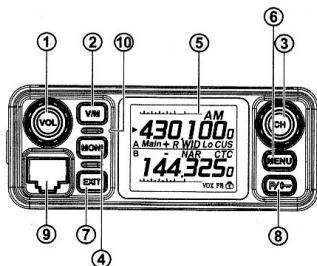


Power Cable



Fuse & Screws

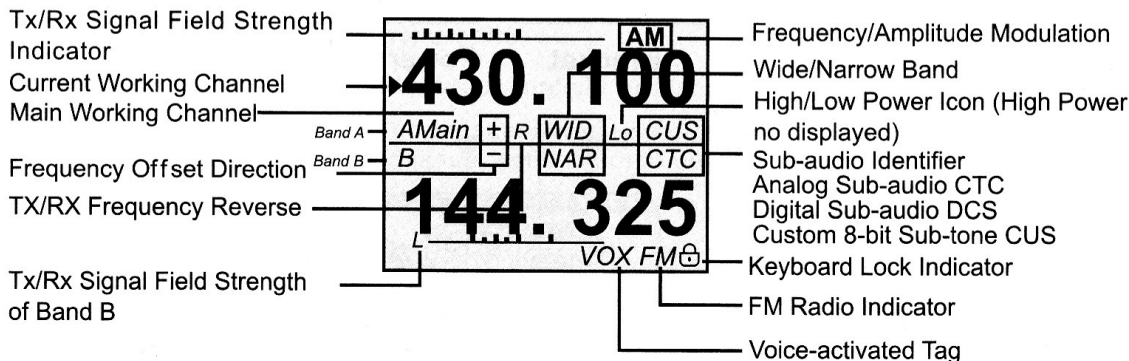
•Product Introduction



Front Panel:

1. Power Switch, Volume Knob
2. Channel No./Channel Name/
Frequency Display Switch Button
3. Channel +/- / Enter Sub-menu And Confirm Button
4. Monitor Button
5. Colored Display Screen
6. Menu Button
7. Exit/Return Button
8. PTT (Secondary PTT)
9. Hand Microphone Socket
10. Front Panel Mic

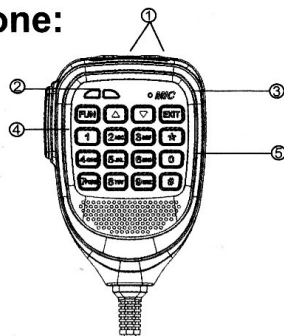
Colored Display Screen:



Rear Panel:

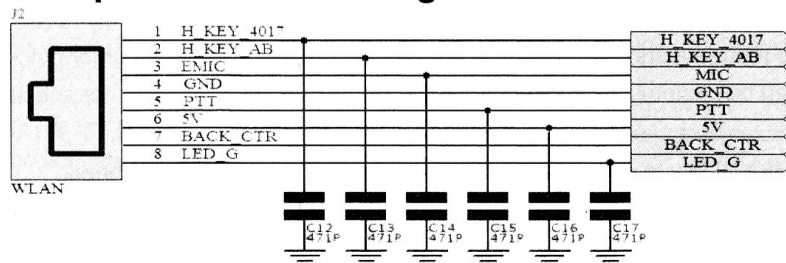
1. Antenna Connector
2. Fan
3. Data Connector (DATA)
4. Power Cable
5. External Speaker Connector (SP)

Microphone:



1. Main Chanel/Sub-channel Switching:(Press A or B to switch as Main Band Correspondinly)
2. RX/TK Led Indicator:
 - ① Green led lights up for signal receiving
 - ② Red led lights up for signal transmitting
3. Mic
4. Push to Talk Button
5. Number Keys (for function settings, VFO frequency input, etc.)

Mic Speaker Wired Diagram:



Basic Operation

■ Denifition of main key functions:

1. The [MENU] button on the front panel and the [FUN] button on the Microphone speaker share the same functionality, both serving to enter menu options and confirm menu selections.
2. The left/right rotation of the channel selector knob on the Front panel and the functionality of the button on the Microphone Speaker are essentially the same, both enabling frequency/channel adjustment or page navigation up/down/left/right in menus..
3. Menu Instruction: Primary Menu: After the user completes the initial boot-up without pressing any keys, pressing the [MENU] key for the first time will display the primary menu. Rotate the [CH] channel knob to view all primary menu options.

The primary menu has six options: 1 . RF 2. Sub-audio 3. Scan 4. Signaling 5. Function 6. Settings

Within any primary menu, pressing the [MENU] key briefly will enter the selection interface for the secondary menu. There are numerous secondary menu options, which will not be listed exhaustively here.

Featured Function: In any secondary menu, users can customize a preferred number as a shortcut for quick access in the future. Numbers 1-6 can be customized, while numbers 7 and above are predefined for special functions.

For example: Users can press the [MENU] key to enter the primary menu, select the [RF] option, press [MENU] again to enter the secondary menu [1 .1 Squelch Level], then long-press the number [1]. The screen will display [Key:1] next to 1 .1 , allowing users to quickly access the [1 .1 Squelch Level] option by pressing [MENU] followed by [1] next time.

I .RF Options

① SQL: Squelch System Settings

This function is used to detect the strength of the received signal. When the received signal strength reaches the set value, the audio reception call is activated; otherwise, the radio remains muted.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the $\Delta \nabla$ key until the [RF] option is selected. (If the user has customized a corresponding shortcut key, simply press [MENU] + the corresponding number to directly access it.)
2. Briefly press the [MENU] key to enter the secondary menu, then rotate the channel knob or press the $\Delta \nabla$ key until the [1 .1 Squelch Level] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob to select the desired level: 0-9, totaling 10 levels. (Default is level 5; level 0 keeps the audio always on.)
4. Press the [MENU] button or channel knob briefly to confirm, and press the [EXIT] button to return.

② Anti-interference level setting

This function is used when the receiver is in a complex electromagnetic interference environment, where nearby electromagnetic fields contain carrier signals similar to the receiving channel, causing false audio activation. Setting the anti-interference level to high can effectively reduce unnecessary disturbances. The default level is medium.

1. Press the [MENU] button briefly to enter the first-level menu options. Rotate the channel knob or $\Delta \nabla$ key until the [RF] option is selected. (If the user has customized a corresponding shortcut key, simply press [MENU] + the corresponding number to directly access it.)
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or $\Delta \nabla$ key until the [1 .2 Anti-interference Level] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob to select the desired setting: High/Medium/Low.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

Note: When the anti-interference level is set to high, it may slightly reduce the communication range. Use this feature with Caution, and you are recommended to use the default setting: Medium.

③ High/Low Power Selection

This function controls the carrier power during transmission. Select the power level according to your needs.

1. Press the [MENU] button briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Press the [MENU] button or channel knob briefly to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [1.3 POWER] setting is selected.
3. Press the [MENU] button or channel knob briefly to enter the menu. Rotate the channel knob or press the ▲▼ key to select the desired power level [High/Low].
4. Press the [MENU] button briefly to confirm, then press the [EXIT] button to return.

④ Companding

When this function is enabled, weaker sounds are attenuated while louder voices are amplified, improving the contrast of received audio for clearer communication.

1. Press the [MENU] button briefly to access the primary menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Briefly press the [MENU] key or channel knob to enter the secondary menu. Rotate the channel knob or press the ▲▼ key until the [1.4 Companding] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob to select the desired setting: On/Off. Default: Off
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑤ Scramble

This function utilizes analog methods to segment, replace, and recombine the frequency bands of voice signals, achieving analog encryption of the audio.

This ensures that receivers without this function or not following the same combination sequence cannot clearly understand the communication content.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Briefly press the [MENU] key or channel knob to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [1 .5 Scramble] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob to select the desired scrambling group. There are 8 groups (1~8) and an off option.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑥ Bandwidth

This function is for channel bandwidth selection (25K wideband/12.5K narrowband). Users should choose the legal communication bandwidth according to local regulations.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Briefly press the [MENU] key or channel knob to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [1 .6 Bandwidth] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to select wideband or narrowband.

4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑦ Busy Channel Lockout

This feature prevents the receiver from transmitting when the channel is already in use by another user, avoiding co-channel interference for others. It offers three options

- A. CAT: The transmitter will be inhibited as long as the receiver detects a channel with the same carrier frequency, and transmission is only permitted once the carrier signal disappears.
 - B. QDT: The transmitter will only be inhibited if the receiver detects not only the same carrier frequency but also matching CTCSS, DCS, or a specific DCS code.
 - C. Off: No transmission inhibition. The transmitter can be activated at any time by the receiver..
1. Press the [MENU] key briefly to enter the primary menu options. Rotate the channel knob or press the ▲▼key until the [RF] option is highlighted.
 2. Briefly press the [MENU] key or channel knob to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until reaching the [1 .7 Busy Lockout] setting.
 3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲▼ key to select the desired blocking method. Default is off.
 4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑧ Weather Alert

VHF weather forecast channel, allowing you to listen to NOAA's weather forecast information. Please program your local weather broadcast frequency to the memory channel by programming software firstly before enabling this feature..

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or ▲▼ key until the [RF] option is reached.

2. Briefly press the [MENU] key or channel knob to enter the secondary menu, rotate the channel knob or ▲ ▼ key until the [1 .8 Weather Alert] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲ ▼ key to select On/Off. Default is Off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

Note: Some regions do not have weather alert broadcast stations; enabling this function will be ineffective.

⑨ **TOT (Time Out Timer)**

Transmission Timeout Timer (TOT) function: Automatically switches back to receive mode after continuous transmission exceeds the preset time, preventing users from occupying the channel resources for too long and missing communication requests from others.

- 1 . Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or ▲ ▼ key until the [RF] option is selected.
2. Briefly press the [MENU] key or channel knob to enter the secondary menu. Rotate the channel knob or ▲ ▼ key until [1 .9 Transmission Timeout] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob or ▲ ▼ key to select the desired time setting..
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob or ▲ ▼ key to select the desired time setting..
Default is 180 seconds. [Off/30 sec/60sec/90 sec/120 sec/150 sec/180 sec/210 sec/240 sec/270 sec]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑩ TOA (Time Out Prompt)

There is a prompt tone before the PTT transmission time is end.

- 1 . Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Briefly press the [MENU] key or channel knob to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [1 .10 Timeout Prompt] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob or press the ▲▼ key to select the desired time setting. Default is 5 seconds. [Off/1 sec/2 sec/3 sec/4 sec/5 sec/6 sec/7 sec/8 sec/9 sec/10 sec]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑪ FM/AM(Frequency/Amplitude Modulation)

This function selects the modulation mode of the channel. Normally, FM is used for transmitting and receiving channel signals. In AM mode, the channel can only receive signals, and transmission is disabled.

- 1 . Press the [MENU] key briefly to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Press the [MENU] key or channel knob briefly to enter the secondary menu. Rotate the channel knob or press the ▲▼ key until the [1 .11 FM/AM] setting is selected.
3. Press the [MENU] key or channel knob briefly to enter the menu. Rotate the channel knob to select FM or AM. The default is FM.
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

⑫ Step

The frequency synthesizer of this device provides several step options for the frequency spacing. When rotating the channel selector knob or pressing the $\blacktriangle\blacktriangledown$ key in frequency mode, the frequency will increase or decrease according to the set step value. During the scanning function, the carrier signal is also scanned by incrementing or decrementing based on the set step value.

1. Press the [MENU] button briefly to enter the first-level menu options. Rotate the channel knob or press the $\blacktriangle\blacktriangledown$ key until the [RF] option is selected.
2. Press the [MENU] button briefly to enter the second-level menu, then rotate the channel knob or press the $\blacktriangle\blacktriangledown$ key until the [1 .12 Step] setting is selected.
3. Press the [MENU] button or channel knob briefly to enter the menu, rotate the channel knob to select the desired step value. Default is 12.5K.
4. Press the [MENU] button briefly to confirm, then press the [EXIT] button to return.

⑬ Frequency Difference Direction (Offset)(This feature is available in VFO frequency mode only)

This feature is typically used to access a repeater by setting the direction of the transmit-receive frequency offset. Taking the receive frequency as the reference, if the offset direction is "+", then "Transmit Frequency = Receive Frequency + Offset Frequency". If the offset direction is "-", then "Transmit Frequency = Receive Frequency - Offset Frequency". When set to "Off", "Transmit Frequency = Receive Frequency".

1. Press the [MENU] key briefly to enter the primary menu options. Rotate the channel knob or $\blacktriangle\blacktriangledown$ key until the [RF] option is selected.
2. Press the [MENU] key briefly to enter the secondary menu, then rotate the channel knob or $\blacktriangle\blacktriangledown$ key until the [1 .13 Offset Direction] setting is reached.

3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob to select "Off/+/-".
Default is off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑭ **Offset (SFT Frequency)**

(Note: This function option is only available in frequency mode. The offset frequency setting adds/subtracts to/from the receive frequency and should be within the band range.) Based on the desired repeater frequency, select the difference between the receive and transmit frequencies.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or ▲▼ key until the [RF] option.
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or ▲▼ key until the [1.14 Offset] setting.
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob or press the ▲▼ key to increment or decrement the offset frequency value step by step. Alternatively, input directly via the microphone numeric keypad.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

(Example: For an offset value of 1.25MHz, press the numbers "0," "1," "2," "5," "0," "0" on the handset—no need to press the decimal point)

⑮ **Transmission Frequency (Tx Frequency)**

This feature is available in VFO only. It is the transmission frequency of frequency difference between transmission and receiving while communicating through a repeater. When the offset direction is "+" or "-", the transmission frequency = reception frequency +/- the offset frequency. It is related to the settings of the offset frequency and direction mentioned above, and keyboard input values are invalid. When the offset direction is "Off", the transmission frequency is the keyboard input frequency.

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [RF] option is selected.
2. Press the [MENU] key briefly to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [1.15 transmission frequency] setting is selected.
3. Press the [MENU] key or channel knob briefly to enter the menu, then input the desired transmission frequency on the numeric keypad.
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

II. Subaudio

In environments with significant electromagnetic interference, to prevent accidental audio activation caused by electromagnetic waves close to the channel carrier signal, the device employs an ultra-low-frequency continuous audio modulation/demodulation squelch system. This prevents unintended audio activation. When CTC/DCS is set for a channel, only receivers with matching tone codes can properly activate the audio system.

① Receive/Transmit Sub-audio Tone

The sub-audio tone set here simultaneously applies to both the receiving and transmitting sub-audio tones for the same channel on this device.

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Sub-audio Tone] option is selected.
2. Press the [MENU] key briefly to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [2.1 C-CTC/DCS] setting is selected.
3. Press the [MENU] key or channel knob briefly to enter the third-level menu, then rotate the channel knob.

There are five menu options: [Off] (i.e., no sub-audio tone), [CTCSS], [DCS], [iDCS], [Customize].

- A: In the [Off] option, briefly press the channel knob or [MENU] key. When [Off] turns blue, it indicates that the sub-audio tone has been turned off.
- B: In the [CTCSS] option, briefly press the [MENU] key or channel knob to enter the analog sub-audio group selection. You can rotate the channel knob to choose the desired analog sub-audio group or directly input it using the keypad. Briefly press the [MENU] key or channel knob to confirm and exit.
- C: In the [DCS] option, briefly press the [MENU] button or channel knob to enter the digital sub-audio DCS group selection. You can rotate the channel knob to choose the desired digital sub-audio group or directly input using the keypad (only the middle three digits need to be entered; the system will automatically add the preceding "D" and trailing "N"). Briefly press the [MENU] button or channel knob to confirm and exit.
- D: In the [IDCS] option, briefly press the [MENU] button or channel knob to enter the digital sub-audio IDCS group selection. You can rotate the channel knob to choose the desired digital sub-audio group or directly input using the keypad (only the middle three digits need to be entered; the system will automatically add the preceding "D" and trailing "I"). Briefly press the [MENU] button or channel knob to confirm and exit.
- E: In the [Customize] option, briefly press the [MENU] key or channel knob to enter custom encoding, then input an 8- digit number of your choice via the keypad. Briefly press the [MENU] key or channel knob to confirm and exit.
4. Press the [EXIT] key to exit.

② **Receive Subaudio**

It is used to set the receive sub-audio for the receive frequency of selected channel.

- 1 . Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [CTCSS] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [2.2 R-CTC/DCS] setting is selected.
3. Press the [MENU] key or channel knob briefly to enter the third-level menu. Rotate the channel knob to reveal five menu options: [Off] (i.e., no tone squelch), [Analog CTCSS], [Digital DCS], [Digital IDCS], [Custom Code].
 - A: In the [Off] option, press the channel knob or [MENU] key briefly. When [Off] turns blue, it indicates the tone squelch is disabled.
 - B: In the [CTCSS] option, press the [MENU] key or channel knob briefly to enter the analog tone group selection. Rotate the channel knob to choose the desired analog tone group or input directly via the keypad. Press the [MENU] key or channel knob briefly to confirm and exit.
 - C: In the [DCS] option, briefly press the [MENU] button or channel knob to enter the digital sub-audio DCS group selection. You can rotate the channel knob to choose the desired digital sub-audio group or directly input using the keypad (only the middle three digits need to be entered; the system will automatically add the leading "D" and trailing "N"). Briefly press the [MENU] button or channel knob to confirm and exit.
 - D: In the [IDCS] option, briefly press the [MENU] button or channel knob to enter the digital sub-audio IDCS group selection. You can rotate the channel knob to choose the desired digital sub-audio group or directly input using the keypad (only the middle three digits need to be entered; the system will automatically add the leading "D" and trailing "I"). Briefly press the [MENU] button or channel knob to confirm and exit.

E: In the [Customize] option, briefly press the [MENU] key or channel knob to enter custom encoding, then input an 8- digit number of your choice via the keypad. Briefly press the [MENU] key or channel knob to confirm and exit.

4. Press the [EXIT] key to exit

③ **Transmit Sub-audible Tone(T-CTC/DCS)**

It is used to change the transmission sub audio for the transmission frequency of selected channel

- 1 . Briefly press the [ME.NU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Sub-audible Tone] option appears.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [2.3 T-CTC/DCS] setting is displayed.
3. Briefly press the [MENU] key or channel knob to enter the third-level menu, then rotate the channel knob. There are five menu options: [Off] (i.e., no sub-audible tone), [Analog CTCSS], [Digital DCS], [Digital iDCS], [Custom Code].

A: In the [Off] option, briefly press the channel knob or [MENU] key. When [Off] turns blue, it indicates the sub-audio tone is disabled.

B: In the [CTCSS] option, briefly press the [MENU] key or channel knob to enter the sub-audio tone group selection. Rotate the channel knob to choose the desired analog sub-audio group, or directly input using the keypad. Briefly press the [MENU] key or channel knob to confirm and exit.

C: In the [DCS] option, briefly press the [MENU] button or channel knob to enter the Sub-audio DCS group selection. You can rotate the channel knob to choose the desired digital sub-audio group or directly input using the keypad (only the middle three digits need to be entered; the system will automatically add the leading "D" and trailing "N"). Briefly press the [MENU] button or channel knob to confirm and exit.

D: In the [IDCS] option, briefly press the [MENU] button or channel knob to enter the Sub- audio IDCS group selection. You can rotate the channel knob to choose the desired digital sub-audio group or directly input using the keypad (only the middle three digits need to be entered; the system will automatically add the leading "D" and trailing "I"). Briefly press the [MENU] button or channel knob to confirm and exit.

E: In the [Customize] option, briefly press the [MENU] key or channel knob to enter custom coding, then input an 8-digit number of your choice via the keypad. Briefly press the [MENU] key or channel knob to confirm and exit.

4. Press the [EXIT] key to exit

④ **Special DCS**

This feature encrypts the digital sub-audio DCS when it has already been set on the channel, distinguishing it from regular DCS to provide users with an enhanced experience. It is ineffective for analog sub-audio CTC.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Sub-audio] option appears.
2. Briefly press the [MENU] key to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until the [2.4 Special DCS] setting is displayed.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob to select the desired special DCS group. [Special DCS 1/Special DCS 2/Special DCS 3/Special DCS 4/Off]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑤ **Vague Sub-audio (Vague CTC/CS)**

When the sub-audio signaling detected by frequency measurement shows that the local unit can transmit and the other party can receive, but the local unit cannot properly receive the other party's transmission, this situation may indicate that the other party's signaling is unconventional. Enabling this function can facilitate interoperability.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Sub-audio] option appears.
2. Briefly press the [MENU] key to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [2.5 Signaling Fuzz] setting appears.
3. Briefly press the [MENU] key or rotate the channel knob to enter the menu. Rotate the channel knob to select On/Off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑥ **Sub-audio Scan(CTC/DCS Scan)**

When the squelch system fails to open (due to incorrect sub-audio reception) while the channel receives a carrier signal, enabling this feature can decode the sub-audio signal set by the transmitter.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Sub-audio Tone] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [2.6 CTC/DCS] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the sub-audio tone scan interface. Wait for a transmitter on the same channel to send a modulated signal with a sub-audio tone. When the signal is received, the sub-audio tone value will be decoded and displayed on the interface.
4. Briefly press the [MENU] key to save the scanned sub-audio tone to the current channel and exit the sub-audio tone scan.

Press the [EXIT] key to exit the CTCSS scan without saving the scanned sub-audible tones.

III. Scan

This feature allows you to scan the memory channels which you added to the scan list. In frequency mode, it can also scan the entire operating band. Scanning stops when a signal is received, allowing you to communicate with the station on that frequency.

① Scan Resume

This function offers three scan resume modes: Carrier, Time, and Search. When scanning is interrupted by a received signal, users can choose one of these three methods to resume scanning.

Carrier: When the user receives a carrier signal, scanning stops, allowing call operations on the current carrier. If the carrier signal disappears, or the user ceases any operation without receiving the carrier signal again, wait for 7 seconds before resuming scanning the next channel.

Time: When the user receives a carrier signal, scanning stops, enabling call operations on the current carrier. If the user takes no action, even if the carrier signal persists, scanning resumes for the next channel after 7 seconds.

Search: When the user receives a carrier signal, scanning stops, allowing call operations on the current carrier. If the user takes no action, the device remains on the current carrier until the channel knob is rotated or the ▲▼ key is pressed, after which scanning resumes.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Scan] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until the [3.1 Scan Resume] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob to select the desired scan resume method. [Carrier/Time/Search]

4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

② Priority Scan Channel

Select a channel from the stored channels as the priority scan channel. When scanning is enabled, this channel will be scanned again after each cycle.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Scan] option is highlighted.
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or ▲▼ key until [3.2 PriScan] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲▼ key to select the desired priority scan channel.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

③ Scan Add

This Feature is valid for the memory channels only. The radio will scan the memory channels add to the scan list only. the channel will not be scanned if it was removed from scan list.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Scan] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [3.3 Scan Add] setting is selected.
3. Briefly press the [MENU] key or the channel knob to enter the menu. Rotate the channel knob or press the ▲▼ key to choose to add or delete.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

IV. Signal

This function is used to enable or disable the transmission and reception decoding of DTMF or FSK signaling. These signals are typically used for repeater communication or wireless data transmission between machines. [The device name is set in the programming software holder and transmitted in FSK format. To receive this information on the receiver, the signaling mode should be set to FSK or FSK&DTMF.]

① Rx Code (Receive Signal Code)

This function specifies which type of signaling the channel will receive. After the user sets the receive signaling type, the received signals will be displayed on the screen, while non-specified types will be ignored.

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Signaling] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until reaching the [4.1 Rx Code] setting.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to select the desired signaling type. [Off/DTMF/FSK/FSK&DTMF]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

② PTT Push Code

This function sends a string of signaling upon pressing the PTT, which can be a common DTMF code or the device name (holder). It is typically used for Repeater activation identification or receiver display identification.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Signaling] option appears.

2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [4.2 PTT Push Code] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to select the signaling group to send. [Close/Local Name/DTMF Common Code 1~DTMF Common Code 30, totaling 32 options. If the selected DTMF common code group is empty , no DTMF code will be transmitted.]
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

③ PTT Pop Code

This function sends a string of signaling when PTT is released after transmission ends, which can be a DTMF common code or Device Holder Name. Typically used to indicate the end of a repeater call or for receiver identification display.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Signaling] option is highlighted.
2. Briefly press the [MENU] key to access the second-level menu, then rotate the channel knob or press the ▲▼ key to navigate to the [4.3 PTT Pop Code] setting.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or press the ▲▼ key to select the signaling group to send. [Options include: Off/Local Name/DTMF Common Code 1~DTMF Common Code 30, totaling 32 choices. If the selected DTMF common code group is empty, no DTMF will be transmitted.]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

④ DTMF Tone

It is used to set the DTMF tone prompt while sending a DTMF Signal. It is invalid for the device sending holder name.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Signaling] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [4.4 DTMF Tone] setting is selected.
3. Briefly press the [MENU] key or rotate the channel knob to enter the menu. Rotate the channel knob or press the ▲▼ key to select On or Off. Default is Off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑤ DTMF form

This feature allows you to modify the code from DTMF Signalling.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Signaling] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [4.5 DTMF form] setting is selected.
3. Briefly press the [MENU] key or rotate the channel knob to enter the [Common Code Table], then rotate the channel knob or press the △▽ key to select the DTMF code group number you wish to modify
4. Briefly press the [MENU] key to enter, and you will be prompted with "New Input: ". Enter the desired code here.

[Only numbers, *, and # can be entered. A, B, C, D cannot be entered. If A, B, C, or D need to be entered, please input them in the frequency programming software.] 5. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

V. FUNC

① VOX Gain

This feature lets the user initiate a transmission without pushing the PTT switch button. When the microphone senses audio input, the radio will automatically switch from receive to transmit. The choices are: Off, level 1-9, where level 9 is the most sensitive setting. A value in the middle will be a better choice for most users.

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Functions] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or ▲▼ key until the [5.1 VOX Gain] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲▼ key to select the desired level to set.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

② VOX Delay

This function sets the delay time for VOX-triggered transmission. When the voice input to the microphone stops, transmission ceases only after exceeding the VOX delay time, preventing intermittent transmission during speech.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or ▲ key until the [Function] option is selected.
2. Press the [MENU] button briefly to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until the [5.2 Voice Delay] setting is selected.

3. Press the [MENU] button or channel knob briefly to enter the menu, then rotate the channel knob or press the ▲▼ key to select the desired delay time. Default is 1 .5 seconds. [0.3 sec/0.5 sec/1 sec/1 .5 sec/2 sec/3 sec]
4. Press the [MENU] button briefly to confirm, then press the [EXIT] button to return.

③ Automatic contact(AUC.)

When traveling in a group, to avoid losing communication range, you can designate one or more radios as the master unit(s) and others as slave units. If a slave unit loses communication with the master, it will emit an alert tone and display "AUC Timeout" on the screen, notifying the user that they have exceeded the communication range with the master unit.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is highlighted.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [5.3 AUC.] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to choose On or Off. Default is Off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

④ AUC. POS

Set whether the device acts as the host or slave during automatic contact. The host only sends contact signals and does not provide alerts beyond communication range. The slave does not send contact signals but will alert when out of communication range.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu. Rotate the channel knob or press the ▲▼ key until the [5.4 AUC. POS] setting is selected.

3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob or press the ▲▼ key to choose between host or slave. Default is slave.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑤ **AUC.TxPer (Automatic Contact Transmission Period)**

it is used to make the automatic contact transmission period for the host device..

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [5.5 AUC. TxPer] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to select the signaling interval. Default is 30 seconds. [Options range from 5 seconds, 10 seconds.. increasing in 5-second increments up to 240 seconds]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑥ **AUC.TOT**

This option sets the timeout period for the slave to determine a communication loss. If the slave does not receive a signal within this time, it will conclude it is out of communication range. This timeout should be longer than the host's signal interval, ideally twice the host's transmission interval.

1. Press the [MENU] key briefly to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is highlighted.
2. Press the [MENU] key briefly to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until the [5.6 AUC. TOT] setting is reached.
3. Press the [MENU] button or channel knob briefly to enter the menu. Rotate the channel knob or press the ▲▼ key to select the reception timeout duration. Default is 60 seconds. [Options range from 5 seconds, 10 seconds... increasing in 5-second increments up to 240 seconds.]

4. Press the [MENU] button briefly to confirm, then press the [EXIT] button to return.

⑦ AUC. Warm

When the slave device is out of communication range (no contact signal received beyond the set timeout period), how often the slave device's alarm tone will remind.

1. Press the [MENU] button briefly to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or press the ▲▼ key until the [5.7 Auc.Warm] setting is reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or press the ▲▼ key to select the desired reminder time. Default is 10 seconds. [Options range from 5 seconds, 10 seconds.. increasing in 5-second increments up to 240 seconds]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑧ 1750Hz Tone

Repeater across the U,K and much of Europe need an access tone(1750Hz tone) to switch the transmitter from standby ready for use.

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or △▽ key until the [5.8 1750Hz Tone] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲▼ key to select the desired duration for transmitting the 1750 Hz tone. [Off/1 sec/2 sec/3 sec/4 sec/5 sec. Off means the 1750 Hz tone will not be sent.]
4. Briefly press the [MENU] key to confirm and press [EXIT] to return.

⑨ Wireless Copy

Use this feature to wireless copy the data including channel information, function options from the device to other same model devices,

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or ▲▼ key until the [Function] option is selected
2. Briefly press the [MENU] key to enter the secondary menu, rotate the channel knob or ▲▼ key until [5.9 Wireless Copy] settings,
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲▼ key to select the data reception or transmission method,
Wireless Copy Reception: Select [Receive Data], press the [MENU] key to start receiving. To synchronize with the transmitter's data, the receiver will wait until the transmitter's progress bar starts from the beginning before performing synchronized reception. If missing codes occur during reception, it will pause until the next round of data transmission. Upon completion, "Done" will be displayed, and the radio will automatically restart before exiting wireless copy.

Wireless Copy Transmission: Select [Send Channel Data] or [Send All Data], press the [MENU] key to start transmission. The device will enter a loop transmission state. [Send Channel Data] transmits only channel data, while [Send All Data] transmits both channel data and parameter configurations. During transmission, you can press PTT to forcibly exit wireless copying, or wait for the wireless copy to complete one full cycle and press [EXIT] to exit.

⑩ Denoise

Background noise canceling. The background noise will be shielded to make your voice more clear when you talk around a noise environment.

1. Briefly press the [MENU] key to access the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is selected.
2. Press the [MENU] key briefly to enter the secondary menu, rotate the channel knob or ▲▼ key until the [5.10 Denoise] setting is reached.
3. Press the [MENU] key or channel knob briefly to enter the menu, rotate the channel knob or ▲▼ key to select on or off.
4. Press the [MENU] key again to confirm, then press the [EXIT] key to return.

VI. SET

① Work Mode

This option is used to switch the current channel to operate in frequency mode, channel mode, or memory mode.

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Press the [MENU] key briefly to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [6.1 Work Mode] setting is selected.
3. Press the [MENU] key or channel knob briefly to enter the menu. Rotate the channel knob or press the ▲▼ key to select frequency/memory/channel.
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

② Rog Beep

This feature will enable a sequence of tones to be transmitted at the end of the transmission, after the user releases the PTT Button.

- 1 . Briefly press the [MENU] key to access the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Function] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.2 Rog Beep] setting is selected.
3. Briefly press the [MENU] key or rotate the channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to select a preferred end tone. [Off /1/2/3 , "Off" means no end tone will be played.]
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

③ Home Channel

This feature selects which of the saved channels is to be designated as the home channel.
Press and hold [FUN]key+[*] key on the microphone to use your home channel quickly.

- 1 . Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.3 Home Channel] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu. Rotate the channel knob or press the ▲▼ key to select the channel number you wish to set as a frequently used channel. [The number of stored channels determines the available channel numbers to choose from; select one as the frequently used channel.]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

④ A/B Switch

This feature can enable the radio to automatically switch to the VFO that has a received signal.

Auto: When a signal is received on channel A or B, the triangle icon automatically switches to the channel with the signal. If no operation is performed within 8 seconds, the arrow returns to the channel marked "Main."

On: When a signal is received on channel A or B, the triangle icon automatically switches to the channel with the signal and does not return to the "Main" channel.

If the PTT is pressed to transmit at this time, this channel will become the "Main" channel.

Off: When a signal is received on A or B channel, the triangle icon automatically switches to the channel with the signal. As soon as the signal disappears, the triangle icon immediately

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, rotate the channel knob or press the ▲▼ key until the [6.4 A/B Switch] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or press the ▲▼ key to choose between /Auto/On/Off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑤ Double Watch

this feature allows the radio to receive signals from band A and Band B at the time. HIROYASU IC-980Pro Max adopts electronic relay for VHF UHF different band Watch avoiding the noise from traditional mechanical relay

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second level menu, then rotate the channel knob or press the ▲▼ key until the [6.5 Double Watch] setting is selected.
3. Briefly press the [MENU] key or rotate the channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to choose On/Off.
4. Briefly press the [MENU] key to confirm and press the [EXIT] key to return.

⑥ Key Tone

This feature enables a tone for each time a microphone key or button is pushed.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press ▲▼ key until the [6.6 Key Tone] setting is selected.
3. Briefly press the [MENU] key or rotate the channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to choose On/Off.
4. Briefly press the [MENU] key to confirm and press the [EXIT] key to return.

⑦ FM-R Watch

FM Radios automatic watch feature. When there is a calling coming, the FM radio will be interrupted, if the value of this feature is on, then the fm radio will resume automatically to work when the calling is end.

[The radio function must be enabled in the programming software.

Press [MENU] + [7] briefly to activate the radio.]

1. Press [MENU] briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Press [MENU] briefly to enter the second-level menu. Rotate the channel knob or press the ▲▼ key until the [6.7 FM-R Watch] setting is selected.
3. Press [MENU] or the channel knob briefly to enter the menu. Rotate the channel knob or press the ▲▼ key to select On/Off.
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

⑧ MIC

There are built-in two mics for the transceiver, one is in the front pannel(device host), another one is in the hand microphone(in hand).

- 1 . Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Press the [MENU] key briefly to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.8 MIC] setting is selected.
3. Press the [MENU] key or channel knob briefly to enter the menu, then rotate the channel knob or press the ▲▼ key to choose between Handset MIC/Main Unit MIC.
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

⑨ Key Lock

Manual or automatic keypad lock.

- 1 . Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is reached.
2. Press the [MENU] key briefly to enter the second-level menu, rotate the channel knob or press the ▲▼ key until the [6.9 Key Lock] setting is reached.
3. Press the [MENU] key or channel knob briefly to enter the menu, rotate the channel knob or press the ▲▼ key to select auto/ma,nual. Automatic: Without pressing any keys, the machine will automatically lock after 50 seconds. Only the PTT function remains usable after locking. Manual: Users can long-press the [#] key to manually lock. [When locked, long-press the [#] key to unlock.]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑩ Lamp Control

this setting controls how long the front panel display and the lighted keys in the microphone will stay lit after a received transmission terminates or the user finishes making changes.

- 1 . Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or ▲▼ key until the [Settings] option is selected.

2. Briefly press the [MENU] key to enter the second-level menu, rotate the channel knob or ▲▼ key until [6.9 Lamp Control] settings.
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or ▲▼ key to select the desired backlight duration. [5 sec/10 sec/15 sec/20 sec/On. "On" means always lit. Default: On]
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑪ Tx Rx Lamp

This function controls whether the backlight turns on when receiving a signal or pressing PTT to transmit while the backlight is off.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until [6.11 Tx Rx Lamp] is selected.
3. Briefly press the [MENU] key or rotate the channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to choose On or Off.
4. Briefly press the [MENU] key to confirm then press the [EXIT] key to return.

⑫ Voice

Menu Voice announcement

1. Press the [MENU] key briefly to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Press the [MENU] key briefly to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until [6.12 Voice] settings are selected.
3. Press the [MENU] key or channel knob briefly to enter the menu, then rotate the channel knob or press the ▲▼ key to choose On or Off.

4. Press the [MENU] key to confirm, then press the [EXIT] key to return.

⑬ Language

This setting chooses the language used in all the settings screens

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is highlighted
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until [6.13 Language] is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to choose the desired language type. [Chinese (Simplified)/Chinese (Traditional)/English]
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

⑭ APO (Auto Power Off)

Automatic shutdown, this feature turn the radio off after pre-set period of time with no any operation.

This feature is highly useful for reducing battery drain caused by forgetting to turn off the car radio when exiting the vehicle.

1. Press the [MENU] key briefly to enter the primary menu options. Rotate the channel knob or ▲▼ key until the [Settings] option is selected.
2. Press the [MENU] key briefly to enter the secondary menu, then rotate the channel knob or ▲▼ key until [6.14 APO] settings
3. Briefly press the [MENU] key or channel knob to enter the menu, rotate the channel knob or press the ▲▼ key to select the desired standby shutdown time. [Off/10 minutes/30 minutes/1 hour/12 hours... 12 hours. Default is Off: no auto-shutdown]

4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑮ Password

The power-on password is a numeric code of up to 6 digits required when the radio is turned off and restarted. This feature allows the radio owner to prevent unauthorized use by others. (Press [#] to clear the password)

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Press the [MENU] key briefly to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until the [6.15 Password] setting is reached.
3. Press the [MENU] key or channel knob briefly to enter the menu, then use the numeric keys to input the desired digital password.
4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

⑯ Power on mode

Used to set whether the radio automatically powers on when the power is connected. There are three power-on modes:

Auto: the radio memory your last switch-off method automatically, the radio will resume your last switch-off method once the power supply work properly and the power cable is connected.

Off: the radio must be switched on manually no matter that it was turn on by manual or cut the power off compulsively.

On: the radio turns on automatically once the power cable is connected and the power supply works properly no matter that the last operation to radio is switched off manual or cut the power off compulsively..

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.

2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until [6.16 Power on mode] settings are reached.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to select Auto/Off/On.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

⑰ **Reset**

This setting will allow the user to perform a reset to the radio. the default value is VFO, the choices are: VFO, ALL. VFO-Clear all frequencies of VFO mode to factory defaults.
ALL-Clear all memories and other settings to factory defaults.

⑱ **Version**

Version information allows you to view details about the software and hardware version of the device.

1. Briefly press the [MENU] key to enter the primary menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the secondary menu. Rotate the channel knob or press the ▲▼ key until the [6.18 Version] setting is selected.
3. Briefly press the [MENU] key or channel knob to view the software and hardware version information.
4. Briefly press the [MENU] key or [EXIT] key to return.

⑲ **User**

This feature allows users to customize the holder name, which is displayed in the lower right corner of the welcome screen at startup or in the upper left corner in single-channel mode. It can be used to send the local code to the other party for identification.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.

2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.19 User] setting is selected.
3. Press the [MENU] button or channel knob briefly to enter the holder information editing interface. Users can input the desired settings via the keypad.

During keypad input, [*] can switch input methods and punctuation. The [#] key can delete or modify entered characters or text. Pressing the [MENU] key while inputting any character confirms it and displays it on the top line. If an error occurs or changes are needed, press the [#] key to delete or backtrack.

(Currently, holder editing does not support Traditional Chinese input. If needed, please configure it in the programming software before writing.)

4. Press the [MENU] key briefly to confirm, then press [EXIT] to return.

②0 Delete Ch

This function allows deletion of channels already stored in the radio.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.20 Delete Ch] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the channel number, then rotate the channel knob or press the ▲▼ key to select the channel number you wish to delete.
4. Briefly press the [MENU] key or channel knob to confirm. The interface will then display "OK," indicating that the channel and its number have been deleted.
5. Press the [EXIT] key to return or exit.

②① Name Display

this setting determines whether the channel name should be displayed.

1. Briefly press the [MENU] key to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Briefly press the [MENU] key to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.21 Name Display] setting is selected.
3. Briefly press the [MENU] key or channel knob to enter the menu, then rotate the channel knob or press the ▲▼ key to choose On or Off.
4. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

②② Name Edit

Users can customize the name of each channel. The name editing option is only available in channel mode or memory mode .

1. Press the [MENU] key briefly to enter the first-level menu options. Rotate the channel knob or press the ▲▼ key until the [Settings] option is selected.
2. Press the [MENU] key briefly to enter the second-level menu, then rotate the channel knob or press the ▲▼ key until the [6.22 Name Edit] setting is selected.
3. Press the [MENU] key or the channel knob briefly to enter the name editing interface. Users can input the desired channel name via the keyboard.

When entering via the keyboard, [*] can be used to switch input methods and punctuation marks.

The [#] key can delete or modify already entered characters or text.

Pressing the [MENU] key while inputting any character confirms it and displays it on the top line. If there is a mistake or change needed, use the [#] key to delete or backtrack.

(Currently, channel name editing does not support Traditional Chinese input methods. If needed, please configure it in the programming software before writing.)

4. Press the [MENU] key briefly to confirm, then press the [EXIT] key to return.

• Steps to manually add a new channel:

1. Transmit/Receive Frequency Setup:

Press the [V/M] or [*] key briefly until the radio is in frequency mode.

Use the Microphone key pad to input the desired frequency sequentially.

Example: ① To set 430.125MHz, press [4]->[3]->[0]->[1]->[2]->[5].

To set 430.0625MHz, press [4]->[3]->[0]->[0]->[6]->[6]->[2]. The last 5 will be automatically filled by the device.

Note: The input frequency must be an integer multiple of the step value; otherwise, the input will fail.

The radio will default to the nearest valid value.

To check the step value: Short-press [MENU] to enter the primary menu, press the hand mic [△] key until reaching the [RF] option.

Short-press [MENU] to enter the secondary menu, press the hand mic [△] key, and locate [1 .12 Step].

Example: Intended to input 430.0625MHz, but the step value selected was 50K. $430062.5\text{KHz} \div 50\text{KHz} = 8601 \dots 12.5$, so the stepvalue should be set to 12.5K or 6.25K. Otherwise, frequency input will fail.

2. CTCSS/DCS Settings:

Please refer to the previous CTCSS/DCS setup method.

Example: Setting both transmit and receive to 69.3 Hz CTCSS.

① Briefly pressthe [MENU] key to enter the primary menu options. Rotate the channel knob or ▲▼ key until the [CTCSS/DCS] option appears.

② Press the [MENU] key briefly to enter the secondary menu, rotate the channel knob or press the ▲▼ key until [2.1 Rx/Tx Sub-tone] setting is reached.

③ Press the [MENU] key or channel knob briefly to enter the tertiary menu [Analog CTC Sub-tone], then press the [▽] key to select [69.3].

④ Press the [MENU] key briefly to confirm, then press the [EXIT] key to return and exit.

This completes the Rx/Tx sub-tone setup.

After both Step 1 and Step 2 are completed, if additional settings are required, configure them according to the corresponding functions. If no

sub-audio tone needs to be set, then Step 2 can also be omitted.

3. Save the preset frequency into a channel:

Exit all menu options and return to the frequency mode interface. Press the [MENU] key briefly, then press [0]. The interface will prompt:)

"Overwrite -> 001" or "Store -> 001 ." At this point, you can rotate the channel knob or press the ▲▼ key to select the channel number to overwrite or store, then briefly press the [MENU] key to confirm.

A completion prompt on the display indicates successful channel storage.

2. Press the [MENU] key briefly to enter the secondary menu, then rotate the channel knob or press the ▲▼ key until the [6.15 Power-on Password] setting is reached.

[Override->*** indicates that this channel previously stored channel information and will be overwritten by the current content. Store- >***

[Override->*** indicates that this channel previously stored channel information and will be overwritten by the current content. Store- >***

means this is a new channel number, previously empty, and the current content will be saved.]

Fast Copy a channel from other Radios:

this setting is used to wireless copy a channel including frequency and Sub-audio tone from other radios, then establish a calling in between

1. Press the [MENU] key briefly, then press the [#] key to enter frequency measurement mode. The device will enter a frequency test standby state. Press and hold the PTT of the device under test to transmit, then wait briefly. The measured carrier frequency and sub-audio tone will be displayed on the screen.
2. A. Briefly press the [MENU] key, and the screen will prompt "Save to channel:". At this point, rotate the channel knob or use the ▲▼ key to select the desired channel number. Then press the [MENU] key again to confirm and exit.
3. Press the [EXIT] key to exit directly.
(Note: This test requires a certain signal strength to ensure accurate testing precision. Users may perform multiple tests to ensure data accuracy.)

FM Radio

HIROYASU IC-980Pro Max comes with FM Commercial Radio feature with 76-108MHz FM Radio receive. Press [FUN], then press [7] on the microphone to enter FM radio.

1. Press [FUN] again to enter FM radio.
2. Rotate channel knob on the front panel or input your FM frequency by numeric keys on the microphone for receiving FM broadcast signal, or you can press [*] key on the microphone keypad to search a working FM frequency.
3. Short press [EXIT] to exit FM radio.

① Save

To save your desired FM frequency manually to a memory channel for quick calling back.

1. Press the [MENU] button briefly to enter the radio menu options. Rotate the channel knob or press the ▲▼ key until the [Save] option is selected.
2. Press the [MENU] button briefly, then rotate the channel knob or press the ▲▼ key to select the desired channel number for storage. [1-20]
3. Press the [MENU] button briefly to confirm, then press the [EXIT] button to return.

② Load

This option retrieves user-stored radio channels for convenient direct use, eliminating the need for further searching.

1. Briefly press the [MENU] key to enter the radio menu options. Rotate the channel knob or press the ▲▼ key until the [load] option is selected.
2. Briefly press the [MENU] key, then rotate the channel knob or press the ▲▼ key to select the desired channel number for import.
3. Briefly press the [MENU] key to confirm, then press the [EXIT] key to return.

③ Step

This Option is used to set the FM frequency step

1. Briefly press the [MENU] key to enter the radio menu options. Rotate the channel knob or press the ▲▼ key until the [Step] option is selected.

Press the [MENU] button briefly to enter, then rotate the channel knob or press the ▲▼ button to select the step frequency to be set. (Recommended setting: 0.05M) [0.05M/0.1M/0.5M/1M]

3. Press the [MENU] button briefly to confirm, then press the [EXIT] button to return.

•Quick access menu settings

Microphone Buttons:

Button	Short press button	Long press button	Press [FUN] + button
Microphone - Up	Increase/decrease or scroll up/down	Continuous operation	Invalid operation
Microphone -Down			Invalid Operation
Microphone Numeric -0	Enter the required frequency, channel number , or digit	Invalid operation	Memory A Channel (VFO Mode)
Microphone Numeric -1		Invalid operation	Customized Quick Access Menu
Microphone Numeric -2		Invalid operation	Customized Quick Access Menu
Microphone Numeric -3		Operation invalid	Customized Quick Access Menu
Microphone Numeric -4		Operation invalid	Customized Quick Access Menu
Microphone Numeric -5		Operation invalid	Customized Quick Access Menu
Microphone Numeric -6		Operation invalid	Customized Quick Access Menu
Microphone Numeric -7		Invalid operation	Radio on/off
Microphone Numeric -8		Invalid operation	Frequency Split [frequency swap when transmit and receive frequencies differ]
Microphone Numeric -9		Invalid operation	Scan
Microphone -*	Switch working mode	Invalid operation	Home channel
Microphone -#	Invalid operation	Keyboard lock/unlock	Fast Copy A channel Fearture

Front Panel Keys:

Key	Briefly press the key	Long press the button	Press [MENU] + button
Volume knob center button	Invalid operation	Power on/off	Invalid operation
Channel knob center button	Enter menu/Confirm	Hold and rotate knob for 1M step adjustment in frequency mode	Enter Device Menu
Panel -V/M	Working Mode Switch	VHF and UHF band switching (valid only in frequency mode)	Single Band/ Dual Band Display Switch
Panel-P/PTT	PTT	PTT	Invalid operation
Panel-MONI	Monitor	Monitor	Invalid operation
Panel-MENU	Menu/Confirm	Menu/Confirm	Access to Device Menu
Panel-EXIT	1. Exit or return to the previous menu 2. When entering frequency or channel, serves as the backspace function	Main Band Select	Exit
Microphone-A button	Main Channel Switch to Band A	Invalid operation	Invalid operation
Microphone-B button	Main channel switched to B	Invalid operation	Invalid operation
Microphone-FUN	Menu Access/Confirm	Menu/Confirm	Menu Access
Microphone-EXIT	1.Exit or return to the previous menu 2.When entering frequency or channel, functions as a backspace key	Main Band Select	Exit

• Key Technical Specifications

General Specifications

Frequency Range	EU:VHF 144-146MHz,UHF 430-440MHz USA: VHF 144-148MH,UHF:420-450MHz
Number of Channels	500 channels
Channel spacing	25KHz (wideband) 12.5KHz (narrowband)
Phase-locked step	2.5KHz, 5KHz, 6.25KHz, 10KHz, 12.5KHz, 20KHz, 25KHz, 30KHz, 50KHz
Operating voltage	13.8VDC±15%
Noise suppression mode	Carrier/CTCSS/DCS/CUS
Frequency stability	±2.5ppm
Operating temperature	-20℃ + 60℃
Dimensions	108 mm × 40 mm × 102 mm
Weight	450g

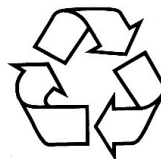
Receiver Section

	Broadband	Narrowband
Sensitivity (12dB SINAD)	$\geq 0.2\mu\text{V}$	$\geq 0.14\mu\text{V}$
Adjacent Channel Selectivity	$\geq 70\text{dB}$	$\geq 60\text{dB}$
Intermodulation	$\geq 65\text{dB}$	$\geq 60\text{dB}$
Spurious response	$\geq 70\text{dB}$	$\geq 70\text{dB}$
Signal-to-noise ratio	$\geq 45\text{dB}$	$\geq 40\text{dB}$
Audio distortion	$\leq 5\%$	
Audio output power	$\geq 2\text{W} \pm 10\%$	

Transmission Section

	Broadband	Narrowband
Output Power	25W/20W (VHF/UHF)	
Modulation	16K ϕ F3E	11 K ϕ F3E
Adjacent channel power	$\geq 70\text{ dB}$	$\geq 60\text{ dB}$
Signal-to-noise ratio	$\geq 40\text{ dB}$	$\geq 40\text{ dB}$
Spurious and harmonic	$\geq 60\text{ dB}$	$\geq 60\text{ dB}$
Audio distortion	$\leq 5\%$	

*All specifications may be modified without prior notice or liability.



RECYCLABLE



XDH Tech
2 Rue Coysevox Bureau 3,
69001, Lyon, France
xdh.tech@outlook.com



Manufacturer: Shenzhen Esma Electronics Co., Ltd.

Add: #2710,F27,Block B,Zhongshen Garden Building,
Caitian Rd,Futian District,Shenzhen,China 518000

Website: <https://globalhiroyasu.com/>

E-mail : HiroyasuService@outlook.com

Made in China

SM2YER Goran's homepage x +
Inte säker popular-hifi.com

Startsidan | Om mej... | Temperaturer just nu! | <-- ***MAIN Menu***

popular-hifi.com ©sm2yer

*** Välkommen till Göran's Hemsida *** Besökare från IP# : 100.74.79.203

SNABB-INDEX | Nya ARTIKLAR | Radio / Amatörradio | DIY-Audio INDEX | Datorer-IOT / Övrigt... | 'Prepping' | 3D-Utskrift | ENERGI projekt

*** Senast uppdaterat på MyServer@Home ***

My Local Area Network (LAN)

MyServer@Home uppdaterad

✓ Aktuell webb-server [status](#)
✓ Aktuell RPI-Host [status](#)

Månadsgivare:

MEDECINS SANS FRONTIERES
LÄKARE UTAN GRÄNSER

WIKIMEDIA
FOUNDATION

- Om [MyServer@Home](#)
- Om mina [arbetsdatorer](#)

Temp i Allsån / Överkalix
9.76 °C
@ Datum: 26.10.05 Tid: 19:36:05

Ytterligare --> [mät-data](#)

<http://www.popular-hifi.com>