



AirBand

COLOR SCREEN

VHF TRANSCEIVER

USER'S MANUAL

Thank you for your purchase of the product.
This transceiver will deliver instant reliable communication.
Please read this manual carefully before use!

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BEFORE PROCEEDING INSURE:

- Qualified technicians shall service this equipment only. Do not modify the radio for any reason.
- Use only original supplied or approved accessories.
- Turn off your radio prior to entering any area with explosive and flammable materials. Do NOT USE your transceiver at a gas/fuel station.
- Do not expose the radio to direct sunlight over a long time, nor place it close to a heating source.
- If the unit emits smoke or an odor, you should immediately cut off the power supply. Then send the radio to the nearest service center or dealer.
- Do not operate the mobile transceiver on high power unless it is necessary. Do not transmit for long periods of time, as it may overheat the transceiver.
- Keep the unit away from dusty, damp and wet environments.

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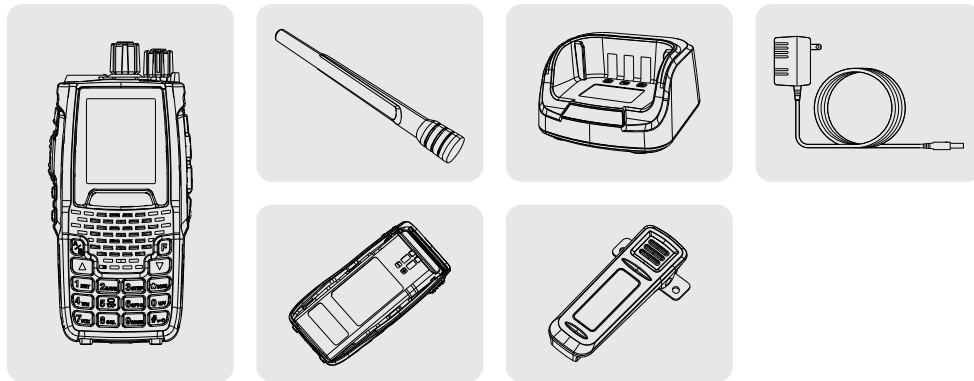
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GETTING STARTED

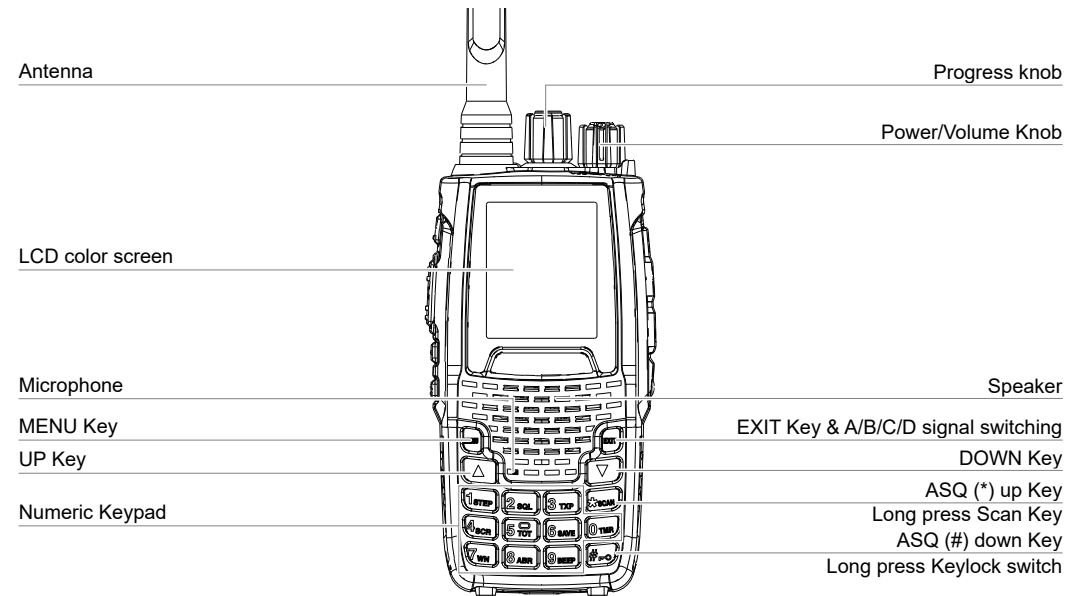
■ Unpacking and Inspecting

- Please check the packaging of your radio for any signs of damage.
- Carefully open the box, and confirm you received the items listed below.
- If you find the radio or the included accessories are damaged or lost, immediately contact your dealer.

What's in the Box



■ Overview



VFO/MR Key

PTT Key (Push to talk)

Backlit Button

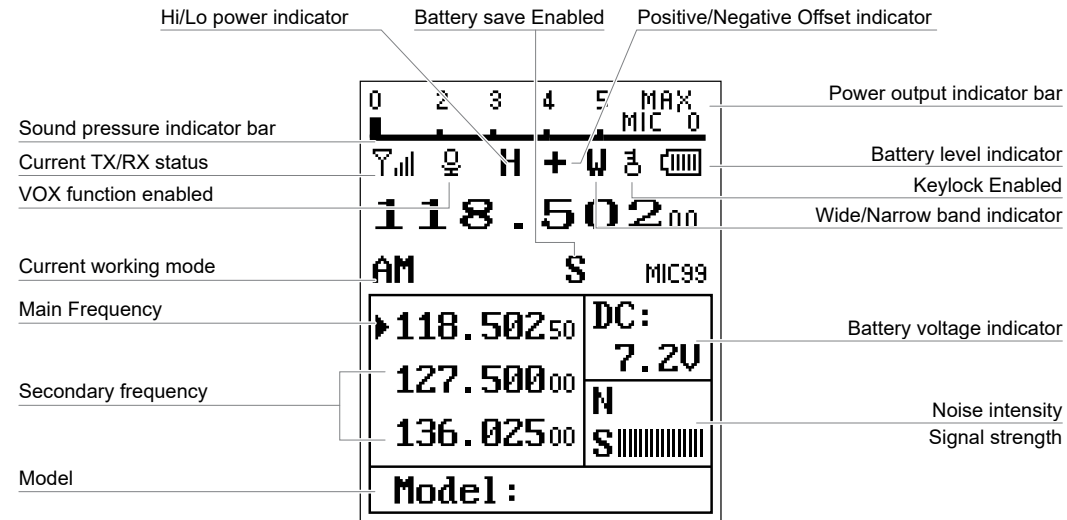
ASQ Key (MONI)

Belt Clip

External Speaker/MIC Connector


Battery pack

■ Color Display and Icon Descriptions



BASIC SHORTCUTS AND USE

■ Pound # Key (Keypad Lock)

To enable or disable the keypad lock, press and hold the [# 

A quick toggle of the # will alternate power levels from High power to Low power.

The keypad lock will lock both the main radio buttons itself.

The PTT and MONI Buttons will not be locked when enabled.

■ Star * Key

A short momentary press of the key enables the ASQ up.

When listening to broadcast FM a momentary press will start the scanning. Scanning in broadcast FM will stop as soon as an active station is found.

To enable scanning, press and hold the [*SCAN] key for about two seconds.

■ Turning the unit ON

To turn the unit on, simply push and hold the power/volume knob until it turns on. If your radio powers on correctly there should be an audible tone after about one second and the display will show a message or flash the LCD depending on settings.

■ Turning the unit OFF

To turn the unit off, simply push and hold the power/volume knob until it turns off. The unit is now off.

■ Adjusting the volume

To turn up the volume, turn the volume knob clockwise.

To turn the volume down, turn the volume knob counter-clock-wise.

■ Making a call

Press and hold the PTT button to transmit. While transmitting, speak approximately 3-5cm (1-2 inches) from the microphone. When you release the PTT your transceiver will go back to its receive mode.

■ Channel selection

There are two modes of operation: Frequency (VFO) mode, and Channel or Memory (MR) mode. For everyday use, Channel (MR) mode is going to be a whole lot more practical than Frequency (VFO) mode. However, Frequency (VFO) mode is very handy for experimentation out in the field.

Frequency (VFO) mode is also used for programming channels into memory. For details on how to program your transceiver see Chapter “Programming”.

Ultimately which mode you end up using will depend entirely on your use case.

◇ Frequency (VFO) mode

In Frequency (VFO) mode you can navigate up and down the band by using the [▲] and [▼] keys (or rotating the selector knob).

Each press (or rotation click) will increment or decrement your frequency according to the frequency step you've set your transceiver to (Menu Item 1: Step).

You can also input frequencies directly on your numeric keypad with kilohertz accuracy.

⚠ Just because you can program in a channel does not mean you're automatically authorized to use that frequency.

⚠ Transmitting on frequencies you're not authorized to operate on is illegal, and in most jurisdictions a serious offence. If you get caught transmitting without a license you can and will get fined, and in worst case sent to jail.

⚠ However, it is legal in most jurisdictions to listen. Contact your local regulatory body for further information on what laws, rules and regulations apply to your area.

◇ Channel (MR) mode

The use of Channel (MR) mode is dependent on actually having programmed in some channels to use.

Once you have channels programmed and ready, you can use the [▲] and [▼] keys to navigate between channels (or Rotate the Selector Knob).

■ Monitor Both VFO & MR Modes

You can toggle from VFO and MR (Memory Recall) mode by pressing the [VFO/MR] button.

The VFO/MR mode will only toggle on the current selected A/B/C line – while the other channel lines will remain on channel or memory mode as they were selected.

This allows you to monitor channel and frequency mode simultaneously.

■ Menu definitions

0	TMR	OFF	"This mode selects what displays are monitored in the background besides the primary selected channel. You can mix and match between all or partial channels to allow dual, tri, and quad watch. Selected Memory + Displays (A,B,C,D) M = Selected Memory A = Display A B = Display B C = Display C
		M+A	
		M+B	
		M+C	
		M+A+B	
		M+A+C	
		M+B+C	
1	STEP	M+A+B+C	In frequency mode, change the step value of the frequency when pressing the UP and DOWN keys
		2.50K	
		5.00K	
		6.25K	
		10.00K	
		12.50K	
2	SQL-FM	25.00K	FM band squelch level setting
		0,...,9	
3	VOX	OFF,1,2,3,...10	Set "OFF" to turn off the VOX. Numbers 1, 2, 3, ... 10 is the sensitivity levels for voice activation. The higher the number, the louder the sound can VOX be switched on.
4	AUTOLK	OFF	Turn off Keypad Auto-Lock
		ON	Turn on Keypad Auto-Lock
5	TOT	15,30,...600	The numbers from 15 to 600, increasing in steps of 15, indicating the maximum time for transmission by pressing PTT button.

6	SAVE	OFF,1,2,3,4	Set "OFF" to turn off Power-Saving. 1,2,3,4 represent the power saving intermittent ratio respectively.
7	ABR	OFF	Turn off Auto-Backlight
		1,2,3,4,5,.... 46	The time from Backlight on to auto off.
8	BEEP	OFF	Turn off operation tone
		ON	Turn on operation tone
9	BCL	OFF	Transmission is allowed under the channel occupancy.
		ON	Transmission is prohibited under the channel occupancy.
10	SC-ADD	OFF	Do not add to scan list when storing channels.
		ON	Add to scan list when storing channels.
11	SC-REV	TO	Time mode scanning
		CO	Carrier mode scanning
		SE	Search mode scanning
12	CA-MDF	FREQ	In channel mode, channel A displays as frequency.
		CH	In channel mode, channel A displays as channel number.
		NAME	In channel mode, channel A displays as the channel name (the specific name is set in the Programming).
13	CB-MDF	FREQ	In channel mode, channel B displays as frequency.
		CH	In channel mode, channel B displays as channel number.
		NAME	In channel mode, channel B displays as the channel name (the specific name is set in the Programming).

14	CC-MDF	FREQ	In channel mode, channel C displays as frequency.
		CH	In channel mode, channel C displays as channel number.
		NAME	In channel mode, channel C displays as the channel name (the specific name is set in the Programming).
15	VOICE	OFF	Turn off voice prompt
		ENG	English operation prompt
		CHI	Chinese operation prompt
16	ST-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	The upper-state font color display settings
17	MFL-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	The main frequency font color display settings
18	MFS-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	The main frequency small font color display settings
19	SFA-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Channel A font color display settings

20	SFB-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Channel B font color display settings
21	SFC-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Channel C font color display settings
22	BATT-C	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Battery Voltage font color display
23	SIG-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	The bottom state bar color display
24	MENUFC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Menu font color display during the menu setting
25	TX-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Display color when a currently active channel is transmitting.
26	RX-FC	WHITE, RED, BLUE, GREEN, YELLOW, INDIGO, PURPLE, GRAY	Display color when a currently active channel receives carrier.

27	MEM-CH	000,...,199	When storing a channel, this is used to refer to the channel number to be stored. If "CH-" is displayed before the number, it indicates that the channel already has stored parameters.
28	DEL-CH	000,...,199	Delete the channel parameters for the specified channel. If no "CH-" is displayed before the number, it indicates that the channel has no parameters and the operation is invalid.
29	SFT-D	OFF	In frequency mode, the transmit frequency and receive frequency do not have frequency offset.
		+	In frequency mode, the transmit frequency equals the receive frequency plus the offset frequency.
		-	In frequency mode, the transmit frequency equals the receive frequency minus the offset frequency.
30	OFFSET	000.000	In frequency mode, the offset is the difference between the transmit and receive frequencies. (Whether or not the difference is controlled by the direction of the frequency difference).
31	TMR-MR	OFF,1,2,3,...50	Main frequency return delay time during multi-frequency standby.
32	TMR-TX	TRACK	Automatically track and switch to the sub-frequency for transmission.
		FIXED	Retain transmitting at the main frequency
33	SQL-AM	0,...,20	AM band squelch level settings
34	ANL_SW	OFF	Turn off the ANL function
		ON	Turn on the ANL function
35	RESET	VFO	Menu initialization
		ALL	Menu and channel initialization

OTHER SETTINGS

■ Keypad Lock-out

Hold the **[# ⏏]** for 2 seconds at standby to turn on/off the keypad lock-out function. (The Lock icon appears, when the radio is locked out)

■ Scanning modes

The scanner is configurable to one of three ways of operation: Time, carrier or search, each of which is explained in further details in their respective section below.

Setting scanner mode

1. Press the **[MENU]** key to enter the menu.
2. Enter "11" on your numeric keypad to come to scanner mode.
3. Press the **[MENU]** key to select.
4. Use the **[▲]** and **[▼]** keys to select scanning mode.
5. Press the **[MENU]** key to confirm and save.
6. Press the **[EXIT]** key to exit the menu.

Time operation:

In Time Operation (TO) mode, the scanner stops when it detects a signal, and after a factory preset time out, it resumes scanning.

Carrier operation:

In Carrier Operation (CO) mode, the scanner stops when it detects a signal, and after a factory preset time with no signal it resumes scanning.

Search operation:

In Search Operation (SE) mode, the scanner stops when it detects a signal. To resume scanning you must press and hold the key again.

■ Manual Channel Storage and Deletion Operations

Channel Storage:

In VFO mode, use the keypad to store the frequency in use. Enter the function menu and select menu item 27: press **[MENU] + [27] + [MENU] + [▲]/[▼]** to select the channel number + **[MENU]** to store.

Channel Deletion:

Select menu item 28 to delete a channel. Press **[MENU] + [28] + [▲]/[▼]** to select the channel number to be deleted + **[MENU]** to delete the channel.

Storing Radio Channels:

You can use the PC programming software to store radio channels. This radio comes with pre-programmed weather channels that cannot be edited or deleted!

TECHNICAL SPECIFICATIONS

GENERAL

Frequency range	TX: 118.000 ~ 136.99166 MHz
	RX: 108.000 ~ 136.99166 MHz
	WX: 161.650 ~ 163.275 MHz
Channel spacing	25 kHz/8.33 kHz
Mode	6K00A3E/5K60A3E
	16K0G3E (WX)
Number of Memory channels	200 Channels
Antenna impedance	50 Ω nominal
Antenna connector	BNC type
Power supply requirement	7.2 V DC standard
Current drain	Less than 1.8 A
Operating temperature range	-10°C ~ +60°C, 14°F ~ 140°F
Dimensions	62 (W) × 128 (H) × 35 (D) mm,
Weight (approximately)	239g with 1200mAH Battery

TRANSMITTER

Output power	6.0 W (PEP), 1.8 W (CW)
Modulation limiting	70 ~ 100%
Audio harmonic distortion	Less than 10% (at 60% modulation)
Ham and Noise ratio	More than 35 dB
Spurious emissions	More than 46 dB
Frequency stability	±0.4 kHz

RECEIVER

Receive system	Double conversion superheterodyne
Intermediate frequencies	1st 46.35 MHz, 2nd 450 kHz
Sensitivity	COM: Less than 0 dB μ (at 6 dB S/N)
	NAV: Less than 3 dB μ (at 6 dB S/N)
	WX: Less than -8 dB μ (at 12 dB SINAD)
Squelch sensitivity (Threshold)	COM/NAV: Less than 0 dB μ
	WX: Less than -5 dB μ
Spurious response rejection ratio	COM/NAV: More than 60 dB
	WX: More than 30 dB

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