Mini color screen **Mobile Radio**



Thank you for purchasing this mobile radio. It is unique for it's compact body, powerful output and frequency range design. It's also designed with new and personalized operation menu to give you easy-to-use and exceptional operation experience. We believe its mini size and costeffective price

will well meet your demand.

Before operation and to obtain the best performance, we recommend you to read this user manual carefully to become familiar with the features and uses.

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■ ATTENTION!

Please observe the following precautions to prevent fire, personal injury, damage to the radio:

- * Don't use this machine when driving, so dangerous.
- * This radio is designed to use 13.8 V dc voltage, do not use the 24 V power supply to the the mobile radio.
- * Please do not place the machine in the dust, moisture or water splashing.
- * If there's any electromagnetic interference, please keep the mobile radio away from the sources such as TV set, engine generator etc.
- * Do not expose the mobile radio to long periods of direct sunlight, for example on the dashboard of a vehicle or close to heating appliances.
- * If the mobile radio generate any smoke or strange smell, please turn off the power supply immediately and make sure all is safe, then you can send the unit to the nearest after-sale center for inspection or repairment.
- * Do not keep transmitting with high power output for too long time, which may lead to overheating and cause auto power off or failure.

■ PRODUCT INSPECTION

Welcome to use our mobile radio, before operation, it is recommended that you:

- * Please check the package is in good condition without any damage.
- * Please unpack the package box carefully and check that all items are included.
- * If you find any items are missing or have been damaged during shipment, please contact your dealer immediately.

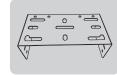
Standard accessories



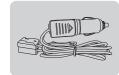
Mobile Radio



Speaker Microphone



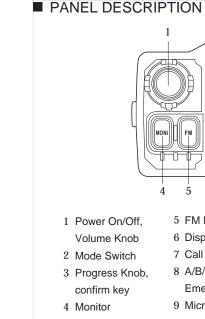
Mounting Bracket

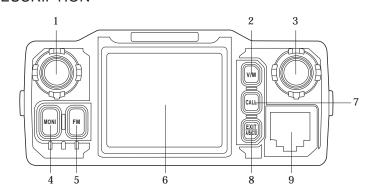


Cigar-plug Power Cable



Screws & Fuse





1 Power On/Off. Volume Knob

2 Mode Switch

3 Progress Knob, confirm key

4 Monitor

5 FM Radio

6 Display screen

7 Call key

8 A/B/C/D Band Switch, Emergency Alarm

9 Microphone Connector

Data Input

Null

MIC

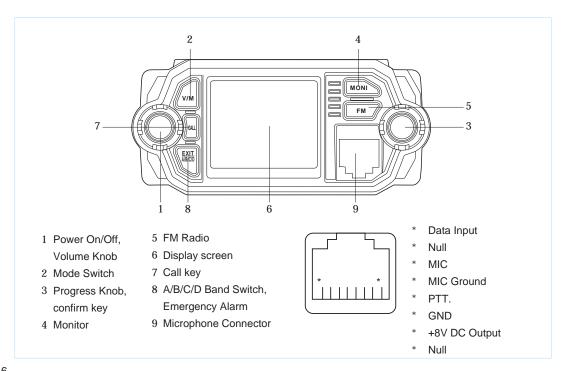
MIC Ground

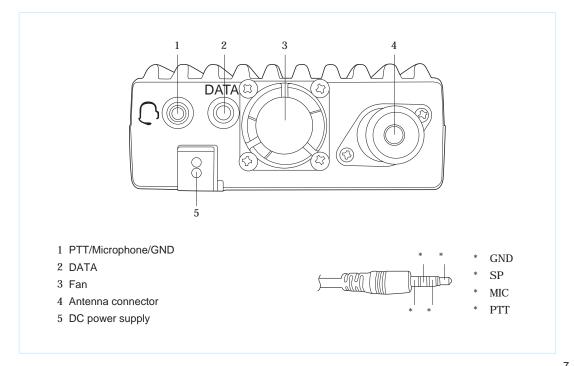
PTT.

GND

* +8V DC Output

* Null





Hotkey function guide

Power/Volume: Press the key to turn on the radio. Hold on the key for seconds to turn off the radio. Switch the knob to adjust the volume.

- [a] or []: In standby mode, press to send caller ID at selected signaling mode, in transmit mode, press to send repeat activate signaling.
- or [mon]: Press to turn on or turn off the squelch.
- or [Image] or [Image]: Press to select radio mode. Hold on for seconds to select power output at this mode.
-] or []: Press to exit function menu setting. In standby mode, press to select A, B, C, D frequency.
- or []: Press to enter and exit FM radio function.

Coder/Function Key: Press to enter menu function setting mode. Hold on for seconds to exit function setting mode.

Frequency Range Setting

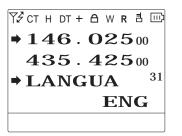
Turn on the radio when show welcome words, hold on the Progress/Confirm Key, radio will shows PASSWORD. Enter the password to setting the frequency range and transmit frequency setting.

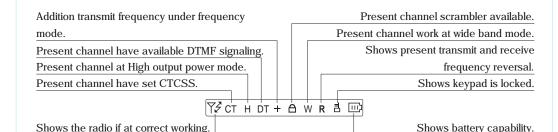
Read and Write the Password Function

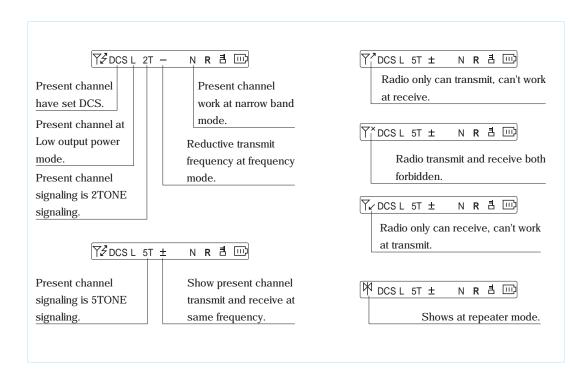
Choose a password, reading, and writing (set password, please remember, once set, after software to read and write all need password to work)

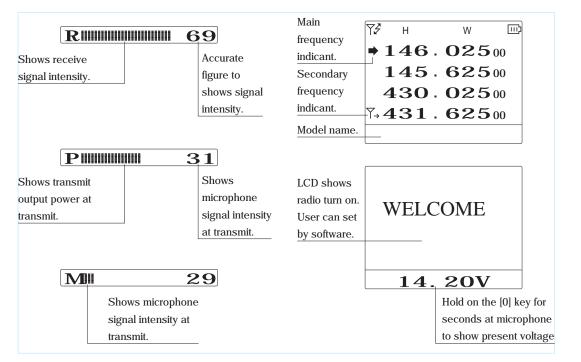
LCD Description

Top place show spec at present working frequency/channel mode.









■ SAME TX RX FREQUENCY, DIFFERENT TX RX FREQUENCY CHANNEL MEMORY

Same TX RX frequency channel memory

- * Use keypad write require frequency, for example 146.6250, press microphone [MENU] key (or Progress/confirm key)
- * Menu select 44.
- * Press microphone [MENU] key (or Progress/confirm key) to select channel 001. Press [MENU] key (or Progress/confirm key) again to memory it to CH-001.

 If before setting already shows CH-001 (not
- 001) means channel 1 is memorized.

 Delete this memorized channel: select menu 45, press [MENU] key (or Progress/confirm key),
- select channel CH-001 press [MENU] key (or Progress/confirm key) again to delete, LCD shows

- 001 is empty channel.
- * Press [MENU] key (or Progress/confirm key) to memory it, LCD shows CH-001.
- * Press [MENU] key (or Progress/confirm key) back to main menu, select 27, A- channel setting the frequency, channel number, channel name, press [MENU] key (or Progress/confirm key) to confirm.
- * Same use menu 28, 29, 30 to setting the B, C, D frequency.
- * Hold on the [MENU] key (or Progress/confirm key) for seconds to exit. Or [EXIT/AB] key.
- * At frequency mode, press [MENU] key enter or exit the channel.

Different TX RX frequency channel (CTCSS/DCS) memory (connect repeater)

* Press [MENU] key (or Progress/confirm key), select menu 10.

- * Press [MENU] key (or Progress/confirm key), setting the receive DCS figure.
- Press [MENU] key (or Progress/confirm key) to confirm.

select menu 11 to setting the receive CTCSS

- * Press [MENU] key (or Progress/confirm key), setting the receive CTCSS figure.
- * Press [MENU] key (or Progress/confirm key) to confirm.

Select menu 12 setting transmit DCS.

- * Press [MENU] key (or Progress/confirm key), to setting the transmit DCS figure.
- * Press [MENU] key (or Progress/confirm key) to confirm.
- * Select menu 13. Press [MENU] key (or Progress/confirm key) to select transmit CTCSS figure.
- * Press [MENU] key (or Progress/confirm key) to confirm.
- Press [EXIT] to exit.

If no need DCS/CTCSS then no then these steps.

Use microphone keypad press require frequency, for example 438.6250.

- * Press microphone **[MENU]** key (or Progress/confirm key) enter menu.
- * Menu select 44.
- Press microphone [MENU] key (or Progress/confirm key) to select channel 002. Press [MENU] key (or Progress/confirm key) again to memory it to CH-002. If before setting already shows CH-002 (not 002) means channel 2 is memorized.

 Delete this memorized channel: select menu 45.

press [MENU] key (or Progress/confirm key), select channel CH-002 press [MENU] key(or Progress/ confirm key) again to delete, LCD shows 002 is empty channel.

- * Press [MENU] key (or Progress/confirm key) to memory it, LCD shows CH-002.
- Press [EXIT/AB] key to exit.
 Microphone press frequency for example 430.6250.

- * Press microphone [MENU] key (or Progress/confirm key) select menu 44.
- * Press [MENU] key (or Progress/confirm key) select channel CH-002.
- Press [MENU] key (or Progress/confirm key) memory this frequency to transmit channel.
 Back to main menu, select 27, A-channel setting
- the frequency, channel number, channel name, press [MENU] key (or Progress/confirm key) to confirm.
- Same use menu 28, 29, 30 to setting the B, C, D frequency.
 Hold on the [MENU] key (or Progress/confirm key)

for seconds to exit. Or **[EXIT/AB]** key.

At frequency mode, hold on **[MENU]** key for seconds to enter or exit channel.

MENU FUNCTION SETTING OPERATION

Operation For Manual Channel Memory And Delete

Channel memory:

- Directly input frequency by keypad under frequency mode. Example: 435.125 MHz input 4,3,5,1,2,5.
- Setting CTDCS frequency (manual page 10, 11).
 Setting transmit CTDCS frequency (manual page 12,13). For example: receive CTDCS 67.0HZ, transmit CTDCS 67.0HZ. Press [MENU] Key + [1]

Key + [1] Key + [MENU] + [UP] Key. Select 67.0HZ + [MENU] Key. Transmit CTDCS 67.0HZ. Press [MENU] Key + [1]

Key + [3] Key + [MENU] + [UP] Key. Select 67.0HZ +[MENU] Key. Press [MENU] Key again to save

and exit. (If no need CTDCS all select OFF)

3 Select manual 44 to memory the channel, press

[MENU] Key + [4] Key + [4] Key + [MENU] Key +

[UP] (DOWN) select channel + **[MENU]** Key to memory the channel information.

Delete channel:

Select menu 45. Press [MENU] + [4] + [5] + [MENU]+ [UP] (DOWN) select the channel number + [MENU] Key to delete.

Memory FM Radio Channel

Use PC software to edit FM radio channel. (Software FM option). Under transmit send DTMF code by microphone keypad. Press microphone [*] Key to search FM channel under FM mode.

Keypad Lock-out

Hold the microphone **[#]** key for 2 seconds at standby to turn on/off the keypad lock- out function.

Transmit Transit Signal

Select transit signal frequency (out radio have $4\ kind$

[MENU] + [UP](DOWN) select transit signal frequency + [MENU] key to save setting. Hold [PTT] and press [CALL] Key to transmit setting transit signal.

transit signal frequency). Press [MENU] + [5] + [0] +

PTT ID Setting

Use PC software to edit PTT-ID code.

- 1. Manual 18, select signal. Press [MENU] + [1] + [8] + [MENU] + [UP](DOWN) select signal + [MENU] save the setting.
- Manual 20, setting PTT launch. Press [MENU] +
 [2] + [0] + [MENU] + [UP](DOWN) select signal +
 [MENU] save the setting.
- 3. Manual 21, setting PTT transmit delay time. Press [MENU] + [2] + [1] + [MENU] + [UP] (DOWN)
- select delay time + [MENU] save thesetting.
 4. Press [PTT] to send setting ID code.

Optional Signalling Setup

DTMF Signalling Setup

This radio is capable of DTMF encode/decode feature, users can program the desired DTMF code by PC program.

DTMF Signalling

If the radio is pre-programmed with DTMF signalling code, when it receive a matched code it will alert and display the corresponding code, also radios can communicate with each other in valid time. (ID code is programmable by PC software)

Patrol Function

When receiving matched DTMF signalling which is same as pre-programmed patrol code, the radio will emit self ID code which will display on master controll radio.

This function is able to select to be or not to be controlled.

by RX signalling. (Patrol code is programmable by PC software)

olled by master ID code, this function is not controlled

Monitor Function

When receiving matched DTMF signalling which is same as pre-programmed monitor code, the radio will transmit to monitor the surrounding voice. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling.

(Monitor code is programmable by PC software)

Remote Stun

When receiving matched DTMF signalling which is same as pre-programmed remote stun code, transmitting is disabled, it will also alert on the display mode. The radio will restore to work normally only after remote revived. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling. (Remote stun code is

programmable by PC software)

Remote Kill

same as pre-programmed remote kill code, transmitting, receiving and all activities will be disabled, it will also alert on the display mode. The radio will restore to work normally only after remote revived. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling. (Remote kill code is programmable by PC software)

When receiving matched DTMF signalling which is

Remote Revive

When receiving matched DTMF signalling which is same as pre-programmed remote revive code, the radio will be revived and restore to work normally. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling.(Remote revive code is programmable by PC software)

Emergency Alarm

matched.

When receiving matched DTMF signalling which is same as pre-programmed emergency alarm code, the radio will emit emergency alarm. Emergency alarm mode and channel is PC programmable. This function is not controlled by master ID code and RX signalling. (Emergency alarm code is programmable by PC software)

Signalling controlled by master ID: Function will be implemented only when both signalling and mater ID

Signalling no controlled by master ID format:signalling + # + Information Code

Signalling controlled by master ID format: signalling +

+ Master ID code + # + Information Code

DTMF Transmit By Call Key Setting

- Select DTMF signal, press [MENU] + [1] + [8] + [MENU] + [UP] (DOWN) select DTMF signal + [MENU] save setting.
- 2. Select signal information code. Press [MENU] + [2] + [2] + [MENU] + [UP] (DOWN) select decode signal information code group (1-15) + [MENU] save the setting. (Can use PC software set DTMF code).
- 3. Press [Call] Key transmit selected DTMF code group at standby.
- 2 TONE And 2 TONE Signal Transmit by Call Key Setting
- 1. Press [MENU] select 18 OPTSIG, press [MENU] select 2 TONE function.
- 2. Press [MENU] select 22 S-INFO, press [MENU] select pre-code signal group (1-16). (Can use PC software setting 2 TONE).
- 3. Corresponding function will turn on when receive 2
 TONE signal is same as pre-set 2 TONE code.

4. Press [Call] to send 2 TONE group code at standby.

5 TONE Signal Setting

This radio have 5 TONE coding/decode function. You can use PC software to input signal information code. (enter software signal edit select 5 TONE and setting). Receiver set 5 TONE signal, then after receive same 5 TONE signal (code must 5 bit) receiver turn on the ring function and display the information code. Speech at effective time is available. (ID code can use PC software to setting).

Press [Call] Key to transmit 5 TONE.

- Press [MENU] key, select 18 OPTSIG press [MENU] select 5 TONE function, press [MENU] to confirm setting.
- Press [MENU] , select 22 S-INFO press [MENU] key to select pre-code signal group 1-15. (Can use PC software setting 5 TONE information code, each group can transmit 3 group 5 TONE code for optional).

3. Press **[Call]** key transmit pre- set 5 TONE code group at standby.

■ SPEAKER MICROPHONE DESCRIPTION (optional)

* "MENU": Function key

* "UP": Tune up channel step

* "DOWN": Tune down channel step

* "EXIT": Exit A/B channel switch, emergency alarm etc.

* "*/SCAN": Offset function, scan, digital "*"

* "#/LOCK": Keypad lockout function, digital "#"

* "0": Number 0

* "1": Number 1

* "2": Number2

* "3": Number3

① "4": Number4

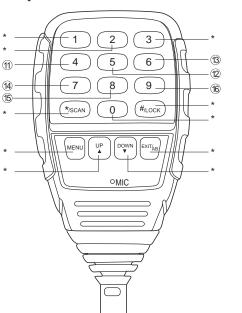
12 "5": Number5

(13) "6": Number6

(4) "7": Number7

15 "8": Number8

16 "9": Number9



SPEAKER MICROPHONE DESCRIPTION (optional)

* "MENU": Function key

* "UP": Tune up channel step

* "DOWN": Tune down channel step

* "EXIT": Exit A/B channel switch, emergency alarm etc.

* "*/SCAN": Offset function, scan, digital "*"

* "#/LOCK": Keypad lockout function, digital "#"

* "0": Number 0

* "1": Number 1

* "2": Number2

* "3": Number3

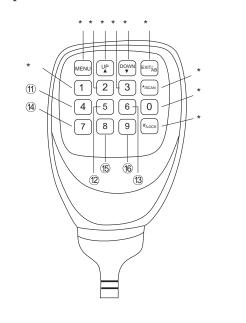
12 "5": Number 5

(13) "6": Number6

(4) "7": Number7

(15) "8": Number8

16 "9": Number9



Microphone Keypad Operation

- Hold on microphone [MENU] key for seconds can switch select channel mode or frequency mode.
- 2. Press **[#]** key to switch High/Low transmit output power.
- 3. Hold on [#] key for seconds to Lock/Unlock the keypad.
- 4. Hold on **[EXIT/AB]** key for seconds to active Alarm mode.
- Press [EXIT/AB] key select present working frequency.
- 6. Press [*] key to reverse the transmit frequency and receive frequency.
- 7. Hold on [*] key to start Scan function.
- 8. Hold on **[0]** key for seconds, to display present power supply voltage

■ FUNCTION MENU

Menu	Primary Menu Icon	Secondary Menu Icon	Secondary Function Description
		OFF	Disable TMR (multiple standby function)
		M+A	Enable TMR, main frequency and A frequency standby
		M+B	Enable TMR, main frequency and B frequency standby
		M+C	Enable TMR, main frequency and C frequency standby
		M+D	Enable TMR, main frequency and D frequency standby
		M+A+B	Enable TMR, main frequency A and B frequency standby
		M+A+C	Enable TMR, main frequency A and C frequency standby
0	TMR	M+A+D	Enable TMR, main frequency A and D frequency standb
		M+B+C	Enable TMR, main frequency B and C frequency standb
		M+B+D	Enable TMR, main frequency B and D frequency standb
		M+C+D	Enable TMR, main frequency C and D frequency standb
		M+A+B+C	Enable TMR, main frequency A B and C frequency standb
		M+A+C+D	Enable TMR, main frequency A C and D frequency stands
		M+B+C+D	Enable TMR, main frequency B C and D frequency stands
		A+B+C+D	Enable TMR, A B C and D frequency standby
		2.50K	
		5.00K	
	CTED	6.25K	In frequency mode, press [UP] and [DOWN] to
1	STEP	10.00K	select step figure.
		12.50K	
		25.00K	1

2	SQL	0,*,9	Squelch level 0-9 selective
3	TXP	HIGH	High power output
3	IAP	LOW	Low power output
4	SCR	OFF	Disable Scrambler function
4	SCR	ON	Enable Scrambler function
5	TOT	15,30,*600	Time out timer, 15-600s selective, step is 15s.
6	APO	OFF, 30, 60, 90 * 300	Auto power off time (no signal, no operation)
7	WN	WIDE	Wide band
'	VVIN	NARR	Narrow band
8	ABR	OFF	backlight always on
0	ADK	1, 2, 3, 4, 5	Auto backlight off time (Color screen unavailable)
9	BEEP	OFF	Alert tone off
9	DEEP	ON	Alert tone on
10	R-DCS	OFF	None DCS tone programmed
10	10 R-DCS	D023N, *, D754I	Desired DCS tone programmed
		OFF	None CTCSS tone programmed
11	R- CTCS	07 0117 * 054 1117	Desired CTCSS tone programmed, and can directly input
		67.0HZ, *, 254.1HZ	by keypad.
10	T. D.C.C.	OFF	None DCS tone programmed
12	T- DCS	D023N, *, D754I	Desired DCS tone programmed
		OFF	None CTCSS tone programmed
13	T- CTCS	07.0117 * 954.1117	Desired CTCSS tone programmed, and can directly input
		67.0HZ, *, 254.1HZ	by keypad.
	DTMECT	OFF	Radio will not emit code tone when transmitting DTMF
14	DTMFST	OFF	code

			Radio emit code tone when manually transmitting DTMF
		KEY	code by key
		ID.	Radio emit code tone when auto transmitting the DTMF
		ID	code
		BOTH	Radio emit code tone in both conditions
15	BCL.	OFF	Radio can transmit at any time
15	DCL	ON	Raido cannot transmit when the selected channel is busy
16	SC- ADD	OFF	Deletes the Channel from the SCAN list
16	SC-ADD	ON	Adds the Channel to the SCAN list
		TO	Scan by time
17	SC-REV	CO	Scan by carrier
		SE	Scan by search
		OFF	Disable optional signalling
18	OPTSIG	DTMF	DTMF as optional signalling
10	OFISIG	2TONE	2 TONE as optional signalling
		5TONE	5 TONE as optional signalling
		QT	Speaker unmutes when receiveing matched QT/DQT
		AND	Speaker unmutes when receiveing both matched optional
19	SPMUTE	AND	signalling and QT/DQT
		OR	Speaker unmutes when receiveing either matched
		OR	optional signalling or QT/DQT
		OFF	Disable PTT-ID transmit
20	PTT- ID	BOT	Press PTT to transmit signalling code (set by software)
20	FII-ID	EOT	Release PTT to transmit signalling code
		ВОТН	Press PTT and Release PTT to transmit signalling code

21 PTT-LT 0, 1, *, 30 Delay time before PTT-ID transmit				
S-INFO I, 5, 15 Software only	21	PTT-LT	0, 1, *, 30	, , ,
ALARM Radio emit emergency alarm tone EMC-TP ANI Radio emit emergency alarm code and ANI code Radio emit emergency alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio will emit emergency alarm from specified emergency alarm channel 25 SIG-BP OFF Signalling available not prompt ON Signalling available prompt In channel mode to edit the channel name FREQ Frequency mode CH Channel display mode NAME Channel display mode (name set by software) FREQ Frequency mode CH Channel display mode CH Channel ame display mode (name set by software) FREQ Frequency mode CH CH Channel mame display mode (name set by software) FREQ FREQ Frequency mode CH Channel mame display mode (name set by software) FREQ FREQ Frequency mode CH Channel display mode CH Channel display mode CH Channel mame display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode Channel name display mode (name set by software)	22	C INICO 1 * 15	Signalling code can be programmed by PC	
EMC-TP ANI Radio emit emergency alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm from specified emergency alarm channel Radio emit emergency alarm from specified emergency alarm channel Radio emit emergency alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm tone, alarm code and ANI code Radio emit emergency alarm chanel alarm code and alarm code and alarm code and alarm code and series alarm code and alarm code and series alarm code and	22	S-1NFO	1, 1, 15	software only
BOTH Radio emit emergency alarm tone, alarm code and ANI code Radio will emit emergency alarm from specified emergency alarm channel SIG-BP OFF Signalling available not prompt ON Signalling available prompt In channel mode to edit the channel name FREQ Frequency mode CA-MDF CA-MDF CH Channel display mode (name set by software) FREQ FREQ Frequency mode CB-MDF CH Channel display mode Channel name display mode (name set by software) FREQ Frequency mode CC-MDF CH Channel mame display mode (name set by software) FREQ Frequency mode Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode (name set by software) FREQ Frequency mode CH Channel display mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode			ALARM	Radio emit emergency alarm tone
BOTH code 24 EMC-CH 000, *, 199 Radio will emit emergency alarm from specified emergency alarm channel 25 SIG-BP OFF Signalling available not prompt 26 CHNAME In channel mode to edit the channel name FREQ Frequency mode 27 CA-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CB-MDF CH Channel display mode CB-MDF CH Channel made display mode CC-MDF CH Channel name display mode CC-MDF CH Channel name display mode CC-MDF CH Channel name display mode CC-MDF CH Channel name display mode (name set by software) FREQ Frequency mode CC-MDF CH Channel name display mode (name set by software) FREQ Frequency mode CC-MDF CH Channel name display mode (name set by software) FREQ Frequency mode CC-MDF CH Channel display mode	23	EMC-TP	ANI	Radio emit emergency alarm code and ANI code
24 EMC-CH 25 SIG-BP OFF ON Signalling available not prompt CH CHAME CHAM			DOTH	Radio emit emergency alarm tone, alarm code and ANI
25 SIG-BP OFF Signalling available not prompt ON Signalling available prompt In channel mode to edit the channel name FREQ Frequency mode CA-MDF CH Channel display mode CB-MDF CH Channel display mode CH Channel display mode CH Channel display mode CH Channel display mode CH Channel name display mode CH Channel display mode CH Channel display mode CH Channel name display mode CH Channel display mode CH Channel display mode			BOIH	code
emergency alarm channel 25 SIG-BP OFF Signalling available not prompt ON Signalling available prompt In channel mode to edit the channel name FREQ Frequency mode CH CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode CH Channel display mode FREQ Frequency mode CH Channel name display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode FREQ Frequency mode CH Channel name display mode FREQ Frequency mode CH Channel name display mode (name set by software) FREQ FREQ FREQ FREQ FREQ FREQ FREQ FREQ	9.4	EMC CH	000 * 100	Radio will emit emergency alarm from specified
25 SIG-BP ON Signalling available prompt 10 CHNAME In channel mode to edit the channel name 11 FREQ Frequency mode 12 CA-MDF CH Channel display mode 12 CB-MDF CH Channel display mode (name set by software) 12 FREQ Frequency mode 13 CC-MDF CH Channel name display mode (name set by software) 14 FREQ Frequency mode 15 CH Channel name display mode (name set by software) 16 FREQ Frequency mode 17 CH Channel display mode 18 CH Channel display mode 19 CC-MDF CH Channel name display mode 10 CH Channel name display mode 10 FREQ Frequency mode 11 FREQ Frequency mode 12 FREQ Frequency mode 13 CD-MDF CH Channel display mode 14 CHANNE Channel name display mode (name set by software) 15 FREQ Frequency mode 16 CHANNE CHANNEL CHANNE	24	EMC-CH	000, 1, 199	emergency alarm channel
ON Signalling available prompt In channel mode to edit the channel name FREQ Frequency mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CB-MDF CH Channel display mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode	95	CIC PD	OFF	Signalling available not prompt
FREQ Frequency mode CH Channel display mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode TREQ Frequency mode CH Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode	25	SIG-Dr	ON	Signalling available prompt
27 CA-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode CH Channel display mode (name set by software) NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode	26	CHNAME		In channel mode to edit the channel name
NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode NAME Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CC-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode NAME Channel name display mode (name set by software) FREQ Frequency mode TREQ Frequency mode CD-MDF CH Channel display mode			FREQ	Frequency mode
FREQ Frequency mode CB-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode NAME Channel name display mode (name set by software) FREQ Frequency mode CD-MDF CH Channel display mode	27	CA- MDF	СН	Channel display mode
28 CB-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode (name set by software) CH Channel display mode (name set by software) NAME Channel name display mode (name set by software) FREQ Frequency mode 30 CD-MDF CH Channel display mode			NAME	Channel name display mode (name set by software)
NAME Channel name display mode (name set by software) FREQ Frequency mode CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode TREQ Frequency mode CD-MDF CH Channel display mode			FREQ	Frequency mode
FREQ Frequency mode CC-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode CD-MDF CH Channel display mode	28	CB- MDF	СН	Channel display mode
29 CC-MDF CH Channel display mode NAME Channel name display mode (name set by software) FREQ Frequency mode 30 CD-MDF CH Channel display mode			NAME	Channel name display mode (name set by software)
NAME Channel name display mode (name set by software) FREQ Frequency mode CD-MDF CH Channel display mode			FREQ	Frequency mode
FREQ Frequency mode CD-MDF CH Channel display mode	29	CC-MDF	СН	Channel display mode
30 CD-MDF CH Channel display mode			NAME	Channel name display mode (name set by software)
			FREQ	Frequency mode
NAME Channel name display mode (name set by software)	30	CD-MDF	СН	Channel display mode
channel name display mode (name set by soltware)			NAME	Channel name display mode (name set by software)

0.1	LANGUA	ENG	English menu
31	LANGUA	CHS	Chinese menu
32	an Allenia	OFF	Disable keypad auto lockout function
32	AUTOLK	ON	Enable keypad auto lockout function
		BLACK	
		WHITE	
		RED	
		BLUE	
33	MAINFC	GREEN	Setting main LCD figure color
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
		BLUE	
34	MAINBC	GREEN	Setting main LCD back color
		YELLOW	
	INDIGO PURPLE GRAY	INDIGO	
		GRAY	
		BLACK	
35 MENUFC	WHITE	Setting Menu figure color	
		RED	

		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
		BLUE	
36	MENUBC	GREEN	Setting Menu back color
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
37	STA-FC	BLUE	Setting top figure front color
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	

		BLACK	
		WHITE	
		RED	
		BLUE	
38	STA-BC	GREEN	Setting top figure back color
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
		BLUE	
39	SIG-FC	GREEN	Setting bottom signal figure color
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
40	SIG-BC	BLUE	Setting bottom signal figure back color
		GREEN	
		YELLOW	
		INDIGO	

		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
		BLUE	
41	RX-FC	GREEN	Set receiving figure color
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
		BLACK	
		WHITE	
		RED	
42	TX-FC	BLUE	Set transmitting figure color
		GREEN	
		YELLOW	
		INDIGO	
40	TVDICD	POWER	Bottom signal shows output power at transmit
43	TXDISP	MIC-V	Bottom signal shows volume at transmit
			Select a channel (000-199) to store desired
44	MEM- CH	000, *, 199	frequency, the channel (000-199) with "CH" was
			already programmed with frequency
45	DEL CH	000 * 100	Delete the channel information, if the channel number
45	DEL- CH	000, *, 199	without "CH" means no programmed

		OFF	Offset is turn off, TX RX frequency is same
46	SFT-D	+	Plus offset, means TX frequency is higher then RX
		-	Minus offset, means TX frequency is lower then RX
47	OFFSET		Offset frequency range is 00.000-69.990MHz sel-
47	OFFSEI		ective. In VFO mode, the offset between TX and RX
48	ANI		ANI code, programmed by PC software only
49	ANI- L	3, 4, 5	Length of ANI code
		1000	Transmitting press CALL to send 1000Hz to activate
		1000	repeater function
	ro PED C	1450	Transmitting press CALL to send 1450Hz to activate
50		REP-S	repeater function
30	KEF-5	1750	Transmitting press CALL to send 1750Hz to activate
		1730	repeater function
		2100	Transmitting press CALL to send 2100Hz to activate
		2100	repeater function
		OFF	Disable repeater transponder function
		CARRI	Repeater transpond when receiving matched carrier
		CTDCS	Repeater transpond when receiving matched
51	51 REP- M	CIDCS	CTCSS/DCS
	TONE	Repeater transpond when receiving matched tone	
		DTMF	Repeater transpond when receiving matched DTMF code
52	TMR- MR	OFF, 1, 2, 3, * 50	Delay time for main frequency back, at multi standby
53	CTE	OFF	Disable squelch tail- eliminated function
33	3 STE	ON	Enable squelch tail- eliminated function

54	RP-STE	OFF, 1, 2, 3, *10	1-10 indicate squelch tail length, used to eliminate squelch tail noise produced
55	RPT- DL	OFF, 1, 2, 3, *10	1-10 select delay time to receive repeater tail noise
56	DTMF- G	0, 1, 2, 3, * 60	Set DTMF gain
		VFO	Reset the menu mode to factory default setting
57	RESET	ALL	Reset all memories and other setting to factory default setting

■ GENERAL SPECIFICATIONS

General Specifications

Frequency range	VHF: 136~174MHz (220~260MHz)		
	UHF: 400~480MHz (350~390MHz)		
Channel capacity	200 channels		
Channel Spacing	25KHz / 20KHz / 12.5KHz		
Channel step	2.5KHz / 5KHz / 6.25KHz / 10KHz / 12.5KHz / 25KHz		
Working Voltage	13.8V DC*15%		
Squelch way	CARRIER / CTCSS / DCS / 5Tone / 2Tone / DTMF		
Frequency stability	*2.5ppm		
Operating temperature	- 20~+60*		
Dimension	98*W*x 43*H*x126*D*mm *103*47*126 mm*		
Weight	448g		

Receiver (ETSI EN 300 086 Standardized.Test)

·	Wide Band	Narrow Band
Sensitivity	*0.25*V	*0.35*V
Adjacent Channel Selectivity	*70dB	*60dB
Intermodulation	*65dB	*60dB
Spurious Rejection	*70dB	*70dB
Audio response	+1~-3dB (0.3~3KHz)	+1~-3dB (0.3~2.55KHz)
Hum & Noise	*45dB	*40dB
Audio Distortion	*5%	
Audio output power	*2W@10%	

Transmit (ETSI EN 300 086 Standardized.Test)

	Wide Band	Narrow Band
Output power	25W/20W(VHF/UHF)	
Modulation Mode	16K*F3E	11K*F3E
Adjacent Channel Selectivity	*70dB	*60B
Hum & Noise	*40dB	*36dB
Spurious Emission	*60dB	*60dB
Audio response	+1~-3dB (0.3~3KHz)	+1~-3dB (0.3~2.55KHz)
Audio distortion	*5%	

Attention: Above specifications are subject to change without any notice due to technology enhancement.