To customers

Thank you very much for using VGC two-way radios. This product has a newly developed function menu and humanism operation design, making it easy to use. It will meet your requirement by the compact size and reasonable price.

Thank you for choosing VGC VR-2200 mobile transceiver, VGC always provides high quality products, and this transceiver is no exception. As you learn how to use this transceiver, you will find that VGC is pursuing "user friendliness". For example, each time you change the menu no. in Menu mode, you will see a text message on the display lets you know what you are configuring.

Though friendly design for user, this transceiver is technically complicated and some features may be new to you. Consider this manual to be a personal tutorial from the designers,allow the manual to guide you through the learning process now, then act as a reference in the coming years.

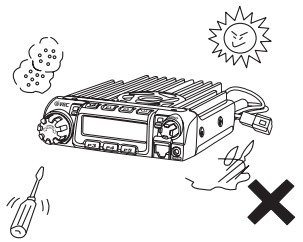
Please contact the local authorized dealer if you have any questions.We are not responsible for any typographical errors that may be in this manual. Standard accessories may change without notice, getting your understanding for any inconveniences.

When programming the transceiver, read the factory initial data firstly, then rewrite the frequency and signalling etc., otherwise errors may occur because of different frequency band etc..

Precautions

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

- Do not attempt to configure your transceiver while driving,it is dangerous.
- This transceiver is designed for a 13.8V DC power supply. Don't use a 24V battery to power on the transceiver.
- Do not place the transceiver in excessively dusty, humid or wet areas, nor unstable surfaces.
- Please keep it away from interferential devices (such as TV, generator etc.)
- Do not expose the transceiver to long periods of direct sunlight or place it close to heating appliances.
- If an abnormal odor or smoke is detected coming from the transceiver, turn OFF the power immediately. Contact local service station or your dealer.



- Do not transmit with high output power for extended periods; the transceiver may overheat.

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New and Innovative Features

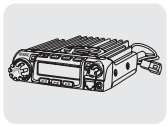
VR-2200 mobile radio has nice housing, stoutness & stability, advanced and reliable functions, perfect & valuable. This amateur mobile radio especially designs for drivers and it pursues company philosophy of innovation and practicality. More functions are as follows:

- Display on a large LCD with adjustable brightness, convenient for nighttime use. There are Amateur operation mode and Professional operation mode for option.
- Distribute buttons reasonably, convenient for operation. Adopt superior quality material, better technology and high quality radiator to ensure stable and durable operation.
- 200 programmable memorized channels, identified by editing name.
- Programming different CTCSS, DCS, 2Tone, 5Tone in per channel, rejecting extra calling from other radios.
- Various scan functions are including CTCSS/DCS Scan functions.
- Using 5Tone to send Message, Emergency alarm, Call all, ANI, Remotely kill, Remotely Waken, etc.
- Automatic calling Identification function by DTMF--ANI or 5Tone--ANI.
- Scramble function (Optional).
- Compander function for decrease the background noise and enhance audio clarity, it can set compander ON/OFF per channel.
- Different band width per channel, 25K for wide band, 20K for middle band ,and 12.5K for narrow band.
- Theft alarm provides extra safety.
- Five programmable multi-functional keys,can set various shortcut operation according to different requirement.
- 1024 groups of DCS code improves the abiliting of rejecting extra calling.

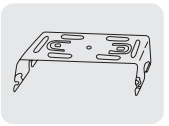
Supplied Accessories/Optional Accessories

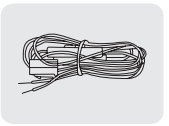
Supplied Accessories

After carefully unpacking the transceiver, identify the items listed in the table below. We suggest you keep the box and packaging.


VR–2200 radio body


Microphone

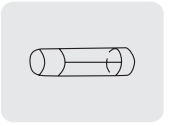

Mobile Mounting Bracket [MB–01]

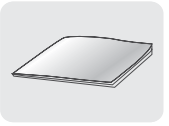

DC Power Cable with Fuse Holder [RL–01]


Black screws (M4X8mm) [SS–01A]


Tapping screws (M5X8mm) [SS–01B]


S–Washer [SS–01D]


Spare Fuses


User Manual

Optional Accessories

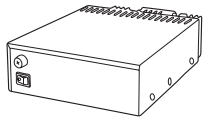

Cloning Cable [CP–220]

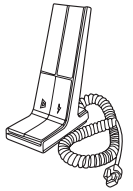

USB Programming Cable [VPG–220–U]


Cigar–Plug Connection Line [CC–01]


Car Antenna [HH–M10A]


Programming Software [CS–2200]


Regulated Power Supply [RP–01]


Desktop Microphone [DHM–02]


Alarm Cable A [MD–01]


Alarm Cable B (Extension line) [L–01(A)]

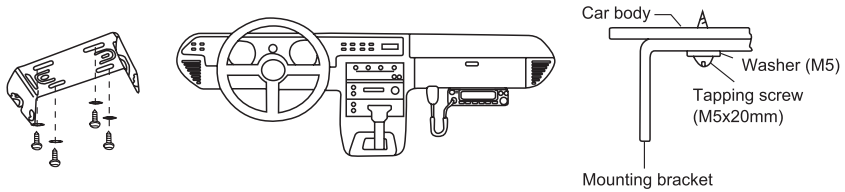

External Speaker [SP–01]

Initial Installation

Mobile installation

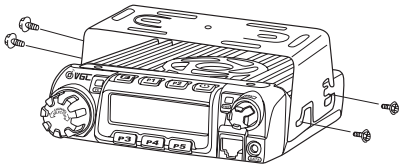
To install the transceiver, select a safe, convenient location inside your vehicle that minimizes danger to your passengers and yourself while the vehicle is in motion. Consider installing the unit at an appropriate position so that knees or legs will not strike it during sudden braking of your vehicle. Try to pick a well ventilated location that is shielded from direct sunlight.

1. Install the mounting bracket in the vehicle using the supplied self-tapping screws (4pcs) and flat washers (4pcs),

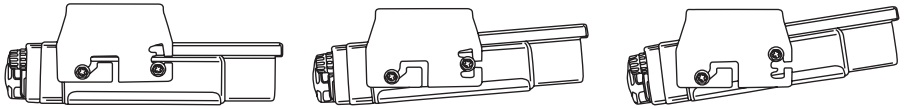


2. Position the transceiver, then insert and tighten the supplied hexagon SEMS screws.

- Double check that all screws are tightened to prevent vehicle vibration from loosening the bracket or transceiver.



- Determine the appropriate angle of the transceiver, using the 3 screw hole positions on the side of the mounting bracket.



DC Power Cable Connection

NOTE: Locate the power input connector as close to the transceiver as possible.

Mobile Operation

The vehicle battery must have a nominal rating of 12V. Never connect the transceiver to a 24V battery. Be sure to use a 12V vehicle battery that has sufficient current capacity. If the current to the transceiver is insufficient, the display may darken during transmission, or transmitting output power may drop excessively.

1. Route the DC power cable supplied with the transceiver directly to the vehicle's battery terminals using the shortest path from the transceiver.

- We recommend you do not use the cigarette lighter socket as some cigarette lighter sockets introduce an unacceptable voltage drop.
- The entire length of the cable must be dressed so it is isolated from heat, moisture, and the engine secondary (high voltage) ignition system/ cables.

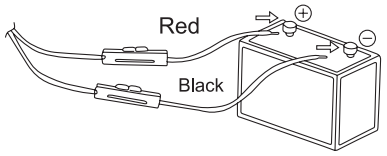
2. After installing cable, in order to avoid the risk of damp, please use heat-resistant tap to tie together with fuse box. Don't forget to reinforce whole cable.

3. In order to avoid the risk of short circuit, please cut down connection with negative (-) of battery, then connect with radio.

4. Confirm the correct polarity of the connections, then attach the power cable to the battery terminals; red connects to the positive (+) terminal and black connects to the negative (-) terminal.

- Use the full length of the cable without cutting off excess even if the cable is longer than required. In particular, never remove the fuse holders from the cable.

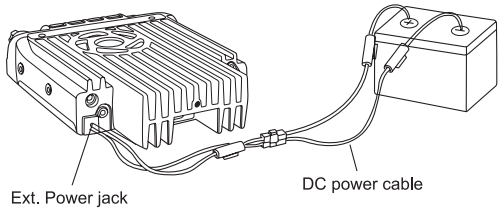
5. Reconnect any wiring removed from the negative terminal.



6. Connect the DC power cable to the transceiver's power supply connector.

- Press the connectors firmly together until the locking tab clicks.

If the ignition-key on/off feature is desired(optional feature),use the



optional (For Cigar-Plug connection) cable. Connect one of the cables between the ACC terminal or a Cigar-Plug that operates with the vehicle ignition or ACC switch on the vehicle and EXT POWER jack on the rear side of the unit.

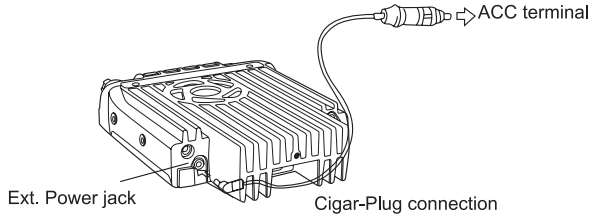
NOTE: In many cars,the cigar-lighter plug is always powered. If this is the case, you cannot use it for the ignition key on/off function.

7. When the ignition key is turned to ACC or ON(Start) position with the radio turned off, the power switch illuminates. The illumination will be turned off when the ignition key is turned to the off position.

To turn on the unit, press the power switch manually while it is illuminated. (While ignition key is at ACC or ON position)

8. When the ignition key is turned to ACC or ON position with the radio's power switch on, the unit turns on automatically and the power switch will be lit. Turn the ignition key to OFF position or manually turn the power switch off to shut down the radio.

9. Using extra cable,power consumption:5MAH. 10.Without this function,user can turn on/off radio by Power knob.



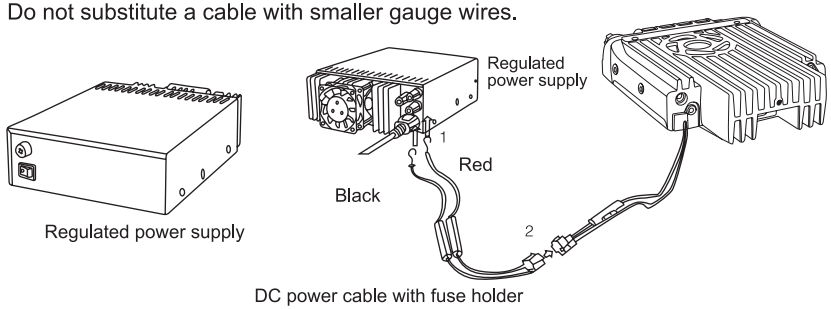
Fixed Station Operation

Ineed a separate 13.8V DC power supply (not included) , power supply as optional accessories. Please contact local dealer to require.

The recommended current capacity of your power supply is 12A.

1. Connect the DC power cable to the regulated DC power supply and ensure that the polarities are correct. (Red: positive, Black: negative).

- Do not directly connect the transceiver to an AC outlet.
- Use the supplied DC power cable to connect the transceiver to a regulated power supply.
- Do not substitute a cable with smaller gauge wires.



DC power cable with fuse holder

2. Connect the transceiver's DC power connector to the connector on the DC power cable.

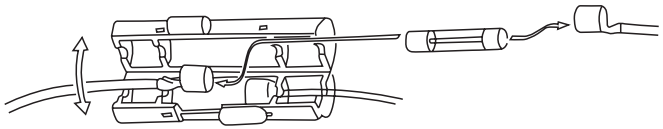
- Press the connectors firmly together until the locking tab clicks.

NOTE: ■ Before connecting the DC power to the transceiver, be sure to switch the transceiver and the DC power supply OFF.

■ Do not plug the DC power supply into an AC outlet until you make all connections.

Replacing Fuses

If the fuse blows, determine the cause, then correct the problem. After the problem is resolved, replace the fuse. If newly installed fuses continue to blow, disconnect the power cable and contact your autho- rized VGC dealer or an authorized VGC servi-cecenter for assistance.



Fuse Location	Fuse Current Rating
Transceiver	15A
Supplied Accessory DC power cable	20A

Only use fuses of the specified type and rating, otherwise the transceiver could be damaged.

NOTE: If you use the transceiver for a long period when the vehicle battery is not fully charged, or when the engine is OFF, the battery may become discharged, and will not have sufficient reserves to start the vehicle. Avoid using the transceiver in these conditions.

Power supply voltage Display

After connecting the transceiver to the power supply, the supply voltage can be displayed on LCD by long pressing the [P2] key.

The display immediately changes as the voltage supply changes, It also displays voltage during transmission.

The transceiver will return to its normal operation when the power is switched ON or repeat above operation.

Important: The range of displayed voltage is only from 7V to16V DC, because the displayed value is estimated, please use a voltmeter when a more precise reading is desired.

Antenna Connection

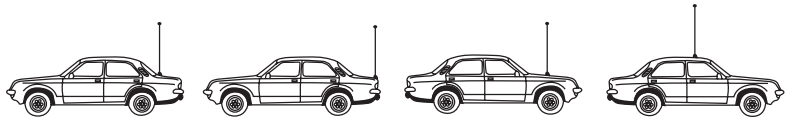
Before operating, install an efficient, well-tuned antenna. The success of your installation will depend largely on the type of antenna and its correct installation. The transceiver can give excellent results if the antenna system and its installation are given careful attention.

Use a 50Ω impedance antenna and low-loss coaxial feed-line that has a characteristic impedance of 50 Ω, to match the transceiver input impedance. Coupling the antenna to the transceiver via feed-lines having an impedance other than 50Ω reduces the efficiency of the antenna system and can cause interference to nearby broadcast television receivers, radio receivers, and other electronic equipment.

NOTE: Transmitting without first connecting an antenna or other matched load may damage the transceiver. Always connect the antenna to the transceiver before transmitting.

All fixed stations should be equipped with a lightning arrester to reduce the risk of fire, electric shock, and transceiver damage.

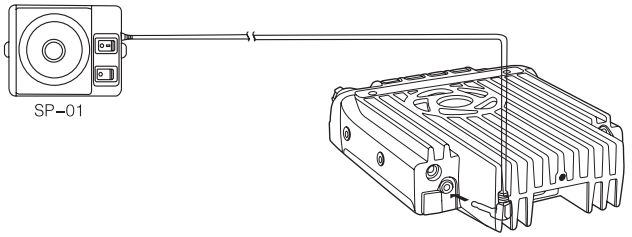
The possible locations of antenna on a car are shown as following:



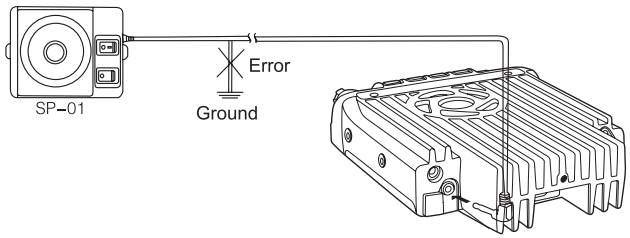
Accessories Connections

External Speaker

If you plan to use an external speaker, choose a speaker with an impedance of 8Ω. The external speaker jack accepts a 3.5 mm(1/8") mono (2-conductor) plug.

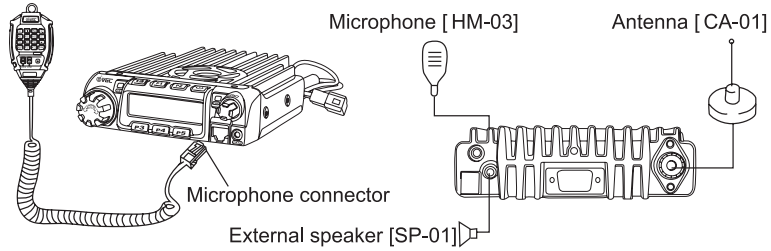


NOTE: External speaker adopt double port BTL, please care about the connecting way. The speaker can not connect with the ground, otherwise the speaker will be fault. The wrong connecting way as the following picture.



Microphone

For voice communications, connect a microphone equipped with an 8-pin modular plug into the modular socket on the front of the main unit. Press firmly. on the plug until the locking tab clicks. Attach the supplied microphone hanger in an appropriate location using the screws included in the screw set.



PC Connecting

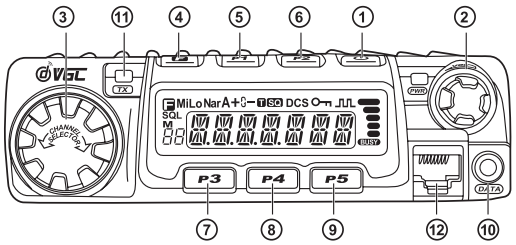
To utilize the optional VR-2200 software, you must first connect the transceiver to your PC then using an optional programming cable CP-220 (via Data socket).

Please use VR-2200 software for programming.

NOTE: Ask your dealer about purchasing a Programming Cable CP-220.

Getting Acquainted

■ Front panel



Basic Functions

NO.	KEY	FUNCTION
1	Pow(Power)	Power on/Off
2	VOL	Adjust Volume Key
3	Main Dial	Change frequency, memory channel and scan direction etc.
4	F	Function Key
5	P1	Call key
6	P2	Squelch off
7	P3	Switch VFO/MR mode
8	P4	Step key (step: 1MHZ)
9	P5	Set CTCSS/DCS
10	Data Terminal	Data reading/writing, cloning and theft alarm functions
11	TX	lights during Transmitting
12	Mic.connector	Microphone connection port

Press F key until icon appears then press the following key.

NO.	KEY	FUNCTION
4	F	Confirms the selective functions and exit
5	P1	TX power set
6	P2	Voice compander
7	P3	Store memory channel
8	P4	Delete memory channal
9	P5	Keypad lock

Press F key and following key together to activate following function:

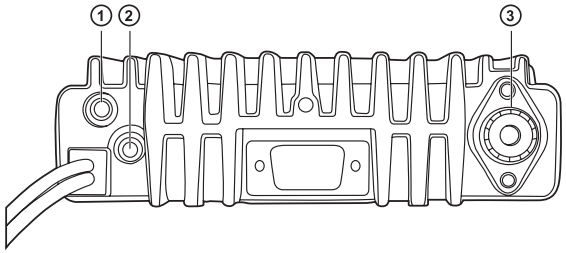
NO.	KEY	FUNCTION
5	P1	Data clone
6	P2	Power voltage display
7	P3	Scan mode
8	P4	Repeater offset set
9	P5	Auto dialer setting

Functions that require continuous pressing following key to be activated

NO.	KEY	FUNCTION
4	FUN/SET	Press and hold for 2s to enter the Setting mode

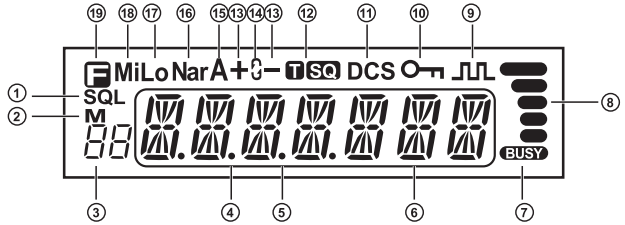
Note:P1-P5 keys setting above are default. Users can modify then according to their need by program software.

Rear panel



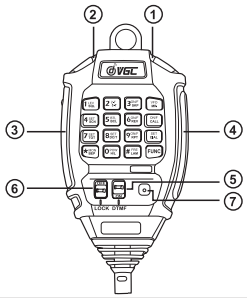
NO.	KEY	FUNCTION
1	Ext. Power Jack	Terminal for connecting optional cable for use with ignition key On/Off function. The radio will auto power on when car is driving. The radio will auto power off when car stops.
2	Ext.Speaker Terminal	Terminal for optional external speaker SP-01.
3	Antenna Connector	Connection for 50Ω antenna.

DISPLAY



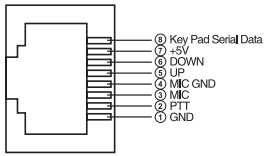
NO.	KEY	FUNCTION
1	**SQL**	Squelch level.
2	**M**	In channel mode.
3	88	Indicates the channel number in channel mode.
4	Decimal point	Channel skip.
5	Decimal point	Indicates the decimal point of frequency and the scanning function.
6	8.8.8.8.8.8.8	Indicates the frequency or memory name.
7	BUSY	Signal is being received or monitor.
8		Signal strength of receiving and transmitting.
9		Compander.
10		Keypad lock .
11	**DCS**	Set DCS function.
12	TSQ	Set CTCSS function.
13	+ −	Offset frequency direction.
14		Scrambler.
15	**A**	Auto power off.
16	**Nar**	Narrow band.
17	**LO**	Low power.
18	**Mi**	Middle Power.
19	F	Pressing F key.

■ Microphone



NO.	KEY	FUNCTION
1	UP	Increase frequency ,channel number or setting value.
2	DOWN	Decrease frequency, channel number or setting value.
3	PTT	Press the PTT (Push–TO–Talk) key to transmit.
4	Number Key	Input VFO frequency or DTMF dial out etc.
5	DTMF ON/ OFF	Switches between DTMF dialing or function operating.
6	LOCK Switch	Locks out the UP DownNumerical keys and Function keys.
7	MIC	Speak here during transmission.

MIC Connector Diagram(in the front view of connector)



Working Mode (Amateur Transceiver Or Professional Transceiver)

According to practical application,you can set the radio works as Amateur Transceiver mode or Professional Transceiver mode . There are also 2 levels operation menu to set functions as you need. It is easy and convenient (From No.1 to No. 15 are channel function setup,from No.15 to No.29 are general setting setup).

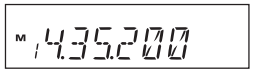
1. Working Mode:

A.By programming software: In PC software's "General Setting"menu ,choose "Display Mode" to select Amateur Transceiver mode or Professional Transceiver mode.

B.By manual setup :Please refer to "Display Mode" in Page 43.

2. Amateur Transceiver Mode: Except setting as "CH" mode, others considered as Amateur transceiver mode. Under this mode,press P3 key to switch between Channel mode and VFO mode .

A. Frequency + Channel mode: When set display as"FR",it enters into Frequency+Channel mode, new setting of channel operation and shortcut operation can be temporarily used by user. Once the radio is turned off or switched to another channel, the temporary setting will be erased and back to initial settings.(As pic 1)

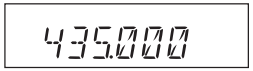


(Pic 1)

(Pic 2)

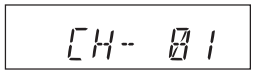
B. Channel+Name Tag Mode: When set display as "NM",it enters into Channel +Name Tag mode. At this mode, it will display corresponding channel name when the current channel is edited with name. Otherwise, it will display frequency + channel. Its operations are the same as frequency + channel mode.(As pic 2)

C. VFO Mode(Frequency mode): This mode shows only frequency on the display. Shortcut operation and Channel setting will be changed & stored as the latest value permanently.Once the radio is turned off or changed to new VFO frequency, the latest setting is remained until next change.(As pic 3)



(Pic 3)

3. Professional Transceiver Mode: When set display mode as "CH",it enters into Professional Transceiver mode.At this mode, except scan,other shortcut operation can't operate.And from No.1- 17 menu in function setting will be auto-hidden,They should be set by PC software.If there is corresponding name for current channel,the LCD will display current channel name Otherwise,it shows current channel number. (As pic 4) (As pic 5)

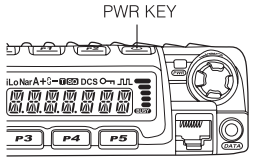


NOTE: If transceiver programmed as professional transceiver mode and locked,you can't return to amateur transceiver mode by manual operation from general setting.

4. Under every mode, from No. 18-29 menu in general setting can be changed and saved.

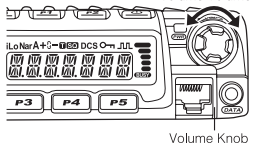
Basic Operations

Switching The Power On/Off



according to the option selected during installation Press the switch or turn the ignition key to ACC (speed up) or ON (start up) position to power on radio . Press the key for 1s or turn the ignition key to OFF position to turn off.

Adjusting The Volume

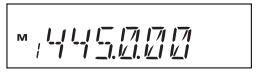


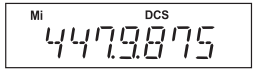
Turn the VOL knob clockwise to increase the audio level, counterclockwise to decrease.

NOTE: During communication, volume can be adjusted more accuratiy.

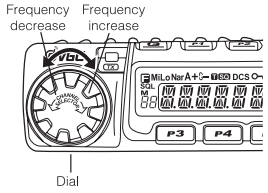
Switch Between VFO And Channel Mode

In standby, press P3 key or Microphone's VFO MR. key until appear , this indicates current channel in channel mode. Repeat above operation to switch between Frequency mode (VFO) and Channel mode.





Adjusting Frequency/Channel Through Selector Knob



1. Under frequency (VFO) mode, you can change the current frequency to the desired one through selector knob; Turn clockwise to increase frequency; turn counterclockwise to decrease. Every gear will increase or decrease one step.

Press key, the decimal point of P4 key, the decimal point

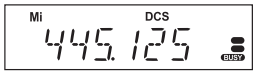
of frequency in screen will be auto-hidden. In this status, turn selector knob or Microphone [UP / DOWN] key will increase or decrease frequency quickly by 1MHz step .

2. Under channel mode, you can change the current channel to the desired one through selector knob, clockwise turn to the forward channel, anticlockwise turn to the backward channel. In relative working mode, Microphone's [UP /DOWN] key has same function for adjusting frequency and channel.

NOTE: 5k, 6.25k, 8.33K,10k, 12.5k, 20k, 25k, 30k and 50k total nine step sizes are available for this radio.

Receiving

When the channel you are operating is called, the screen shows BUSY and field intensity, in this way, you can hear the calling from transmitting party.



NOTE: If the transceiver has set at higher squelch level, it may fail to hear the calling.

When the channel you are operating is called,the screen shows BUSY and field intensity, you can't hear the calling from transmitting party,it means current channel receives a matching carrier but unmatching signaling(Refer to CTCSS/DCS encode and decode or Optional Signaling setup).

Transmitting

Press P2 key or press MIC's MON BEP key to monitor for a while to confirm the channel desired is not busy. Release P2 or press Mic's MON BEP key to return standby status,Then press and hold [PTT] key to speak into microphone.

Please hold the microphone approximately 2.5-5.0cm from your lips, and then speak into the microphone in your normal speaking voice to get best timbre.

NOTE:Press and hold [PTT] key, LED lights RED and power intensity showed in screen indicates it is transmitting, release to receive.

Transmitting Tone-pulse

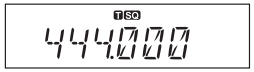
Press and hold [PTT] key, then press Microphone DOWN transmit current selected tone-pulse signal.

Transmitting Optional Signaling

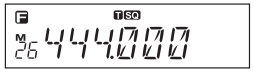
Press and hold [PTT] key, then press Microphone UP key or press P1 key in front panel or press Mic's ON/F CALL key to transmit pre-stored and selected DTMF/2Tone/5Tone optional signaling.

Channel Edit

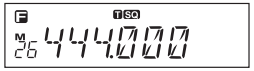
1. Under frequency mode (VFO), turn selector knob to select the desired frequency or input frequency by MIC's numeric keys.



2. Press P5 key to enter CTCSS/DCS signaling setup, turn selector knob to select the desired signaling.



3. Press F key, LCD appears F , **M**icon and current channel number, **M**icon flashing means current channel is empty.



4. Turn selector knob to select the desired channel number to store.

5. Press P3 key, F , **M**icon and channel number disappears and emit a prompt voice, thus the channel storage succeed.

Channel Delete

1. Under channel mode, turn selector knob to select channel which you want to delete.
2. Press [F] key and [P4] key together, current channel will be deleted and emitted and emitted a prompt voice. **M**icon flashing means current channel is deleted.

Shortcut Operations

Squelch Off

[P2] key programmed as Squelch Off to monitor the weak signal.

1. Squelch Off: Press [P2] key to disable squelch ,press [P2] key again to resume squelch.

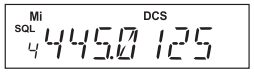
Squelch level Setup

Setting the radio to a tight squelch level,you can avoid unwanted signals or noise,but you may not receive a weak signal. Therefore,it will be better for you to select the normal squelch level.

1. While standby, press [P2] key and turn selector knob at the same time until LCD appears and current squelch level
2. Turn selector knob or press MIC [UP / DOWN] key to set desired squelch level.
3. Press any key except [⏻] and [F] key to exit .

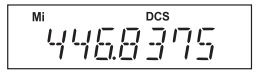
Frequency/Channel Scan

Frequency Scan



In frequency (VFO) mode, this function is designed to monitor signal of every communicative frequency point of transceiver "step size" you have set.

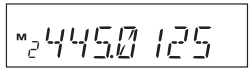
1. In VFO mode,presst [P3] for 1s to enter into frequency scan.
2. Turn selector knob or press Microphone [UP / DOWN] key tochange scan direction.
3. Press any key except [⏻] and [F] key to exit.



Channel Scan

In channel mode, this function is designed to monitor signal in every channel.

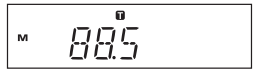
1. In channel mode,Press [P3] key for 1s to enter into channel scan
2. Turn selector knob or press Microphone [UP / DOWN] key to change scan direction.
3. Press any key except [⏻] and [F] key to exit.

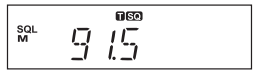


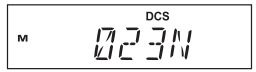
CTCSS/DCS Encode and Decode Setup

Repeatedly press [P5] key to check whether set CTCSS/DCS encode and decode in current channel or not.

1. When LCD appears [T] iron, it means current channel with CTCSS encode, turn selector knob or press Microphone's [UP / DOWN] key to select desired CTCSS encode.
2. When LCD appears [T] and [SQ] iron, it means current channel with CTCSS encode and decode, turn selector knob or press Microphone's [UP / DOWN] to select desired CTCSS code.
3. When LCD appears DCS iron, it means current channe can be set with DCS encode and decode together, turn selector







knob or press Microphone's [UP / DOWN] to select desired DCS encode and decode.

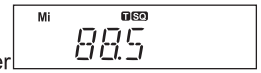
4. CTCSS:62.5-254.1, Total 50 groups; DCS:000N-777I total 1024 groups. N is positive code, is inverse code.

5. Press any key except [F] , [⏻] and [P5] keys to return into standby status.

NOTE: Under channel mode,this operation can be temporarily used by user. Once the radio is turned off or switched to another channel,the temporary setting will be erased.

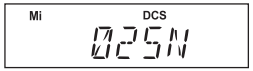
CTCSS Scan

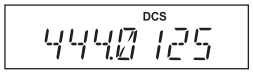
Repeatedly press [P5] key until LCD displays T and SQ icons, Press [FUNC] key on microphone the press [4 SET SCN] key to enter into CTCSS scanning.Once finding a matching CTCSS signaling, it will stop for 15s then scan again.



DCS Scan

Repeatedly press [P5] key until LCD displays DCS icons , Press [FUNC] key on microphone the press [4 SET SCN] key 1S to enter into DCS scanning. Once finding a matching DCS signaling ,it will stop for 15s then scan again.



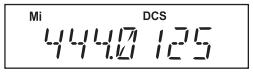


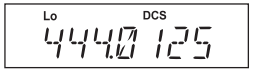
High/Mid/Low Power Switch

Press [F] key until LCD display F iron, then press [P1] key to switch between high/ Mid/low power. The LCD appears:

None: Transmit in high power Mi: Transmit in middle power

Lo: Transmit in low power

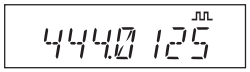




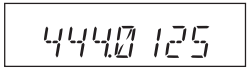
Voice Compander

Compander function will decrease the background noise and enhance 15 audio clarity, especially in long range communication.

1. Press [F] key, then press [P2] key to turn on compander function, repeat above operation again to turn off compander function.



2. When LCD appears ⎍ iron, enable compander in current channel.



3. When LCD doesn't display ⎍ iron, disable compander in current channel.

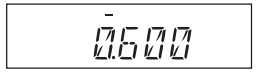
Offset Direction and offset frequency setup

Repeater receives a signal(UP-LINK) on one frequency and re- transmits on another frequency(DOWN-LINK). The difference between these two frequencies is called the offset frequency. If the UP-LINK frequency higher than DOWN-LINK frequency, the direction is positive, If it is lower, the shift direction is negative.

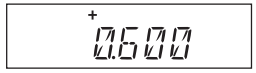
1. Press [F] key until the F icon displays on the LCD, then press [P4] key, LCD displays offset direction and offset frequency.

2. Repeatedly press [P4] key to select positive offset and negative offset.

3. When LCD displays " + " icon, it indicates positive offset, which means transmitting frequency higher than receiving frequency.



4. When LCD displays " − " icon, it indicates negative offset, which means transmitting frequency lower than receiving frequency.



5. Turn selector knob or Mic's [UP / DOWN] key to change offset frequency, offset frequency changed as per stepping.

6. Press any key except F and P2 key to exit into standby.

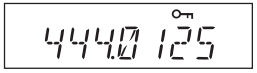
NOTE: Under channel mode,this operation can be temporarily used by user.

Once the radio is turned off or switched to another channel,the temporary setting will be erased.

Keypad Lockout

Avoiding unintentional operation, this function will lock main keys, all keys except P2 F and key are invalid.

1. Press F key until the F icon displays on the LCD, then press P5 key until LCD displays icon, it indicates keypad lockout function is valid.

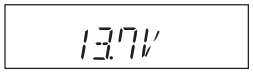


2. Repeat above operation, icon disappears, it indicates keypad lockout function is invalid.

Current Voltage Enquiry

This function will display Current Battery Voltage.

1. Press and hold F key, then press P2 key, LCD displays current battery voltage.



2. Repeat above operation to return into VFO or Channel mode

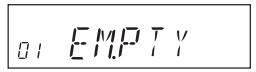
NOTE: In voltage display mode, all functions and channel or frequency selection are invalid.

Auto-Dialer Setup

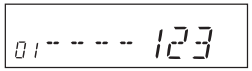
This will automatically transmit pre-programmed and stored DTMF tones. And they are often used to remote control electronic devices or AUTOPATCH phone systems available on some repeater.

1. Press and hold P5 key to enter the auto-dialer enquiry mode, LCD displays current default data and current group displayed on left. If no data in current group,it shows"EMPTY".

2. Turn selector knob to choose group you desired. Total:16 group,01-16.

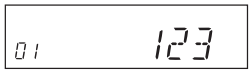


3. Press P5 key to enter into editing of current group,press MIC's numeric keys to set your desired data.



4. The display scrolls when the 7th digit is entered. The numbers 0-9, –, A-D, * and # can be stored up to a total of 23 digits.

5. After editing,press PTT or P1 key to send current group and store edited DTMF signaling.



Transmitting Edited DTMF tones in the Auto-dialer memory

1. Press and hold P5 key to enter into auto-dialer enquiry

2. Turn selector knob to select desired transmitting group

3. Press PTT then UP or P1 key to transmit current selected DTMF tones.

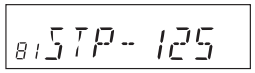
General Setting

1. Press and hold [F] key for over 2s to enter general setting menu.
2. Press [P1] or [P2] to select the desired function option.
3. Turn selector knob to select the desired setup.
4. Press [P5] to confirm and exit.

NOTE: In Profession transceiver mode,the functions from No.1 to No.17 will be auto-hidden.

Frequency Channel Step Setup

Only in frequency (VFO) mode, this function is valid. Turn selector knob to select frequency or frequency scanning which is restricted by frequency step size.



1. Press and hold [F] key for over 2s to enter general setting menu.
2. Press [P1] / [P2] key to choose No.01 menu, LCD displays "STP–125"
3. Turn selector knob to select the desired frequency channel step. Channel step: 5K, 6.25K,8.33K,10K,12.5K,20K,25K,30K and 50K, total 9 kinds.
4. Press [P5] key to confirm and exit

NOTE: This function is auto-hidden in channel mode.

DTMF, DTMF ANI, 2Tone or 5Tone Signaling

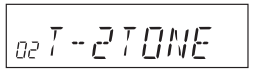
DTMF/5Tone/2Tone signalling function as similarily as CTCSS/DCS. Without receiving correspondent tone signalling, the speaker will remain mute. DTMF and 5Tone signalling can be applied for other advanced features such as ANI, PTT ID, group call, remotely stun, remotely kill, waken,...etc. The signalling edition must be done through programming software. Please refer to it in the programming software to know how to operate these features.

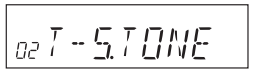
1. Press and hold [F] key for over 2s to enter into general setting menu.

2.Press [P1] / [P2] to choose No 2 menu,LCD displays"T-OFF" .
3. Turn selector knob to select the desired setup.

"DTMF": the channel will be mute by a DTMF signal. The speaker won't be open until receiving a correspondent DTMF signal. Hold "**PTT**" then press [UP] or press [P1] directly to transmit the pre-stored DTMF signaling.

"2TONE": the channel will be mute by a 2-Tone signal. The speaker won't be open until receiving a correspondent 2-Tone signal.Hold "**PTT**" then press [UP] or press [P1] directly to transmit the pre- stored 2-Tone signaling.

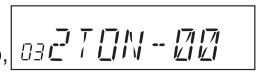




"5Tone": the channel will be mute by a 5-Tone signal. The Speaker won't be open until receiving a correspondent 5-Tone signal. hold "**PTT**"then [UP] then press [P1] directly to transmit the pre-stored 5-Tone signaling.

Sending 2-Tone Call

1. Press and hold [F] key for over 2s to enter general setting menu.
2.Press [P1] / [P2] key to choose No.03 menu, LCD displays "2TON XX","XX"indicates the group in the list.
3. Turn selector knob to select the desired sending 2TONE group, Press PTT to transmit selected group.



4. Total:32groups,00-31,Default:00.