


USER`S MANUAL

Thanks for buying the  VR-200series transceiver. This transceiver offers latest in design, multi-functionality, stable behaviour and easy operation. We believe you will be pleased with the high quality and dependable features for all your communication needs.

VR-200


Vero Global Communication Co Limited

User Safety, Training, and General Information

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR

 PORTABLE TWO-WAY RADIO.

Compliance with RF Energy Exposure Standards

Your  two-way radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environment at duty cycles of up to 50% talk-50% listen and should be used for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your radio radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.




NOTE

» The approved batteries supplied with this radio are rated for a 5-5-90 duty cycle (5% talk-5% listen-90% standby), even though this radio complies with the FCC occupational RF exposure limits at duty cycles of up to 50% talk.



Professional FM Transceiver

Your  two-way radio Complies with the following of RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit no more than 50% of the time and always adhere to the following procedures:

Transmit and Receive



To transmit (talk), push the Push-To-Talk (PTT) button; to receive, release the PTT button.

Hand-held radio operation

Hold the radio in a vertical position with the microphone 5 cm away from the lips and let the antenna






farther away from your head.

Body-worn operation


Always place the radio in an  approved clip, holder, holster, case, or body harness for this product. Use of non- -approved accessories may exceed FCC RF exposure guidelines.

Antennas & Batteries

Hold the radio in a body-worn operation >2.5cm away from the clip and let the antenna keepaway from the body as possible.

- Use only  approved, supplied antenna or  approved replacement antenna.
- Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.
- Use only  approved, supplied batteries or  approved replacement batteries.
- Use of non- -approved batteries may exceed FCC RF exposure guidelines.

Approved Accessories

For a list of  approved accessories, see the accessories page of this user manual or visit the following website which lists approved accessories: <http://www.verotelecom.com>




Professional FM Transceiver

Notices to the User

- Government law prohibits the operation of unlicensed radio transmitters within the territories under government control.
- Illegal operation is punishable by fine or imprisonment or both.
- Refer service to qualified technicians only.

WARNING: It is important that the operator is aware of and understand hazards common to the operation of any transceiver. Explosive environment (such as gases, dust, fumes, etc). Turn off your transceiver while talking on fuel, or while parked in gasoline service stations.

If you require this machine to be developed or some changed, please connect with or your  dealer.

FCC Caution:

This equipment has been tested and found to comply with the part 90 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does


cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

Measures:

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

FCC Licensing Requirements

Your radio must be properly licensed Federal Communications Commission prior to use. Your

 Wireless dealer can assist you in meeting these requirements. Your dealer will program each radio with your authorized frequencies, signaling codes, etc., and will be there to meet your communications needs as your system expands.



Precautions

Only qualified technicians are allowed to maintain this product.

Do not use the radio or charge a battery in explosive areas such as coal gas, dust, steam, etc.

Switch OFF the radio while refueling or parking at gas station.


Do not modify or adjust this radio without permission.

Do not expose the radio to direct sunlight over a long time, nor place it close to heating source.

Do not place the radio in excessively dusty, humid areas, nor on unstable surfaces.

Safety: It is important that the operator is aware of and understands hazards common to the operation of any radio.

CE Caution:

Hereby,  declares that this Two-way radio is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

A copy of the DOC may be obtained through the following address.

Address:

Contents

Unpacking and checking of your equipment	1
Supplied accessories	1
Description of functions	2-3
Getting started	4-7
LCD display	4
Description of transceiver	5-6
Speed search	7
DTMF encoding	7
Switch working mode	7
Shortcut operation sheet	8-13
How to operate	14-53
Look menu functions	14
Setting channel step (STEP) ---- MENU 1	14
Setting squelch level (SQL-LE) ---- MENU 2	15
Setting batterypack savemode (SAVE) --- MENU 3	15
Selecting transmitpower (TXP) ---- MENU 4	16
Setting voice encrypt compress (SCR)--- MENU 5	16-17
Transmit over timer (TOT) ---- MENU 6	17
Setting VOX (VOX) ---- MENU 7	17-18



Professional FM Transceiver

Setting wide and narrow bandwidth (WN) ---- MENU 8	18
Setting auto backlight (ABR) ---- MENU 9	18
Setting receive CTCSS (R-CTCS) ---- MENU 10.....	19
Setting receive DCS (R-DCS) ---- MENU 11	19-20
Setting transmit CTCSS (T-CTCS) ---- MENU 12	20
Setting transmit DCS (T-DCS) ---- MENU 13	21
Setting voiceguide (VOICE) ---- MENU 14	21
Setting Beeprompt function (BEEP) ---- MENU 15	22
Setting DTMF sidetone (DTMFST) ---- MENU 16	22-23
Setting transmit overtime alarm (TOA) ---- MENU 17	23
Busy channel lockout (BCL) ---- MENU 18	23-24
Adding channelscan (SC-ADD) ---- MENU 19	24
Priority scan function (PRI-SC) ---- MENU 20	24
Setting priority channel scan function (PRI-CH) ---- MENU 21	25
Setting scanmode (SC-REV) ---- MENU 22	26
Setting option signal (OPTSIG) ---- MENU 23	27-30
Setting mutemode (SPMUTE) ---- MENU 24	31
PTT ID (PTT-ID) ---- MENU 25.....	31-32
Setting ANI ID CODE transmit (PTT-ID) ---- MENU 26	32

Contents

Setting signal information (S-INFO) ---- MENU 27	33
Emergency calling type (EMC-TP)---MENU 28	33
Emergency calling channel (EMC-CH)---MENU 29	34
Select ringmode (RING-M)---MENU 30	34
Setting ringtime(RING-T)---MENU 31	35
Edit channelname (CHNAME) ---- MENU 32	35-36
Setting working mode (CA-MDF)---MENU 34	37
Setting keyboard lock (AUTOLK) ---- MENU36	38
Setting power on message (PONMSG) ---- MENU 37	39
Setting sidekey 1(PF1)---MNEU 38	39-40
Setting topkey (PF2) ---MENU 39	41
Define MONI key (MONI) ---- MENU 40	42
Selecting standby display color (WT-LED) ---- MENU 41	42
Selecting receive display color (RX-LED) ---- MENU 42	43
Selecting transmit display color (TX-LED) ---- MENU 43	43
Setting memory channel=setting co-channel and dis-channel (MEM-CH) ---- MENU 44	44-45
Delete channel (DEL-CH) ---- MENU 45	45
Setting frequencyshift direction (SFT-D) ---- MENU 46	46



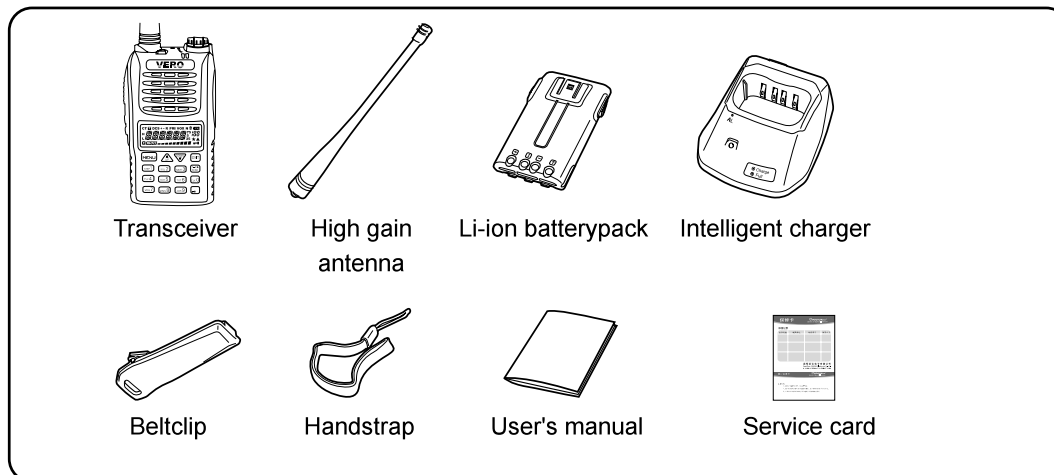
Professional FM Transceiver

Setting offsetfrequency (OFF-SET) ---- MENU 47	46-47
ANI CODE edit (ANI) ---- MENU 48	48
Setting VOX-T (VOXT) ----MENU 50	48
Companding(COMP) ----MENU 51	49
Setting reset (RESET) ---- MENU 52	49-50
Setting reverse frequency function	50
Lowvoltage batterypack voiceprompt	50
Setting transmit overtime prompt	50
Adding channelscan	51
Wireclone function	51
Programming repeater function	51-52
How to use your intelligentcharger	53
Trouble shooting	54
Technology specification	55

Unpacking and checking of your equipment

Carefully unpack the transceiver. We recommend that you identify the items in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, please notify your dealer.

Supplied accessories



Description of functions



Professional FM Transceiver

1. VHF: 66-88MHz VHF: 136-174MHz VHF: 245-246MHz
UHF: 300-350MHz UHF: 350-390MHz UHF: 400-470.9875MHz UHF: 450-520MHz
2. Output power: VHF: 5W/1W UHF: 4W/1W
3. 200 memory channels
4. DTMF encoding and decoding
5. 5 tones (including 15 kinds standard)
6. 2 tones
7. 1750Hz burst tone
8. Priority scan
9. FM radio with frequency display
10. DCS/CTCSS of RX and TX can be set respectively.
11. ANI (caller ID)
12. VOX
13. All calls, group calls and selective calls function
14. Calling ring function
15. Scrambler
16. 105 groups DCS/50 groups CTCSS
17. Voiceguide (English/Chinese)
18. Wide/Narrow bandwidth selection (25KHz/12.5KHz)
19. Three color backlight display
20. Channel order, channel frequency, channel name multi-display method

The chart shows four vertical bars of increasing height from left to right, representing the number of people in each age group. The bars are colored in a light gray shade.

- 03

103



the table below.

The diagram shows a radio's LCD screen with various status indicators and their functions. The screen displays the following information:

- CT**: CTCSS (Continuous Tone-Coded Squelch System) indicator.
- DCS**: DCS (Digital Coded Squelch) indicator.
- +-**: Split frequency indicator.
- R**: Reverse frequency indicator.
- PRI**: Priority scan indicator.
- VOX**: VOX (Voice Operated Exchange) transmission indicator.
- N**: Bandwidth indicator.
- 75**: Menu order / Channel order indicator.
- 5**: Channel have stored sign indicator.
- 25**: Keypadlock indicator.
- FM**: FM radio has turned on sign indicator.
- BATTERY**: Battery status indicator.
- 188**: Channel number.
- BUSY**: Busy channel light indicator.

The functions of these indicators are as follows:

- Split
- Split
- DCS
- DTMF encoding and decoding
- CTCSS
- High power transmit
- Low power transmit
- Enter menu function
- set state
- Busychannel light
- Reverse frequency
- Priority scan
- VOX transmission
- Bandwidth indicator
- Scrambler state
- Batterypack status indicator
- Menu order / Channel order
- Channel have stored sign
- Keypadlock
- FM radio has turned on sign

 Batterypack capacity indicator (full)

 Batterypack capacity spare indicator

 Receive signal meter

Getting started

Description of transceiver

Topkey: Distant urgency alarm

Antenna

Receive light

Powerswitch / Volumecontrol

Transmit light

Screen / LCD display

Functionkey

Numberkey

Up / Downkey

Exitkey

Reverse frequency / Scankey

Lockkey

05



Professional FM Transceiver

PTT (Push-To-Talk) key

Side key 1: radio, scan, lamp

Side key 2: monitor



Speaker/ Microphone jacks

Battery latches

06

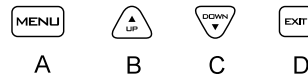
Getting started

■ Speed search

When setting each function or parameter, press the  or  key one time can speed search the function or parameter.

■ DTMF encoding

This transceiver has DTMF encoding. By pressing the right number key on transmitting you can choose the right DTMF tone which you want to TX.



■ Switch working mode

















Channel mode  + POWER ON Frequency mode

■ If you want to transmit the 1750Hz burst tone, just press PTT and sidekey 1 at the same time.

Shortcut operation sheet



Professional FM Transceiver

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter-explanation	Confirm	Back	See page
1 Setting channel step	MENU → STEP 1	"STEP 1"	MENU → Press  or  key	Select step	5 kinds of channel step 5K/6.25K/10K/12.5K/25K	MENU	EXIT	P14
2 Setting squelch level	MENU → SQ 2	"SQUELCH 2"	MENU → Press  or  key	Select step	Squelch level from 0-9	MENU	EXIT	P15
3 Setting battery pack save mode	MENU → SAVE 3	"SAVE 3"	MENU → Press  or  key	Select step	ON: Turn on save function 1:1/1:2/1:3/1:4 OFF: Turn off save function	MENU	EXIT	P15
4 Selecting transmit power	MENU → TXP 4	"TXP 4"	MENU → Press  or  key	Select step	6-10: High power (5W). 1-5: Low power (1W)	MENU	EXIT	P16
5 Setting voice encrypt compress	MENU → SCR 5	"SCR 5"	MENU → Press  or  key	Select step	ON: Turn on scrambler. OFF: Turn off scrambler.	MENU	EXIT	P16 -17
6 Transmit over timer	MENU → TOT 6	"TOT 6"	MENU → Press  or  key	Select step	TOT has 40 levels in steps of 15 seconds. OFF: Turn off TOT.	MENU	EXIT	P17
7 Setting VOX	MENU → VOX 7	"VOX 7"	MENU → Press  or  key	Select step	VOX has levels from 1 to 10. OFF: Turn off VOX.	MENU	EXIT	P17 -18
8 Setting bandwidth	MENU → WBN 8	"WBN 8"	MENU → Press  or  key	Select step	WIDE: 25KHz. NARROW: 12.5KHz.	MENU	EXIT	P18

Shortcut operation sheet

9 Setting auto back light	MENU → APP 9 → "ABR" 9 → MENU → Press Δ or ∇ key Select step	ON: Turn on auto back light OFF: Turn off auto back light	MENU → EXIT P18
10 Setting receive CTCSS	MENU → STEP 1 → CLX → "R-CTCSS" 10 → MENU → Press Δ or ∇ key Select step	50 groups CTCSS (67-254.1Hz) OFF: Turn off CTCSS	MENU → EXIT P19
11 Setting receive DCS	MENU → STEP 1 → STEP 1 → "R-DCS" 11 → MENU → Press Δ or ∇ key Select step	105 groups DCS (D023N-D754N) OFF: Turn off DCS	MENU → EXIT P19-20
12 Setting transmit CTCSS	MENU → STEP 1 → SOL 2 → "T-CTCSS" 12 → MENU → Press Δ or ∇ key Select step	50 groups CTCSS (67-254.1Hz) OFF: Turn off CTCSS	MENU → EXIT P20
13 Setting transmit DCS	MENU → STEP 1 → SAVE 3 → "T-DCS" 13 → MENU → Press Δ or ∇ key Select step	105 groups DCS (D023N-D754N) OFF: Turn off DCS	MENU → EXIT P21
14 Setting voiceguide	MENU → STEP 1 → TYP 4 → "VOICE" 14 → MENU → Press Δ or ∇ key Select step	CHINES: Chinese ENGLISH: English OFF: Turn off voiceguide	MENU → EXIT P21
15 Setting beeprompt	MENU → STEP 1 → SCR 5 → "BEEP" 15 → MENU → Press Δ or ∇ key Select step	ON: Turn on beeprompt OFF: Turn off beeprompt	MENU → EXIT P22
16 Setting DTMF sidetone	MENU → STEP 1 → TOT 6 → "STBTF" 16 → MENU → Press Δ or ∇ key Select step	KEY: Turn on sidekey ANI: Turn on ANI sidetone BOTH: Turn on both sidekey and ANI sidetone OFF: Turn off all	MENU → EXIT P22-23
17 Transmit over time alarm	MENU → STEP 1 → VOK 7 → "OTA" 17 → MENU → Press Δ or ∇ key Select step	ON: Turn on transmit overtime alarm. OFF: Turn off transmit overtime alarm	MENU → EXIT P23



Professional FM Transceiver

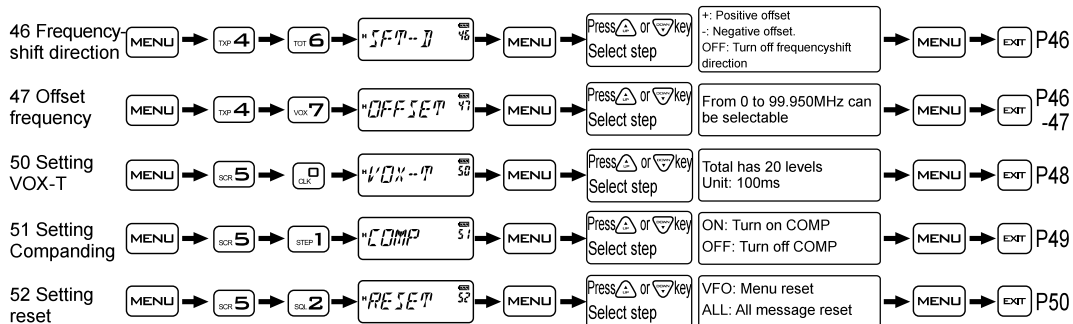
18 Busy channel lockout	MENU → STEP 1 → WAK 8 → "BCL" 18 → MENU → Press Δ or ∇ key Select step	ON: Turn on busy channel lockout. OFF: Turn off busy channel lockout.	MENU → EXIT P23-24
19 Adding channel scan	MENU → STEP 1 → APP 9 → "SC-ADD" 19 → MENU → Press Δ or ∇ key Select step	ON: Turn on adding channelscan. OFF: Turn off adding channelscan.	MENU → EXIT P24
20 Setting priority scan function	MENU → SOL 2 → CLX → "PRI-SC" 20 → MENU → Press Δ or ∇ key Select step	ON: Turn on priority scan function. OFF: Turn off priority scan function.	MENU → EXIT P24
21 Setting priority channel scan function	MENU → SOL 2 → STEP 1 → "PRI-CH" 21 → MENU → Press Δ or ∇ key Select step	Have 200 groups channel can select	MENU → EXIT P25
22 Setting scanmode	MENU → SOL 2 → SOL 2 → "SC-REV" 22 → MENU → Press Δ or ∇ key Select step	TO: Scan with time CO: Scan with carrier wave SE: Does not scan with carrier wave	MENU → EXIT P26
23 Setting option signal	MENU → SOL 2 → SAVE 3 → "OPTSIG" 23 → MENU → Press Δ or ∇ key Select step	4 kind of signals WDTSDTMF: Double tone signal 2TONES: 2TONES signal 5TONES: 5TONES signal	MENU → EXIT P27-30
24 Setting mutemode	MENU → SOL 2 → TYP 4 → "SMPMUTE" 24 → MENU → Press Δ or ∇ key Select step	3 kinds of mutemode QT/AND/OR	MENU → EXIT P31
25 Transmit PTT ID	MENU → SOL 2 → SCR 5 → "PTTID" 25 → MENU → Press Δ or ∇ key Select step	4 kinds of PTT ID BOT/EOT/BOTH/OFF	MENU → EXIT P31-32
26 Setting ANI ID CODE transmit	MENU → SOL 2 → TOT 6 → "PTTID" 26 → MENU → Press Δ or ∇ key Select step	Permit transmit ANI delay time from 1-30, unit: 100ms 0: Turn off manual transmit	MENU → EXIT P32

Shortcut operation sheet

27 Setting signal information	MENU → SC2 → VOK 7 → "S--INFO" 27 → MENU → Press ▲ or ▼ key Select step	15 groups signal information	MENU → EXT P33
28 Emergency calling type	MENU → SC2 → VOK 8 → "EMC--TP" 28 → MENU → Press ▲ or ▼ key Select step	3 kinds of emergency alarm ALARM: Field alarm ENI: Distant alarm BOTH: Field + distant alarm	MENU → EXT P33
29 Emergency calling channel	MENU → SC2 → ABR 9 → "EMC--CH" 29 → MENU → Press ▲ or ▼ key Select step	200 groups calling channel	MENU → EXT P34
30 Select ringmode	MENU → SAVE 3 → CLK → "RING--M" 30 → MENU → Press ▲ or ▼ key Select step	4 kinds of ringmode SOUND/BIV/BOTH/OFF	MENU → EXT P34
31 Setting ringtime	MENU → SAVE 3 → STEP 1 → "RING--T" 31 → MENU → Press ▲ or ▼ key Select step	10 levels, 1 second different 0 means turn off ringtime prompt	MENU → EXT P35
32 Edit channelname	MENU → SAVE 3 → SC2 → "CH" 32 → MENU → Press ▲ or ▼ key Select step	The channel name make up of (A to B)26 letters, (0-9)10 numbers, ? or i+1 or i-1. The length at least 6 bits	MENU → EXT P35-36
34 Setting working mode	MENU → SAVE 3 → TOP 4 → "CH--MIF" 34 → MENU → Press ▲ or ▼ key Select step	CH: Channel order display FREQ: channel frequency+channel order display. NAME: channel name+channel order display	MENU → EXT P37
36 Setting keyboard lock	MENU → SAVE 3 → TOT 6 → "KEYLOCK" 36 → MENU → Press ▲ or ▼ key Select step	ON: Turn on autolock OFF: Turn off autolock	MENU → EXT P38
37 Setting power on message	MENU → SAVE 3 → VOK 7 → "POWERMSG" 37 → MENU → Press ▲ or ▼ key Select step	FULL: Full screen display MSG: WELCOME. BATT-V: Battery voltage display	MENU → EXT P39

38 Setting sidekey1(PF1)	MENU → SAVE 3 → VOK 8 → "FM" 38 → MENU → Press ▲ or ▼ key Select step	FM: FM radio key. CALL: Signal calling at present NO-SUB: Delete receive JP-PRI: Switch to priority scan channel. JP-EMC: Switch to emergency calling mode.	MENU → EXT P39-40
39 Setting topkey(PF2)	MENU → SAVE 3 → ABR 9 → "PF2" 39 → MENU → Press ▲ or ▼ key Select step	EMCALL: Turn on alarm function. CALL01-CALL15: Signal calling key.	MENU → EXT P41
40 Define MONI key	MENU → TOP 4 → CLK → "MONI" 40 → MENU → Press ▲ or ▼ key Select step	CONTIN: Continual turn off squelch diagram via keep press MONI key one time. PRESS: Continual turn off squelch diagram via just press MONI key one time.	MENU → EXT P42
41 Setting standby display-color	MENU → TOP 4 → STEP 1 → "WML--LED" 41 → MENU → Press ▲ or ▼ key Select step	BLUE: Blue backlight ORANGE: Orange backlight PURPLE: Purple backlight OFF: Turn off backlight	MENU → EXT P42
42 Setting receive display-color	MENU → TOP 4 → SC2 → "RX--LED" 42 → MENU → Press ▲ or ▼ key Select step	BLUE: Blue backlight ORANGE: Orange backlight PURPLE: Purple backlight OFF: Turn off backlight	MENU → EXT P43
43 Setting transmit display-color	MENU → TOP 4 → SAVE 3 → "TX--LED" 43 → MENU → Press ▲ or ▼ key Select step	BLUE: Blue backlight ORANGE: Orange backlight PURPLE: Purple backlight OFF: Turn off backlight	MENU → EXT P43
44 Setting memory-channel	MENU → TOP 4 → TOP 4 → "MEM--CH" 44 → MENU → Press ▲ or ▼ key Select step	200 channel	MENU → EXT P44-45
45 Delete channel	MENU → TOP 4 → SC5 → "DEL--CH" 45 → MENU → Press ▲ or ▼ key Select step	200 channel	MENU → EXT P45

Shortcut operation sheet



- Speed search (▲ / ▼) (See page 7)
- High/Low power changeable when on transmitting (See page 16)
- All calls, group calls and selective calls (See page 27-29)
- Setting reverse frequency function (See page 50)
- Setting transmit overtime prompt (See page 50)
- Lowvoltage batterypack voiceprompt (See page 50)
- Adding channelscan (See page 51)
- Wireclone function(See page 51)
- Programming repeater function (See page 51-52)

How to operate



Lock menu functions

If you don't need operate menu functions frequently, you can turn off by KG-679E programming software.

The steps as following:

1. Set password of switching between channelmode and frequencymode.
2. Set workmode as channelmode.
3. Turn off operating menu function in channelmode.

When you want to use menu functions, input password which you have set, and switch to frequency-mode, then you can operate it.

Setting channel step (STEP) ---- MENU 1

In standby, press MENU + ▲ / ▼, till the screen display "STEP"

Press MENU enter, press ▲ / ▼ to select the channel step you desired.

Press MENU to confirm, then press EXIT to return to standby.

This transceiver has the option of 5KHz, 6.25KHz, 10KHz, 12.5KHz and 25KHz steps.



NOTE

» In channelmode the next settings are not available to change: transmit power, companding, receive CTCSS and DCS, transmit CTCSS and DCS, optional signal, channel bandwidth, encoding signal, mutemode, PTT transmit, Voice encrypt compress, busy channellockout and adding channelscan.

How to operate

Setting squelch level (SQL-LE) --- MENU 2

Select the level of squelch so that you will have no difficulty receiving the desired signal. When you set the level too high you will lose communication in a fringe area.

» This transceiver has steps from 0-9, which step 0 is always open squelch. From 1 to 9 gives different levels of noise reduction.

In standby, press **[MENU]** + number **[SQL 2]** and the screen will display **"SQL-LE 2"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** to select the desired level.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Setting battery pack savemode (SAVE)--- MENU3

In standby, press **[MENU]** + number **[SAVE 3]** and the screen will display **"SAVE 3"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select one of 1:1/ 1:2/1:3/1:4/OFF.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

1:1/1:2/1:3/1:4 means the radio receive circuit turn on and off pulse ratio.



Professional FM Transceiver

Selecting transmit power (TXP)--- MENU4

In frequency mode, press **[MENU]** + number **[TXP 4]** and the screen will display **"TXP 4"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select the desired power level.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» This transmit power has 10 levels can be selected, this means it will higher and higher from 1 to 10.
High/Low power can be changed during transmit. Press PTT key and topkey at the same time, this will change High/Low power.

Setting voice encrypt compress (SCR)--- MENU 5

SCR: Use the scrambler, it can encrypt the communication and make the transceiver who do not use the scrambler can't hear clear what you are talking, meanwhile you also can't hear clear others, who do not use the scrambler, what they are talking.

In standby, press **[MENU]** + number **[SCR 5]** and the screen will display **"SCR 5"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select OFF to switch off this function or turn on SCR.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» To ensure effective communications the radio's must be set to the same voice encrypt.

Transmit over timer (TOT) ---- MENU 6

The TOT is designed to prevent your radio to transmit too long. When the transceiver is exceeding the preset time limit, it will stop transmitting and give you a warning signal.

This transceiver can be set in 40 steps of 15 seconds, between 15 and 600 seconds.

In standby, press **[MENU]** + **[TOT 6]** and the screen will display **"TOT 6"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** to select the level you need when on transmitting.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Setting VOX (VOX) ---- MENU 7

In standby, press **[MENU]** + number **[VOX 7]** and the screen will display **"VOX 7"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** to select VOX OFF or to switch on the 1 to 10 different sensitivity-levels. Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



Professional FM Transceiver



NOTE

» When level is too high the VOX needs more volume to get activated.

» When scan or radio is in using, you can not use VOX.

Setting wide and narrow bandwidth (WN) ---- MENU 8

In standby, press **[MENU]** + number **[WN 8]** and the screen will display **"WN 8"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and you can select WIDE or NARROW bandwidth.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Setting auto backlight (ABR) ---- MENU 9

It means that the time of radio return to standby state after receive the signal.

In standby, press **[MENU]** + number **[ABR 9]** and the screen will display **"ABR 9"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** key and select 1 to 5 to turn on auto backlight or when you want to switch OFF backlight. Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» Time of auto backlight of this transceiver has 5 levels of which 1 second difference.

How to operate

Setting receive CTCSS (R-CTCS) ---- MENU 10

Sometimes may be you only want to hear the calling which comes from the specific individual or group, then you can ignore some (can not hear from others who using the same frequency) calling through CTCSS/DCS. Only when receive the same signal of CTCSS/DCS, the radio will release the mutemode.

In standby, press **[MENU]** + number **[STEP 1]** **[CLR]** and the screen will display **"R--CTCS"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select OFF to switch off CTCSS or use one of the tones between 67Hz and 254.1Hz.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» This transceiver has 50 groups different CTCSS tones, see appendix (1) CTCSS frequency sheet.

Setting receive DCS (R-DCS) ---- MENU 11

In frequency mode, press **[MENU]** + number **[STEP 1]** **[STEP 1]** and the screen will display **"R--DCS"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select OFF to switch off DCS or one of the steps from D023N to D754I.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



Professional FM Transceiver



NOTE

» This transceiver has 105 groups different DCS codes, see appendix (2) DCS frequency sheet. And DxxxN means positive code, DxxxI means negative code. The range of positive code is between D023N and D754N, negative code is between D023I and D754I.

Setting transmit CTCSS (T-CTCS) ---- MENU 12

In standby, press **[MENU]** + number **[STEP 1]** **[SC 2]** and the screen will display **"T--CTCS"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select OFF to switch off CTCSS or use one of the tones between 67Hz and 254.1Hz.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» This transceiver has 50 groups different CTCSS tones, see appendix (1) CTCSS frequency sheet.

How to operate

Setting transmit DCS (T-DCS) ---- MENU 13

In frequency mode, press **[MENU]** + number **[STEP 1] [SAVE 3]** and the screen will display **" T--DCS "**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select OFF to switch off DCS or one of the steps from D023N to D754I. Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» This transceiver has 105 groups different DCS codes, see appendix (2) DCS frequency sheet. And DxxxN means positive code, DxxxI means negative code. The range of positive code is between D023N and D754N, negative code is between D023I and D754I.

Setting voiceguide (VOICE) ---- MENU 14

In standby, press **[MENU]** + number **[STEP 1] [TOP 4]** and the screen will display **" VOICE "**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** key to select English or OFF to switch off the voiceguide.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» If want turn off all keypad voiceguide should turn off MENU15 and MENU14 at the same time.

Setting beeprompt function (BEEP) ---- MENU 15

Beeprompt is to tell you if the transceiver is operating well or has a malfunction.

We kindly advice you to switch on this function.

This function will inform you for any possible malfunction.

In standby, press **[MENU]** + number **[STEP 1] [SCR 5]** and the screen will display **" BEEP "**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** to switch on the beep or OFF when you want to switch off the beep.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» When MENU 14 is switched on, the voice guide gets priority.

Setting DTMF sidetone (DTMFST) ---- MENU 16

DTMF sidetone gives you the opportunity to switch on or off the speaker when transmit DTMF.

The transceiver has 4 different options.

KEY: Switch on sidekey when transmitting.

ANI: Switch on the ANI sidetone when transmitting.

BOTH: Sidekey and ANI are both on.

How to operate

OFF: Turn off all.

In standby, press **MENU** + number **STEP 1** **6** and the screen will display **"STDTIME"**

Press **MENU** enter, press **UP** / **DOWN** and select one function of KEY/ANI/BOTH/OFF.

Press **MENU** to confirm, then press **EXIT** to return to standby.

Setting transmit overtime alarm (TOA) ---- MENU 17

Transmit overtime alarm is the setting to alarm the user that he/she has reached the preset time and a voiceprompt and light will flicker during transmit.

The transceiver can be set from 1 to 10 TOA in steps of 1 second.

In standby, press **MENU** + number **STEP 1** **7** and the screen will display **"TOA"**

Press **MENU** enter, press **UP** / **DOWN** to select OFF or to set 1 to 10 for the overtime alarm.

Press **MENU** to confirm, then press **EXIT** to return to standby.

Busy channel lockout (BCL) ---- MENU 18

This function is to prevent that interfere others who is on communicating. If the channel you have selected which is using by other radio, at this time press PTT key, you can not transmit.

In frequencymode, press **MENU** + number **STEP 1** **8** and the screen will display **"BCL"**



Press **MENU** enter, press **UP** / **DOWN** and select between ON or OFF.

Press **MENU** to confirm, then press **EXIT** to return to standby.

Adding channelscan (SC-ADD) ---- MENU 19

This function ensure that whether the frequency or channel be added to scan list or not.

In frequencymode, press **MENU** + number **STEP 1** **9** and the screen will display **"SC-ADD"**

Press **MENU** enter, press **UP** / **DOWN** and select between ON or OFF.

Press **MENU** to confirm, then press **EXIT** to return to standby.

Priority scan function (PRI-SC) ---- MENU 20

When the transceiver is in non-priority frequencymode, it still check activity of the priority channel, once there has an action at priority channel, the transceiver will auto work in the priority channel.

In frequencymode, press **MENU** + number **STEP 2** **CLP** and the screen will display **"PRI-SC"**

Press **MENU** enter, press **UP** / **DOWN** to turn on or turn off.

Press **MENU** to confirm, then press **EXIT** to return to standby.

How to operate

Setting priority channel scan function (PRI-CH) ---- MENU 21

This function means any channel which has been programmed can be set as priority scan channel.

In frequency mode, press **[MENU]** + number **[2]** **[STEP 1]** and the screen will display **"PRI-CH"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select the desired channel.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

- » This transceiver priority scan channel from 0 to 199 can selectable.
- » There is only display a "PRI" on LCD screen, that means radio has startup priority channel scan.
- » Startup priority channel scan function needs two conditions: 1. Do priority channel scan switch on. 2. This function scan the channel which has been stored.
- » In frequency mode, channel mode or scanning, when transceiver scans a signal, it will transfer the priority channel, after the signal disappeared 3 seconds if you don't do any operation, transceiver will back to frequency and go on priority scan.
- » The speed of startup or resume priority scan is relative to the setting backlight. When if the backlight be set as "1", then the speed of startup or resume priority scan will be the fastest.
- » When the priority channel which has been set parameter receive signal, if with the same frequency, then radio can transfer the priority channel.
- » The transferred priority channel only be used to communication, you can't do any other operation until radio resumes frequency.



Setting scanmode (SC-REV) ---- MENU 22

The transceiver will stop scanning when detect the frequency(memory channel) of signal. According to the method of restoring that you selected, the transceiver will resume or stop scanning.

The transceiver has three scanmodes.

TO: After signal in channel disappears the transceiver will start scanning if you don't any operation within 5 seconds.

CO: After the transceiver stopped on a signal it will resume scanning again in 3 seconds when signal disappears.

SE: Scanning will stop when receives a signal.

In standby, press **[MENU]** + number **[2]** **[SC 2]** and the screen will display **"SC-REV"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select TO, CO or SE.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Switch on scanning: Press the **[SCAN]** via keyboard.

How to operate

Setting option signal (OPTSIG) ---- MENU 23

In standby, press **[MENU]**+ number **[2]** **[3]** and the screen will display 

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select one kind of WDTS/DTMF/2-TONES/5-TONES.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

All calls, group calls and selective calls

This transceiver has the function of transmitting ANI ID code, editing ANI ID code and decoding DTMF.

Without by other tools, it can accomplish the operation of all calls, group calls and selective calls.

How to program all calls, group calls and selective calls.

1. Edit ANI

This transceiver has 3 kinds of method:

. ANI-XXX . ANI-XXXX . ANI-XXXXX

XXX: Means can program 3 bits ANI ID CODE.

XXXX: Means can program 4 bits ANI ID CODE.

XXXXX: Means can program 5 bits ANI ID CODE.



Professional FM Transceiver



Edit method: see to the MENU 48. This is how to build up ANI.

» Every transceiver in the group needs a unique ANI ID CODE.



NOTE

2. Setting all calls, group calls and selective calls.

» Every transceiver using in the group must be set turn on WDTS optional signal.
» Setting WDTS option signal, the details see to the MENU 23 (OPTSIG).



NOTE

3. Setting mutemode must be set as AND, the details see to the MENU 24 (SPMUTE)

4. Press PTT: Setting time according your need to select one of the BOT/EOT/BOTH, the details see to the MENU (25)

5. Turn on ringtime alarm and set ringtime (set when needed) The details see to the MENU (30) and MENU 31 (RING-T)

6. Setting PTT-LT

In fact, the signal can delay before transmitted. The details see to the MENU (26)

How to operate





NOTE

» All transceivers in the same group must set their radio to the same frequency, channel and parameter.

a. Using All calls

Press PTT to transmitting, after transmitting ANI ID CODE, input  +  directly by keyboard.

b. Using group calls


Press PTT to transmitting, after transmitting ANI ID CODE, input [group number] +  +  directly by the keyboard (Using three ID codes as an example).


c. Using selective calls

Press PTT to transmitting, after transmitting ANI ID CODE. input the ANI ID CODE you want to call by keyboard.



NOTE

» This transceiver has memory function, after you used all calls, group calls or selective calls, then you want to transmit again, the ID code is the same as last time you transmitted. If you want to transmit new ID code, please press  before transmitting.

» This transceiver has difference of 3,4,5 bit. so all the ANI ID CODE in the group have better set the same bit. When the bit of transmitter is lower than receiver's, you can use the  to make up, then you can go on all calls, group calls or selective calls.



DTMF, 2-TONES, 5-TONES.

1. When DTMF/2-TONES/5-TONES signaling is programmed in a channel. Press PTT key to transmit DTMF/2-TONES/5-TONES signal.
2. When DTMF/2-TONES/5-TONES is set in a channel, the preset functions will be activated only when the matching DTMF/2-TONES/5-TONES signals are received.
3. Likewise, your signals will be received only by parties using the same DTMF/2-TONES/5-TONES.
4. Setting signal

Every transceiver in the same group must be set DTMF/2-TONES/5-TONES option signal, the details see to the MENU (23).

Setting sidetone the details see to the MENU (16), according your requirement to select.

Mutemode must be set as AND. the details see to the MENU (24)

Setting PTT transmit

Depend on your requirement to select one of the BOT/EOT/BOTH, the details see to the MENU (25)

Setting S-INFO

The receiver's and the transmitter's signaling must be set the same.

Setting PTT-LT

In fact, the signal can delay before transmitted, the details see to the MENU (26)

How to operate

Setting mutemode (SPMUTE) ---- MENU 24

The mutemode is to turn on/off the speaker audio according to your optional signal setting.

This transceiver has three kinds of mode which can be selected.

1. QT: When the transceiver receives a signal and suited CTCSS tone it will switch on the speaker.
When transceiver has not be set a CTCSS tone, then receives a signal which can switch on squelch it also can switch on speaker.
2. AND: When the transceiver receives a suited QT and matching signal it will switch on the speaker.
3. OR: When the transceiver receives a suited QT or AND signal it will switch on the speaker.

In frequencymode, press **[MENU]** + number **[2]** **[4]** and the screen will display **"SPMUTE 24"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select one of QT or AND or OR.

Press **[MENU]** to confirm, press **[EXIT]** to return to standby.

PTT ID (PTT-ID) ---- MENU 25

PTT ID means that the method of choosing the transmitting ID code.

BOT:When press PTT key,ID code is transmitted.

EOT:When release PTT key,ID code is transmitted.

BOTH: When press or release PTT key,ID code is transmitted.

OFF: The radio can't transmits ID code when turn off all.



Professional FM Transceiver

In frequencymode, press **[MENU]** + number **[2]** **[5]** and the screen will display **"PTTID 25"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select one of BOT/EOT/BOTH/OFF.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Setting ANI ID CODE transmit (PTT-LT) ---- MENU 26

Setting ANI ID CODE on transmit is needed to send ANI ID code everytime when you press your PTT key.

1-30: Permit transmit ANI delayed time from 1 to 30. Unit: 100ms

0: Do not delay to transmit ANI ID CODE

In standby, press **[MENU]** + number **[2]** **[6]** and the screen will display **"PTTLT 26"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select 1 to 30 for delay transmit ANI or OFF to switch off ANI delay transmit. Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

- » When alarming, if this menu does not be set as "0", but be set one of the number between 1 and 30, then the setting delayed time will be delayed to transmit signalcode and alarmcode.
- » When the frequency has set WDTS/DTMF/2TONES/5TONES signals, if this menu does not be set as "0", but be set one of the number between 1 and 30, then the setting delayed time will be delayed to transmit signalcode.

How to operate

Setting signal information (S-INFO) ---- MENU 27

This function means selects information code which be used to program channelsignal.

In frequencymode, press **MENU** + number **[2]** **[7]** and the screen will display **"S-INFO 27"**

Press **MENU** enter, press **▲** / **▼** select from 1 to 15.

Press **MENU** to confirm, then press **EXIT** to return to standby.

Emergency calling type (EMC-TP)---MENU 28

This transceiver has 3 kinds function.

1. ALARM: Field alarm
2. ENI: Distant alarm
3. BOTH: Field + distant alarm

In frequency mode, press **MENU** + number **[2]** **[8]** and the screen will display **"EMC-TP 28"**

Press **MENU** enter, press **▲** / **▼** select ALARM/ENI/BOTH

Press **MENU** to confirm, then press **EXIT** to return to standby.



NOTE

- » In frequencymode or channelmode, only be set as ENI and BOTH, then can use the alarm channel to alarm.
- » In frequencymode or channelmode, if you do not set alarm channel, then it will alarm at the present channel.



Emergency calling channel (EMC-CH)---MENU 29

Select any of the channel which had been set for emergency calling.

In standby mode, press **MENU** + number **[2]** **[9]** and the screen will display **"EMC-CH 29"**

Press **MENU** enter, press **▲** / **▼** select the desired channel,

Press **MENU** to confirm, then press **EXIT** to return to standby.

Select ringmode (RING-M)---MENU 30

Setting calling ring means after the transceiver receive the matching signal, it will be announced from the speaker.

This transceiver has 4 kinds of ringmode can be selectable.

SOUND: Turn on ring

BIV: Turn on libration

BOTH: Turn on ring and libration

OFF: Turn off all.

In frequencymode, press **MENU** + number **[3]** **[0]** and the screen will display **"RING-M 30"**

Press **MENU** enter, press **▲** / **▼** select one of SOUND/BIV/BOTH/OFF.

Press **MENU** to confirm, then press **EXIT** to return to standby.

How to operate

Setting ringtime(RING-T)---MENU 31

When exceed the preset ringtime, it will switch on the speaker.

In standby, press **MENU** + number **3** **STEP 1** and the screen will display "RING-T 31"

Press **MENU** enter, press **UP** / **DOWN** to select the time of the ring between 0 and 10.

Press **MENU** to confirm, then press **EXIT** to return to standby.



NOTE

» This transceiver has 10 different steps of ringtime of which every step is 1 second difference, this means that 0 will switch off the ring.

Edit channelname (CHNAME) ---- MENU 32

1. Channelname can be made up of 26 letters (A to Z), 10 numbers (0 to 9) or (?) (+) (-), with any of the 3 last symbols.
2. Channelname can have a length of maximum of 6 bits or you can edit one of the bits from 1 to 6.
3. When you select the (-) symbol it means that the bit is blank.

Edit method

1. Via KG-679E programming software.



Professional FM Transceiver

2. Via keyboard of transceiver.

Edit Channelname

1. At least one channel should have been stored.
2. The transceiver should be work in channelmode.
3. Enter the channelname edit menu, then press **UP** / **DOWN** to select character, press **#** to select edit position.

Edit step

1. If the transceiver works in frequencymode, set the workmode as NAME in the display then press **MENU** and power on again.
If the transceiver works in CH mode, then go through MENU 34 to set display to NAME.
2. Select the desired channel, press **MENU** + **3** + **2** + **MENU** and then the screen will display 6 rails, press **UP** / **DOWN** and select character then press **#**, press **UP** / **DOWN** again to select the second character, after selecting the sixth character press **MENU** to confirm, press **EXIT** to exit.
The screen will display the channelname and show the order of this channel on top right corner.

How to operate

Setting working mode (CA-MDF)---MENU 34

This transceiver has three selectable display modes: channelorder display, channelfrequency + channelorder display, channelname + channelorder display.

In standby, press **MENU** + number **3** **4** and the screen will display **CA-MDF**

1. Channelorder display mode

Press **MENU** enter, press **UP** / **DOWN** select CH and the screen will display **CH**

Press **MENU** to confirm, then press **EXIT** to exit.

2. Channelfrequency + Channelorder display mode

Press **MENU** enter, press **UP** / **DOWN** select FREQ and the screen will display **FREQ**

Press **MENU** to confirm, then press **EXIT** to exit.

3. Channelname + Channelorder display mode

Press **MENU** enter, press **UP** / **DOWN** select NAME and the screen will display **NAME**

Press **MENU** to confirm, then press **EXIT** to exit.

Channelname display mode: To operate this function you need to edit the channelname first.

See details of channelname edit in MENU 32.

Setting keyboard lock (AUTOLK) ---- MENU36

The transceiver has two options, auto lock and manual lock.

AUTOLK: When you set autolock the keyboard will be locked within 15 seconds if you don't to any operation. To release keyboard press **#** for more than 2 seconds.

OFF: Turn off auto lock.

In frequencymode, press **MENU** + number **3** **6** and the screen will display **AUTOLK**

Press **MENU** enter, press **UP** / **DOWN** and select ON for autolock or OFF to switch off autolock.

Press **MENU** to confirm, then press **EXIT** to return to standby.



NOTE

» Manual lock: In standby, press **STAR** for more than 2 seconds will lock keyboard, release keyboard press **STAR** for more than 2 seconds.

How to operate

Setting power on message (PONMSG) ---- MENU 37

Transceiver power on message:

FULL: Full display BATT-V: Display the current voltage of battery pack MSG: WELCOME

In standby, press **MENU** + number **3** **7** and the screen will display

Press **MENU** enter, press / and select FULL/BATT-V/ MSG,

Press **MENU** to confirm, then press **EXIT** to return to standby.

Setting sidekey 1(PF1)---MNEU 38

This transceiver sidekey 1 has 5 kinds function can be selected:

1. FM: FM radio key
2. CALL: Signal calling at present.
3. NO-SUB: Cancel receive DCS
4. JP-PRI: Switch to priority scan channel.
5. JP-EMC: Switch to emergency calling mode.

1. Select FM radio function.

In standby, press the sidekey 1 to switch on FM radio, this FM radio is frequency modulation, frequency range is 87-108MHz, and the screen will display

39



Professional FM Transceiver

- a. In FM radio, press / or number to select program
- b. Press **EXIT** , you can check the working frequency and channel, after 2 seconds the screen will resume , the radio works in normally when you are on operation
- c. Press PTT, sidekey 2 and topkey, it will into the relevant operation.

When you want to turn off radio, press sidekey 1 again.

When you turn on the FM radio, you should install supplied antenna.

In standby, press **MENU** +number **3** **8** and the screen will display

Press **MENU** enter, press / and select one of the FM/CALL/NO-SUB/JP-PRI/JR-EMC.

press **MENU** to confirm, then press **EXIT** to return to standby.



NOTE

- » When in FM radio, the present frequency or channel are still in standby, if transceiver receives a signal, it will return to radio, After the signal disappeared 5 seconds, it will auto return to FM radio. If you want to exit FM radio, please press sidekey 1 again.
- » You can use the software to edit the channel of FM radio, make the radio can display the frequency and radio's name on LCD screen, after you have succeed in programming, press the sidekey 1 to turn on FM radio, now you not only can use the channel knob to switch channel, but also can use / to switch.
- If the radio don't have channel knob, you can use / to switch FM radio channel.

40

How to operate

Setting topkey (PF2) ---MENU 39

The topkey offers two kinds of function:

EMCALL: Start up alarm function

CALL01-CALL15: Signal calling key

Select EMCALL function

In standby, press **[MENU]** + number **[3]** **[9]** and the screen will display ***PF2** **39**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select EMCALL.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Signal calling key

In standby, press **[MENU]** + number **[3]** **[9]** and the screen will display ***PF2** **39**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select one of function from CALL01 to CALL15,

press **[MENU]** to confirm, then press **[EXIT]** to return to standby.



NOTE

» CALL01-CALL15: Means the information code which has been set as calling signal, when PF2 has been set as one kind of CALL01-CALL15, then press PF2 one time, meanwhile the LED A and B flicker each other. When the information code of signal has been set as the same as others and other functions are also the same, then press PTT you can communicate each other, also you can communicate when the LED is flickering.



Define MONI key (MONI) ---- MENU 40

This function is defined for turning on squelch diagram.

Total have 2 kinds function can be selected.

CONTIN: Should always press side key 2 to persist turn off squelch diagram.

PRESS: Just need press side key 2 one time to persist turn off squelch diagram.

In standby, press **[MENU]** + number **[4]** **[0]** and the screen display ***MONI-LED** **40**

Press **[MENU]** enter, Press **[UP]** / **[DOWN]** select CONTIN/PRESS

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Selecting standby display color (WT-LED) ---- MENU 41

The transceiver has four colors available:

BLUE / ORANGE / PURPLE / OFF

In standby, press **[MENU]** + number **[4]** **[1]** and the screen will display ***WT-LED** **41**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select the desired color of BLUE/ORANGE/PURPLE/OFF.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

How to operate

Selecting receive display color (RX-LED) ---- MENU 42

The transceiver has four colors available:

BLUE / ORANGE / PURPLE / OFF

In standby, press **MENU** + number **TXP 4** **SQL 2** and the screen will display **"RX-LED" 42**

Press **MENU** enter, press **UP** / **DOWN** and select the desired color of BLUE / ORANGE / PURPLE/OFF.

Press **MENU** to confirm, then press **EXIT** to return to standby.

Selecting transmit display color (TX-LED) ---- MENU 43

The transceiver has four colors available:

BLUE / ORANGE / PURPLE/OFF

In standby, press **MENU** + number **TXP 4** **SAVE 3** and the screen will display **"TX-LED" 43**

Press **MENU** enter, press **UP** / **DOWN** and select the desired color of BLUE / ORANGE / PURPLE/OFF.

Press **MENU** to confirm, then press **EXIT** to return to standby.



Setting memory channel=setting co-channel and dis-channel (MEM-CH) ---- MENU 44

When transceiver works in frequency mode or in standby, input the frequency and any kind of parameter what you want to store.

Press **MENU** + number **TXP 4** **TXP 4** and the screen will display **"MEM-CH" 44**

Press **MENU** enter, press **UP** / **DOWN** to select channel order, press **MENU** to store and you hear a voice prompt if it is stored.

Press **EXIT** to exit, at this moment the channel should be co-channel.

When you need to store dis-channel, repeat the above procedure, after you stored, you will hear a voice prompt .

Example:

You want 450.025MHz for receive and 460.025MHz for transmit and stored in CH-20, then act as follows:

1. When the transceiver works in frequency mode, input **TXP 4** **SCR 5** **CLK** **CLK** **SQL 2** **SCR 5**, **MENU** + **TXP 4** **TXP 4** + **MENU**, then press **SQL 2** **CLK** or **UP** / **DOWN** key select CH-20, press **MENU** key to confirm, voice prompt will tell you it is stored, press **EXIT** to exit;

How to operate

2. Then input **[4]** **[6]** **[OK]** **[OK]** **[2]** **[5]** + **[MENU]** + **[4]** + **[4]** + **[MENU]** and voiceprompt will tell you it is stored + press **[EXIT]** to exit.
3. The dis-channel is stored.



NOTE

- » If you want to set CTCSS, D.C.S, W&N etc functions on parameter please setting before stored. That it can store with frequency in channel.
- » The transmitting only stored transmit frequency, if you want to store MENU function and parameter, please store with the receiving.
- » If you want to store by manual, in frequency mode, and the channel should be vacant, then you can go on operation of store receiving or transmitting or you can only go on the operation of storing transmitting. If it is not vacant you should delete channel to go on the above operation.

Delete channel (DEL-CH) ---- MENU 45

In standby, press **[MENU]** + number **[4]** **[5]** and the screen will display **"DEL-CH"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** to select the channel you want to delete, press **[MENU]** to confirm.

The select channel and message are deleted, press **[EXIT]** to return to standby.



Setting frequencyshift direction (SFT-D) ---- MENU 46

Frequencyshift means that:

1. The transmit frequency is higher than receive frequency. This is called positive offset (+)
2. The transmit frequency is lower than receive frequency. This is called negative offset.(-)
3. Turn off frequencyshift.

In standby, press **[MENU]** + number **[4]** **[6]** and the screen will display **"SFT-D"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select +/-OFF.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Setting offsetfrequency (OFF-SET) ---- MENU 47

Offsetfrequency is the difference between the transmit and receive frequency. The transceiver offset range can be from 0 to 99.950MHz.

In standby press **[MENU]** + number **[4]** **[7]** and the screen will display **"OFF-SET"**

Press **[MENU]** enter, press number 0 to 9 to select offsetfrequency.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

In order to let the transceiver receiving and transmitting under different frequency, the frequencyshift direction and offsetfrequency can only be programmed when the transceiver works in frequency mode.

How to operate

Follow the next steps:

1. Set working frequency.
2. Set frequency shift direction and offset frequency.

Example: In frequency mode, the transceiver will work on receive frequency 450.025MHz and transmit frequency will be 460.025MHz.

In frequency mode, order input **[FREQ]** **[4]** **[.]** **[0]** **[2]** **[5]**, press **[MENU]** + **[4]** + **[6]** + **[MENU]** and select positive offset (+); press **[MENU]** + **[EXT]**, then press **[MENU]** + **[4]** + **[7]** + **[MENU]** + NO.Key and select 10.000+ **[MENU]** + **[EXT]** and the frequency shift direction plus offset frequency are complete.

The screen will display **"450.025"**

When press PTT key the screen will display **"460.025"**

When you release PTT the screen will display **"450.025"**

Now the receiving frequency is **"450.025"**

The transmit frequency is **"460.025"**



Professional FM Transceiver

ANI CODE edit (ANI) ---- MENU 48

Every transceiver in the same group must be set different ANI code.



NOTE

» Because this transceiver has different of 3 bits, 4 bits and 5 bits, so the ANI ID CODE length must keep the same as which used in group.

ANI ID CODE only can be programmed via VR-200F programming software.

Setting VOX-T (VOXT) ---- MENU 50

The purpose of setting VOX-T is to avoid the problem: When after transmitted, transceiver will return to received mode immediately, but you can't ensure whether last part of calling can be transmitted or not, so you can set a proper VOX-T then makes calling can be transmitted exactly.

Be careful, don't set VOX-T to a long time.

This transceiver total has 20 levels, unit: 100ms

In standby, press **[MENU]** + number **[5]** **[OK]** and the screen will display **"1'00" -- 0"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select one of level between 1 and 20 or 0 not allow delay transmit, press **[MENU]** to confirm, then press **[EXT]** to return to standby.

How to operate

Companding (COMP) ---- MENU 51

COMP: Use voice compress technology to reduce the noise when on talking, make the voice clear.

In standby, press **[MENU]** + number **[5]** **[STEP 1]** and the screen will display **"COMP 51"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** to select ON or OFF.

Press **[MENU]** to confirm, then press **[EXIT]** to return to standby.

Setting reset (RESET) ---- MENU 52

The transceiver has a menu which resets VFO and ALL messages.

When you use RESET VFO all parameters of menu will return to factory set.

When you use RESET ALL all menu and channel parameters will return to factory set.

1. MENU reset (VFO):

In standby, press **[MENU]** + number **[5]** **[2]** and the screen will display **"RESET 52"**

Press **[MENU]** enter, press **[UP]** / **[DOWN]** select VFO, press **[MENU]** key and the screen will display **"SURE 52"**

Press **[MENU]** again and the screen will display **"WRIT 52"**

When the reset has worked well the transceiver will auto power off and auto switch on again.

2. All message reset (ALL):

In standby, press **[MENU]** + number **[5]** **[2]** the screen will display **"RESET 52"**



Press **[MENU]** enter, press **[UP]** / **[DOWN]** and select ALL, press **[MENU]** and the screen will display **"SURE 52"**

Press **[MENU]** again and the screen will display **"WRIT 52"**

When reset has worked well, the transceiver will auto power off and auto switch on again.

Setting reverse frequency function

When using reverse frequency function, the transceiver's transmit and receive frequency will interchange and the setting of CTCSS and/or DCS encode and decode will interchange.

■ Operating reverse frequency function:

In standby, press **[*]** **[SCAN]** and this will turn on reverse frequency function, press **[*]** **[SCAN]** again and this will turn off reverse frequency function.

Lowvoltage battery pack voice prompt

When the battery pack has low voltage, the transceiver will sound "low battery pack" voice prompt.

Setting transmit overtime prompt

When transmitter works longer than set time, the transceiver will announce "transmit overtime" by voice and stops transmitting. If you want to transmit again, please press PTT. (Setting overtime prompt Please see MENU 6)

How to operate

Adding channelscan

Only scan according programming list which have added channel scan on programming software.

Edit method: 1.Strictly via KG-679E programming software.

2.Edit via adding scan menu 19.

Wireclone function

Using wireclone	Switch sourceradio on,after you have connected the targetradio to the sourceradio via the cloningcable,push the [MONI] key and the sourceradio starts cloning.	LED is flashing red during cloning. LED goes out in case of successful cloning. Glow continuous red in case of cloning failure.
	Targetradio	LED is flashing green during cloning. LED will switch OFF when cloning complete.

Programming repeater function

Most repeaters use standard or different splits and/or matching CTCSS/DCS or DTMF signals.

When you need to join a repeater, you need to set different parameters on receiving and transmitting

Example: The repeater transmit frequency is 450.025MHz, CTCSS value is 67Hz, the receive frequency is 460.025MHz.

When the transceiver needs to join this repeater, you need to follow the following steps:



Professional FM Transceiver

1. Set receive frequency, CTCSS value and transmitting CTCSS value and store this on appointed channel, example channel 20. The transceiver in frequency mode, setting receive frequency to 460.025MHz, transmitting CTCSS value is 67Hz, and store to channel 20. The operation is as follows:

In frequency mode, order input **[4]** + **[6]** + **[D]** + **[D]** + **[SQL]** + **[5]**, **[MENU]** + **[STEP]** + **[2]** + **[MENU]** press **[UP]** / **[DOWN]** and select CTCSS value 67Hz + **[MENU]** + **[EXIT]**, **[MENU]** + **[TWP]** + **[4]** + **[MENU]** + **[SQL]** + **[D]** + **[MENU]** voice prompt receive store, press **[EXIT]** key.

2. Setting transmit frequency, and store on appoint channel 20. The transceiver in frequency mode, setting transmit frequency as 450.025MHz, and store on channel 20.

In frequency mode, order input **[4]** + **[5]** + **[D]** + **[D]** + **[SQL]** + **[5]**, **[MENU]** + **[TWP]** + **[4]** + **[MENU]**; **[MENU]** + **[SQL]** + **[D]**. Voice prompt transmit store, press **[EXIT]** key.

3. Press **[MENU]**, turn on the power at the same time, the transceiver work in channel mode at this time, press **[UP]** / **[DOWN]** select channel 20, the transceiver can join repeater.

How to operate

How to use the intelligent charger

1. When the poweradapter is connected the intelligentcharger, the poweradapter should be plugged into the matchingvoltage. The intelligentcharger will flicker once, then go into the standby mode which means that you can charge the batterypack; When you plug in the batterypack, the intelligentcharger will switch to red LED which means that it has being charged.
2. When the green light flickers, the batterypack is fully charged.
3. After you plug in the batterypack which the voltage is lower than 6V (it is lower than 6V if you can not power on the transceiver), the red LED flickers which means that the batterypack is being trickle charged by intelligentcharger and this will last about 10 minutes. When the light turns red, it will go into the normal charge.
4. After you plug in the batterypack which the voltage is higher than 6V(it is higher than 6 V if you can power on the transceiver), the red LED flickers, at this time, please confirm whether the batterypack is plugged in right with intelligentcharger.



Trouble shooting



Professional FM Transceiver

Please check carefully if your transceiver has problems by following this chart.

If you maintain to have trouble you can reset your transceiver and very often this will eliminate your problem.

Problem	Possible Cause	Possible Solution
Transceiver will not switch on.	1. The batterypack is not installed properly. 2. The batterypack maybe exhausted. 3. The batterypack is getting too old.	1. Re-install the batterypack. 2. Charge the batterypack. 3. Change the batterypack.
The receiverlight is on and there is no sound from the speaker.	1. The powerswitch is not adjusted well. 2. Confirm if your CTCSS/DCS tone is the same as others. 3. Confirm if you use the right mutemode.	1. Tum the volumecontrol. 2. Reset the CTCSS/DCS 3. Reset the mutemode.
There is no reception	1. Check if you have installed your antenna right. 2. The signal you are receiving is very weak.	1. Install the supplied antenna. 2. Move the radio around till you receive the desired signal or press  to reset and then press  to go to right channel.

Technology specification

Frequencyrange	VHF: 66-88MHz	
	VHF: 136-174MHz	VHF: 245-246MHz
	UHF: 300-350MHz	UHF: 350-390MHz
	UHF: 400-470.9875MHz	UHF: 450-520MHz
Memorychannels	200 channels	
Voltage	7.4V DC	
Working temperature	-30C(-22F) to +60C(140F)	
Channels	Co-channel or Dis-channel simplex	
Poweroutput	VHF: 5W / UHF:4W	
Mode	F3E(FM)	
Maximum deviation	* ± 5 KHz	
Adjacent channel power	< -60dB	
Stability	± 5 ppm	
Sensitivity	< 0.2 μ V	
Audio output power	* 700mW	
Weight	265g	
Size	63 X 106 X 39 (mm)	2.49x4.18x1.54(inch)

» Specifications are subject to change without notice.



NOTE