KIRISUN

PT2508/3508

VHF/UHF HANDHELD TRANSCEIVER

INSTRUCTION

MANUAL

CH 2

UHF FM TRANSCEIVER PT-3508

SCAN
DIAL
FUNC
LOW

KIRISUN

FC CE 0681 ①

■ TO THE USER

THANK YOU!

We are grateful you have chosen KIRISUN for your land mobile application.

We believe this easy to use transceiver will provide dependable Communications to keep personal operating at peak efficiency.

KIRISUN Transceiver incorporates the latest advanced technology. As a result , you will be pleased with this product's quality and features.

MODELS COVERED BY THIS MANUAL

● PT-2508 VHF FM transceiver

● PT-3508 UHF FM transceiver

NOTICES TO THE USER

● Government law prohibits the operation of unlicensed radio transmitters within the territories under government control.

● Illegal operation is punished by fine or imprisonment or both.

● Refer service to a qualified licensed or certified technician only.

SAFETY:

It is important that the operator is aware of and understands Hazards common to the operation of any transceiver.

WARNING:

Explosive atmospheres (gases, dust, fumes, etc)

Turn off and do not operate your transceiver while taking on fuel, or while parked.

PRECAUTIONS

Please observe the following precautions to prevent fire, personal Injury, and transceiver damage:

● It is suggested that transmit period is 1 minute, & 4 minute for receiving. Long period of transmitting or in high power mode may heat the back Of the transceiver.

● Do not modify this transceiver for any reason.

● Do not expose the transceiver for a long period to direct

sunlight, nor place the transceiver close to heating appliances.

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

● If an abnormal odor or smoke is detected coming from the transceiver, switch OFF the power immediately and remove the optional battery from the transceiver and Contact your KIRISUN dealer.

● Do not dispose used batteries in the household waste.Bring back such batteries to your dealer or bring the exhausted batteries to a special disposal service.

CONTENTS

# ■ UNPACKING AND CHECKING EQUIPMENT /PREPARATION

Carefully unpack the transceiver. We recommend that you identify the Items listed on the following page before discarding the packing material. If any damage has occurred during shipment, file a claim with the carrier Immediately.
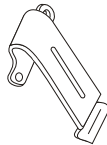
■ Supplied Accessories

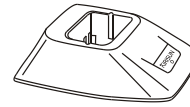| Item		Quantity(pc)
Antenna	PT-2508	1
	PT-3508	1
Wrist loop		1
Belt hook		1
Screws		2
Battery		1
Charger		1
Adaptor		1
Instruction manual		1
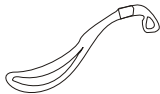
Antenna   Wrist loop   Belt hook   Screws
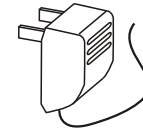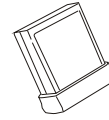
Charger   Adaptor   Battery

■ Charge the battery

After purchase or extended storage (greater than 2 months),

The battery can not reach its maximum capacity for the first time recharging. Repeating the charge/discharge cycles two or three times ,the capacity will reach its best status.The battery is not charged at the factory. Charge the battery before use. Please see the following steps:

1. Connect the adaptor to the charger, then insert the adaptor into the power socket.
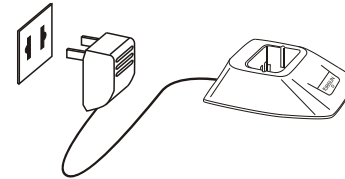
2.Insert the battery into the charger and the indicator light turns red while it is charging. The light turns green after charging for six hours around,it means the battery is fully charged.Then continue to charge for one or two hours after the light turns green,the function of battery will be better.
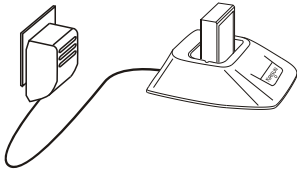
Note:

● Do not recharge the battery if it is already fully charged or there is no low battery alarm .If do this, you will overcharge the battery which may shorten its life or damage it.

● After charging the battery fully, take it out from the Charger. If having charged the battery, do not insert the battery back into the changer again when the changer powers on, in that case, the battery will become overcharged, thus the battery will be damaged.

■ **INSTALLING/REMOVING THE BATTERY**

Note:

● Do not short the battery terminals or dispose of the battery by fire.

● Never attempt to remove the case from the battery.

● Do not install the battery in dangerous conditions.The spark may cause an explosion.

1.Insert the battery into the bottom of the transceiver until the release catch on the base of the transceiver and locks the battery in place.
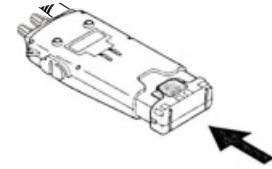
2.To remove the battery , push back on the release catch, then slide thepack away from the transceiver.
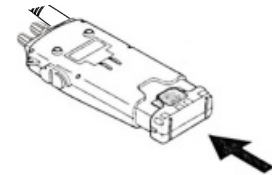
■**INSTALLING THE ANTENNA**

Holding the provided antenna at its base, screw the antenna into the connector on the top panel of the transceiver.

■ **INSTALLING THE BELT HOOK**

If necessary, attach the belt hook using the two 3mm×4mm screws from the supplied screw set.
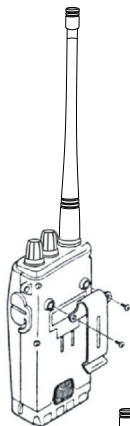
■ **INSTALLING WRIST LOOP**

Holding the provided wrist loop, put it through the ring on the right side of the transceiver,and then make a knot, refer to the picture.
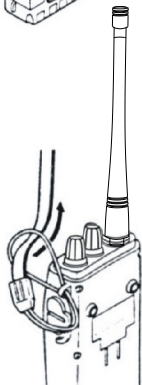
■ **INSTALLING THE SPEAKER /LOOP OF MIC**

Use the optional KMC-17 or KMC-21 speaker/MIC with the supplied connecting loop.

1. Switch power off and remove the panel from cap of MIC-SP.

2. Insert the speaker-microphone plugs into the SP/MIC jack.

3. Circle the LOOP to the position 4-5cm from plug, and insert the plug into the loop and fasten the loop.
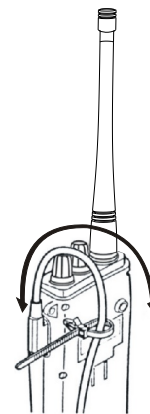
4. Cut off the bottom of loop, and insert the pin into the loop of the right side of transceiver.

● If the loop is removed and used again later, make sure 1 or 2 cm length separated from body.

● To remove the connecting loop, insert clip or iron wire into the locking Position, and pull out the bottom from the loop.
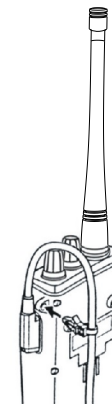
■ GETTING ACQUAINTED
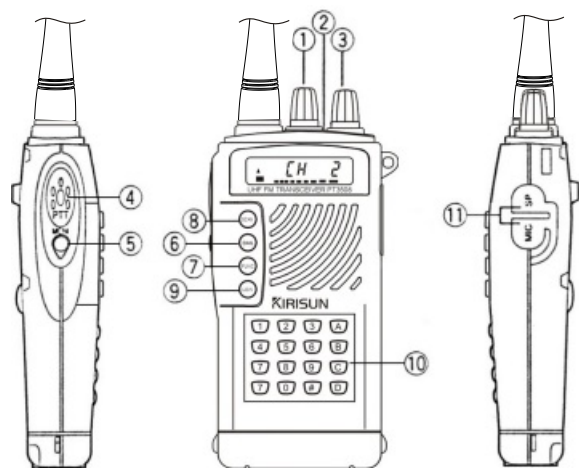
① POWER/VOL control

Turning clockwise to switch the transceiver ON, or counter clockwise to switch the transceiver OFF, this also increases or decreases the transceiver Volume.

② LED indicator

Lights red while transmitting. Flashes red when the battery voltage Level is low. Flashes orange when receiving the correct signalling For Code Squelch, selective Call.

③ CHANNEL selector

Selects operating channels. Also used for selecting squelch level, If so programmed by your dealer, used for selecting channels to Be locked.

④ PTT(Push-to-Talk) switch

Switches the transceiver between receive and transmit modes.

⑤ MONI Button

Press to monitor activity on your selected channel. Also used with QT/DTMF to mute the speaker after these functions have opened Squelch.

⑥ DIAL key

Used for dialling a number with the Store and Send function, or Used for storing, confirming, transmitting, or erasing numbers with The Auto-dial function.

⑦ FUNC Key

Press or release to enable the other functions of the transceiver.

⑧ SCAN key

Used for controlling the Scan function, or used with FUNC key Together to exclude the locked channel from scanning and set Condition of indicator of LCD.

⑨ LOW key

Used for setting the transmit power

⑩ DTMF keypad

Used for storing or transmitting DTMF numbers.

⑪ MIC-SP jacks

If desired, connect a speaker-microphone here.

■ BASIC USE

■ LCD
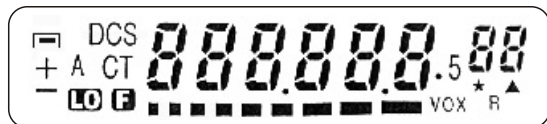
FIGURE	DESCRIPTION
—	Appears when the squelch is opened by pressing MONI button
A	Appears when the selected channel is assigned to the scan list.
888888	Appears when the selected channel is assigned to the scan list.
88	Displays different figure according to the selected functions.
R	Appears when the REV function
VOX	Apppears when VOX function enabled
■■■■■■■■	Indicates the receiving signal when receive and indicates the power of battery when transmitting
F	Appears after entering into FUNC mode
LO	Appears when the LOW RF power enabled

■ Switch Power ON/OFF

To switch ON the transceiver:

Turn the POWER/VOL control clockwise.

To switch OFF the transceiver.

Turn the POWER/VOL control fully counterclockwise.

Until a click is heard.

■ Adjusting Volume

To adjust the volume, turn the POWER/VOL control while.

Using [MONI] to listen to channel background noise.

■ Selecting a Channel

Use the CHANNEL selector to choose your regular operating channel. Turning the selector clockwise to increase the channel number and turning the selector counterclockwise

To decrease the channel number.

■ Selecting a Squelch Level

The purpose of squelch is to silence the speaker when no Signals are present. When squelch is open, you hear sound From the speaker. When squelch is closed, you hear no sound.

The squelch level that determines under which conditions squelch is opened or closed. Selecting a level that is too high prevents you from hearing audio while receiving a weak signal. Selecting a level that is too low forces you to listen to channel noise between transmissions made by other parties.

1. Hold down [FUNC], and then [LOW]

● Display -SqL and the current squelch level appears.

2.Turn the CHANNEL selector to select a squelch level from

■ CHANAL SCAN

0~9.

● Turning the CHANNEL Selector clockwise to increase the squelch level, and turning the selector counterclockwise to decrease the level.

3.Press any key to complete the selection.

● The original display is restored

■ CALLING

1.Press [MONI], and then listen for a few seconds to make certain that ,the channel is not being used.

2.Hold the transceiver about 3~4cm from your lips, press the PTT Switch, and speak in your normal speaking voice.

● The LED lights red while you are transmitting.

3.Release the PTT switch to return to the receive mode.

■ RECEIVING

LED indicator turns green when the channel currently used is called, You can hear the calling.

● You may not hear the calling if the calling signal is too weak or the Squelch level is too high.

● QT/DQT maybe programmed by your dealer in your transceiver, when, You select one of these channels; you can only hear the calling with ,The same QT/DQT code other than other channel.

● Some calling can use DTMF code. For further detailed information,Please refer to the CODE SQUELCH and SELECTIVE CALLING.

Scan is a useful feature for monitoring activity on the channels programmed in the transceiver. When scanning, the transceiver checks each channel for activity, and only stops on a channel if a signal is present.

The transceiver remains on a busy channel until the channel is no longer Busy, unless transceiver check the new signal during the delay time.

> **Note:**
>
> ● *Scan can only be used if your dealer has programmed at least 2 Channels on the transceiver, Also, at least 2 channels must not Have been locked out.*
>
> ● *Your dealer can best explain how Channel Scan functions when Using Code Squelch, Selective Call.*

Using Scan Press [SCN]

● Scanning starts from the currently displayed channel, Then ascends in numerical sequence up through the Channel numbers.

● SCAN replace the channel number, and this word remains visible on the display. To quit scanning, press any key other than [MONI].

■ CHANNEL LOCKOUT

If so programmed by your dealer, Channel Lockout allows you to select Channels to skip while scanning.

1.Using the CHANNEL selector to select channels to be skipped.

2.Hold down [FUNC], and then press [SCAN].

■ DTMF CALLING

● Each time this key combination is pressed, the lockout status.

Toggles ON And OFF for the selected channel.

● A on LCD stands for the scanning channel, A will not show for excluded channel.

■ Standby channel

To quit scanning and go back to standby channel, only hold down PTT button while Scanning.

While transmitting, you must release PTT button, and then press PTT button Again.

■ MANUAL DIALING

There are two ways of manual dialling, and can the second way take effect only your dealer have programmed it.

1) Holding down the PTT button, and enter the number with keypad.

● If your dealer have programmed, you do not need to hold down PTT button without release.

● The microphone is muted and the corresponding DTMF tones are transmitted. You can monitor the transmitting Tone by the sound from speaker.

2) Using the keypad, enter the desired digits (16 digits maximum).

● As each digit is entered, the digit is displayed and the corresponding DTMF tone is heard. Press [DIAL] while the

digits are currently displayed.

● The digits for the stored number scroll across the display and Their associated DTMF tones are transmitted.

● If so programmed by your dealer, no DTMF tone is transmitted if D is stored since D represents a pause time. However, the transceiver remains in the transmit mode for the length of the pause time which is also programmed by your dealer.

■ Storing DTMF Numbers

One DTMF number with a maximum of 16 digits can be stored in each of the 9 Auto-dial memory channels.

1. Press [DIAL] to enter Dial mode.

● LCD display --------d

2.Press # Key to enter Storing mode.

3.Using the keypad, enter up to 16 digits maximum for the number.

● that you want to store. If incorrect digits are entered, press [MONI] andre-enter the entire number.

4.Press [DIAL], and then [0]~[9], only press a single number

● Corresponding to the desired Auto-dial memory channel, the original display is restored.

■ **Confirming Stored DTMF Numbers**

To confirm stored DTMF Numbers,

1. Press [DIAL] to enter Dialling mode.

● LCD display --------- D

2. Press ✴ key to enter into confirming mode.

3. Enter desired memory channel Number (1~9).

 Display the stored number and transmit corresponding DTMF tone.

■ **Transmitting Stored DTMF Numbers**

To transmit stored DTMF Number,

1. Press [DIAL] to enter dialling mode.

● LCD display -------- D.

2.Enter the desired memory channel number (1~9) that

● Contains the DTMF number to be transmitted.

3. Restore to the original display.

■ **Erasing Stored DTMF Numbers**

To erase the number stored in memory channel,

1. Press [DIAL] to enter Dialling mode.

● LCD display ------- D.

2. Press D key to enter erasing mode.

● LCD display CLrd

● Press any key except 1~9 to cancel process.

3. Enter the Auto-dial memory channel (0~9) that.

■ **DTMF CALLING**

● Contains the DTMF number to be erased.

4. Restored to the original display.

■ **REDIALING**

You can re-transmit up to 16 digits maximum that you last sent.

1. Press [DIAL] to enter dialling mode.

● LCD display -------- .

2. Press 0 key to call the last number.

Note:

Switch OFF the power of the transceiver to clear the redial memory.

■ CODE SQUELCH

Code Squelch is either enabled or disabled by your dealer. This function opens the squelch only when the transceiver Receives a predetermined DTMF code that has 3 to 10 digits. Usually, each transceiver would be programmed with a unique code.Transceiver not transmitting the correct code will not be heard. Consequently, this function allows you to readily communicate With a single specific transceiver without listening to other transceivers that share the same channel.

Your dealer also may activate Group Call for your transceiver. This is useful when you want to pass information to a number of units in a Fleet. Ask your dealer for details.

Note:
Code Squelch cannot be used on a channel that your dealer has Programmed with Selective Call.

■ RECEIVING

When the same code is received that was programmed in the transceiver By your dealer, the squelch opens, and the caller is heard without any Further action.

● Receiving the correct code causes CH- and channel number to appear on the Display and the LED to flash orange.

● Press [MONI] mutes the speaker after Code Squelch has opened The squelch.

● If so programmed by your dealer, after Code Squelch opens the squelch, the squelch automatically closes when a programmed time period Passes.

● If your dealer has programmed Transpond, an acknowledgement signal is returned from your transceiver to the station that called. However, Transpond does not function when you are called with a Group code.

● If your dealer has programmed Tone Alert, both Tone Alert and Code Squelch can function together.

■ TRANSMITTING

1. Refer to the MANUAL DIAL or Transmitting stored DTMF code to Make a call by DTMF keypad.

● Make sure to enter the correct DTMF Code.

● CH- and channel Number displayed on LCD, and LED indicatorturns red.

2. Use the transceiver with the usual calling method, press to talk, and release to receive.

● The squelch on the transceiver being called will remain open for as long as you are transmitting plus a time period after you stop transmitting. This time period is programmed by your dealer.

● Release [PTT] causes the squelch to open and the LED to flash Orange, when the transceiver receives a signal, the LED lights Green. After the transceiver receives no further signals, the LEDFlashes orange again. After a time period programmed by your dealer passes during which no signal is received, the squelch closes And LED goes OFF.

● Pressing [MONI] also causes the squelch to Close and the LED to go OFF.

■ SELECTIVE CALL

■ SELECTIVE CALL

Selective Call is either enable or disabled by your dealer.

This function is similar to Code Squelch. The differences from Code Squelch are as follows:

● A message containing up to 5 digits maximum can be sent or received.

● Selective Call opens the squelch only when the transceiver

Receives predetermined DTMF codes in the correct sequence:

1) An ID code (3 digits), then

2) An Intermediate code(1 digit)

3) Message (status) code (5 digits maximum).

Your dealer also may activate Group Call for your transceiver. This is Useful when you want to pass information to a number of units in A fleet.

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Note:
When you select a channel that your dealer has programmed for
Code Squelch, you cannot use this channel with Selective Call.
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■ RECEIVING

When the ID and Intermediate codes are received that were programmed In the transceiver by your dealer, the squelch opens, if a message code is Also received, the message appears on the Display of the transceiver.

● Receiving the correct codes causes a bar to appear on the Display And the LED to flash orange.

● When you are called with your ID code, C is displayed, for

Example: 12345 C .

● When you are called with your Group code, GP is displayed, For example 12345GP .

● When no message is received, NO DATA is displayed.

● Press any key to erase message.

● Pressing [MONI] mutes the speaker after Selective Call has opened the squelch.

● If so programmed by your dealer, after Selective Call opens the Squelch, the squelch automatically closes when a programmed time period passes.

● If your dealer has programmed Transpond, an acknowledgment Signal returned from your transceiver to the station that called. However, Transpond does not function when you are called with A Group code.

● If your dealer has programmed Tone Alert, both Tone and Selective Call can function together.

■ TRANSMITTING

1. Refers to the MANUAL DIAL or Transmitting the stored DTMFcode To make a call with DTMF keypad.

2. Make sure to call the ID or Group code and intermediate code that Was programmed in the transceiver. When the transmission starts, A bar appears on the display, and the LED lights red. 3. Continue to use the transceiver normally, releasing [PTT] to receive and holding down [PTT] to transmit.

● Transmitting causes the squelch of called transceiver open,

After a period of time programmed by your dealer passes during which no signal is transmitting, the squelch closes.

■ AUXILIARY FUNCTIONS

● Releasing [PTT] causes the squelch to open and the LED to flash Orange. When the transceiver receive a signal, the LED lights green, After the transceiver receives no further signals, the LED flashes orange again. After a period of time programmed by your Dealer passes during which no signal is received, the squelch closes And LED goes OFF, Press the [MONI] also causes the squelch to close and the LED to go OFF.

If your dealer have programmed QT/DQT in your transceiver, when you select the channel with this function, you can only hear the calling with the same QT/DQT tone.

This function can make you filter the unnecessary calling, even as if you use the special channel when the QT/DQT enabled, the other party with the same QT/DQT code still can receive your calling.

■ Keypad Lockout

This function can prevent you from any error operation to your transceiver.

Your dealer may set Keypad Lockout Alternatively: CHANNEL SELECTOR Or 12/16 key.

● CHANNEL SELECTOR can lock any key other than MONI, FUNC, DIAL, PTT, Power/Volume.

● 12/16 key can only lock DIAL.

To lockout the above keys, hold down FUNC for more than 1 second and Press DIAL key.

● L appears on display.

To unlock the locks, hold down FUNC for more than 1 second, and Press DIAL.

■ TIME-OUT-TIMER (TOT)

The purpose of the time-out timer is to automatically interrupt continuous transmitting After a specified time elapses. Holding down [PTT] for longer than the Programmed time causes the transceiver to stop transmitting and Generate a warning tone. Releasing [PTT] cancels the warning tone.

Your dealer also can program a warning function that alerts you just Before the time-out timer stops your transmission. After [PTT] is held Down for the time specified by your dealer, a warning tone sound that Is different from the time-out timer tone.

■ Busy Channel Lockout

Activated or deactivated by your dealer, this function prevents you from interfering with other stations that may be using the same channel. Pressing [PTT] while the selected channel is in use causes your transceiver to generate an audible warning tone. Your transceiver is inhibited in this situation so it will not transmit. Release [PTT] to cancel the alarm and restore the receive mode.

■ LAMP button

You can set [LAMP] IN AUTO, ENABLE or DISABLE mode. In auto mode, the display is illuminated for 5 seconds after Being pressed any key other than [PTT] , in ENABLE mode, the lamp Will light after the power switched on, in DISABLE mode, LAMP Switches off.

LAMP SETTING

1. Holding down FUNC key for more than 1 second, and press SCAN key.

2. Turning channel selector to choose the desired setting. In AUTO mode, A appears on LCD. In ENABLE mode, On appears. In DISABLE mode, OF appears on LCD.

3. Press any key to exit the setting.

■ REVERSE

Your dealer may have programmed the Reverse function. When using Reverse, the transceiver transmits on the receive frequency and encodes, Using the QT signalling that is programmed for decode. Also, the transceiver receives on the transmit frequency and decodes, using the QT signalling that is programmed for encode.

To enable/disable REVERSE, hold down FUNC and press DIAL key.

● R appears on display

● When changing channel or start scanning, REVERSE function will be cancelled.

■ Battery Voltage Level

While the power is switched on , the battery voltage level is checked, when the voltage level drops to the predetermined value, the LED Flashes red. When the voltage level drops further, the transceiver stops Transmitting and generates an alarm. If this occurs, recharge the Battery pack.

■ Transmitting Power

Press LOW key to select desired output power, each time LOW key is Pressed, the output power is toggled between low and high power.

● When you choose low power, LO appears on display.

Note:

If you press [LO] after selecting a channel programmed for low Power, the power setting does not change.

■ MONITOR

You can use MONI key to detect the weak signal in normal condition, and Adjust the volume when no signal received on your selected channel.

● ¯-¯ will appear on left side of LCD when MONI function enabled.

There are 4 functions for MONI, the original function is squelch open, Your dealer may program your transceiver according to following methods:

Squelch open:

Hold down MONI key to monitor the background noise, release to restore To normal condition.

MONI key activated

Press MONI key to close transmitting code, release to restore to normal Condition.

MONI key instantaneous

Press and release to close transmitting code, press and release again to restore to normal condition.

Switch off: No function.

■ VOX

You can set VOX gain from Switch off to Volume 3(high). When using VOX, if the gain of MIC is higher than that of VOX, transceiver Will change to transmitting mode automatically; if the gain of MIC is Lower than that of VOX, transceiver will restore to receiving mode in 2 seconds.

Since it is the auto toggle between transmitting and receiving, make sure to deactivate the transmitting when setting the VOX gain if the environment Is too noisy.

To adjust VOX gain:

1. Hold down FUNC for more than 1 second, and press LOW key.

● VOX will appear on display and the VOX value also appears.

2. Turning the channel selector to choose the VOX gain value from Switch off to Volume 3(High).

● To increase VOX value, turn the knob clock wisely.

● To decrease VOX value, turn the knob counter-clock wisely If the VOX enabled, OF appears on display, and 1 indicates Volume 1, 2 indicates Volume 2, 3 indicates volume 3.

3. Press any key to exit setting.

● VOX appears if you select volume from 1 to 3.

Note:

It is recommended to use vox function with the optional earphone, otherwise, the effect may not be satisfactory.

■ SELECTABLE QT

You can change the preset QT frequencies in some channels of the transceiver temporarily:

1. Holding down FUNC key for more than 1 second, and press MONI Key.

● OFF appears on display

2. Turning the channel selector to select the new QT code and Frequency.

3. Press any key to exit the setting.

Note: Switch off power or press any key other than MONI and

PTT to erase the changed data temporarily.

Note:

Switch off power or press any key other than MONI and PTT to erase the changed data temporarily.