User Manual

GYQ transceiver

GYQ-8900

FCC ID:2ADTZGYQ-8900

Product Safety

- Do not repack & modify the construction of the radio
- Do not expose the radio to direct sunshine for a prolonged period of time
- Do not lay the radio near any heater
- Do not expose the radio to the damp and dusty place.
- Do not lay the radio on the incline.
- Power the radio off if you find the fumes, and remove the battery pack.

Contents

What's in the box

Upon opening the GYQ-8900 box, please check to ensure that all of the following items are enclosed:

Commodities

Radio body	desktop charger	belt clip
AC Power Adapter	battery pack	screws
Antenna	Verification	User's Manual

Product Use

Battery

Please charge the new battery because it wasn't be charged before left the factory and charge the battery which don't working for a prolonged period of time before use.

If recycle to charge and discharge the battery for 3 times, the capacity of the battery will be best .

Do not attempt to operate the GYQ-8900 radio with any third-party battery, as this result in explosion.

Caution:

1. Do not allow any metal object to come in contact with both the anode(+) and the cathode(-) terminal on the GYQ-8900 battery.

2. Charge the battery in temperatures 0℃ - 40℃ otherwise which result in explosion..

3. Power the radio down before charging the battery.

4. Do not remove the radio from the charging dock while it is in mid-charge.

5. Do not attempt to charge or power the radio on if it is wet or damp.

6. If the radio's talk-time becomes noticeably short even after full charged, it is highly advisable that you replace the battery with new one.

Charging

(1) Power off the GYQ-8900 Radio.

(2) Then connect the power adapter to the desktop charging dock.

(3) Ensure that the battery is upright and in direct contact with charging node.

Is it charging

The LED charging indicator will light up red when the battery is charging, and will turn green when it is fully charged!

Maintenance & Protection

● Keep it dry, otherwise rainwater and dampness perhaps erode the electron line of PCB.

● Maintenance can only be undertaken by professional technicians.

● Do button the MIC/SP cover (microphone port cap) up when the radio is not used.

● To change antenna, only can be used antenna appointed .

● Do not put it in the extreme dusty, wet or splashed places, or on the unsteady surface.
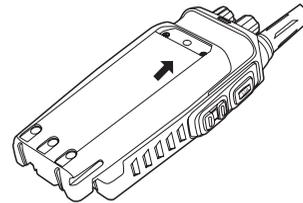
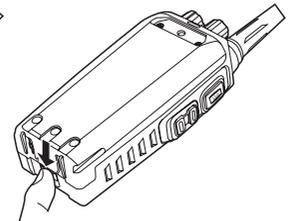## Installing Accessory

Installing/removing battery

Note: The GYQ-8900 battery is shipped without a charge, please charge the battery before using it for the first time.

Installing battery : Firstly push the front end of the battery to radio frame, then press the battery clip down,finally button the bottom end of battery up (see dwg 1).

Removing battery: Press the battery clip down, the bottom end of the battery will automatically upspring,then you can remove the battery (see dwg 2)
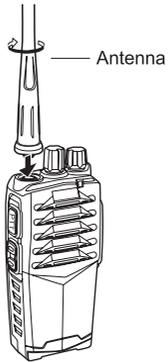
(dwg 1)   (dwg 2)

Installing/removing antenna

Installing antenna: Affix the antenna to the SMA connector of radio (see dwg 3), and then screw it down securely, turn in clockwise.

Removing antenna: Screw the antenna off the radio, turn it count-clockwise(see dwg 4)

Antenna

Antenna

(dwg 3)   (dwg 4)

Installing belt clip

While affix the belt clip to the back of the radio, screw the 2 screws (included in box) through the holes in the belt clipand onto the back of the radio(see dwg 5).
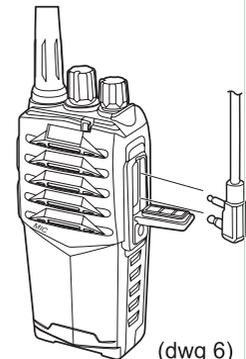
(dwg 5)

Installing extra microphone/earphone

Open the MIC/SP cover(microphone /earphone jack cover), and plug the two-pronged input jack in (see dwg 6)

caution:

The radio can not be waterproof when you open the MIC/SP cover.

(dwg 6)

Sketch Map of the Radio

Channel knob

Antenna

Power/Volume
Knob
(Power the radio
on, and control
the volume level)

Speaker
(sound output)

Microphone
(sound input)

MIC

PTT button
(Depress this button to
transmit, release this
button to receive)

Side button PF1
Factory default setting :
1. cancel the squelch after
fast depress it for 1 time in
very short time
2. no any function if always
depressing it in a longer time

Side button PF2
Factory default setting:
1. remind the capacity of
battery after fast depress it
for 1 time in very short time.
2. no any function if always
depressing it in a longer time.

MIC/
speaker
jack/Data
port

Battery
Pack

Function Operation

Function operation is required to set up by appointed Programming Software by PC and the local distributor do programming.

Programming frequency by PC

1. Use the appointed programming software.
2. Power the radio off, the radio is connected with the Computer by Programming cable (see dwg.7)
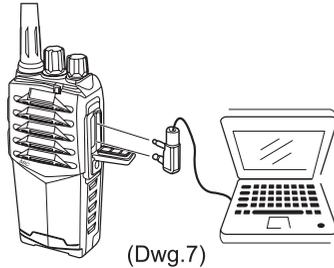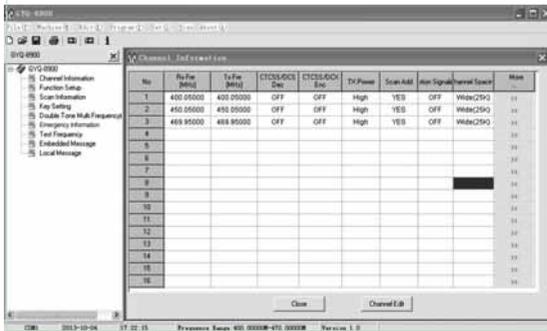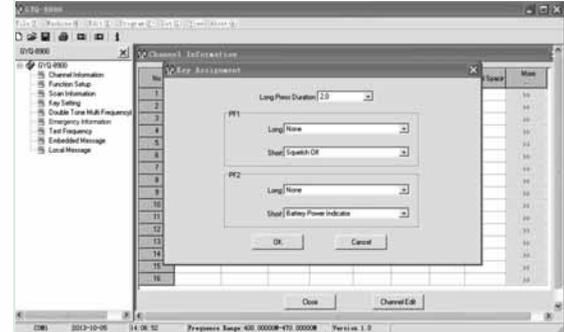
(Dwg.7)

3. Run the programming software to access the operation interface windows, then power the radio on, to set data to write into the radio (see dwg.8) by ➡️

Dwg.8

Side Button Function (set up in PC by Programming Software)
Open the GYQ-8900 Programming Software, click "Key Setting" ---the No. 4 item of Toolbar in the left side of the Programming Software, to setting up Side Button Function (PF1 or PF2).
Note: The factory default setting read as following dwg.9.

Dwg.9

Notes in the Drawing 9:

◆ "Long" in Programming Software means that press the button /key for a longer time (from 0.1second-2.5 seconds in the box), you can set the Long Press Duration desired by yourself.
◆ "Short" in it means that press the button/key only 1 time, and then release it at once.
◆ The Long Press Duration is 2.0 seconds
◆ "None" is shown in the box after "Long" under PF1.
◆ "Squelch Off" is shown in the box after "Short" under PF1.
◆ "None" is shown in the box after "Long" under PF2 .

◆ "Battery Power Indicator" is shown in the box after"Short"
under PF2.

**The Functions & Definitions of Side Button PF1 and PF2
Can Be Set by in Programming Software As follows:**
1. None
2. Call1/ Call2
3. Alarm
4. Monitor
5. Monitor Momentary
6.Noisy channel temporary delete
7. Noisy channel temporary delete backup
8. Check Squelch Level,/Adjust Squelch Level
9.Squelch Off
10. Squelch Off Momentary
11. Scan
12. Scramble
13. Talk Around
14. Reverse frequency
15. Check Power Level/ Adjust Power Level
16. Whisper
17. VOX
18. companding
19. Battery Power Indicator
20. Channel Tone
21. Channel Locked.

The Function and Definition of PF1/ PF2
◆ **Caution:** Each of the following functions must be set well in
programming software in advance before depress side button
PF1/PF2.If a certain function set-up is set in PF1 in advance,
Side button PF1 will be depress; Otherwise, PF2 will be depressed.
1. None: which means that there is no any function setting.
2. Call1/Call2: It can transmit the stored DTMF code.
3. Alarm: Alarm tone is transmit by depress Side Button PF1/
PF2, or its own ID code or background sound which is a so-
und of surrounding environment also can be transmit to the
member(s) of same Group (GYQ-8900 radio). If user depress
the side button PF1 or PF2 again, the alarm will be cancelled.
4. Monitor: it exists in the box after only the "Short" in the prog-
ramming software. Have no the Monitor function in the box
after "Long". (Note: that is : after user set the Monitor function
in programming software, you depress the PF1 or PF2 button
only 1 time, and then release the button, but user are not re-
quired to depress a longer time) .
After user set the Monitor function in Programming software,
then user depress the side button PF1 or PF2, at the same
time user will hear the "Beep" sound, now the radio will be
access to the Monitor Mode. And the radio will close the de-
code of CTCSS/DCS and Optional signalling. So long as re-
ceive the signal, it will open the speaker. Depress the side
button PF1 or PF2 again, it will remind 2 "Beep" sounds, now

it exits the Monitor mode/status.

5. Monitor Momentary: It is same as Monitor function, their warning tone "Beep" is same too. However the Monitor Momentary exists in the box after "Long" in the programming software . When user set Monitor Momentary function, user must be always depressing the side button PF1 or PF2. If user release the side button, will exit the Monitor Momentary function /mode.

6. Noisy channel temporary delete:

(1) When scan stops on a certain channel, depress side button PF1 or PF2 after set the function for " Noisy channel temporary delete", the channel will be temporarily deleted from the scanning list.

(2) Preferential channel can't be temporarily deleted.

(3) If only 1 channel or 2 channels in the scanning list, any one channel between 2 channels will not be deleted.

(4) If recover the channel which have been deleted temporarily before back to the scanning list, just exit the scanning mode, or power the radio off and then power the radio on again.

7. Noisy channel temporary delete backup:

(1) When scan stops on a certain channel, depress side button PF1 or PF2 after set the function for "Noisy channel temporary delete backup", the channel will be permanently deleted from the scanning list. Even though exit the scanning mode

or power the radio on again, the deleted channel will not be scanned further yet.

(2) Preferential channel can't be temporarily deleted.

(3) If only 1 channel or 2 channels in the scanning list, any one channel between 2 channels will not be deleted.

8. Check squelch level: After depress side button PF1 or PF2, the sound of the Level of Squelch will be heard.

9. Adjust squelch level: depress side button PF1 or PF2, and then user can modify the squelch level, depress the button for 1 time, the squelch level will add 1 level, and automatically keep in reserve .

Note: squelch level : 9,8,7---2,1.0, when the squelch level is 0, one sound "beep" will be heard., and finally squelch will be on always.

10. Squelch off : The function "Squelch off " only exists in the box after **"Short"** of PF1/PF2 in the Key Setting in Programming Software Toolbar. After you set the function "Squelch off ", then depress PF1 button the radio will be forced to open speaker and release noise anyway, no matter whether there is signal or not . Depress the button again, exit the " Squelch off "mode. In Factory default: After shortly depress PF1 button for 1 time will start "Squelch off " function.

11. Squelch Off Momentary : The function "Squelch Off Momentary " only exists in the box after "Long " of PF1/PF2 in

the **"Key Setting"** in Programming software Toolbar. When you operate this function, user must be always depressing the button PF1 or PF2 for a duration (factory default setting is 2 seconds). After user release the button, will exit the "Squelch Off Momentary" Mode.

12. **Scan :** Firstly user set the function "Scan " in the box after **"Long" or " Short "** of PF1/PF2 in the Key Setting in the Programming software Toolbar, then depress PF1 or PF2 ,it will be access in the Scanning Mode, it begin to scan from the current channel one by one. While scanning, the LED indicator is green on and off. When receive signal matched, the LED indicator will be always red. Depress the button again, exit the Scanning Status. The scanning status will be not kept in reserve when power the radio on next time.

13. **Scramble:** After set scramble function in programming software, depressing PF1 or PF2 can avoid the third Party (which is not a member/members of your same Group Radio) to hear clearly your signal and information. The scramble status will be keep in reserve after power the radio on next time.

Caution: the scramble function can't normally used until both the receiving radio and sending radio must switch on the scramble function at the same time.

14. **Talk around :** Depress PF1 or PF2, and then depress PTT button to transmit again, the radio will transmit the received frequency, but won't transmit the sending frequency in the current channel, unless the sending frequency is same as the receiving frequency set in advance in programming software. User can set to write to the radio that the receiving frequency is different from sending frequency, also the receiving frequency is same as the sending frequency.

But before depress PF1 or PF2, the radio will transmit the sending frequency in current channel.

15. **Reverse frequency :** Depressing PF1 or PF2, the radio will receive signal same as the frequency sent, and transmit signal same as the frequency received.

Note: When the sending frequency in the working channel is empty, the Reverse frequency function is not valid.

16. **Whisper:** Depress PF1 or PF2, even though user talk to the radio in a whisper, the other party (receiver) still can hear

the louder voice. Depress PF1 or PF2 again, exit the funct-
ion, and the whisper function will be kept in reserve after
power the radio on next time.

19. **VOX :** it means voice-operated transmission. After user set
VOX function in programming software, and then depress
PF1 or PF2 , it will start VOX function, the radio can tran-
smit signal if the PTT button is not be depressed.
Depress PF1 or PF2 again, it will exit the function. And the
VOX status will be kept in reserve after power the radio on
next time.

20. **Companding :** It means compressing and expanding signal.
Depress PF1 or PF2 for Companding function, it can improve
the voice quality. It compress the voice while transmitting,
and then expand while receiving, meanwhile it will reduce
extraneous noise. But can't use the companding function
until both the sending radio and receiving radio must activate
the companding function .
Depress the PF1 or PF2 again, it will exit the function. The
Companding status will be kept in reserve after power the
radio on next time.

21. **Battery power indicator:** Depress PF1 or PF2, the radio will
remind warning tone : 4 sounds "beep", or 3 sounds, or 2
sounds. 4 sounds "beep" mean that power of battery is high,
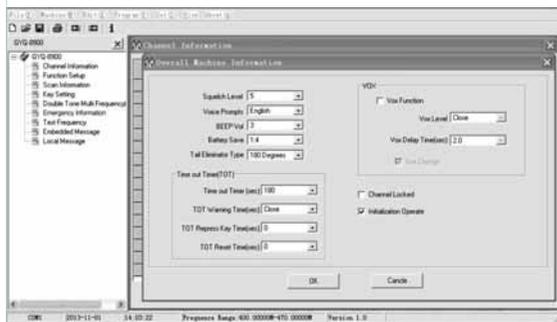3 sounds "beep" mean middle power, 2 sounds mean low .

(If switch on the voice broadcast prompt function, it will sound
the relevant power level of battery)

22. **Channel tone:** mean that the channel will sound voice bro-
adcast prompt.
Depressing PF1 or PF2, the radio will broadcast the current
channel number.

23. **Channel locked:** Depress PF1 or PF2, revolving the channel
knob is not valid. Depress it again, it will exit.

OTHER FUNCTION BY PROGRAMMING SOFTWARE

Voice prompt : It means speech sounds reminding function in English or Chinese.

Firstly open programming software, then click **"Function Setup"** in the left toolbar, then choose "Chinese" , or "English" or "Off" in the box after Voice Prompt according to your requirement. If choose " Off " , the radio will cancel Voice prompt function. (See Dwg.10)

Dwg.10

Battery Save : After Battery-Saving Function is set well in Programming software, the function will decrease power consumption of battery when the radio doesn't receive signal or without any operation including pressing keypad & revolving knob. When the channel is free and without any operation in 20 seconds, the Battery Save function will automatically be opened. Set "Close" , "1:1" , "1:2" , "1:4 " in the box after **"Battery Save"** in above-mentioned **"Drawing 10"** after you click **"Function Setup"** in the programming software . If set "Close " , it means that it cancel the function.

TOT : Time-out Timer to the continuous calling time of calling radio.

TOT function prevent that the calling time of the calling radio is overlong. If continuous and uninterrupted sending time exceed the time set in programming software by contributor, the radio will stop transmitting and sound warning tone. If release PTT button, it will stop the warning tone. Set "TOT Warning Time" to remind user in advance before the the time of Time out Timer will be up soon. The TOT time of The factory default settings is 60 seconds.

"TOT Warning time" is to remind and warn user in advance before the time of Time out Timer will be up soon

"TOT Repress Key" Time is that interval time to re-transmit is allowed after the time of TOT is up.

"TOT Warning Time " , "Time out Timer" , "TOT Repress Key Time" and "TOT Reset Time" must be set in the above-mentioned **Drawing 10** after you click **"Function Setup "** in the programming software .

VOX : voice-operated transmission

After you start the VOX function, the PTT button is not depressed , and talking with Mic position of the radio. It will start to transmit the speech sounds when LED indication light is red. Mark "√ " in the box before "VOX function" or mark "√ " in the box before "VOX change" in the above-mentioned **"Dwg 10"** after you click "Function Setup" in the programming software, and then set VOX Level and VOX Delay Time(seconds).

VOX level including 1,2...5,The level 5 means the strongest transmission signal .

VOX Delay Time is suggested to set within 1-2 seconds, avoid VOX transmission to cause voltage shaking.

VOX change : After start VOX-voice-operated transmission, it is a option if there is "beep" warning tone option **(See Drawing 10)**

Squelch and Squelch Level

Adjusting Squelch Level will be switched on or switch off the function how strong the signal is , when it receive the signal. The lower the squelch level is , the louder the noise is when it is open, and farther the talking range to heard is . But the weaker the ability of anti-interference of the received signal. Set "Squelch Level " function in the above-mentioned **Drawing 10** after you click **" Function Setup"** in the programming software.

CTCSS and CDCSS

CTCSS/CDCSS are a kind signal of sub-audio frequency, it avoid to receive irrelated calling in the same channel.

If CTCSS/CDCSS is set, hear the calling only same as the frequency and CTCSS/CDCSS signal in effective range.

If CTCSS/CDCSS is not set, hear the calling that the frequency is same in effective range.

CTCSS/CDCSS must be set in programming software. The radio has 50 groups of fixed CTCSS code and 116 groups of CDCSS code.

Empty Channel reminding

When the current channel is empty, the radio will sound continuous warning tone "beep " , which mean that the current channel doesn't work now.

Low capacity of battery warning tone

When the radio is sending or is in the standby status, the battery

capacity of radio decrease very lowly till predetermined value, the LED indication light will be red and flash on and off . If the voice prompt-speech reminding function is switched on, the radio will sound "please charge battery " each 30 seconds . If the voice prompt is switched off, it will remind 3 sounds "beep" warning tone.

Emergency Alarm

Firstly open programming software, then click **"Emergency Inf-ormation "** in the left toolbar, please see the following **Drawing 11**.

1. Emergency alarm: Alarm has the following 4 items mode:

(A) Alarm itself (No TX): the radio itself will sound alarm tone .

(B) ENI + Background voice : Send ENI alarm code and back-ground voice.

(C) ENI + Alarm sound No: Send ENI and alarm sound , but the radio itself will not sound alarm tone.

(D) ENI + Alarm sound Itself: Send ENI alarm code and alarm sound, meanwhile the radio itself will sound alarm tone.

2. Code type : it has 2 kinds : None and DTMF.

3. Emergency Code: it has 2 groups : 1 and 2 .(Notes: Group 1 and Group 2 are respectively concerned with their own corre-sponding code in automatic dialing memory)

4. Auto TX Period (seconds)**:** It is the time to send the alarm

5. Auto RX Period: It is the interval time when the radio send the alarm between the first time and the second time.
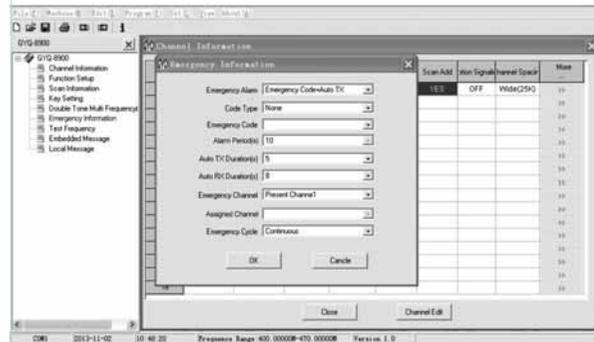
6. Emergency channel: Assigned channel and Selective channel.

(A).It means that the radio will alarm in the current channel.

(B). Assigned channel: It means that the radio alarm in the assi-gned channel.

7. Assigned Channel Number: A certain channel among the 16 channels (from Channel No.1 to No.16) is designated as a specific channel to alarm.

8. Emergency cycle: It is the frequency (number) to send alarm tone. (see **dwg 11**).

Dwg.11

Scan

Caution: The following items 1-9 in Page 26 and Page 27 must be operated in programming software. Click "Scan information" in the left toolbar after open pro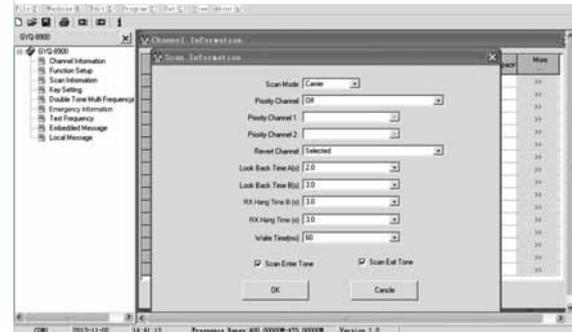gramming software **(see Dwg 12)**. After you start the scan function, the LED indication light will be green and flash on and off, meanwhile, the radio will automatically

check scanning information among the 16 channels . When a certain channel scanned has signal, the radio will stop scanning and stay the channel , and now can talk by this channel with other party.Scan information can be set according to your requirement in programming software as follows:

1. Scan mode : Choose "carrier" or "off" .

2. Priority channel: it has the following 4 modes option:

(A). Off (B) Priority channel 1 (C) Priority channel 2

(D) Priority channel 1 **+** Priority channel 2

3. Priority channel 1(or 2) means that the channel selected is assigned as priority channel.

4. Look back time A (second) **:** After the priority channel is set well, a certain calling is received in the channels excluding priority channel during the a single scan or multi-scan, the radio will still check calling in priority channel on the basis of time interval set when the scan pause. The above-said operation is called as "Look back ". "Look back time A" is time interval of looking back operation when the carrier wave is not received in the priority channel .

5. Look back time B: It is a time interval that it is receiving carrier wave in the priority channel but when the signalling don't match and then look back (scan back) .

6. RX Hang time (seconds) **option:** It is a time intervalthat it will recover to scan again after receiving calling end.

Its range from 0.1 second to 5 seconds. The factory default setting is 3 seconds.

7. TX Hang time option: it is a time interval that it will recover to scan again after transmission end. Its range from 0.1seconds -5 seconds. The factory default setting is 3 seconds.

8. Waiting time (milliseconds)**:** It is a time interval between scanning 2 channels.

9. Scan enter tone and **Scan exit tone**, mark "√ " before them if switch on the 2 functions.

Dwg.12

Sending Transit Signalling 1750Hz to Repeater.

Firstly the frequency or channel is set well to repeater, then depress PTT button + PF1 button, the radio will send 1750Hz transit signalling out, after the signalling is connected with repeater, and then release (**PTT + PF1**) buttons , talk with it according to normal method.

Remotely Kill/ Remotely Stun

(1) Remotely Stun: After the remotely-stun code is set up well in advance by both receiving-radio and sending-radio, then the receiving-radio will receive the remotely-stun code from sending-radio, finally the receiving-radio can **not** transmit/send **but** receive.

(2) Remotely Kill: After the remotely-kill code is set up well in advance by both receiving-radio and sending-radio, then the receiving-radio will receive the remotely-kill code from sending-radio, finally the receiving-radio **neither** receive **nor** transmit.

Caution : Set-up of Remotely-Stun code & Remotely-Kill code are read in Item No.G & H of the following DTMF Decode.

DTMF (Double Tone Multi Frequency)

Open the programming software, then click "Double Tone Muliti Frequency " in the left toolbar of Software Menu.

DTMF code can be sent in the both status (PTT ID BOT OR PTT ID EOT).

Notes: BOT = beginning of transmission,EOT= end of transmission

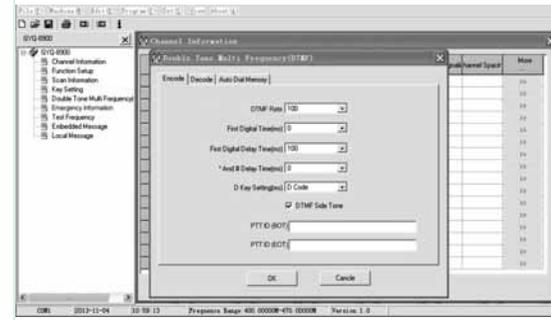PTT ID BOT = To send PTT ID at once after depress PTT button 1 time

PTT ID EOT= To send PTT ID after release PTT button when ending transmission.

1. DTMF Encode (see dwg 13)

(A). **DTMF rate:** its range from 50-500, The factory default setting is 100.

(B). **First Digital Time (milisencod):** its range from 0, 100, 200, 300...900,1000. The factory default setting is 100.

(C). **First Digital Delay Time (ms):** its range from 100,200,300... 1000. The factory default setting is 100.

(D). **And # delay Time(ms):** its range including 0, 100, 500,1000 only. The factory default setting is 0.

(E). **D key setting (ms):** Its range is D code, 1S, 2S, 3S ...15S, 16S. The factory default setting is D code.

(F). **DTMF side tone:** After mark "√ " in the box before the DTMF side tone, The tone can be heard from the speaker when the code is being sent. Otherwise, no heard.

(G). **PTT ID BOT:** At most 16 characters can be input (e.g.: 1234 567890ABCD*#) in the box after "PTT ID BOT".

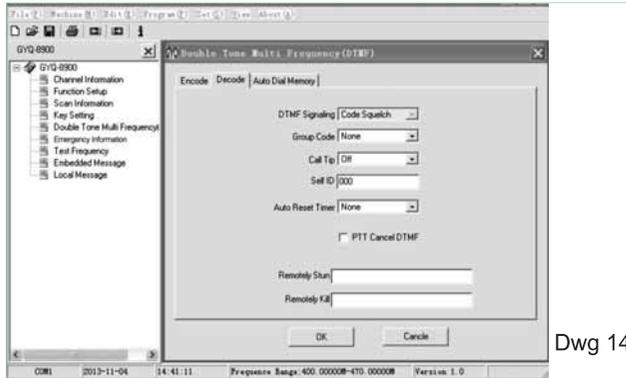(H). **PTT ID EOT:** At most 16 characters can be input (e.g.: 1234 567890ABCD*#) in the box after "PTT ID EOT".

Dwg 13

2. DTMF Decode (See dwg 14)

(A). **DTMF signalling:** The factory default setting is code squelch.

(B). **Group code:** It is used to set Group to call, easy to manage. Its range is None/ A/ B/C/D/ */#. The factory default setting is "None"

(C). **Call Tip:** Its range is off/alarm/ID code.

(D). **Self ID:** It is called ANI, it means personal identification code (at most 10 digits, e.g. : 123456790).

If "DTMF" is chosen under the item "Option Signaling" in the form of Channel Information after click "Channel Information" in the programming software, the Self ID(ANI) of the receiving -radio must be transmitted by sending-radio if sending-radio communicate with this receiving-radio normally.

(E). **Auto Reset Timer (second)**: Receive effective signal after decoding, and then don't receive effective signal any more. It is the duration time that the radio will finally decode signal again if receive effective signal again.

The duration time range is set " None, 1,2,3...15 seconds" . The factory default setting is 10 seconds.

(F). **PTT cancel DTMF:**

◆ If mark "√" in the box before "PTT cancel DTMF " in the programming software, it means that it will cancel ID of the radio-receiving radio (the green LED indication light will fl- ash on and off) when PTT ID signal is finished to send, the

other party (sending-radio) donít send ID of receiving-radio any more, it will normally communicate with the receiving- radio as before.
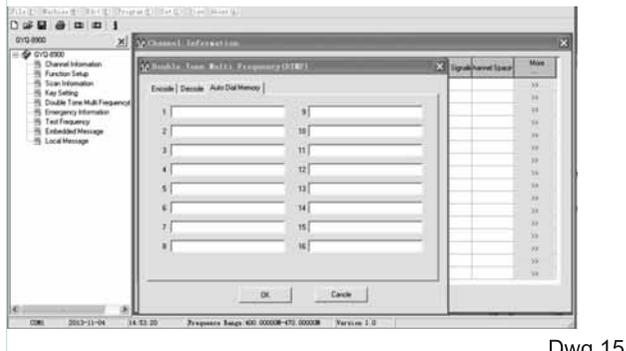
◆ If don't mark "√ " in the box before "**PTT cancel DTMF**", it means that it will not cancel ID of the receiving-radio when PTT ID is finished to send, the sending-radio will not norm- ally communicate with the receiving-radio until the sending -radio transmit the ID to the receiving-radio.

(G). **Remotely Stun:** it has remotely-stun code, at most 10 digits (e.g.: 1234567890). After the radio's remotely-stun code is set well, the receiving-radio will be remotely stun if sending -radio transmit the remotely-stun code to the current cha- nnel of the receiving radio.

(H). **Remotely Kill:** it has remotely-kill code, at most 10 digits (e.g.: 1234567890). After the radio's remotely-kill code is set well, the receiving-radio will be remotely kill if sending- radio transmit the remotely-stun code to the current channel of the receiving radio.

Dwg 14

3. Auto Dial Memory (See Drawing 15)

The radio has 16 groups of DTMF code with 16 characters at most (e.g.: 1234567890ABCD*#) as memory, the memory is also called "calling list" see the following Dwg 15)

Dwg 15

Local Message

The "Local Message" item in the left menu of in the programming software, it mainly set to these following functions(see Drawing 16).

1. Remotely Kill :

◆ Mark "√ " in the box before "**Remotely Kill** ", it means the radio has been remotely killed .

Caution: If the radio has been remotely killed, and forget the remotely-kill-code, finally solve it to delete "√ " in the box before "**Remotely Kill**" by programming software.

◆ Delete "√ " , it means that the radio has not been remotely killed.

2. Remotely Stun:

◆ Mark "√ " in the box before "**Remotely Stun**", it means the radio has been remotely stunned .

Caution: If the radio has been remotely stunned, and forget the remotely-kill-code, finally solve it to delete "√ " in the box before "**Remotely Stun**" by programming software.

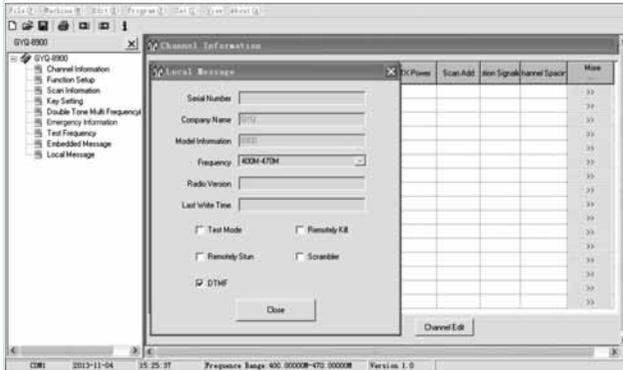◆ Delete "√ " , it means that the radio has not been remotely stunned.

3. Scrambler:

◆ Mark "√ " in the box before "Scrambler", it means that "scrambler" function set before is effective.

◆ Delete "√ " , it means that "**scrambler**" function set before
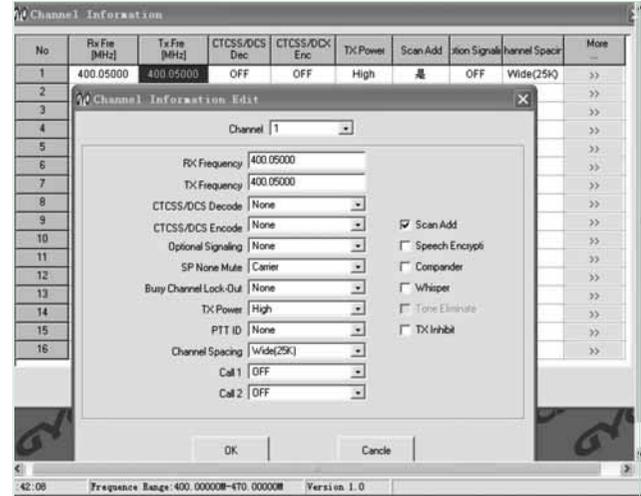
is not effective.

4. DTMF :

◆ Mark "√ " in the box before "**DTMF**", it means that "**scrambler** " function set before is effective.

◆ Delete "√ " , it means that "**DTMF** " function set before is not effective.

(Dwg 16)

More : The "More" setting is mainly used to set some function of a certain single channel .

Firstly open programming software, then write a certain frequency in No.1 channel (E.g. frequency: 400.0500), and then click " >> " under "**More** " in the right of No. 1 channel, the following **drawing 17** will come out .

(Dwg 17)

Troubleshooting Guide

Trouble	Solutions
The Transceiver doesn't power on	● Recharge the battery or rep-lace it with a new one. ● Or the battery pack don't in-stall well, please take down to install again.
The life of battery is very short.	● The life of battery end, repl-ace it with a new battery pack.
Can't communicate with other GYQ-8900 transceivers.	● Ensure that you are not out of the Transceiver's range . ● Ensure that all the transceiver you are attempting to connect are programmed to the same frequencies and CTCSS/DCS tones.
Can't communicate with other GYQ-8900 transceivers, but can other extr-aneous devices .	● Change the CTCSS/DCS tones on your transceiver as well as those onapplicable transceiver and devices.
Communication distance is very short	● Ensure the antenna connect well ● Ensure the antenna is original. ● Ensure the voltage of battery is normal. ● Adjust the level of SQL (Squelch Level).

Technical Specification

GENERAL	
Frequency Range	400.000-470.000MHz
Supply Power	DC 7.4V
Operation Temperature	-20℃ - +60℃
Memory Channel	16/32 Channels
Antenna	Rubber antenna
Antenna Impedance	50Ω
Work Mode	Simplex of Co-channel or Dis-channe
Ground Method	Negative electrode
Dimension	138 x 65 x 42mm
Weight	331g(Including antenna and battery)

TRANSMITTER	
Output Power	5 W
Modulation Mode	FM(F3E)
Max. Frequency Deviation	≤5KHz
Residual Radiation	<-60dB
Emission Current	0.8/1.7A

RECEIVER	
Sensitivity	<0.20uV(12dB SINAD)
Squelch Sensitivity	<0.20uV
Intermodulation Interference Resistance	50dB
Audio Power	≥500mW
Receiving Current	≤200mA
Standby Current	≤20mA

SAFETYTRAINING INFORMATION

Your FUJIAN NANAN GAOYINGQI ELECTRONIC CO., LTD. radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". In addition, your FUJIAN NANAN GAOYINGQI ELECTRONIC CO., LTD. radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields– RF and Microwave.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your FUJIAN NANAN GAOYINGQI ELECTRONIC CO., LTD. radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

Attention:

This radio complieswith IEEE and ICNIRP exposure limits for occupational/controlled RF exposure emvironment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only. An appropriate warning lable is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original acessories (belt clip).

Do not use this device when antenna shows obvious damages

Only the headset reported in test report can be used.