# RADTEL



## 6 Bands

136-180MHz(TX/RX) 200-260MHz(TX/RX) 350-400MHz(TX/RX) 400-520MHz(TX/RX) 108-136MHz(AM RX) 66-108MHz(FM RX) Bluetooth 2.4G ISM

RT-490





## **FUNCTIONS**

- 1. Frequency band:
  - FM 65-108MHz (Receive)
  - VHF 108-136MHz (AM receive)
  - VHF 136-174MHz (RX&TX) or
  - UHF 220-260MHz (RX&TX) or
  - UHF 350-390MHz(RX&TX) or
  - UHF 400-520MHz(RX&TX)
  - BLW 2.4GHz ISM
- 2. Working mode: Frequency mode/Channel mode
- 3. FM Radio
- 4. Dual standby
- 5. 50 CTCSS/105 DCS
- 6. RX CTCSS/EICS ., TX CTCSS/DCS can be set individually
- 7. TOT
- 8. Voice encryption(Frequency Hopping)
- 9. Frequency Step: 2.5K/5K/6.25K/10K/12.5K/20K/25K/50K
- 10. Battery saving
- 11. Reverse Frequency / Talk around
- 12. VOX
- 13. Busy channel lockout
- 14. Low battery alert / Voltage display
- 15. Automatic backlight
- 16. Channel display: Frequency Channel name
- 17. Scan: Time/Carrier/Search
- 18. Frequency mode: Frequency difference+/Frequency difference-
- 19. Frequency mode: Frequency difference range: 0-99.99951VIHz
- 20. Frequency mode: Edit/Save channel specs
- 21. 256 memory channels
- 22. Emergency
- 23. Frequency scan
- 24. DTMF
- 25. GPS (optional)
- 26. Boot interface customization
- 27. PC Programming
- 28. Wireless programming via Bluetooth(optional)

## **KEYPAD Function description**



- 1. P1 Short press: Switch A/B band. Long press: In channel mode, switch to channel display mode
- P2 Short press: Switch frequency mode and channel mode.
   Long press: Turn on/off-ANI name display function

Functional keypad - Select/confirm



## ENTER MENU, THEN SELECT OPTION IN MENU LIST



Long press to quickly change menu option in Scan mode, or to change scan direction Up



Long press to quickly change menu option in Scan mode, or to change scan direction down



In the input state, undo clears information that has been Input

## NUMERIC KEYPAD



Input information while in programming menu or to



input non-standard CTCSS/DCS and if needed use key

Short Press: Switch cycles through Reverse Frequency/Talk around/Normal mode Long press: Lock/unlock keypad Long press: (over 2 seconds): cycles between Active frequency/Channel scan

Short press in DTMF edit: Use \* key to end if less than 6 digits Short press in FM mode: Activates FM channel scanning



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## KNOB FOR POWER VOLUME ON OR OFF

Clockwise rotation:

- If Off, turns Power on
- If On, adjusts Volume Up

Anticlockwise rotation:

- If On, turns Power Off
- If On, adjusts Volume Down

## **STATUS INDICATOR**

Red Light = TX (Transmit) Green Light = RX Receive)

## EXTERNAL JACK FOR EARPIECE OR PROGRAMMING CABLE

Side key 1 (PTT): In SOS mode, Short press to exit SOS

Side key 2: Set functions via programming software

Side key 3: Long press to active MONI (monitor) mode. Set function for short press via programming software

## **MULTI KEYS**

1750Hz Tone: Press both PTT and MONI

DTMF: Press both PTT plus numeric keys plus



to transit DTMF 0-9, ABCD\*#

**SCREEN DISPLAY** 



ICON	DESCRIPTION
СТ	CTCSS display
DCS	DCS display
+	Frequency difference +
-	Frequency difference -
DS	Dual Standby
Ц Ц	νοχ
R	Reverse Frequency
т	Talk Around
Ν	Narrow Band
	Battery level display
â	Keypad lock
Н	High Power
L	Low Power
5	Tone while DTMF transmitting
AM	AM Mode
FM	FM Rode
*	Bluetooth Turn On
GPS	GPS Turn On
	Transmitting power
	Indicates audio amplitude transmitting and signal strength

## MENU LIST

#### Note: When entering the menu, take note of whether selection is for [A] band or [B] band

Menu #	ltem	Options	Description		
0	SQL	09	The lower the level, the easier it is to be disturbed, the higher the level, and the worse the sensitivity. Better to set as medium.		
		2.50K	_		
		5.00K			
		6.25K	Select the desired frequency Step to		
4	CTED	1 0.00K	be used In frequency mode, to change		
1	STEP	12.50K	frequency step pick from the option		
		20.00K	list.		
		25.00K			
		50.00K			
2	MEMCH	000 256	Indicate the channel number to be stored. While storing a channel, if 'CH' is in front of the number it means this channel already has a channel associated/stored there. If the occupied number is desired, use DELCH function on the channel first then assign new freq to number being reused with MEMCH		
3	DELCH	000 256	Delete the channel parameters of the specified channel. If there is no 'CH' displayed, that means the channel has no parameters and the operation is invalid.		

Menu #	ltem	Options	Description
4	R-CTCSS	OFF 67.0 HZ 254.1 HZ	OFF = No CTCSS required. To turn on, select a Standard CTCSS code from the list presented. If selected station does not continuously transmit the specific CTCSS code selected, then speaker is muted and nothing will be heard.
			List is Standard CTCSS Table. Select a Standard or for nonstandard CTCSS enter via keypad.
5	R-DCS	OFF DO23N, D743I,D754I	OFF = No DCS required. To turn on, select a Standard DCS code from the list presented. If selected station does not continuously transmit the specific DCS code selected, then speaker is muted and nothing will be heard.
		OFF	No CTCSS code will be transmitted
6	T-CTCSS	67.0 HZ 254.1 HZ	Transmits a specific and continuous sub- audible signal to unlock the squelch of a distant receiver often a Repeater. To turn on select a Standard CTCSS from the list.
		OFF	No DCS code will be transmitted
7	T-DCS	DO23N, D743I,D754I	Transmits a specific and continuous low-level digital signal to unlock the squelch of a distant receiver often a Repeater. To turn on select a Standard DCS from the DCS code options
8	VOICEPRI	OFF, Encrypt (1,2,3,4)	Choose OFF if Encryption is not desired or there are (4) Encryption types available to choose from. Select one from options list.
9	CH-NAME	i.e. Fleet 5	Use Common Name List or Enter Custom Names using CPS Multiband PC Software
10	TVD	HIGH	High Power Transmitting
10	ТХР	LOW	Low Power Transmitting

Menu #	ltem	Options	Description	
		OFF	Off Battery saving	
11	SAVE	NORMAL	Normal, for timeouts etc. to save battery	
		SUPER	Super, shorter timeouts etc. to save battery	
		DEEP	Deep, minimum timeouts to save battery	
12	ROGER	OFF	Turn Off	
12	KOGEN	ON	Turn On	
13	тот	30, 60, 480S	Number is from 30sec to 480sec and the max time for PTT transmission is indicated in 30 second steps	
14	VOX	OFF	Enable VOX to speak into the microphone to start transmitting instead of pressing the PTT	
		1, 2, 9	key. Activate by choosing the voice control sound intensity. Level 1 is most sensitive	
15	W/N	WIDE	Wide mode	
15	VV/IN	NARR	Narrow mode	
16	VOICE	OFF or ON	Voice prompts, turn Off or On	
17	BEEP	OFF	Operation Beep prompts, turn Off or On	
18	LANGUAGE	ENGLISH	English	
		CHINESE	Chinese	
19	BCL	OFF	Turn off <u>B</u> usy <u>C</u> hannel <u>L</u> ockout	
19	DLL	ON	Turn on <u>B</u> usy <u>C</u> hannel <u>L</u> ockout	

Menu #	ltem	Options	Description
20 SC-		то	<u>Time scanning</u> , radio pauses scanning when it detects a signal, and after staying stopped for about 5 seconds, scanning continues even if the signal is still there
	SC-REV	СО	<u>Carrier Scanning</u> , radio pauses scanning when a channel is detected and keeps it on the same frequency until the signal disappears. There is a 2s delay between the disappearance of the signal and resumption of scanning to allow time for the response to begin transmission.
		SE	Search Scanning, radio exits scanning when detecting a signal and stays on the same frequency.
21	PF2 or SK2 SHORT PRESS	Side Keys	<ul> <li>[PF2] <u>SHORT</u> PRESS can be programmed for Function <ul> <li>Radio</li> <li>PTT B</li> <li>Search</li> <li>Scan</li> <li>TX Power</li> </ul> </li> </ul>
22	PF2 or SK2 LONG PRESS	PF2	<ul> <li>[PF2] LONG PRESS can be programmed for Function <ul> <li>Radio</li> <li>Search</li> <li>Scan</li> <li>TX Power</li> </ul> </li> </ul>
23	PF3 or SK3	PF3	<ul> <li>[PF3] (Short or Long same) can be programmed for Function <ul> <li>Radio</li> <li>Search</li> <li>Scan</li> <li>TX Power</li> </ul> </li> </ul>

Menu #	ltem	Options	Description		
24	ABR	ON	Background light is always ON		
25	OFFSET	000 99.995	In frequency mode, difference between TX and RX freqs. Enter using keypad or Customer Provided Software (CPS).		
		OFF	In frequency mode, turn off the TX/RX difference		
26	SFT-D	+	In freq mode, TX freq = RX freq PLUS freq diff		
		-	In freq mode, TX freq = RX freq LESS freq diff		
27	SCAN CTCSS	OFF	Change only using software		
28	SCAN DCS	OFF	Change only using software		
	CTCSS SAVE	ALL	Save ALL		
29	MODE	RX	Save Only Received CTCSS		
		ТХ	Save Only Transmitted CTCSS		
30	<b>POWER ON</b>	LOGO	Photo (currently JJCC logo)		
50	MSG	VOLTAGE	Battery Voltage		
31	<b>ANI NAME</b>	NUM1  NUM60	Select from list or Set custom Radio Name using Customer Provided Software		
32	S-CODE	1,215	Select from list of 1 to 15 DTMF codes. The DTMF codes are programmed with Customer Provided Software.		
		OFF	Turn Off DTMF code transmit		
33	DTMF CODE	BOT	Press PTT to BEGIN transmit DTMF		
		EOT	Release PTT to END transmit DTMF		
		BOTH	Press PTT for BOTH to begin and again to end		

Menu #	ltem	Options	Description
34		OFF	No DTMF prompt when key pressed to transmit DTMF
	DTMFST	DT-ST	Prompt for DTMF when transmit key pressed
	DTIVIFST	ANI-ST	Auto prompt when transmitting DTMF
		DT + ANI	DTMF prompt whether automatically transmitting DTMF or pressing transmit key
35	AUTOLOCK	OFF	Turns off auto keypad lock
55	AUTOLOCK	5s,10s,15s	Select time to turn on the auto keypad locking
36	SCAN ADD	SCAN ADD	Not changeable, SCAN ADD is on
37	TONE	1000Hz, 1450Hz, 1750Hz, 2100Hz	Select Tone from List. Tone can be simultaneously sent by holding down [PTT] key and pressing [PF2], sometimes referred to as [SK2].
38	PTT-LT	Millisecs: ,100,200, 400, 600, 800 or 1000	Millisecs of Delay time before auto DTMF transmits
39	MENU EXIT TIME	5,1060s	Control seconds of time before MENU exits
40	VOX DELAY	0.5s2.0s	Control the seconds of time for VOX to
41	RP_STE	OFF, 1s,2s,3s10se c	Due to the delay of the repeater, noise appears when receive instant signal. Adjust to eliminate the tail. To ensure if the repeater is working or not, set to OFF
42	RPT_RL	OFF, 1s,2s,3s10se	Adjust the length of time the tail sound appears. If not needed set to OFF
43	ANI Function	OFF or ON	Turns function OFF or ON

Menu #	Item	Option	Description			
		FREQ	In Multi Display Mode the 'A' band (Upper line)			
44	MDF-A	СН	displays the Option selected here: <u>FREQ</u> for			
		NAME	Frequency, <u>CH</u> for Channel Number and <u>NAME</u> for Channel Name.			
		FREQ	In Multi Display Mode the 'B' band (Lower line)			
45	MDF-B	СН	displays the Option selected here: <u>FREQ</u> for			
		NAME	Frequency, <u>CH</u> for Channel Number and <u>NAME</u> for Channel Name.			
46	TDR	OFF or ON	Dual watch (monitor A and B at same time).			
		OFF	Dual standby mode, transmits only current freq. band			
47	TX-A/B	Α	Select which Band will be transmitted when PTT is pressed while TDR (Dual Watch mode) is ON.			
		В	<ul> <li>Select "A" to Press PTT and Talk on "A" Band</li> <li>Select "B" to Press PTT and Talk on "B" Band</li> </ul>			
			If ON then after releasing the PTT, radio sends turn- off code to suppress instant noise of receiver. If OFF no turn-off code is sent.			
48	STE	OFF or ON	off code to suppress instant noise of receiver. If OFF			
48	STE	OFF or ON ON SITE	off code to suppress instant noise of receiver. If OFF			
48 49	STE AL-MOD		off code to suppress instant noise of receiver. If OFF no turn-off code is sent.			
		ON SITE	off code to suppress instant noise of receiver. If OFF no turn-off code is sent. Alarm sounds for On-site Emergency			
		ON SITE SOUND	off code to suppress instant noise of receiver. If OFF no turn-off code is sent. Alarm sounds for On-site Emergency Send emergency voice			
49	AL-MOD	ON SITE SOUND CODE	off code to suppress instant noise of receiver. If OFF no turn-off code is sent. Alarm sounds for On-site Emergency Send emergency voice Send emergency code Turns GPS function either OFF or ON BLUETOOTH function OFF or ON. When activated ON, Android Smartphone can Bluetooth SCAN to			
49 50	AL-MOD GPS	ON SITE SOUND CODE OFF or ON	off code to suppress instant noise of receiver. If OFF no turn-off code is sent. Alarm sounds for On-site Emergency Send emergency voice Send emergency code Turns GPS function either OFF or ON BLUETOOTH function OFF or ON. When activated ON, Android Smartphone can Bluetooth SCAN to PAIR to "walkie-talkie". This is required for using Android programing APP "Super Walkie-Talkie"			
49 50 51	AL-MOD GPS BLUETOOTH DISPLAY	ON SITE SOUND CODE OFF or ON	off code to suppress instant noise of receiver. If OFF no turn-off code is sent. Alarm sounds for On-site Emergency Send emergency voice Send emergency code Turns GPS function either OFF or ON BLUETOOTH function OFF or ON. When activated ON, Android Smartphone can Bluetooth SCAN to PAIR to "walkie-talkie". This is required for using Android programing APP "Super Walkie-Talkie" to remotely program the RT-490.			

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## **MENU OPERATION**



*Note: Step, TX power, Wide/Narrow band, CTCSS/DCS, frequency changes etc., can ONLY be set valid while in Frequency Mode* 

#### **OTHER FUNCTION DESCRIPTIONS**

- 1. Dual PTT Set side Key2 **PF2** as PTT-B
  - a. Press PTT to transmit on 'A' band
  - b. Press PTT-B to transmit on 'B' band.
- 2. AM Mode 108-136 Mhz, Receive ONLY
- 3. Scan Mode Set for TO or CO or SE mode
  - a. [TO] **Time scanning**, radio pauses scanning when it detects a signal, after staying stopped for about 5 seconds, scanning continues even if signal is still there
  - b. [CO] **Carrier Scanning**, radio pauses scanning when a channel is detected, stays on same frequency until the signal disappears. There is a 2s delay between the disappearance of the signal and resumption of scanning to allow time for the response to begin transmission.
  - c. **Search Scanning**, radio exits scanning when detecting a signal and stays on the same frequency.

## **FM FUNCTION**

Turn on FM function, screen will display current FM frequency

- 1. Press Up or Down keys to change FM frequency or
  - a. Input frequency via keypad.
  - b. FM frequencies are from 65Mhz to 108Mhz
  - c. Press **# I** key to auto scan FM freq in FM mode.
- 2. Adjust volume via Power/Volume knob
- 3. Press FM key again to exit FM mode

Note: FM function needs to be set in a PF2 or PF3 side key customized setting.

#### **FREQUENCY SCAN**

Scan other radio's CTCSS/DCS and frequency to make a contact.

- 1. Set a PF side key custom function for Frequency Scan. Select the frequency band from UHF or VHF or 200M or 350M
- 2. After defining, turn it on through the customized side key can be used to begin scanning of the selected band.
- 3. After scanning the frequency, it will continue to scan CTCSS/DCS. If there is no CTCSS/DCS, the screen will display 'NONE' and end the scan. At this time, the scanned data can be saved to the designated channel through by using the lock/c

OK

The frequency scan function can also be re-launched using the Alternate method using the UP or Down keys to start the next frequency scan.

## **ANI NAME DISPLAY**

Name indicator can be customized so that display reveals the selected name from the possible 60 group names that can be selected.

- 50 groups are default named 'Radio 1' to 'Radio 50'
- 10 groups (rest of the 60) are editable via programming software.

#### **DTMF ENCODE**

1) Quick Transmitting DTMF Encode:

In transmitting status, press digit ke 📑

,\*,# to transmit DTMF

encode 0-9, ABCD\*#. Press key to continuously encode transmit then, release key to end encode transmitting

2) Transmitting DTMF Encode after editing:

In standby mode, press [#] key to enter DTMF edit menu and Input 0-9, ABCD\*#, if less than 6 digits press [#] to end edit. Then Press PTT key to transmit DTMF.

- a) In edit mode:
  - i) Press R to delete encode
  - exit DTMF edit mode. ii) Press

#### **GPS FUNCTION**

Press the [Right arrow] to enter the GPS positioning interface.

- GPS interface provides the option to also switch the coordinate display mode and the image mode.
- GPS includes a backtracking function and GPS can store the starting point position in advance. The GPS provides real time viewable direction and



distance from current position to ensure that you won't get lost in the wild.

#### WIRELESS PROGRAMMING VIA SMARTPHONE BLUETOOTH

- 1. From the Android Play Store, install the free Blue Tooth programming application "Super Walkie-Talkie".
- 2. If not found, use the smartphones internet browser to go to Radtels website to download the Android application here:

https://www.radtels.com/pages/software-download

- 3. In the list find "Bluetooth\_App\_for\_android.apk" and click to download.
- 4. Next open the "Files" icon to find the downloaded APK file just downloaded, click to load (may have to temp change setting so allow loading an APK that wasn't in the Play Store)
- 5. The APP icon createe on the smartphone named "Super Walkie-Talkie"
- 6. Next, using the radio's keypad menu, select Menu #51 and turn Bluetooth ON.
- 7. Next on the smartphone, "Settings; Connections; Bluetooth; SCAN to see a new icon "walkie-talkie", click to Pair smartphone to radio.
- Next start the smartphone App "Super Walkie-Talkie" and click on option "Connect", if you don't get Success, then reboot smartphone and off/on radio power. Try again.

#### LOCATING SOFTWARE FOR PC WINDOWS PROGRAMMING

#### A. **RT-490 FREE Programming software** is found here:

https://www.radtels.com/pages/software-download

This Customer Programming Software (CPS) for MS Windows PC is in a downloadable ZIP file, from Radtel's download page, click on the file named:

9) 📑 Radtel RT-490 6 Bands Radio Software 🕹

Auto download will download a ZIP file named "Radtel\_RT-490.zip" that contains an executable Setup file installation program "mysetup.exe". Click "mysetup.exe" to install the CPS Software





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(CPS) named "Multiband" and a desktop icon that looks like this.

# radtel



# bluetooth guide

Instructions for pairing an Android Smartphone to the Radtel RT-490 Six Band Handheld radio

Also includes instuctions for installing and utilizing Radtels Free smartphone programming Application designed to provide easy options editing using Radtels "Super Walkie Talkie" Android App.

## Finding, Installing and Setup for Smartphone Bluetooth Programming Software

## FOR Andriod PHONE

- 1. Go to the Android Play Store, install the free Blue Tooth programming application "Super Walkie-Talkie".
- 2. If not found, use the smartphones internet browser to go to Radtels website to download the Android application here:

https://www.radtels.com/pages/software-download

3. In the list find "Bluetooth\_App\_for\_android.apk" and click to download

Or scan this barcode to install Bluetooth programming app.



- Super Walkie-Talkie
- 4. Next open the "Files" icon to find the downloaded APK file just downloaded, click to load (may have to temp change setting so allow loading an APK that wasn't in the Play Store)
- 5. The App icon created on the smartphone as part of the installation process is named "Super Walkie-Talkie"

## FOR APPLE IPHONE

Copy 多段王 in Chinese and search the app in apply store (sorry we don't have a English name, you may copy Chinese and search it.

0:22 ৵	::!! ? <mark>-</mark>
2、多段王	S Cancel
多段王 Utilities	OPEN

- 6. Next, using the radio's keypad menu, select Menu #51 and turn Bluetooth ON.
- 7. Next on the smartphone, "Settings; Connections; Bluetooth; SCAN to see a new icon "walkie-talkie", click to Pair smartphone to radio.
- 8. Next start the smartphone App "Super Walkie-Talkie" and click on option "Connect", if you don't get Success, then reboot smartphone and off/on radio power. Try again.

The following section titled "RT-490 – Pairing the Smartphone to the Radio" provides a screen by screen further walk through of this process followed by addition screen instructions for actually programming Channel numbers, Frequencies and Channel Names onto the RT-490.

## RT-490 – Pairing the Smartphone to the Radio

This Bluetooth tutorial guides through setting up the phone and RT-490 to use the Android version of the RT-490 Customer Programming Software 'Super Walkie-Talkie. All actions were captured as screen shots performing this process and the screens are in order Left to Right.

Follows these steps;

- 1. Use Smartphones 'Settings' to turn on Bluetooth and Pair the RT-490 to the phone.
- 2. From smartphones Bluetooth screen you will Scan for the RT-490's Bluetooth name.
- 3. On the radio, use the RT-490 Menu setting #51 and turn on Bluetooth option which causes the RT-490 to broadcast its Pairing request as Bluetooth id 'walkie-talkie'.
- 4. Now go back over to the phone Settings and Scan for Bluetooth devices, you should see 'walkie-talkie' appear. Click on it to do the pairing.
- 5. Open the phone's app 'Super Walkie-Talkie and from the first screen click on Connect.





## **Super Walkie Talkie**



This first screen is where the real magic begins. When app 'Super Walkie Talkie' is loaded, first screen to appear is the one to join the RT-490 to the Smartphone app.



Click on the word '*Connect*' to begin connection process and a small spinning wheel replaces word 'Connect' as the process continues. If the RT-490 has its Bluetooth turned on using the radio's keyboard Menu option #51, then the app will identify the radio and the spinning wheel is replaced by the word '*Disconnect*'.

When finished programming click on '**Disconnect**' and that will un-join the phone from the app and at the same time it will send a command to the RT-490 to Turn Off Bluetooth.

Next pages provide more detail on making and saving changes to the RT-490 Radio

## 490 How To Start Programming the Radio



Click on 'READ' below to read radio's current settings ('Programming' appears in radio's display).

Next follow thsese steps to modify:

- A) Click on the channel number (initially it will be 1. A drop list is presented for selecting the channel number to be modified.
- B) Clicking on either of the Freq numbers presents a a box for entering a new freq number to assign to the working channel just picked.
- C) Click on Global Selection to go to the other option screens, then Return here after making any changes.
- D) When finished programming channels, freqs and options, Click on Write to write/download the changes to the RT-490 radio.



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## RT-490 – Reading and Writing Changes to the Radio

#### How to make changes and enter data on the smartphone

Once Phone and Radio are connected in App there are a few things to work with.

- READING If you want to start with the RT-490's existing program, then with your programming cable plugged in and your radio turned on, select the option at the bottom "READ".
- CHANNEL SELECTING You must work on Channels individually, Click on the number next to the words "*CurCH*:" (Item (A) in the graphic), at first it's the number '1'. From there the App presents a drop down list of channel numbers, scroll and click on the Channel number desired.
- CHANNEL NAME After selecting a number, you are returned to the main screen and from there, click in the area to the right of 'CH Name:' and the keyboard pops up to allow typing a name.



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## RT-490 – Changing Global Selections

#### HOW TO MODIFY GLOBALS – Channel, Freq, Optional or ID Code Setting

Various configuration screens are available to edit RT-490 options. These are the same RT-490 Radio's Menu options #1 to #53 that can be changed in any of three (3) ways:

- A. Using the RT-490's keypad Menu
- B. Connecting USB Programming cable and using the PC software, 'Multiband'
- C. Using a Smartphone and Bluetooth connecting the Smartphone App
   'Super Walkie-Talkie' to the RT-490 with Bluetooth turned on.



Click on 'Global Selection' as shown below and a box of selections popup.

Each of the 4 options is shown on the following screens.



Each method can manipulate the same Options that are grouped into (4) categories – **Channel, Freq, Optional, ID\_Code Setting**. The options and a brief explanation of the choices can be found in the The RT-490 User Manual on the pages that contain Menu tables for the 53 customizable settings.

- 1. Select 'GLOBAL SELECTION' to view the popup for the 4 options.
- 2. Pick either 'Channel' or 'Freq' or 'Optional' or 'ID Code Setting'
- 3. Change are a back and forth operation. Example: Select Optional, then Channel Options, then Power to see drop down list with H for High, L for Low. Select H, click OK and you will be brought back to Options.
- 4. Note that Changes made without a WRITE are in effect for the current session but are lost when the radio is turned off.
- 5. For a more permanent save, at any time Click on Home then WRITE.

The following pages have screen prints of every Global Setting screen so you may associate the Smartphone app options to ones in the manual.

CHANNEL OPTIONS	FREQ OPTIONS	ID CODE SETTING		
) ᢀ ⊑ ♡ ♡ ⑧ ●	<sup>%</sup> ● 1:49 ᢀ Ҏ ♥ ♥ ® ●	1:50 🕸 🖬 🗘 🔘 👄 🦀 📽 4: 77% 🗉		
A6:00:00:00:00:00		ID50 50		
< ⊡		ID51		
TX QT/DQT	A:Current Frequency(MHZ)	ID52		
RX QT/DQT	A:TX QT/DQT	ID53		
Signal Code PTTID	A:RX QT/DQT	ID54		
Power	HZ A:Offset(MHZ)	ID55		
Freq Hopping	A:SFT_D	ID56		
W/N	A:Signal Code	ID57		
BusyLockout		ID59		
Scan Add	A:TX Power			
Send Allow	A:Freq Hopping			
Break Flag	A:Frequency Mode			
Freq Hopping Code	A:Step Frequency(KHZ)			
	B:Current Frequency(MHZ)			
	B:TX QT/DQT			
	B:RX QT/DQT			
	B:Offset(MHZ)			
	B:SFT_D			
	B:Signal Code			
	B:TX Power			
	B:Freq Hopping			
	B:Frequency Mode			
	B:Step Frequency(KHZ)			

OPTIONAL OPTIONS							
:48 ‡ ⊑ ै ∿ © ⊜ acy	র্ঞ হ; ⊪া 77%∎ 	:49 🕸 🖬 🖗 📎 🕲 👄 ∕acy	<b>ৠ</b> বি≌া∥ 77%। [	1:49 🕸 🖾 🛇 🕓 🗑 👄 ivacy	୫ ିଙ୍କ ⊪∥ 7.		
A6:00:00:D0:22:01	nec		ne		)-22:0D [→		
Squelch Level		A Channel Disp	Way	FM Radio Enabl	ed		
Save		B Channel Disp	Way	Work Mode A			
vox		BCL		Work Mode B			
ABR	Hz	Auto_Lock	H	Keyboard Lock			
TDR	HZ	Alarm Mode	н	Switch On Icon			
Time Out Timer(TOT	)	Alarm Soun		R-TONE			
Веер		Transmit Dual-F	requency	VOX Delay Time			
Voice Prompt Switch	ı	Tail noise Clear		Menu Automatio	c Exit Time		
Display and voice pr	ompt	Pass Repert noi	se	ID Code Display	Switch		
DTMF-ST		Clear(ms)		GPS Switch			
Scan Rev		Pass Repert noi	se(iiis)	Subaudio scan	save mode		
PTT-ID		Roger		Radio ID			
PTT Delav		Work Type		Receiving displa	iy time		

Side Key 2 Long Press

Side Key 3 Short Press

DTMF Encode

Alarm Code

DTMF Speed(On Time)

DTMF Speed(Off Time)

Remote Kill Func

350M Enable

- 1) TO eable Bluetooth and GPS function, please check this video <u>https://youtu.be/H6UJkGVDR5g</u>
- 2) To pair with smartphone , please check this video <u>https://youtu.be/kbBEcw6-jdY</u>

For any question, please contact us by email <u>Kevin@radtel.com.cn</u> or by whatsApp: +8615860705619 we are pleased to help you.