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CRT FRANCE®

SS 9900 V

USER'S MANUAL

10 METER RADIO

CE RoHS ISO9001 ISO14001

SYMBOLS DESCRIPTION

Please carefully read the instructions	
Information on recycling, not throwing your material in the trash at the end of life, bring it to special aera to be recycling	
DC using	
Keep dry	
Shield symbol	
CE conformity symbol	
Warning	
Restrictions	

STORAGE , TRANSPORT, USING

Storage : Classe 1 -30/85% (°humidity)

Transport :- 30/85% (°humidity)

Operating temperature –30 à + 50°

Using cycle TX 10%/RX 90%

Warned before use

This transceiver correspond to the requirements of European directives RED 2014/53/EU and answers theEuropean standards of telecommunication EN 62368-EN 62311-EN 50665- EN 301 489-1/15- EN 301783.

IMPORTANT : This receivingtransmitterworks on not free frequencies in the use. The user has to possess a radio licence amateur radio (certificate of radio operator HAM) to use it (in emission) and only on the frequenciesauthorized in radio amateurs.
This model isapproved for use in these countries : AT-BE-BG-CH-CY-CZ -DK-EE-ES-FI-FR-DE-UK-EL-HR-HU-IE-IS-IT-LI-LU-LT-LV-MT-NL-NO-PL-PT-RO-SK-SI-SE and in CEPT countries and those no CEPT countries that implement the CEPT regulation TR 61/01.

Precautions

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

Do not attempt to configure your transceiver while driving, it is dangerous.

This transceiver is designed for a 13.8V DC power supply. Don't use a 24V battery to power on the transceiver.

Do not place the transceiver in excessively dusty, humid or wet areas, nor unstable surfaces.

Do not connect the antenna while transmission, risk of burn or electric shock.

Please keep it away from interferential devices (such as TV, generator etc.) devices (such as TV, generator etc.)

For those fitted with pacemakers are advised to move away from the antenna during transmission, mainly in high power, and especially do not touch it.

Never allow metal objects or son electrical contact with the part or internal electrical connection to the risk of electric shock.

Avoid exposing the transceiver to temperatures below -30 ° C. and above +60 ° C, the temperature of the dashboard inside a vehicle can sometimes exceed 80 ° C, which can damage irreparable damage to your machine in case of prolonged exposure. Not exposed to prolonged direct sunlight or place it near heaters.

Do not place anything on top of the apparatus that would interfere with cooling.

Check that your battery is sufficiently charged to avoid rapidly exhausting its resources.

It is important to turn off your device before starting the vehicle to avoid damage caused by spikes in the ignition.

When replacing the fuse, you must use a fuse 15A 250V type F
In no case a higher value!, Otherwise a fire hazard.

If an abnormal odor or smoke is detected coming from the transceiver, turn OFF the power immediately.
Contact an CRT service station or your dealer.

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

Keep out from children.

WELCOME TO USE

Welcome to the world of new radios. The new SS 9900V radio providesyou with top performance and best visualenjoyment. With the use of SMT technology to guarantee the best stability, reliability and unprecedentedquality, your multi-functional SS 9900V 10-meter Radio is a new step in personal communication and issurely the best choise for professionalusers of radio. Moreover, with multiple connecting ports in the radio, SS 9900V Radio isready thismanualcarefullybeforeinstalling and usingyour SS 9900V Radio.

ATTENTION :

Beforeusingyour transceiver pleaseconnect an antenna on the connector PL on back sidethen check the SWR beforeemitting. A too important SWR can entail the destruction of the transistors of power which are not flatware by the guarantee.

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1. FUNCTIONS & FEATURES

1. LCD display with 7 color options for RX and TX, with back light dimming
2. FM, AM, USB, LSB, CW, PA modes
3. Frequency Tuning Steps: 10Hz, 100Hz, 1KHz, 5KHz, 10KHz, 100KHz, 1MHz
4. ± 500Hz, 5KHz Clarifier (R/T/R+T selectable)
5. Flexible menu functions and PC programming software
6. RX and TX NRC Noise Reduction
7. SQ, ASQ Function (FM and AM mode)
8. RF GAIN Adjustment
9. RF PWR Adjustment
10. VFO / BAND / Memory Channel Modes
11. Repeater Shift / Offset Frequency Function
12. CTCSS/DCS with RX/TX Split functions
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25. Enhanced VOX Function (VOX.SPK can support digital mode operation)
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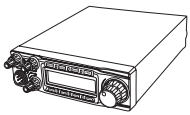
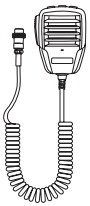
27. Programmable RB Function
28. AM TX NPC
29. User Defined (PF) key on microphone
30. Audio path select
31. +10KHz Function

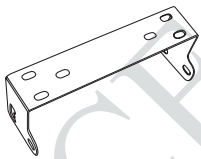
2. STANDARD ACCESSORIES



Radio



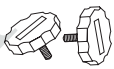
Microphone



Install bracket

Screws

Pads



Adjusting screws

Microphone Hanger

Adhesive Case Protectors

Fuse (15A 250V)

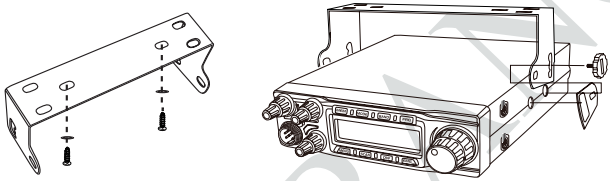
3. INSTALLATION

Choose the most appropriate location from a simple and practical point of view. If installed in a vehicle, care should be taken to ensure your radio does not obstruct the driver or passengers.

1. Use the Self-tapping Screws and Pads to fix the Bracket to a suitable location.

2. Attach the Adhesive Case Protectors to the inside ends of the Mounting Bracket and insert the Radio. Fit the Adjusting Screws loosely, and choose a suitable angle by moving the Adjusting Screws to one of the 3 positions on the Mounting Bracket.

3. Tighten the Adjusting Screws firmly by hand. Make sure the radio and all accessories are securely mounted.



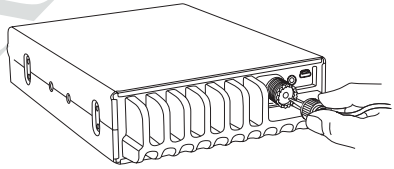
3.1 Antenna Installation .....

Before using this radio, please install an efficient and resonant antenna. Using an antenna that is correctly installed and tuned will enable excellent communication performance.

This radio requires an antenna impedance of 50 ohms, unbalanced.

1. Screw the antenna connector into the antenna jack.

2. Grounding of the antenna system is recommended to ensure best performance.



WARNING:

▲ NEVER transmit without a connected resonant antenna, or a suitable 50 ohm load being connected. Damage to the radio may result.

▲ To reduce the risk of electric shock, or radio damage, base station installations should include lightning protection devices.

▲ Ask your authorized dealer or an authorized service center for available antenna options.

3. A mobile antenna can be mounted in various locations, for example:

3.2 Power Connection

This radio requires a 13.8V (12V) DC power supply. Never connect the radio directly to a 24V DC battery system, as can be found in some vehicles. Please refer to the radio Specifications to ensure your 13.8V DC power supply can provide enough current (amps), otherwise poor performance may occur.

1. Connect the positive (red) power cable to the + terminal of the battery.

2. Connect the negative (black) power cable to the - terminal of the battery.

- ▲ Locate the power cable away from high temperature, moisture, and other electrical systems. Ensure it is installed where it cannot be damaged.
- ▲ It is not recommended to use a vehicle cigar/cigarette lighter socket to power the radio, as it may not supply the correct voltage or current.
- ▲ Do not remove the fuse holder from the cable.

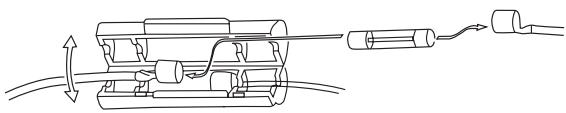
3.3 Replacing Fuse

This radio requires a 15A, 250V fuse.
If the fuse blows, determine the reason, then correct the problem.
After the problem is resolved, replace the fuse. If newly installed fuses continue to blow, disconnect the power cable and contact your authorized dealer or an authorized service center.

1. Pull the two fuse cover in opposite directions and open it.

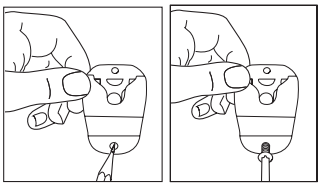
2. Replace the blown fuse with a new one, and close the fuse holder.

3. Be sure to only use the correct fuse type, otherwise damage may occur.



3.4 Install Microphone Hanger

Choose a location which will not interfere with the driver. Use the supplied self-tapping screws and pads to install the hanger.

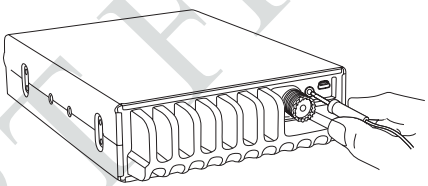


3.5 Install External Speaker

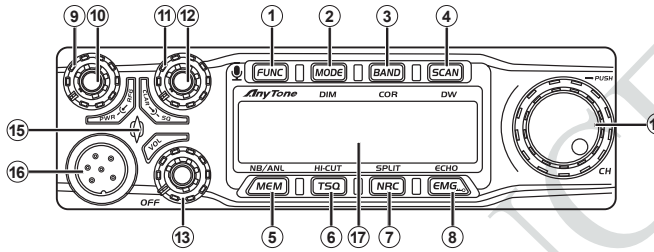
If using an external speaker, please choose an 8 ohm speaker with a 3.5mm mono (double cable) TS type plug.

1. Locate the external speaker in a suitable place.

2. Plug into the speaker jack.

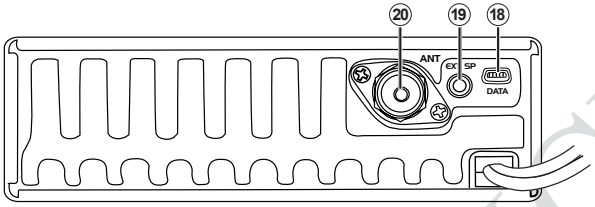


4.1 Front Panel



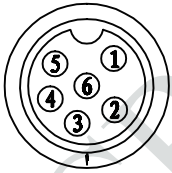
No.	Key	Functions
1	FUNC	Function / Menu key
2	MODE	Switch Mode: FM, AM, USB, LSB, CW, PA
3	BAND	Switch Band: A-I / VFO mode
4	SCAN	Scan / Scan add / Scan delete
5	MEM	Use, Store or Delete memory channels
6	TSQ	Activate / deactivate the CTCSS/DCS function
7	NRC	Activate / deactivate the NRC function
8	EMG	Emergency Channel; Keypad lock
9	PWR	RF Power Control
10	RFG	RF Gain Control
11	SQ	Squelch Control
12	CLAR	SSB/CW Clarifier Control
13	VOL / OFF	Power On/Off; Volume Control
14	CH / PUSH	Channel Switch; PUSH key
15	--	RX/TX Indicator
16	--	Microphone Jack
17	--	LCD Display

4.2 Rear Panel

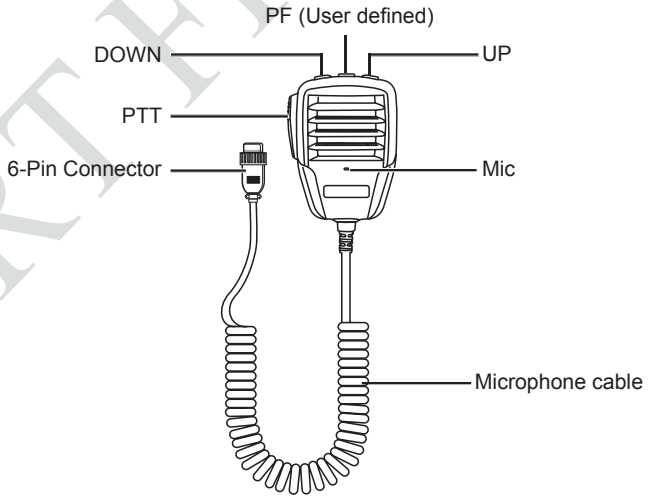


No.	Functions
18	PC Cable Jack
19	External Speaker Jack
20	Antenna Jack

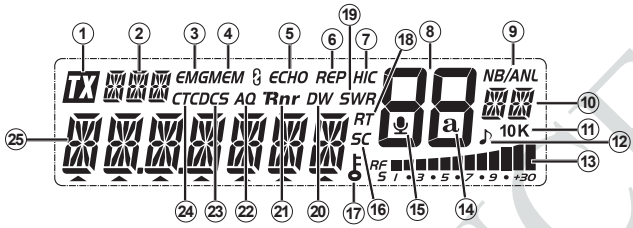
4.3 Microphone



1. MIC
2. EXT.AF
3. PTT
4. MIC.KEY
5. GND
6. +DC



4.4 LCD Display



1	TX	Appears during transmit (TX)
2		Displays the working mode
3	EMG	Appears when using Emergency channels
4	MEM	Appears when using Memory channels
5	ECHO	Appears when Echo function is ON
6	REP	Appears when Repeater Offset function is ON
7	HIC	Appears when Hi-Cut function is ON
8	88	Displays the channel number
9	NB/ANL	Appears when Noise Blanker / ANL is ON
10		Displays the Band name
11	10K	Appears when +10Khz function is ON
12	♪	Appears when the Roger Beep function is ON
13	RF S 1 • 3 • 5 • 7 • 9 • +30	Display of the TX/RX signal strength
14	a	Not in use
15		Appears when the VOX function is ON
16	SC	Appears when the Scan function is ON
17		Appears when the Keypad Lock function is ON
18	RT	Appears when the SSB/CW clarifier is enabled
19	SWR	Appears when the SWR level indication is enabled
20	DW	Appears when Dual Watch function is ON
21	Rnr	Appears when NRC Noise Reduction function in ON
22	AQ	Appears when ASQ is enabled
23	DCS	Appears when DCS is enabled
24	CTC	Appears when CTCSS is enabled
25		Displays the Frequency and Channel information

5. HOW TO USE YOUR RADIO

5.1 OFF/ON Radio

1. Turn **VOL** clockwise to switch the radio ON, the radio may emit a beep (if the BEEP Prompt function is enabled). The LCD display will show a frequency or a channel number.

2. Turn **VOL** anti-clockwise to switch off the radio OFF.

5.2 Volume Control

When the radio is turned on, turning **VOL** clockwise will increase the Volume level. Turning **VOL** anti-clockwise will reduce the Volume level. Adjust the volume during communication to get suitable level.

Note: On-screen display of the level can be enabled/disabled with PC software.

5.3 RF Power Control

When the radio is transmitting, turn **PWR** outer shaft to adjust power. Turn it clockwise to increase power, anti-clockwise to reduce power.

Note: On-screen display of the level can be enabled/disabled with PC software.

5.4 RF Gain Control

When the radio is receiving, turn **RFG** inner shaft to adjust RF gain. Turn it clockwise to increase gain, anti-clockwise to reduce gain.

Note: On-screen display of the level can be enabled/disabled with PC software.

5.5 SQUELCH Control

When the radio is standby, turn **SQ** outter shaft clockwise to adjust squelch level. The LCD displays **SQ: XX**. (XX represents the squelch level, total 1-36 levels).

Note: On-screen display of the level can be enabled/disabled with PC software.

5.6 SSB Clarifier control

When the radio is transmitting or receiving, turn **CLAR** inner shaft to adjust USB/LSB/CW TX or RX frequency. Turn it clockwise to increase frequency, or anti-clockwise to reduce frequency. *Note: See Menu items "CLA.SET" and "CLA.FRQ" for settings.*

5.7 Channel Selection

When the radio is in channel mode, turn channel knob to select desired channel. Clockwise to increase, and anti-clockwise to reduce the channel number.

5.8 Frequency control

1. When in channel mode, press **[PUSH]** key to temporarily adjust the VFO frequency.

2. When the frequency is flashing, press [PUSH] again to adjust frequency step size.

3. When the desired frequency digit/step is flashing, turn **CH** clockwise to increase frequency, or anti-clockwise to reduce frequency.

Note: In channel mode, changing the VFO frequency is temporary, and is not saved to memory. The frequency will return to the default programmed channel after after changing channels.

6.1 MEM or ANL/NB

6.1.1 Using memory channels:

1. Short press MEM to enter memory channel, turn **CH** to choose memory channel. M1-M99, (total of 99 memory channels).

2. Short press MEM again to exit memory channel mode.

Note: Short press the BAND key to copy the current Memory Channel into VFO.

6.1.2 Store/Delete memory channels:

1. Store memory channel:

When the radio is not in memory channel mode, choose the frequency to be stored, and hold MEM enter storage mode, the channel number flashes. Turn the CH switch to choose the location to be stored (M1-M99), then hold MEM until the channel number stops flashing. The memory is stored.

2. Delete memory channel:

In memory mode, hold MEM for over 2 seconds, the memory channel number flashes, turn the **CH** switch to choose the memory to be deleted, then hold MEM until the channel number stops flashing. The memory is deleted.

6.2 ANL/NB

Press FUNC +**[NB/ANL]** key to enable NB/ANL function. The "**NB/ANL**" icon will appear on the LCD display. Press the key repeatedly to switch on/off the function.

6.3 MODE or DIM

6.3.1 MODE

Short press MODE key to choose the mode FM-AM-USB-LSB-CW-PA.

Note: Modes can be enabled and disabled using the PC software

6.3.2 DIM

Press FUNC+MODE key to adjust the backlight dimmer / brightness.

6.4 BAND / VFO or COLOR

6.4.1 BAND

Short press BAND key to choose band A-B-C-D-E-F-G-H-I.

6.4.2 COLOR

Press FUNC + BAND key switch LED backlight color, repeat this operation to switch between different color backlights.

Note: TX (PTT) mode Color can be individually set. See MENU item "TXCOLOR".

6.4.3 VFO

Long press BAND key to turn on the VFO function. The LCD displays "**VF**"

6.5 FUNC

1. Long press [FUNC] for 2 seconds to enter the main Background Function Menu (See section "9. BACKGROUND FUNCTION MENU OPERATION").
2. Short press [FUNC], "**FUN**" will appear at the top left of LCD display. Press **[PUSH]** to enter the Function menu list. (See section "7. CHANNEL FUNCTION MENU OPERATION").

6.6 SCAN or DW

6.6.1 SCAN

1. Short press [SCAN] to start scan function, "SC" flashes in the LCD.
2. In scan mode, turning the Channel switch will change the scan direction.
3. Short press [SCAN] again to exit scan.

Add/delete scan list

In channel mode, Long press [SCAN] for over 2 seconds to add or delete a channel from scan list.

1. When LCD displays "SC", the present channel is added to the scan list.
2. When LCD does not display "SC", the present channel is not added to the scan list.

Note: This function is equal to the CHANNEL FUNCTION menu item, No.06.

6.6.2 DW

Press [FUNC] + [SCAN] key to turn on Dual watch function, LCD displays "DW"; Repeat this operation to switch ON/OFF the DW function.

6.7 TSQ or HI-CUT

6.7.1 TSQ

Short press [TSQ] key to start the CTCSS/DCS function, repeat this operation to switch ON/OFF the function. Long press [TSQ] key to quickly enter the CTCSS/DCS function setting.

6.7.2 HI-CUT

Press [FUNC] + [TSQ] key to turn on HI-CUT function, LCD displays "HIC"; Repeat this operation to switch ON/OFF the function.

6.8 NRC or SPLIT

6.8.1 NRC

Short press [NRC] key to start the RX noise reduction function. Repeat this operation to switch ON/OFF the function.
Short press **[PTT]**+ [NRC] key to start the TX noise reduction function. Repeat this operation to switch ON/OFF the function.
Long press [NRC] key to quickly enter the noise reduction level setting menu.

6.8.2 SPLIT

Press [FUNC] + [NRC] key to turn on SPLIT function, LCD displays "***REP***"; Repeat this operation to switch ON/OFF the function.

Note: Refer to Menu items for additional TX Repeater SPLIT / Offset settings.

6.9 EMG

Choose EMG channel:

Short press [EMG] to use Emergency channel, LCD displays "***EMG***".

1. Short press [EMG] once to choose CH9;

2. Short press [EMG] again to choose CH19;

3. Short press [EMG] again to return to last normal channel.

Note: See Menu item "EMG.CH1" and "EMG.CH2" for EMG channel settings.

Keypad Lock Function:

1. Long press [EMG] to lock keys, LCD displays "🔑";

2. Long press [EMG] again to unlock the keys.

Note: When this function is turned on, only the [PTT] button is valid.

7. CHANNEL FUNCTION MENU OPERATION

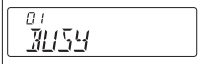
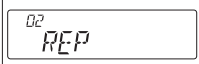
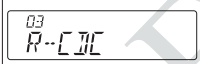
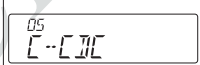
1. Press [FUNC], the top left of LCD displays "**FUN**", Press **[PUSH]** to enter the menu list.

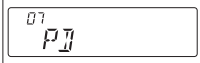
2. Turn Channel switch to select menu No.1- No.7.

3. Press **[PUSH]** to choose the menu to modify.

4. Turn the Channel switch to modify the menu options.

5. Press **[PUSH]** to return to the previous menu. Press any other key or wait 5 seconds, and the menu will exit and the modified settings will be stored.

No.	Function	LCD Display	Values and Descriptions
1	Busy Channel Lockout		**OFF:** Disable Busy Channel Lockout function; **ON:** Enable Busy Channel Lockout function; **Default:** OFF.
2	Repeater Offset Direction		**REP+:** Enable offset + direction function, TX frequency > RX frequency; **REP-:** Enable offset - direction function, TX frequency < RX frequency; **OFF:** Disable offset direction function. **Default:** OFF.
3	R-CDC		CTCSS/DCS: RX setup **OFF:** Turn off CTCSS/DCS function; **CTCSS:** 67.0Hz~250.3Hz, Total 38 tones; **DCS:** D023N~D754N, Total 104 codes; **Default:** OFF *Note: Press SCAN key to start CTCSS/DCS scanning.*
4	T-CDC		**CTCSS/DCS:** TX setup **OFF:** Turn off CTCSS/DCS function; **CTCSS:** 67.0Hz~250.3Hz, Total 38 tones; **DCS:** D023N~D754N, Total 104 codes; **Default:** OFF
5	C-CDC		CTCSS/DCS: RX+TX setup **OFF:** Turn off CTCSS/DCS function; **CTCSS:** 67.0Hz~250.3Hz, Total 38 tones; **DCS:** D023N~D754N, Total 104 codes; **Default:** OFF *Note: Press SCAN key to start CTCSS/DCS scanning.*
6	Add/delete Scan list		**ADD:** LCD displays "SC", present channel is added to scan list. **DEL:** LCD does not display "SC", present channel is not added to scan list. **Default:** OFF

7	Public Data		**OFF:** Choose independent channel menu; **ON:** Choose public channel menu; **Default:** ON Note: When OFF is selected, additional hidden public channel menu items 8-13 will appear. These are the same as shown in 'Section 8'.

Note: **Public Data** settings can be used to enable saving of individual settings (e.g. Mode, NB, etc) per individual channel.

For example:

- Channels with **PD=OFF** will remember the last used mode and settings, individually. When you return to the channel later, the last used mode and settings will be recalled.

- Channels with **PD=ON** will use the mode and settings from the global PUBLIC settings (e.g. if the radio is set to FM mode and NB, then all channels with PD=ON will follow this last used global PUBLIC mode and setting.

PC Software can also be used to configure the PUBLIC DATA option for individual channels, bands, or to apply these settings globally.

8. PUBLIC DATA FUNCTION MENU OPERATION

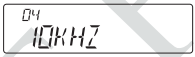
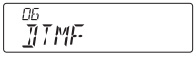
1. Hold **[PUSH]** for 2 seconds to enter the Public Data menu list;

2. Turn the Channel switch to select menu 1-6;

3. Press **[PUSH]** to choose the menu to modify;

4. Turn the Channel switch to modify the menu options.

5. Press **[PUSH]** to return to the previous menu. Press any other key or wait 5 seconds, and the menu will exit and the modified settings will be stored.

No.	Function	LCD Display	Values and Descriptions
1	HI-CUT		**OFF:** Disable HI-CUT function; **ON:** Enable HI-CUT function; **Default:** OFF.
2	NB/ANL		**OFF:** Disable NB/ANL function; **ON:** Enable NB/ANL function; **Default:** OFF.
3	ECHO		**OFF:** Disable ECHO function; **ON:** Enable ECHO function; **Default:** OFF
4	10KHz		**OFF:** Disable +10KHz function; **ON:** Enable +10KHz function; **Default:** OFF
5	ROGER		**OFF- 5,** Total 6 options. **Default:** OFF, (RB Disabled)
6	DTMF PTT ID		**BOT:** Press PTT to send DTMF encode; **EOT:** Release PTT to send DTMF encode; **CALL:** Hold PTT+EMG to send DTMF encode; **Note:** If the M1-M16 memory storage has no PTT ID's set, the DTMF function will be defaulted to OFF. DTMF groups can only be selected once they have been programmed.

9. BACKGROUND FUNCTION MENU OPERATION

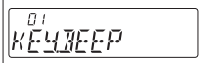
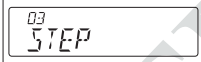
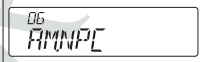
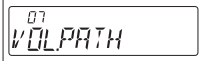
1. Hold **[FUNC]** for 2 seconds to enter the Background Function Menu list;

2. Turn the Channel switch to select menu 1-42;

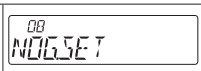
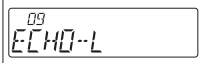
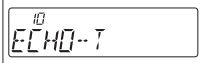
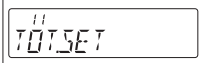
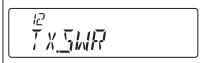
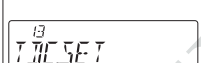
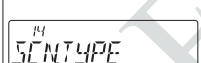
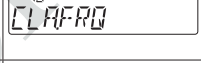
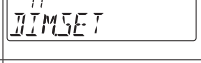
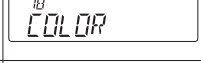
3. Press **[PUSH]** to choose the menu to modify;

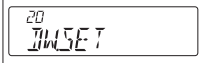
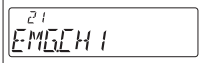
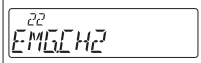
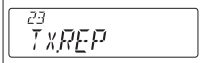
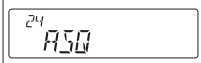
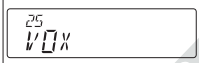
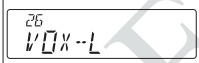
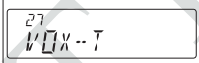
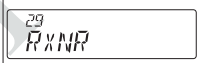
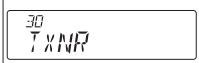
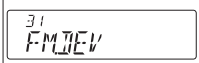
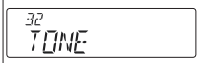
4. Turn the Channel switch to modify the menu options;

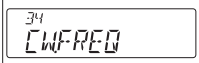
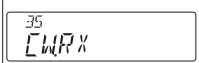
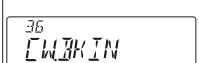
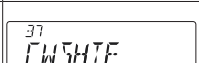
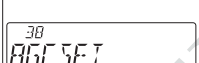
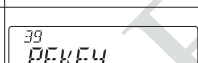
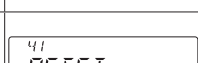
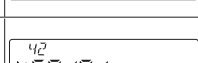
5. Press **[PUSH]** to return to the previous menu. Press any other key or wait 5 seconds and the menu will exit and the modified settings will be stored.

No.	Function	LCD Display	Values and Descriptions
1	KEY.BEEP		**1-5,OFF,** Total 6 levels available. **Default:** 03.
2	LCD TX DISPLAY		**OFF:** Displays TX frequency when in TX; **SWR:** Displays SWR value when in TX; **TOT:** Displays TOT remaining time when in TX; **DC:** Displays DC voltage when in TX; **Default:** OFF.
3	STEP		Adjust the default step size in VFO mode. **Options:** 10Hz, 100Hz, 1KHz, 5KHz, 10KHz, 100KHz, 1MHz; **Default:** 1KHz.
4	MIC.GAIN		**1-45,** Total 45 levels of Microphone Gain available. **Default:** 33.
5	MIC.TYPE		**ELEC:** Electret Microphone **DYNA:** Dynamic Microphone **Default:** ELEC.
6	AM.NPC		**OFF:** Disable AM NPC function. **ON:** Enable AM NPC function. **Default:** OFF.
7	VOL.PATH		**MAIN:** The VOL knob controls the internal speaker volume; **MIC.JACK:** The VOL knob controls the microphone jack output volume; **BOTH:** The VOL knob controls both the internal speaker and microphone jack output volume; **Default:** MAIN

9. BACKGROUND FUNCTION MENU OPERATION

8	Monitor Gain (Talkback)		**1-32, OFF,** Total 33 levels available; **Default:** OFF (Disable NOG function)
9	ECHO volume level setting		**1-32,** Total 32 levels available; **Default:** 28
10	ECHO delay time setting		**1-32,** Total 32 levels available; **Default:** 28
11	TOT		**1-600s, OFF,** Total of 10 minutes available; **Default:** 180s
12	SWR Protection		**OFF:** Disable the SWR Protection function; **ON:** Enable the SWR Protection function; **Default:** ON
13	Voltage Protection		**OFF:** Disable the Voltage Protection function; **ON:** Enable the Voltage Protection function; **Default:** ON
14	Scan Type		**SQ:** Squelch based scan function; **TI:** Time based scan function; **Default:** SQ
15	Clarifier		**OFF:** Disable clarifier adjustment; **R:** Enable RX frequency adjustment; **T:** Enable TX frequency adjustment; **RT:** Enable both RX and TX frequency adjustment; **Default:** R
16	Clarifier Freq Range		**500Hz:** adjustable range ±500Hz; **5KHz:** adjustable range ±5KHz; **Default:** 500Hz
17	Dimmer		**1-5,** 5 backlight dimmer levels available; **Off:** Turn off the backlight; **Default:** 5
18	Backlight Color		WHITE, BLUE, GREEN, YELLOW, RED, PURPLE, CYAN, OFF **Default:** WHITE
19	TX Color		WHITE, BLUE, GREEN, YELLOW, RED, PURPLE, CYAN, OFF **Default:** WHITE

20	DW Channel		Set the Dual Watch channel, mode and band: Turn channel knob to change channel, press MODE to choose the mode, press BAND to choose the band.
21	EMG1 Channel		Set Emergency Channel 1 and its mode. Turn channel knob to choose the channel, press MODE to choose the mode.
22	EMG2 Channel		Set Emergency Channel 2 and its mode. Turn channel knob to choose the channel, press MODE to choose the mode.
23	TX Repeater Shift		**100Hz-5MHz,** Frequency Shift/Offset range. **Default:** 100KHz
24	ASQ Level		**01-09:** Total of 9 Automatic Squelch levels; **OFF:** Turn off ASQ **Default:** 05.
25	VOX		**OFF:** Disable VOX function; **ON:** Enable VOX function; **Default:** OFF
26	VOX sensitivity		**01-09**, Total of 9 VOX sensitivity levels; **Default:** 03
27	VOX Delay Time		**01-09**, Total of 9 VOX Delay Time levels; **Default:** 03
28	VOX Speaker		**OFF:** VOX PTT is disabled when squelch is open; **ON:** VOX PTT is enabled when squelch is open; **Default:** OFF
29	RX Noise Reduction Level		**01-05:** Total of 5 levels for RX noise reduction; **OFF:** Turn off RX noise reduction; **Default:** OFF
30	TX Noise Reduction Level		**01-05:** Total of 5 levels for TX noise reduction; **OFF:** Turn off TX noise reduction; **Default:** OFF
31	FM Deviation		**2K:** 2KHz FM deviation **4K:** 4KHz FM deviation **Default:** 2K
32	Tone		**HI 4K:**4K audio response **LO 3K:** 3K audio response **Default:** 4K

33	CW Volume (Sidetone)		**01-63:** Adjusts the CW Sidetone level (volume); **OFF:** CW Sidetone disabled; **Default:** 31
34	CW FREQ		**300Hz-3KHz:** This menu is to select CW Sidetone; frequency. The frequency step is 10Hz; **Default:** 1050Hz
35	CW RX		**CW-U:** select USB for CW RX **CW-L:** select LSB for CW RX **Default:** CW-U
37	CW Delay		**10-1000MS:** TX delay (CW break-in) **OFF:** No TX delay **Default:** 500MS
37	CW SHIFT		**ON:** CW RX Shift ON (RX Shift = +/- "CW.FREQ") **OFF:** CW RX Shift OFF **Default:** OFF
38	AGC (S-Meter Response)		**SLOW:** AGC SLOW response; **FAST:** AGC FAST response; **Default:** SLOW
39	User Define PF Key		A total of 16 PF key functions are available. See 'Section 10. SELF DEFINE PF KEY' for options. **Default:** INDIC
40	DTMF Encode		**S TIME:** DTMF transmit time; **FDELAY:** First digital delay time; **C TIME:** Pre-carrier time; ***# TIME:** * and # delay time; **D CODE:** D code setting time; **TXDIS:** Display setting for DTMF transmit; **MEM:** DTMF encode storage list; **Note:** In the DTMF encode storage list (M1-M16), press PUSH to edit DTMF code, then turn channel knob to choose desired value. Press PUSH again to edit next list. Hold PUSH to store any chnages and exit back to the main menu.
41	Reset		**OPT:** Settings/Functions reset to defaults; **ALL:** Channels and Settings/Functions reset to defaults; **Default:** OPT
42	Firmware Version		Displays the Firmware Version

10. SELF DEFINE PF KEY

1. Hold **[FUNC]** for 2 seconds and enter the Background Function Menu "PF.KEY";
2. Press **[PUSH]** to choose the menu to enter modify mode;
3. Turn the Channel switch to modify the PF.KEY menu options;
4. Press **[PUSH]** to return to the previous menu. Press any other key or wait 5 seconds, and the menu will exit and the modified settings will be stored.

No.	LCD Display	1st Function (PF Short Press)	2nd Function (PF Long Press)
1	**VOX**	VOX ON/OFF	Enter VOX setting menu
2	**VFO**	VFO ON/OFF	Enter STEP setting menu
3	**NB.ANL**	NB.ANL ON/OFF. See below: →NB→ANL→ANL+NB→OFF→	--
4	**10K**	+10K ON/OFF	--
5	**ECHO**	ECHO ON/OFF	Enter ECHO setting menu
6	**HI-CUT**	HI-CUT ON/OFF	--
7	**CALL**	DTMF ON/OFF	Enter DTMF setting menu
8	**C-CDC**	CTCSS/DCS ON/OFF - If current channel no CTCSS/DCS, the LCD will show "error"	Enter C-CDT setting menu
9	**ASQ**	Enter ASQ level setting menu	--
10	**MIC.GAIN**	Enter Mic Gain setting menu	--
11	**AM.NPC**	AM TX NPC ON/OFF	--
12	**RXNR**	RXNR ON/OFF	Enter RXNR setting menu

13	**TXNR**	TXNR ON/OFF	Enter TXNR setting menu
14	**FM.DEV**	Choose FM Deviation level	--
15	**TONE**	Choose SSB TX bandwidth	--
16	**INDIC**	Choose LCD meter display	When set to SWR, long press enters SWR setting menu.
17	**CH.PUSH**	Choose frequency STEP size	Enter Public Setting PD menu
18	**AGC.SET**	Choose AGC FAST/SLOW speed	--
19	**SCAN**	Activate the SCAN feature	SCAN Add / Delete
20	**OFF**	No function Key	

11. SPECIFICATIONS

GENERAL	
Frequency Range	28.000-29.700MHz (Programmable)
Frequency Band	A/B/C/D/E/F/G/H/I + VFO
Channel	40 channels (programmable) in each band
Frequency Control	Phase-Locked-Loop Synthesizer
Frequency Step	10Hz,100Hz,1KHz,5KHz,10KHz,100KHz,1MHz
Frequency Tolerance	±5.0 ppm
Temperature Range	-20℃~ +50℃
Microphone	With Push-to-Talk / UP / DN / PF and coiled cord
Input Voltage	13.8V DC
Dimensions (in mm)	252(L) x 158(W) x 48(H)
Weight	1.27kg
Antenna Connector	UHF, SO239
TRANSMITTER	
Power Output	AM: 80W(PEP) / FM:50W / SSB: 80W(PEP)
Drain	15A (with modulation)
Modulation	FM/AM/USB/LSB/CW
Inter-modulation Distortion	SSB: 3rd order, more than -25dB; 5th order, more than -35dB
SSB Carrier Suppression	55dB
Unwanted Sideband	50dB
Frequency Response	AM/FM: 300 to 3000Hz SSB: 450 to 2500Hz
Output Impedance	50ohms, unbalanced
RECEIVER	
Sensitivity	SSB: 0.25μV for 10dB(S+N)/N AM:1.0μV for 10dB(S+N)/N FM: 1.0μV for 20 dB (S+N)/N (All at greater than 1/2 watt of audio output)
Adjacent-Channel Selectivity	AM/FM: 60dB SSB: 70dB
Image Rejection	More than 65dB
IF Frequency	AM/FM: 10.695MHz 1st IF, 455KHz 2nd IF SSB: 10.695MHz
RF Gain Control	45dB adjustable for optimum signal reception
Automatic Gain Control(AGC)	Less than 10dB change in audio output for inputs from 10 to 100,000 microvolt.
Squelch	Adjustable; threshold less than 1.0μV. Automatic Squelch Control (AM/FM) 1.0μV
Audio Output Power	3 watts into 8 ohms
Frequency Response	AM/FM: 300 to 3000Hz SSB: 450 to 2500Hz
Built-in Speaker	8 ohms, round.
External Speaker(Not Supplied)	8 ohms; disables internal speaker when connected.

DECLARATION OF CONFORMITY N° 200245

CE

We hereby declare under our responsibility that the product :
Description : mobile transceiver HF amateur radio
Brand : CRT
Model : SS9900V
Satisfies all the technical regulation applicable to the product within the scope of directive RED 2014/53/EU and european standarts.

EN IEC 62368-1 :2020+A11 :2020

EN IEC 62311 :2020

EN 50665 :2017

ETSI EN 301 489-1 V.2.2.3 (2019-11)

ETSI EN 301 489-15 V2.2.1 (2019-04)

ETSI EN 301 783 V2.1.1 (2016-01)

C.R.T. France INTERNATIONAL S.A.S.
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Capital de 1 800 000 euros
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M. CELESTRANO E.
PRESIDENT
LE 08/07/2024

RECYCLABLE

RoHS

ISO9001
ISO14001

CONDITIONS OF GUARANTEE

Our transceivers CRT SUPERSTAR are guaranteed on 2 year. The other equipments : 6 months.

Any abnormality of functioning must be indicated to your retailer, who will intervene or will send it to our technical service for control

The spare parts of our devices are the object of no sending under guarantee

Are excluded of the guarantee:

- the damages caused by accidents, shocks, natural elements (lightning, thunderstorm, static electricity etc.)
- The transistors of power, the microphones, the fuses, the bad uses: badly adjusted ante -nna (tos excessive), inversion of polarity, surge, bad connection etc. recognized by our technical service.
- The interventions having modified the standards of approval of the device.

PROCEDURE ON RETURNING TO THE AFTER-SALES SERVICE CRT

- If you send back a radio under guarantee for repair : you must pay the freight costs to go. CRT will pay the freight costs return. If the radio is not under guarantee postal charges are at your expense.
- each device must be sent accompanied with a photocopy of the invoice as well as with a descriptive note of the noticed defect

If our AFTER-SALES SERVICE estimates the repair more expensive than the value of the device, this one will send you an estimate which must have returned to him accepted or refused. If the estimate is refused, the device will have carriage forward returned.