CRT® 2000H

MOBILE CB TRANSCEIVER
AM- FM CITIZEN BAND
EUROPEAN MULTI-NORMS

12 V

OWNER'S MANUAL

CE

ISO9001
ISO14001

RoHS

CRT® and SUPERSTAR® are registered and protected brands.

English owner's manual Copyright CRT France 2018

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	

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 corresponds to the requirements of European directives RED 2014/53/EU documents n° EN 301 489-1-13 / EN 62 311 / EN 300 433 / EN 60 950.

Thank you for choosing this CRT vehicle transceiver CRT always provides high quality products. Though friendly design for user, this transceiver is technically complicated and some features may be new to you. Consider this manual to be a personal tutorial from the designers, allow the manual to guide you through the learning process now, then act as a reference in the coming years.

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 5A 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.

Attention :

• Before using your transceiver please connect an antenna on the connector PL on back side then check the SWR before emitting. A too important SWR can entail the destruction of the transistors of power which are not flatware by the guarantee

SAFETY INFORMATION FOR USER

CRT transceiver is excellently designed with advanced technology.
Please observe the following precautions to perform your obligation, prevent personal injury and ensure the safety of transceiver usage.
1. Keep the transceiver and accessories away from children.
2. Please do not try to open or modify the transceiver without permission non-professionals process may also cause damage.
3. Please use assorted battery and charger to avoid damage.
4. Please use assorted antenna to ensure the communication distance.
5. Please do not expose the transceiver to long period of direct sunlight or place it close to heat appliances.
6. Please do not put the transceiver in excessively dusty or humid areas.
7. Do not use harsh chemicals cleaning solvents to clean the transceiver.
8. Do not transmit without antenna.
9. We recommend for people using pace maker not transmitting or do carefully
10.Do not use on airplane and hospital to avoid disagreements.
9. When using this transceiver. We recommend transmitting for 1 minute then receiving for 4 minutes. Continuous transmitting for long time or working
10.Do not place the transceiver's hot back close to any surface of plastic.
11. If any abnormal odor or smoke detected coming from the transceiver) turn off the power and take off the battery pack and its case. Then contact local *CRT* dealers.
NOTICE
All tips as above also apply to the standard parts of *CRT*
If any spare parts fail to work, please contact local *CRT* dealers in time
If users use spare parts from other suppliers instead of safety and performance of the transceiver can't be guaranteed.

IMPORTANT

Before the first using , make sure that the norm selected is corresponding with the norm apply in your country (see restrictions at the end of this manual) .

To choose the correct norm, Hold P1+FUNC key when power on the radio , then turn the channel knob to select the norm apply in your country. Hold " PUSH " key to valid .

MODE	FM	AM	--
EU	40 Ch (4W)	40 Ch (4W)	BE,BG, CH, CY, DK, EE, ES, FI, FR, GB, GR, IE, IS, IT, LT, LU, LV, NO, PT, RO, SE
PL	-5 KHz 40 Ch (4W)	-5 KHz 40 Ch (4W)	PL
DE	80 Ch (4W)	40 Ch (4W)	DE
CE	40 Ch (4W)	-	AT, CZ, HU, MT, SI, SK
U	CEPT 40 Ch + ENG 40 Ch (4W)	-	GB
IN	27 Ch (4W)	27 Ch (4W)	IN
I2	36 Ch (4W)	36 Ch (4W)	IT

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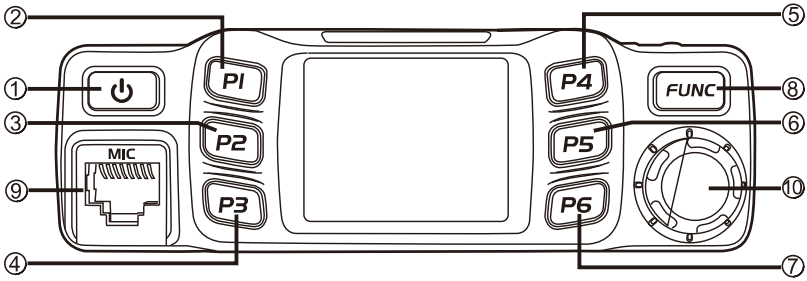
1. FUNCTIONS & FEATURES

- FTF LCD display
- 12 V voltage
- Full alloy body for heat radiation
- Programmable keypad
- CTCSS/DCS (optional)
- Wireless microphone control(optional)
- Cell-phone APP control (optional)
- AM/FM multi norms
- Flexible menu and programming software
- DTMF
- SQ, ASQ
- SQ, ASQ open/close value setting
- RF Gain
- Scan
- Dual watch
- Programmable RB
- CH9/19
- NB/ANL
- HI-CUT
- Voltage protection
- 8 memory channel
- TOT
- Backlight control
- Automatic power on
- Keypad lock

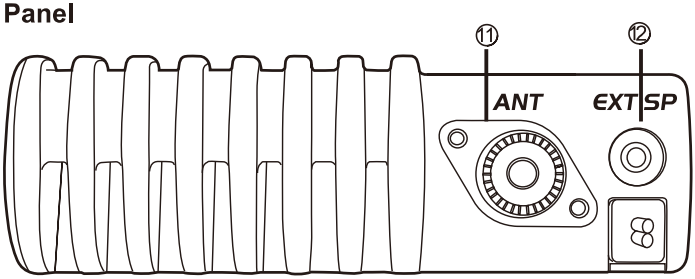
GETTING ACQUAINTED

Front Panel



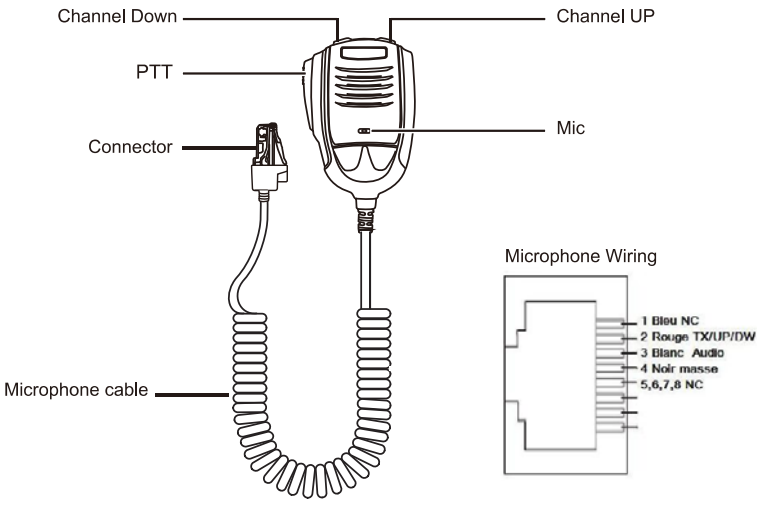
NO.	Key	Functions
1	⏻	Power On/Off/Mute
2	P1	Programmable Key 1
3	P2	Programmable Key 2
4	P3	Programmable Key 3
5	P4	Programmable Key 4
6	P5	Programmable Key 5
7	P6	Programmable Key 6
8	FUNC	Function Menu key
9	MIC	Microphone RJ45
10		Channel Switch/Push key/ Key lock

Rear Panel



NO.	Functions
11	External Speaker Jack 3.5
12	Antenna connector UHF SO239

Microphone



KEY FUNCTION OPERATION

⏻

1. Short press ⏻ key, the radio emit a prompt and LCD display on.
2. Power off radio: hold ⏻ key, until LCD display off.
3. when radio is powered on, short press ⏻ key, LCD displays AUDIO:MT, the radio volume will mute.
short press ⏻ key, LCD displays AUDIO: Esc, radio will recover last volume level.

Channel switch~PUSH

1. Turn channel switch anti-clockwise to move to down channel, turn it clockwise to up channel.
2. Fast channel adjust: short press **[PUSH]** key to adjust channel by 10 steps each push.
3. Key lock: Hold **[PUSH]** key, LCD displays Key Lock, All keys except **[PTT]** key are locked.
Hold **[PUSH]** key again to unlock the key.

FUNC

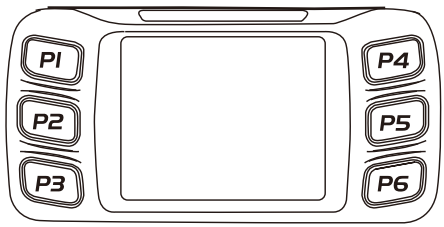
1.Short FUNC to switch between 3 groups of self define funciton keys.

2.Long press FUNC to enter background function menu.

[P1]~[P6]

This radio has 6 self define keys P1,P2,P3,P4,P5,P6,each key can set 3 functions.

P1~P3 matching the 3 function display in left side LCD, **P4~P6** matching the functions display in the right side of the LCD; Please refer to KEY MENU operation to allocate key functions.



MOD: AM/FM mode

1.Short press FUNC key to choose programmed function group.

2.Short press the programmable key which allocated as MOD function, the LCD displays MOD:XX.

3.Short press it again or turn channel switch to switch between FM→AM.

4.Press **[PUSH]** key or FUNC key to store setting and exit.

RFG: Adjust RF gain

1.Short press FUNC key to choose programmed function group.

2.Short press the programmable key which allocated as RFG function, LCD displays RFG: XX.

3.Short press it again or turn channel switch to adjust RF gain level.

4.Press [PUSH] key or FUNC key to store setting and exit.

Note: When RFG is ON, LCD will display the level accordingly.

EMG: CH9/CH19

1.Short press FUNC key to choose programmed function group..

2.Short press the programmable key which allocated as EMG function, first press is choose CH9.

3.Short press it again, will choose CH19.

4.Short press it third time, will return to last normal channel.

VOL: Volume level control

1.Short press FUNC key to choose programmed function group.
2.Short press the programmable key which allocated as VOL function, LCD displays VOL: XX.
3.Turn channel switch to adjust volume level.
4.Press **[PUSH]** key or FUNC key to store setting and exit.

SQL:

Short press: Squelch level control

1.Short press FUNC key to choose programmed function group..
2.Short press the programmable key which allocated as SQL function, LCD displays SQ: XX.
3.Turn channel switch to adjust S level.
4.Press **[PUSH]** key or FUNC key to store setting and exit.

Long press: ASQ level control

1.Short press FUNC key to choose programmed function group.
2.Long press the programmable key which allocated as ASQ function, LCD displays ASQ: XX.
3.urn channel switch to adjust ASQ level.
4.Press **[PUSH]** key or FUNC key to store setting and exit.
5.Long press the programmable key again to turn on SQL function.

DSP: Channel/Frequency display mode.

1.Short press FUNC key to choose programmed function group.
2.Short press the programmable key which allocated as DSP function, LCD displays DSP:XX.
3.Short press it again or turn channel switch to switch between CH→FRQ.
4.Press **[PUSH]** key or FUNC key to store setting and exit.

SCA:

Short press: Turn on scan function

1.Short press FUNC key to choose programmed function group..
2.Short press the programmable key which allocated as SCA function, LCD displays“S”.
3.During scanning, turn channel switch to change scan direction.
4.Press **[PUSH]** key or FUNC key exit scan.

Long press: add/delete scan list

In channel mode, Long press the programmable key which allocated as SCA function to add or delete channel from scan list.
1. When the LCD displays“S”means current channel is in scan list.
2. When the “S”disappear, means current channel is deleted from scan list.
Note: this function is same as the channel menu 2 control

MEM:

Short press: use memory channel

1.Short press [FUNC] key to choose programmed function group.
2.Short press the programmable key which allocated as MEM function to enter memory channel, turn channel switch to choose memory channels.
3.Short press it again to store setting and exit.

Long press: Memory channel store position

1.Choose a channel
2.Short press [FUNC] key to choose programmed function group.
3.Long press the programmable key which allocated as MEM function , the LCD displays memory channel number, turn channel switch to choose channel number(CH-01~CH-08), Long press **[MEM]** key until LCD displays the stored channel.

NOTE
» *1.when the channel number is not flash, means the channel already stored into memory channel.*
» *2.when the channel number is flash, means the channel is not into memory channel.*

DW: Dual-watch control

1.Choose first dual-watch channel,and select working mode(AM or FM)
2.Short press [FUNC] key to choose programmed function group.
3.Short press the programmable key which allocated as DW function, LCD flashes and displays “D”
4.Turn channel knob to choose second dual-watch channel, short oress other self-define key to set working mode(AM or FM)
5.Short press allocated the programmable key again to turn on DW fuction,LCD displays "D"
6.Press **[PUSH]** key or [FUNC] key to exit dual-watch function.

CAL: transmit DTMF code

1.Short press [FUNC] key to choose programmed function group.
2.Short press the programmable key to transmit DTMF code which allocated as CAL function.
Note:This function is valid only when the CALL set with valid DTMF group. refer page X or page X of Call setting for details.

NB: NB/ANL function

1.Short press [FUNC] key to choose programmed function group.
2.Short press the programmable key which allocated as NB/ANL function, LCD displays NB:XX.
3.Short press it again or turn channel switch to NB/ANL function between ON-OFF.
4.Press **[PUSH]** key or [FUNC]

RB: RB function

1.Short press FUNC key to choose programmed function group.
2.Short press the programmable key which allocated as RB function, LCD displays RB:XX.
3.Short press it again or turn channel switch to choose RB group
4.Press **[PUSH]** key or FUNC key to store setting and exit.

HIC: HI-CUT function

1.Short press FUNC key to choose programmed function group.
2.Short press the programmable key which allocated as HIC function, LCD displays HIC:XX.
3.Short press it again or turn channel switch to switch between ON→OFF.
4.Press **[PUSH]** key or FUNC key to store setting and exit.

TSQ: CTCSS/DCS encode (optional)

1.Short press FUNC key to choose programmed function group.
2.Repeatedly short press the programmable key which allocated as TSQ function , LCD displays TSQ:XX
(Note:refer page X of CTCSS/DCS code setting for details)
3.Short press it again or turn channel switch to switch between ON→OFF
4.Press **[PUSH]** key or FUNC key to store setting and exit.
Note:This function is available only when install Optional CTCSS board.

XX:The current key not setting function.

BACKGROUND FUNCTION MENU OPERATION

How to enter function menu:

1.Long press FUNC key to enter SELECT MENU interface.
2.Short press P4 key, P6 key or turn channel switch to move cursor, to choose menu.
(Note: short press P5 key will fast turn menu page).
3.Press **[PUSH]** key to enter FUNC MENU .
4.Short press P4 key, P6 key or turn channel switch to move cursor to set for choose function.

1. BEEP: Beep sound

1.Enter FUNC MENU, choose NO. 1 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.turn channel switch to choose wanted setting.
4.Press **[PUSH]** key or P3 key to confirm and exit.

2. TOT: Time out timer

1.Enter FUNC MENU, choose NO. 2 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting. This radio has OFF~30Min, total 30minutes available. , OFF is turn off TOT function.
4.Press **[PUSH]** key or P3 key to confirm and exit..

3. DIM: backlight level control

1.Enter FUNC MENU, choose NO. 3 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.turn channel switch to choose wanted setting. This radio has 1,2,3 total 3 level available.
4.Press **[PUSH]** key or P3 key to confirm and exit..

4. VOL: Volume level control

1.Enter FUNC MENU, choose NO. 4 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted level, This radio has 1~56 total 56 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit..

5. SQL: Squelch level

1.Enter FUNC MENU, choose NO. 5 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted level, This radio has OFF~28 total 29 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit..

6. ASQ: ASQ level

1.Enter FUNC MENU, choose NO. 6 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted level, This radio has 1~9 total 9 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit..

7. RFG: RF gain

1.Enter FUNC MENU, choose NO. 7 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted level, This radio has AU. OFF~30 total 12 levels available.
AU: Turn on automatically RF gain control.
OFF~30: Turn on RF gain control, each level stands for attenuated level.
4.Press **[PUSH]** key or P3 key to confirm and exit..

8. DSP: Channel/frequency display mode

1.Enter FUNC MENU, choose NO. 8 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting..
4.Press **[PUSH]** key or P3 key to confirm and exit..

9. KEYs: key function group setting

1.Enter FUNC MENU, choose NO. 9 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting. This radio has 1/2/3. 1/2. 2/3. 1/3 total 4 combinations available.
4.Press **[PUSH]** key or P3 key to confirm and exit..

10. SCM: scan method

1.Enter FUNC MENU, choose NO. 10 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting.
SQ: Squelch scan.
TI: time scan.
4.Press **[PUSH]** key or P3 key to confirm and exit..

11. SCRT: scan exit time setting

1.Enter FUNC MENU, choose NO. 11 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting. This radio has 5S~30S total 6 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit..

12. AOP: Automatic power on

1.Enter FUNC MENU, choose NO. 12 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting.
ON: Turn on Automatic power on.
OFF: Turn off Automatic power on.
4.Press **[PUSH]** key or P3 key to confirm and exit.

13. SWR:Standing wave ratio test

(Note:connect a 50 ohm load before testing SWR !)
1.Enter FUNC MENU,choose NO.13 function menu.
2.Press **[PUSH]** key to enter function setting.
3.Turn channel switch to choose wanted setting.
Continue:enter into SWR testing.
No:exit.
4.press **[PUSH]** key to confirm.

14. RST: Resume factory default

1.Enter FUNC MENU, choose NO. 14 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose wanted setting.
OPT: All function settings resume factory default.
ALL: All channel and function settings resume factory default.
4.Press **[PUSH]** key to confirm.
5.Press P3 key to stop and exit resume default function,

PUBLIC DATA FUNCTION MENU OPERATION

How to enter public menu:

1.Long press FUNC key to enter main MENU interface.

2.Short press P4 key, P6 key or channel switch to move cursor, to choose menu group.

(Note: short press P5 key can fast turn page)

3.Press **[PUSH]** key to enter PUD MENU .

4.Short press P4 key, P6 key or channel switch to move cursor, to choose wanted menu setting.

5.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.

6.Turn channel switch to choose wanted setting.

7.Press **[PUSH]** key or P3 key to confirm and exit.

Note: Public function menu offer one-time setting for all channels.

NO.	LCD display	Function detail	Setting details
1	A/FM XXX	AM/FM switch	FM: Turn on FM mode. AM: Turn on AM mode.
2	NB XXX	NB/ANL function setting	OFF: Turn off NB/ANL function. ON: Turn on NB/ANL function.
3	HIC XXX	HI-CUT on/off	OFF: Turn off HI-CUT function. ON: Turn on HI-CUT function.
4	RB XXX	RB groups setting	OFF-5, total 6 groups. OFF: Turn off RB function.
5	BUSY XXX	Busy channel lock	OFF: Turn off busy channel lock function. ON: Turn on busy channel lock function.
6	BOT XXX	Call setting	OFF: Press PTT will not transmit DTMF code. 1~16: Press PTT to transmit DTMF code.
7	EOT XXX	Call setting	OFF: Release PTT will not transmit DTMF code. 1~16: Release PTT to transmit DTMF code.
8	CALL XXX	Call setting	OFF: Press CALL key will not transmit DTMF code. 1~16: Press CALL key to transmit DTMF code.

» *Note: Only when current channel has store DMTF group, the Call setting will work.*

» *(Refer to DTMF MENU setting)*

CHANNEL FUNCTION MENU OPERATION

How to enter channel menu:

1.Long press FUNC key to enter main MENU interface.

2.Short press P4 key, P6 key or Turn channel switch to move cursor, to choose menu group.(Short press P5 key can fast turn page).

3.Press **[PUSH]** key enter channel menu .

4.Short press P4 key, P6 key or Turn channel switch to move cursor to choose wanted menu setting.(Short press P5 key can fast turn page).

5.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.

6.Turn channel switch to choose wanted setting.

7.Press **[PUSH]** key or P3 key to confirm and exit.

Note: Channel funciton menu is used to edit the setting for current channel.

NO.	LCD display	Function detail	Setting details
1	PD XXX	Public channel setting	OFF: Public setting disable. *(The separate channel setting is valid for single channel only.)* ON: The public setting is valid for all channels.
2	SCAN XXX	Scan add/delete setting	ADD: Current channel add into scan list. DEL: Current channel delete from scan list.
3	RCDT XXX	Receiver CTCSS/ DCS encode setting	Long press **[PUSH]** key to choose wanted setting: CTC: 67.0Hz~250.3Hz, total 38 groups. DCS: D023N~D754N, total 104 groups. OFF: Turn off CTCSS/DCS encode. Long press **[PUSH]** key to confirm and exit. *Note: This is function is optional.*
4	TCDT XXX	Transmit CTCSS/ DCS encode setting	
When PD is on, the following menu is hiding, when PD is OFF, the following menu will appear.			
5	A/FM XXX	Mode setting	FM: Turn on FM mode. AM: Turn on AM mode.
6	NB XXX	NB/ANL function setting	OFF: Turn off NB/ANL function. ON: Turn on NB/ANL function.
7	HIC XXX	HI-CUT function setting	OFF: Turn off HI-CUT function. ON: Turn on HI-CUT function.
8	RB XXX	RB setting	OFF-5, total 6 groups available. OFF: Turn off RB function.
9	BUSY XXX	Busy channel lock function.	OFF: Turn off busy channel lock function. ON: Turn on busy channel lock function.
10	BOT XXX	Call setting	OFF: Press **[PTT]** will not transmit DTMF code. 1~16: Press **[PTT]** to transmit DTMF code.
11	EOT XXX	Call setting	OFF: Release **[PTT]** will not transmit DTMF code. 1~16: Release **[PTT]** to transmit DTMF code.
12	CALL XXX	Call setting	OFF: Press **CALL** key will not transmit DTMF code. 1~16: Press **CALL** key to transmit DTMF code.

Note: Only when current channel has store DMTF group, the Call setting will work (Refer to DTMF MENU setting)

DTMF ENCODE SETTING

How to enter DTMF encode setting:

1.Long press FUNC key to enter main MENU interface.

2.Short press P4 key, P6 key or Turn channel switch to move cursor, to choose menu group.(Short press P5 key can fast turn page).

3.Press **[PUSH]** key to enter DTMF MENU .

4.short press P4 key, P6 key or Turn channel switch to move cursor to choose wanted setting.

1. DTMF: Encode setting

1.Enter DTMF MENU, choose NO. 1 function menu.

2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.

3.Turn channel switch to choose group.

4.Long press **[PUSH]** key edit code, Red character stands for current editing digit, Turn channel switch to edit it, Press **[PUSH]** key to edit next digit.

5.Long press **[PUSH]** key or P3 key to confirm and exit..

2. SND-T: Transmit time setting

1.Enter DTMF MENU, choose NO. 2 function menu.

2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.

3.Turn channel switch to choose group, This radio has 10ms~500ms total 50 levels available.

4.Press **[PUSH]** key or P3 key to confirm and exit.

3. FIR-T: First digit time setting

1.Enter DTMF MENU, choose NO. 3 function menu.

2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.

3.Turn channel switch to choose group, This radio has 0~1000ms total 11 levels available.

4.Press **[PUSH]** key or P3 key to confirm and exit.

4. PRE-T: Pre-loading time setting

1.Enter DTMF MENU, choose NO. 4 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose group, This radio has 100ms~2500ms total 25 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit.

5. DELAY: #. * delay time setting

1.Enter DTMF MENU, choose NO. 5 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose group, This radio has 0~1000ms total 4 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit.

6. D-FUN: D function key setting

1.Enter DTMF MENU, choose NO. 6 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose group, This radio has D~16S total 17 levels available.
4.Press **[PUSH]** key or P3 key to confirm and exit.

7. DISP: Code display setting

1.Enter DTMF MENU, choose NO. 7 function menu.
2.Press **[PUSH]** key to enter function setting, the chosen menu value in LCD will turn to green color.
3.Turn channel switch to choose setting:
ON: When transmitting DTMF code, LCD displays corresponding setting.
OFF: When transmitting DTMF code, LCD not display corresponding setting.
4.Press **[PUSH]** key or P3 key to confirm and exit.

SELF –DEFINE KEY SETTING:

1.Long press FUNC key to enter main MENU interface.
short press P4 key, P6 key or Turn channel switch to move cursor, to choose menu group.(Short press P5 key can fast turn page).
2.Press **[PUSH]** key to KEY MENU .
3.Turn channel switch to choose wanted function
4.Short press **[PUSH]** key to choose Key function group.
5.Short press P1~P6 keys to choose the key for allocated the function.
6.Press FUNC key to confirm and exit.

CEPT channels
for FM, AM und SSB

Kanal CH	Frequenz (MHz)	Kanal CH	Frequenz (MHz)
1	26.965	21	27.215
2	26.975	22	27.225
3	26.985	23	27.255
4	27.005	24	27.235
5	27.015	25	27.245
6	27.025	26	27.265
7	27.035	27	27.275
8	27.055	28	27.285
9	27.065	29	27.295
10	27.075	30	27.305
11	27.085	31	27.315
12	27.105	32	27.325
13	27.115	33	27.335
14	27.125	34	27.345
15	27.135	35	27.355
16	27.155	36	27.365
17	27.165	37	27.375
18	27.175	38	27.385
19	27.185	39	27.395
20	27.205	40	27.405

UK frequency table

Kanal CH	Frequenz (MHz)	Kanal CH	Frequenz (MHz)
1	27.60125	21	27.80125
2	27.61125	22	27.81125
3	27.62125	23	27.82125
4	27.63125	24	27.83125
5	27.64125	25	27.84125
6	27.65125	26	27.85125
7	27.66125	27	27.86125
8	27.67125	28	27.87125
9	27.68125	29	27.88125
10	27.68125	30	27.89125
11	27.70125	31	27.90125
12	27.71125	32	27.91125
13	27.72125	33	27.92125
14	27.73125	34	27.93125
15	27.74125	35	27.94125
16	27.75125	36	27.95125
17	27.76125	37	27.96125
18	27.77125	38	27.97125
19	27.78125	39	27.98125
20	27.79125	40	27.99125

AVAILABLES CTCSS CODES

67,0	94,8	131,8	171,3	203,5
69,3	97,4	136,5	173,8	206,5
71,9	100,0	141,3	177,3	210,7
74,4	103,5	146,2	179,9	218,1
77,0	107,2	151,4	183,5	225,7
79,7	110,9	156,7	186,2	229,1
82,5	114,8	159,8	189,9	233,6
85,4	118,8	162,2	192,8	241,8
88,5	123,0	165,5	196,6	250,3
91,5	127,3	167,9	199,5	254,1

AVAILABLES DCS CODES

1	D023N	27	D152N	53	D311N	79	D466N
2	D025N	28	D155N	54	D315N	80	D503N
3	D026N	29	D156N	55	D325N	81	D506N
4	D031N	30	D162N	56	D331N	82	D516N
5	D032N	31	D165N	57	D332N	83	D523N
6	D036N	32	D172N	58	D343N	84	D526N
7	D043N	33	D174N	59	D346N	85	D532N
8	D047N	34	D205N	60	D351N	86	D546N
9	D051N	35	D212N	61	D356N	87	D565N
10	D053N	36	D223N	62	D364N	88	D606N
11	D054N	37	D225N	63	D365N	89	D612N
12	D065N	38	D226N	64	D371N	90	D624N
13	D071N	39	D243N	65	D411N	91	D627N
14	D072N	40	D244N	66	D412N	92	D631N
15	D073N	41	D245N	67	D413N	93	D632N
16	D074N	42	D246N	68	D423N	94	D654N
17	D114N	43	D247N	69	D431N	95	D662N
18	D115N	44	D252N	70	D432N	96	D664N
19	D116N	45	D255N	71	D445N	97	D703N
20	D122N	46	D261N	72	D446N	98	D712N
21	D125N	47	D263N	73	D452N	99	D723N
22	D131N	48	D265N	74	D454N	100	D731N
23	D132N	49	D266N	75	D455N	101	D732N
24	D134N	50	D271N	76	D462N	102	D734N
25	D143N	51	D274N	77	D464N	103	D743N
26	D145N	52	D306N	78	D465N	104	D754N

Troubleshooting

Your CB radio set does not transmit at all or transmission power is poor:

With the push-to-talk button activated, TX should be lit and your radio set should start transmission. By releasing the button once again, the indicator should go out and your radio set should again switch over to reception mode.

Check the standing wave ratio of your antenna as well as the cable with regard to possible interruptions or loose contacts!

Your radio set does not receive any response to your transmission or reception is poor:

Correctly adjust the **SQ** control!

Adjust the **VOL** control to an appropriate playback volume.

Check the standing wave ratio of your antenna as well as the cable with regard to possible interruptions or loose contacts!

Make sure that you are using the same modulation mode (AM or FM) as your contact partner!

The displays do not light up:

Check whether your power supply unit is switched on.

Check the connections for proper wiring: plus pole (= RED) and negative pole (= BLACK)! Exchange the connections if they are mixed up.

Tips on radio communication

After switching on the radio set, always listen first whether the set channel is free (To do so, deactivate the squelch function such that you are also able to hear weaker radio stations.)! Start your own call only if the channel is absolutely free.

Transmit nothing but short calls! After each call carefully listen to a station possibly answering your call. Repeat your call only after having carefully listened.

After each transmission of your contact partner wait for several seconds before answering in order to give further radio stations the chance to participate in the radio communication (“change-over delay”).

International phonetic alphabet

When the radio contact is weak or intense interferences occur, it is quite often difficult to understand everything perfectly, as e.g. proper names or geographical names.

In this case, you can fall back on the international alphabet which is also applied in air traffic (ICAO) and NATO communications:

A Alpha	F Foxtrott	K Kilo	P Papa	U Uniform	Z Zulu
B Bravo	G Golf	L Lima	Q Quebec	V Victor	
C Charlie	H Hotel	M Mike	R Romeo	W Whiskey	
D Delta	I India	N November	S Sierra	X X-ray	
E Echo	J Juliett	O Oscar	T Tango	Y Yankee	

Evaluating the reception quality

For informing the respective contact partner clearly on the strength and quality of reception, the numbers of the R/S code are used. The R-value is used for comprehensibility (readability) and the S-value (signal strength) for signal strength and/or volume of the contact partner.

R = readability

1 not readable, incomprehensible
2 temporarily or partially readable
3 difficult to read
4 readable, comprehensible
5 easy to read

S = signal strength

The S-value (= signal strength) can be read on the S-meter.

CB Language

Typically a special slang is used in CB radio. Some special terms originate, for instance, from amateur radio or the professional radio communication, other expressions stand for periphrases or abbreviations:

Advertising	Flashing lights of police car
Back off	Slow down
Basement	Channel 1
Base station	A CB set in fixed location
Bear	Policeman
Bear bite	Speeding fine
Bear cage	Police station
Big slab	Motorway
Big 10-4	Absolutely
Bleeding	Signal from an adjacent channel interfering with the transmission
Blocking the channel	Pressing the PTT switch without talking
Blue boys	Police
Break	Used to ask permission to join a conversation
Breaker	A CBer wishing to join a channel
Clean and green	Clear of police
Cleaner channel	Channel with less interference
Coming in loud and proud	Good reception
Doughnut	Tyre
Down and gone	Turning CB off
Down one	Go to a lower channel
Do you copy?	Understand?
DX	Long distance
Eighty eights	Love and kisses
Eye ball	CBers meeting together
Good buddy	Fellow CBer
Hammer	Accelerator
Handle	CBer's nickname
Harvey wall banger	Dangerous driver
How am I hitting you?	How are you receiving me?
Keying the mike	Pressing the PTT switch without talking
Kojac with a kodak	Police radar
Land line	Telephone
Lunch box	CB set
Man with a gun	Police radar
Mayday	SOS
Meat wagon	Ambulance

Midnight shopper	Thief
Modulation	Conversation
Negative copy	No reply
Over your shoulder	Right behind you
Part your hair	Behave yourself - police ahead
Pull your hammer back	Slow down
Rat race	Congested traffic
Rubberbander	New CBer
Sail boat fuel	Wind
Smokey dozing	Parked police car
Smokey with a camera	Police radar
Spaghetti bowl	Interchange
Stinger	Antenna
Turkey	Dumb CBer
Up one	Go up one channel
Wall to wall	All over/everywhere
What am I putting to you?	Please give me an S-meter reading

Q groups

Quite often, abbreviations from the internationally binding Q code are used which is also applied in naval or amateur radio. Thanks to these three-letter acronyms, information can be submitted very fast:

QRA:	The name of my vessel (or station) is ...
QRG:	Your exact frequency (or that of ...) is ... kHz (or MHz).
QRL:	I am busy (or I am busy with ...). Please do not interfere.
QRM:	Your transmission is being interfered with ... *or* I am being interfered with
QRN:	I am troubled by static
QRP:	Decrease transmitter power
QRT:	Stop sending
QRU:	I have nothing for you
QRV:	I am ready
QRX:	I will call you again at ... hours (on ... kHz (or MHz))
QRZ:	You are being called by ... (on ... kHz (or MHz))
QSB:	Your signals are fading
QSL:	I am acknowledging receipt
QSO:	can communicate with ... direct (or by relay through ...)
QSP:	I will relay to ... free of charge
QST:	General call to all stations
QSY:	Change to transmission on another frequency (or on ... kHz (or MHz))
QTH:	My position is ... latitude, ... longitude (or according to any other indication)

SPECIFICATIONS

GENERAL		
Modulation Mode		AM/FM
Frequency Range		AM : 26.965-27.405MHz FM : 26.565-27.405MHz
Frequency Tolerance		±5.0ppm
Input Voltage		12 V
Dimensions(in mm)		124(W) x 163(D) x 39(H)
Weight		Approx.670g
Ferquency Control		PLL Synthesizer
Operating Temperature Range		-20° C TO + 55° C
Current Drain	Transmit	2A MAX
	Receive	Squelched 0.3A
	VOL Max	0.8A
Antenna Connector		UHF,SO-239
TRANSMITTER		
Power Output		4 WattsFM/AM
Transmission interference		inferior to 4nW(-54dBm)
Frequency Response		300-3000Hz
Modulated signal distortion		inferior to 5%
Output Impedance		50 ohms
RECEIVER		
Sensitivity		Less than 1uV for 10dB(S+N)/N
Image Rejection		70dB
Adjacent Channel Rejection		60dB
IF Frequencies		1st 10.695MHz
		2nd 455KHz
Automatic Gain Control(AGC)		Less than 10dB change in audio
		Output for inputs from 10 to 50000uV
Squelch		less than 1uV
Audio Output Power		3 watts into 8 ohms
Frequency Response		300-3000Hz

RESTRICTIONS

PAYS	CB	RESTRICTIONS	REGLAGE		
GERMANY	YES	80 ch – 4W FM – free use		D	
		40 ch – 4 W AM - free use			EU
		40 ch – 4 W FM – free use	EC		
UK	YES	Cept 40 ch – 4 W FM + ENG 40 ch – 4 W FM – individual license required 40 ch 4 W AM-FM	EC UK		EU
AUSTRIA	YES	40 ch – 4 W FM AM : Not authorized	EC		
BELGIUM	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
BULGARIA	YES	40 ch – 4 W FM - free use	EC		
CYPRUS	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
CROATIA	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
DANEMARK	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
SPAIN	YES	40 ch – 4 W FM – individual license required	E	EC	EU
		40 ch – 4 W AM – individual license required			
		12 W pep BLU/SSB			
ESTONIA	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
FINLAND	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
FRANCE	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM – free use			
GREECE	YES	40 ch – 4 W FM - individual license required	EU	E	EC
		40 ch – 4 W AM - individual license required			
HUNGARY	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
IRELAND	YES	40 ch – 4 W FM – free use AM : Not authorized	EC		
ISLAND	YES	40 ch – 4 W FM - free use	EC	EU	
		40 ch – 4 W AM - free use			
ITALY	YES	40 ch – 4 W FM – general autorisation required	E	EC	EU
		40 ch – 4 W AM - general autorisation required			
		12 W pep BLU/SSB			
LATVIA	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
LITHUANIA	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
LUXEMBOURG	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		

MALTA	YES	40 ch – 4 W FM - individual license required AM : Not authorized	EC		
NORWAY	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
NETHERLAND	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
POLAND	YES	40 ch – 4 W FM - free use		EC	
		40 ch – 4 W AM/FM - free use	PL		
		12 W pep BLU/SSB			
PORTUGAL	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
CZECH	YES	80 ch – 4 W FM - free use AM : Not authorized	EC		
ROMANIA	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
SLOVAKIA	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
SLOVENIA	YES	40 ch – 4 W FM - free use AM : Not authorized	EC		
SWEDEN	YES	40 ch – 4 W FM - free use	EU	EC	
		40 ch – 4 W AM - free use			
SWITZERLAND	YES	40 ch – 4 W FM – free use	EU	EC	
		40 ch – 4 W AM - free use			
LIECHTENSTEIN	YES	40 ch – 4 W FM - individual license required AM : individual license required	EC		

FREQUENCIES TABLE								
Band ID	EU	CE	UK	PL	IN	I2	DE	
COUNTRY	EUROPE	CEPT	UK	POLAND	INDIA	ITALY	GERMANY	
POWER	AM : 4W	/	/	AM : 4W	AM : 4W	AM : 4W	AM : 4W	
	FM : 4W	FM : 4W	FM : 4W	FM : 4W	FM : 4W	FM : 4W	FM : 4W	FM : 4W
CHANNELS	1-40	1-40	1-40	1-40	1-40	1-36	1-40	41-80
CH 1	26.965	26.965	27.6013	26.960	26.965	26.965	26.965	26.565
CH 2	26.975	26.975	27.6113	26.970	26.975	26.975	26.975	26.575
CH 3	26.985	26.985	27.6213	26.980	26.985	26.985	26.985	26.585
CH 4	27.005	27.005	27.6313	27.000	27.005	27.005	27.005	26.595
CH 5	27.015	27.015	27.6413	27.010	27.015	27.015	27.015	26.605
CH 6	27.025	27.025	27.6513	27.020	27.025	27.025	27.025	26.615
CH 7	27.035	27.035	27.6613	27.030	27.035	27.035	27.035	26.625
CH 8	27.035	27.035	27.6713	27.050	27.035	27.055	27.035	26.635
CH 9	27.065	27.065	27.6813	27.060	27.065	27.065	27.065	26.645
CH 10	27.075	27.075	27.6913	27.070	27.075	27.075	27.075	26.655
CH 11	27.085	27.085	27.7013	27.080	27.085	27.085	27.085	26.665
CH 12	27.105	27.105	27.7113	27.100	27.105	27.105	27.105	26.675
CH 13	27.115	27.115	27.7213	27.110	27.115	27.115	27.115	26.685
CH 14	27.125	27.125	27.7313	27.120	27.125	27.125	27.125	26.695
CH 15	27.135	27.135	27.7413	27.130	27.135	27.135	27.135	26.705
CH 16	27.155	27.155	27.7513	27.150	27.155	27.155	27.155	26.715
CH 17	27.165	27.165	27.7613	27.160	27.165	27.165	27.165	26.725
CH 18	27.175	27.175	27.7713	27.170	27.175	27.175	27.175	26.735
CH 19	27.185	27.185	27.7813	27.180	27.185	27.185	27.185	26.745
CH 20	27.205	27.205	27.7913	27.200	27.205	27.205	27.205	26.755
CH 21	27.215	27.215	27.8013	27.210	27.215	27.215	27.215	26.765
CH 22	27.225	27.225	27.8113	27.220	27.225	27.225	27.225	26.775
CH 23	27.255	27.255	27.8213	27.250	27.255	27.255	27.255	26.785
CH 24	27.235	27.235	27.8313	27.230	27.235	27.245	27.235	26.795
CH 25	27.245	27.245	27.8413	27.240	27.245	27.265	27.245	26.805
CH 26	27.265	27.265	27.8513	27.260	27.265	26.875	27.265	26.815
CH 27	27.275	27.275	27.8613	27.270	27.275	26.885	27.275	26.825
CH 28	27.285	27.285	27.8713	27.280		26.895	27.285	26.835
CH 29	27.295	27.295	27.8813	27.290		26.905	27.295	26.845
CH 30	27.305	27.305	27.8913	27.300		26.915	27.305	26.855
CH 31	27.315	27.315	27.9013	27.310		26.925	27.315	26.865
CH 32	27.325	27.325	27.9113	27.320		26.935	27.325	26.875
CH 33	27.335	27.335	27.9213	27.330		26.945	27.335	26.885
CH 34	27.345	27.345	27.9313	27.340		26.955	27.345	26.895
CH 35	27.355	27.355	27.9413	27.350		26.855	27.355	26.905
CH 36	27.365	27.365	27.9513	27.360		26.865	27.365	26.915
CH 37	27.375	27.375	27.9613	27.370			27.375	26.925
CH 38	27.385	27.385	27.9713	27.380			27.385	26.935
CH 39	27.395	27.395	27.9813	27.390			27.395	26.945
CH 40	27.405	27.405	27.9913	27.400			27.405	26.955

DECLARATION OF CONFORMITY

CE

We hereby declare under our responsability that the product :

Marque : CRT
Model : 2000
Descripion: Mobile CB RADIO
Satisfies all the technical regulations applicable to the product within the scope of directive RED 2014/53/EU and european standarts

EN 60950-1 :2006+A11 :2009+A1 :2010+A12 :2011+A2 : 2013

EN 301 489-1 V2.2.0

EN 301 489-13 V1.2.1

EN 300 433 V2.1.1

EMF: EN 62311 :2008

The was approved in the CEPT countries and those non CEPT countries that implement the CEPT regulation TR 61/01

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Mr CELESTRANO PHILIPPE
MANAGER
LE 15/03/2018

RoHS
ISO9001
ISO14001

CONDITIONS OF GUARANTEE

This transceiver **CRT SUPERSTAR** is guaranteed on 2 years.
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 antenna (tos excessive), inversion of polarité, 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 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.

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