



CRT[®] MIKE

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



OWNER'S MANUAL



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English owner's manual Copyright CRT France 2014



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 area to be recycling



DC using



Keep dry



Shield symbol



CE conformity symbol



Alert symbol indicating an incomplete harmonization of the frequency band which will result in restrictions on the use of the equipment concerned.



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 R&TTE 1999/5/CE documents n° EN 301 489-13 / 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 $+60^{\circ}\text{C}$, 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 10A 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



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FUNCTIONS AND CHARACTERS

- Full Aluminum body offer best heat radiation
- Remote control microphone with Wide angle Dot matrix LCD
- Multiple norms: EU, EUH, CE, UK, PL, E1, I2, DE, DEH
- 3 color display: Blue, Purple, Orange
- Dual watch
- Full channel scan
- EMG Channel CH9/19
- SQ and ASQ Control
- 4 Memory channels for each Norm
- SQ, VOL, voltage level display
- Field strength display
- Automatic Power on/Manual Power on
- Time Out Timer
- Keypad lock
- Channel and Frequency mode
- Optional earphone for Microphone
- Optional remote PTT control cable

■ STANDARD ACCESSORIES



Screws for bracket



Pads for bracket



Adjusting knobs



Fuse (2A, 250V)



Pads



Hanger



Self-tapping screws

■ OPTIONAL ACCESSORIES



Remote PTT Control Cable
EK01

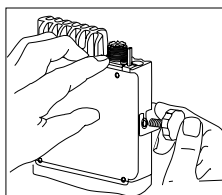
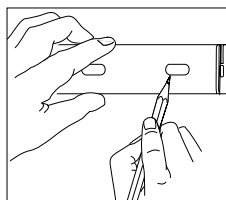


Earphone
HS03

■ INSTALLATION

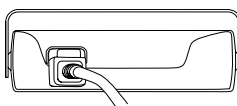
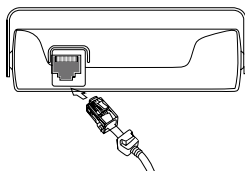
Choose a idea location to install the radio.

1. Mark the location for screws by intall racket.
2. Fix the bracket by screws.
3. Fix radio base into install bracket and lock by adjusting knobs.



✦ Microphone connection

1. Plug microphone connector into jack.
2. Pull on the dustproof cover for microphone connector.

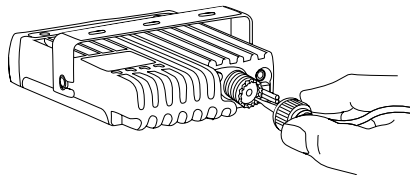




❖ Antenna connection

Note: Never press PTT before install the antenna, it might burn the transistor.

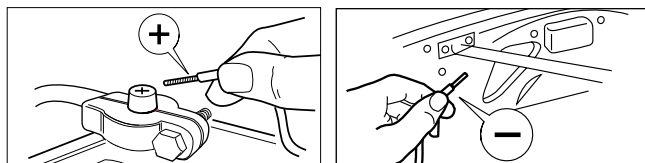
1. Screw on the antenna into antenna jack.
 2. To make full use of this radio, it is necessary to locate the antenna in a well grounded place, and well adjust the SWR.
- * Please enquiry the local dealer for choosing and intallation of suitable antenna.



❖ Power connection

This radio adopt 13.2V power supply.

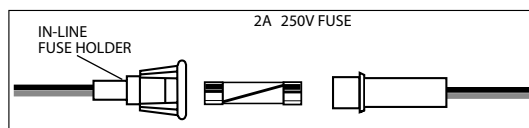
Connect the red wire to the positive terminal of the battery, and the black wire to the negative terminal of the battery.



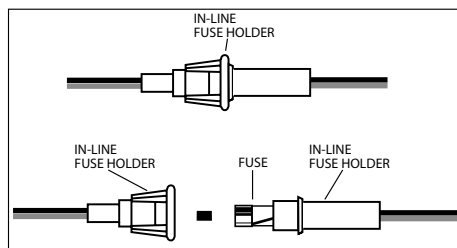
❖ Fuse replacement

This radio adopt 2A, 250V fuse

1. Open the fuse holder

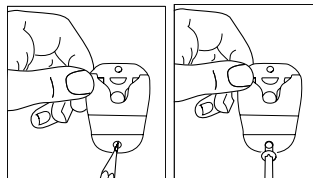


2. Replace the fuse and screw on the holder.



❖ Install Microphone hanger

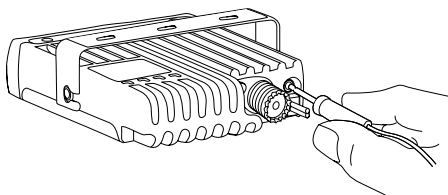
1. Choose idea location and mark for screw point.
2. Fix the hanger by the screws in accessory list.



❖ Install external speaker

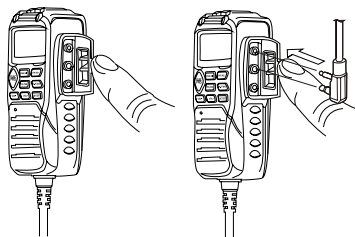
This radio adopt 4-8 ohm, 4W external speaker.

1. Install the external speaker in idea location.
2. Plug in the seaker connector into jack.



❖ Install earphone

1. Open the jack cover
2. Plug in the earphone into MIC/SP jack

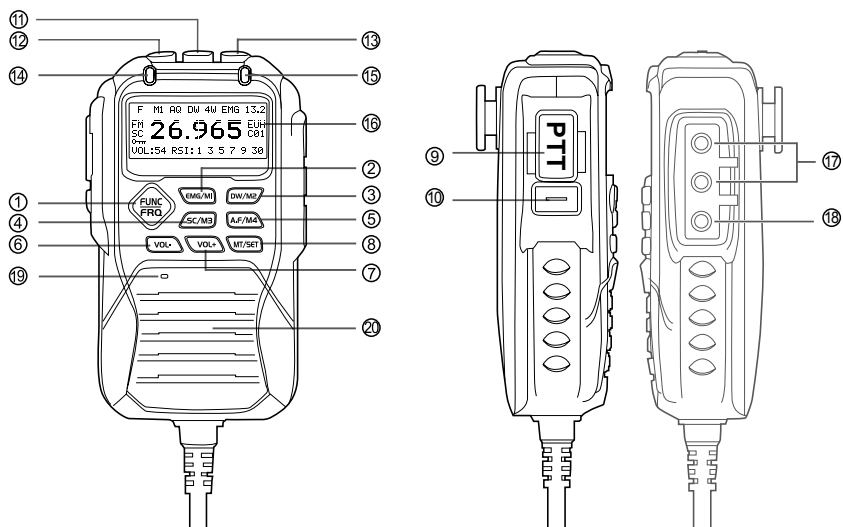


❖ Install Remote PTT cable

1. Open the jack cover
2. Plug in the Remote PTT cable into PTT jack



■ KNOW ABOUT THIS RADIO



1	FUNC/FRQ	Function menu / frequency mode
2	EMG/M1	EMG CH9 and CH19, or program with second function
3	DW/M2	Dual watch, or program with second function
4	SC/M3	Channel scan, or program with second function
5	AF/M4	AM/FM selection, or program with second function
6	VOL-, Squelch level -	Decrease volume or Squelch level
7	VOL+, Squelch level +	Increase volume or Squelch level
8	MT/SET	Mute, Menu, Lock key
9	PTT	Transmitting
10	SQ, ASQ	SQ/ASQ switch
11	POW	Power key
12	UP	Channel UP
13	DN	Channel down
14	TX indicator	
15	RX indicator	
16	LCD	
17	Ext MIC/SP jack	
18	Ext remote PTT cable jack	
19	Mike	
20	Speaker	

■ HOW TO USE THIS RADIO

✘ Power on radio

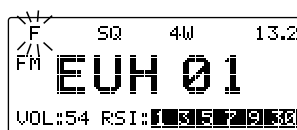
1. Press **POW** key to turn on the radio.

Note: When the radio is on, hold **POW** key until nothing appears on LCD and release **POW** key, the radio will power off.

2. Adjust squelch level until you can hear background noise, refer to Page 7 about Squelch level setup.
3. Adjust volume level to wanted level, refer to Page 7 about Volume level setup.

✘ Automatic Power on

1. Short Press **F** key, F Icon appear and flashes.
2. Short Press **MT/SET** key to enter Menu.
3. Repeatedly short press **F** key until LCD displays **POR: XXX**
4. Press **UP** or **DN** to choose POR: ON.
5. Short press any other key to confirm and exit.

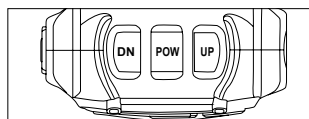


POR: ON

Repeat the above operation will turn off Automatic power on.

✘ Channel control

1. Short Press **UP** or **DN** key to choose Channel.
2. Hold **UP** or **DN** key to choose channel fastly.



Note: Before using, check if the working frequency and Norms are valid in your country. If not, change the norms according to following instruction. The radio is defaulted set on EUH (AM/FM 4W). The norms list see page 12.

✘ Choose Norms

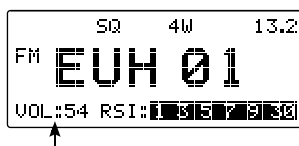
1. Short Press **F** key, F Icon appear and flashes.
2. Short Press **MT/SET** key to enter Menu.
3. Repeatedly short press **F** key until LCD displays **BAND: XXX**
4. Press **UP** or **DN** to choose the norms
5. Short press any other key to confirm and exit.

BAND: EUH



❖ Volume control (1-56 levels, Default level 54)

1. Press SQ/VOL key repeatedly, until LCD display **VOL: XX**
XX stands for volume level.
2. Short Press or key to choose wanted volume level.
3. Hold can fast increase volume level,
Hold can fast decrease volume level.



❖ Mute Function

1. Short press will fastly mute the speaker, and LCD displays **VOL:MT**
2. Press again, the volume will resume to previous volume level setting.



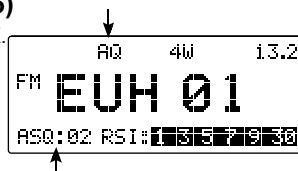
❖ Squelch control (1-28 Levels, Default Level 3)

1. Choose a channel which is not busy.
2. Short Press SQ/VOL key repeatedly until LCD displays **SQ: XX**
XX stands for Squelch level.
3. Short press or key to choose desired squelch level.
4. Hold or can fastly adjust squelch level.
5. Short press key until the noise just appears, then short press until the noise just disappear the squelch level setup is done.
The deeper squelch level selected, the stronger signal required to open the speaker and hear the calling.



❖ ASQ control (1-9 Levels, Default Level 5)

1. Hold SQ/VOL key until the LCD displays ASQ:XX.
XX stands for the automatic squelch level.
2. Short press or key to choose desired automatic squelch level.
3. Hold or can fastly adjust squelch level.
4. Repeat above operation to switch between ASQ and SQ level control, in ASQ mode ,
SQ level control will disappear and displays ASQ.

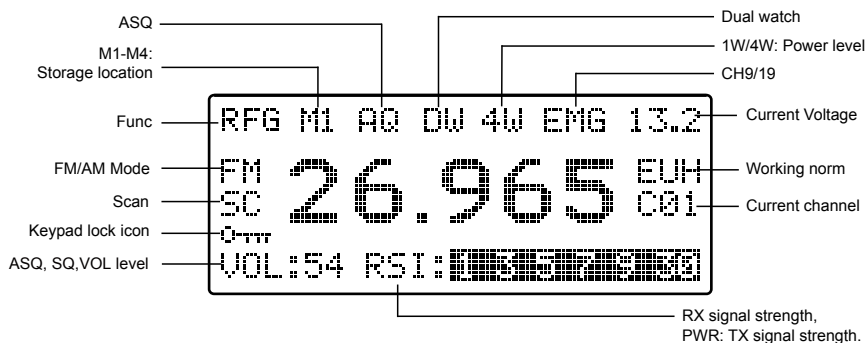


The deeper squelch level selected, the stronger signal required to open the speaker and hear the calling.



✕ LCD display

Dot matrix LCD display for channel number, frequency and operations.



2 Digits for display of channel number and Norms

5 Digits for display of frequency and Norms

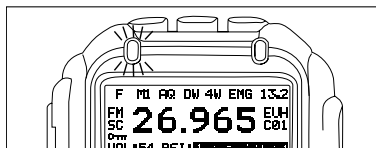
✕ AM/FM mode

1. Short press key to switch between AM/FM mode.
2. Corresponding mode will display in the LCD.



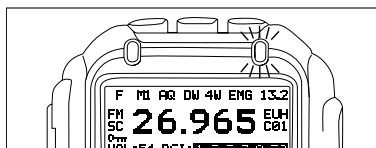
✕ Transmitting

1. Hold [PTT] key, TX LED indicator light on.
2. Hold the microphone about 2cm away from your mouth and speaker in a normal tone.
3. Release [PTT] the radio turn to RX mode TX LED indicator light off.



✕ Receiving

The radio will keep in TX mode when it is not transmitting, the RX LED indicator will light on.





⌘ Time Out Timer

1. Short Press  key, F Icon appear and flashes.
2. Short Press  key to enter Menu.
3. Repeatedly short press  key until LCD displays **TOT: XXXX**
4. Press  or  to adjust the TOT time.
5. Short press any other key to confirm and exit.

TOT:3005

⌘ LCD color

1. Short Press  key, F Icon appear and flashes.
2. Short Press  key to enter Menu.
3. Repeatedly short press  key until LCD displays **COL: X**
4. Press  or  to choose the color.
5. Short press any other key to confirm and exit.

COL:1

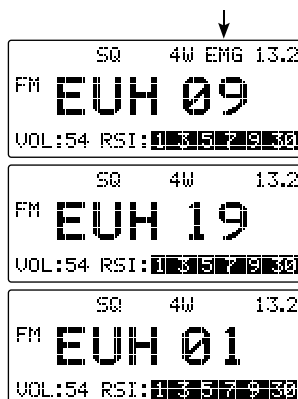
⌘ Beep Prompt

1. Short Press  key, F Icon appear and flashes.
2. Short Press  key to enter Menu.
3. Repeatedly press  key until LCD displays **BEEP: XX**
4. Press  or  to choose ON or OFF.
5. Short press any other key to confirm and exit.

BEEP:ON

⌘ EMG channel

1. First short press  will choose CH9, the LCD displays EMG Icon.
2. Second short press of  will choose CH19.
3. Third short press of  will resume to last none EMG channel.



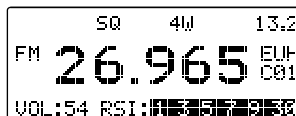
✘ Keypad lock

1. To avoid wrong operation of keys, you can hold key to lock the keypad.
2. The LCD displays .
3. Repeat the above function to unlock the keypad.



✘ Frequency mode

1. Hold for over 5 seconds, the display will change to frequency mode.
2. Repeat hold for over 5 seconds, the display will change to channel mode.



✘ Scan

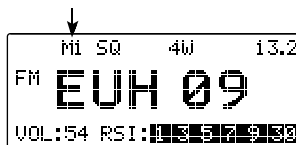
1. Set SQ or ASQ firstly.
2. Short press key to start scanning the LCD displays **SC**.
3. Press any key to stop scan, SC disappear.



✘ Memory channel

In each norm, you can store 4 channels into M1, M2, M3, M4 for fast choose.

1. Choose the channel to be stored
2. Hold the memory key (M1, M2, M3, M4) to store it.
3. The corresponding memory channel will show on LCD, the storage is done.

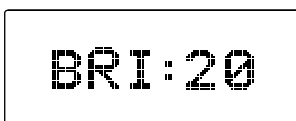


✘ Using Memory Channel

1. Short press key MEM appears in LCD and flashes.
2. Short press the memory key (M1, M2, M3, M4)
3. MEM disappears, the memory channel you chose will display in LCD.

✘ LCD Brightness

1. Short press key, F Icon appear and flashes.
2. Short Press key to enter Menu.
3. Repeatedly short press key until LCD displays **BRI: XX**
4. Press **UP** or **DN** to choose brightness level.
5. Short press any other key to confirm and exit.





✖ DW channels

2 channels need be pre-stored for dual watch function.

1. Short Press key, F Icon appear and flashes.
2. Short Press key to enter Menu.
3. Repeatedly short press key until LCD displays **DW0: XX**
4. Press or to choose first DW channel
5. Repeatedly short press key until LCD displays **DW1: XX**
6. Press or to choose second DW channel.
7. Short press any other key to confirm and exit.

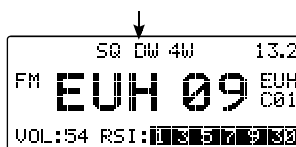


DW0:09

DW1:19

✖ Using DW function

1. Short press key, the DW flashes in LCD, the radio enter Dual watch mode.



✖ NB/ANL function

1. Short press key, F Icon appear and flashes.
2. Short Press key to enter Menu.
3. Repeatedly short press key until LCD displays **NBAN: XX**
4. Press or to choose ON or OF
5. Short press any other key to confirm and exit.

NBAN:ON

✖ RF Gain control

1. Short press key, F Icon appear and flashes.
2. Short Press key to enter Menu.
3. Repeatedly short press key until LCD displays **RFG: XX**
4. Press or to choose RF gain level.
5. Short press any other key to confirm and exit.

RFG:OFF

When RFG is on, the LCD displays RFG, and if choose 6, the signal will attenuate 6dBm.

✖ Factory reset

1. Hold to Power off radio.
2. Hold key, then press key and release key until LCD displays **RE S**.
3. Release key, the radio recover to factory default and automatical power off.

RE S

■ Norms and Frequency

Band ID	EU	EUH	CE	UK	PL	IN	I2	DE	DEH
Country	Europe	Europe	CEPT	UK	Poland	India	Italy	Germany	Germany
Power	AM=1W	AM=4W	/	/	AM=4W	AM=4W	AM=4W	AM=1W	AM=4W
	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W
CH-01	26.965	26.965	26.965	27.60125	26.960	26.965	26.965	26.965	26.565
CH-02	26.975	26.975	26.975	27.61125	26.970	26.975	26.975	26.975	26.575
CH-03	26.985	26.985	26.985	27.62125	26.980	26.985	26.985	26.985	26.585
CH-04	27.005	27.005	27.005	27.63125	27.000	27.005	27.005	27.005	26.595
CH-05	27.015	27.015	27.015	27.64125	27.010	27.015	27.015	27.015	26.605
CH-06	27.025	27.025	27.025	27.65125	27.020	27.025	27.025	27.025	26.615
CH-07	27.035	27.035	27.035	27.66125	27.030	27.035	27.035	27.035	26.625
CH-08	27.055	27.055	27.055	27.67125	27.050	27.055	27.055	27.055	26.635
CH-09	27.065	27.065	27.065	27.68125	27.060	27.065	27.065	27.065	26.645
CH-10	27.075	27.075	27.075	27.69125	27.070	27.075	27.075	27.075	26.655
CH-11	27.085	27.085	27.085	27.70125	27.080	27.085	27.085	27.085	26.665
CH-12	27.105	27.105	27.105	27.71125	27.100	27.105	27.105	27.105	26.675
CH-13	27.115	27.115	27.115	27.72125	27.110	27.115	27.115	27.115	26.685
CH-14	27.125	27.125	27.125	27.73125	27.120	27.125	27.125	27.125	26.695
CH-15	27.135	27.135	27.135	27.74125	27.130	27.135	27.135	27.135	26.705
CH-16	27.155	27.155	27.155	27.75125	27.150	27.155	27.155	27.155	26.715
CH-17	27.165	27.165	27.165	27.76125	27.160	27.165	27.165	27.165	26.725
CH-18	27.175	27.175	27.175	27.77125	27.170	27.175	27.175	27.175	26.735
CH-19	27.185	27.185	27.185	27.78125	27.180	27.185	27.185	27.185	26.745
CH-20	27.205	27.205	27.205	27.79125	27.200	27.205	27.205	27.205	26.755
CH-21	27.215	27.215	27.215	27.80125	27.210	27.215	27.215	27.215	26.765
CH-22	27.225	27.225	27.225	27.81125	27.220	27.225	27.225	27.225	26.775
CH-23	27.255	27.255	27.255	27.82125	27.250	27.255	27.255	27.255	26.785
CH-24	27.235	27.235	27.235	27.83125	27.230	27.235	27.245	27.235	26.795
CH-25	27.245	27.245	27.245	27.84125	27.240	27.245	27.265	27.245	26.805
CH-26	27.265	27.265	27.265	27.85125	27.260	27.265	26.875	27.265	26.815
CH-27	27.275	27.275	27.275	27.86125	27.270	27.275	26.885	27.275	26.825
CH-28	27.285	27.285	27.285	27.87125	27.280		26.895	27.285	26.835
CH-29	27.295	27.295	27.295	27.88125	27.290		26.905	27.295	26.845
CH-30	27.305	27.305	27.305	27.89125	27.300		26.915	27.305	26.855
CH-31	27.315	27.315	27.315	27.90125	27.310		26.925	27.315	26.865
CH-32	27.325	27.325	27.325	27.91125	27.320		26.935	27.325	26.875
CH-33	27.335	27.335	27.335	27.92125	27.330		26.945	27.335	26.885
CH-34	27.345	27.345	27.345	27.93125	27.340		26.955	27.345	26.895
CH-35	27.355	27.355	27.355	27.94125	27.350		26.855	27.355	26.905
CH-36	27.365	27.365	27.365	27.95125	27.360		26.865	27.365	26.915
CH-37	27.375	27.375	27.375	27.96125	27.370			27.375	26.925
CH-38	27.385	27.385	27.385	27.97125	27.380			27.385	26.935
CH-39	27.395	27.395	27.395	27.98125	27.390			27.395	26.945
CH-40	27.405	27.405	27.405	27.99125	27.400			27.405	26.955



■ Specification

GENERAL		
Modulation Mode		AM/FM
Frequency Range		26.965-27.405Mhz
Frequency Tolerance		±5.0ppm
Input Voltage		13.2V
Dimensions(in mm)		112mm(L) x 143mm(W) X 30mm (H)
Weight		785g
Ferquency Control		PLL Synthesizer
Operating Temperature Range		-20° C TO + 55° C
Current Drain	Transmit	1.4A MAX
	Receive	Squelched 0.4A
	VOL Max	1.3A
Antenna Connector		UHF,SO-239
TRANSMITTER		
Power Output		4 WattsFM 1/4Watt 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		60 dB
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		2Watts
Frequency Response		300-3000Hz



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 antenna (too 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 return.



SUPERSTAR[®]

Bon de Garantie à conserver

**Sans le Cachet du Distributeur,
la garantie sera nulle.**

Nom : Prénom :

Adresse :

..... Tél. :

Date d'achat :

Type :

Série N°

APPAREIL GARANTI 2 ANS PIECES ET MAIN D'ŒUVRE

Cachet du Distributeur

POUR LA VALIDITE DE VOTRE GARANTIE

Bon de Garantie à découper et à retourner sous enveloppe

*dans un délai maximum de 15
jours après la date d'achat
à l'adresse suivante :*

C.R.T. SUPERSTAR
DÉPARTEMENT GARANTIE
ROUTE DE PAGNY
21250 SEURRE
FRANCE

Nom : Prénom :

Adresse :

..... Tél. :

Date d'achat :

Type :

Série N°

APPAREIL GARANTI 2 ANS PIECES ET MAIN D'ŒUVRE

Cachet du Distributeur

Sans le Cachet du Distributeur, la garantie sera nulle.



SUPERSTAR

SARL au capital de 762 500 €

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