MTech

LEGEND IV

Mobile CB Radio

Owner's Manual

RoHS Compliant

CE 0890

Automatic Squelch

Noise Blanker Circuit

Table of Contents

Introduction

Welcome to the world of Citizens Band radio communications. Your radio is an advanced mobile radio designed for use in the Citizens Band (CB) Radio Service. It will operate on any of the 40 AM/FM frequencies. Your Radio features a super heterodyne circuit with PHASE LOCKED LOOP techniques to assure precise frequency control.

This document is the operating guide for the CB Transceiver LEGEND IV.

Included in your package

If any of these items are missing or damaged, immediately contact your place of purchase.

LEGEND IV CB radio   *Microphone and hook*   *Cable*

Mounting bracket, mic hanger, knobs, and mounting hardware

NOTES!   You must use a CB antenna (sold separately) with this radio.

Features

Function

- LCD Display
- AM/FM Mode select
- Memory (Memory Channel)
- Emergency CH9 / CH19 Mode
- All Channel Scan
- Memory Channel Scan
- Roger Beep
- Key Beep
- Key Lock
- TOT (Trasmit Time Out Timer)
- S / RF Meter indicator
- Volume Control
- Squelch Control (Auto (ASQ)/ Manual)
- RF GAIN LOCAL / DX Control
- NB (Noise Blanker)
- HI-CUT Function
- VOX (Voice Operated Transmission)
  VOX Adjust Mode - MIC Sensitivity LeveL Control (1 - 9 steps) /
  Anti VOX Level Control (OFF, 1 - 9 steps) /
  VOX Delay Time Control (1 - 9 steps)
- EC / EN mode select [For UK Configuration]

Detail of the multi configuration

Configuration	FM Channel	AM Channel	Country And Region
EU	40 CH (4W)	40 CH (1W)	BE, BG, CH, CY, EE, ES, FI, FR, GR, IE, IS, IT, NL, PT, RO, SE
PL	-5KHz 40 CH (4W)	-5KHz 40 CH (4W)	PL
D	80 CH (4W)	40 CH (4W)	DE
EC	40 CH (4W)	-	AT, CZ, DK, HU, LU, LT, LV, MT, NO, SI, SK
UK	EC 40 CH (4W) + EN 40 CH (4W)	-	UK

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Controls and Rear Panel

Controls

These drawings are just for reference, and do not reflect the final product.
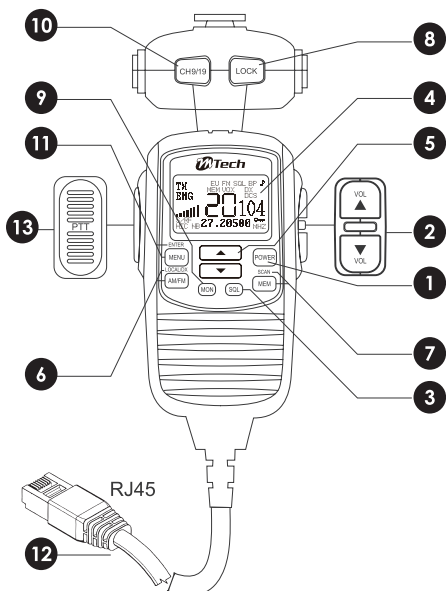
1. Power
2. Volume ▲ ▼
3. Squelch
4. Display
5. Channel selector ▲ ▼
6. AM/FM and LO/DX
7. MEM and SCAN
8. LOCK
9. MON
10. CH 9 / 19
11. MENU and ENTER
12. Microphone plug – RJ45
13. PTT – Push To Talk

A. Power supply
B. Antenna connector
C. Jack for external loud speaker

Installation

Where and how to mount your mobile CB radio

- You should choose the most appropriate setting from a simple and practical point of view.

- Your CB radio should not interfere with the driver or the passengers.

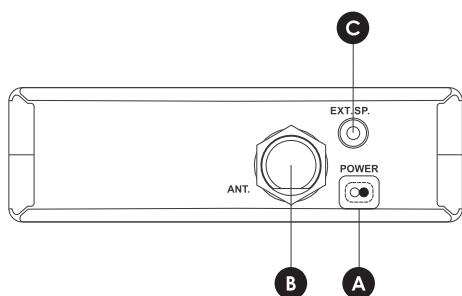- Remember to provide for the passing and protection of different wires (e.g, power ,antenna, accessory cabling) so that they do not interfere in any way with the driving of the vehicle.

- To install your equipment, use the cradle ① and the self-tapping screws ② provided (drilling diameter 3.2mm). Take care not to damage the vehicle's electrical system while drilling the dash board.

- Do not forget to insert the rubber joints ③ between the CB and it's support as these have a shock-absorbing effect which permits gentle orientation and tightening of the set.

- Choose where to place the microphone support and remember that the microphone cord must stretch to the driver without interfering with the controls of the vehicle.

A. Power supply (DC.12V)
B. Antinna connector (SO–239)
C. Jack for external loudspeaker (8Ω, ∅ 3.5mm)
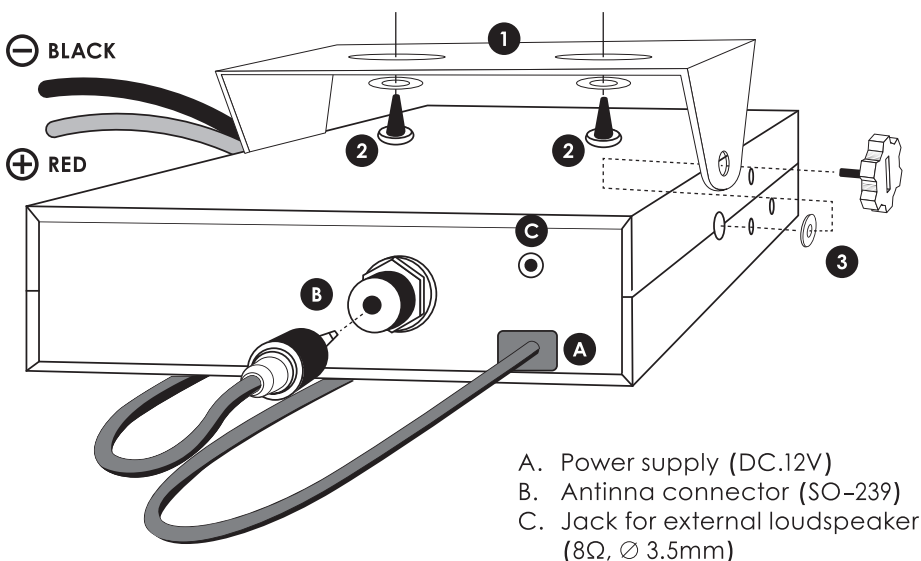
WARNING! DO NOT connect this equipment to a power supply if you are not absolutely certain of the grounding type!

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4.1 Antenna installation

a. Choosing your antenna

· For CB radios, the longer and matched antenna is the better results.

b. Mobile antenna

· Must be fixed to the vehicle where there is a maximum of metallic surface (ground plane), away from windscreen mountings.

· If you already have a radio–telephone antenna installed, the CB antenna should be higher than this.

· For an antenna which must be fixed by drilling, you will need a good contact between the antenna and the ground plane.

· To obtain this, you should lightly scratch the surface where the screw and tightening star are be placed.

· Connect the antenna Ⓑ .

c. Fixed antenna

· A fixed antenna should be installed in as clear space as possible, If it is fixed to a mast, it will perhaps be necessary to stay it ,according to the laws in force (you should seek professional advice).

Connecting An External Antenna

WARNING!	The antenna used for this radio must be installed at least 25 inches (63 cm) away from all persons. The antenna must not be collocated or used with any other antenna or transmitter.
CAUTION!	Never operate your radio with no antenna or with a damaged antenna cable. This can damage the radio.

You will need to purchase an antenna to operate the radio. There are two basic types of mobile CB antennas--full-length whips and loaded whips -- with a wide variety of mounts to suit different vehicle locations.

• Choose an antenna that matches the specifications of this radio.

• Follow the manufacturer's installation instructions carefully.

• Tune your antenna using a Standing–Wave Ratio (SWR) meter: set the radio to channel 20, and adjust the antenna until the SWR is as close as 1:1 as possible.

CAUTION!	Make sure the SWR is less than 2:1 before using the radio. An SWR higher than 2:1 can damage the transmitter.

Your dealer can help you select the antenna that is best for your needs. Cinsult the specifications in the back of this manual for detailed transmitter and antenna information.

4.2 Power installation

a. Choosing your antenna

Your LEGEND IV is protected against an inversion of polarities. Your equipment must be supplied with a continued current of DC.12V Ⓐ.

1. Check that the battery is of 12 volts.

2. Locate the positive and negative terminals of the battery ⊕ is red and ⊖ is black.

3. It is necessary to connect your CB to a permanent ⊕ and ⊖.

4. Connect the red wire ⊕ to the positive terminal of the battery and the black ⊖ wire to the negative terminal of the battery.

5. Connect the power cable to your CB radio.

WARNING!   Never replace the original fuse (3 Amp.) by one of a different value.

4.3 Basic operations to be carried out before using your set for the first time

* Without transmitting and without using the <push-to-talk> switch on the microphone

1. Connect this microphone.

2. Check the antenna connections.

3. Turn the set on by pushing and holding the power key.

4. Adjust the volume to a comfortable level.

5. Go to channel 20 using either the <UP><DN> key on the microphone.

4.4 Adjustment of SWR (Standing Wave Ratio)

WARNING!   This must be carried out when you use your CB radio for the first time (and whenever you re-position your antenna). The adjustment must be carried out in an obstacle-free area.

* Adjustment with an external SWR meter.

a.   To connect the SWR meter:

・ Connect the SWR meter between the CB radio and the antenna as close as possible to the CB

B.   To adjust the SWR meter:

・ Set the CB to channel 20 in FM.

・ The reading on the Meter should be as near as possible to 1. If this is not the case ,re-adjust your antenna to obtain a reading as close as possible to 1. (An SWR reading between 1 and 1.8 is acceptable).

・ It will be necessary to re-calibrate the SWR meter after each adjustment of the antenna.

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Operation

* Drawing is just for reference.
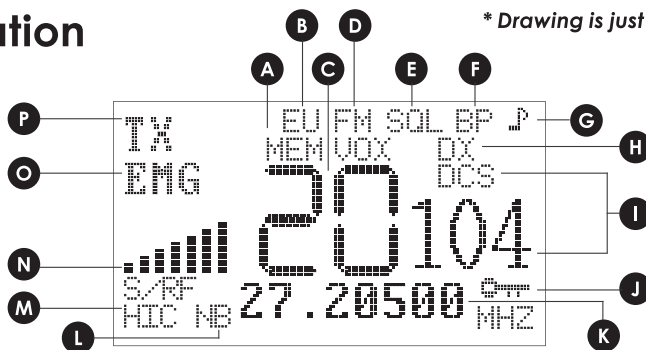
LCD Display Layout

A. Memory Channel
B. Configuration
C. Channel
D. Mode
E. ASQ/SQL
F. Key Beep

G. Roger Beep
H. R.F Gain
I. CTCSS/DCS code
J. Key Lock
K. Frequency
L. Noise Blanker

M. High Cut
N. Signal Bar/Power
O. Emergency Channel
P. TX/RX
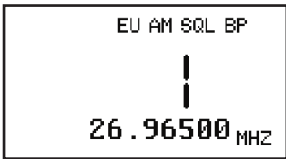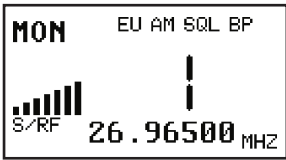
5.1 Power ON/OFF Control

Push and hold POWER key.
Power ON/OFF is switched alternately.
The LCD Display current status.
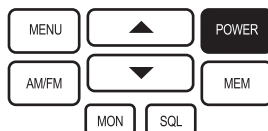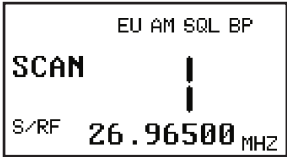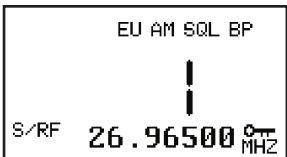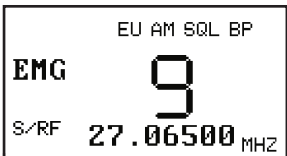
Element of LCD	Contents of the Indicator
	5.2 Volume Control Push VOL up/down key. Volume steps from 00 to 12.
 	5.3 ASQ (Automatic Squelch Control)/SQL Suppresses undesirable background noises when there is no communication. Squelch does not affect neither sound nor transmission power, but allows a considerable improvement in listening comfort. **a) ASQ: Automatic Squelch Control** Press and hold SQL key for 2 seconds. The LCD display you selected mode for a while. **b) SQL (Manual Squelch Level) Adjustment** Press SQL key into adjust the level mode. The squelch level can select from 00 to 12 by press up/down keys.

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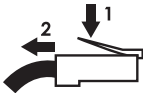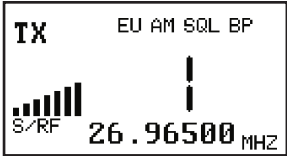
Drawing is just for reference.

Element of LCD	Contents of the Indicator
	5.4 S/RF Meter SRF meter indicate the receiving signal strength in RX mode. The SRF meter is used as RF power indicator in TX mode. SRF meter indicators are 7 steps from 1 (weak) to 7 (strong)
	5.5 Channel Select Push or push and hold up/down keys.
	5.6 Mode Selector AM/FM or LO/DX **a) Mode Selector AM/FM (short push)** This switch allows selecting the AM or FM modulation. Your modulation mode has to correspond to the one of your correspondent. 1. Push AM/FM key. 2. AM/FM 2nd function (only in UK configuration) Allows to alternate the frequency bands EC and EN in the UK configuration. AM/FM or EC/EN are switched alternately. **b) LO/DX (long push 2 seconds)** Allows the automatic adjustment of the RF Gain for close communication. 1. Push and hold LO/DX (AM/FM) key. 2. LO/DX is switched alternately.
	5.7 MON (Monitor) The MON function deactivates the squelch function, it is used for "fast listening". Push MON key to activate the MON function. MON function on/off alternately.
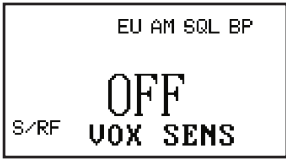
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Element of LCD	Contents of the Indicator
	5.8 MEM/SCAN

a) MEM (short push)

Those function are memorized when memory command is done : Mode AM/FM , Channel number and CTCSS or DCS.

MEM Store (8 memories)

1. Select the channel to be memorized.

2. Push MEM key.

3. With the up/down keys, select the memory address to be store (address from 1 to 8)

4. Push and hold MEM key to store the selected channel.

MEM Call

1. Push MEM key.

2. With the up/down keys to select the memory to be called.

3. Push MEM key to select the memorized channel.

WARNING: All memories are cleared at configuration change.

b) SCAN (long push 2 seconds)

There are 2 SCAN types: All channels SCAN type (normal), "SCAN" icon is displayed.

MEM channels SCAN type, "MEM" and "SCAN" icons are displayed. Push and hold SCAN (MEM) key to start the SCAN. On the MEM SCAN type, both emergency channels are scanned with the memorized channels. To quit the SCAN function press SCAN (MEM) key.

5.9 Lock

Push and hold LOCK key to lock the key. During the LOCK mode, only allow PTT and Power keys.

5.10 CH 9/19

Push and hold the CH 9/19 key to active instantly these emergency channels.
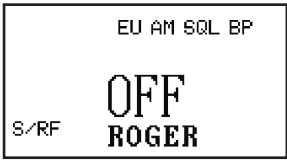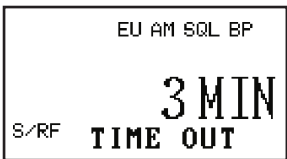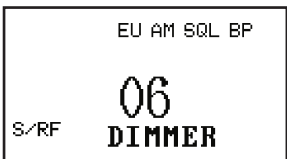
Element of LCD	Contents of the Indicator
	5.11 Micro Plug RJ45 The plug is located on the front panel of the transceiver and makes the setting of the equipment into the dashboard easier. Push 1, pull 2 to remove
	5.12 TRANSMISSION **a) PTT** Press to transmit a message, TX is displayed and release to listen to an incoming communication. To transmit, you can also use the VOX function. **b) VOX TRANSMISSION** The VOX function allows transmitting by speaking into the microphone without pressing the PTT switch. During the LOCK mode, only allow PTT and Power keys. ** Background noise is most concerned, adjust the "Sensitivity" for operating*
	5.13 Menu Functions **CTCSS /DCS** · CTCSS and DCS can be set on FM mode only. · CTCSS (Continues Tone Coded Squelch System) and DCS (Digital Codes Squelch) are two tone squelch methods. · Squelch functions often depend on the field strength or are controlled via the signal-to-noise ratio. · Each transmission on the selected channel and each interference carrier as well will open the squelch. · All radios belonging to a certain speech circuit have to be operated using the same CTCSS frequency or the same DCS code. · The squelch of the receiving radio only opens when a signal featuring the corresponding CTCSS/DCS is received. · 38 CTCSS tones and 104 DCS codes are available. · Push the MENU key to select CTCSS/DSC setting. Current CTCSS/DCS setting is displayed. · Push up/down keys to select the CTCSS tone or DCS code. The DCS code with TI/RI, TN/RN, TN/RI, TI/RN Selection. ** N = Normal, I = Inverse* ** Advanced design for connection at the waiting channel.*

Element of LCD	Contents of the Indicator
EU AM SQL BP OFF S/RF MEM SCAN	**Memory Scan** Push the MENU key to select MEMO SCAN setting. Current setting is displayed. Push up/down keys to select the On or Off.
EU AM SQL BP OFF S/RF VOX SENS	**Vox Sensitivity Level** The VOX Sensitivity Level allows the adjustment of the microphone for an optimum transmission quality. Push up/down keys to select the VOX SENSITIVITY.
EU AM SQL BP VOX OFF S/RF ANTI VOX	**Anti Vox Level** ANTI VOX function checks speaker volume and inhibits VOX transmission. This is to prevent an easy loop from speaker sound to MIC. Push the MENU key to select ANTI VOX setting. Current setting is displayed. Push up/down keys to select the level.
EU AM SQL BP VOX 06 S/RF VOXDELAY	**Vox Delay Time** VOX delay time is max wait time from the end of transmission request to actual end of transmission. If transmission request is detected in delay time, transmission will be done without pause. Push the MENU key to select VOX DELAY setting. Current setting is displayed. Push up/down keys to select the time.
EU AM SQL BP OFF S/RF NB SELE	**NB** These filters allow reducing back ground noises and some reception interferences. Push the MENU key to select NB setting. Current setting is displayed. Push up/down keys to select the on or off.
EU AM SQL BP OFF S/RF HIC SELE	**HIC** Eliminates high frequency interferences. Push the MENU key to select HIC setting. Current setting is displayed. Push up/down keys to select the on or off.

Drawing is just for reference.

Element of LCD	Contents of the Indicator
EU AM SQL BP S/RF SPK SELE	**Speaker** Select the receiving audio speaker. Push the MENU key to select Audio path setting. Current setting is displayed. Push up/down keys to select the main speaker or MIC speaker or both main and MIC speaker.
EU AM SQL BP OFF S/RF ROGER	**Roger Beep** Roger Beep is a short tone that is transmitted at the end of transmission. Push the MENU key to select ROGER BEEP setting. Current setting is displayed. Push up/down keys to select on or off.
EU AM SQL OFF S/RF BEEP	**Key Beep** Push the MENU key to select KEY BEEP setting. Current setting is displayed. Push up/down keys to select on or off.
EU AM SQL BP 3 MIN S/RF TIME OUT	**Tx Time Out Timer** This function limit the continuously transmitting time. Push the MENU key to select TOT setting. Current setting is displayed. Push up/down keys to select the time.
EU AM SQL BP GREEN S/RF COLOR	**Back Light Colour (5 Colours)** Push the MENU key to select BACK LIGHT COLOUR setting. Current setting is displayed. Push up/down keys to select the color.
EU AM SQL BP 06 S/RF DIMMER	**Dimmer** The DIMMER function changes the intensity of the back light. Push the MENU key to select DIMMER setting. Current setting is displayed. Push up/down keys to select the intensity.

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Element of LCD	Contents of the Indicator
EU AM SQL BP 06 S/RF CONTRAST	**LCD Contrast** The Contrast function changes the contrast (from 1 to 10) the characters. Push the MENU key to select Contrast setting. Current setting is displayed. Push up/down keys to select the contrast.
EU	**5.14 Configuration** **(configuration: EU;PL;D,EC;UK)** The frequency bands have to be chosen according to the country of use. Don't use any other configuration. Some countries need a user's license. 1. Turn POWER on with the up and downs keys push. ConF and current setting are displayed. 2. Push up/down keys to select configuration. 3. Push PTT key to restart the radio with setted configuration.

5.15 MENU/ENTER

a. MENU (short push)

Push MENU key to active the MENU mode. Push MENU key once more, current setting is stored and menu changes from next setting (see table). If no setting is done during 10 seconds, the unit exits from MENU mode.

№	MENU Item	Effective	Selectable Item	Default
a	CTCSS/DCS	FM mode only	OFF, CTCSS: 1 to 38, DCS: 1 to 104	OFF
b	MEMO SCAN		ON/OFF	OFF
c	VOX SENSITIVITY		OFF, 1 to 9	OFF
d	ANTI VOX LEVEL	VOX selected	OFF, 1 to 9	OFF
e	VOX DELAY TIME	VOX selected	1 to 9 (0.5, 1, 1.2,1.5 1.8, 2.0, 2.5, 3, 4 SEC.)	6
f	NB (Noise Blanker)		ON/OFF	OFF
g	HIC (HI Audio Cut)		ON/OFF	OFF
h	SPEAKER		MAIN SPK/ MIC SPK/ BOTH	MAIN
i	ROGER BEEP		ON/OFF	OFF
j	KEY BEEP		ON/OFF	ON
k	TX TIME OUT TIMER		OFF/ 2MIN./ 2.5MIN./ 3MIN.	3MIN.

№	MENU Item	Effective	Selectable Item	Default
l	BACK LIGHT COLOUR		GREEN CYAN BLUE RED PINK	GREEN
m	DIMMER		OFF 1 to 9	6
n	LCD CONTRAST		1 to 10	6

b. ENTER (long push 2 seconds)

Push and hold ENTER (MENU) key or push PTT key to complete the setting and exit the MENU mode.

Specifications

General	
Channels	40 (EU)
Modulation Modes	AM/FM
Frequency Ranges	from 26.965 MHz to 27.405MHz
CTCSS Tones	38
DCS Codes	104 (with Normal / Inverse selection)
Antenna Impedance	50 ohms
Power Supply	DC.12V

Transmitter	
Frequency Allowance	+/-200Hz
Carrier Power	4W/1W
Transmission Interference	<4nW
Audio Response	300Hz to 3KHz
Emitted Power In The Adj. Channel	<20µW
Microphone Sensitivity	7mW
Drain	<1.8A(with modulation)
Modulated Signal Distortion	3%

Receiver	
Max. Sensitivity at 20dB Sinad	<1µV
Frequency Response	300Hz to 3KHz
Adjacent Channel Selectivity	>60dB
Maximum Audio Power	>2W
Squelch Sensitivity	minimum <0.5µV; maximum =1mV
Frequency Image Rejection Rate	>60dB
Intermediate Frequency Rej. Rate	>60dB
Drain	<700mA

Specifications and features are subject to change without notice.

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Glossary

Technical Vocabulary	
AM	Amplitude Modulation
CB	Citizen's Band
CH	Channel
CW	Continuous Wave
DX	Long Distance Liaison
DW	Dual Watch
FM	Frequency Modulation
GMT	Greenwich Meantime
HF	High Frequency
LF	Low Frequency
LSB	Lower Side Band
RX	Receiver
SSB	Single Side Band
SWR	Standing Wave Ratio
SWL	Short Wave Listening
SW	Short Wave
TX	Transmitter
UHF	Ultra High Frequency
USB	Upper Side Band
VHF	Very High Frequency

NORMS

№	Configuration Code	FM Channel	AM Channel	Country
1	EU	40 CH (4W)	40 CH (1W)	BE, BG, CH, CY, ES, FI, FR, GR, IE
2	PL	-5KHz 40CH (4W)	-5KHz 40CH (4W)	PL
3	D	80 CH (4W)	40 CH	DE
4	EC	40 CH (4W)	-	AT, CZ, DK, EE, HU, LU, MT, NO, SI, SK
5	UK	EC 40 CH (4W) + EN 40 CH (4W)	-	UK

Frequency List

8.1 CONFIG 1 Frequency List (EU Configuration)

CONFIG 1 / EUROPE 40 CH FM (4W), 40 CH AM (4W)

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	26.965	○	○ 4W	○	○ 4W
2	26.975	○	○ 4W	○	○ 4W
3	26.985	○	○ 4W	○	○ 4W
4	27.005	○	○ 4W	○	○ 4W
5	27.015	○	○ 4W	○	○ 4W
6	27.025	○	○ 4W	○	○ 4W
7	27.035	○	○ 4W	○	○ 4W
8	27.055	○	○ 4W	○	○ 4W
9	**27.065**	○	○ 4W	○	○ 4W
10	27.075	○	○ 4W	○	○ 4W
11	27.085	○	○ 4W	○	○ 4W
12	27.105	○	○ 4W	○	○ 4W
13	27.115	○	○ 4W	○	○ 4W
14	27.125	○	○ 4W	○	○ 4W
15	27.135	○	○ 4W	○	○ 4W
16	27.155	○	○ 4W	○	○ 4W
17	27.165	○	○ 4W	○	○ 4W
18	27.175	○	○ 4W	○	○ 4W
19	**27.185**	○	○ 4W	○	○ 4W
20	27.205	○	○ 4W	○	○ 4W
21	27.215	○	○ 4W	○	○ 4W
22	27.225	○	○ 4W	○	○ 4W
23	27.255	○	○ 4W	○	○ 4W
24	27.235	○	○ 4W	○	○ 4W
25	27.245	○	○ 4W	○	○ 4W
26	27.265	○	○ 4W	○	○ 4W
27	27.275	○	○ 4W	○	○ 4W
28	27.285	○	○ 4W	○	○ 4W
29	27.295	○	○ 4W	○	○ 4W
30	27.305	○	○ 4W	○	○ 4W
31	27.315	○	○ 4W	○	○ 4W
32	27.325	○	○ 4W	○	○ 4W
33	27.335	○	○ 4W	○	○ 4W
34	27.345	○	○ 4W	○	○ 4W
35	27.355	○	○ 4W	○	○ 4W
36	27.365	○	○ 4W	○	○ 4W
37	27.375	○	○ 4W	○	○ 4W
38	27.385	○	○ 4W	○	○ 4W
39	27.395	○	○ 4W	○	○ 4W
40	27.405	○	○ 4W	○	○ 4W

*** CH 9 and CH 19 are shown by ▨ in the table.**

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8.2 CONFIG 2 Frequency List (PL Configuration)

CONFIG 2 / POLAND -5KHz 40 CH FM (4W), 40 CH AM (4W)

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	26.960	○	○ 4W	○	○ 4W
2	26.970	○	○ 4W	○	○ 4W
3	26.980	○	○ 4W	○	○ 4W
4	27.000	○	○ 4W	○	○ 4W
5	27.010	○	○ 4W	○	○ 4W
6	27.020	○	○ 4W	○	○ 4W
7	27.030	○	○ 4W	○	○ 4W
8	27.050	○	○ 4W	○	○ 4W
9	**27.060**	○	○ **4W**	○	○ **4W**
10	27.070	○	○ 4W	○	○ 4W
11	27.080	○	○ 4W	○	○ 4W
12	27.100	○	○ 4W	○	○ 4W
13	27.110	○	○ 4W	○	○ 4W
14	27.120	○	○ 4W	○	○ 4W
15	27.130	○	○ 4W	○	○ 4W
16	27.150	○	○ 4W	○	○ 4W
17	27.160	○	○ 4W	○	○ 4W
18	27.170	○	○ 4W	○	○ 4W
19	**27.180**	○	○ **4W**	○	○ **4W**
20	27.200	○	○ 4W	○	○ 4W
21	27.210	○	○ 4W	○	○ 4W
22	27.220	○	○ 4W	○	○ 4W
23	27.250	○	○ 4W	○	○ 4W
24	27.230	○	○ 4W	○	○ 4W
25	27.240	○	○ 4W	○	○ 4W
26	27.260	○	○ 4W	○	○ 4W
27	27.270	○	○ 4W	○	○ 4W
28	27.280	○	○ 4W	○	○ 4W
29	27.290	○	○ 4W	○	○ 4W
30	27.300	○	○ 4W	○	○ 4W
31	27.310	○	○ 4W	○	○ 4W
32	27.320	○	○ 4W	○	○ 4W
33	27.330	○	○ 4W	○	○ 4W
34	27.340	○	○ 4W	○	○ 4W
35	27.350	○	○ 4W	○	○ 4W
36	27.360	○	○ 4W	○	○ 4W
37	27.370	○	○ 4W	○	○ 4W
38	27.380	○	○ 4W	○	○ 4W
39	27.390	○	○ 4W	○	○ 4W
40	27.400	○	○ 4W	○	○ 4W

*** CH 9 and CH 19 are shown by ▨ in the table.**

8.3 CONFIG 3 Frequency List (D Configuration)

CONFIG 3 / GERMANY 80 CH FM (4W), 40 CH AM (4W)

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	26.965	○	○ 4W	○	○ 4W
2	26.975	○	○ 4W	○	○ 4W
3	26.985	○	○ 4W	○	○ 4W
4	27.005	○	○ 4W	○	○ 4W
5	27.015	○	○ 4W	○	○ 4W
6	27.025	○	○ 4W	○	○ 4W
7	27.035	○	○ 4W	○	○ 4W
8	27.055	○	○ 4W	○	○ 4W
9	**27.065**	○	○ **4W**	○	○ **4W**
10	27.075	○	○ 4W	○	○ 4W
11	27.085	○	○ 4W	○	○ 4W
12	27.105	○	○ 4W	○	○ 4W
13	27.115	○	○ 4W	○	○ 4W
14	27.125	○	○ 4W	○	○ 4W
15	27.135	○	○ 4W	○	○ 4W
16	27.155	○	○ 4W	○	○ 4W
17	27.165	○	○ 4W	○	○ 4W
18	27.175	○	○ 4W	○	○ 4W
19	**27.185**	○	○ **4W**	○	○ **4W**
20	27.205	○	○ 4W	○	○ 4W
21	27.215	○	○ 4W	○	○ 4W
22	27.225	○	○ 4W	○	○ 4W
23	27.255	○	○ 4W	○	○ 4W
24	27.235	○	○ 4W	○	○ 4W
25	27.245	○	○ 4W	○	○ 4W
26	27.265	○	○ 4W	○	○ 4W
27	27.275	○	○ 4W	○	○ 4W
28	27.285	○	○ 4W	○	○ 4W
29	27.295	○	○ 4W	○	○ 4W
30	27.305	○	○ 4W	○	○ 4W
31	27.315	○	○ 4W	○	○ 4W
32	27.325	○	○ 4W	○	○ 4W
33	27.335	○	○ 4W	○	○ 4W
34	27.345	○	○ 4W	○	○ 4W
35	27.355	○	○ 4W	○	○ 4W
36	27.365	○	○ 4W	○	○ 4W
37	27.375	○	○ 4W	○	○ 4W
38	27.385	○	○ 4W	○	○ 4W
39	27.395	○	○ 4W	○	○ 4W
40	27.405	○	○ 4W	○	○ 4W

*** CH 9 and CH 19 are shown by** ▨ **in the table.**

CONFIG 3 / GERMANY 80 CH FM (4W), 40 CH AM (4W)

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
41	26.565	✕	✕	○	○ 4W
42	26.575	✕	✕	○	○ 4W
43	26.585	✕	✕	○	○ 4W
44	26.595	✕	✕	○	○ 4W
45	26.605	✕	✕	○	○ 4W
46	26.615	✕	✕	○	○ 4W
47	26.625	✕	✕	○	○ 4W
48	26.635	✕	✕	○	○ 4W
49	26.645	✕	✕	○	○ 4W
50	26.655	✕	✕	○	○ 4W
51	26.665	✕	✕	○	○ 4W
52	26.675	✕	✕	○	○ 4W
53	26.685	✕	✕	○	○ 4W
54	26.695	✕	✕	○	○ 4W
55	26.705	✕	✕	○	○ 4W
56	26.715	✕	✕	○	○ 4W
57	26.725	✕	✕	○	○ 4W
58	26.735	✕	✕	○	○ 4W
59	26.745	✕	✕	○	○ 4W
60	26.755	✕	✕	○	○ 4W
61	26.765	✕	✕	○	○ 4W
62	26.775	✕	✕	○	○ 4W
63	26.785	✕	✕	○	○ 4W
64	26.795	✕	✕	○	○ 4W
65	26.805	✕	✕	○	○ 4W
66	26.815	✕	✕	○	○ 4W
67	26.825	✕	✕	○	○ 4W
68	26.835	✕	✕	○	○ 4W
69	26.845	✕	✕	○	○ 4W
70	26.855	✕	✕	○	○ 4W
71	26.865	✕	✕	○	○ 4W
72	26.875	✕	✕	○	○ 4W
73	26.885	✕	✕	○	○ 4W
74	26.895	✕	✕	○	○ 4W
75	26.905	✕	✕	○	○ 4W
76	26.915	✕	✕	○	○ 4W
77	26.925	✕	✕	○	○ 4W
78	26.935	✕	✕	○	○ 4W
79	26.945	✕	✕	○	○ 4W
80	26.955	✕	✕	○	○ 4W

*** *Fast action key for AM/FM functions-exchange (from CH 41 to CH 80).*

8.4 CONFIG 4 Frequency List (EC Configuration)

CONFIG 4 / CEPT 40 CH FM (4W)

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	26.965	✕	✕	◯	◯ 4W
2	26.975	✕	✕	◯	◯ 4W
3	26.985	✕	✕	◯	◯ 4W
4	27.005	✕	✕	◯	◯ 4W
5	27.015	✕	✕	◯	◯ 4W
6	27.025	✕	✕	◯	◯ 4W
7	27.035	✕	✕	◯	◯ 4W
8	27.055	✕	✕	◯	◯ 4W
9	**27.065**	**✕**	**✕**	**◯**	**◯ 4W**
10	27.075	✕	✕	◯	◯ 4W
11	27.085	✕	✕	◯	◯ 4W
12	27.105	✕	✕	◯	◯ 4W
13	27.115	✕	✕	◯	◯ 4W
14	27.125	✕	✕	◯	◯ 4W
15	27.135	✕	✕	◯	◯ 4W
16	27.155	✕	✕	◯	◯ 4W
17	27.165	✕	✕	◯	◯ 4W
18	27.175	✕	✕	◯	◯ 4W
19	**27.185**	**✕**	**✕**	**◯**	**◯ 4W**
20	27.205	✕	✕	◯	◯ 4W
21	27.215	✕	✕	◯	◯ 4W
22	27.225	✕	✕	◯	◯ 4W
23	27.255	✕	✕	◯	◯ 4W
24	27.235	✕	✕	◯	◯ 4W
25	27.245	✕	✕	◯	◯ 4W
26	27.265	✕	✕	◯	◯ 4W
27	27.275	✕	✕	◯	◯ 4W
28	27.285	✕	✕	◯	◯ 4W
29	27.295	✕	✕	◯	◯ 4W
30	27.305	✕	✕	◯	◯ 4W
31	27.315	✕	✕	◯	◯ 4W
32	27.325	✕	✕	◯	◯ 4W
33	27.335	✕	✕	◯	◯ 4W
34	27.345	✕	✕	◯	◯ 4W
35	27.355	✕	✕	◯	◯ 4W
36	27.365	✕	✕	◯	◯ 4W
37	27.375	✕	✕	◯	◯ 4W
38	27.385	✕	✕	◯	◯ 4W
39	27.395	✕	✕	◯	◯ 4W
40	27.405	✕	✕	◯	◯ 4W

*** CH 9 and CH 19 are shown by** ▨ **in the table.**

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8.5 CONFIG 5 Frequency List (UK Configuration)

CONFIG 5 / EC 40 CH FM (4W)   **CEPT FREQUENCY MODE**

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	26.965	✕	✕	○	○ 4W
2	26.975	✕	✕	○	○ 4W
3	26.985	✕	✕	○	○ 4W
4	27.005	✕	✕	○	○ 4W
5	27.015	✕	✕	○	○ 4W
6	27.025	✕	✕	○	○ 4W
7	27.035	✕	✕	○	○ 4W
8	27.055	✕	✕	○	○ 4W
9	**27.065**	**✕**	**✕**	**○**	**○ 4W**
10	27.075	✕	✕	○	○ 4W
11	27.085	✕	✕	○	○ 4W
12	27.105	✕	✕	○	○ 4W
13	27.115	✕	✕	○	○ 4W
14	27.125	✕	✕	○	○ 4W
15	27.135	✕	✕	○	○ 4W
16	27.155	✕	✕	○	○ 4W
17	27.165	✕	✕	○	○ 4W
18	27.175	✕	✕	○	○ 4W
19	**27.185**	**✕**	**✕**	**○**	**○ 4W**
20	27.205	✕	✕	○	○ 4W
21	27.215	✕	✕	○	○ 4W
22	27.225	✕	✕	○	○ 4W
23	27.255	✕	✕	○	○ 4W
24	27.235	✕	✕	○	○ 4W
25	27.245	✕	✕	○	○ 4W
26	27.265	✕	✕	○	○ 4W
27	27.275	✕	✕	○	○ 4W
28	27.285	✕	✕	○	○ 4W
29	27.295	✕	✕	○	○ 4W
30	27.305	✕	✕	○	○ 4W
31	27.315	✕	✕	○	○ 4W
32	27.325	✕	✕	○	○ 4W
33	27.335	✕	✕	○	○ 4W
34	27.345	✕	✕	○	○ 4W
35	27.355	✕	✕	○	○ 4W
36	27.365	✕	✕	○	○ 4W
37	27.375	✕	✕	○	○ 4W
38	27.385	✕	✕	○	○ 4W
39	27.395	✕	✕	○	○ 4W
40	27.405	✕	✕	○	○ 4W

CH 9 and CH 19 are shown by ▨ in the table.

CONFIG 5 / EN 40 CH FM (4W)   ENGLAND FREQUENCY MODE

CH №	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	27.60125	✕	✕	◯	◯ 4W
2	27.61125	✕	✕	◯	◯ 4W
3	27.62125	✕	✕	◯	◯ 4W
4	27.63125	✕	✕	◯	◯ 4W
5	27.64125	✕	✕	◯	◯ 4W
6	27.65125	✕	✕	◯	◯ 4W
7	27.66125	✕	✕	◯	◯ 4W
8	27.67125	✕	✕	◯	◯ 4W
9	**27.68125**	✕	✕	◯	◯ 4W
10	27.69125	✕	✕	◯	◯ 4W
11	27.70125	✕	✕	◯	◯ 4W
12	27.71125	✕	✕	◯	◯ 4W
13	27.72125	✕	✕	◯	◯ 4W
14	27.73125	✕	✕	◯	◯ 4W
15	27.74125	✕	✕	◯	◯ 4W
16	27.75125	✕	✕	◯	◯ 4W
17	27.76125	✕	✕	◯	◯ 4W
18	27.77125	✕	✕	◯	◯ 4W
19	**27.78125**	✕	✕	◯	◯ 4W
20	27.79125	✕	✕	◯	◯ 4W
21	27.80125	✕	✕	◯	◯ 4W
22	27.81125	✕	✕	◯	◯ 4W
23	27.82125	✕	✕	◯	◯ 4W
24	27.83125	✕	✕	◯	◯ 4W
25	27.84125	✕	✕	◯	◯ 4W
26	27.85125	✕	✕	◯	◯ 4W
27	27.86125	✕	✕	◯	◯ 4W
28	27.87125	✕	✕	◯	◯ 4W
29	27.88125	✕	✕	◯	◯ 4W
30	27.89125	✕	✕	◯	◯ 4W
31	27.90125	✕	✕	◯	◯ 4W
32	27.91125	✕	✕	◯	◯ 4W
33	27.92125	✕	✕	◯	◯ 4W
34	27.93125	✕	✕	◯	◯ 4W
35	27.94125	✕	✕	◯	◯ 4W
36	27.95125	✕	✕	◯	◯ 4W
37	27.96125	✕	✕	◯	◯ 4W
38	27.97125	✕	✕	◯	◯ 4W
39	27.98125	✕	✕	◯	◯ 4W
40	27.99125	✕	✕	◯	◯ 4W

CH 9 and CH 19 are shown by ▨ *in the table.*

Tones

CTCSS Tons List

№	Frequency (Hz)	№	Frequency (Hz)	№	Frequency (Hz)
OFF	OFF	13	103.5	26	162.2
01	67.0	14	107.2	27	167.9
02	71.9	15	110.9	28	173.8
03	74.4	16	114.8	29	179.9
04	77.0	17	118.8	30	186.2
05	79.7	18	123.0	31	192.8
06	82.5	19	127.3	32	203.5
07	85.4	20	131.8	33	210.7
08	88.5	21	136.5	34	218.1
09	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3

DCS Code List

Code №	DCS (Octal)	Code №	DCS (Octal)	Code №	DCS (Octal)	Code №	DCS (Octal)
1	023	27	152	53	311	79	466
2	025	28	155	54	315	80	503
3	026	29	156	55	325	81	506
4	031	30	162	56	331	82	516
5	032	31	165	57	332	83	523
6	036	32	172	58	343	84	526
7	043	33	174	59	346	85	532
8	047	34	205	60	351	86	546
9	051	35	212	61	356	87	565
10	053	36	223	62	364	88	606
11	054	37	225	63	365	89	612
12	065	38	226	64	371	90	624
13	071	39	243	65	411	91	627
14	072	40	244	66	412	92	631
15	073	41	245	67	413	93	632
16	074	42	246	68	423	94	654
17	114	43	251	69	431	95	662
18	115	44	252	70	432	96	664
19	116	45	255	71	445	97	703
20	122	46	261	72	446	98	712
21	125	47	263	73	452	99	723
22	131	48	265	74	454	100	731
23	132	49	266	75	455	101	732
24	134	50	271	76	462	102	734
25	143	51	274	77	464	103	743
26	145	52	306	78	465	104	754

Declaration of Conformity

I here by declare that the product
LEGEND IV, CB Radio

satisfies all the technical regulations applicable to the product within the scope of Radio Equipment and Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC:

ETSI EN 300 135-2 (V1.2.1, 2008-2), ETSI EN 300 433-2 (V1.3.1, 2011-07)
ETSI EN 301 489-13 (V1.2.1, 2002-8), ETSI EN 301 489-1 (V1.9.2, 2011-09)
EN 62311:2008
EN 60065:5014

Manufacturer or Authorised Representative:
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New Territories, Hong Kong

SGS United Kingdom Limited
(Identification Number 0890)
Fred Huggins, Principal Engineer
hereby declares that testing has been completed and reports have been generated for.

This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorized representative.

Hong Kong, 16- Dec-2015
(Place, date of issue)

Patrick Fu
General Manager
M-TECH DYNAMIC CORPORATION LTD.

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