MTech

LEGEND III

Mobile CB Radio

RoHS Compliant

CE 2150 !

Automatic **S**quelch

Noise **B**lanker **C**ircuit

Owner's Manual

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1. 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 hetero-dyne circuit with PHASE LOCKED LOOP techniques to assure precise frequency control.
This document is the operating guide for the CB Transceiver LEGEND Ⅲ.

2. INCLUDED IN YOUR PACKAGE

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

LEGEND Ⅲ CB radio

Microphone and hook

Mounting bracket, knobs, and mounting hardware

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

3. FEATURES

Function
LCD Display
AM/FM Mode select
Memory Function (1 Priority Channel)
Priority CH19/CH9 Mode
All Channel Scan Function (Upward and downward direction)
Built-in ANL (Automatic Noise Limiter) Function
Roger Beep Function
Key Beep Function
Key Lock Function
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Volume Control (Variable)
Squelch Control (Variable)
ASQ (Auto Squelch Control)
RF GAIN LOCAL / DX Control
NB (Noise Blanker) Function
HI-CUT Function
MIC Channel UP/DOWN switch (When using option MIC)
VOX (Voice Operated Transmission) Function
A microphone for exclusive use of VOX (Option)
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)
CEPT / ENG mode select [For UK Configuration]

Table 3-2. Detail of the Multi Configuration

Configuration	FM channel	AM channel	Country and region
EU	40CH FM (4W)	40CH AM (4W)	BE, BG, CH, CY, EE, ES, FI, FR, GR, IE, IS, IT, NL, PT, RO, SE
PL	–5KHz 40CH FM (4W)	–5KHz 40CH AM (4W)	PL
D	80CH FM (4W)		
EC	40CH FM (4W)	–	AT, CZ, DK, HU, LU, LT, LV, MT, NO, SI, SK
UK	CEPT 40CH FM (4W) + ENG 40CH FM (4W)	–	GB

4. CONTROLS AND REAR PANEL

4.1. Controls

* These drawings are just for reference, and do not reflect the final product.

Figure 4-1-1. Front Panel Controls

Figure 4-1-2. Original Microphone

Figure 4-1-3. Optional Microphone

Table 4-1-1. Key / knob / other function / microphone switch function for LEGENDⅢ

a) Push switches		Function	
		1st Function (Press this switch momentarily)	2nd Function (Press this switch for one second)
1	[AM/FM]	AM/FM Mode select switch [Except for EC, UK Configuration]	-
	([CEPT/ENG])	CEPT/ENGLAND select switch [For UK Configuration]	-
	-	*This switch as NO FUNCTION [For EC Configuration]	-
	[ASQ]	-	Auto Squelch on/off switch
2	[MEM]	Memory Recall Mode switch	-
	[STORE]	-	Memory store switch
3	[CH19/9]	Priority CH19/CH9 mode switch	-
	[SCAN]	-	Scan Mode on/off switch
4	[LO/DX]	RF Gain LOCAL/DX select switch	-
	[LOCK]	-	Key Lock on/off switch
5	[NB]	NB Function on/off switch	-
	[HI-CUT]	-	HI-CUT Function on/off switch
6	[F]	Band select switch	-
		Configuration select mode switch [For Multi Configuration mode]	To decide Configuration, use this switch [For Multi Configuration mode]
	[MENU]	Menu mode select switch while Menu mode	Menu mode on/off (store) switch
b) Knob and other		Function	
7	[CH] knob	Channel selector knob	
		Configuration select [Only Multi Configuration mode]	
		Scan resume switch of Scan Mode (Upward/downward direction)	
		Menu mode value select	
8	[VOL]	Volume control knob with power on/off	
9	[SQ]	Squelch control knob	
10	LCD Display panel		
11	Microphone socket (6 poles)		
c) Microphone switch		Function	
1	[PTT]	Push to talk switch	
2	[UP] (Only when using option MIC)	Channel Up switch	
		Configuration select [Only Multi Configuration mode]	
		Scan resume switch of Scan Mode (Upward direction)	
		Menu mode value select	
3	[DN]	Channel Down switch	

4.2. Rear Panel

1. ANT. Antenna socket   Antenna socket
2. VOX MIC   Connection for VOX Microphone
3. EXT. SP.   Connection for external speaker
4. POWER   Connection for DC Power supply
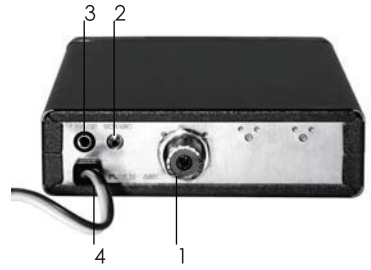
5. DISPLAY (LCD)

* This drawing is just for reference.

Figure 5-1. LCD Display Layout

ELEMENT of LCD		CONTENTS of the INDICATOR
(Channel Indicator)	2- digits	7 segments 2 digits of large size. (left side 2 digits) Usually indicates the channel number. (Channel number 1-9 is displayed by using only one digits of the lower digit.)
(Configuration Indicator)	2- digits	7 segments 2 digits of small size. (right side 2 digits) Usually indicates the Configuration code. MENU Mode indication.
TX	-	TX Indicator
FM	-	FM Mode Indicator
AM	-	AM Mode Indicator
UK	-	UK (ENGLAND) mode Indicator [Only UK Configuration]
MEM	-	Memory Channel Indicator
SCN	-	Scan Mode Indicator
VOX	-	VOX Mode / VOX Adjust of Menu mode Indicator
ASQ	-	Auto Squelch Indicator
LOCAL	-	LOCAL Indicator (RF Gain)
DX	-	DX Indicator (RF Gain)
BP	-	Key Beep Indicator
♪	-	Roger Beep Indicator
HIC	-	Hi-Cut Indicator
NB	-	Noise Blanker Indicator
�	-	Key Lock Indicator
F	-	Configuratin select mode Indicator [Only Multi Configuration mode]
S/RF *(S/RF Meter)*	6 steps	Signal strength and RF Power Meter

6. INSTALLATION

Connect The Microphone

Align the microphone connector with the jack on the front of the radio. Push the connector in firmly and secure it with the locking screw.

Connect The Power

You can connect the radio to any standard 12 volt DC power source, with a negative ground. If you don't know whether your power supply uses a positive or negative ground, consult the manual for your power supply or contact the manufacturer.

WARNING! *DO NOT connect this equipment to a power supply if you are not absolutely certain of the grounding type!*

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1. Make sure your power supply is turned off.
2. Connect the RED lead on the radio to the power supply's POSITIVE (+) pole, and connect the BLACK lead to the power supply's NEGATIVE (–) pole or to a neutral ground such as the chassis.
3. Turn on your power supply.
4. Turn the radio's **Volume** knob clockwise to power on the radio.

Installing The Mounting Bracket

When choosing the location for the radio's mounting bracket, keep the following things in mind:

► Pick a location that does not block your view, interfere with your vehicle's controls, or hinder your driving.
► Make sure the radio and microphone are not in front of an airbag.
► Pick a solid surface that can support the weight of the bracket and the radio.
► Make sure there's enough room. (You may want to put the radio in the bracket when you're choosing where to install the bracket.)

Once you choose the location, use the included, self-tapping screws to attach the mounting bracket and the microphone bracket to your vehicle (you don't have to drill holes). Slide the radio into the bracket with the rubber rings and use the included knobs to hold it at the preferred angle.

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. Consult the specifications in the back of this manual for detailed transmitter and antenna information.

7. OPERATIONS

7.1. Common Items

1. Only for Multi Configuration mode, when Power On is done while [F] switch is not pressing, then it becomes normal state of the receiving and transmitting. When Power On is done while [F] switch is pressing, then it becomes Configuration select mode. At this state, it is in mute state, and normal operation of the reception and the transmission cannot be done. [Only for Multi Configuration mode]
2. Connecting the external speaker automatically disconnects the internal speaker.
3. In the state that the transmission is prohibited, "TX" icon and the Channel Indicator blink.
4. Even if all other push switches except for [LOCK] switch is not accepted while [PTT] switch is pressing.
5. While MIC [UP]/[DN] switch is pressed, [CH] knob is not activated. If MIC [UP] switch and [DN] switch are pressed at the same time, [DN] switch is activated.

7.2. Power On/Off

Used switch	[VOL] knob
Used indicator	━

[VOL] knob is used to turn Power On and Off.

1. Rotate clockwise this knob from switch off producing a click to turn power on. [Except for Multi Configuration mode] Rotate clockwise this knob from switch off producing a click to turn power on while [F] switch is not pressing. [Only for Multi Configuration mode]
   →The power of the transceiver will be turned on. It becomes normal state that can be received and transmitted.

2. Rotate counterclockwise this knob from switch on producing a click to turn power off.
   →The power of the transceiver will be turned off.

* When Power On is done when [PTT] switch is being pressed, then Transmit is not possible, and "TX" icon and the Channel Indicator blink as long as [PTT] switch is pressed.
* The example of the display, when Power On is done is shown.

(Channel number & Configuration code)

* When Power On is done while [F] switch is being pressed, then it becomes Configuration select mode. At this state, it is in mute state, and normal operation of the reception and the transmission cannot be done. (Refer to section 7.3.19. Configuration selection mode operation) [Only for Multi Configuration mode]

7.3. CB Mode

7.3.1. Volume Level setting

Used switch	[VOL] knob
Used indicator	—

- Turn the [VOL] knob clockwise to increase the volume.
- Turn it counter-clockwise to decrease the volume.
* [VOL] is used for adjusting the Volume Level of receiver and transceiver's Power On and Off.

7.3.2. Squelch Level setting

|	
Used switch	[SQ] knob
Used indicator	—

- To filter out weaker signals and background noise, turn the [SQ] knob clockwise to increase the squelch level.
- To decrease the squelch level so you can hear weaker radio signals, turn the [SQ] knob counter-clockwise.
* This function is used for FM Mode and AM Mode commonly.

7.3.3. Auto Squelch Function

|	
Used switch / Switch operation	AM/FM ASQ Press [ASQ] for one second
Used indicator	ASQ

- Use [ASQ] switch to switch the ASQ On/Off.
  ASQ On ←→ ASQ Off
* This function is used for FM Mode and AM Mode commonly.
* ASQ is a function to which mute is automatically controlled.

7.3.4. RF Gain LOCAL/DX Control

Used switch / Switch operation	LO/DX LOCK Press [LO/DX] switch momentarily
Used indicator	LOCAL , DX

- [LO/DX] switch is used to adjust sensitivity (RF Gain) by 2 steps.
  LOCAL ←→ DX
* It is adjusted to RF Gain Down when LOCAL is selected.
* It is adjusted to RF Gain Up when DX is selected.
* Normally, this setting is used DX setting.
* When the LOCAL/DX function is changed while Memory Channel Recall Mode, then Memory Channel Recall Mode is canceled.

7.3.5. NB (NOISE BLANKER) Control

Used switch / Switch operation	NB HI-CUT Press [NB] switch momentarily
Used indicator	NB

- NB (Noise Blanker) is a function to suppress an ignition noise for FM Mode and AM Mode reception.
- [NB] switch is used to NB (Noise Blanker) On/Off.
  NB ON ←→ NB OFF
* When the NB function is changed while Memory Channel Recall Mode, then Memory Channel Recall Mode is canceled.

7.3.6. HI-CUT Control

Used switch / Switch operation	NB HI-CUT Press [HI-CUT] switch for one second
Used indicator	HIC

- HI-CUT is a function to cut out high frequency interference for receiving.
- [HI-CUT] switch is used to HI-CUT function On/Off.
  HI-CUT ON ←→ HI-CUT OFF
* When the HI-CUT function is changed while Memory Channel Recall Mode, then Memory Channel Recall Mode is canceled.

7.3.7. Built-in ANL Function

ANL (Automatic Noise Limiter) is a function to suppress a white noise of AM Mode automatically. The ANL function is built-in, and ANL always works at receiving. ANL is an effective function only in the AM mode reception.

7.3.8. Priority CH19/CH9 Mode (Channel Mode)

Used switch / Switch operation	CH19/9 SCAN
	Press [CH19/9] switch momentarily
Used indicator	—

The Channel Mode has 3 states of Normal Mode, Priority CH19 and Priority CH9 Mode, by using [CH19/9] switch.

- Push the [CH19/9] switch; the radio automatically tunes to channel 19. (Priority CH19 Mode)
- Push the [CH19/9] switch again; the radio automatically tunes to channel 9. (Priority CH9 Mode)
- Push the [CH19/9] switch once again: return to the previous channel. (Normal Mode)

* When [SCAN] switch is pressed for 1 second, MIC [UP]/[DN] switch is pressed, or rotate the [CH] knob during Priority CH19/CH9 Mode, Emergency CH19/CH9 Mode is released at present Emergency CH19 or CH9 and these operations are accepted.
* When [MENU] switch is pressed for one second while Priority CH19/CH9 Mode, it becomes Menu mode, and then Priority CH19/CH9 Mode is not canceled.

7.3.9. Roger Beep Function

Roger Beep is the function that notify user the end of transmission, as for either of the transmission by [PTT] switch or VOX function. Roger Beep function On/Off is in the MENU mode item.

* "♪" icon appears in the LCD display while Roger Beep function On.
* Roger Beep can be heard from the unit speaker, while Key Beep Tone enable.
* Roger Beep is transmitted even if Key Beep Tone disable. However, Roger Beep does not hear from the unit speaker.

7.3.10. CB Channel select

Used switch / Switch operation	* Rotate [CH] knob * Press MIC [UP]/[DN] switch (When using option MIC)
Used indicator	19 (Channel Indicator)

The [CH] knob or MIC [UP]/[DN] switch is used for selecting the channel number.

1. When rotate the [CH] knob to clockwise direction or MIC [UP] switch is pressed, channel number is increased.
2. When rotate the [CH] knob to counterclockwise direction or MIC [DN] switch is pressed, channel number is decreased.

* When the MIC [UP]/[DN] switch is pressed and held for 500msec, Auto Repeat function is activated, and the unit will automatically increment or decrement the channel in 100msec speed while pressing.
* CB channel number can select 1-40CH. [Except for D Configuration]
* CB channel number can select 1-80CH. [D Configuration]
* When the rotate the [CH] knob or MIC [UP]/[DN] switch is pressed while Memory Channel Recall Mode, selected channel number can be changed. At this time, Memory Channel Recall Mode is canceled.
* Channel number can be changed by using [CH] knob or [UP]/[DN] switch while Priority CH19/CH9 Mode. CB channel number change to next channel from Priority CH19 or CH9, and Priority CH19/CH9 Mode is released.

7.3.11. AM/FM Mode [Except for EC, UK Configuration]

Used switch / Switch operation	AM/FM ASQ
	Press [AM/FM] switch momentarily
Used indicator	**AM FM**

[AM/FM] switch is used to switch modulation mode AM/FM. This function is effective in AM/FM model.
AM ←→ FM

* " **AM** " icon appears in the LCD display when the AM is selected.
* " **FM** " icon appears in the LCD display when the FM is selected.
* When [AM/FM] switch is pressed while All Channel Scan Mode, then All Channel Scan Mode is maintained, and AM/FM modulation mode changes.
* In D Configuration, only CH1-CH40 is possible transmitting and receiving with AM Mode. It becomes FM Mode at CH41-CH80 regardless of the AM/FM modulation mode setting. When [AM/FM] switch is pressed while CH41-CH80 is selected, this switch is not accepted. [D Configuration]
* When the AM/FM modulation mode is changed while Memory Channel Recall Mode, then Memory Channel Recall Mode is canceled.

7.3.12. CEPT/ENG select [Only for UK Configuration]

Used switch / Switch operation	AM/FM ASQ
	Press [AM/FM] ([CEPT/ENG]) switch momentarily
Used indicator	**UK**

Use [AM/FM]([CEPT/ENG]) switch to switch the CEPT mode and ENGLAND mode for UK Configuration.
CEPT ←→ ENGLAND

* " **FM** " icon always appears at UK Configuration.
  " **UK** " icon disappears while CEPT mode.
  " **UK** " icon appears while ENGLAND mode.

FM   FM   UK

"UK" disappears at CEPT mode   "UK" appears at ENGLAND mode

* When the CEPT mode and ENGLAND mode is changed while Memory Channel Recall Mode, then Memory Channel Recall Mode is canceled.

7.3.13. Memory Channel Recall / Store

It is a function to store and recall the one Memory Channel with AM/FM modulation Mode [Except for EC Configuration and UK Configuration], RF Gain LOCAL/DX setting, NB, HI-CUT, CEPT/ENG Mode [Only for UK Configuration].

Memory Channel store procedure:

Used switch / Switch operation	STORE
	Press [STORE] switch for one second
Used indicator	**MEM**

1. Select the channel setting that can be stored (AM/FM modulation Mode, RF Gain LOCAL/DX, NB, HI-CUT, CEPT/ENG Mode [Only UK Configuration]).

2. Press and hold the [MEM] switch for one second.
   → It will store a new memory. The Store Confirmation Tone sounds and " **MEM** " icon appears. (It becomes Memory Channel Recall Mode.)

Memory Channel recall procedure:

Used switch / Switch operation	![MEM STORE]
	Press [MEM] switch momentarily
Used indicator	**MEM**

1. Press [MEM] switch momentarily.
   → The channel number and other item currently stored in the memory (AM/FM modulation Mode, RF Gain LOCAL/DX, NB, HI-CUT, CEPT/ENG Mode [Only UK Configuration] is recalled, and " **MEM** " icon appears. (Memory Channel Recall Mode)
   This recalled channel is set to selected channel.

   * Memory Channel is empty at the time of initial setting. At this time, if Memory Recall operation is performed, Error Tone sounds and cannot recall the Memory Channel.
   * While Priority CH19/CH9 Mode, Memory Channel store operation can't be done.
   * While Priority CH19/CH9 Mode, Memory Channel recall operation can be done. Priority CH19/CH9 Mode is released and Memory Channel is recalled at this time.
   * Memory Channel store operation isn't possible while Scan Mode.
   * When [MEM] switch is pressed momentarily during All Channel Scan Mode, the unit will exit the Scan Mode and it becomes Memory Channel Recall Mode.

7.3.14. Memory Channel Clear

Used switch / Switch operation	![MEM STORE]
	Press [MEM] switch at power on
Used indicator	—

Memory Channel Clear procedure:

1. Turn off the power of this transceiver.

2. Turn on this transceiver's power while pressing only the switch of [MEM].
   → It will clear the Memory Channel. And it becomes normal state of receiving.

7.3.15. All Channel Scan Mode

Used switch / Switch operation	![CH19/9 SCAN]
	Press [SCAN] switch for one second
Used indicator	**SCN**

The All Channel Scan function is to scan all channels in either upwards and downwards direction. When a signal is received, the unit will stay at that channel.

To start All Channel Scan Mode:
1. Press and hold the [SCAN] switch for one second while in Scan Mode off.
   →" **SCN** " icon turns on, and the unit enters All Channel Scan Mode, and the scan starts in the upward direction.

All Channel Scan Mode operation:
1. Rotate the [CH] knob or press the MIC [UP]/[DN] switch while All Channel Scan Mode.
   →Scan restarts from the next channel.

2. When Press the [MEM] switch momentarily while All Channel Scan Mode.
   →All Channel Scan Mode is released and it becomes Memory Channel Recall Mode.

3. Press and hold the [SCAN] switch for one second while Scan Staying condition of All Channel Scan Mode.
   →" **SCN** " icon turns off, and the Scan Mode is turned off at the staying channel.

4. Press and hold the [SCAN] switch for one second while Scan Running condition of All Channel Scan Mode.
   →" **SCN** " icon turns off, and the Scan Mode is turned off, and it returns to channel when Scan Mode begins

* The All Channel Scan function is to scan all channels (Scan speed is 100ms/CH) in either upwards or downwards direction. When a signal is received, the unit will stay at that channel and enters the receiving state (Scan Staying state). In Scan Staying state, Scan will resume automatically when the signal is not received for 3 consecutive seconds. (Drop Out Delay function）
* When Scan Mode begins from other than Scan Mode, it becomes scanning of the upward direction.
* The following are the channels when the unit exits the All Channel Scan Mode;
  Scanning state → The channel where the Scan Mode started.
  Staying state → The channel where the unit stayed.
* The following are the operation when rotate the [CH] knob or MIC [UP]/[DN] switch is pressed in All Channel Scan Mode;
  Scanning state / Staying state → The unit resumes Scan from the next channel of present channel. Rotate the [CH] knob to clockwise direction or MIC [UP] switch will resume in upward direction, and rotate the [CH] knob to counterclockwise direction or MIC [DN] switch will be in downward direction.
* When [PTT] or [MENU] switch is pressed for one second, or [F] switch is pressed momentarily during All Channel Scan Mode, the unit will exit the Scan Mode.
* Press and hold the [SCAN] switch for one second while Memory Channel Recall Mode, Memory Channel Recall Mode is canceled and it becomes All Channel Scan Mode.

Figure 7-3-15-1. All Channel Scan Timing outline

All Channel Scan Mode of upward direction (No signal receiving)

Scan start (Press and hold the [SCAN] switch for one second)

1CH	2CH	3CH	4CH	5CH
	‹ 200ms ›	‹ 100ms ›	‹ 100ms ›	‹ 100ms ›

All Channel Scan Mode of downward direction (No signal receiving)

[DN] SW is pressed while All Channel Scan Mode

1CH	40CH	39CH	38CH	37CH	••••
‹ 100ms ›	‹ 200ms ›	‹ 100ms ›	‹ 100ms ›	‹ 100ms ›	

All Channel Scan Mode of upward direction (signal receiving on 2CH)

1CH	2CH STAY	3CH	4CH	••••
‹ 100ms ›	‹ Signal is receiving › ‹D.O.D 3s›	‹ 200ms ›	‹ 100ms ›	

Signal stops

7.3.16. TX Mode

Used switch / Switch operation	* Press [PTT] switch * Transmit by VOX Function
Used indicator	TX

1. Press [PTT] switch
   → It becomes transmitting state (TX Mode) while [PTT] switch is pressed and held. "TX" icon turns on, and the S/RF Meter displays TX RF Level.
2. Release [PTT] switch
   → It becomes receiving state (RX Mode). "TX" icon turns off, and the S/RF Meter displays Signal Strength Level.

* When power on is done when [PTT] switch is being pressed, then transmit is not possible.
* When [PTT] switch is pressed while Priority CH19/CH9 Mode, it becomes transmit mode, and then Priority CH19/CH9 Mode is not canceled.
* When [PTT] switch is pressed while All Channel Scan Mode, at this time this mode is canceled and it becomes transmit mode. Refer to All Channel Scan Mode for channel of which this Mode is canceled.
* The transmission by [PTT] switch is possible without relations of VOX Mode On or Off. In addition, [PTT] switch is effective even if VOX microphone is connected to VOX MIC JACK.
* Transmit is possible by VOX function also. (Refer to section 7.3.18. VOX Mode)
* To avoid the transmission by VOX function being continued so long time by noise and the other conditions, this unit have a TX Time Out Function. When transmits by VOX function for more than consecutive 5 minutes, it prohibit the transmission automatically. When transmit successively, please stops voice or noise into PTT microphone or VOX microphone once. And please start speaking into PTT microphone or VOX microphone again. TX Time Out Function is not active when transmission by [PTT] switch.

7.3.17. Menu mode On/Off

Used switch / Switch operation	[MENU]
	To Enter the Menu Mode, press [MENU] switch for one second
Used indicator	—

Press [MENU] switch for one second, it enters Menu mode. And press [MENU] switch momentarily Menu item is change.

Table 7-3-17. Selectable function during Menu mode

NO.	MENU item	Selectable item
1	Select Roger Beep On/Off	On/Off
2	Select Key Beep On/Off	On/Off
3	Select VOX mode On/Off	On/Off
4	Select VOX MIC Sensitivity Level	1(high),2,3,4,5,6,7,8,9(Low)
5	Select Anti VOX Level	0(Off),1(high),2,3,4,5,6,7,8,9(Low)
NO.	Select VOX Delay Time	1(0.2sec),2,3,4,5,6,7,8,9(3sec)

* When press and hold [MENU] key for one second, Menu mode is concluded and current setting data and already set data are stored.
* When operate any key except [MENU], [UP]/[DN] or [CH] knob, current setting data and already set data are stored and Menu mode is cancel.
* The Configuration Indicator displays selected item and value of each Menu mode item. As for the Channel Indicator while Menu mode, present Channel number is displayed.
* VOX MIC Sensitivity Level adjust, Anti VOX Level adjust and VOX Delay Time adjust function is possible, it only at the time of VOX Function On.
* It is possible to transmit while Menu mode. Menu mode is not canceled when transmitting by a VOX function. On the other hand, Menu mode is canceled when transmitting by [PTT] switch.
* If [MENU] switch, [CH] knob or MIC [UP]/[DN] switch aren't operated within 10 seconds while Menu mode then Menu mode will be canceled and Menu Mode Time Out Tone will sound. At this time, current setting data and already set data are stored.
* Menu mode is effective while transmitting by VOX function also. However during transmitting by [PTT] switch it is not effective.
* When MIC [UP]/[DN] switch is pressed and held for 500msec while Menu mode, Auto Repeat function is activated, and the unit will automatically increment or decrement the each steps in 200msec speed while pressing.
* When other switches except for [MENU] switch, [CH] knob or MIC [UP]/[DN] switch is pressed while Menu mode, at this time Menu mode is canceled and current setting data and already set data are stored. At this time, the Mode Release Tone sounds and operation of pressed switch are not operated.

7.3.17.1 Roger Beep On/Off Function

Used switch / Switch operation	[MENU]
	* To enter the Roger Beep On/Off mode, press [MENU] switch for one second. * To select the Roger Beep On/Off, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the Roger Beep On/Off function, press [MENU] switch for one second or press [MENU] switch momentarily.
Used indicator	♪ and 88 (Configuration Indicator)

While Roger Beep On/Off Function, " ♪ " icon blinks and the "on" or "oF" character will blink on the Configuration Indicator.
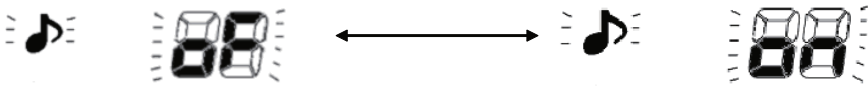
Roger Beep function Off

Rotate the [CH] knob counterclockwise direction or press the MIC [DN] switch while Roger Beep On/Off Function.

Roger Beep function On

Rotate the [CH] knob clockwise direction or press the MIC [UP] switch while Roger Beep On/Off Function.

7.3.17.2 Key Beep On/Off

Used switch / Switch operation	[MENU] * To enter the Key Beep On/Off mode, press [MENU] switch for one second and press [MENU] switch momentarily once. * To select the Key Beep On/Off, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the Key Beep On/Off function, press [MENU] switch for one second or press [MENU] switch momentarily.
Used indicator	BP and [88] (Configuration Indicator)

It is a function to switch Key Beep Tone enable/disable.
While Key Beep On/Off Function, "BP" icon blinks and the "on" or "oF" character will blink on the Configuration Indicator.

Key Beep function disable	Key Beep function enable
Rotate the [CH] knob counterclockwise direction or press the MIC [DN] switch while Key Beep On/Off Function.	Rotate the [CH] knob clockwise direction or press the MIC [UP] switch while Key Beep On/Off Function.

7.3.17.3 VOX Mode On/Off

Used switch / Switch operation	[MENU] * To enter the VOX Mode On/Off function, press [MENU] switch for one second and press [MENU] switch momentarily twice. * To select the VOX Mode On/Off, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the VOX Mode On/Off function, press [MENU] switch for one second or press [MENU] switch momentarily.
Used indicator	VOX and [88] (Configuration Indicator)

While VOX Mode On/Off Function, "VOX" icon blinks and the "on" or "oF" character will blink on the Configuration Indicator.

VOX mode Off (Normal PTT Mode)	VOX mode ON
Rotate the [CH] knob counterclockwise direction or press the MIC [DN] switch while VOX mode On/Off Function.	Rotate the [CH] knob clockwise direction or press the MIC [UP] switch while VOX mode On/Off Function.

7.3.17.4 VOX MIC Sensitivity Level Adjust Mode

Used switch / Switch operation	[MENU] * To enter the VOX MIC Sensitivity Level Adjust Mode, press [MENU] switch for one second and press [MENU] switch momentarily three times. * To select the VOX MIC Sensitivity Level, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the VOX MIC Sensitivity Level, press [MENU] switch for one second or press [MENU] switch momentarily.
Used indicator	VOX and [8] (Configuration Indicator)

This function is possible, it only at the time of VOX Function On.

While VOX MIC Sensitivity Level Adjust Mode, "VOX" icon appears and the selected VOX MIC sensitivity level will blink on the lowest digit of Configuration Indicator. At this mode, " " blinks on higher digits of Configuration Indicator.

1. When rotate the [CH] knob to clockwise direction or MIC [UP] switch is pressed, VOX MIC sensitivity level is increased as follows.
   1(high sensitivity) → 2 → 3 → ・・・ 7 → 8 → 9(low sensitivity)

2. When rotate the [CH] knob to counterclockwise direction or MIC [DN] switch is pressed, VOX MIC sensitivity level is decreased as follows.
   1(high sensitivity) ← 2 ← 3 ← ・・・ 7 ← 8 ← 9(low sensitivity)

7.3.17.5 Anti VOX Level Adjust Mode

	MENU
Used switch / Switch operation	* To enter the Anti VOX Level Adjust Mode, press [MENU] switch for one second and press [MENU] switch momentarily four times. * To select the Anti VOX Level, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the Anti VOX Level, press [MENU] switch for one second or press [MENU] switch momentarily.
Used indicator	VOX and (Configuration Indicator)

This function is possible, it only at the time of VOX Function On.

An Anti VOX function is a function to disable that it is transmitted automatically by a sound output by speaker itself. This Anti VOX Level Adjust Mode sets the detection speaker volume level that an Anti VOX function acts on. Anti VOX level can be adjusted to Off and 1-9 steps.
While Anti VOX Level Adjust Mode, "VOX" icon appears and the selected Anti VOX level will blink on the lower digit of Configuration Indicator. At this mode, " " blinks on higher digits of Configuration Indicator.

1. When rotate the [CH] knob to clockwise direction or MIC [UP] switch is pressed, Anti VOX level is increased as follows.
   0 (OFF) → 1(high level) → 2 → 3 → ・・・ 7 → 8 → 9(low level)

2. When rotate the [CH] knob to counterclockwise direction or MIC [DN] switch is pressed, Anti VOX level is decreased as follows.
   0 (OFF) ← 1(high level) ← 2 ← 3 ← ・・・ 7 ← 8 ← 9(low level)

*   When Anti VOX level set to 0 (OFF), Anti VOX function is not active.

7.3.17.6 VOX Delay Time Adjust Mode
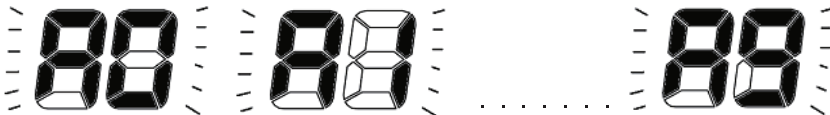
Used switch / Switch operation	[MENU] * To enter the VOX Delay Time Adjust Mode, press [MENU] switch for one second and press [MENU] switch momentarily five times. * To select the VOX Delay Time, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the VOX Delay Time, press [MENU] switch for one second or press [MENU] switch momentarily.
Used indicator	VOX and (Configuration Indicator)

This function is possible, it only at the time of VOX Function On.

VOX Delay Time is the time before stopping VOX transmission after the input to a microphone stopped. This adjusting mode sets delay time for the VOX transmission to be finished. It can adjust the nine steps.

While VOX Delay Time Adjust Mode, "VOX" icon appears and the selected VOX delay time will blink on the lowest digit of Configuration Indicator. At this mode, " " blinks on higher digits of Configuration Indicator.

1. When rotate the [CH] knob to clockwise direction or MIC [UP] switch is pressed, VOX delay time is increased as follows.
   1(short delay time) → 2 → 3 → ・・・ 7 → 8 → 9(long delay time)

2. When rotate the [CH] knob to counterclockwise direction or MIC [DN] switch is pressed, VOX delay time is decreased as follows.
   1(short delay time) ← 2 ← 3 ← ・・・ 7 ← 8 ← 9(long delay time)

7.3.18. VOX Mode

A VOX function is an automatic transmitting function by speaking into PTT microphone or VOX microphone without pressing [PTT] switch. And automatically returns to receiving when stop speaking.

A VOX function usually uses PTT microphone. When optional VOX microphone is connected to VOX MIC JACK of rear panel, VOX transmission by PTT microphone is not performed, but it becomes VOX transmission by VOX microphone.

* " VOX " icon appears while VOX Mode On, and " VOX " icon disappears while VOX Mode Off.
* " VOX " icon blinks at the situation that Anti VOX having acted prohibits transmission.
* Transmission by [PTT] switch is available during VOX Mode On. When [PTT] switch is pressed while transmission by VOX function, then it changes to transmission by [PTT] switch. While [PTT] switch is pressing, transmission by VOX function is unavailable.

TABLE 7-3-18-1. VOX MIC Sensitivity Level Adjust

Sensitivity Level	1	2	3	4	5	6	7	8	9
Sensitivity	high	>	>	>	mid	>	>	>	low

TABLE 7-3-18-2. Anti VOX Level Adjust

Anti VOX Level	0	1	2	3	4	5	6	7	8	9
Level	OFF	high	>	>	>	mid	>	>	>	low

TABLE 7-3-18-3. VOX Delay Time Adjust

Delay Time	1	2	3	4	5	6	7	8	9
Time (sec.)	0.2	0.4	0.6	0.8	1	1.2	1.5	2	3

7.3.19. Configuration select mode operation [Only for Multi Configuration mode]

Used switch / Switch operation	**[F MENU]** * To enter the Configuration select mode, press [F] switch at power on. * To select the Configuration, rotate the [CH] knob or press MIC [UP]/[DN] switch. * To decide the Configuration, press [F] switch for one second.
Used indicator	**F** and **88** (Configuration Indicator)

1. Turn off the power of this transceiver.

2. Turn on this transceiver's power while [F] switch is being pressed.
   → It goes Configuration select mode. At this mode, "**F**" icon will blink and present Configuration code on Configuration Indicator will blink.

   Configuration Select Mode

3. At this state, when rotate the [CH] knob to clockwise or MIC [UP] switch is pressed, Configuration code is changed as the right side.

   1(EU) → 2(PL) → 4(D) → 5(EC) → 6(UK) →
   ↑_____↓

4. Similarly, when rotate the [CH] knob to counterclockwise or MIC [DN] switch is pressed, Configuration code is changed as the right side.

   1(EU) ← 2(PL) ← 4(D) ← 5(EC) ← 6(UK) ←
   ↓_____↑

   EU Configuration   PL Configuration   D Configuration   EC Configuration   UK Configuration
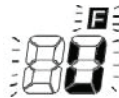
5. When you choose Configuration that wants to be used, press the [F] switch for one second.
   → The new Configuration is decided. The Configuration code indication and "**F**" icon stop blinking, and the Configuration code indication is maintained until the power of this transceiver turned off once.

   Ex.) Choosing the PL Configuration

6. When press the [F] switch momentarily while the Configuration code indication and "**F**" icon are lighting and not blinking.
   → It goes Configuration select state again. "**F**" icon and present Configuration code on Configuration Indicator will blink.

7. Turn off the power of this transceiver once while "**F**" icon and the Configuration code indication are not blinking. And then turn on the power again while the [F] switch is not pressed.
   → It changes to new Configuration, and it enters a normal state of receiving and transmitting.

* While Configuration select mode, all other indicator disappears except for "**F**" icon and Configuration Indicator.
* While Configuration select mode, it is in mute state, and normal operation of the reception and the transmission cannot be done. At this mode, all other push switch except for [F], [CH] knob or MIC [UP]/[DN] switch is not active. Even if [PTT] switch is pressed while Configuration select mode, Transmit is not possible.
* The selected Configuration code will appear on Configuration Indicator while Configuration select mode.
* When MIC [UP]/[DN] switch is pressed and held for 500msec while Configuration select mode, Auto Repeat function is activated, and the unit will automatically increment or decrement the Configuration code in 200msec speed while pressing.
* While Configuration select mode, Channel number cannot be changed by using [CH] knob or MIC [UP]/[DN] switch.

* In each Configuration, Channel number is separately memorized.
* Only when " " icon and Configuration Indicator are blinking while Configuration select mode, Configuration can be changed by using [CH] knob or MIC [UP]/[DN] switch. When " " icon and Configuration Indicator are not blinking while Configuration select mode, [CH] knob or MIC [UP]/[DN] switch is not active.
* When Power On is done while [F] switch is not pressed, then it becomes normal state of the receiving and transmitting.
* When Configuration is changed, Memory Channel is cleared.

7.3.20. Configuration code indication

The character of the Configuration code is displayed on Configuration Indicator as the following:
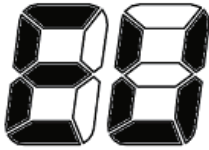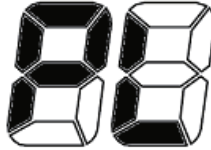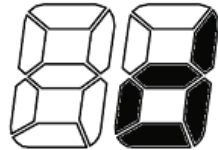
Configuration 1   Configuration 2   Configuration 3
(EU Configuration)   (PL Configuration)   (D Configuration)
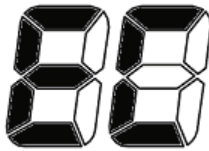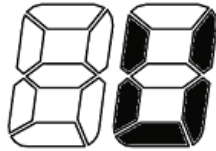
Configuration 4   Configuration 5
(EC Configuration)   (UK Configuration)

7.3.21. Key Beep Function

Key Beep Tone function On/Off is possible in the MENU mode item.

* While Key Beep Tone disable, all the Key Beep Tone is not sound.
* " " icon appears in the LCD display when Key Beep Tone enable.

7.3.22. Key Lock Function On/Off

Used switch / Switch operation	
	Press [LOCK] switch for one second
Used indicator	

Key Lock Function is a function to disable MIC [UP]/[DN] switch, [CH] rotary knob and all front panel switches except for [LOCK] switch.
Use [LOCK] switch to switch the Key Lock Function On/Off.
Key Lock Function Off ←→ Key Lock Function On

* [PTT] switch is accepted while Key Lock Function On. And Transmission by VOX Function is accepted also while Key Lock function On.
* " " icon appears in the LCD display while Key Lock Function On.
* This operation is accepted both receiving mode and transmitting mode.
* Key Lock Function is off when turns off the transceiver's power.

8. MAINTENANCE

Every six to twelve months, check to make sure that...

► The Voltage Standing Wave Ratio (VSWR) is less than 2:1.

► All electrical connections are secure and free of corrosion.

► The antenna cable shows no wear or damage.

► All mounting screws are securely fastened.

9. TROUBLESHOOTING

If your radio is not performing to your expectations, please try these simple steps.

Problem:	Things to try:
Radio won't turn on (no power)	1. Check the radio's power cord and all connections. 2. Check the fuse in the radio's power cord. 3. Check your vehicle's electrical system.
Poor reception	1. Adjust the squelch level. 2. Adjust the RF gain level. 3. Check the antenna, cable and connectors. 4. Check operation mode of the radio.
Weak transmission	1. Check the antenna, cable and connectors. 2. Check the antenna grounding. 3. Check for corrosion on the connectors.

Service and repair information

► Technical information, diagrams and charts will be provided upon request.

► Service, repair, or alignment should only be attempted by a qualified and/or licensed radio technician.

► When ordering parts, it is important to specify the correct model number of this radio.

10. SPECIFICATIONS

General	
Channels	40 AM/FM (Config. EU)
Frequency Range	26.965 to 27.405 MHz (Config. EU)
Frequency Control	Phase Locked Loop (PLL) synthesizer
Frequency Tolerance	±600Hz
Operating Temperature	-10°C to +55°C
Microphone	Electret condenser Type Microphone
Input Voltage	12.0 V DC
Current Drain	TX full mod., 2.0A Max
	RX with max. audio output, 0.75A max.
Consumption Power	24 W max
Size	126.5(L) x 36(H) x 160(D) mm
Weight	Approx. 0.9 Kg
Antenna Connector	UHF, SO-239
LCD Meter	Indicates relative RF output and received signal strenght
Filter	ANL (Automatic Noise Limiter) built-in
Transmitter	
Power Output	4 W AM / 4 W FM
Freq. Response	300-3,000 Hz in AM/FM
Output Impedance	50 ohm, unbalanced
Receiver	
Sensitivity	0.7μV for 20dB SINAD typical (limit 1.4μV)
Adjacent Channel Rejection	66 dB typical
Image Rejection	75 dB typical
I.F. Frequency	Double Conversion Superheterodyne
	1_{st} 10.695 MHz
	2_{nd} 455 KHz
Local / DX Range	Adjustable for optimum reception - More than 30 dB (@1μV)
Automatic Gain Control	Less than 10 dB change in audio output for inputs from
(AGC)	10 to 50,000μV
Squelch	Adjustable; threshold less than 1μV
Audio Output Power	3 W max. into 8 ohm
Freq. Response	300 to 3,000 Hz
Distortion	Less than 10%, 0.5W 1KHz

* Specifications and features are subject to change without notice.

11. FREQUENCY LIST

11.1. CONFIG1 Frequency List (EU Configuration)

CONFIG1 "EU" SPAIN 40CH FM (4W) , 40CH AM (4W)

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

* Priority CH9 and CH19 are shown by 9 or 19 in the table.

11.2. CONFIG2 Frequency List (PL Configuration)

CONFIG2 "PL" POLAND -5KHz 40CH FM (4W) , 40CH AM (4W)

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

* Priority CH9 and CH19 are shown by 9 or 19 in the table.

11.3. CONFIG3 Frequency List (D Configuration)

CONFIG3 " d" GERMANY 80CH FM (4W) , 40CH AM (4W)

CH NO.	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX	CH NO.	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	26.965	O	O 4W	O	O 4W	41	26.565	X	X	O	O 4W
2	26.975	O	O 4W	O	O 4W	42	26.575	X	X	O	O 4W
3	26.985	O	O 4W	O	O 4W	43	26.585	X	X	O	O 4W
4	27.005	O	O 4W	O	O 4W	44	26.595	X	X	O	O 4W
5	27.015	O	O 4W	O	O 4W	45	26.605	X	X	O	O 4W
6	27.025	O	O 4W	O	O 4W	46	26.615	X	X	O	O 4W
7	27.035	O	O 4W	O	O 4W	47	26.625	X	X	O	O 4W
8	27.055	O	O 4W	O	O 4W	48	26.635	X	X	O	O 4W
9	**27.065**	**O**	**O 4W**	**O**	**O 4W**	49	26.645	X	X	O	O 4W
10	27.075	O	O 4W	O	O 4W	50	26.655	X	X	O	O 4W
11	27.085	O	O 4W	O	O 4W	51	26.665	X	X	O	O 4W
12	27.105	O	O 4W	O	O 4W	52	26.675	X	X	O	O 4W
13	27.115	O	O 4W	O	O 4W	53	26.685	X	X	O	O 4W
14	27.125	O	O 4W	O	O 4W	54	26.695	X	X	O	O 4W
15	27.135	O	O 4W	O	O 4W	55	26.705	X	X	O	O 4W
16	27.155	O	O 4W	O	O 4W	56	26.715	X	X	O	O 4W
17	27.165	O	O 4W	O	O 4W	57	26.725	X	X	O	O 4W
18	27.175	O	O 4W	O	O 4W	58	26.735	X	X	O	O 4W
19	**27.185**	**O**	**O 4W**	**O**	**O 4W**	59	26.745	X	X	O	O 4W
20	27.205	O	O 4W	O	O 4W	60	26.755	X	X	O	O 4W
21	27.215	O	O 4W	O	O 4W	61	26.765	X	X	O	O 4W
22	27.225	O	O 4W	O	O 4W	62	26.775	X	X	O	O 4W
23	27.255	O	O 4W	O	O 4W	63	26.785	X	X	O	O 4W
24	27.235	O	O 4W	O	O 4W	64	26.795	X	X	O	O 4W
25	27.245	O	O 4W	O	O 4W	65	26.805	X	X	O	O 4W
26	27.265	O	O 4W	O	O 4W	66	26.815	X	X	O	O 4W
27	27.275	O	O 4W	O	O 4W	67	26.825	X	X	O	O 4W
28	27.285	O	O 4W	O	O 4W	68	26.835	X	X	O	O 4W
29	27.295	O	O 4W	O	O 4W	69	26.845	X	X	O	O 4W
30	27.302	O	O 4W	O	O 4W	70	26.855	X	X	O	O 4W
31	27.315	O	O 4W	O	O 4W	71	26.865	X	X	O	O 4W
32	27.325	O	O 4W	O	O 4W	72	26.875	X	X	O	O 4W
33	27.335	O	O 4W	O	O 4W	73	26.885	X	X	O	O 4W
34	27.345	O	O 4W	O	O 4W	74	26.895	X	X	O	O 4W
35	27.355	O	O 4W	O	O 4W	75	26.905	X	X	O	O 4W
36	27.365	O	O 4W	O	O 4W	76	26.915	X	X	O	O 4W
37	27.375	O	O 4W	O	O 4W	77	26.925	X	X	O	O 4W
38	27.385	O	O 4W	O	O 4W	78	26.935	X	X	O	O 4W
39	27.395	O	O 4W	O	O 4W	79	26.945	X	X	O	O 4W
40	27.405	O	O 4W	O	O 4W	80	26.955	X	X	O	O 4W

* Priority CH9 and CH19 are shown by 9 or 19 in the table.

11.4. CONFIG4 Frequency List (EC Configuration)

CONFIG4 "EC" CEPT 40CH FM (4W)

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

* Priority CH9 and CH19 are shown by ⬛9 or ⬛19 in the table.

11.5. CONFIG5 Frequency List (UK Configuration)

CONFIG5 " U" CEPT 40CH FM (4W) , ENGLAND 40CH FM (4W)

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

* Priority CH9 and CH19 are shown by ⬛9 or ⬛19 in the table.

CONFIG5 " U" CEPT 40CH FM (4W) , ENGLAND 40CH FM (4W)

ENGLAND Frequency Mode										
CH NO.	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX	CH NO.	Frequency (MHz)	AM RX	AM TX	FM RX	FM TX
1	27.60152	X	X	O	O 4W	21	27.80125	X	X	O	O 4W
2	27.61125	X	X	O	O 4W	22	27.81125	X	X	O	O 4W
3	27.62125	X	X	O	O 4W	23	27.82125	X	X	O	O 4W
4	27.63125	X	X	O	O 4W	24	27.83125	X	X	O	O 4W
5	27.64125	X	X	O	O 4W	25	27.84125	X	X	O	O 4W
6	27.65125	X	X	O	O 4W	26	27.85125	X	X	O	O 4W
7	27.66125	X	X	O	O 4W	27	27.86125	X	X	O	O 4W
8	27.67125	X	X	O	O 4W	28	27.87125	X	X	O	O 4W
9	**27.68125**	X	X	**O**	**O 4W**	29	27.88125	X	X	O	O 4W
10	27.69125	X	X	O	O 4W	30	27.89125	X	X	O	O 4W
11	27.70125	X	X	O	O 4W	31	27.90125	X	X	O	O 4W
12	27.71125	X	X	O	O 4W	32	27.91125	X	X	O	O 4W
13	27.72125	X	X	O	O 4W	33	27.92125	X	X	O	O 4W
14	27.73125	X	X	O	O 4W	34	27.93125	X	X	O	O 4W
15	27.74125	X	X	O	O 4W	35	27.94125	X	X	O	O 4W
16	27.75125	X	X	O	O 4W	36	27.95125	X	X	O	O 4W
17	27.76125	X	X	O	O 4W	37	27.96125	X	X	O	O 4W
18	27.77125	X	X	O	O 4W	38	27.97125	X	X	O	O 4W
19	**27.78125**	X	X	**O**	**O 4W**	39	27.98125	X	X	O	O 4W
20	27.79125	X	X	O	O 4W	40	27.99125	X	X	O	O 4W

* Priority CH9 and CH19 are shown by 9 or 19 in the table.

R&TTE STATEMENT OF OPINION

We, SGS Germany GmbH, Certification Body Munich, Hofmannstr. 50, D-81379 Muenchen, GERMANY

Declare, on our own responsibility that the CB radio-communication transceiver

Brand : **M-TECH**
Model : **LEGEND III**
Manufactured in PRC

is in conformity with Annex IV of the R&TTE Directive 1999/5/EC of 9th March, 1999 adapted to the national law, as well as with the following European Standards:

Opinion on the Essential Requirements

Health and Safety	EN 62311:2008	compliant
	EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011	
Electromagnetic Compatibility	ETSI EN 301 489-1 (V1.8.1, 2008)	compliant
	ETSI EN 301 489-13 (V1.2.1, 2002)	
Effective Use of the Radio Spectrum	ETSI EN 300 135-2 (V1.2.1, 2008)	compliant
	ETSI EN 300 433-2 (V1.3.1, 2011)	

The product shall be marked with the CE confomity marking and our Noified Body number as shown on the right.

$C\epsilon 2150$ ①

The scope of evaluation relates to the submitted documents only.

Approved by:	Date	Signature
Beier Head of Notified Body R&TTE	Dec 08, 2011	*i.V. M. Beier*
Werner Head of Notified Body EMC	Dec 08, 2011	*i.A. K. Wh*
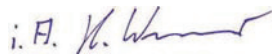
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