KCB-2000

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AM/FM-CB-MOBIL RADIO
EUROPEAN MULTINORM RADIO
WITH VOX-MICROPHONE

OPERATING MANUAL

MEANING OF THE SYMBOLS

Read the operating instructions carefully	
Information on the procedure to follow with defective or unusable electronic equipment	
DC power supply	
Protect from moisture	
Earthing	
CE conformity	
Warning	

STORAGE, TRANSPORT AND OPERATION

Storage: Class 1 (max. 85% humidity).
Transport: max. 85% humidity
Operating temperature range: -30°C to +50°C
Normal operation: Transmit 10% / Receive 90%

NOTES ON OPERATION

We hereby declare that the appliance complies with the essential requirements of the Directive 2014/53/EU.

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Be sure to keep these operating instructions in a safe place as they contain many instructions for use.

Warnings

- Please observe the following instructions to avoid damage to the radio, injuries or the occurrence of fires:
- Do not operate the radio while driving because this reduces attention.
- The radio is intended for operation with 13.8 V DC voltage. It must not be connected directly to 24 V on-board power supply systems.
- Never place the radio in dusty, damp, wet or mechanically unstable places.
- Never disconnect the antenna from the radio while transmitting, as this may result in burns or electric shocks.
- Place the radio as far away as possible from other electronic equipment (TV, generators, etc.).
- Never touch the electronics inside the housing with any metallic objects, as short circuits can lead to serious damage or a defect.
- Do not expose the radio to direct sunlight and do not store it at temperatures below -30°C or above +60°C. When installing the radio in a vehicle, choose a location that is not exposed to direct heating air.
- If smoke is coming from the radio or abnormal odours are detectable, it must be switched off immediately and disconnected from the power supply. After that, contact the dealer.
- Do not transmit for a long time as the radio heats up.
- Position the radio so that it cannot be reached by children.
- If the radio is operated with the engine stopped, the car battery will discharge.
- If the fuse needs to be replaced, only a 2 A type may be used as a replacement.

Attention!

Before transmitting, connect an antenna and check its SWR.
Transmitting without an antenna or with too high an SWR can destroy the transmitter.

1. INTRODUCTION

Thank you for purchasing a KCB-2000 CB radio. To get the most out of your new CB radio, we recommend that you read these operating instructions carefully.
The KCB-2000 is a small, easy-to-use CB radio preferably for use in vehicles, with good performance parameters.

Worth highlighting are:
- VOX microphone with adjustable sensitivity and hold time
- Up/down buttons on the microphone
- Search function
- LC display
- manual and automatic squelch
- switchable RF amplification
- connectivity for an external loudspeaker
- Second power supply cable with integrated fuse holder for the direct connection to the car battery or ignition lock

2. CHANGE COUNTRY STANDARD

The user is responsible for operating the radio with the country standard binding for the respective country. Note in particular that in some countries there is an obligation to register and/or certain operating modes or channels are not permitted and violations can be punished with heavy fines.
Especially when or after crossing a border, it is therefore necessary to change the country standard so that the radio can be operated according to the regulations.
1. Hold down the **[A/F]** key when switching on so that the display shows the currently selected country standard.
2. Press the **[UP]** or **[DOWN]** button on the microphone to select the desired standard.
3. Switch the radio off and on again.

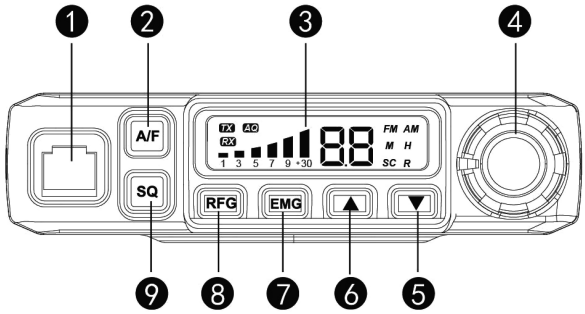
Note: In UK mode, the **[A/F]** key can be used to switch between CEPT and UK frequencies or mode.

3. NOTES ON INSTALLATION

The radio is designed for operation with 12 or 13.8 V DC. The cigarette lighter socket can be used for the power supply in the vehicle.
Alternatively, it can be connected to the car battery or the ignition lock. A second cable with a fuse is included with the radio. It is best to have this work done by a specialist, as errors in connection not only endanger the radio, but also carry the risk of short circuits or cable fires.
In any case, the correct polarity of the operating voltage must be observed.

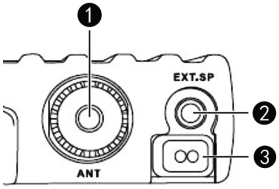
4. KNOB, FEYS AND CONNECTORS

Front panel



Nr.	Name	Function (short push)	Funktion (long push)
1	Micropnone jack		
2	A/F key	Mode	Search
3	LC-Display		
4	Volume control with On/Off switch		
5	Channel down		
6	Channel up		
7	EMG	Key for CH9/CH19	
8	RFG	RF amplification	
9	SQ	Squelch setting	Automatic squelch

Rear panel



Nr.	Function
1	Antenna connector
2	Jack for external speaker
3	DC cable

5. FUNCTIONS

5.1 Switching on and off

1. Turn the volume control clockwise to switch on the radio. The display briefly shows the country standard and then the channel number.
2. To switch the radio off again, turn the volume control counterclockwise until it clicks into place.

5.2 Setting the volume

Turn the volume control clockwise to increase the volume or counterclockwise to decrease the volume.

5.3 Select channel

1. Briefly press the **[UP]** or **[DOWN]** button on the microphone to change the channel.
   Note: Long press leads to the option to change the VOX settings (sensitivity and hold time).

5.4 Adjust Squelch (0.F to 2.8 adjustable)

1. Press the **[SQ]** button briefly so that the display first shows SQ and then the squelch level between 0.1 and 2.8.
2. Press the **[UP]** or **[DOWN]** button on the microphone to change the setting.
3. Press and hold the **[UP]** or **[DOWN]** button on the microphone to quickly change the squelch setting.
4. Keep **[SQ]** button pressed or wait 3 sec. to save the new setting and return to normal operation.

0.F	Squelch OFF
0.1	minimum squelch setting
…	…
2.8	maximum squelch setting

5.5 Set automatic squelch (A.1 to A.9 adjustable)

1. Press the **[SQ]** button until AQ appears in the display and the automatic squelch is switched on. Then a level between A.1 and A.9 is displayed.
2. Press the **[UP]** or **[DOWN]** button on the microphone to change the auto squelch setting.
3. Press and hold the **[UP]** or **[DOWN]** button on the microphone to quickly change the auto squelch setting.
4. Keep **[SQ]** button pressed or wait 3 sec. to save the new setting and return to normal operation.

A.1	minimum adjustable level of automatic squelch
…	…
A.9	maximum adjustable level of automatic squelch

5.6 Switching the operating mode

1. Press the **[A/F]** button briefly to switch between AM and FM.
   The selected operating mode is shown in the display.

5.7 Change HF Gain

1. Briefly press the **[RFG]** button so that R appears in the display and the current value flashes.
2. Press the **[UP]** or **[DOWN]** button on the microphone to change the RF gain.
3. Briefly press the **[RFG]** button again to save the new setting and return to normal operation.

5.8 VOX operation

1. Press and hold the **[M]** button on the microphone to activate the VOX. An acknowledgement tone sounds and the LED on the microphone lights up green.
2. speak into the microphone without pressing the PTT. The KCB-2000 switches to transmit by voice. After you stop speaking, the radio switches back to receive after an adjustable hold time.
3. The hold time can be adjusted in four steps. To do this, press the **[UP]** button on the microphone for a long time so that the VOX microphone switches to the setting mode, which is confirmed with an acknowledgement tone. Now press the **[UP]** button briefly. You will hear one to four short acknowledgement tones. When one tone is heard, the hold time is short; when four tones are heard, the hold time is longest. Each short press of the **[UP]** button advances one step. If you no longer press the buttons on the microphone, the microphone switches back to normal mode after about 4 seconds.
4. The VOX sensitivity can be adjusted in four steps. To do this, press the **[DOWN]** button on the microphone for a long time so that the VOX microphone switches to the setting mode, which is confirmed with an acknowledgement tone. Now press the **[DOWN]** button briefly. You will hear one to four short acknowledgement tones. The sensitivity is highest when one tone is heard, and lowest when four tones are heard. Each short press of the **[DOWN]** button advances one step. If the buttons on the microphone are no longer pressed, the microphone switches back to normal mode after about 4 seconds.
5. Press and hold the **[M]** button to deactivate the VOX. An acknowledgement tone sounds and the LED on the microphone goes out. When the VOX is deactivated, you must press the PTT button again to transmit.

5.9 Emergency Channel

1. Press the **[EMG]** button briefly to select channel 9. The channel number flashes in the display.
2. Press the **[EMG]** button again briefly to select channel 19. The channel number flashes in the display.
3. Briefly press the **[EMG]** button a third time to return to the originally selected channel.

5.10 Key lock

1. Press the **[EMG]** button for longer than 2 sec. to lock the keys. LC appears in the display.
2. Press the **[EMG]** button again for longer than 2 sec. to unlock the buttons. OF is shown in the display.

5.11 Search run

1. Press and hold the **[A/F]** button to start the search. SC flashes in the display.
2. Press the **[UP]** or **[DOWN]** button on the microphone to change the search direction.
3. Press the **[A/F]** button or the **PTT** button on the microphone to stop the search.

5.12 Reset to factory settings

1. Hold down the **[SQ]** button when switching on so that RT appears in the display.
2. If RT appears, all settings have been reset to the factory settings.

SPECIFICATIONS

General		
Modes		AM/FM
Frequency range		26,565 .... 27,405 MHz
Supply voltage		13,2 V
Dimensions (mm)		120 (B) × 110 (T) × 27 (H)
Weight		320 g
Frequency control		PLL Synthesizer
Operating temperature		–20 °C … +60 °C
Current	Transmit	max. 1,8 A @ 4 W RF power
	Receive maximum volume	0,5 A
Antenna connector		UHF, SO-239
Transmitter		
RF power		4 W (FM/AM)
Audio frequency range		300 ... 3000 Hz
Modulation distortions		< 8 %
Antenna impedace		50 Ω
Receiver		
Sensitivity		0,25 µV @ 12 dB
IF frequencies		1. IF 10,7 MHz
		2. IF 450 KHz
AGC		Volume change less than 10 dB
		on input signal change 10 µV … 50 mV
Squelch sensitivity		< 1 µV
Audio power		max. 1 W
Audio frequency range		300 ... 3000 Hz

FAILURE RECOVERY

The radio is not transmitting at full power

T his may be caused by the operating voltage being too low. This should be checked first. Another source of error is the antenna. This must have an impedance of 50 Ω and be suitable for CB frequencies. In any case, test the SWR, the condition of the antenna cable and the fit of the connector.

The radio is not receiving anything

First check the volume setting and the squelch. Your remote station may not be transmitting in the modulation mode you have set (AM / FM). If the problem persists, check the condition of the antenna, the antenna cable and the fit of the plug.

No indication in the display

First check that the radio is switched on and supplied with voltage. Make sure that the operating voltage is connected with the correct polarity.

TIPS FOR RADIO OPERATION

Before transmitting, be sure to check whether the set channel is free, i.e. it is not being used by other stations. To be able to hear weak signals, you can switch off the squelch.
If another station answers you, you should take a small switching pause (a few seconds) after the end of their programme before you start speaking yourself.

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When disposing of this radio, the regulations for handling electronic for handling electronic waste must be observed.
Electronic devices do not belong in household waste!