

CB Radio AE6110



User Manual



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1 Introduction

The AE 6110 can be operated as a mobile station in a car or with a suitable DC power supply as a base station. This device complies with the latest European CB standards. Due to its selectable CB standards it can be used throughout Europe. Please select only a CB standard that is allowed in the country of use. For details see the Albrecht Radio Passport at the end of this manual.

Features:

- Multi-standard device
- Up/Down keys on the microphone
- Channel Scan
- LCD display, S-Meter
- ASQ Automatic squelch, adjustable
- RF Gain
- Socket for external loudspeaker

2 Installation

Select the mounting location so that road safety is not affected by the device, or additional risk of injury in an accident arises. Check that the display can be seen, and the controls can easily accessed.

2.1 Power Supply

Fuse

A fuse in the power cable protects against damage caused by technical defects or incorrect polarity. If this fuse is blown, first eliminate the error and then replace the blown fuse with a similar spare fuse (2.5 A). If the fuse burns several times, please send the radio to our service.

Car Operation

The **red wire** of the power cable must be connected to the **positive terminal** (+12 V), the **black wire** to the **negative terminal**. If possible the radio should be connected directly to the vehicle battery, because this is the point with the least interference from the car's electrical system. The device can also be connected behind the ignition switch. All settings of the AE 6110 are stored in a nonvolatile memory.

Operation with AC Adapter

Operate your radio only at a stabilized radio power supply, which is capable to provide at least 2A at 12 -13.8V DC. A well suitable power supply is Albrecht article no. 47500. Unregulated power supplies or battery chargers are unsuitable and can cause damage. Connect the **red** lead to the positive (+) **terminal** of the power supply, the **black** wire to the negative (-) **terminal** of the power supply.

2.2 Antenna Connection

Connect the CB antenna to the ANT socket on the back of your AE 6110. The antenna must be tuned to the CB radio band. For this use a SWR meter. For a good radio range, the SWR should not exceed a value of 2. A high SWR also points to defects in antenna, cable, or a short circuit in the antenna line. Never transmit without connected antenna!

Note: The radio antenna is to be mounted from other antennas and interference sources as much as possible. CB antennas must be mounted usually in or on metal surfaces. A sufficiently large metal surface is essential for the function of the antenna. For installation on a fiberglass cabs or plastic wind deflectors, special ground less antennas (eg GL 27) can be used

3 Controls



4 Operation

4.1 Power On/Off the radio

- 1. Turn **VOL** switch clockwise to power on the radio, the LCD displays the CB standard followed by the channel number.
- 2. Turn the **VOL** knob counterclockwise, until it clicks. The radio is powered off.

4.2 Volume control

Turn clockwise to increase volume and turn counterclockwise to decrease volume.

4.3 Channel Selection

- 1. Shortly press microphone [UP] or [DN] to change working channel.
- 2. Hold microphone [UP] or [DN] to change the working channel fast.

4.4 Squelch level control (28 level and off)

1. Shortly press **[SQ]**, until LCD shortly displays "SQ" and then displays X.X, X.X stands for the SQ level.

0.F	Squelch off
0.1	lowest Squelch level
2.8	highest Squelch level

- 2. Press microphone [UP] or [DN] shortly to change SQ level
- 3. Hold microphone **[UP]** or **[DN]** to change the SQ level fast.
- 4. Hold [SQ] or wait for 3 seconds to store and exit.

Note: Higher SQ level require a stronger signal to open the speaker and hear the calling.

4.5 ASQ control (9 levels)

1. Hold **[SQ]** key, until LCD displays AQ, the ASQ function is turned on. The LCD will display "A.X", X stands for the ASQ level.

A.1	lowest ASQ level		
A.9	highest ASQ level		

- 2. Shortly press microphone [UP] or [DN] to change ASQ level
- 3. Hold microphone [UP] or [DN] to change the ASQ level fast fast.
- 4. Hold [SQ] or wait for 3 seconds to store and exit.

Note: Higher ASQ level require a stronger signal to open the speaker and hear the calling.

4.6 Modulation Type

- 1. Shortly press [A/F] key to switch between AM /FM mode.
- 2. The LCD displays the selected mode.

4.7 RF Gain control

- 1. Shortly press [RFG] key, LCD displays R and the present RF gain level flashes.
- 2. Shortly press microphone **[UP]** or **[DN]** to change the level of attenuation.
- 3. Shortly press [RFG] key to exit RF gain level control.

Note: When RFG function is on, the LCD displays "R", if RFG level 6 is selected it means the attenuation is 6 dB

4.8 Emergency Channel

- 1. Shortly press **[EMG]** key to choose CH9, the channel number flashes.
- 2. Shortly press **[EMG]** key again to choose CH19, the channel number flashes.
- 3. Shortly press **[EMG]** key third time to return to last normal channel.

4.9 Key Lock

- 1. Hold [EMG] key for over 2 seconds to lock the keys, LCD displays "LC".
- 2. Hold [EMG] key for over 2 seconds again to unlock the keys, LCD displays OF.

Note: In lock Mode, all keys except PTT are valid.

4.10 Scan function

- 1. Hold [A/F] to start scan function, "SC" flashes in the LCD.
- 2. Press microphone [UP] or [DN] to change scan direction during scan.
- 3. Press [A/F] or [PTT] key to exit scan function.

4.11 Changing the CB-Standard

- 1. Hold [A/F] while powering the radio on, until LCD displays the norms.
- 2. Press microphone [UP] or [DN] to choose wanted norms.
- 3. Power off and power on again

Standard	Channels	Frequency Range	
EU	40 FM/40 AM	26.965-27.405MHz	
CE	40 FM	26.965-27.405MHz	
UK	40 CH FM	27.60125-27.99125MHz	
PL	40 FM/40 AM	26.960-27.400MHz	
12	36 FM/36 AM	26.965-26.865MHz	
DF	40 FM/40 AM	26.965-27.405MHz	
	80 FM	26.565-26.955MHz	
IN	27 FM/27 AM	26.965-27.275MHz	

4.12 External Speaker

An external speaker (8 Ohm) can be connected to the 3.5mm mono socket on the back of the radio. The built-in speaker automatically turns off when a plug is inserted into this jack.

4.13 Restore factory default

- 1. Hold [SQ] key while powering the radio on, until the LCD displays "rt".
- 2. All channel and function setting will resume factory default after above operation.

5 Warranty and Service

The manufacturer/reseller grants warranty for this product for two years from the date of purchase. This warranty covers any malfunction caused by defective components or incorrect functions during the warranty period. Damage caused by improper use, or external influences are excluded from the guarantee.

For warranty claims please contact your local dealer. The dealer will repair, exchange, or send your device to an authorized service center.

If you cannot reach your dealer, send your unit directly to a service address specified under 'www.service.alan-electronics.de'. Please attach your proof of purchase for the product and describe the malfunction as accurately as possible.

You can download the latest versions of user manuals and conformity declaration any time from our server:

http://www.service.alan-electronics.de

6 Disposal and Recycling

This radio was manufactured low-emission according to the European WEEE directive. Please note that electronic and electric devices are not to be disposed of with the household waste; return these devices to collection points. Returning devices is free of charge for end users, since the industry is covering the disposal costs. By returning the device to a collection point you contribute to the recycling of valuable raw materials



7 Specification

Dimensions 102 x 100 x 25 mm³

Weight 450 gr
Supply Voltage 13,2 V
Current Consumption 2 A max
Operating Temperature Range -20 to +50 °C
Antenna Socket UHF, SO-239
Frequency Error <+/- 300 Hz
TX Power 4 Watt

Spurious Transmissions < 4 nW (-54 dBm)

 $\begin{array}{lll} \mbox{Adjacent Channel Power} & < 20 \ \mu \mbox{W} \\ \mbox{FM Deviation} & 1.9 \ \mbox{kHz} \\ \mbox{AM Modulation Index} & 85-90\% \end{array}$

RX Sensitivity better than 1 μV

Image Rejection 70dB Adjacent Channel Rejection 60dB

Audio Output 1 Watt into 8 Ohm

Frequency Response 300-3000Hz

8 Declaration of Conformity - Konformitätserklärung



We hereby declare that our product: / Wir erklären hiermit, dass unser Produkt

CB-Radio Albrecht AE 6110

satisfies all technical regulations applicable to the product within the scope of EU Council Directives, European Standards and national frequency applications:/ alle technischen Anforderungen im Geltungsbereich der EU Richtlinien, europäischer Normen und nationaler Frequenzanwendungen einhält:

73/23/EEC, 2004/108/EG and 99/5/EC EN 300 433-2 V.1.3.1 EN 301 489-1 V.1.8.1, EN 301 489-13 V.1.2.1, EN 60 950-1: 2006+Amendments 2010/11

All essential radio test suites have been carried out. / Alle für das Produkt vorgeschriebenen Funktestreihen wurden durchgeführt.

Alan Electronics GmbH Daimlerstr. 1 k D- 63303 Dreieich

This declaration is issued under our sole responsibility. Basing on not yet fully harmonised frequency applications, the CB radio may be used only in listed countries according to selected channel programming and according to the still existing national restrictions for AM + FM, if such should still apply.

Diese Erklärung wird unter unserer alleinigen Verantwortung abgegeben. Dieses Funkgerät darf wegen der noch nicht überall harmonisierten Frequenzanwendungen in AM + FM in einigen Ländern nur eingeschränkt oder gar nicht betrieben werden, entsprechend den noch geltenden nationalen Regelungen.

Alan Electronics GmbH declare, bajo su responsabilidat, que este aparato cumple con lo dispuesto en la Directiva 99/05/CE, del Parlamento Europeo y del Consejo de 9 de marzo de 1999, transpuesta a la legislacion espanola mediante el Real Decreto 1890/2000, de 20 de noviembre.

NDw

Point of contact/Ansprechpartner: Dipl.-Ing. Norbert Dau

Place and date of issue:

Lütjensee, 23.09.2014

(Signature)

Dipl.-Ing. Norbert Dau Alan Electronics GmbH

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9 Albrecht Radio Passport

For your AE 6110 the following rules for settings and usage apply

Country	80/40	40/40	40 FM	Remarks
Austria	×	✓	✓	
Belgium	×	✓	✓	
Bulgaria	×	✓	✓	
Croatia	×	✓	✓	
Cyprus	×	✓	✓	
Czech Republic	✓	✓	✓	
Denmark	×	✓	✓	
Estonia	×	✓	✓	
Finland	×	✓	✓	
France	×	✓	✓	
Germany	✓	✓	✓	Base stations in vicinity of the borders (except CZ) need a license for the operation on channels 41-80.
Greece	×	✓	✓	
Hungary	×	✓	✓	
Iceland	×	✓	✓	
Ireland	*	✓	✓	
Italy	×	✓	✓	Registration for inhabitants required. Foreign Visitors free.
Latvia	*	✓	✓	
Liechtenstein	*	✓	✓	
Lithuania	*	✓	✓	
Luxembourg	*	✓	✓	
Malta	×	×	✓	
Monaco	*	✓	✓	
Netherlands	*	✓	✓	
Norway	*	✓	✓	
Poland	×	✓	✓	
Portugal	*	✓	✓	
Romania	×	✓	✓	
San Marino	×	✓	✓	
Slovakia	✓	✓	✓	In FM operation is only allowed on channels 1-40 and 70-80.
Slovenia	×	✓	✓	
Spain	×	✓	✓	Registration and regular fees for inhabitants required. Foreign Visitors free.
Sweden	×	✓	✓	
Switzerland	×	✓	✓	
United Kingdom	×	×	✓	

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