AEQ LISTENER 8

AM/FM Monitoring Multi Receiver

USER MANUAL

ED 08/06

BASIC USER'S MANUAL AEQ LISTENER 8

DESCRIPTION OF THE UNIT

The AEQ LISTENER-8 is a system composed of eight receivers that monitor up to eight AM and/or FM transmissions. It offers radio broadcasters a high degree of control as well as the possibility to record both their own broadcasts and those produced by other stations.

It is designed to be controlled from the front panel so that each receiver is tuned and the front panel display allows for real-time monitoring of key parameters such as carrier, stereo pilot, absence of tuning, and mute. The unit also has alarms for lack of carrier and stereo pilot and mute. It is also equipped with an RS-232 port to allow PC control.

Local listening of each receiver can be achieved through the internal loudspeaker or by using the headphone jack and select the desired receiver using the switch on the front panel.

The unit is equipped with stereo audio and alarm (buzzer) outputs for each of the 8 outputs. There are two antenna inputs, which allows for separate AM and FM antennae.

TECHNICAL SPECIFICATIONS

FM RECEIVER

Frequency Range:	87.5 MHz - 108.0 MHz (in 50KHz steps)
Intermediate Frequency:	10.7 MHz
Antenna Impedance:	75 ohms
Sensitivity	-92 dBm for 50 dB S/N
Maximum SNR:	75 dB
Total Harmonic Distortion:	0.2 %
Audio Output:	1 V
Stereo Separation:	40 dB
Image Rejection:	80 dB
AM Suppression:	50 dB
Selectivity (+/-400 kHz):	75 dB
Intermodulation (+/- 800 kHz):	65 dB
IF Rejection:	70 dB
Spurious Radiation:	EN 55013 compliant
Complies with EN 55020	

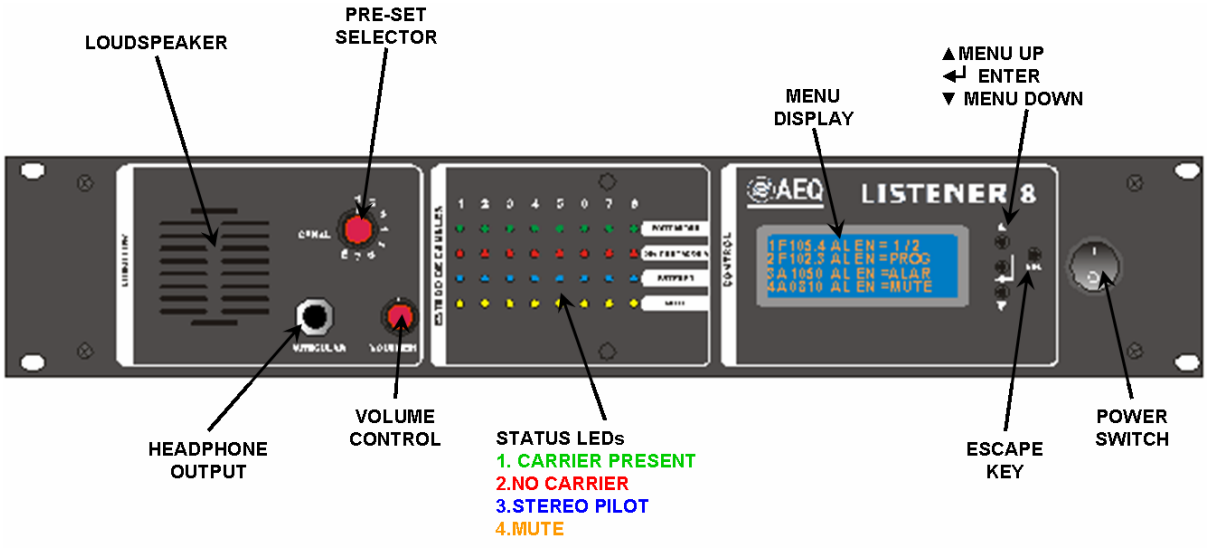
AM RECEIVER

Frequency Range:	522 kHz - 1611 kHz (steps of 9 kHz)
Intermediate Frequency:	450kHz
Sensitivity at S/N 20 dB:	-60 dBm
Maximum SNR:	50 dB
Total Harmonic Distortion:	0.7 %
Image Rejection:	36 dB
IF Rejection:	55 dB
Frequency Response:	40 Hz a 4 kHz (-10 dB)
AGC Range:	58 dB

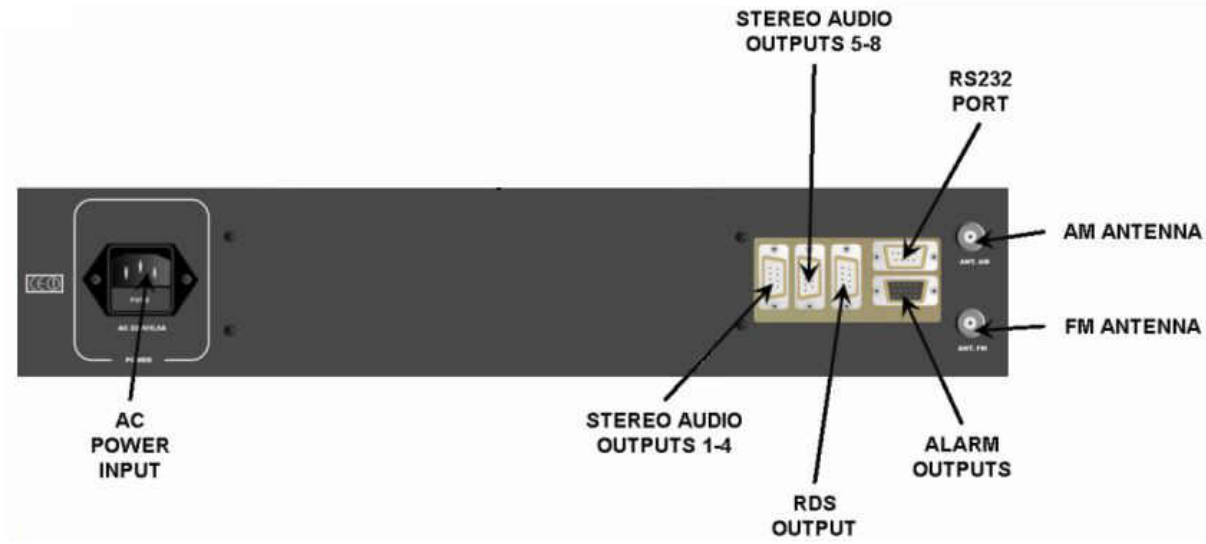
GENERAL

Operating Temperature:	-20º C a + 70º C
Dimensions:	2HU x 19" x 250 mm.
Power:	90-220 VAC
Weight:	3 KG
Status Indicators	Pilot, No Pilot, Stereo and Mute
Inputs:	FM & AM Antennae, AC IN
Outputs:	RDS,16 x Audio, Alarm Buzzer
Monitor:	Internal Speaker and Headphone jack
Communications:	RS232 Serial Port

FRONT VIEW



REAR VIEW



OPERATION

The unit shows a simple screen with information of the frequencies pre-set and a main menu. The operation is very simple, based on the utilization of the menu keys:

▲, ▼, ◄┘ (ENTER) and ESC.

Generally, the arrows we will move through the different options and we modify values of a selected setting with ENTER key. To leave a value without changing the settings, press ESC. The ESC key also mutes the alarm buzzer when sounded.

DISPLAY

The default display shows the state of the 8 receivers divided across 2 pages which can be selected using the up/down arrows. Both pages show the pre-set number, the band, frequency and whether or not the alarm is activated when carrier frequency (also stereo pilot for FM) is lost.

PROGRAMMING

By accessing the second menu option by using PROG the configuration of each receiver can be designed. The arrow keys move through the fields and when ENTER is pressed, the value for each field is selected. The arrow keys are then used to change the setting and press ENTER to accept or ESC to cancel.

The available parameters for each preset:

- **PRE-SET CHANNEL**
- **BAND** – to select AM or FM
- **FREQUENCY** (FM in MHz, AM in KHz)
- **ALARM** – to enable/disable alarm for each pre-set.
- **MUTE** – mutes the audio and turns on the mute LED for the preset.

ALARMS

Each time that an event in one of the receivers causes an alarm, an audible buzzer will sound and an output in the rear DB9 connector will be activated, where by means of a closing contact can therefore further activate a remote indicator (not supplied). The buzzer can be cancelled with the ESCAPE key, nevertheless the alarm output will be maintained on the DB9 connector until the condition causes the alarm ceases.

CONECTOR PIN OUTS

AUDIO 1-4 (DB-9M)	
1	GND
2	L1
3	R1
4	L2
5	R2
6	L3
7	R3
8	L4
9	R4

AUDIO 5-8 (DB-9M)	
1	GND
2	L5
3	R5
4	L5
5	R6
6	L7
7	R7
8	L8
9	R8

DB-9M – RDS	
1	GND
2	CH1
3	CH2
4	CH3
5	CH4
6	CH5
7	CH6
8	CH7
9	CH8

BUZZER (DB-15M)	
1	GND
2	CH1
3	CH2
4	CH3
5	CH4
6	NC
7	NC
8	NC
9	NC
10	NC
11	CH5
12	CH6
13	CH7
14	CH8
15	VCC