



EKSELANS BY ITS

USER MANUAL

EKSEL 632

071013

DIGITAL PROGRAMMABLE AMPLIFIER

V01

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INTRODUCTION:

Description:

DIGITAL PROGRAMMABLE AMPLIFIERS: EK presents the new range of EKSEL programmable amplifiers developed with state-of-the-art digital filtering technology. EKSEL models incorporate 32 ultra-selective digital filters which enable the selection, filtering and amplification of each digital multiplex, guaranteeing the optimal output level for each type of installation - whether individual or collective - and a very high quality output. The control units likewise incorporate an automatic search system for fast and efficient self-programming of the DTT multiplexes of the UHF inputs. The EKSEL range complies with the requirements for header equipment stipulated by the Regulatory Regulations (ICT2) on common infrastructure in buildings for access to telecommunications services, approved by RD 346/2011, of 11 March, given that it incorporates very high selectivity single-channel filters which enable to guarantee a difference less than 3dB between channels of the same band.

Main features:

- 6 inputs (3 x UHF-VHF selectable, 1 x FM, 1 x DAB / VHF-UHF selectable, 1 x AUX)
- 2 outputs (TER / TEST -30dB)
- 32 ultra-selective digital filters
- Gain >55dB
- Output level 122dBuV (45004B) / 134dBuV (IMD3-36dB)
- Automatic digital multiplex search
- Programming with joystick and display. User-friendly navigation through the menu
- Processing functionality for channel conversion
- Measurement of the digital multiplex input level
- Automatic real-time gain control
- Automatic detection of the necessary filter LTE1 (4G) / LTE2 (5G)
- Preamp power option
- USB 2.0/3.0 for dump configurations
- Easily access internal power supply

Packaging Contents:

- 1.- EKSEL632, code 071013.
- 2.- Power Cable.

CONNECTIONS AND INTERFACES:

1 2 3 4 5 6 7		1.-FM Input
8 9 10 11 12 13		2.-V-UHF1 Input
		3.-V-UHF2 Input
		4.-V-UHF3 Input
		5.-DAB or VHF-UHF4, Input, selectable
		6.-USB Input
		7.-230Vac Input
		8.-Test Ouyput (-30dB)
		9.-TV Output
		10.-AUX Input
		11.-Display 2x16 characters
		12.-Joystick for programming
		13.-Earthin connection point.

Power Supply replacement:

In the unlikely event that the power supply is damaged it can easily be replaced on site:

<p>1.- Disconnect power supply. 2.- Unscrew the screws highlighted above. 3.- Remove cover.</p>	<p>4.- Remove the power supply and install a new one. 5.- Put cover again.</p>

INSTALLATION RECOMMENDATIONS:

- 1.- Install the equipment vertically in a well-ventilated location, ensuring not to exceed the maximum recommended operating temperature.
- 2.- Leave a space between 15 cm and 20 cm, free of obstacles, around the equipment which ensures compliance with Point no.1.
- 3.- Connect an appropriate earth cable to the equipment ground screw.
- 4.- Connect the equipment's input and output cables.
- 5.- Connect the power cable to the equipment.
- 6.- Configure.

EKSEL 632 CONFIGURATION:

Joystick functions description (button):



The button enables to scroll up or down and to the right and left of the menu. Pressing the button is the equivalent to OK. Sometimes it is necessary to hold down the button for certain special options.

To enter into configuration menu press OK. In the case of having a PIN configured, when touching any button option, it will be necessary to enter the PIN. Moving to the right or left, each digit of the PIN increases. Using OK the digit jumps to the right. Once the last digit has been entered, the menu can be accessed after pressing OK.

Menu Overview:

Holding down any key we will access into main menu:

EKSEL462

Press OK to enter to its first line:

**<V-UHF4 MODE> <DC PASS: 12v> <AUTO SCANNING> <V-UHF1> <V-UHF2> <V-UHF3> <V-UHF4> <OUT>
<FM> <AUX> <MORE OPTIONS>**

Using we will scroll through this first menu line.

Using we go backwards.

Equipment configuration:

<p><UHF4 MODE> VHF-UHF or DAB</p>	<p>UHF4 input configuration as VHF-UHF or DAB. Press OK to access this menu. Using <input type="button" value="◀"/> <input type="button" value="▶"/> select correct parameter and confirm using OK</p>
<p><DC PASS: 12v> 1:- 2:- 3:- 4:-</p>	<p>Voltage configuration for pre-amplifiers. Press OK to enter, and <input type="button" value="◀"/> <input type="button" value="▶"/> to select voltage, 12V or 24V. OK to accept. Then select in which UHF input, 1:- 2:- 3:- 4:-, do we need</p>

	<p>voltage. By pressing OK we will change between inputs, with ◀ ▶ we will enable/disable voltage at that input: 1:+ 2:- 3:- 4:-</p> <p>⊕ = enabled / ⊖ = disabled.</p>
<p><AUTO SCANNING> INPUTS: 1:- 2:- 3:- 4:- LTE filter: 790MHz / 690MHz / off Searching [***] Result: CH UHF:xx</p>	<p>Automatic UHF channels search.</p> <p>Press OK to enter. Select in which inputs we do have signal. Pressing OK we move between inputs and with ◀ ▶ we will enable/disable such input: 1:+ 2:- 3:- 4:-</p> <p>⊕ = enabled / ⊖ =disabled.</p> <p>Using OK we will jump to Lte filter selection; with ◀ ▶ we will select: 790MHz, 694MHz, off. After confirming with OK scan will start. Once the search is finished it will be shown a message showing the number of channels found.</p>
<p><V-UHF1> UHF1 L= 75dBuV 24=>24 L=108dBuV UHF Add channel</p>	<p>Manual configuration of V-UHF1 input. (****).</p> <p>Whether we want to add manually a new channel after AutoScan or we want to configure such input totally manually from beginning, with ◀ ▶ we need to move until Add channel and press OK. Configurable parameters, second line, will be shown flashing, with ◀ ▶ we will change their value, with OK we accept and move to next value to configure. First value is input channel, second value is output channel, third value is output level (*). If selected output channel is already in use an Error message will be shown. Input level will be shown in first line; if it is too low it will be shown as L=Low lev.</p> <p>If one channel needs to be deleted, stay in selected channel and keep pressing OK until Channel deleted! Message appears.</p>
<p><V-UHF2></p>	<p>Manual configuration of V-UHF2 input. (****).</p> <p>Idem <UHF1>.</p>
<p><V-UHF3></p>	<p>Manual configuration of V-UHF3 input. (****).</p> <p>Idem <UHF1></p>
<p><V-UHF4></p>	<p>Manual configuration of V-UHF4 input. (****).</p> <p>Idem <UHF1></p> <p>This option will not appear if we have selected DAB in <V-UHF4 MODE> menu.</p>
<p><OUT> Level: xxxdBuV Slope: yydB</p>	<p>Output level (*) and Slope configuration for UHF channels.</p> <p>Press OK for entering into menu. Select parameter to modify by ◀ ▶, Level (*) or Slope. With OK we select option and with ◀ ▶ we modify its value.</p>
<p><FM> Preamplific.: on/off Atenuation: xdB</p>	<p>FM input Configuration.</p>

	Press OK for entering into menu. Select parameter to modify by ◀ ▶, Level (*) or Attenuation . With OK we select option and with ◀ ▶ we modify its value.
<p><AUX></p> <p>Preamplific.: on/off</p> <p>Atenuation: xdB</p>	<p>AUX input Configuration.</p> <p>Press OK for entering into menu. Select parameter to modify by ◀ ▶, Level (*) or Attenuation. With OK we select option and with ◀ ▶ we modify its value.</p>
<p><MORE OPTIONS></p> <p>F.A. Status:</p> <p>Config. import (**)</p> <p>Config. export (**)</p> <p>Default settings.</p> <p>FW upgrade (**)</p> <p>PIN: no/yes</p> <p>Language: español/english</p> <p>FW version</p>	<p>Press OK for entering into menu. Using ◀ ▶ we move for the different options, with OK we enter into option, with ◀ ▶ we modify its value and with OK we confirm it.</p> <p>PIN: one we confirm yes, it will appear 0---. With ◀ ▶ we modify number, with OK we confirm it and automatically we move to second digit. Once last digit is confirmed this will be the new PIN for access to amplifier.</p> <p>Note: in case PIN is forgotten it cannot be recovered. Amplifier must be reset (***) and all is set to factory default values.</p>

(*) Output level will never be possible to be adjusted above the level amplifier determines in case of AutoScanning or through OUT menu. This level set by amplifier, is the result of subtracting to amplifier maximum output level the amount of dB due to the number of channels. This is the optimum Output Level.

In case, for any reason, you need to adjust level above such level, and never over maximum Output Level, the only way is by following manual configuration.

(**) These Options are only available in case an USB memory is inserted in corresponding connector.

(***) For reset plug in amplifier pressing Joystick button upwards ▲. All previous configuration will be lost.

(****) In VHF band only BIII channels can be set.