



Univox[®] AC/DC-100

Loop amplifier for lift and bus areas

Features

- Cover area 170m² with 400 mA/m
- High output current, 17A RMS
- Constant output current
- Automatic backup using both AC and DC
- Three inputs giving several and various connection possibilities
- Dual Action AGC control provides high speech perception
- Short circuit safe
- Automatic power fuse
- Easy to connect with a removable screw terminal connector
- Intelligent AGC controlling both output voltage and output current
- Three LEDs indicating power connection, input signal level and loop function
- Separate treble control (metal loss compensation)
- Separate bass control
- High quality well proven UniVox technique

Univox[®] AC/DC-100 is an highly efficient and compact loop amplifier with professional quality designed for areas such as lifts or buses.

This intelligent and easy to use amplifier can be connected simultaneously to 230-240V AC and 12-36V DC. It switches automatically between AC and DC sources in case of power failure. Univox[®] AC/DC-100 is a reliable amplifier with a large safety margin and with exceptionally high output current and power.

The built-in two step AGC input control and self regulating AGC output provides a stable sound with high speech perception even in hard hearing environments.

Univox[®] AC/DC-100 fulfils the requirements of the international standard IEC 60118-4:2006.

Univox® AC/DC-100

System Overview

Power supply:		230-240V AC 50Hz, 3.5-100W 12-36V DC, 3.5-100W
Area of coverage:		170 m ² , IEC 60118-4:2006, including the full strength of 400mA/m
Loop output:	<i>Max current</i>	60App/1ms/1kHz, short circuit safe output 17A RMS/10ms/1kHz 12A RMS/125ms/1kHz
	<i>Max voltage</i>	10V RMS
	<i>Output AGC</i>	Power controlled by voltage and current. The output voltage is reduced by 10dB after 0.6-1sec. Normal signals like speech is not regulated.
	<i>Frequency response</i>	80-6000Hz (±3dB)
	<i>Distorsion</i>	<1%
	<i>Wire connection</i>	Screw terminal
Inputs:	<i>Input 1 and 2</i>	7mV-10V (330Ω/150kΩ screw terminal)
	<i>Input 3</i>	7mV-10V/10kΩ, 7 pin DIN-connector, preset for the TV's Scart connector. Also equipped with a phantom voltage (12V DC/30mA) for example for use with a preamplifier.
Dual Action AGC:	<i>Dynamic range</i>	>70dB
	<i>Attack time</i>	2-500ms
	<i>Decay time</i>	0.5-20dB/s
Trimmers:	<i>Bass control</i>	0 - +12dB, trimmer inside unit
	<i>Treble control</i>	0 - +9dB, trimmer inside unit
Optical indication:	<i>Mains connection</i>	Yellow LED at the front panel
	<i>Input level</i>	Red LED at the rear panel
	<i>Loop current</i>	Green LED at the rear panel
Other information:	<i>Dimensions</i>	214 x 142 x 55mm (L x W x H)
	<i>Weight</i>	2 kg
	<i>Colour</i>	Light grey cover with a darker grey bottom plate
	<i>Part No</i>	212020

Note

- Dual action AGC – times are depending on type of signal sources
- If the bus TV is missing a Scart connector socket – attach the microphone Part No 242405 to the loudspeaker. Input 3 is not a general microphone input, due to low sensitivity.
- Removeable screw terminal connector makes it easier to mount or dismount

General planning

- Before installation make certain that magnetic ambient noise level caused by other electronic equipment is lower than 20dB according to IEC 60118-4:2006.
- Lift installation – use a 1.5mm² loop cable in a 4 to 8 turn loop at the lift ceiling or on top of the lift roof.
- Bus installation – install a 2 x 2.5mm² cable around the perimeter of the bus at roof height. Connect in series as a two turn loop. If the measurements are unsatisfactory connect in parallel as a one turn loop.
- Avoid input wires parallel and close to loop wires. Vertical crossing is permitted.
- Finally, check the installation with the FSM Field Strength Meter according to IEC 60118-4:2006.