EKONICS
Digital Alarm and Voice Evacuation System

Ravel®
Reliability at reach

Product Overview:

The Ekonics (Digital Alarm and Voice Evacuation System) is Digital Signal Processing (DSP) based voice alarm and Public Address System. The Ekonics System comprises router, Digital Amplifier and Power supply. This unit provides audio routing, full system control and fault reporting functions.

The Ekonics provides digital storage 120 Second Max, it is divided into Maximum 12 DVA messages eight audio outputs. The Ekonics has a front panel display control interface for commissioning the system, fault monitoring and diagnostics.

Ekonics is linked / integrated with the Fire Alarm control Panel (Avani) through Rs485.

CE

Features

➢ 4 audio inputs can configure to any combination of 8 or multiple of 8 outputs.
➢ 19" Rack mountable.
➢ All-call or zone wise paging.
➢ Built-in 12 Programmable DVA/Alarm messages.
➢ 40x4 LCD Display.
➢ USB 2.0 Interface for PC connectivity.
➢ PC based Router configuration.
➢ Interface with Avani via RS-485
➢ 3 Levels of Password protection.
➢ RS485 communication facility.
➢ Event log with RTC.
➢ User selectable Volume level & 3 Band Equalizer for audio inputs.
➢ Zone wise input priority level, permanent input, scheduled digital voice announcer.
➢ All field circuits are supervised.
➢ Inbuilt 250W Amplifier (2X125W)
➢ Zone wise selection through keypad
➢ Programmable one form C Relay
➢ Zone Selection, Fault status in unambiguous colored LED indication.

Specification

Primary Power
 220VAC + 10% -15%, 50 Hz.
Standby Power
24V DC (Lead acid battery)
Operating Condition
Operating Temperature 0 - 49° C / 32-120° F.
Relative Humidity 93 ± 2% RH (non-condensing) at 32 ±2° C / 90 ±3° F.
Charging Circuit
Charging Voltage 28 V, ±0.5V Nominal
Charging Current 1.2A (Max.).
DC Output
        24 VDC @ Max 3A

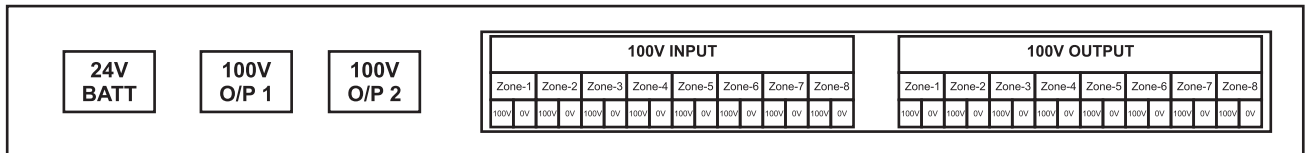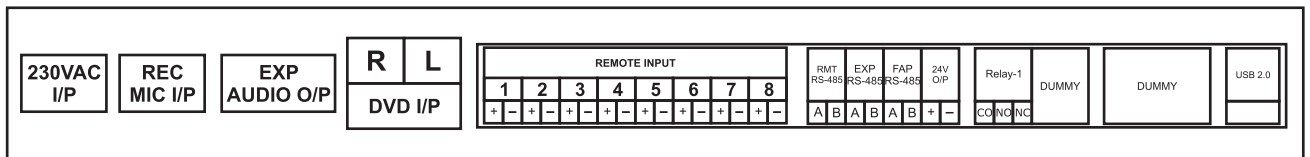**Audio**
Audio Inputs   : 4
Audio outputs   : 8 Zone (Expandable upto 64)
Build in DVA / Alarm storage   : Max 12 Messages / 120 seconds
Analogue input interfaces   : 8 Contacts (Normally Open)
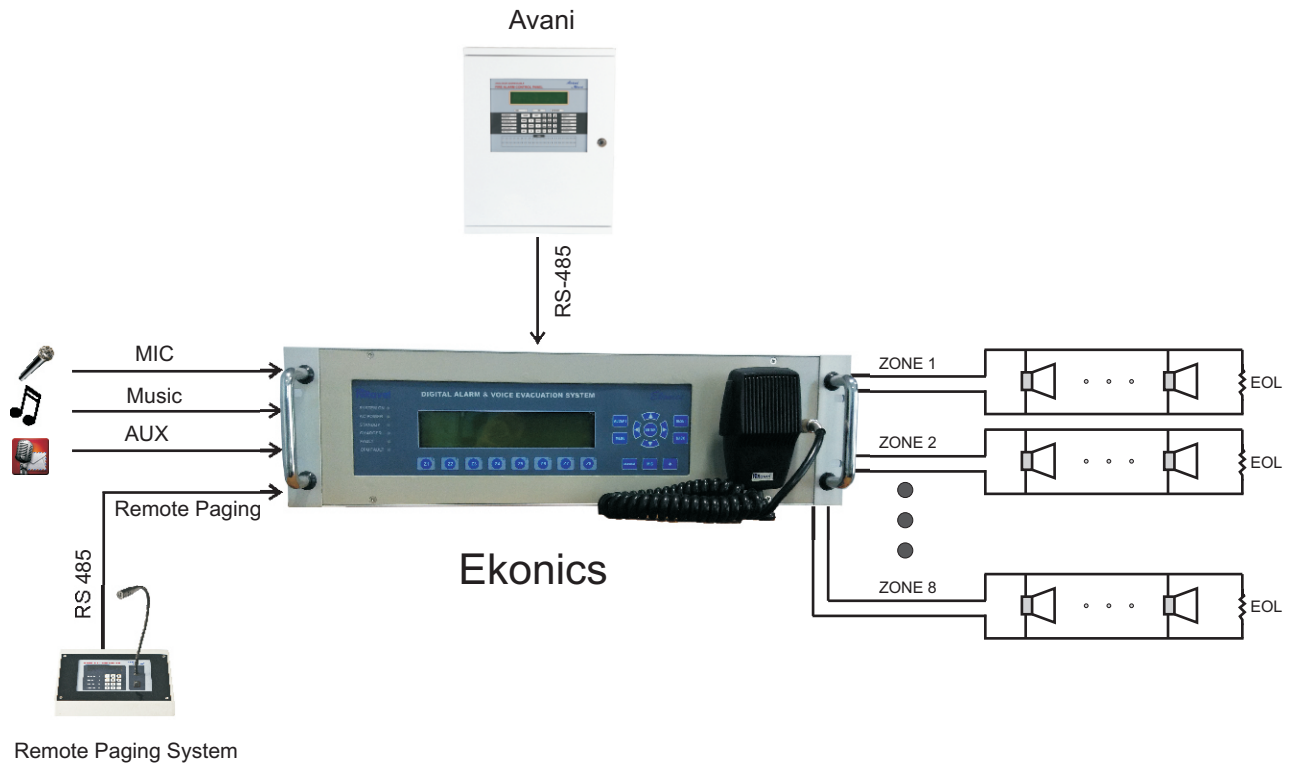Maximum Watts   : 250Watt (2X125W)

Dimension:
Dimensions(3U)   : 482.6 mm W X 134 mm H.

Terminal Details

230VAC I/P	REC MIC I/P	EXP AUDIO O/P	R	L	REMOTE INPUT																		RMT RS-485	EXP RS-485	FAP RS-485	24V O/P	Relay-1	DUMMY	DUMMY	USB 2.0

| | | | DVD I/P | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | | A | B | A | B | A | B | + | – | CO | NO | NC | | | |
| + | – | + | – | + | – | + | – | + | – | + | – | + | – | + | – |

24V BATT	100V O/P 1	100V O/P 2	100V INPUT								100V OUTPUT							
			Zone-1	Zone-2	Zone-3	Zone-4	Zone-5	Zone-6	Zone-7	Zone-8	Zone-1	Zone-2	Zone-3	Zone-4	Zone-5	Zone-6	Zone-7	Zone-8
			100V	0V	100V	0V	100V	0V	100V	0V	100V	0V	100V	0V	100V	0V	100V	0V

Block Diagram

Avani

RS-485

MIC

Music

AUX

Remote Paging

RS 485

Ekonics

ZONE 1
EOL

ZONE 2
EOL

ZONE 8
EOL

Remote Paging System

Compatible Device

MODELS	DESCRIPTION
EK-722	Digital Amplifier
EK-714	Remote Paging System
RE-LS10C	PA Ceiling Speaker
RE-LS10W	PA Wall mount Speaker
RE-LS30B	Bi-Directional Projection Speaker
RE-LS100XT	Horn Speaker

Ordering Information

MODELS	DESCRIPTION
EKONICS	Digital Alarm & Voice Evacuation System

*In the interest of improving quality and design, Ravel reserve the right to change the specification without prior notice.