



# Mirage Dig Evolution

## AEV DIGITAL AUDIO BROADCAST PROCESSOR



The latest AEV Fully digital audio processor, powered by DSP technology



Digital AES/EBU & Optical Inputs & Outputs

Balanced Analog Inputs & Outputs

AES/EBU standard, 24 bit resolution

UltraLow Latency Structure (only 3 ms delay)

Four Bands in multiband compressor process

Radio Data System encoder available

User selectable backup audio sources priority

Intelligent Silence Detector and Backup Audio Switcher

Four-bands AGC control

Eight-bands Equalizer

DSP processing power

Digital Stereo Coder

Software PC control

Ethernet control

Stereo Enhancer

RJ45, USB & RS232



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## Technical Data

Frequency response	20Hz ÷ 15 KHz FM version ( with 15 KHz filter) 20Hz ÷ 9.5 KHz AM version 20Hz ÷ 20 KHz ( with HD function)
Stop band rejection	> 78 dB beyond 17 KHz
Noise	> 75 dB in all conditions(depends on the processing)
Total distortion	< 0,01 %
Total system separation	> 85 dB (30 Hz – 15 kHz)

### ANALOG AUDIO INPUT

Configuration	Left and Right
Impedance	> 10 Kohm balanced
CMRR	> 45 dB from 30 to 15 KHz
A/D Conversion	64 kHz sample rate
Sensitivity	±12dBu
Maximum input level	+26 dBu
Connector	XLR-type, female,
Pin 1 Chassis Pin 2 & 3 electronically balanced, floating and symmetrical	

### DIGITAL INPUT

Digital input configuration	AES 3 professional (IEC-60958)
Digital AES 3 In Impedance	110 ohmBalanced
Digital AES 3 In Connector	XLR Female
Sample Rate Automatic lock	32 - 44.1 - 48 - 96 KHz
Resolution	24 Bit
Over sampling	256 x

### ANALOG AUDIO OUTPUT

Configuration	Left and Right. Flat or pre-emphasized (50µS – 75µS)
Impedance	30 Ohm electronically balanced and floating
Minimum load impedance	600 Ohm
Maximum output level	+24 dBu into 600 ohm load
Connector	XLR-type, male
Pin 1 Chassis	
Pin 2 & 3 electronically balanced, floating and symmetrical	

### DIGITAL OUTPUT

Digital Output Sample Rate	Software Selectable 32 - 44.1 - 48 - 96 KHz
Resolution	24 Bit
Over sampling	256 x
Digital Output configuration	stereo AES 3 Transformer Balanced (IEC-60958)
Digital Output Impedance	110 Ohm Balanced
Digital Output Level	- 20.00 / 0 dBFS adjustable
Digital Output Connector	XLR Male

### STEREO GENERATOR (version MPX only)

Configuration	one output
Pilot freq.	19 KHz ± 0.001% Max over temp.
Pilot injection	+4 ÷ 12 %
Distortion	< 0.005 % @1 kHz
Noise signal ratio	70 dB (Din Audio,Bypass mode) Typical
Stereo separation	60 dB Typical
Crosstalk Main to Sub	Great 48 dB 30-15 kHz
Crosstalk Sub to Main	Great 46 dB 30-15 kHz
38 kHz subcarrier suppression	70 dB Typical
76 kHz suppression	70 dB Typical
Composite audio level	0 ÷ 12dB
Connector	BNC
Output impedance	50 ohm

### DATA

Terminal Interface	Ethernet / RS232- at rear, asynchronous
Data Input	Full duplex
Format	Selectable
Serial Transmission Speed	2400 ÷ 19600 baud
Connector	RJ45 / RS232/ USB
Data management	Microprocessor controlled
Not volatile memory RAM data retention	10 years
Logic	I/O
Connector	DB9 cannon female

### GENERAL

Mains Voltage	90 – 260 Vac / 50 Hz full range
Dimension	(WxHxD) 48,3 x 19,4 x 4,4 cm 1 rack unit
Weight	3,5 Kg.
Operating Temp.	0 ÷ 50° C.
Operating Humidity.	Max 95% non condensing

