



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)
Three Bands in multiband compressor process
Radio Data System encoder (only MPX version)

DSP processing power
Digital Stereo Coder
Software PC control
Ethernet control
Stereo Enhancer
RJ45, USB & RS232



ADDITIONAL FEATURES for Mirage 4 EVO

Four Bands in multiband compressor process
User selectable backup audio sources priority
Intelligent Silence Detector and Input Backup Audio Switcher
Input MPX external to input autoswitch function (only MPX version)
Internal Decoder Radio Data System signal (only MPX version)
Radio Data System with RT+ dynamic info management (only MPX version)



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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

