

bit one

Signal Interface Processor

Bit One .1 Version



ideato,
progettato,
costruito
in Italia



Power Supply

Voltage:	11 ÷ 15 VDC
Idling current:	0.45 A
Switched off without DRC:	< 0.5 mA
Switched off with DRC:	< 1.8 mA

Remote IN voltage:	7 ÷ 15 VDC (1.3 mA)
Remote OUT voltage:	12 VDC (130 mA)

Distortion - THD @ 1 kHz, 1 V RMS Output:	0.002%
Bandwidth:	4.5 ÷ 21 kHz
S/N Ratio @ A weighted:	102 dBA
Channel Separation (@1 kHz):	77 dB
Input sensitivity (Low Level):	0.3 ÷ 5 V RMS
Input sensitivity (High Level):	1.2 ÷ 20 V RMS
Max Output Levels:	4 V RMS
Input impedance (Low Level):	20 kΩ
Input impedance (High Level):	5 kΩ

Inputs:	Low Level (Pre In):
	Ch1÷Ch6, AUX1 L/R, AUX2 L/R
Outputs:	High Level (Speakers In): Ch1÷ Ch8, Phone In
	Coaxial and Optical (S/PDIF Max 48 kHz/24 bit, PCM)
Outputs:	Analog Pre Out: Ch1÷Ch8
	Digital Out 48kHz-24 bit AD Link: Ch1÷ Ch8

Crossover

Type:	12/24/36/48 dB Linkwitz 6/12/18/24/30/36/42/48 dB Butterworth
Mode:	Full/Hi Pass/Low Pass/Band Pass

Equalizer

Type:	31 Band, ISO 1/3 Oct, 20 Hz ÷ 20 kHz
Gain:	± 12 dB

Time Alignment

Delay:	0 ÷ 22 ms in 0,02 ms steps (748 cm/294.5 inch)
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Size

WxHxD (mm/inches):	225 x 32,3 x 150 8.85" x 1.27" x 5.90"
Weight (kg/lb):	1,345 / 2.965

Audio DSP and converters	32-BIT floating point Analog Devices Sharc (Clock speed: 266MHz) Digital Signal Processing chip and Wolfson A/D D/A converters working in PCM at 48kHz with 24 Bit resolution. Tuning functions can be heard in real time due to processing speed
Audio Inputs	8 independent high-level channels (with automatic summing capability) or 6 independent analog low-level channels 2 analog low-level stereo auxiliary inputs 1 optical digital input 1 electric coaxial digital input 1 high-level momentary audio interrupt input (with Mute IN) for use with mobile phone or navigation systems
Audio Outputs	8 independent low-level analog channels featuring adjustable level and 1 AD Link output (8 independent digital audio channels through a single CAT 5.S LAN cable for use with AD Link provided amplifiers)
Digital Control System	1 USB /B (2.0) connector for PC connection 2 AC Link control bus connectors for DRC and AC Link amplifiers
Configuration	Guided procedure that, thanks to a wide range of set names, provides the ability to assign each component to the Bit One connections and automatically coordinate their functioning
Turn-on Controls	ART™ automatic remote turn on/off circuit. Through the car ignition key with memory function. Through the DRC. Automatically through the hands-free phone kit.
In/Out Volume	Input sensitivity automatically adjusted for the main inputs (with supplied Test CD and DVD) Manual input sensitivity adjustment for auxiliary inputs Independent level control for each output channel for system fine tuning (-40 ÷ 0 dB)
Dynamic Equalizer	System automatically self-adjusts through an equalization between low and high listening levels that can be set by the user and controlled by the DRC
De-equalization and calibration	Automatic de-equalization of signal fed into the high-level inputs (with supplied Test CD or DVD) and levels calibration
Equalizers	One 31-band graphic equalizer (1/3Oct.; ±12dB) for each one of the 4 auxiliary input One 31-band graphic equalizer (1/3 Oct.; ±12dB) for each one of the 8 output channels
Crossover Filter	Filter typology: Selectable; Hi-pass, Lo-pass, Bandpass, Full Range Cut-off frequency: 70 steps available from 10Hz to 20kHz Cut-off slope: Selectable; 6 to 48 dB/Oct. Alignments: Selectable; Linkwitz or Butterworth Mute: Selectable for each output (On/Off) Phase: Selectable for each output (0°/180°)
Signal channels reconstruction	It can reconstruct a stereo signal from a multi-channel signal. In addition it can reconstruct a centre channel and subwoofer channels from a stereo input alone
Time Alignment	Guided procedure for the speaker distance data entry with an automated calculation of proper delay times for each channel for accurate time alignment set-up. System also provides for manual fine tuning of delay (0÷22 ms max)
Auto Restart	Automatic turn Off/On, if the DSP locks up
DRC	Master Volume control, Subwoofer Volume control, Balance control, Fader control, Input selection, Memory selection, Dynamic Equalizer On/Off, Adjustable display brightness, Access to digital features of Audison TH amps if connected
Memory	4 presets separately managed and recalled by the DRC Remote Control
Bit One software	Microsoft Windows (Win 2000, XP, Vista) based software with "Standard" and "Expert" operating modes screen resolution: 1024 x 768 px min.

