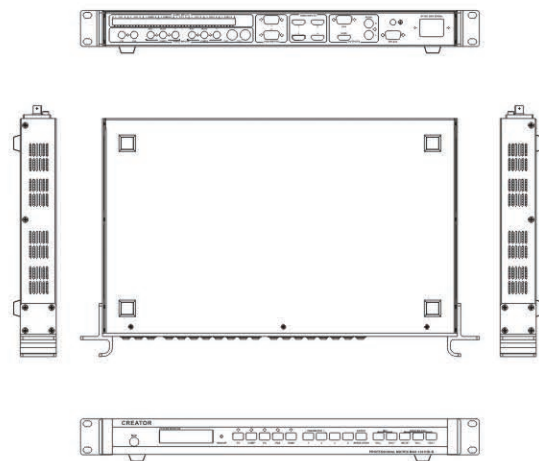


MAX-1301HD-B

Professional multi-signal switcher



MAX-1301HD-B



Size(mm):
483(L)×290(W)×43.6(H)

Product overview

MAX-1301HD-B is a Matrix switcher which set video signal format conversion (SCALER) and switching into one. It supports converting and switching different formats of a variety of video signal sources: composite video signal (CV), component video signals (Pr/Cr, Pb/Cb, Y), S-Video (Y/C), VGA and HDMI (high-definition multimedia interface) signal to the unified VGA / HDMI/DVI signal, also supports MIC signal input.

Function characteristics

- Support 12 video signal input: 2 CV, 2 S-Video, 2 component video, 2 VGA, 4 HDMI/DVI.
- 2 video signal output: 1 HDMI, 1 VGA.
- Support input signal source of composite video (CV), component video (Pr/Cr, Pb/Cb, Y) and S-Video (Y/C) of various adaptive formats (including NTST, PAL, SECAM).
- Support independent adjustment of brightness, contrast, saturation, sharpness, hue of VIDEO (CV), component video (YpbPr/YcbCr), S-Video and HDMI, and independent adjustment of brightness, contrast, color temperature and phase of VGA.
- Support corresponding 8 unbalanced audio input, a non-equilibrium audio output.
- Main audio bass, treble, balance can be adjusted.
- Support for 1 road microphone input, and remix effect of microphone and master volume.
- Support audio video independent switching effect.
- Support power-off memory function.
- Support the OSD menu.
- When the input groups converted into VGA/HDMI/DVI video signal after switching.

Specifications

The parameter name	MAX-1301HD-B	
Video	Gain	0dB
	Bandwidth	AV video:150MHz, S-video video:150MHz, VGA video:375 MHz,HDMI/DVI video:2.25Gbps.
	Crosstalk of input multiple channels to a channel	-50dB @50 MHz, -45dB @10 MHz
	Differential phase I/OS	<1.28°, 3.58 MHz
	Differential phase error	0.1%, 3.58-4.43 MHz
	Differential gain error	0.1%, 3.58-4.43 MHz
	Switching speed	100 ns(The longest time)
Video input	Signal type	VGA,S-video, COMP component video (YPbPr/YCbCr),Composite video (CVBS),HDMI/DVI.
	Interface	CV:RCA female connector,S-Video:S-Video terminal (Y-C terminal), VGA:15-pin HD master interface, COMP:RCA female connector, HDMI/DVI:HDM terminal.
VGA video output	Signal strength	The 1Vpp:Y component video、S-video,S-video, composite video, 0.7Vpp: VGA (computer signal), 0.3Vpp: CbCr component video、C of S-video ,HDMI/DVI video.
	The minimum, maximum level of the analog signal	-2.0Vpp / +2.0Vpp
	Impedance	75 Ω
	Echo loss	<-30dB@5MHz
	Horizontal frequency response	60-200KHz
	Vertical frequency response	10Hz-200Hz
The VGA synchronization signal	Interface	DB15 master interface
	Minimum / maximum level	-2.0Vpp / +2.0Vpp
	Impedance	75 Ω
	Echo loss	<-40dB@5MHz
HDMI video input	DC compensation	Maximum ± 5mV
	Input / output signal types	RGBHV, RGBS, RGSB, RsGsBs, Composite video, Component video.
	Video format	NTSC 3.58,NTSC 4.43,PAL,SECAM
	Input level	0.5V- 5.0Vpp,4.0Vpp Normal
	Output level	AGC-TTL: 5Vpp, unterminated
	Input impedance	510 Ω
	Output impedance	75 Ω
	Maximum transmission delay	Horizontally 90ns vertical: 1 60ns
	The maximum rise / fall time	4ns
	Polarity	Positive or negative (completely consistent with the input)
HDMI video output	Supported protocols	HDMI1.3a, DVI1.0, HDCP1.3, x.v.Color, TrueHD, DTS-HD
	Gain	0dB
	Pixel bandwidth	165MHz, all digital
	Interface bandwidth	2.25 Gbps,Full digital (a total of 6.75Gbps. each color is 2.25Gbps)
	Maximum supported resolution	HDPC 1600x1200@60_24bit Color depth,HDTV 1920x1080P@60_24bit Color depth.
	Clock Jitter	<0.15 Tbit
	Risetime	<0.3Tbit (20%~80%)
	Falltime	<0.3Tbit (20%~80%)
	Signal type	HDMI/ DVI-D all digital T.M.D.S signal in HDMI 1.3a / DVI 1.0 specification
	Interface	The HDMI-A interface (Type A connector)
Signal strength	T.M.D.S. +/- 0.4Vpp	

Specifications

The parameter name	MAX-1301HD-B	
HDMI video input	Minimum / maximum level	T.M.D.S. 2.9V/3.3V
	Impedance	50Ω
	Input EDID	Using the default EDID, (support terminal EDID mapping to input)
	Maximum DC offset error	15mV
Video output	The recommended maximum input distance	Less than 25 meters, in the 1920x1080p@60 (recommended the use of certified HDMI special wire, as Molex TM wire)
	Interface	The HDMI-A interface (Type A connector)
	Minimum / maximum level	T.M.D.S. 2.9V/3.3V
	Impedance	50Ω
Sound signal	The recommended maximum output distance	Less than 10 meters, in the 1920x1080p@60 (recommended the use of certified HDMI special wire, as Molex TM wire)
	Input and output interface	4 10PIN Phoenix joint / unbalanced audio input of each road, 1 unbalanced output of 2RCA joint
	Gain	0dB
	Frequency response	20 Hz ~ 20 kHz,
	Total harmonic distortion + noise	(Rated voltage)
	The signal-to-noise ratio (S/N)	>58dB
	Stereo separation	>80dB @ 1 kHz
	Common mode rejection ratio (CMRR)	>75dB @: 20 Hz ~ 20 kHz
	Signal type	stereo audio (unbalanced)
	Impedance	Input: >10 K (balanced or unbalanced connection) output: 50 (unbalanced connection), 100 (balanced connection)
	Maximum input level	+19.5dBu, (balanced or unbalanced connection)
	Gain error	± 0.1dB @20 Hz ~ 20 kHz
	The maximum output level	+19.5dBu, (balanced or unbalanced connection)
	MIC	MIC type
Input sensitivity		25mV
Frequency response		50Hz-16K Hz
Type of joint		Mono input
Control types	Serial control interface	RS-232, 9- pin female D interface
	The baud rate and protocol	9600, Data bits: 8, Stop bit: 1, No parity
	The serial control port structure	2 = TX, 3 = RX, 5 = GND
Specifications	Power supply	100VAC-240VAC-50/60 Hz, The adaptive power supply
	Maximum power dissipation	100W
	Storage, use temperature	-20°C~ +70°C
	Storage, use humidity	10% ~ 90%
	The weight of the product	1.9kg
	Mean time between failures	30000 Special Ops
	The warranty	1 year free warranty, life-long maintenance

System connection diagram

