

Overview

The Active VGA/Audio Balun Kit (500145) allows VGA and stereo or digital audio to be transmitted via cost-efficient unshielded copper twisted cable in a point-to-point configuration. The product also supports RS232, is DDC compliant and works in conjunction with MuxLab's IR-Emitter (500998) and IR Sensor (500999) to support IR source control. Tx and Rx also sold separately.

The product supports up to 1920 x 1200 resolution and features manual brightness, sharpness and skew adjustments. Applications include; Digital signage, residential, boardroom, classroom, medical imaging video systems.



Key Features

- Up to 600 ft (180m) via Cat5e/6 @ 1920 x 1200
- Supports analog stereo or digital audio
- Supports RS232 or IR control
- DDC1/DDC2 (Plug-and-Play) Compliant
- Brightness, sharpness and skew adjustments
- Local VGA/Audio monitor output
- Ground loop isolation

Specifications															
Environment	VGA. VESA VP&D 1.0, VIP ver 2.0. DDC1 and DDC2 with Analog Stereo and/or Digital Audio, IR and RS232 control.														
Devices	PCs, laptops, CRT monitors, LCD monitors, plasma screens, DLP projectors.														
Transmission	Transparent to the user														
Bandwidth	Up to 220 MHz (1920 x 1200 resolution), 1080p														
Input Impedance	HD15; 75 ohms: 75 ohms; Stereo Audio: 2.2 Kohms														
Output Impedance	Cat 5e/6: 100 ohms														
Connectors: Transmitter	<table border="0"> <tr> <td>VGA Input (PC):</td> <td>HD15-F</td> </tr> <tr> <td>VGA Output (Local Monitor):</td> <td>HD15-F</td> </tr> <tr> <td>Stereo Audio Input and Output:</td> <td>2 x 3.5mm (stereo) jacks</td> </tr> <tr> <td>Digital Audio Input:</td> <td>RCA-F</td> </tr> <tr> <td>IR-Emitter Output:</td> <td>3.5mm (mono) jack</td> </tr> <tr> <td>RS232:</td> <td>DB9-F</td> </tr> <tr> <td>Link Output:</td> <td>RJ45S</td> </tr> </table>	VGA Input (PC):	HD15-F	VGA Output (Local Monitor):	HD15-F	Stereo Audio Input and Output:	2 x 3.5mm (stereo) jacks	Digital Audio Input:	RCA-F	IR-Emitter Output:	3.5mm (mono) jack	RS232:	DB9-F	Link Output:	RJ45S
VGA Input (PC):	HD15-F														
VGA Output (Local Monitor):	HD15-F														
Stereo Audio Input and Output:	2 x 3.5mm (stereo) jacks														
Digital Audio Input:	RCA-F														
IR-Emitter Output:	3.5mm (mono) jack														
RS232:	DB9-F														
Link Output:	RJ45S														
Connectors: Receiver	<table border="0"> <tr> <td>Link Input:</td> <td>RJ45S</td> </tr> <tr> <td>VGA Output (Display):</td> <td>HD15-F</td> </tr> <tr> <td>Stereo Audio Output:</td> <td>3.5mm jack</td> </tr> <tr> <td>Digital Audio Output:</td> <td>RCA-F</td> </tr> <tr> <td>IR-Sensor Input:</td> <td>3.5mm (stereo) jack</td> </tr> <tr> <td>RS232:</td> <td>DB9-M</td> </tr> </table>	Link Input:	RJ45S	VGA Output (Display):	HD15-F	Stereo Audio Output:	3.5mm jack	Digital Audio Output:	RCA-F	IR-Sensor Input:	3.5mm (stereo) jack	RS232:	DB9-M		
Link Input:	RJ45S														
VGA Output (Display):	HD15-F														
Stereo Audio Output:	3.5mm jack														
Digital Audio Output:	RCA-F														
IR-Sensor Input:	3.5mm (stereo) jack														
RS232:	DB9-M														
Max. Distance – VGA via Cat 5e/6 UTP	<table border="0"> <tr> <td>640 x 480 (VGA): 1,000 ft (305m)</td> <td>1600 x 1200 (UXGA):800 ft (245m)</td> </tr> <tr> <td>800 x 600 (SVGA): 1,000 ft (305m)</td> <td>1366 x 768 (WXGA):850 ft (260m)</td> </tr> <tr> <td>1024 x 768 (XGA): 1,000 ft (305m)</td> <td>1680x1050 (WSXGA):850 ft (260m)</td> </tr> <tr> <td>1280 x 1024 (SXGA):850 ft (260m)</td> <td>1920 x 1200 (WUXGA):600 ft (180m)</td> </tr> </table>	640 x 480 (VGA): 1,000 ft (305m)	1600 x 1200 (UXGA):800 ft (245m)	800 x 600 (SVGA): 1,000 ft (305m)	1366 x 768 (WXGA):850 ft (260m)	1024 x 768 (XGA): 1,000 ft (305m)	1680x1050 (WSXGA):850 ft (260m)	1280 x 1024 (SXGA):850 ft (260m)	1920 x 1200 (WUXGA):600 ft (180m)						
640 x 480 (VGA): 1,000 ft (305m)	1600 x 1200 (UXGA):800 ft (245m)														
800 x 600 (SVGA): 1,000 ft (305m)	1366 x 768 (WXGA):850 ft (260m)														
1024 x 768 (XGA): 1,000 ft (305m)	1680x1050 (WSXGA):850 ft (260m)														
1280 x 1024 (SXGA):850 ft (260m)	1920 x 1200 (WUXGA):600 ft (180m)														
Max Distance – Audio	Analog Stereo Audio: 1,000 ft (305 m) Digital Audio: 1,000 ft (305 m)														
RJ45 Pin Configuration <i>Reverse Polarity Sensitive</i> <i>Use EIA/TIA 568A or 568B straight-through wiring</i>	<table border="0"> <tr> <td>Green (Y):</td> <td>Pin 4 (R)</td> <td>Pin 5 (T)</td> </tr> <tr> <td>Blue (Pb):</td> <td>Pin 1 (R)</td> <td>Pin 2 (T)</td> </tr> <tr> <td>Red (Pr):</td> <td>Pin 7 (R)</td> <td>Pin 8 (T)</td> </tr> <tr> <td>IR-Emitter, RS-232:</td> <td>Pin 3 (R)</td> <td>Pin 6 (T)</td> </tr> </table>	Green (Y):	Pin 4 (R)	Pin 5 (T)	Blue (Pb):	Pin 1 (R)	Pin 2 (T)	Red (Pr):	Pin 7 (R)	Pin 8 (T)	IR-Emitter, RS-232:	Pin 3 (R)	Pin 6 (T)		
Green (Y):	Pin 4 (R)	Pin 5 (T)													
Blue (Pb):	Pin 1 (R)	Pin 2 (T)													
Red (Pr):	Pin 7 (R)	Pin 8 (T)													
IR-Emitter, RS-232:	Pin 3 (R)	Pin 6 (T)													
Brightness Adjustment	Brightness control via rotary switch on the receiver. (Factory default setting: "None")														
Sharpness Adjustment	Sharpness control via potentiometer on the receiver (Factory default setting: Completely rotated counterclockwise)														
Skew Adjustment	Skew control via 3 potentiometers (R, G, B) on the receiver (Factory default setting: Completely rotated counterclockwise)														
LED Indicators	Tx Balun: Power: One (1) green LED; Sync: One (1) green LED Rx Balun: Power: One (1) green LED														
IR Interface <i>Use p/n 500998 and p/n 500999 or equivalent (see datasheets)</i>	IR Emitter (500998): IR Wavelength: 940 nm IR Sensor (500999): IR Wavelength: 940 nm, Carrier freq: 38 KHz, Receiving Distance: 50 ft (15m) Power requirement:: 12 VDC @ 2 mA														
Cable	Cat 5e/6 unshielded twisted pair (or better)														
Power Supplies	110-240V/12VDC/0.5A, 12VDC power jacks Removable AC blades included for North America, Continental Europe & UK														
Temperature	Operating: 0° C to 40° C Storage: -10° C to 70° C Humidity: Up to 95% non-condensing														
Enclosure	Black. ABS fire retardant plastic														
Dimensions	6" x 4.25" x 1.50" (15.3 cm x 10.8 cm x 3.8 cm)														
Weight	2 lbs (0.9 kg)														
Regulatory	FCC/CE, RoHS														
Warranty	Two (2) years														
Order Information	500145 Active VGA/Audio Balun Kit 500146 Active VGA/Audio Balun, TX, incl PSU 500147 Active VGA/Audio Balun, RX, incl PSU														

Typical Applications

