

### Overview

The Active VGA Balun II Kit allows VGA or component video to be transmitted via cost-efficient unshielded copper twisted cable in a point-to-point configuration. The product supports remote power pass-thru and is DDC compliant with all “plug-and-play” laptops, PCs and displays. The product supports up to 1920 x 1440 pixels and 1080p resolution and features manual gain adjustment and local monitor output for added versatility. Applications include; Digital signage, residential, boardroom, classroom, medical imaging video systems.



### Key Features

- Up to 600 ft (180m) via Cat5e/6 @ 1920 x 1440
- Up to 600 ft (180m) via Cat5e/6 @ 1080p
- Remote power pass-thru up to 150 ft (46m)
- DDC1/DDC2 (Plug-and-Play) Compliant
- Manual gain compensation
- Local monitor output
- Ground loop isolation

Specifications													
<b>Environment</b>	VGA. VESA VP&D 1.0, VIP ver 2.0. DDC1 and DDC1.												
<b>Devices</b>	PCs, laptops, monitors, LCD monitors, plasma screens, DLP projectors.												
<b>Transmission</b>	Transparent to the user.												
<b>Bandwidth</b>	Up to 220 MHz (1920 x 1200 resolution), 1080p												
<b>Input Impedance</b>	HD15; 75 ohms												
<b>Output Impedance -</b>	Cat5: 100 ohms												
<b>Connectors – Transmitter</b>	VGA/Component Input (PC): DB15HD-F VGA/Component Output (Local Monitor): DB15HD-F VGA/Component Output (Cat5E): RJ45 shielded												
<b>Connectors – Receiver</b>	VGA/Component Input (Cat5E): RJ45 shielded VGA/Component Output (Display): DB15HD-M												
<b>Maximum Distance – Remote Power</b>	150 ft (46m) (Tx Balun unpowered, Rx balun powered) 150 ft (46m) (Tx Balun powered, Rx balun unpowered)												
<b>Max. Distance for VGA via Cat 5E/6</b>  <i>Up to three (3) transmitters may be cascaded. Loss of 100 ft (30m) for every Tx cascaded @ 1024x768.</i>	<table border="0"> <tr> <td>640 x 480 (VGA): 1000 ft (305m)</td> <td>1600 x 1200 (UXGA):800 ft (245m)</td> </tr> <tr> <td>800 x 600 (SVGA): 1000 ft (305m)</td> <td>1366 x 768 (WXGA):850 ft (260m)*</td> </tr> <tr> <td>1024 x 768 (XGA): 1000 ft (305m)</td> <td>1680x1050 (WSXGA):850 ft (260m)</td> </tr> <tr> <td>1280 x 1024 (SXGA):850 ft (260m)</td> <td>1920 x1200 (WUXGA):600 ft (180m)**</td> </tr> <tr> <td></td> <td>*Cat6:Skew is noticeable at 300' (90m)</td> </tr> <tr> <td></td> <td>**Cat6:Skew is noticeable at 200' (60m)</td> </tr> </table>	640 x 480 (VGA): 1000 ft (305m)	1600 x 1200 (UXGA):800 ft (245m)	800 x 600 (SVGA): 1000 ft (305m)	1366 x 768 (WXGA):850 ft (260m)*	1024 x 768 (XGA): 1000 ft (305m)	1680x1050 (WSXGA):850 ft (260m)	1280 x 1024 (SXGA):850 ft (260m)	1920 x1200 (WUXGA):600 ft (180m)**		*Cat6:Skew is noticeable at 300' (90m)		**Cat6:Skew is noticeable at 200' (60m)
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<b>Max Distance for Component Video (YPbPr) via Cat 5E/6</b> <i>Up to four (4) transmitters may be cascaded</i>	480i/p: 1,000 ft (305 m)    1080i: 850 ft (260 m) 1080p: 600 ft (180 m)  * VGA-to-component video cables required at both ends (not included)												
<b>RJ45 Pin Configuration</b> <b>Reverse Polarity Sensitive</b> <i>Use EIA/TIA 568 A or B, straight-through wiring</i>	<table border="0"> <tr> <td>Red:</td> <td>Pin 7 (R)</td> <td>Pin 8 (T)</td> </tr> <tr> <td>Green:</td> <td>Pin 3 (R)</td> <td>Pin 6 (T)</td> </tr> <tr> <td>Blue:</td> <td>Pin 1 (R)</td> <td>Pin 2 (T)</td> </tr> <tr> <td>DDC/Remote Power:</td> <td>Pin 4 (R)</td> <td>Pin 5 (T)</td> </tr> </table>	Red:	Pin 7 (R)	Pin 8 (T)	Green:	Pin 3 (R)	Pin 6 (T)	Blue:	Pin 1 (R)	Pin 2 (T)	DDC/Remote Power:	Pin 4 (R)	Pin 5 (T)
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<b>Gain Adjustment</b>	Gain control via brightness and sharpness potentiometers (Rev B)												
<b>LED Indicators</b>	Tx Balun: Power: One (1) green LED    Sync: One (1) green LED Rx Balun: Power: One (1) green LED												
<b>Cable</b>	Category 5 or better twisted pair cable. Transmitter requires additional VGA jumper cables (not included)												
<b>Ground Loop Isolation</b>	Up to -2VDC to +3VDC between PC and display ground.												
<b>Power Supplies</b>	Includes two (2) 110-240V/12VDC/0.5 power supplies with removable AC blades for North America and Continental Europe. 12VDC power jacks.												
<b>Temperature</b>	Operating: 0° to 40° C.    Storage:-10° to 70° C. Humidity: up to 95% non-condensing.												
<b>Enclosure</b>	Black. ABS fire retardant plastic												
<b>Dimensions</b>	Tx: 4.5" x 3.8" x 1.25" (11.4 cm x 9.7 cm x 3.2cm) Rx: 2.4" x 2.25" x 1.0" (6.1 x 5.5 x 2.5 cm) plus 6" cable lead												
<b>Weight</b>	2 lbs, 0.9 Kg												
<b>Regulatory</b>	FCC/CE, RoHS												
<b>Warranty</b>	Two (2) years												
<b>Order Information</b>	500140: Active VGA Balun II Kit (Rev C) 500141: Active VGA Balun II, Transmitter (Source), No PSU 500142: Active VGA Balun II, Receiver (Display), No PSU (Rev C) 500144: Power Supply 100-240V/12VDC/.5A for 500141 or 500142												

**Typical Applications**

