Active VGA Balun II Kit
500140, 500141, 500142, 500144

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.
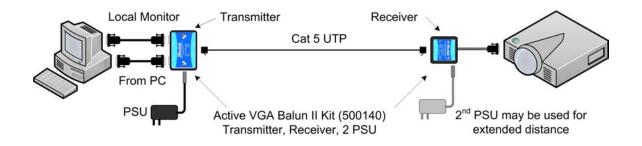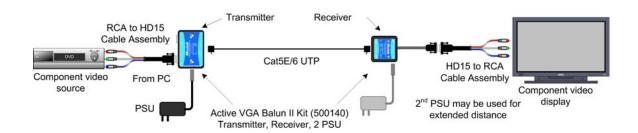
Key Features

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
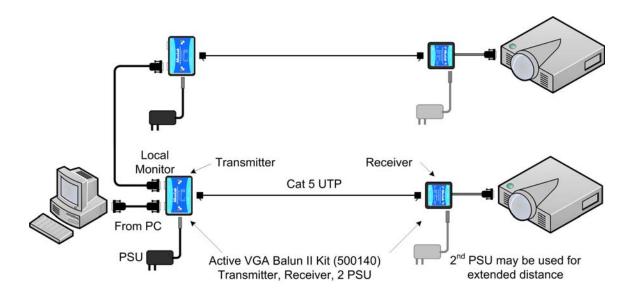Local monitor output
Ground loop isolation

Specifications	
Environment	VGA. VESA VP&D 1.0, VIP ver 2.0. DDC1 and DDC1.
Devices	PCs, laptops, 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
Output Impedance -	Cat5: 100 ohms
Connectors – Transmitter	VGA/Component Input (PC): DB15HD-F VGA/Component Output (Local Monitor): DB15HD-F VGA/Component Output (Cat5E): RJ45 shielded
Connectors – Receiver	VGA/Component Input (Cat5E): RJ45 shielded VGA/Component Output (Display): DB15HD-M
Maximum Distance – Remote Power	150 ft (46m) (Tx Balun unpowered, Rx balun powered) 150 ft (46m) (Tx Balun powered, Rx balun unpowered)
Max. Distance for VGA via Cat 5E/6 *Up to three (3) transmitters may be cascaded. Loss of 100 ft (30m) for every Tx cascaded @ 1024x768.*	640 x 480 (VGA): 1000 ft (305m) 800 x 600 (SVGA): 1000 ft (305m) 1024 x 768 (XGA): 1000 ft (305m) 1280 x 1024 (SXGA):850 ft (260m)	1600 x 1200 (UXGA):800 ft (245m) 1366 x 768 (WXGA):850 ft (260m)* 1680x1050 (WSXGA):850 ft (260m) 1920 x1200 (WUXGA):600 ft (180m)** *Cat6:Skew is noticeable at 300' (90m) **Cat6:Skew is noticeable at 200' (60m)
Max Distance for Component Video (YPbPr) via Cat 5E/6 *Up to four (4) transmitters may be cascaded*	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)	
RJ45 Pin Configuration Reverse Polarity Sensitive *Use EIA/TIA 568 A or B, straight-through wiring*	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)	
Gain Adjustment	Gain control via brightness and sharpness potentiometers (Rev B)
LED Indicators	Tx Balun: Power: One (1) green LED Sync: One (1) green LED Rx Balun: Power: One (1) green LED
Cable	Category 5 or better twisted pair cable. Transmitter requires additional VGA jumper cables (not included)
Ground Loop Isolation	Up to –2VDC to +3VDC between PC and display ground.
Power Supplies	Includes two (2) 110-240V/12VDC/0.5 power supplies with removable AC blades for North America and Continental Europe. 12VDC power jacks.
Temperature	Operating: 0º to 40º C. Storage:-10º to 70º C. Humidity: up to 95% non-condensing.
Enclosure	Black. ABS fire retardant plastic
Dimensions	Tx: 4.5" x 3.0" x 1.25" (11.4 cm x 7.6 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
Weight	2 lbs, 0.9 Kg
Regulatory	FCC/CE, RoHS
Warranty	Two (2) years
Order Information	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

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Typical Applications

Local Monitor — Transmitter — Receiver
Cat 5 UTP
From PC
PSU
Active VGA Balun II Kit (500140)
Transmitter, Receiver, 2 PSU
2nd PSU may be used for extended distance

RCA to HD15 Cable Assembly — Transmitter — Receiver
Component video source
From PC
Cat5E/6 UTP
HD15 to RCA Cable Assembly
Component video display
PSU
Active VGA Balun II Kit (500140) Transmitter, Receiver, 2 PSU
2nd PSU may be used for extended distance

Local Monitor — Transmitter — Receiver
Cat 5 UTP
From PC
PSU
Active VGA Balun II Kit (500140) Transmitter, Receiver, 2 PSU
2nd PSU may be used for extended distance