VGA Balun II
500040, 500041, 500042, 500043

Overview

The VGA Balun II eliminates costly and bulky VGA cable, allowing a VGA source to be connected to a VGA monitor via one (1) 4-pair Cat5E/6 unshielded twisted pair (UTP) cable. Used in pairs, the VGA Balun II allows VGA video to be transmitted up to 350ft (107m) via Cat5E/6 at 800 x 600 resolution.

Each VGA connection requires p/n 500040 or 500043 at the source and either p/n 500041 or 500042 at the display. The VGA Balun II works in conjunction with laptops, PCs, plasmas, CRT, LCD monitors and DLP projectors.

Typical applications include digital signage, boardroom systems, classroom video instruction and custom audio-video systems. The product features a "reset" button that may be required when used in conjunction with certain sync-sensitive displays.

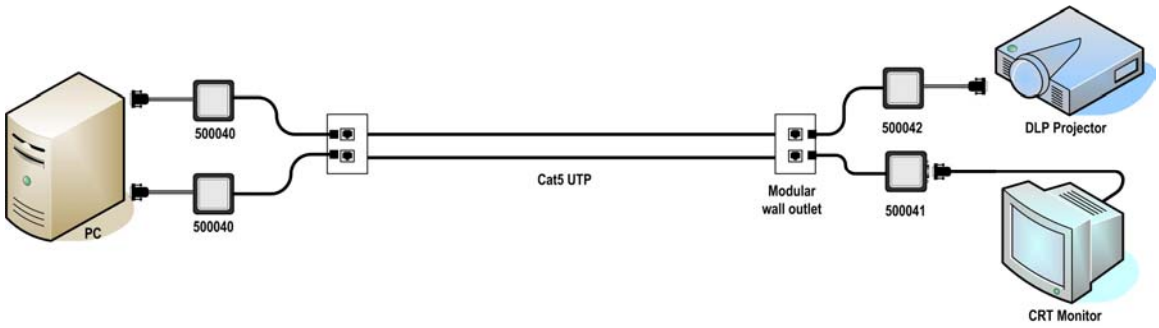
Features & Benefits

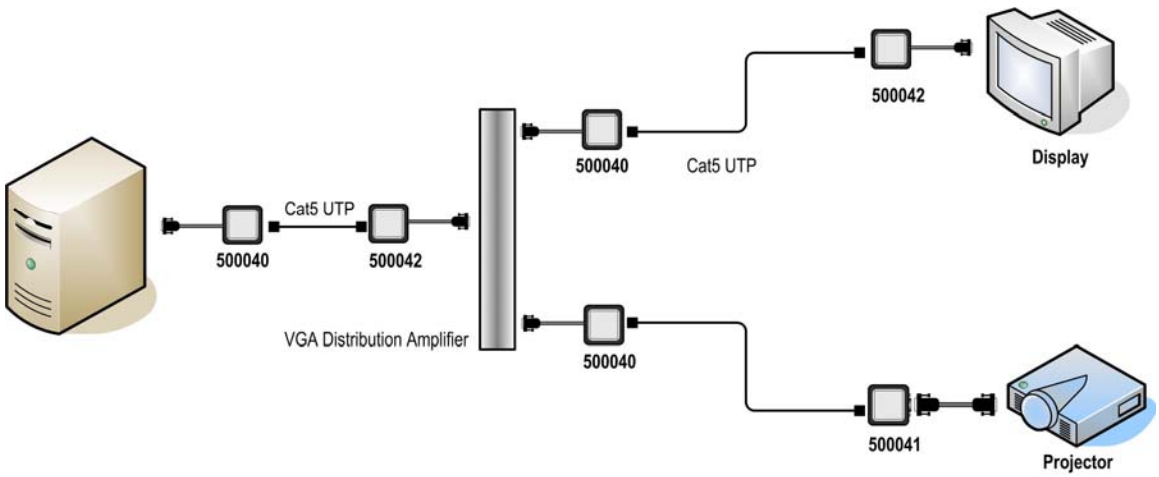
Fully supports Cat5E/6 unshielded twisted pair (UTP)*
Cost efficient versus VGA cable
Use existing structured cabling system
Save conduit space

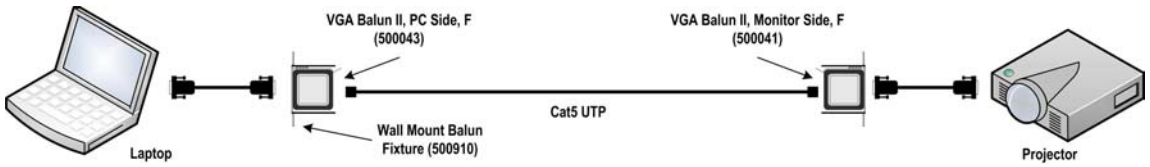
** Reset button on units may be required with certain sync-sensitive displays. Not compatible with 500010, 500011 and 500014. Does not support DDC handshaking.*

Specifications	
Environment	VGA. VESA VP&D 1.0, VIP ver 2.0.
Devices	CRT & LCD monitors, plasma screens, PCs, laptops and multimedia projectors.
Transmission	Transparent to the user.
Bandwidth	DC to 60MHz
Input Signals	Video: 1.1Vp-p Horizontal sync: TTL standard. 300kHz max. bandwidth Vertical sync: TTL standard. 300kHz max. bandwidth
Insertion Loss	Less than 3 dB per pair over the frequency range.
Common Mode Rejection (CMRR)	15kHz -60dB typ. 100kHz to 10MHz -40dB typ. 200MHz -20dB typ.
Return Loss	-15dB max from DC to 60MHz
Connectors	500040/500042: HD15 Plug, RJ45S 500041/500043: HD15 Receptacle, RJ45S
Max. Distance via Cat5E/6 Twisted Pair	VGA: 640x480 pixels (15MHz) 450ft (137m) SVGA: 800x600 pixels (30MHz) 350ft (107m) XGA: 1024x768 pixels (60MHz) 250ft (76m) SXGA: 1280x1024 pixels (100MHz) 200ft (61m) WXGA:1366x768 pixels 180ft (55m)
RJ45 Pin Configuration *EIA 568 (A or B)* *Reverse Polarity Sensitive*	Pin 1 (R) Pin 2 (T) Balanced - Red Pin 4 (R) Pin 5 (T) Balanced – Green Pin 7 (T) Pin 8 (R) Unbalanced – Blue (7 - Signal, 8 - Ground) Pin 3 (R) Pin 6 (T) Unbalanced – H & V Sync
Compatibility	Not compatible with 500010, 500011, 500014, 500035/36, 500140 Does not support VGA handshaking (DDC) signals.
Reset button	May be required when used with sync-sensitive displays.
Grounding screw	Grounding screw for optional use.
Cable	Cat5E/6 or better unshielded twisted pair (UTP) The VGA Balun II does not support VGA handshaking and control signals. Therefore it is necessary to set the monitor attributes prior to installing the VGA baluns. In order to do this, first connect the standard VGA cable directly from the PC to the monitor and then set the monitor attributes to the required settings (*i.e.*, resolution, color, etc.). Also, in order to achieve optimum results via twisted pair, set the contrast and brightness levels to maximum.
Impedance	Input: RGB 75 ohms (HD15) Unbalanced Output: RGB 100 ohms (RJ45 shielded) Balanced Horizontal and vertical sync: Balanced
Temperature	Operating: 0° to 55° C. Storage:-20° to 85° C. Humidity: up to 95% non-cond.
Enclosure	ABS fire retardant plastic
Dimensions	2.4" x 2.25 x 1.0" (6.1 x 5.7 x 2.54 cm). Plus 6" (15.2cm) lead on 500040/42
Weight	500041/500043: 2.34 oz (66 gms). 500040/500042: 3.87 oz (110 gms)
Mounting	Free-standing. Separate Velcro mounting pad included
Warranty	Lifetime
Order Information	500040 VGA Balun II, HD15 HD Plug, PC Side 500043 VGA Balun II, HD15 HD Receptacle, PC Side 500041 VGA Balun II, HD15 HD Receptacle, Monitor Side 500042 VGA Balun II, HD15 HD Plug, Monitor Side

Typical Applications







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