

Overview

The VGA Balun eliminates costly and bulky VGA cable, allowing a VGA source to be connected to a VGA monitor via 4-pair Cat5e/6 twisted pair cable. **In order to ensure a commons signal ground, shielded twisted pair is required.**

Used in pairs, the VGA Balun allows VGA video to be transmitted up to 350ft (107m) via Cat5e/6 at 800 x 600 resolution. Each VGA connection requires a VGA Balun at the source (500010) and a VGA Balun (500011 or 500014) at the display. The VGA Balun works in conjunction with PCs, laptops, plasma, LCD monitors and DLP projectors.

Applications

Boardroom systems, classroom projection systems digital signage, custom residential AV, DVR monitor extension, medical display systems.



Key Features & Benefits

Up to 250 ft (76m) @ 1024 x 768

Cat5e/6 STP cable required*

Eliminate bulky VGA cable

No power required

Compact design

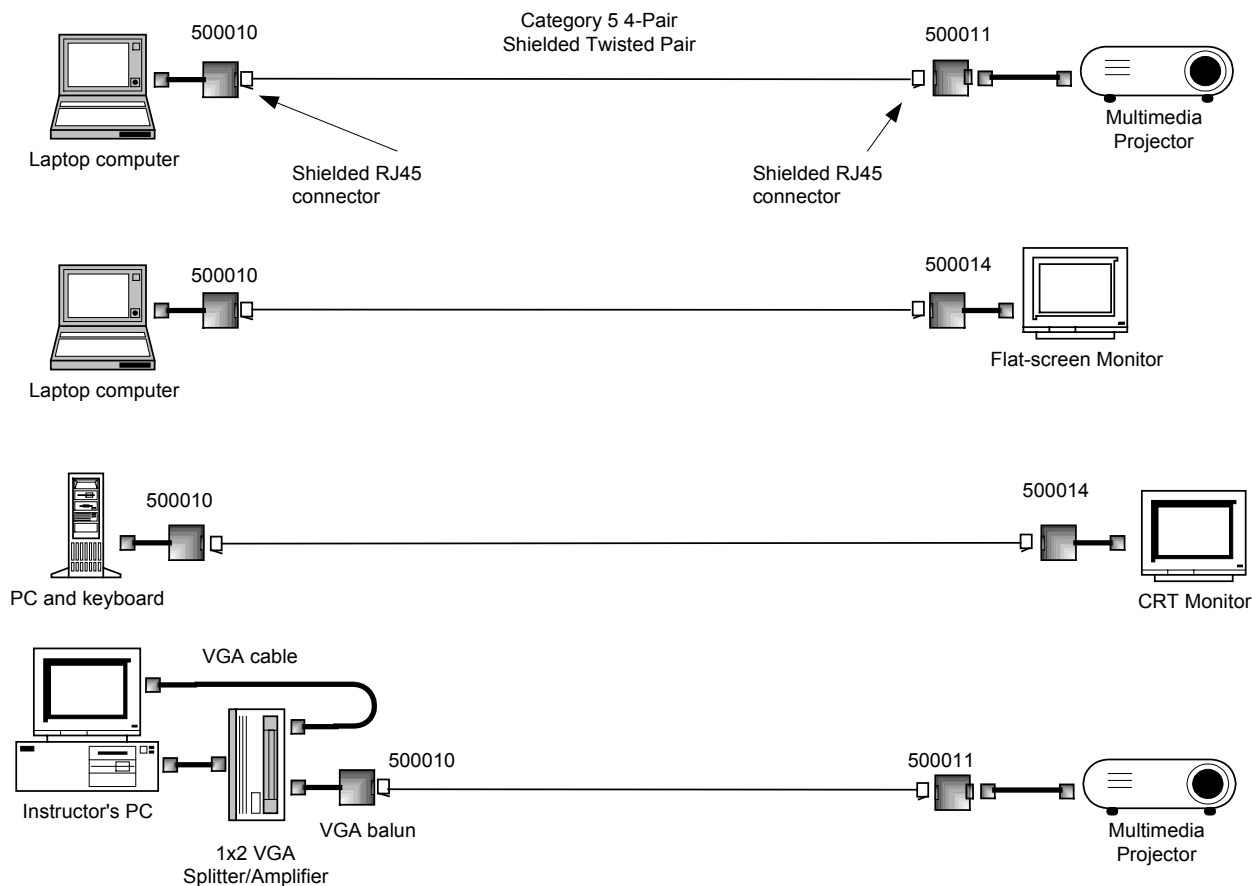
Saves conduit space

Lifetime warranty

**In order to ensure a common signal ground. Does not support DDC handshaking.*

Specifications	
Environment	VGA. VESA VP&D 1.0, VIP ver 2.0.
Devices	CRT and flat-screen LCD monitors, plasma screens laptops, PCs, 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 (CMMR)	15kHz -60dB max. 100kHz to 10MHz -40dB max. 100MHz -20dB max.
Video Signal Return Loss	-15dB max from DC to 60MHz
Video Differential Gain	+/- 2%
Video Differential Phase	+/- 2%
Connectors	RJ45 shielded 500010: HD15 Plug (Connects to VGA output of PC), 6" lead 500011: HD15 Receptacle (Connects to VGA monitor input) 500014: HD15 Plug (Connects to VGA monitor input), 6" lead
Max. Distance via Cat5e/6 Twisted Pair	VGA: 640x480 pixels (15MHz) 450ft (137m) SXGA: 1280x1024 pixels (100MHz) 200ft (61m) SVGA: 800x600 pixels (30MHz) 350ft (107m) WXGA: 1366x768 pixels 180ft (55m) XGA: 1024x768 pixels (60MHz) 250ft (76m)
RJ45 Pin Configuration Reverse Polarity Sensitive	R Video (Red) Pin 1 (+) Pin 2 (-) Balanced Horiz Sync Pin 3 G Video (Green) Pin 4 (+) Pin 5 (-) Balanced Vert Sync Pin 6 B Video (Blue) Pin 7 (+) Pin 8 (-) Balanced
Cable	In order to ensure a common signal ground, Cat5e/6 shielded twisted pair (STP) is required. The VGA Balun 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: TTL standard
Temperature	Operating: 0 to 55 C. Storage: -20 to 85 C. Humidity: up to 95% non-cond.
Enclosure	ABS fire retardant plastic
Dimensions	2.40" x 2.25 x 1.00"
Weight	500011: 2.34 oz (66 gms). 500010/500014: 3.87 oz (110 gms)
Mounting	Free-standing. Separate Velcro mounting pad included
Warranty	Lifetime
Order Information	500010 VGA Balun, PC Side, HD15 Plug, 6" lead 500011 VGA Balun, Monitor Side, HD15 Receptacle 500014 VGA Balun, Monitor Side, HD15 Plug, 6" lead

Typical Application



Note:

In order to ensure common signal ground continuity between the VGA source and display, it is highly recommended to use shielded twisted pair (STP) cable terminated with shielded RJ45 connectors.

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