Overview

The VGA 1x4 Distribution Hub allows one (1) VGA (RGBHV) source to be distributed up to up to four (4) displays via Cat5/6 cable for more cost-efficient cabling. The hub works in conjunction with the Active VGA Balun II Kit (500140) and Active VGA Balun II Receivers (500142). At least one (1) 500140 is required to support one (1) display. Up to three (3) additional 500142 may be added to support up to three (3) additional displays.
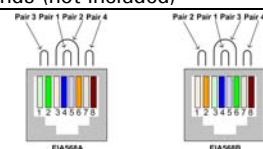
Applications

Digital signage, boardroom systems, multi-room systems, classroom training, retail systems, electronic billboards, electronic signs, video kiosks, point-of-sale displays, in-store video.

Features

Plug and Play - DDC1 and DDC2 Compliant
Remote power up to 150 ft (46 m)
Modular RJ45 on input and output
Supports up to 1920 x 1440, 1080p
Cascadable up to four (4) levels
Ground loop isolation on every port
Works in conjunction with 500140 and 500142.

Specifications	
Environment	VGA. VESA VP&D 1.0, VIP ver 2.0. DDC1 and DDC1.
Devices	PCs, laptops, CRT monitors, LCD monitors, plasma screens, DLP projectors.
Transmission	Transparent to the user.
Bandwidth	Up to 280 MHz (1920 x 1440 resolution), 1080p
Impedance – Video Input (Coax)	75 ohms
Impedance – Video Out (UTP)	100 ohms
Connectors	VGA Input (Cat5/6): One (1) RJ45 shielded VGA Output (Cat5/6): Four (4) RJ45 shielded
DDC Compliance	Transmits DDC control signals on RJ45 pins 4&5 for Plug-and-Play operation.
Remote Power	Transmits remote DC power on RJ45 pins 4&5
Maximum Distance – Remote Power	Source to Hub: 150 ft (46 m) Hub to Display: 150 ft (46 m)
Maximum Distance between VGA source and Display *Hub may be placed anywhere in between*	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) 1920x1200 (WUXGA): 600 ft (180m)
Max Distance – Component Video (YPbPr) via Cat 5 (or better) Twisted Pair	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 DIP switches on receiver (factory default setting: all OFF)
LED Indicators	Power: One (1) green LED Sync: One (1) green LED per port.
Cable	Category 5/6 or better twisted pair cable.
Ground Loop Isolation	Ground loop isolation on every port. –2VDC to +3VDC between PC and display ground.
Power Supply	110-240V/12VDC/1.25A. Detachable North American or Continental Europe AC power cord included. 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	4.5" x 3.8" x 1.25" (11.4 cm x 9.7 cm x 3.2cm)
Weight	2 lb, .9 Kg
Regulatory	FCC/CE, RoHS
Warranty	Two (2) years
Order Information	500150 VGA Hub, 4 Ports, 110V 500151 VGA Hub, 4 Ports, 220-240V

Typical Application

Active VGA Balun II Kit (500140)
Transmitter, Receiver, 2 PSU

Local Monitor

From PC

PSU may be used for
extended distance

VGA Distribution Hub 4P
500150

Required PSU
Included with 500150

Cat5e/6 UTP

Outlet 1

2nd PSU may be used for
extended distance

500142

Outlet 4

PSU may be used for
extended distance
(500144)

Active VGA Balun II Kit (500140)
Transmitter, Receiver, 2 PSU

RGB to VGA
Cable Assembly

PSU may be used for
extended distance

VGA Distribution Hub 4P
500150

Required PSU
Included with 500150

Cat5e/6 UTP

Outlet 1

VGA to RGB
Cable Assembly

2nd PSU may be used for
extended distance

500142

Outlet 4

PSU may be used for
extended distance
(500144)