



# VGA Video Extender

## Quick Reference & Setup Guide



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Magenta Research  
128 Litchfield Rd  
New Milford, CT. 06776 USA

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# 1. Specifications

<b>Cable Required:</b>	Category 5, 5e, 6 twisted pair (UTP)
<b>Maximum Distance:</b>	250 ft (76m)
<b>Video Support:</b>	RGBHV (All VESA modes to UXGA)
<b>Video Resolution:</b>	Up to 1600x1200
<b>Connectors:</b>	Tx: (1) DB15 , (1) RJ-45, (1) power Rx: (1) DB15 , (1) RJ-45
<b>Temperature Tolerance:</b>	Operating: 32 to 104°F (0 to 40°C); Storage: -4 to +140°F (-20 to +60°C)
<b>Humidity Tolerance:</b>	Up to 80% noncondensing
<b>Enclosure:</b>	Metal
<b>Size:</b>	0.94"H x 2.6"W x 2.9"D (2.4 x 6.6 x 7.4 cm) each unit (mounting tab not included in above dimensions)
<b>Weight:</b>	0.4 lb. (0.18 kg) - each unit
<b>Power:</b>	9 VDC/ 300mA (transmitter) Receiver powered by transmitter
<b>Compliance:</b>	RoHS, CE; FCC Class A

## 2. Introduction

### 2.1 Overview

The Cyan VGA Video extenders extend VGA video signals over Category 5/5e/6 cable.

### **WARNING**

*This equipment is not intended for, nor does it support, distribution through an Ethernet network. Do not connect these devices to any sort of networking or telecommunications equipment!*

### 2.2 Equipment You May Also Need

- DB15M-M video cables

### 2.3 Compatible Cabling

Cyan extender products are compatible with Cat5/5e/6 data cabling.

CAT5/5e/6 cabling for the Cyan extender must be pinned to the TIA-EIA T568B wiring specification (see appendix A). We also highly recommend that all CAT5/5e/6 cables be pre-terminated and tested. Cables terminated on-site or in an existing infrastructure should be tested before use to ensure compliance with the TIA-EIA T568B specification. Using incorrectly terminated CAT5/5e/6 cables can damage the units.

## 3. Setup and Installation

### 3.1 Making the Connections

#### 3.1.1 CONNECTIONS AND SETUP IN GENERAL

This section contains figures showing connections with the specific Cyan Extenders. In general the connection and setup procedure at both transmitter and receiver ends is as follows:

*At the sender end:*

1. Connect the source video to the Cyan Extender Video In port.
2. Connect the CAT5/5e/6 cables to the sender.
3. Connect power supply

*At the receiver end :*

1. Connect the display to the Cyan Extender Video Out port.
2. Connect the CAT5/5e/6 cables to the UTP connection.
3. Set EQ switch for best picture quality

#### 3.1.2 CONNECTIONS ON THE CYAN VIDEO EXTENDER:

Figure 3-1 shows the Cyan Extender Transmitter connections and Figure 3-2 shows the receiver connections.



Figure 3-1. Connections on the Cyan VGA Video Extender Transmitter



Figure 3-2. Connections on the Cyan VGA Video Extender Receiver

## 4. Troubleshooting

### 4.1 Common Problems

In most cases, nearly every issue with the Cyan Extenders can be resolved by checking the CAT5/5e/6 termination and making sure that it's pinned to the T568B wiring specification. However, there may be other problems that cause the system to not perform as it's designed. Below are solutions to the most common installation errors.

**Problem:** No video signal at the receiver.

**Solution:**

- Check that both units are powered. Note that the receiver is powered via the transmitter over the cat5 cable. The power is on pair 4, pins 7,8. Ensure this pair is terminated correctly (see Appendix A).
- **Ensure Cable Length Compensation Switches are set correctly.**
- Make sure the CAT5 cable is terminated correctly per the 568B wiring specification.
- Is the display device powered on and functioning?

**Problem:** Poor video quality.

**Solution:**

- Check all cable connections.
- **Ensure Cable Length Compensation Switches are set correctly.**
- The video signal's refresh rate may be set too high for the display. Reset to a lower refresh rate in your monitor configuration menu.

Appendix A. Cabling Pinouts

T568B CAT5 Specification

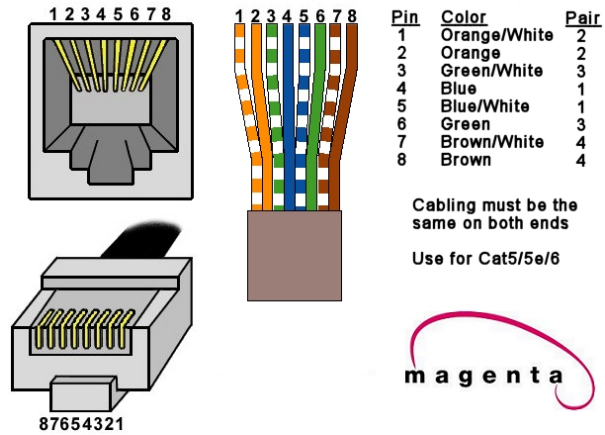


Table A-1. T568B CAT5 pinout



**Magenta Research**

128 Litchfield Road, New Milford, CT 06776 USA  
(860) 210-0546 FAX (860) 210-1758  
[www.magenta-research.com](http://www.magenta-research.com)

PN: 5310225-01, Rev 01, 2/09

