

Table of Contents

- Overview
- Features
- System Requirements
- Introduction
 - Local Unit
 - Remote Unit
- Installation
- Appendix
 - Troubleshooting
 - TP Pin Assignments
 - TP Wiring Diagram
 - Specifications

Overview

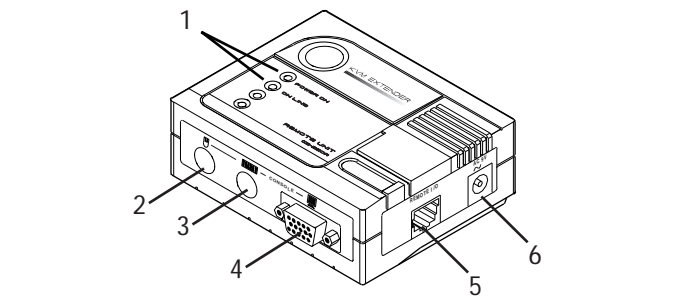
Because the CE-220 Console Extender System allows access to a computer system from a remote console (keyboard, monitor, and mouse), it is perfect for factory and construction sites, or any type of installation where the console needs to be kept in a conveniently accessible location, but you want the system equipment to reside in a safe place - away from dust, dirt, and harsh environmental influences.

The CE-220 Extender System is also useful for control and security purposes, where you can have the system unit in a secure area at the same time that you put the console in a location that offers convenient access.

The CE-220 Console Extender provides the ideal means to access the remote system box, since it improves on previous designs by using inexpensive Category 5 STP cable - the kind commonly used in Ethernet networks - instead of bulkier, more expensive, standard cables.

The Remote Unit (CE-220R)

Front View



1. LEDs
The Remote Unit has two LEDs (Power and On Line) that function in the following manner:

| LED | Indication |
|---------|---|
| Power | 1. Lights steadily to indicate that the connection to the Local Unit is ok. 2. Flashes when there is a problem with the connection to the Local Unit. |
| On Line | 1. Lights when the remote console is active. 2. Is Off when the local console is active. 3. Is Off when there is a problem with the connection to the Local Unit. |
2. Mouse Port
The remote PS/2 mouse plugs into this connector.
3. Keyboard Port
The remote PS/2 keyboard plugs into this connector.
4. Monitor Port
The remote monitor plugs into this connector.
5. Remote I/O
The Category 5 twisted pair cable that connects back to the Local Unit plugs into this connector.
6. AC 9V Power Jack
The cable from the AC Power Adapter plugs into this jack.

Category 5 cabling makes for a much neater, more convenient, more reliable data transfer connection. Setup is as easy as can be - simply connect the PC system box and local console to the Local CE-220 Module; run the STP cable to the Remote CE-220 Module (up to 150 m away); and plug the remote console into the Remote Module.

Note: You can control numerous remote systems from a single console by combining the CE-220 with KVM Switch.

Features

- Uses Inexpensive, Reliable, Category 5 STP Ethernet Cable to Connect the Local and Remote Units
- Dual Console Operation - Control Your System From Both the Local and Remote PS/2 Keyboard, Mouse, and Monitor Consoles
- Push Button Selection of the Active Console
- High Resolution Video - Up To 1024 x 768 @ 150 m (max.)
- Supports VGA, SVGA, and Multisync Monitors
- Local Monitor Supports DDC2

System Requirements

- Consoles
A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any PC in the installation
- A PS/2 Style Keyboard
- A PS/2 Style Mouse
Note: You must use the same brand and model of mouse on both the local and remote units.

Installation

Setting up the Console Extender System is simply a matter of plugging in the cables:

1. Make sure that all the equipment to be connected up is powered Off.
2. Plug the cables from the local console devices (mouse, keyboard, monitor), into their ports on the Console side of the CE-220L.
3. Plug the appropriate connectors on the KVM extension cable supplied with this unit into the CPU side of the CE-220L.

- Note:** Each connector is marked with an appropriate icon to indicate which it is.
4. Plug the connectors on the other end of the cable into the appropriate ports on the PC system (or Console section of the KVM switch - if you are using one).

Note: Each connector is marked with an appropriate icon to indicate which it is.

5. Plug one end of the Category 5 twisted pair cable into the Local Unit's Remote I/O port.
6. Slide the Range Switch to the **Long** position if the Remote Unit location is a long distance away (more than 30 m); slide the switch to the **Short** position if the Remote Unit location is a short distance away.
7. Plug one of the power adapters (supplied with this package) into an AC source; plug the adapter's power cable into the Local Unit's AC 9V Power Jack
8. Plug the other end of the Category 5 twisted pair cable into the Remote Unit's Remote I/O port.
9. Plug the cables from the remote console devices (mouse, keyboard, monitor), into their ports on the Console side of the CE-220R.
10. Plug the second power adapter (supplied with this package) into an AC source; plug the adapter's power cable into the Remote Unit's AC 9V Power Jack
11. Power On all the equipment

- PC
The following equipment must be installed on each PC that is to be connected to the system:
A VGA, SVGA or Multisync card.
A 6-pin mini-DIN (PS/2 style) mouse port.
A 6-pin mini-DIN (PS/2 style) keyboard port.

- Cables
Although it is possible to use standard extender cables to connect the computer to the CE-220L, for optimum signal integrity and to simplify the layout, we strongly recommend that you use the high quality CS Custom Cable that is provided with this package.

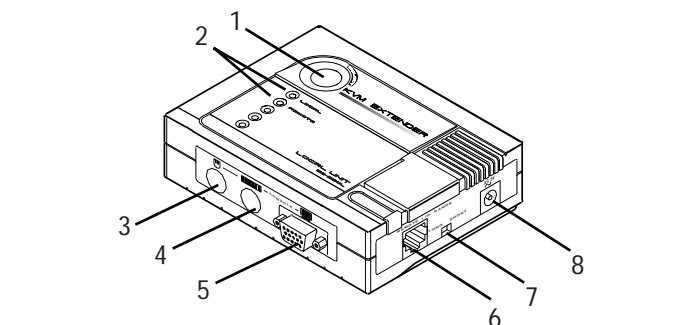
Category 5 STP cable is required to connect the local and remote CE-220 units.

Note: Using other types of cable (e.g. UTP cable) will result in degrading the video signal.

Introduction

The Local Unit (CE-220L)

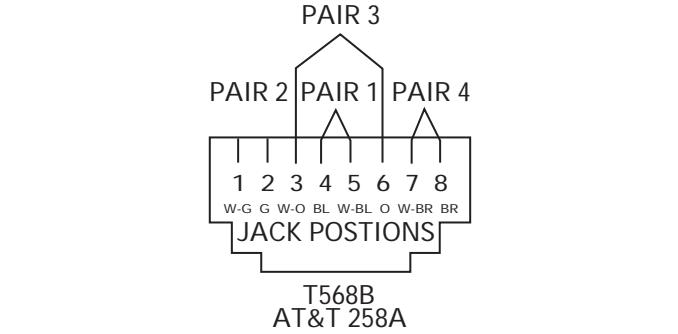
Front View



Appendix

| Troubleshooting | | TP Pin Assignments | |
|-----------------|--|--------------------|------------|
| Symptom | Action | Pin | Assignment |
| No Video | Make sure that all cables are securely plugged into their sockets. | 1 | V OUT B |
| | | 2 | / V OUT B |
| | | 3 | V OUT G |
| | | 4 | V OUT R |
| | | 5 | / V OUT G |
| | | 6 | / V OUT G |
| | | 7 | DO |
| | | 8 | DO |

TP Wiring Diagram



| Specifications | | CE-220L | CE-220R |
|------------------------|--------------|------------------------------|-------------------------|
| Connectors | Keyboard | 2 x 6 pin mini-DIN Female | 6 pin mini-DIN Female |
| | Mouse | 2 x 6 pin mini-DIN Female | 6 pin mini-DIN Female |
| | Monitor | 1 x 15 pin HDB Male | 15 pin HDB Female |
| | Unit To Unit | 1 x 15 pin HDB Female | 8P8C Jack |
| LEDs | | 1 Local 1 Remote | 1 Power On 1 On Line |
| Function Keys | | Local/Auto Select Pushbutton | N/A |
| Cable Length | | 150m [500'] (max.) | |
| Video Resolution | | 1024 x 768 | |
| Power Consumption | | AC 9V 300mA (max.) | |
| Housing | | Plastic | |
| Weight | | 300 g | 220 g |
| Dimensions (L x W x H) | | 130 x 100 x 35 mm | 100 x 80 x 35 mm |

1. Operating Mode Selection Switch
Pressing this button cycles you through the operating mode choices:
Local - only the local console can control the system(s);
Auto - both consoles can control the system(s)).
2. LEDs
The Local Unit has two LEDs (Local and Remote) that function in the following manner:

| LED | Operating Mode | |
|--------|--|---|
| | Local | Auto |
| Local | Lights to indicate that the local console is active (the Remote LED is out). | 1. Lights when the local console is active (the Remote LED is out) 2. Turns off when the remote console is active (the Remote LED turns on) 3. Flashes on and off alternately with the Remote LED when neither console is active. |
| Remote | The LED is Off | 1. Lights when the remote console is active (the Local LED is out) 2. Turns off when the local console is active (the Local LED turns on) 3. Flashes on and off alternately with the Local LED when neither console is active. |

3. Mouse Port
The local PS/2 mouse plugs into this connector.
4. Keyboard Port
The local PS/2 keyboard plugs into this connector.
5. Monitor Port
The local monitor plugs into this connector.
6. Remote I/O
The Category 5 twisted pair cable that connects to the Remote Unit plugs into this connector.
7. Range Switch
Slide the switch to the **Long** position if the Remote Unit is located a long distance away (greater than 30 m); slide the switch to the **Short** position if the Remote Unit is located a short distance away.
8. AC 9V Power Jack
The cable from the AC Power Adapter plugs into this jack.

Limited Warranty

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK, OR ITS DOCUMENTATION EXCEED THE PRICE PAID FOR THE PRODUCT.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or update. For further inquiries, please contact your direct vendor.

Radio & TV Interference
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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