1x4 CAT5 Distribution Amplifier

MODEL CETx DA 124

Innovators in Audio Video Integrations

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We also Manufacture:

1. Audio Follow Video QXGA PC Switcher (RS232 Controlled)
2. RGB to YUV Converter
3. VGA to CAT5 Converter
4. 1 x 2 VGA Dist. Amp.
5. 1 x4 VGA Dist. Amp With Stereo Audio
6. 1 x 8 VGA Dist. Amp With Stereo Audio
7. VGA Interface (Converts VGA to RGBHV on BNC)
8. Feed Back Logic Controller
9. 1 x 2 Audio Video Dist. Amp.
10. 1 x 4 Audio Video Dist. Amp.
11. Projection Screen Interface (Control 1 Motor & Rack Power)
12. Dual Function Screen Interface (Control 3 Motors & Rack Power)

Front View

Rear View

Creative expands its line of audio/ video / RS232 / IR-over-CAT5 cable products with the introduction of a high-performance CAT5 Distribution Amplifier, **Model CETx DA124**. The DA124 is used to fan out to multiple locations the output from Creative CAT5 Transmitter Module, allowing the same signals to be sent to upto four different Creative CAT5 (Rx) Receivers. The RS232 or IR serial communication between the Tx and the four Rx's provides the same commands to all locations.

About the Selector Switch Or (DATA Return Port):—A four position switch on the DA124 selects which of the remote locations is able to send data back to the Tx unit, avoiding any complex data collision management. **About the selector switch -** serial commands at the input of the Tx is broadcast to all four of the receivers, but, only one receiver can send commands back to the Tx - that receiver is selected by the switch. You can't have four receivers trying to send data back - it would just get scrambled - you have to limit it to one and only one receiver being selected to send commands back !

The DA 124 is power from an external +5V source. **This unit also offers automatic reset Fuses, and built in Power Surge and transit protection.**

More about CAT5 DA— DA124 is a cheap and reliable solution for delivering signals to more recipients in most digital networks, be those video streaming devices, Ethernet connections, or whatever network you may have built with Cat5 wiring.
RGB Video Cat5 splitters work great for sending RGB Video signal to multiple locations via Cat5 wiring. The receivers can be located up to 1000 feet away, which is more than enough to wire a whole building.
Whether you want to broadcast commercial streams throughout a whole supermarket, information for passengers in an airport, broadcast current NFL scores on the Four plasma screens in the pub downtown or simply need to share the video signal from your cable TV supplier to more than one TV set in your home, this technology will help you pull it through.

Extra Power Protection

Unit offers real—world Protection with Automatic Reset Fuses and built-in Power surge and transit Protection. This Unit also includes an isolated Power Supply for Protection against Ground Loops.

Advanced Features

- Built-in lightning, power surge and transient protection.
- Distributes VGA, Stereo Audio, and RS232 or IR serial communications
- Maximum RGB Resolution 2048 x 1536
- One Bidirectional RS-232 or IR-link control path, three Tx only control path
- Uses easy to install, inexpensive CAT-5/5e/6/7/8
- **Selector Switch:** For Analog adjustment. range up to 1000 Feet
- Data return selector— Selects which of the remote locations is able to send data back to the Tx unit,
- High ground loop immunity. For Better NOICE Reduction

Technical Specifications

Video	
Gain	Unity
Bandwidth	**max 450MHz**

CAT5 Input	
Number / Signal Type	1 / RGB (computer video)
Connectors	Female RJ-45 8/8

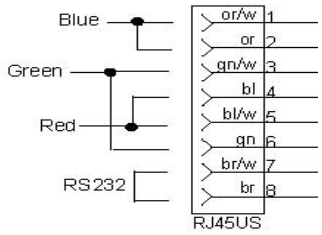
CAT5 Output	
Number / Signal Type	Four / CAT5
Connectors	Female RJ-45 8/8

Signal Compatibility	Creative products CAT5 over RJ-45 8/8
Input Level	Nominal 1vpp
Output Level	Nominal 1vpp

General	
Power	External 5V@1A
Enclosure Type	Metal
Enclosure Dimensions	**Ht. –** 2.5 cm, **W** - 16.5 cm, **D** – 8 cm
Product Weight	
Shipping Weight	
Warranty	1 year with parts and labor

Wiring Standard for Terminating CAT5 Cable Using RJ45 Connector

- Pair 1 Pins 1 & 2
- Pair 2 Pins 3 & 6
- Pair 3 Pins 4 & 5
- Pair 4 Pins 7 & 8



Connecting Transmitter (Tx) and 1x4 DA

1. Connect +5vDC Adopter for Supply to CETx DA 124.
2. Connect output of Creative Transmitter unit using the Male RJ-45 8/8 cable to input of CETx DA 124
3. Connect the output of the CETx DA124 to Input of Creative Rx (Receiver) Unit using Male RJ-45 8/8 cable

Connecting Receiver Rx

1. Connect CAT5 cable (coming from CETx DA124) to the receiver (CE RX 1003).
2. Connect 1-2 display monitors to the VGA out connectors on the front of the receiver.
3. Connect 1-2 sets of external speakers to the audio output connections on the front of the unit. (Standard 3.5mm stereo Mini plug)

Installation Notes

Resolution v/s Distance:

In all analog CAT5 products there is a relationship between acceptable resolution and maximum distance and yet no manufacture tabulates this data for the end user possibly because of the variables of installation and accountability. ***What this means to the user is that the maximum resolutions are only obtainable with the shortest CAT5 cables and the longer cables will require lower VGA resolutions.*** Where this trade-off of VGA resolution v/s distance occurs depends upon the application and sophistication of the viewer. ***Creative CAT5*** products push the theoretical limits of what can be driven over copper twisted pairs.

Standard v/s video-twist CAT5:

Standard CAT5 has four different twist ratios to minimize crosstalk between the twisted pairs. This is desirable in data transmission, but in video transmission each different twist changes the amount of time that it takes for the video on that pair to get to the receiver end, and this produces color fringes. ***This means that each Red , Green and Blue image arrives at a different time to the monitor. To compensate for this problem, the right-most image should be used as a reference***, and various lengths of coax cable should be inserted in the path of the offset images until they overlay the reference image.
Using Video-twist cable, all twist ratios are the same so there is usually not the need for any compensation.

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