

# Component Video/Audio HDTV Distribution Amplifier

## Cat 5 Distribution Hub And Receiver

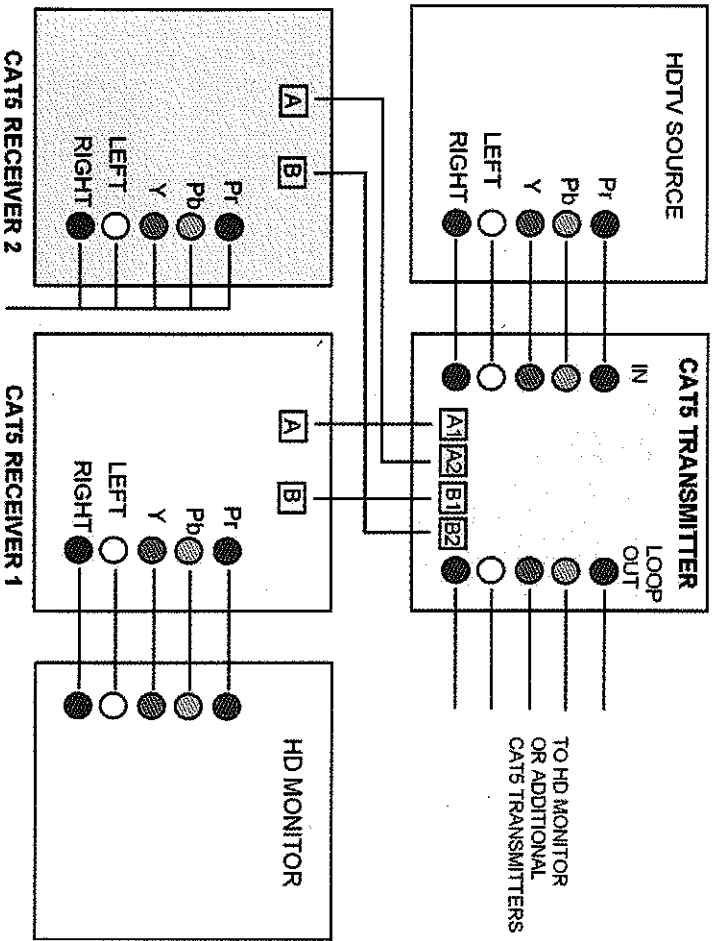


Distribute a High Definition Video/Audio Source to multiple locations over extended distances using economical Cat 5 cable.

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# CAT5 Distribution Hubs



## Installation / Operation Instructions

Unpack the amplifier and power supply from each box. Place the transmitter amplifier in a dry location, usually behind the shelf where the source is located.

Connect the source device outputs to the appropriate input jacks on the CAT5TX. The loop out jacks can be used to feed a local monitor or a second transmitter if installed.

**Do not connect the Loop Out cable unless it is plugged into a monitor.**

Connect Cat5 cables A1 and B1 to the Transmitter RJ-45 jacks. At the other end of the same cables, connect A1 and B1 to the CAT5RX. The RCA outputs are used to connect to the remote monitor.

Insert the power supply connector into the power jacks of both units. Plug the wall transformer into a 120Vac outlet. The power LED should be on and the unit is ready to use. The CAT5RX will have 3 LEDs on to indicate continuity of the CAT5 cable. If one of the Continuity LEDs is not on, there could be a problem with the A cable. Both A and B cables should be installed for the detector to work properly.

Adjust the equalization control to the approximate length of the Cat5 cable. View the picture on the monitor and fine tune the equalization control for the most pleasing picture.

There are 1/8" mini-jacks available to allow the transport of IR signals. This requires optional external IR system.

Installation is complete.

The Cat5 TX has one set of RCA inputs and one set of RCA loop-thru connectors to go to the next Transmitter if installed. The unit allows any Audio/Video source, with Y, Pb, Cr, or Y, Pb, Pr Outputs (component), to distribute Audio and Video to distant locations with excellent picture quality. The amplifier also supports digital audio.

The Cat5 RX supports one monitor with component video, right and left audio, and digital audio. The RX has an adjustable equalizer to correct for the signal loss caused by long cables. An optional external IR system can be used with IR jacks.

## SPECIFICATIONS

### VIDEO

Nominal Input level: 1 Volt peak to peak  
 Gain: 1 Volt into 75 ohms  
 Input Impedance: 75 ohms  
 Output Impedance: 75 ohms  
 Isolation port to port: >65 dB  
 Isolation out to input: >80 dB  
 Return loss: >30 dB  
 Video bandwidth: > 50 MHz (HDTV requires 37MHz min.)  
 Distance: 300 feet @ 1080i (500 feet with Cat6 cable)

### AUDIO

#### Analog:

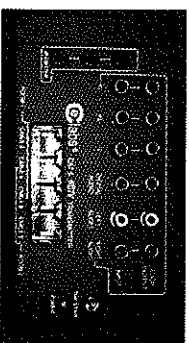
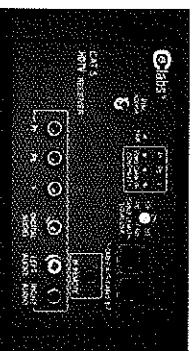
Nominal Input level: 1 Volt peak to peak  
 Gain: Unity (one to one)  
 Input Impedance: 22k ohm  
 Output Impedance: 1k ohm  
 Frequency Response: 20Hz to 20kHz  
 Signal to Noise: 80dB @ 1 Volts out

#### Digital:

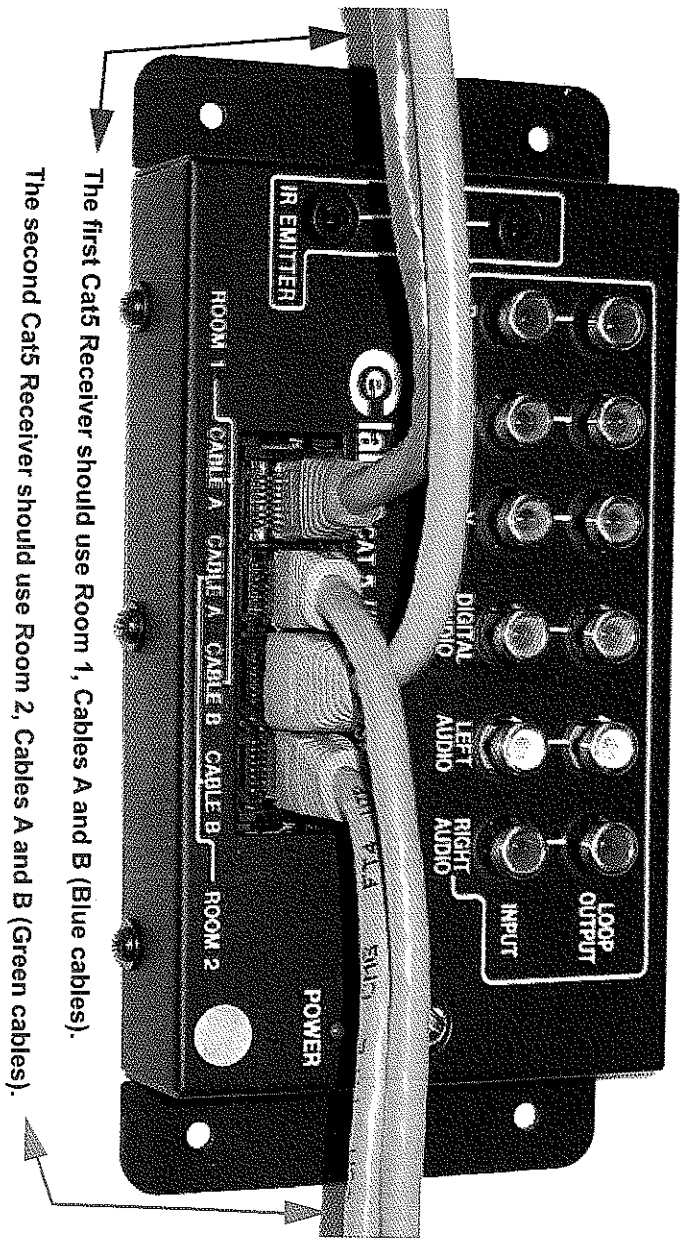
Supports Standard SPDIF digital audio. (Not compatible with analog input signals)

### POWER

Requirement: External 9 or 10 Volt AC @ 600mA with a (2.1mm center) Coaxial connector. Power Supply is included.



# ATTENTION PLEASE



The first Cat5 Receiver should use Room 1, Cables A and B (Blue cables).

The second Cat5 Receiver should use Room 2, Cables A and B (Green cables).

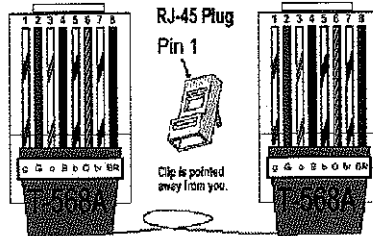
# CE Labs, Inc.

## Cat5 HDTV Transmitter / Receiver

### Connector Pin-out

#### Cat5 Transmitter

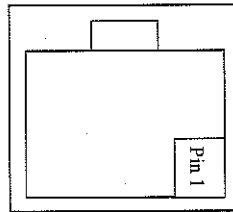
	Cable A	Cable B	Wire Color
Pins			(568A)
1	Video Pr +	Audio Left +	Green / White
2	Video Pr -	Audio Left -	Green
3	Video Pb +	Audio Right +	Orange / White
4	Video Y +	IR Ring	Blue
5	Video Y -	Ground	Blue / White
6	Video Pb -	Audio Right -	Orange
7	IR Sleeve	Digital Audio +	Brown / White
8	IR Tip	Digital Audio -	Brown



Note: Room 1 and Room 2 pin-outs on Transmitter are identical.

#### Cat5 Receiver

	Cable A	Cable B	Wire Color
Pins			(568A)
1	Video Pr +	Audio Left +	Green / White
2	Video Pr -	Audio Left -	Green
3	Video Pb +	Audio Right +	Orange / White
4	Video Y +	IR Ring	Blue
5	Video Y -	Ground	Blue / White
6	Video Pb -	Audio Right -	Orange
7	IR Sleeve	Digital Audio +	Brown / White
8	IR Tip	Digital Audio -	Brown



View from front of unit's RJ-45 Jack

#### Applications with Only One Cable

Some users only have one CAT5 cable available and have expressed an interest in routing the Digital Audio along with the component video on the single Cat5 cable. This can be accomplished by splitting out the last pair (pins 7 and 8 (Brown and Brown White) of cable A) and connect them to a second RJ-45 connector (once again in positions 7 and 8). This second RJ-45 connector would be plugged into the Cable B RJ-45 jack. This would need to be done on both the Transmitter and Receiver ends of the system.

#### IR REMOTE and IR EMITTER:

These passive jacks are provided to allow the use of an external IR system. There is no power supplied to the IR jacks internally, so the user supplied external IR blocks must include a power inserter function.

