AV Over Cat5 Distribution System with IR Instruction Manual

The System allow the extension of video, stereo audio and infrared control signals using Cat5 UTP (category 5, unshielded twisted pair) cable.

The System uses a unique method of transparent data transfer, which allows a device, such as DVD player, set-top box to be situated up to 1000ft (300m) away from the controller TV or point of control.
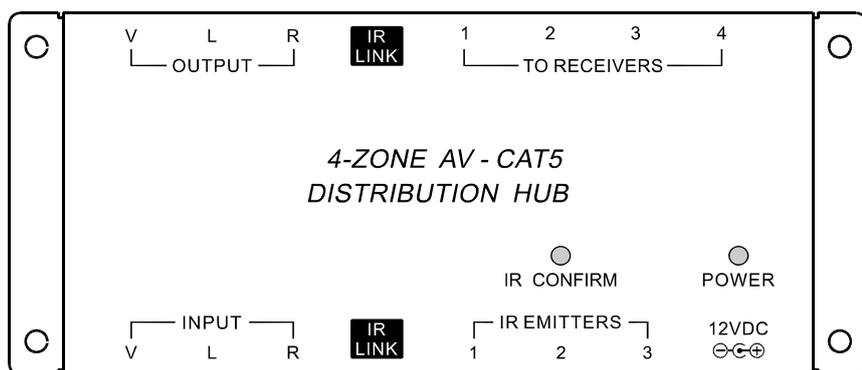
Fully compliant with standard 38 kHz modulated IR or higher, the IR extender link will provide a transparent path for all protocols and data transfers. The extender uses one pair for IR data transmission and the other 3 pairs for composite video and stereo audio transmission.

The Distribution Hub has one set of RCA inputs and one set of RCA loop-thru connectors to go to the next Distribution Hub if installed. The System allows any audio/video source to distribute audio and video to 4-zone distant locations with excellent picture quality.
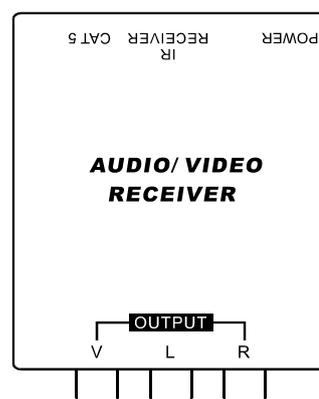
The AV Cat5 Receiver supports one monitor with composite video, stereo audio.
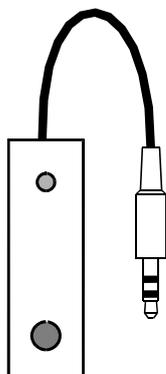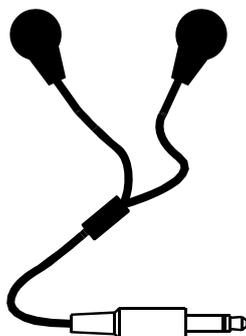
Related Components:
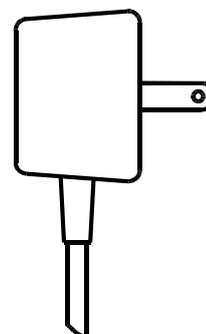
Distribution Hub

AV Cat5 Receiver

IR Receiver

IR Emitter

Switching Power
(12VDC, 1.2A or above)

FEATURES

1. Four zone distribution ability & Loopout function.
2. Three emitters output & IR Link connections.(Mono or stereo plug)
3. Convenient IR confirmation LED.
4. Power receptacle with LED indicator.
5. Supports PAL, NTSC and SECAM.
6. Sends Composite Video, Stereo Audio, IR signals and Power over single CAT5.

SPECIFICATIONS

1. Video nominal input level:1 Volt (peak to peak)
2. Video input impedance (Distribution Hub):75 ohm.
3. Video output impedance (AV Cat5 Receiver):75 ohm.
4. Audio input impedance (Distribution Hub):47K ohm.
5. Audio output impedance (AV Cat5 Receiver):300 ohm.
6. Distance: reaches up to 1000 feet (300 m).
7. Power: Switching Power 12VDC / 1.2A
8. Weight
   Distribution Hub: 317 g
   AV Cat5 Receiver: 67 g
9. Dimensions
   Distribution Hub:
       159L x 68W x 33H mm
   AV Cat5 Receiver:
       80L x 65W x 30H mm

INSTALLATION

1. Connecting Distribution Hub to the AV sources. (DVD, VCR, satellite receiver etc.)
2. Connect AV CAT5 Receiver to the Display.
3. Connect the Distribution Hub to the AV Cat5 Receiver using Cat5 UTP cable (Purchased separately). The Cat5 UTP cable, if purchased in bulk, will be wired using 568A or 568B wiring standard as shown in the table blow. Once connected, check that the power LEDs on both the Distribution Hub and the AV Cat5 Receiver are on, IR LED is flashing when remote control is used indicating that communication is in progress.

CAUTION: Do not plug the Switching Power to Distribution Hub unless all installation be finished, otherwise the surge-current could damage the AV Cat5 Receiver.

CAT 5 Wiring Standards

Pin #	EIA/TIA 568A	EIA/TIA 568B
1	White with green stripe	White with orange stripe
2	Green with white stripe or solid green	Orange with white stripe or solid orange
3	White with orange stripe	White with green stripe
4	Blue with white stripe or solid blue	Blue with white stripe or solid blue
5	White with blue stripe	White with blue stripe
6	Orange with white stripe or solid orange	Green with white stripe or solid
7	White with brown stripe or solid brown	White with brown strip or solid brown
8	Brown with white stripe or solid brown	Brown with white stripe or solid brown

Setup Diagram

AV Distribution Hub

Room 1

IR Receiver

TV

AV Cat5 Receiver

OUTPUT
R L V

AUDIO / VIDEO RECEIVER

POWER   IR RECEIVER   CAT 5

CAT-5

Room 2

Room 3

Room 4

CAUTION:
Do not plug the power supply to Distribution Hub unless all installation be finished.

Just for IR link. Do not connect IR Emitter.

4-ZONE AV - CAT5 DISTRIBUTION HUB

IR LINK

POWER   12VDC

1 2 3 4
TO RECEIVERS

IR CONFIRM

IR EMITTERS
1 2 3

OUTPUT
V L R

INPUT
V L R

IR Emitter

4-ZONE AV - CAT5 DISTRIBUTION HUB

IR LINK

POWER   12VDC

1 2 3 4
TO RECEIVERS

IR CONFIRM

IR EMITTERS
1 2 3

Loop out

OUTPUT
V L R

INPUT
V L R

TV

DVD Player