IR Distribution Over Coax Instruction Manual



The-IR-over-coaxial-cable system allows an IR Injector and IR coupler to work together to insert an IR signal into an existing coaxial cable. This allows source components to be controlled from a remote location, without having to run additional cable.

Note that this instruction sheet covers use of the Model #50-14895 IR coupler and Model #50-14890 IR injector, both sold separately. It also references multiple other optional or required components, all of which are available separately.

Features

- Creates an IR system with existing wiring
- Power 4 IR receivers with one power supply
- Quick and easy installation

IR repeating concepts

Most people are familiar with Infra-Red remote controls because they use them to operate their TV and other devices on a daily basis. However, some people may not be familiar with IR repeating. IR repeating allows the user to control devices which are not with in the direct line of sight of the remote control. This is most commonly used in distributed audio/video systems where the source components are centrally located.

Basic IR Setup

A basic IR system is often used when an audio/video signal is distributed to a remote TV location using an RF modulator. The IR INJECTOR is located near the TV, providing a connection for an IR receiver, and the IR COUPLER is located near the audio/video source, providing an IR emitter output.





Troubleshooting

If your IR system is not working, check to see if IR COUPLER is feeding at least approximately 12 Volts DC onto the coax between the shield and center pin. (Any voltage between 8-12 VDC is OK). If there is no voltage between the center pin and shield, check the connectors on each end of the coax.



If you are troubleshooting a whole-house IR system and you measure approximately 8-12 Volts DC on the output of the IR COUPLER, but 0 Volts DC on the output of your RF splitter, check the following items:

1. Make sure you are using a DC passing splitter. Traditional splitters will short out DC voltage traveling on the coax and prevent your IR system from working.

2. Make sure that there are DC blocks on any output from the RF splitter that will not be connected to an IR INJECTOR. If outputs from the splitter are connected directly to TV sets without going through a IR INJECTOR or DC block, the system voltage will be shorted out by the input of the TV set.

3. Double check the fittings at the end of your coax cables. If a little bit of shielding is touching the center pin, the voltage will be shorted out and the system will not work.

Don't worry. The IR COUPLER has a current limiting circuit. If the IR COUPLER is shorted (due to a bad connection or an on-DC passing splitter) nothing will be harmed.

Surface Mount Mini IR Receiver

FEATURES

1. CFL friendly-allows installations in areas with

compact fluorescent lighting. Works in most

lighting environments.

2. Blue IR confirmation LED.

3. Wide band IR receives IR from many types of remotes.

4. Self-adhesive tape for quick and easy fixing on

any flat surface.

5. 3 meters cable with 3.5mm stereo mini-plug.





B. Attach emitter at inside of shelf

1 Attach emitter on above or below of the IR sensor.

2 Less reliable activated.



SPECIFICATIONS

Receive Frequency Range	34 kHz to 60 kHz
Transmit Frequencies	38 kHz & 56 KHz
Range	40ft. @ 38 KHz
	25ft. @ 56 KHz
Power	12VDC, 30mA max.
Dimensions4	5L x 14W x 13H mm
Cord Length	10ft (3m)
Connector Type1/8" (3.8	5mm) TRS mini plug
Weight	28 g

A. Standard installation

- 1. IR emitter attached directly to IR sensor window.
- 2. More reliable activated



C. Cabinet with door installation

1 Attach emitter on door, round shape facing the IR sensor.

2 Less reliable activated

