

**Specifications:** (typical)

<b>Power Supply Voltage:</b>	12 VDC
<b>IR Frequency range supported:</b>	30 kHz - 56 kHz
<b>Maximum number of targets:</b>	4
<b>Maximum distance to emitters:</b>	500 ft.

Specifications subject to change without notice.

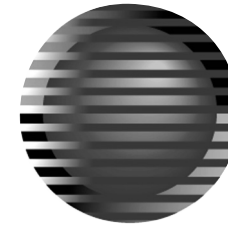
### CHANNEL VISION Limited Warranty

Channel Vision Technology will repair or replace any defect in material or workmanship which occurs during normal use of this product with new or rebuilt parts, free of charge in the USA, for two years from the date of original purchase. This is a no hassle warranty with no mail in warranty card needed. This warranty does not cover damages in shipment, failures caused by other products not supplied by Channel Vision Technology, or failures due to accident, misuse, abuse, or alteration of the equipment. This warranty is extended only to the original purchaser, and a purchase receipt, invoice, or other proof of original purchase date will be required before warranty repairs are provided.

Mail in service can be obtained during the warranty period by calling (800) 840-0288 toll free. A Return Authorization number must be obtained in advance and can be marked on the outside of the shipping carton.

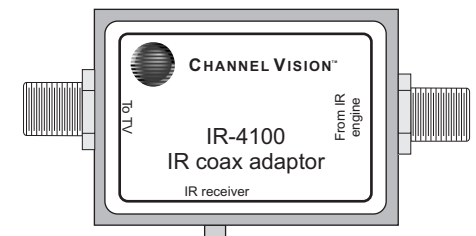
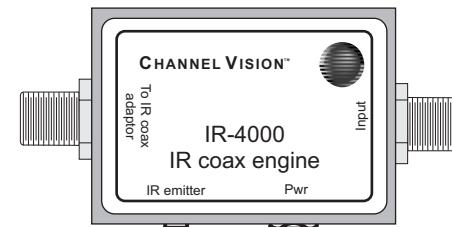
This warranty gives you specific legal rights and you may have other rights (which vary from state to state). If a problem with this product develops during or after the warranty period, please contact Channel Vision Technology, your dealer or any factory-authorized service center.

500-089 rev B



# CHANNEL VISION™

## IR-4000 & IR-4100 IR distribution over coax



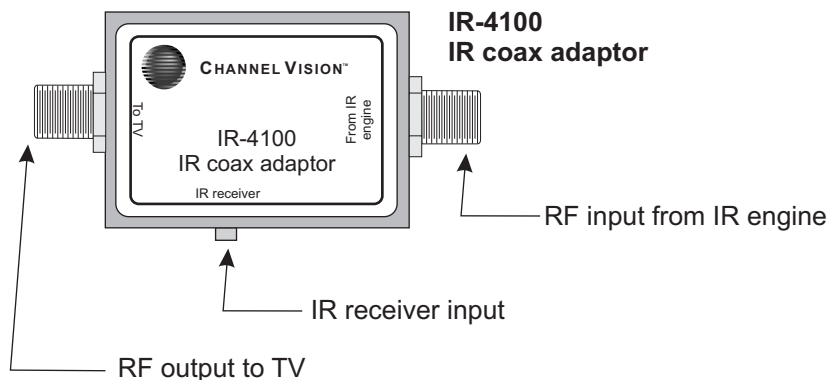
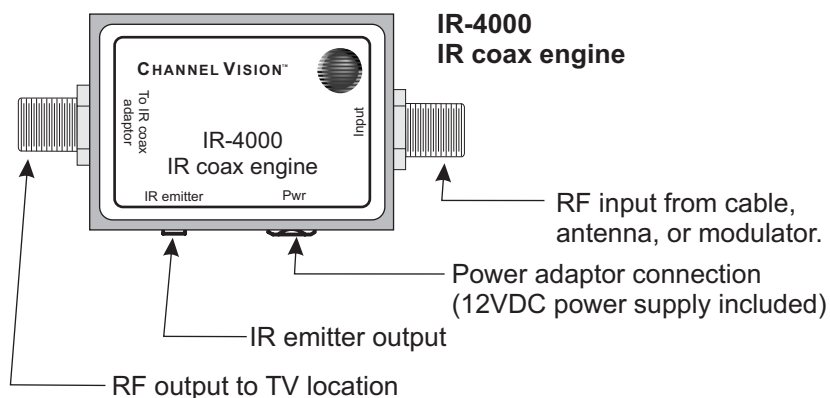
CHANNEL VISION™

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The **IR-4000** & **IR-4100** work together to allow IR signals to be inserted onto a coax cable in one location and extracted from the coax in another location. IR-4000 & IR-4100 are sold separately.

**Features:**

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

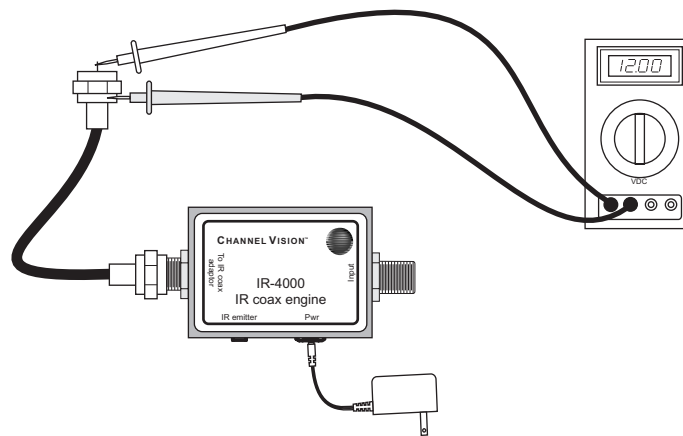


**IR repeating concepts:**

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 within 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. See *How IR repeating works* on the next page for details.

## Troubleshooting

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

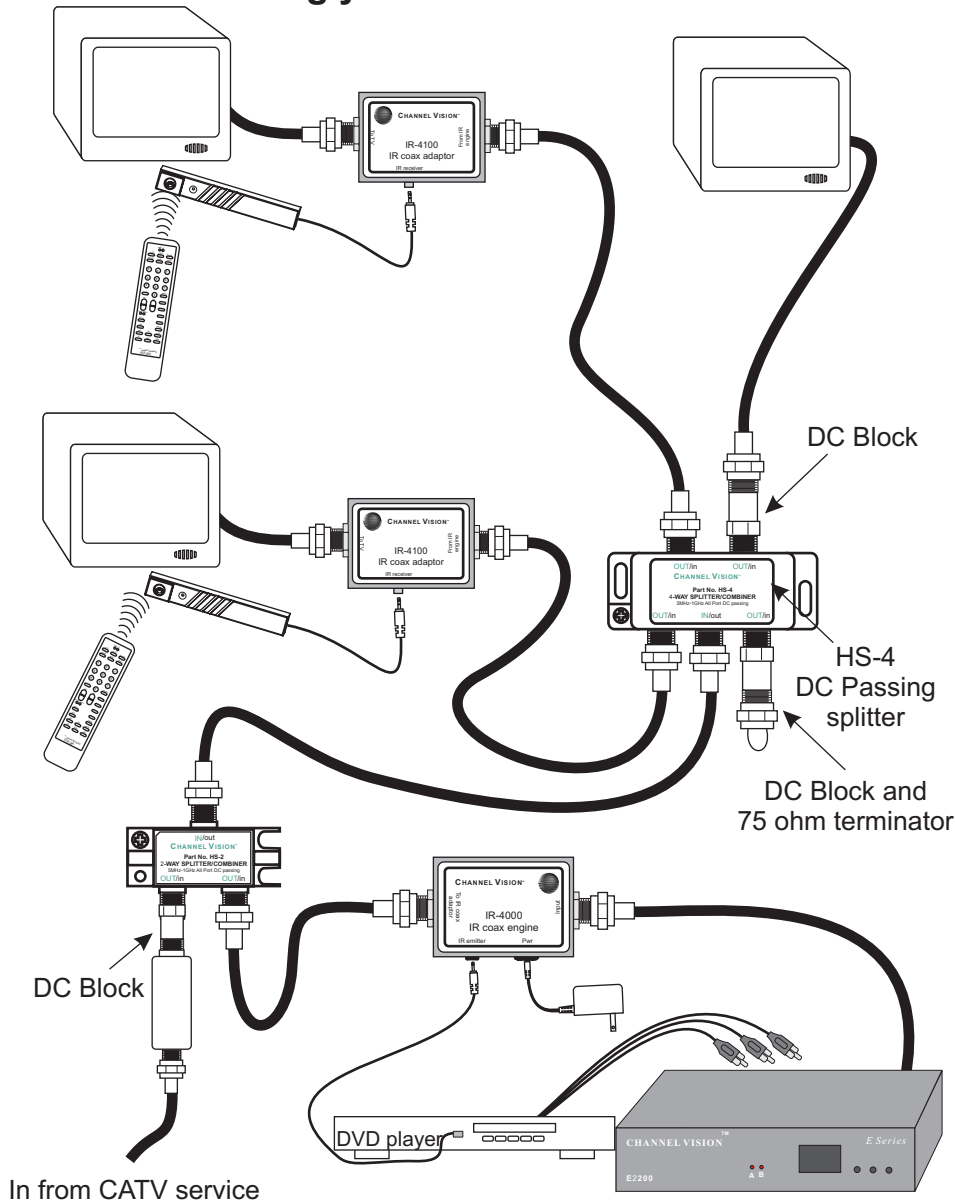


If you are trouble shooting a whole-house IR system and you measure approximately 8-12 Volts DC on the output of the IR engine, but 0 Volts DC on the output of your RF splitter, check the following items:

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 (model 3109) on any output from the RF splitter that will not be connected to an IR-4100. If outputs from the splitter are connected directly to TV sets without going through a IR-4100 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.

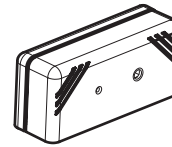
Don't worry. The IR-4000 engine has a current limiting circuit. If the engine is shorted (due to a bad connection or a non-DC passing splitter) nothing will be harmed.

## Joining your Modulator with CATV

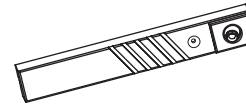


This diagram shows how to distribute CATV along with a modulated source and IR control throughout your house.

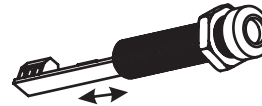
## Other IR components



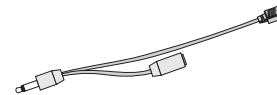
**IR-2301** ... Table top IR Receiver. Can be placed on any flat surface such as a TV or entertainment center.



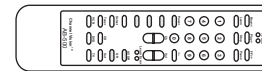
**IR-2105** ... Stick type IR receiver with variable field of view. An adjustable blinder swivels around the IR pickup to prevent interference from light sources that may cause erroneous IR signals.



**IR-2202** ... Tube type IR receiver with variable field of view. The IR pickup slides in and out of the tube to adjust the field of view.

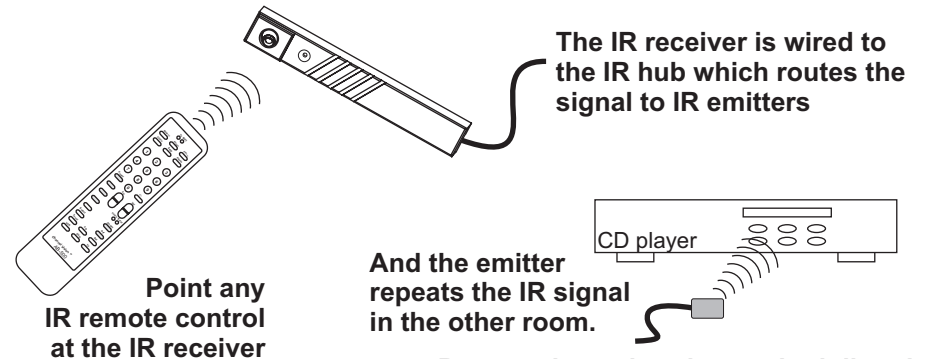


**IR-3003**... Single head IR emitter with expansion jack. As many as 3 units can be chained together and connected to a single emitter output.



**AB500** ... Universal remote control. Learns IR codes for up to 6 sources.

## How IR repeating works



Point any IR remote control at the IR receiver

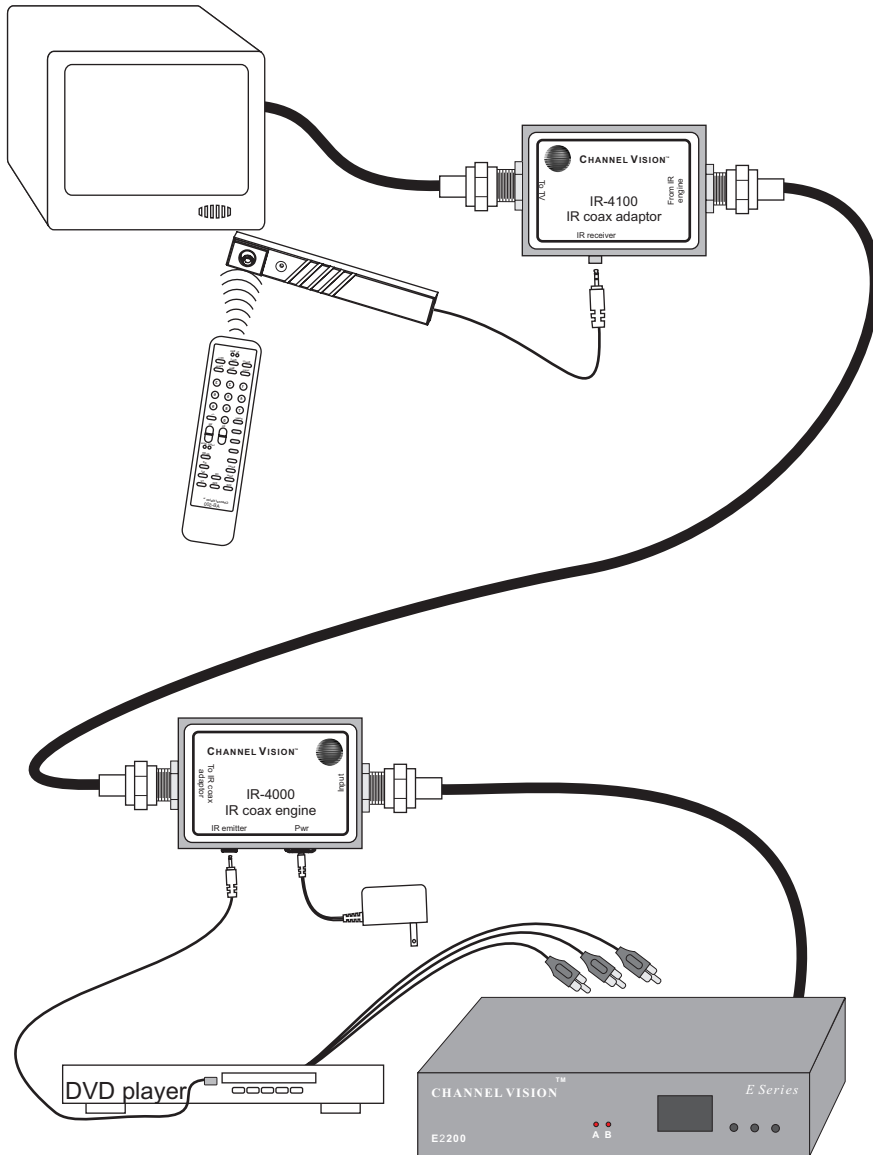
The IR receiver is wired to the IR hub which routes the signal to IR emitters

And the emitter repeats the IR signal in the other room.

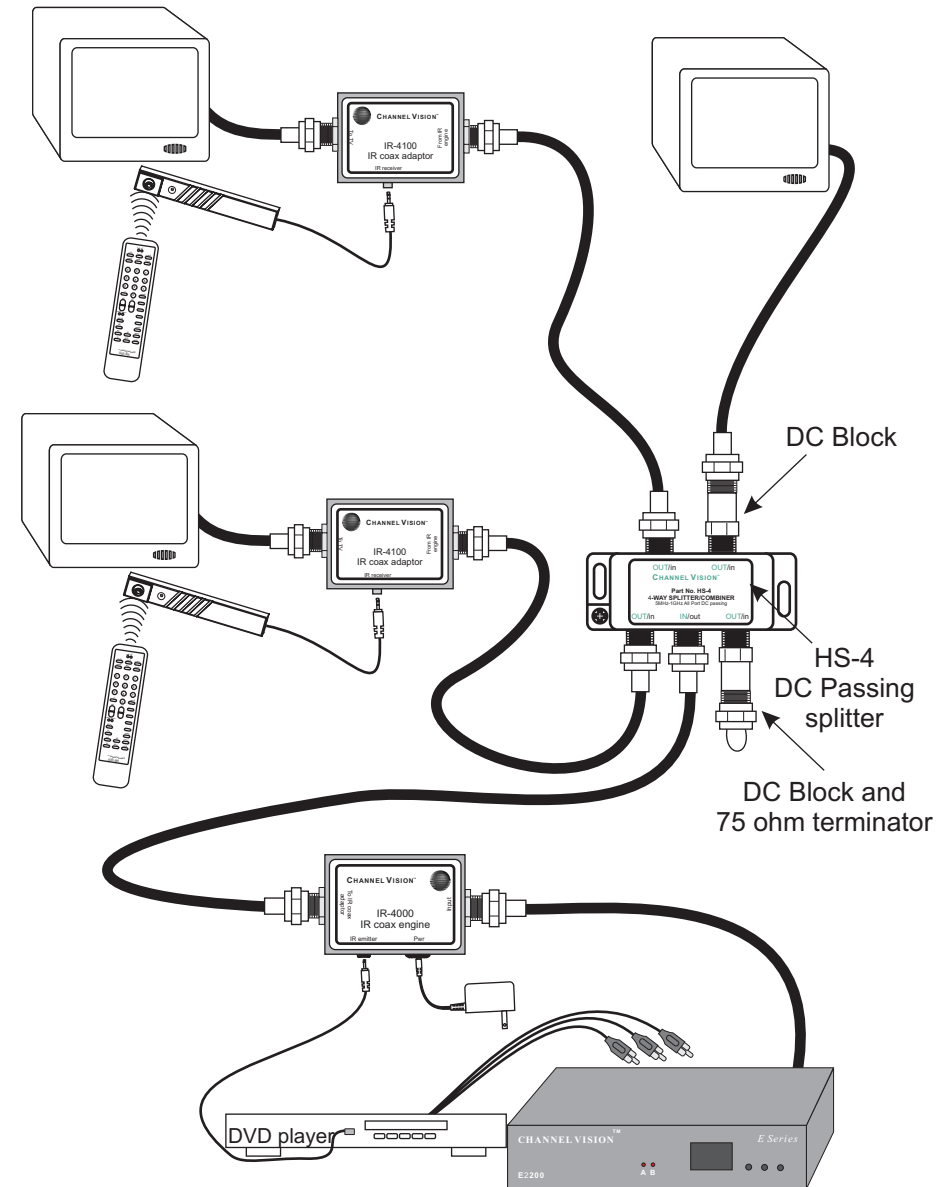
Be sure the emitter is attached directly over the component's IR receiver.

## Basic IR Setup

A basic IR system, like the one shown below, is often used when an audio/video signal is distributed to a remote TV location using an RF modulator. The IR-4100 is located near the TV, providing a connection for an IR receiver, and the IR-4000 is located near the audio/video source, providing an IR emitter output.



## IR over coax to multiple TVs



The diagram above illustrates how to create an IR system with IR receivers in several different rooms in the house using an IR and DC passing splitter. Note: a DC block is required on all outputs of the splitter that do not have IR components connected.