

WARRANTY

Multiplex Technology, Inc. warrants this product to be free from defects in materials and workmanship for a period of one year from the date of purchase or MTI will repair, or at its option, replace the defective product. To obtain warranty service, call MTI for a return material authorization (RMA) number and return the product pre-paid

Attention: Customer Service.

Please put the RMA number on the outside of the carton.

Any implied warranty arising from the sale of the product including implied warranties of merchantability and fitness for purpose are limited to the warranty stated above. MTI shall not be responsible for losses or damages or expenses, whether direct, consequential or incidental arising from the use of or the inability to use this product. Some states do not allow limitations on how long the implied warranty lasts or the exclusions or limitations or incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which may vary from state to state.

Channel Plus®

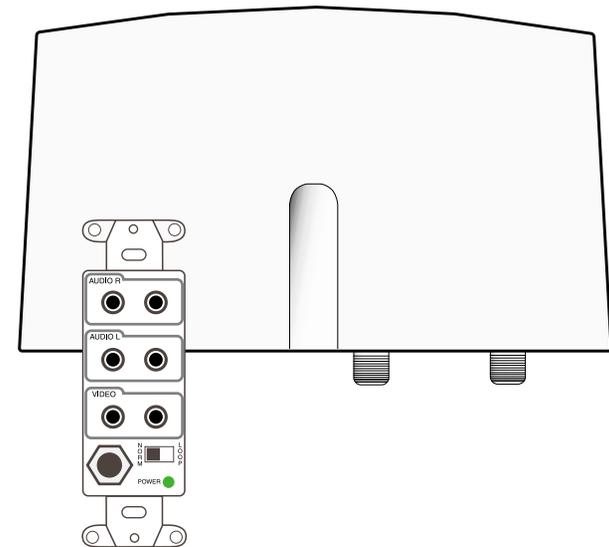
PERFORMANCE MULTI-ROOM VIDEO

5115 Modulator Series

Model 5115HHR

Model 5115BID

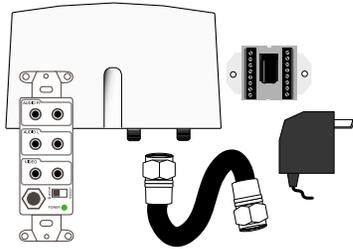
Model 5115PAL



multiplex®
technology, inc.

The 5115 series is a audio/video distribution system that creates a new channel to add to existing television channels. The new channel carries audio/video from any video source to all the TVs in the home. The 5115 was designed to install effortlessly into existing coax home wiring or into new construction.

Contents: Channel Injector
Wall plate
Power Injector
Power Supply
Coax Jumper



The 5115 series is comprised of a wall plate and a channel injector. The channel injector is weather resistant and designed to mount indoors or outdoors close to the incoming CATV or antenna feed. The system uses the existing coax cable distribution in the house and only requires a single run of Cat 5.

The 5115 was designed to work with Cat 5 wiring. Although the system will function with quad wire, Cat 5 delivers the highest quality picture. The Cat 5 allows the use of an automatic line length sensor and picture compensator. Quad wire does not take advantage of this enhancement.

Model Differences:

The model **5115HHR** is a high headroom design for CATV and off air antenna feeds only.

The model **5115BID** is a bi-directional design for use with CATV cable boxes that are interactive or require bi-directional communications with the cable company.

The model **5115PAL** is designed to modulate PAL frequencies and use CATV or off air antenna feeds.

Installation:

First, locate the incoming CATV or antenna feed and install the channel injector at that location.

Second, install the wall plate at the desired location and run Cat 5 wire from the wall plate to the channel location. Then connect a video source.

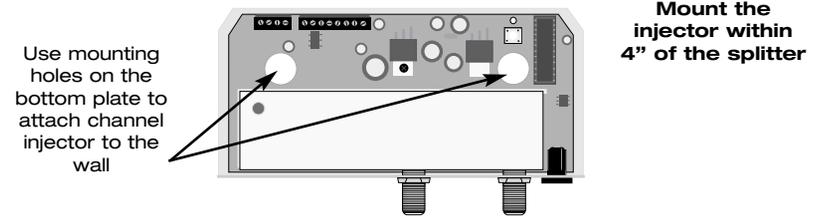
Third, apply power and select an unused channel for the 5115 picture to appear on all the televisions.

Installation

Step One

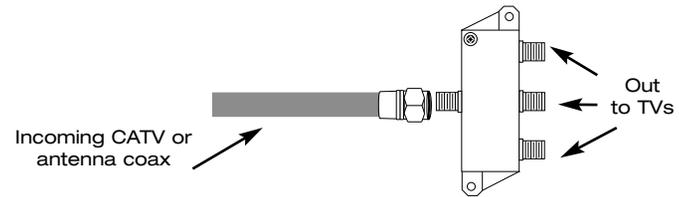
Locate the incoming CATV or antenna feed and existing splitter. (Usually found on the side of the house, in the attic or near the electrical and phone service box)

Remove the lock screw located on the bottom of the channel injector and slide the cover off. Use the mounting holes as shown to affix the channel injector to the wall next to the splitter.



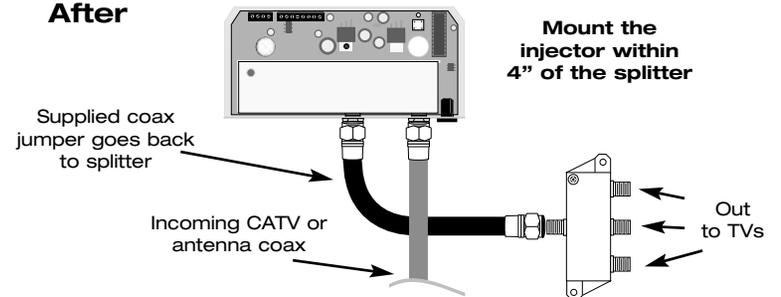
Disconnect the incoming CATV or antenna feed from the existing splitter and attach it to the channel injector as shown.

Before



Now attach the supplied coax jumper back to the existing splitter and tighten all connections with a 7/16" wrench.

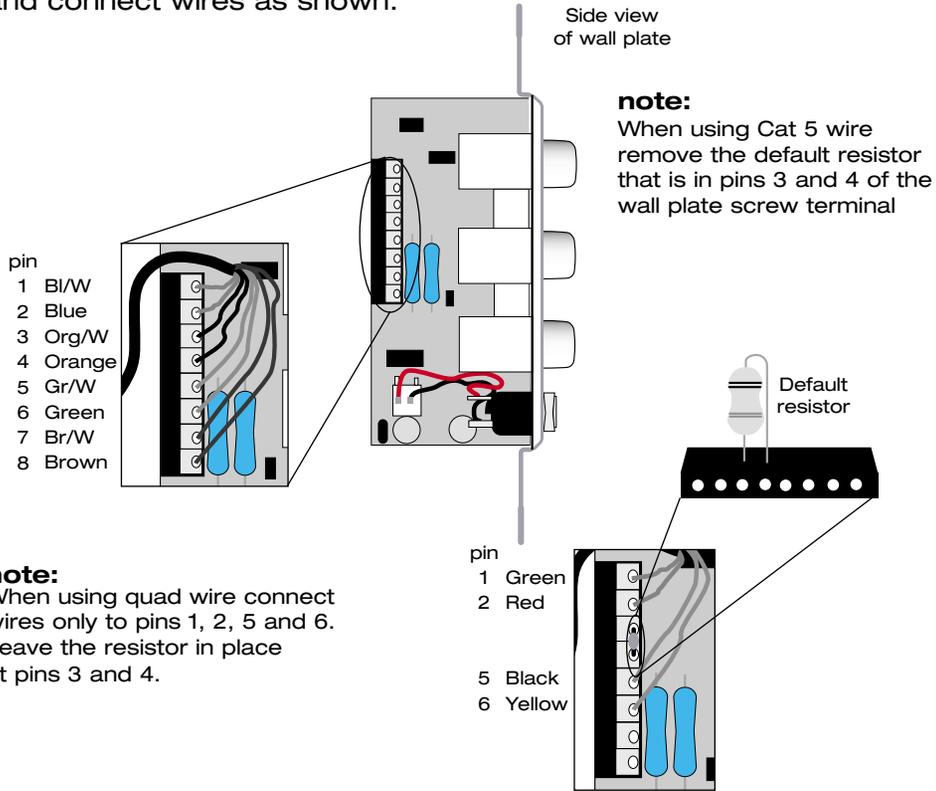
After



Installation of the wall plate

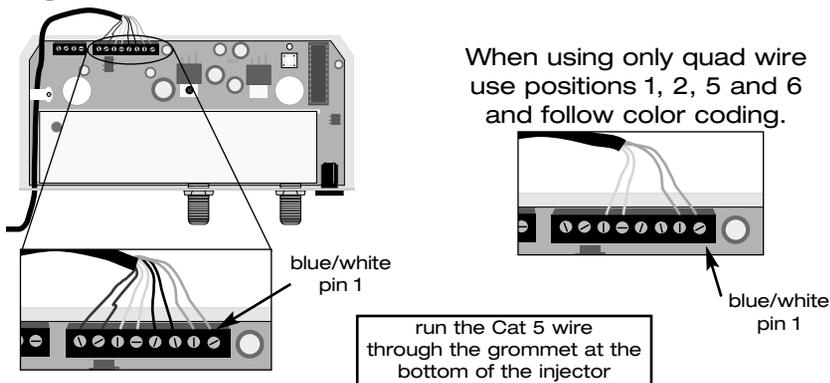
Step Two

The wall plate mounts using a low voltage ring into a wall cut out. Run a line of Cat 5 wire from the wall plate to the channel injector and connect wires as shown.



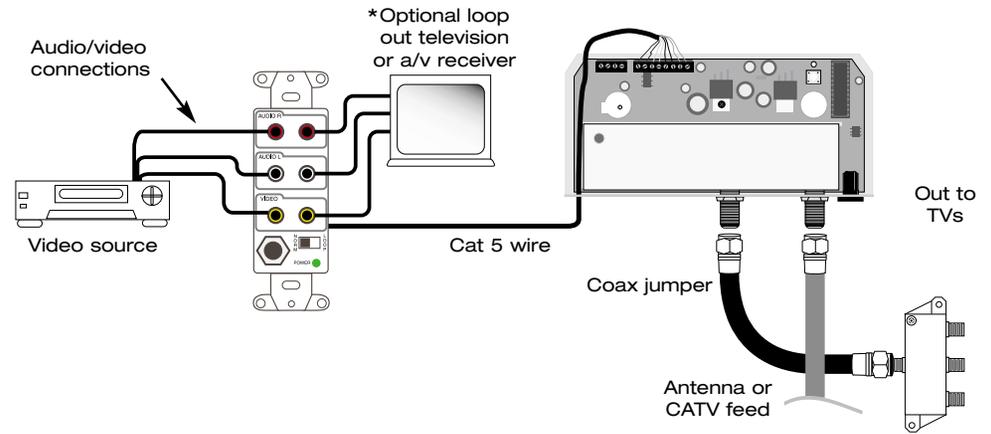
note:
When using quad wire connect wires only to pins 1, 2, 5 and 6. Leave the resistor in place at pins 3 and 4.

At the channel injector, connect Cat 5 wire as shown. Follow the color coding on the screw terminal.

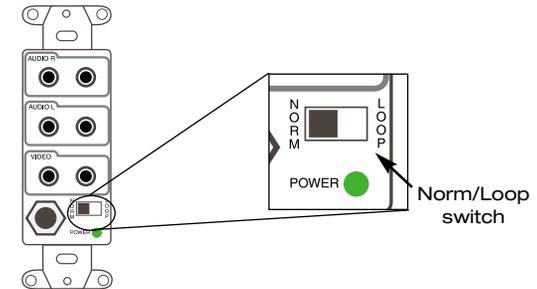


Connecting A Video Source

Using any video source, DVD, Satellite or VCR connect it to the wall plate as shown. This video source will be transmitted over the Cat 5 wire to the channel injector.



*Use the NORM / LOOP switch to select the proper setting for your application.



NORM:

Select NORM when a television or a/v receiver is *not* used at the wall plate to view the connected source.

LOOP:

Select LOOP when a television or a/v receiver is *connected* to the wall plate to view the connected source

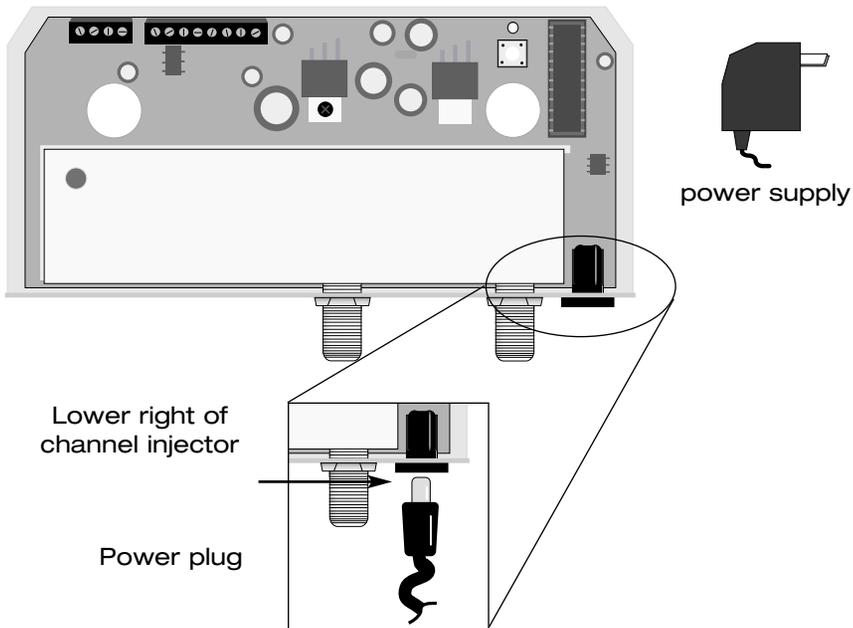
Applying Power and Programming

Step Three

The 5115 series has three different methods for applying power to the system.

Use only one method for applying power.

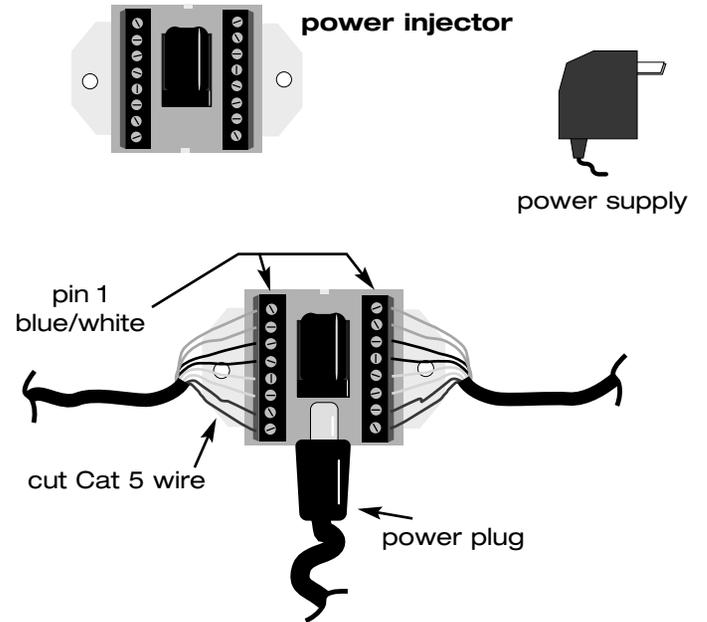
Method One: Apply power directly to the channel injector with the power supply.



The green LED in the upper right corner of the injector will be lit showing power is active.

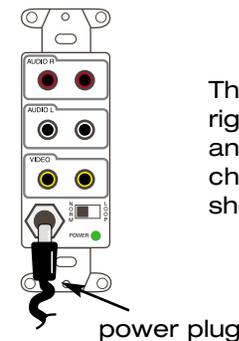
(See power length requirements page 8)

Method Two: Use the *power injector* to apply power along the Cat 5 or quad wire run. Cut the connecting wire along the run and insert the power injector. Connect the wires using the color coding. Then plug the power supply into the power injector.



The green LED in the upper right corner of the channel injector will be lit showing power is active.

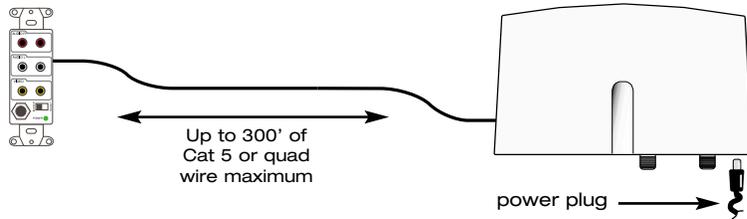
Method Three: Apply power directly at the wall plate.



The green LED in the lower right corner of the wall plate and upper right corner of the channel injector will be lit showing power is active.

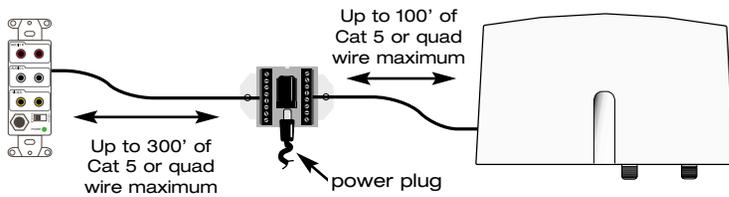
Power Length Requirements

Method One



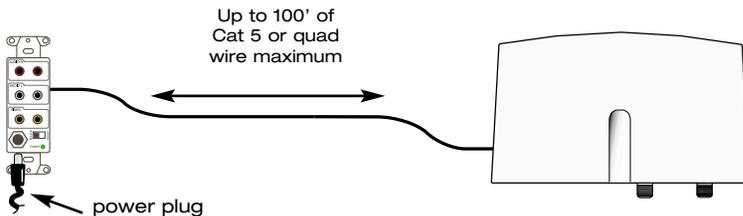
Power Length Requirements

Method Two



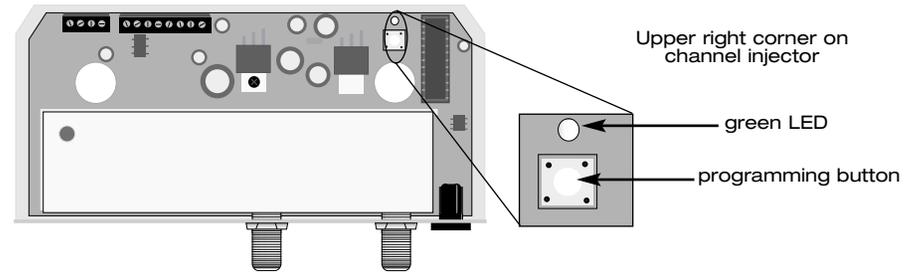
Power Length Requirements

Method Three



How to Program

Determine which unused channel you want to view your video source on and program the injector for that channel. There must be one unused channel both before and after the selected channel to avoid interference. The new channel will be combined with the existing channels and appear on all televisions.



To program: For example channel 60

- 1: Press the button 6 times.
- 2: Wait for the LED to relight.
- 3: Press the button 10 more times (pressing 10 times enters "0").

The injector will now combine the wall plate feed on channel 60 with all other existing channels from the incoming CATV or antenna.

To program a three digit channel: For example channel 120

- 1: Press the button 1 time.
- 2: Wait for the LED to relight.
- 3: Press the button 2 more times.
- 4: Wait for the LED to relight.
- 5: Press the button 10 more times.

Finding Unused Channels

CATV: Determine the highest channel number delivering a picture, excluding 95-99. Tune the TV up one channel at a time from the last channel with a picture until finding one channel with no trace of a picture or interference, just snow.

Antenna: Tune the TV one channel at a time from channel 14-64. Locate one channel that has no trace of a picture or interference, just snow.

Programming a New Channel

Valid channels are 14 thru 64 for UHF and 65 thru 125 for CATV
Channels 95-99 are not available. Channels 21 thru 62 are for Pal.

Channel Spacing:

Skip at least one number between the new channel and the closest existing UHF/CATV channel.

(example 14 and 16: OK 14 and 15: Unacceptable)

Error Indication:

If an error occurs or an incorrect channel is entered, the LED will flash quickly for one second and return to previous settings.

Cable HRC and IRC considerations:

Most cable services use IRC frequency assignments. This is the default for the 5115. However, if the cable services uses HRC or the TV appears to search for the "created channel", program the channel injector for HRC.

For HRC enter 98. Reset to IRC by entering 99.

Entries 98 and 99 are for setting HRC or IRC only. They will not change the channel number.

With programming complete, test each TV in the system to see that it is receiving the new channel.

Specifications: typical @ 25°C ± 5° C		
	5115HHR / 5115BID	5115PAL(AUS)
video input format	NTSC	CCIR
input signal	1.0 V peak-to-peak @ 75Ω	
output	12dBmV normal - 15.5dBmV maximum	
input connectors	3 RCA (video + audio left + audio right)	
loop-thru connectors	3 RCA (video + audio left + audio right)	
video termination	75Ω or > 1 MΩ in "loop" position (selectable)	
tuning range UHF	14 to 64	21 to 62(28 to 67)
CATV	65 to 125 [^]	
power supply	included with product	
mains power	105 to 125	210 to 250
output of power supply	15VDC 600mA	
general		
width x height x depth	injector module	wall plate
	6.5" x 3.5" x 1.25"	1.25" x 4.0" x 1.75"
	(16.3cm x 9cm x 3.2cm)	(3.2 cm x 10.5cm x 4.0cm)
shipping weight	2 lbs (0.9 kg)	
operating temperature	-4°F to 131°F (-20°C to 55°C)	
[^] excluding channels 95 through 99		