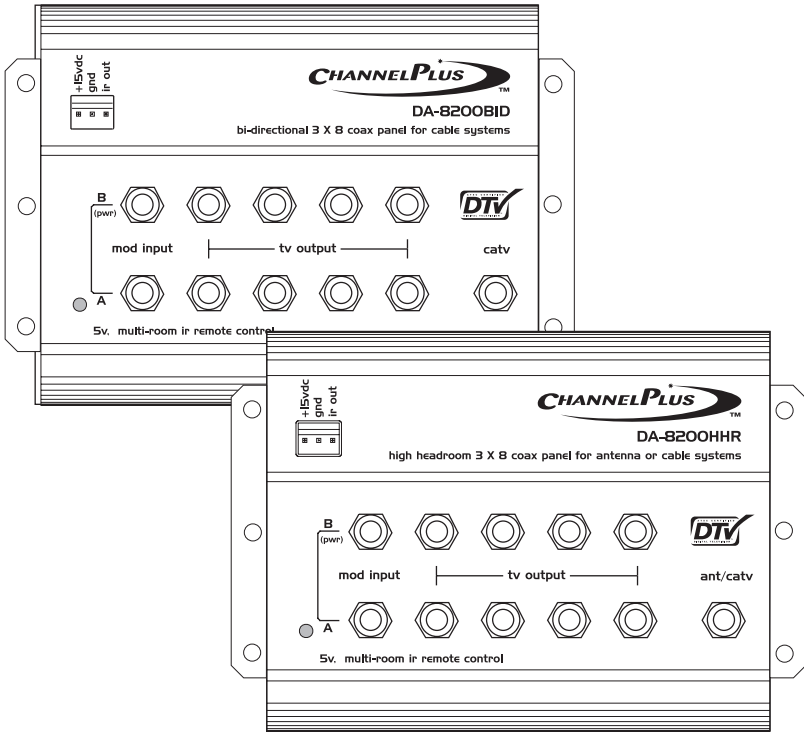




PERFORMANCE MULTI-ROOM VIDEO

# 3 x 8 Coax Cable Panel DA-8200BID DA-8200HHR



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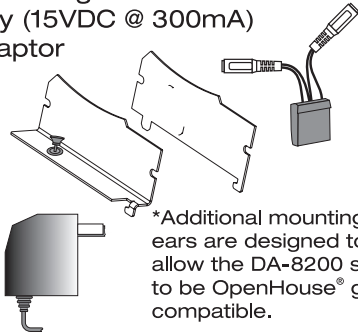
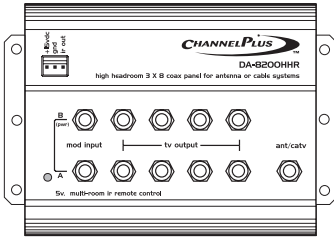
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# Model DA-8200

The model DA-8200 is the heart of a multi-room video distribution system. The DA-8200 connects as many as 8 televisions to cable or antenna, while maintaining compatibility with ChannelPlus video modulators and the 5V IR repeating system.

- Contents:** DA-8200  
 Additional mounting ears\*  
 Power Supply (15VDC @ 300mA)  
 Power/IR adaptor



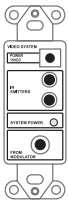
\*Additional mounting ears are designed to allow the DA-8200 series to be OpenHouse® grid compatible.

## Model Differences:

The DA-8200**HHR** is for antenna or uni-directional cable systems. The HHR has the highest headroom of any coax panel available in the market. Systems will meet FCC part 15 requirements for using modulators with an antenna based system.

The DA-8200**BID** is for bi-directional cable systems, providing a 5-42MHz back channel for cable modems or interactive set-top boxes.

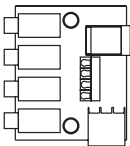
## Accessories:



**Model 2010**  
 Power injector wall plate  
 Powers the DA-8200  
 remotely and has a built-in  
 IR wall plate.  
 (fits standard Decora)



Series 5500 and series SVM modulators create local TV channels, have built-in IR engines and can remotely power the DA-8200.



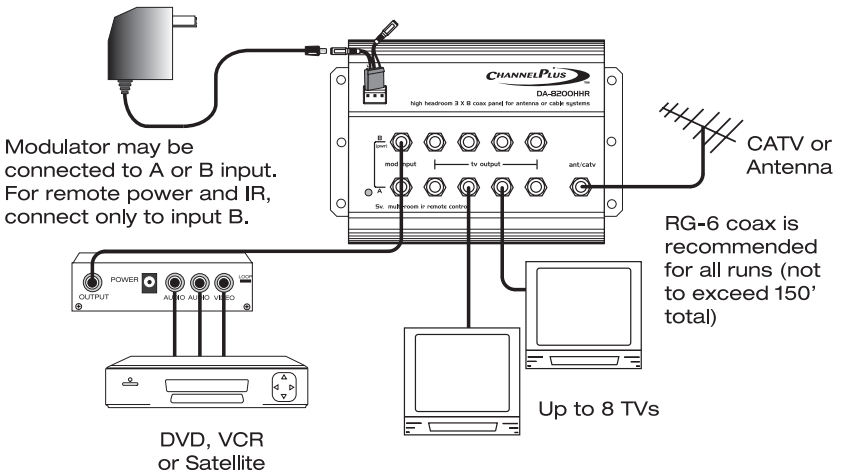
**Model 2184 IR breakout**  
 replaces the power  
 supply adapter and  
 drives up to four IR  
 emitters.



**Model 2181 IR extender** allows IR signals to be passed from one DA-8200 to another.

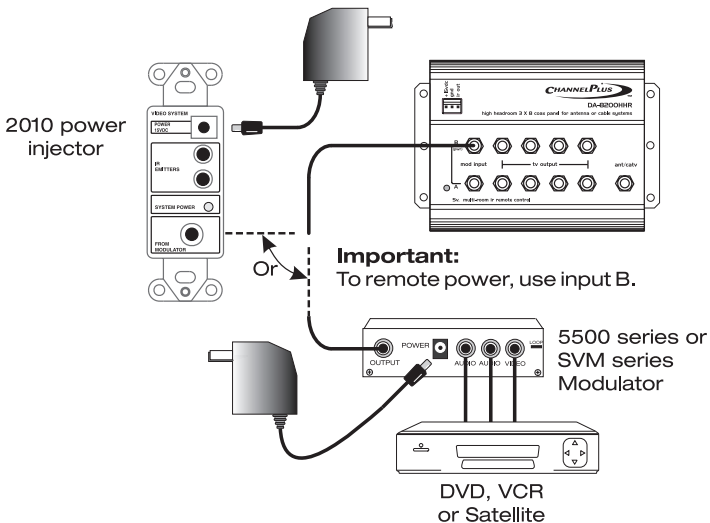
## Typical Installation:

The DA-8200 works like a zero-loss splitter. The signals you put on the antenna/CATV input will appear on the outputs with about 3dB of gain.



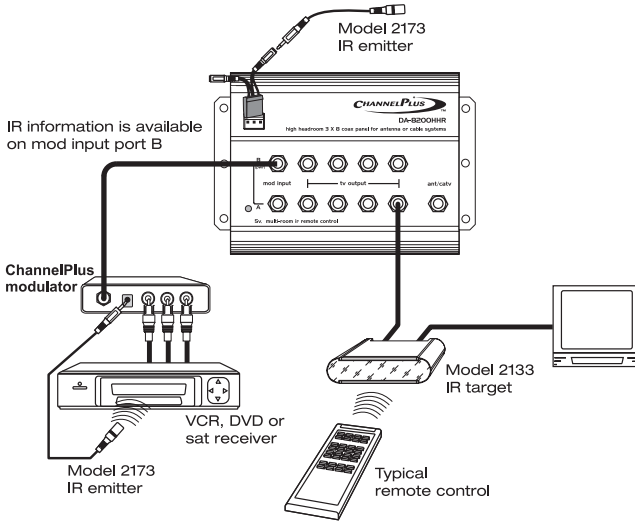
## Remote Powering the DA-8200

Put the DA-8200 coax panel where the coax is: often the basement or garage. The single coax carries power, RF signals and IR repeating signals. You can remote power the DA-8200 from series 5500 or series SVM modulators, or from a model 2010 wall plate.

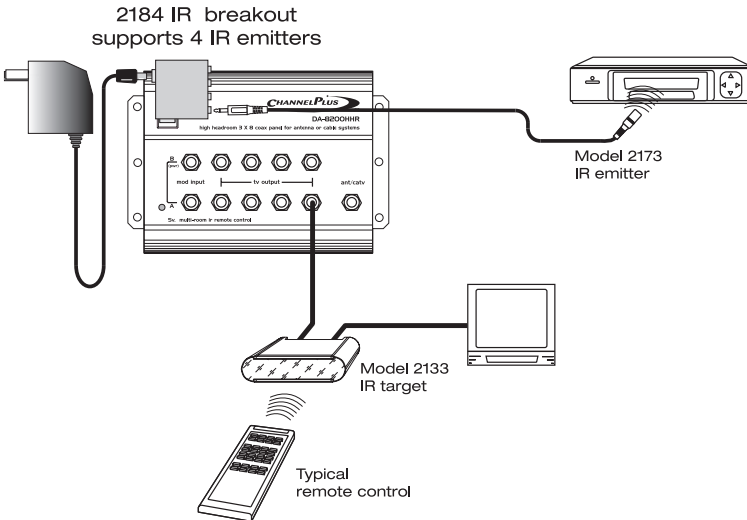


## 5V IR Repeating System:

With the DA-8200 you can control your video devices from any room in the house. Any or all 8 outputs may be connected to model 2133 IR targets. Direct your remote control at the IR target and the 2173 IR emitter will repeat the IR signal to the video devices in the media room.



Normally, the IR emitters are connected to the modulator or 2010 wall plate. But, if the coax panel is located in the media center, you may connect the emitter directly to the panel or to a model 2184 IR breakout adaptor.

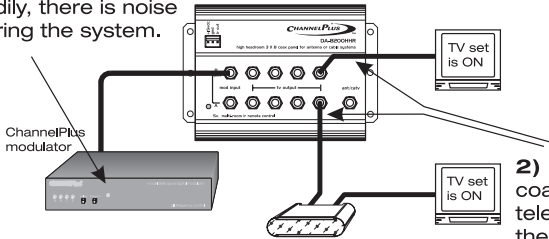


# IR Systems: FAQ

- There are two common IR repeating systems. The 12V Xantech® system is very versatile and intended for professional installation. The 5V system used by the DA-8200 is easy to use and low cost.
- 12V and 5V IR targets are NOT interchangeable. The emitters ARE interchangeable.
- When using a 5V IR system, DC blocks are usually not necessary.

## 5V IR Systems: Troubleshooting

1) If IR light glows steadily, there is noise entering the system.



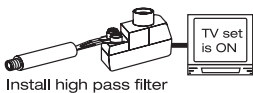
2) First disconnect the coax cables from all of the television output jacks. Find the source of the noise by re-connecting cables one at a time until the IR light glows. This identifies that coax as a noise source. Connect this noisy coax only for the next steps. Remember that there could be more than one source of noise, so you may need to repeat the following steps for each coax. Now step 3 will determine which type of noise problem you have.



**3a) Optical noise.** Cover the target with a towel. If the IR lights stops blinking, you have optical noise. The target may be pointed at a window, a fluorescent light or a plasma TV. Reposition the target so it can't "see" the source of IR light. If the IR light still glows, proceed to the next step.



**3b) EMI noise:** TV sets are sources of EMI, electromagnetic interference. Move the target away from the TV and try to reposition the target so the IR light stays off. If the IR light still glows, proceed to the next step.



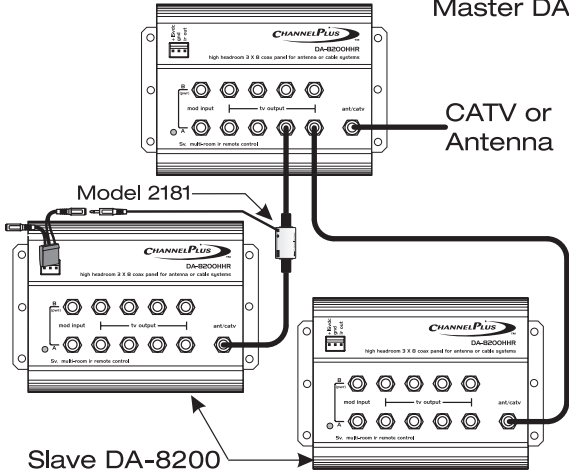
**3c) Conducted noise from the TV.** If the noise is not optical or EMI, then you have a noisy TV. Some TV sets generate substantial low frequency electrical noise on their inputs! The sensitive IR detection circuits can be triggered by this noise. Use a high pass filter to remove the noise. Sometimes a DC block will be a effective filter. The assembly shown at left is a low cost sure fix for this problem. Create this filter from two different types of matching transformers. Connect the filter directly to the F-connector on any noisy TV. *Note that any TV can be a noise problem, with or without an IR target attached.*

# Expanding the DA-8200:

## Master DA-8200

### Up to 64 TV outlets

You may connect up to 8 more DA-8200s to the outputs of a *master* DA-8200, for a total of 64 TV outlets. The longest recommended coax run should not exceed 150'. That is a total of the coax from *master* to *slave* and *slave* to TV.

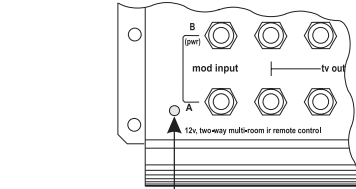


Each DA-8200 must be powered individually. Each *slave* DA-8200 can have local modulators and a zoned IR system for TVs connected to the eight outputs. Any modulator signals injected into a *slave* DA-8200 will be viewable only on the eight TVs connected to it. Modulators connected to the *master* DA-8200 will be viewable on all TV outputs including *slave* DA-8200s. To combine IR control signals of *slave* DA-8200 units, use one 2181 IR extender for each *slave* DA-8200. (See model 2181 instruction manual)

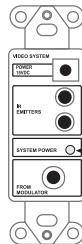
## Circuit Breaker:

The model 2010, DA-8200 and modulators with remote-power feature have built-in circuit breakers. If any of the power LEDs are not lit, reset the circuit breaker by disconnecting and reconnecting all power supplies. If the system does not reset, look for an installation error.

### DA-8200



Power LED



### Model 2010

Power LED

## FCC Requirements:

THIS PRODUCTS COMPLIES WITH FCC REQUIREMENTS. A SYSTEM USING THIS DEVICE WILL COMPLY WITH FCC REQUIREMENTS. USE ONLY VIDEO MODULATORS THAT COMPLY WITH PART 15 OF THE FCC RULES AND HAVE A 25dBmV MAX OUTPUT LEVEL. FAILURE TO DO SO MAY VOID THE USER'S AUTHORITY TO OPERATE THIS EQUIPMENT.

THE DA-8200HHR IS SUITABLE FOR USE WITH AN ANTENNA OR WITH CATV SYSTEMS.

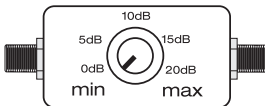
THE DA-8200BID IS SUITABLE FOR USE WITH CATV SYSTEMS.

## Things To Watch For:

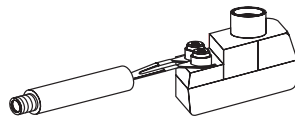
**Herringbone interference on modulator channel (diagonal lines):** You may have chosen a channel number that is not completely vacant. Distant UHF stations may not be watchable, but will cause interference if you try to create a new channel at the same frequency. Also, cable companies often have extra signals where there should be none. Try moving the modulator channel to another number. You may have to add a low pass filter to remove the cable company noise. If the filter does not work, try adding a DC-block to remove common mode interference.

**Herringbone interference on many channels, including modulator channels (disappears when you remove the CATV/antenna feed):** The RF amplifier can be overloaded by abnormally strong signals. Often, you can cure the problem with a simple attenuator. Use a variable attenuator and try to find a signal level where the interference just disappears. Sometimes, the problem is one station is far stronger than the rest. In this case, attenuating all of the signals with a simple attenuator will cause the desired stations to be weak (snowy). You must reduce the strength of the only offending station. A common FM trap will help if the problem is a nearby FM tower. If the problem is a nearby TV station, often the station management can provide suitable filters.

We recommend using only RG-6 coax when wiring a house. Why? Although good RG-59 has only slightly more loss than RG-6, it is harder to find a good RG-59 with wide bandwidth. RG-6 is a little more expensive and a little harder to run (it is thicker). But you will avoid surprises if you stick to RG-6.



Inexpensive variable attenuator



Inexpensive high pass filter and DC block

Specifications: typical @ 25°C ± 5°C

Gain:	DA-8200HHR	DA-8200BID
CATV/Antenna port to output	3dB	3dB
Modulator input to output	-10dB	-10dB
Output to CATV (reverse) (5-42MHz)	n/a	-15dB
Isolation	>80dB	>35dB
Modulator input to CATV/Ant	5-1000MHz	54-1000MHz fwd
Max CATV/Antenna input	20dBmV(+85dBuV)	20dBmV(+85dBuV)
Power Supply (included)	15 VDC @ 300mA	15 VDC @ 300mA
<b>General</b>		
Width x height x depth (cm)	6.5" x 1.25" x 4.5"	
Shipping weight	4 lbs.	

### LIMITED WARRANTY STATEMENT

Linear LLC warrants this product to be free from defects in material and workmanship for 2 years. The time period will be measured using the date code labeled on the product. Linear LLC is not responsible for damage to the product resulting from the buyer's improper handling, stocking or warehousing of the product. Any implied warranty arising from the sale of the product including implied warranties of merchantability and fitness for purpose are limited. Linear LLC shall not be responsible for any losses, damages or expenses, whether direct, consequential, or incidental arising from the use or the inability to use the product. Some states and countries do not allow limitations or how long an implied warranty lasts or the exclusion or limitation or incidental or consequential damages, so the above exclusions may not apply. The Linear LLC warranty gives specific legal rights in addition to other rights, which may exist and vary from state to state and country to country.

The warranty is limited to repair or replacement of products returned, freight prepaid, to Linear LLC, there is NO PROVISION FOR LABOR COST OR OTHER REIMBURSEMENTS OF ANY KIND.

1. Failures due to product abuse, such as negligence, improper use, and electrical surge including damage from lightning, water damage or other damage due to natural disasters are not covered by the warranty. The most common form of product abuse is surge damage caused by lightning.
2. The warranty shall also be voided by any tampering with the date code, labels or other markings on the product.
3. Products that are damaged in transit to Linear LLC due to improper packaging or by the carrier (shipping company) will not be covered under the warranty. If the product was damaged or lost by the carrier, it is the sender's responsibility to create a claim against the carrier.
4. The user is responsible for all labor costs associated with removing, reinstalling and returning the product to Linear LLC.

Linear LLC, at its option, will repair or replace the defective product. Replacements will be made from B-Stock, if an exact replacement is not available, Linear LLC, at its option, will select the nearest equivalent product. The user is responsible for freight charges to Linear LLC. Linear LLC will return warranted repaired or replacements by UPS Ground or an equivalent service. A customer may pay the additional costs for second-day or next-day service.

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.