



StarServe Contractor Series
Video Hub, 3 Inputs / 8 Outputs, with IR
Installation Instructions

8073/8VHPIR

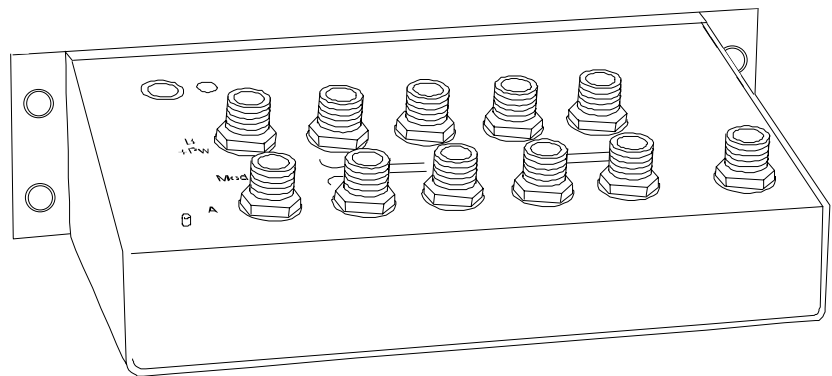


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1.0 Product Range

8073/8VHPIR StarServe Contractor Series Video Hub, 3 Inputs / 8 Outputs, with IR
E8073/8VHPIR StarServe Contractor Series Video Hub, 3 Inputs / 8 Outputs, with IR
(Power Supply Not Included)

2.0 Description

The 8073/8VHPIR StarServe Contractor Series Video Hub offers whole-house video distribution for Antenna and CATV signals at up to eight television locations. The hubs have two modulator inputs to add locally generated channels (front door camera, DVD and VCR), in addition to a CATV/Antenna input.

The 8073/8VHPIR StarServe Contractor Video Hub also has an integrated 5-volt infrared engine, including an IR Output on-board, that allows instant control of any video device from any location in the house. Use the 8050TR StarServe Infrared Target and the 8050LD or 8050/2LD StarServe Infrared Emitter for complete IR remote control.

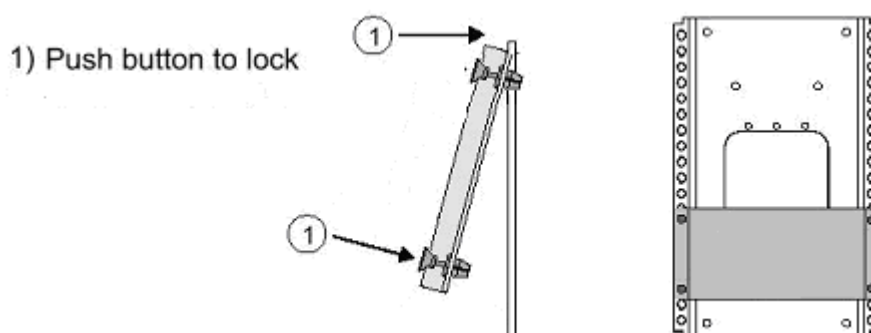
The 8073/8VHPIR StarServe Contractor Video Hub has a high headroom amplifier that handles signal differences between high-powered analog VHF and low-powered digital UHF, free from overdrive effects. The unit is compatible with today's PAL and NTSC formats, as well as tomorrow's HDTV signals.

3.0 Features

- Distributes CATV or antenna to 8 TV's
- Expandable up to 64 TV outputs
- Two modulator inputs to add locally generated channels (camera, DVD or Pay TV)
- High headroom 5-860MHz amplifier
- IR repeating system using StarServe Infrared Targets and Emitters
- Can be mounted upside down
- Compatible with PAL, NTSC and HDTV systems
- Antenna isolation compliant with FCC Part 15 requirements

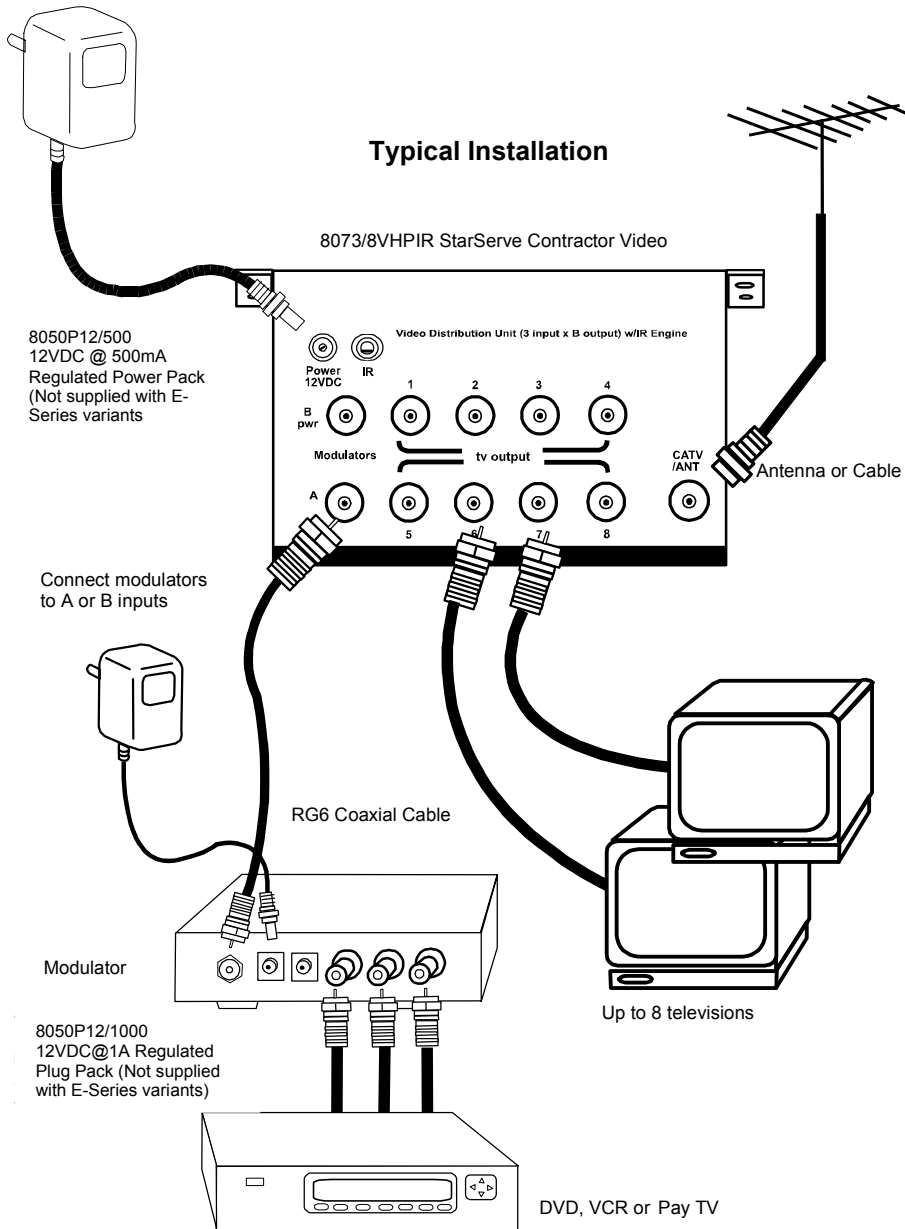
4.0 Installation Instructions

The 8073/8VHPIR StarServe Contractor Series Video Hub is installer friendly, and features the unique StarServe Grid mounting design. It is intended to mount in any of the StarServe enclosure panels.



4.1 Whole House Video Distribution

A typical StarServe installation using the 8073/8VHPIR Contractor Series Video Hub is shown below. Note Infrared services are not available using this configuration.

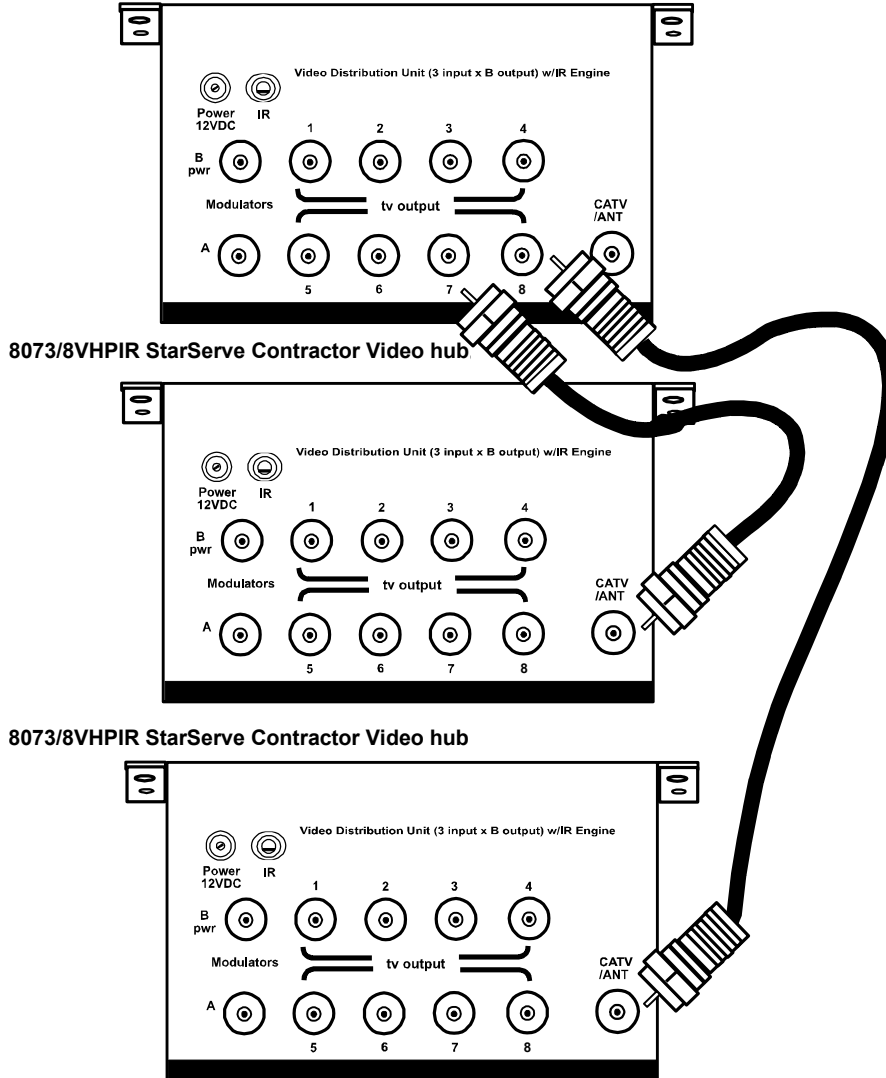


The 8073/8VHPIR StarServe Video Hub works like a zero-loss splitter. The signals you put on the Antenna / CATV input will appear on the outputs with about 3dB of gain. Modulator inputs will automatically appear on the outputs at a FCC legal level. The 8073/8VHPIR has the isolation required by the FCC for any system that has modulators and an antenna.

4.2 Expanding the Television Outputs

You may connect up to 8 additional 8073/8VHPIR StarServe Video Hubs to the outputs of a Master Video Hub for a total of 64 television outlets. The recommended maximum coax run should not exceed 45 metres (that is a total of the coax from Master to Slave and from Slave to TV).

8073/8VHPIR StarServe Contractor Video hub

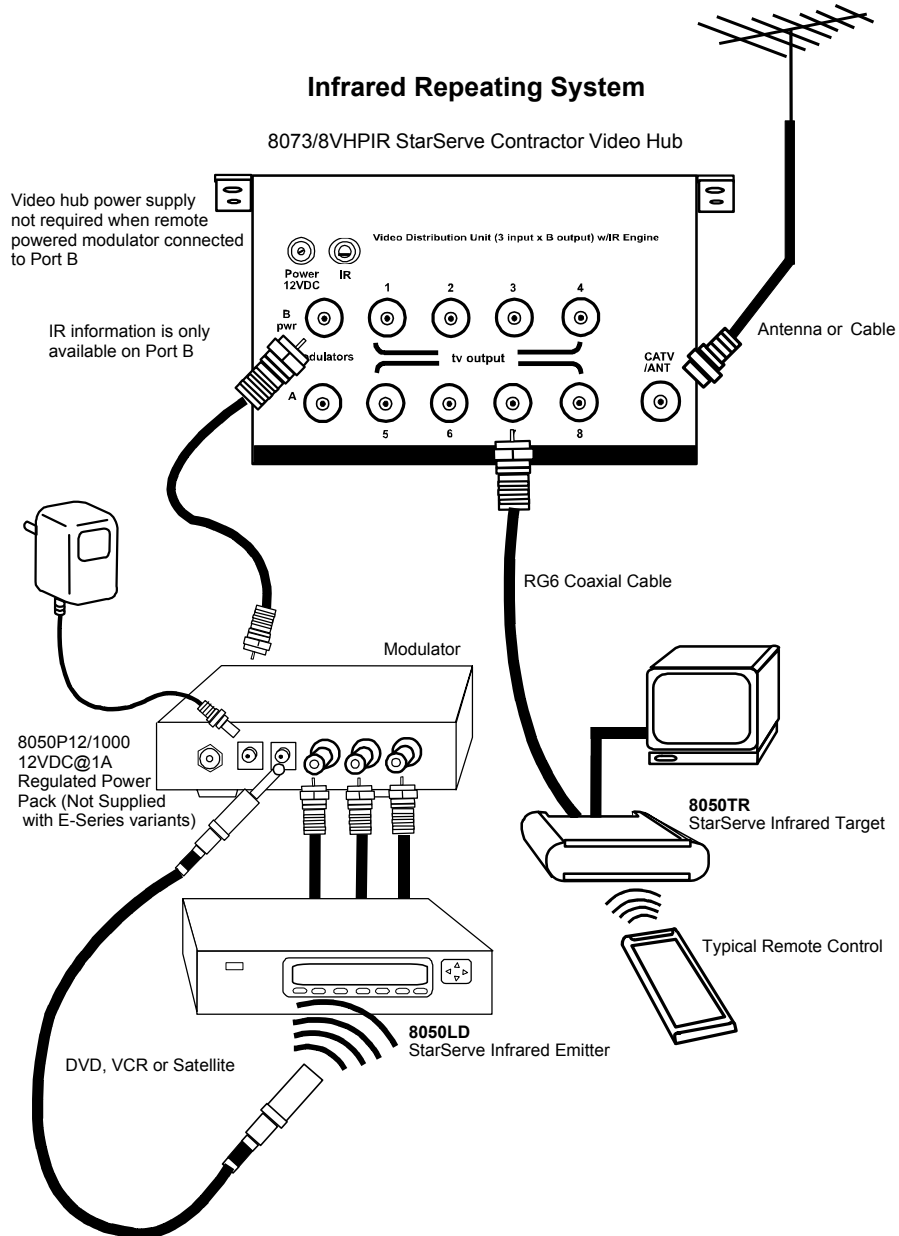


NOTE:

- IR services available on each unit are independent.
- IR commands received by a remote IR Target connected to one of the Master Video Hub outputs are available for IR Emitters connected via the B+PWR input port of the Master Video Hub only.
- IR commands received by a remote IR Target connected to one of the Slave Video Hub 1 outputs are available for IR Emitters connected via the B+PWR input port of the Slave Video Hub 1 only.
- IR commands received by a remote IR Target connected to one of the Slave Video Hub 2 outputs are available for IR Emitters connected via the B+PWR input port of the Slave Video Hub 2 only.

4.3 Whole House Infrared Control

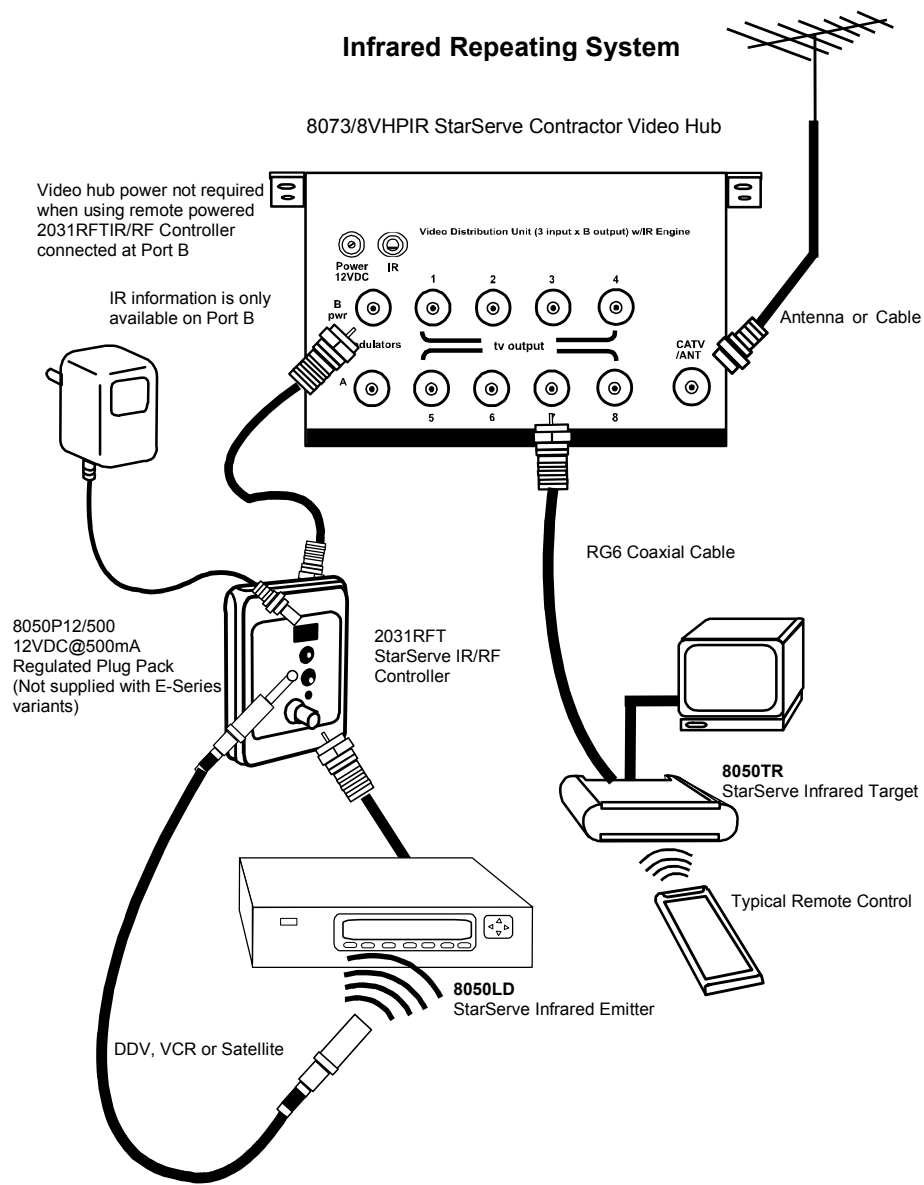
To control your video devices, add a modulator with IR repeating, an 8050TR StarServe IR Target and an 8050LD StarServe IR Emitter. Point a remote control at the Target in the bedroom and IR pulses are repeated by the Emitter, controlling the DVD player in the den. Any or all of the television ports may have Targets connected.



Infrared Repeating System using StarServe Set Top Modulator (8074VMPIR)

NOTE:

- Example uses an 8074VMPIR StarServe Set Top Modulator (one channel pictured only). Modulator must be connected to Port B+PWR on the 8073/8VHPIR for IR services to function.
- The StarServe Set Top Modulator provides remote power for the Video Hub. The Video Hub Power Pack is not required in this case.



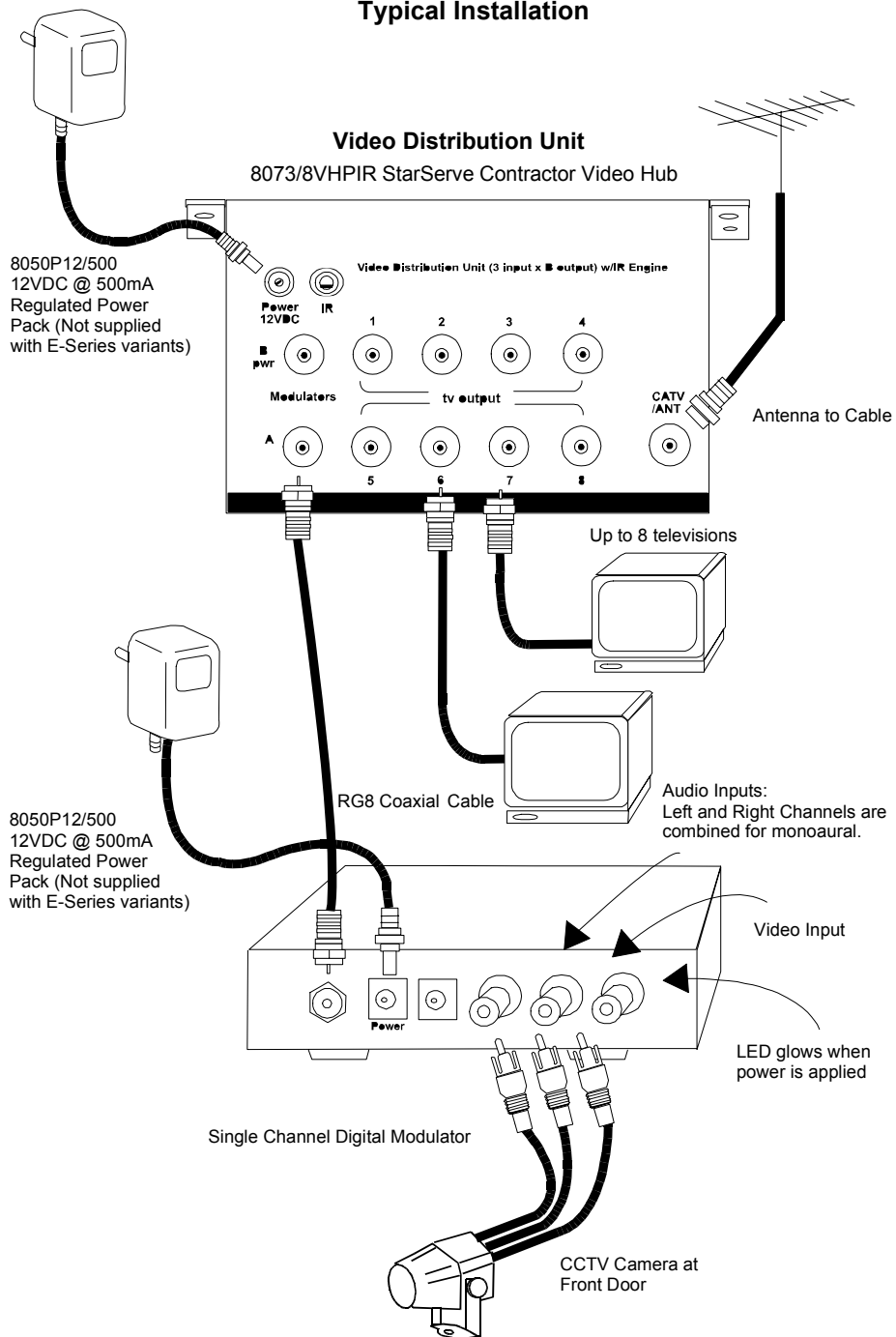
Infrared Repeating System using StarServe IR/RF Controller (2031RFT)

NOTE:

- Example uses 2031RFT StarServe IR/RF Controller. Controller must be connected to Port B+PWR on the 8073/8VHPIR for IR services to function.
- The StarServe IR/RF Controller provides remote power for the Video Hub. The Video Hub Power Pack is not required in this case.

4.4 Adding a Front Door Camera

Typical Installation



5.0 Troubleshooting

Symptoms	Remedy
No picture ...	Check that the TV and the modulator are tuned to the same channel. For example, if the modulator is broadcasting on UHF channel 16, make sure the TV is on UHF 16 rather than CATV 16. UHF 16 and CATV 16 are at different frequencies.
A weak StarServe UHF channel ...	If the TV has a separate UHF input, be sure that it is connected.
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 modulated channel (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 may 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.
Audio volume is low ...	The left and right audio inputs are combined for monaural. For proper audio level, both right and left inputs must be used. If you have a mono source, connect it to both right and left inputs using an RCA 'Y' connector.

6.0 Product Specifications

Catalogue No.		8073/8VHPIR
RF Output	Number of Runs	8
	Output Run Distance	45 metres
	Connector Type	8 x F-Type
Output Gain	CATV/Ant input to TV output	2dB
	Modulator input to TV output	-5dB
Bandwidth	Forward	45-850 MHz
	Reverse	N/A
Isolation	Modulator input to CATV/Ant	-80dB
RF Input	Max CATV/Antenna Input (64 channels)	20dBmV
	Connector Type	1 x F-Type
Power Supply (Not supplied with E-Series variant)	Model Number	8050P12/500
	Output Current	500mA (300mA minimum)
	Output Voltage	12VDC REGULATED
	Input Power	240VAC / 50Hz
IR Engine	Voltage (DC)	5V
Mechanical Details	Dimensions	162 x 85 x 45mm (LxWxD)
	Shipping Weight (approx)	1.2 kg
	Operating Temperature	0 – 50°C
	Operating Humidity	10 – 95% RH
Specifications typical @ 25°C ± 5°C		
No user serviceable parts inside.		

DECLARATION OF CONFORMITY

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Installation Requirements:

FCC classifies this product under part 15 of its rules as a “television interface device”. Systems designed using television interface devices have the following legal requirements:

- 1) The modulated channel signal strength may not exceed 15.56dBmV at any television. *Federal Regulation 47CFR15.115(b)(1)(i).*
- 2) If an antenna is used in the system, the modulated channel signal strength may not exceed –51dBmV at the antenna input port. *Federal Regulation 47CFR15.115(c)(4).*

The system you design must comply with these regulations. As the installer, you are responsible. The easiest way to be fully compliant is to use a pre-configured StarServe panel. StarServe panels have the necessary isolation from the modulator input ports to the antenna input port and gain characteristic from the modulator input ports to the television output ports. These features will make your modulator comply with the above requirements.

Further Information

For further information about Clipsal StarServe, please consult the documentation supplied. Further assistance can be obtained as follows:

- **StarServe Installers Guide**

A printed booklet containing detailed information for the installer regarding StarServe system design.

- **Technical Support and Troubleshooting**

For further assistance in using Clipsal StarServe, please consult your nearest Clipsal Integrated Systems Sales Representative or Technical Support Officer.

Technical Support Hotline

1300 722 247 (Cost 25c per Call)

Technical Support Email

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