

Network connectivity

StarServe Installation Guide

StarServe® Digital Home Networking



CLIPSAL
by Schneider Electric

Distribute TV, Telephone and Data with Ease!

Clipsal StarServe is the ultimate “smart” distribution system for the home, allowing users to access their data and video with ease. It has the power to distribute audiovisual and high-tech devices to multiple rooms throughout the home.

StarServe is easily installed into new homes, or large renovations and is the perfect solution for anyone wanting to maximise the benefits of home technology. Digital devices, such as pay-TV decoders or IP movie decoders, can be viewed from any TV outlet around the home.

Homeowners aren't limited to watching pay TV at the location of the decoder box. Instead, the signal can be distributed to any room that is connected to the StarServe system – such as the bedroom, outdoor area, or second lounge room.

Digital Video Distribution

Every TV in the home can access free-to-air channels, subscription TV, DVD players, digital recorders and surveillance cameras.

Please note: some models of StarServe Video Distribution Units allow infrared control of devices from other rooms.

Internet and Data Distribution

In today's modern homes, telephone and Internet access are essential. StarServe distributes telephone and Internet with ease and facilitates high-speed data, so computers, printers and AV equipment operate on one integrated network. StarServe will also operate with a wireless network in your home, if required.

Master Antenna Television (MATV)

The master antenna supplies one or multiple TV outlets with a signal. StarServe accommodates MATV and provides additional benefits, when compared to a standalone MATV system.

StarServe Connects the Home



Phone



Security/Surveillance Camera



Data = Internet, VoIP, networking, computer, printer, gaming



Video = Pay TV, free-to-air, HD audiovisual



StarServe Enclosure



Repeater/Additional Wireless Router



NBN Connection

StarServe Suite of Products

The products below are essential parts of a StarServe system.

StarServe AV Distribution

Antenna



StarServe accommodates free-to-air TV and an antenna is integral to delivering the signal that is distributed by a StarServe system.

Antennas need to be selected to suit the transmission frequencies specific to the customer's location. Use the Clipsal MATV guide to choose the correct antenna for your project.

Coax Cable



Coax cable is essential for AV distribution, providing superior qualities for shielding against electrical noise and premium picture quality. Clipsal Coax Cable is the highest quality quad-shield cabling.

Cat. No: 3105RG6Q3B (RG6 Quadshield Coax Cable Foxtel Approved)

Coax Connectors



F-type coax connectors are used to connect coax cabling together. Clipsal recommends compression F-type connectors for low loss characteristics, which provide the best transmission.

Cat. No: 3105RG6CC10 (RG6 Compression Connector F-Type Foxtel Approved)

Digital Modulator



A digital modulator connects devices, such as subscription-TV or security cameras. It converts input signals to digital RF signals for distribution via the VDU.

Cat. No: 3105SDM1 (Digital Modulator SD, Single Input and IR)
3105HDM1 (Digital Modulator HD, Single Input and IR)

Video Distribution Unit (VDU)



The VDU is the heart of StarServe AV distribution. The unit accommodates three RF inputs for distribution to any TV in the home.

Cat. No: 3105VDU38IR (Video Distribution Unit, 3 Inputs, 8 Outputs, with IR Pass)

Infrared (IR) Systems

Infrared Receiver



The IR receiver provides remote control of devices. The IR flat target receives the command from a remote and transmits it through the coax cabling to the device.

Cat. No: 3105TCB (IR Target Lead and Connection Box)

Infrared Emitter



Working with the IR target to receive commands, the IR emitter transmits the signal for the device.

Cat. No: 3105IMLD (IR Emitter Lead)



Standalone IR System

The standalone IR kit allows control of devices hidden away in TV cabinets, without needing to open the cabinet door.

StarServe Home Networking

Cat. 6 Cable



Cat. 6 cable provides superior performance to handle the bandwidth in today's homes.

Cat. No: 2D4P6IPV3B-BU (Cat. 6 LAN Cable)



Cat. 6 RJ45 Connectors

Cat. 6 connectors fit into Clipsal wall plates to accommodate cabling at connection points.

Cat. No: 30RJ45SMA6-WE (Cat. 6 RJ45 30 Mech Connector)



Cat. 6 Patch Cords

A must-have for your StarServe set-up, Clipsal Patch Cords provide easy connection of all your network devices.

Cat. No: RJ6/XXPL-BU (refer to parts list for patch cord lengths and colours)



1-Gigabit Switch

A true 8-port, 1-gigabit data switch, with a separate up-link port to leave all eight ports free for patching to field devices.

Cat. No: 95ESW8P1G (Ethernet Switch, 8-Port + U/Link, 1G Base-T)



Cat. 6, 8-Port Patch Panel

The Cat. 6, 8-port patch panel is compact enough for all home networking installations.

Cat. No: 3105APP8H6 (Patch Panel, 8-Port, Harmonica, Cat. 6 Angled)
3105APP8/6 (Patch Panel, 8-Port Cat. 6 Angled)

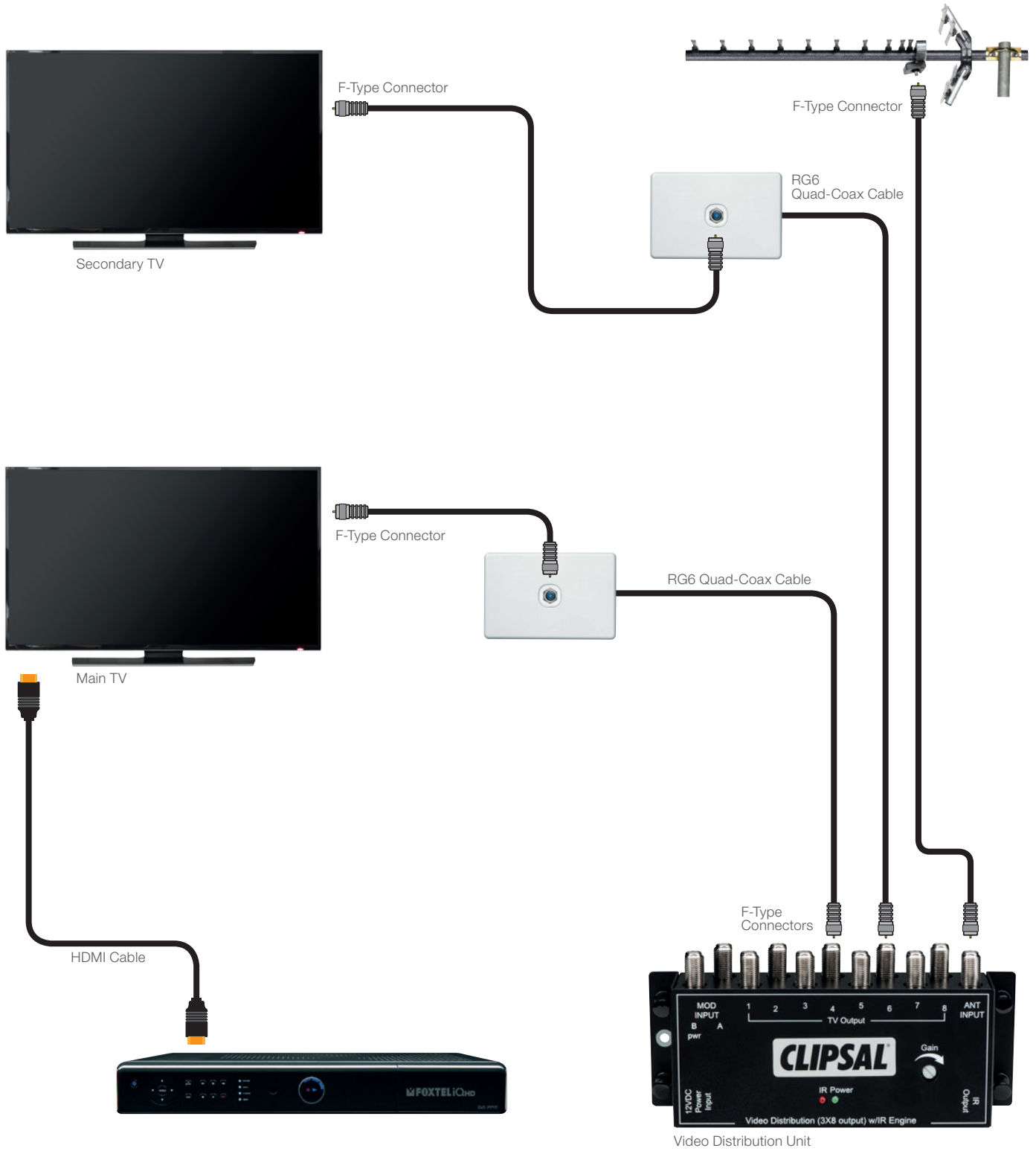


Enclosures

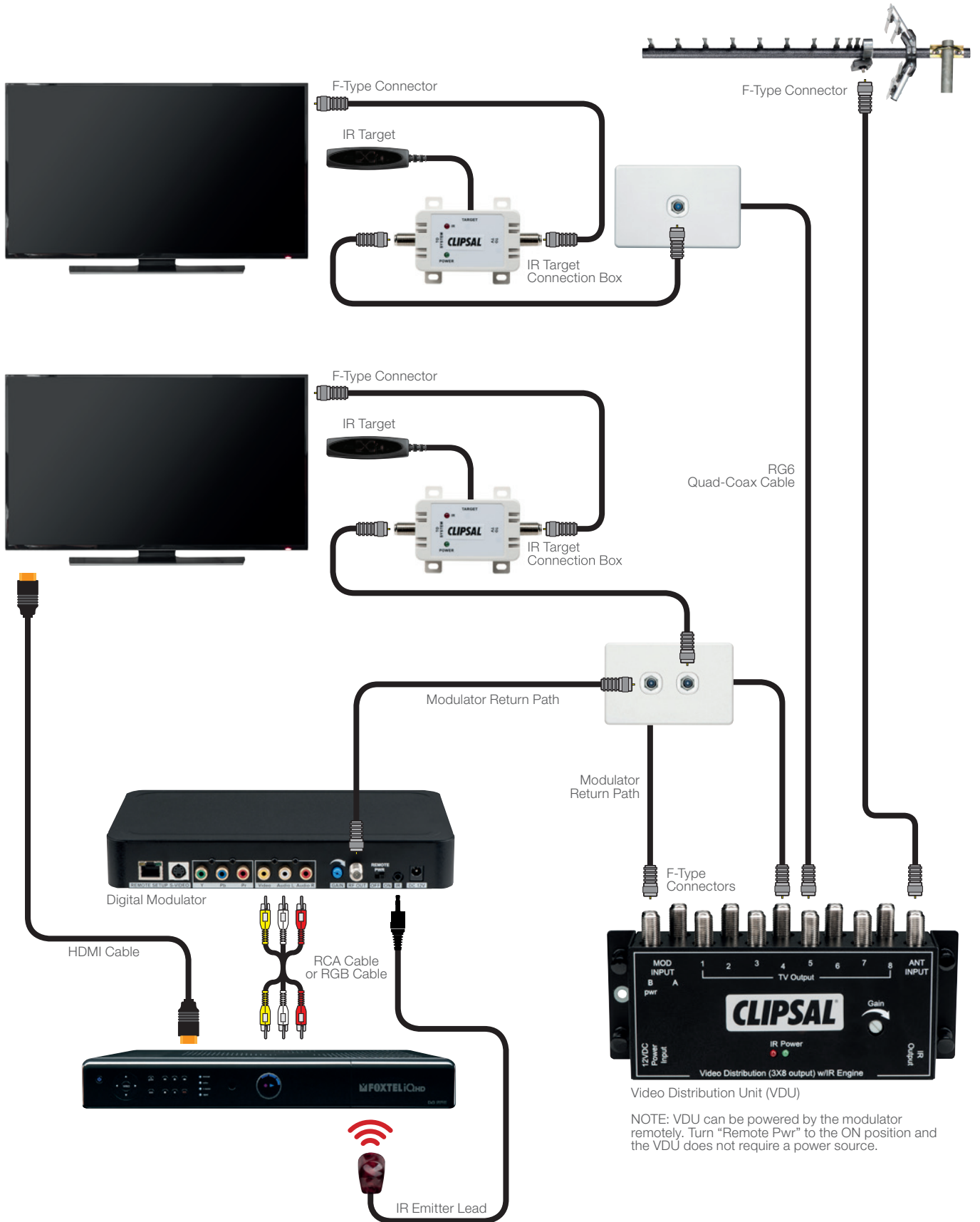
The enclosure provides a convenient storage space for StarServe networking equipment. Select from a range of Starserve Enclosures to accommodate any installation or application.

Refer to the parts list for enclosure model options.

Television Distribution

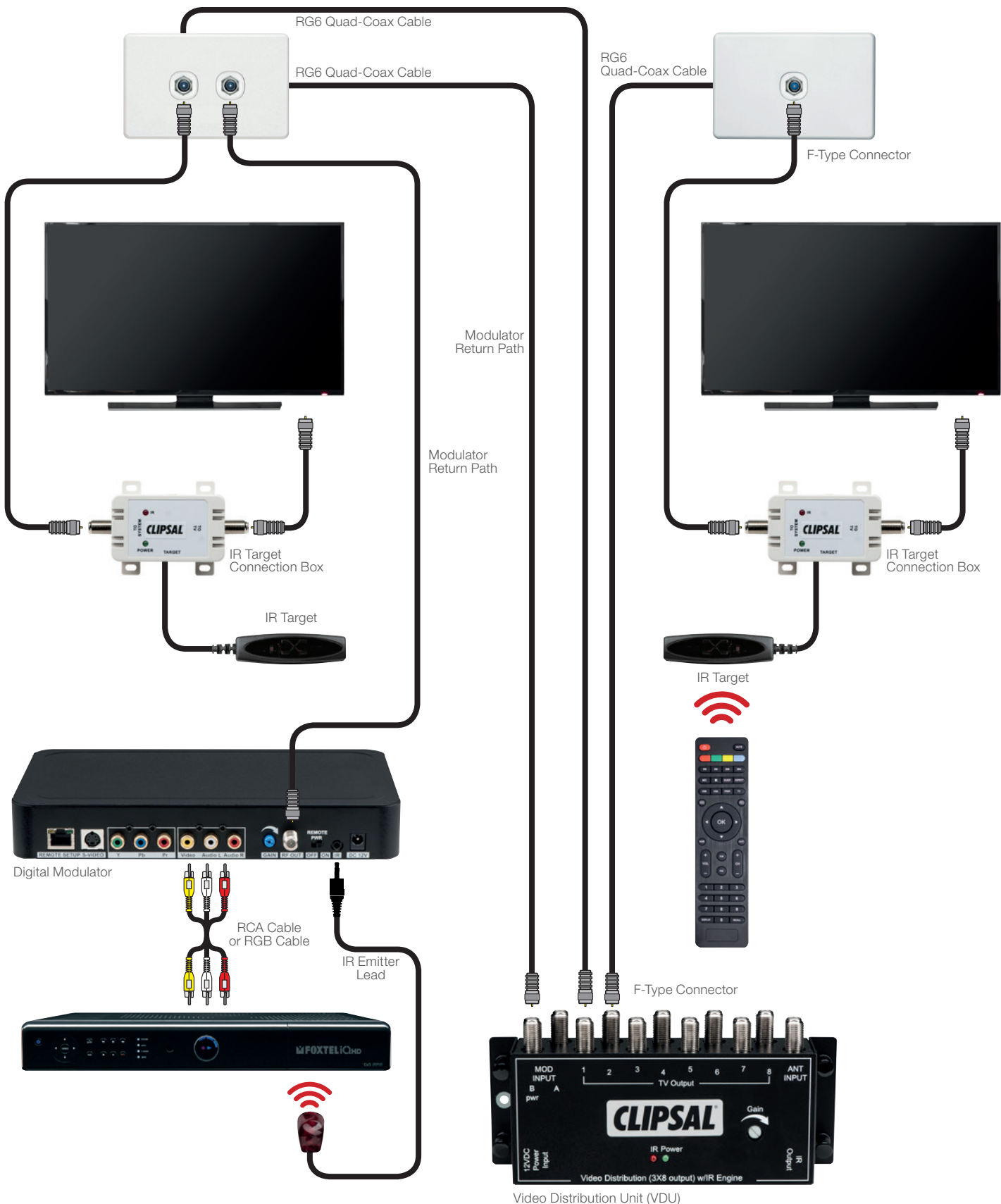


Audiovisual Distribution



Infrared Remote Control

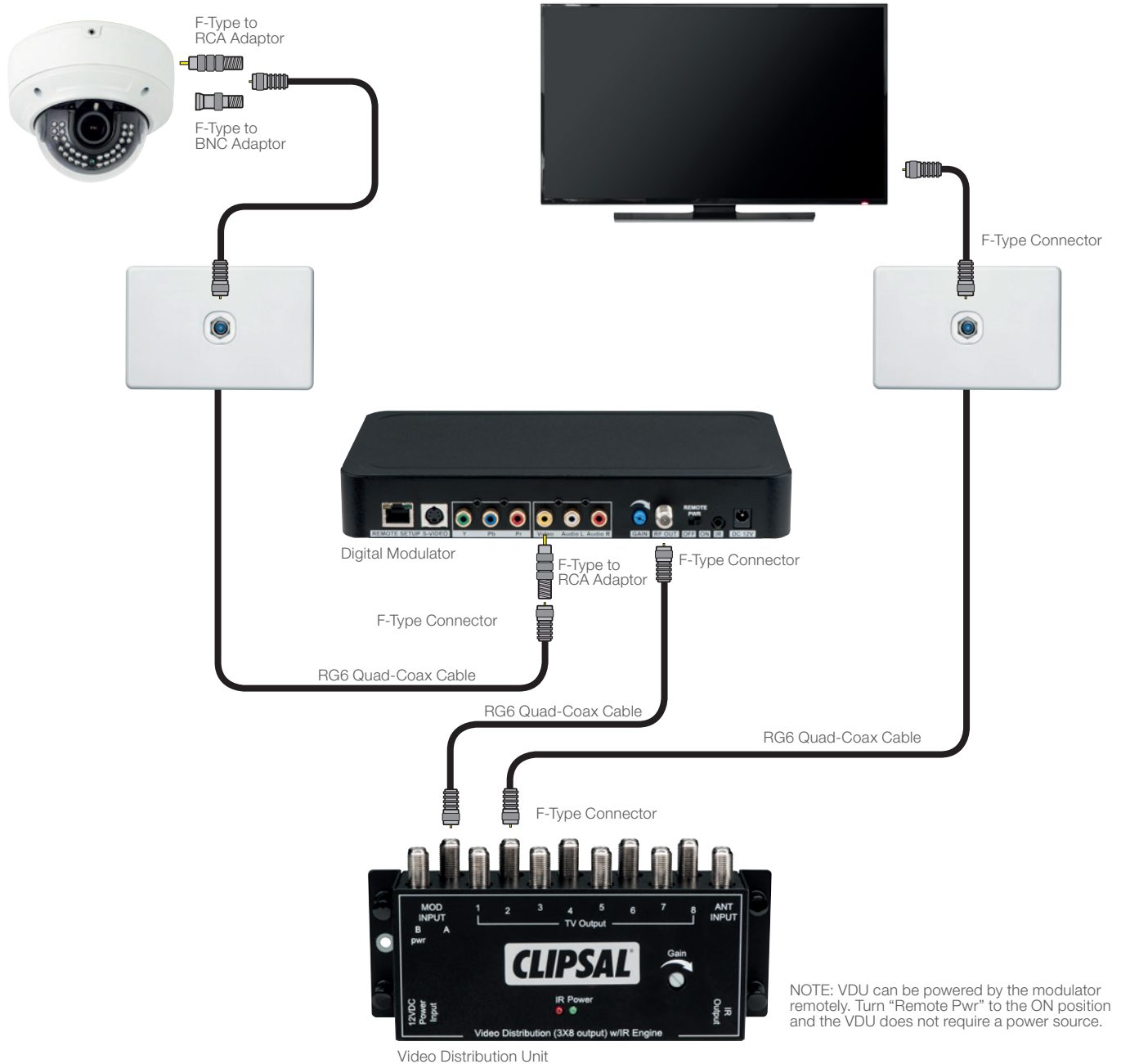
Only IR-capable devices can be controlled remotely from other rooms of the home.



NOTE: VDU can be powered by the modulator remotely. Turn "Remote Pwr" to the ON position and the VDU does not require a power source.

Video Camera Surveillance

'Mod Input A' is used for devices that don't require infrared (IR) remote control, such as surveillance cameras. A modulator is connected to 'Mod Input A' via an RG6 quad-shield coax cable.



The camera is connected to the modulator via RCA connections. This enables the camera to be viewed from any TV connected to the StarServe Video Distribution Unit (VDU) output.

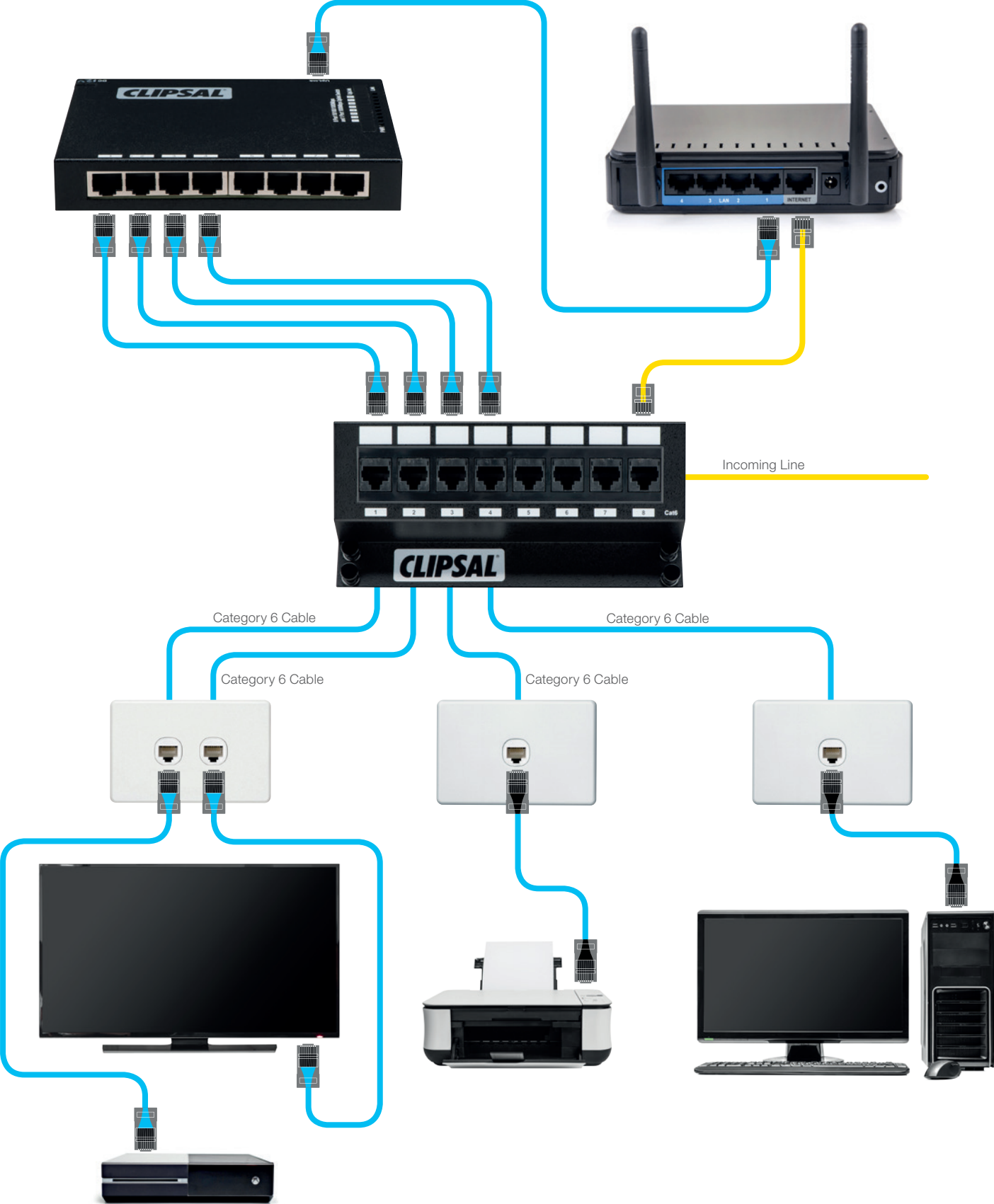
Additional Considerations

1. Location of modulator: where is it going to go?
2. Powering the camera: is the camera being powered locally or remotely?
3. Number of cameras: how many cameras and channels are required?

Data Home Networking

Data cabling simply connects data outlets together. One outlet is installed into a wall plate and the other is located in a panel.

Please note: data connections are the same at both ends.



FAQs

General

Q: Where is the best place to mount a StarServe Enclosure

A: StarServe Enclosures are not IP rated, so they should be installed indoors. Generally the garage or under a staircase is a good location; somewhere unobtrusive. A power point should be installed within, or adjacent to the enclosure. StarServe Enclosures are available in recess-mounted or surface-mounted models.

Home Networking

Q: What category solution is recommended for a StarServe system?

A: Clipsal recommend using Category 6 components, cabling and connectors. It will provide the best performance for Internet and networking applications.

Q: Where does the incoming telephone line terminate, if incorporated in the StarServe cabling?

A: The incoming line should go into the StarServe enclosure. It can then be terminated onto an 8-port patch panel (normally the last port, which can be looped if required). It can then be patched using the patch cords for outgoing services, i.e. modem.

Q: Where does the Ethernet switch connect to?

A: The Ethernet Switch acts like a bus way, providing interconnection of equipment. For internet connection, plug a patch cord from a port on the modem into the Uplink port on the Ethernet switch. All outgoing ports from the Ethernet switch can be patched into ports on the patch panel. This provides Internet access to any of the field outlets and allows equipment to be networked together.

Video Distribution Unit (VDU)

Q: How many AV input sources can be connected into the VDU?

A: There are 3 inputs: 1 antenna input and 2 modulator inputs (Mod A and Mod B). Mod B has the ability to pass power and Infrared signals. Mod A is a passive input and will not pass power or Infrared signals.

Q: What is the 'Gain' dial used for?

A: The gain dial is used to adjust picture quality. It can either amplify or decrease the output signals to field outlets by turning the dial. A signal strength meter should be used to ensure optimum signal output strength is achieved; 69dB +-3dB at the wall outlet.

Digital Modulator

Q: What is the 'Remote Power' switch for?

A: This is used to power the VDU remotely. If the switch is ON it will send small amount of powers (via the coax cabling) to power the VDU. It must be plugged into Mod B for power pass. **PLEASE NOTE:** if powering VDU remotely, the VDU should not be powered independently.

Q: What is the IR port on the digital modulator?

A: This is the Infrared extender port where the emitter plugs in. The target is located at the TV, which receives the IR commands. The emitter transmits the IR commands to control the device.

Q: How do you set up the digital modulator?

A: Please use the Digital Modulator Installation Instructions for details. They can be found either in the box or online at clipsal.com

Infrared Control

Q: How does the IR control work?

A: The IR control utilises the coax cabling system. The target box is connected in line with the TV and outlet. The target receives the signal and transmits it to the IR emitter, which then sends the command to the devices.

Starserve Home AV Distribution Product List

Catalogue Number	Description
3105RG6Q3B	RG6 Quad-shield, 305m Box, Foxtel Approved
3105RG6Q3R	RG6 Quad-shield, 305m Reel, Foxtel Approved
3105RG6F	RG6 F-Type, Crimp Connector, 10 Pack
3105RG6CC10	RG6 F-Type, Compression Connector, 10 Pack, Foxtel Approved
30FFM-WE	TV Socket, 30 Mech, F-Type Front, F-Type Rear
30FFPFMS-WE	TV Socket, 30 Mech, PAL Female-Type Front, F-Type Rear
3105VDU38IR	Video Distribution, 3 Inputs/8 Outputs, IR with Power Pack
3105SDM1	Digital Modulator, SD, Single Input, IR
3105HDM1	Digital Modulator, HD, Single Input, IR
3105IMLD	IR Emitter Lead
3105TCB	IR Target Lead Connection Box
3105IRKL	IR Kit, Local, 4 x Emitter, 1 x Target with Power Pack
3105IRK4	IR Kit, 1 x Emitter, 4 x Target

StarServe Home Networking Product List

Catalogue Number	Description
2D4P6IPV3B-BU	Cat. 6, 4-Pair UTP LAN Cable, 305m Box, Blue
30RJ45SMA6-WE	Cat. 6, 30Mech Socket White
RJ6/05PL-BU	Cat. 6, Patch Lead, 0.5m, Blue
RJ6/10PL-B	Cat. 6, Patch Lead, 1.0m, Blue
RJ6/15PL-BU	Cat. 6, Patch Lead, 1.5m, Blue
RJ6/20PL-BU	Cat. 6, Patch Lead, 2.0m, Blue
RJ6/30PL-BU	Cat. 6, Patch Lead, 3.0m, Blue
RJ6/50PL-BU	Cat. 6, Patch Lead, 5.0m, Blue
RJ6/100PL-BU	Cat. 6, Patch Lead, 10.0m, Blue
3105APP8H6	Patch Panel, 8-Port, Harmonica, Cat. 6, Angled
3105APP8/6	Patch Panel, 8-Port, Cat. 6, Angled (individual Connectors)
3105ATPP2X4	Patch Panel, Phone 2 In 2 X 4 Out, Angled
95ESW8P1G	Ethernet Switch, 8-Port + U/Link, 1G, Base-T
3105ABENSB	Ethernet Switch, Mounting Bracket for 3105ABEN
3105SWBKT	Cradle Ethernet Switch Bracket (Not Suited for 3105ABEN)

StarServe Enclosures

Catalogue Number	Description
3105ABEN	Slimline Plastic Enclosure 269mm(w) x 383mm(h) x 84mm(d)
3105PEN7440	ABS Plastic Enclosure - Suited for NBN 405mm(w) x 750mm(h) x 150mm(d)
8000LEN	Lite-Size Metal Enclosure 200mm(w) x 300mm(h) x 145(d)
8000LFK	8000LEN Enclosure Flush Kit
8000MEN	Mid-Size Metal Enclosure 415mm(w) x 450mm(h) x 145mm(d)
8000MENFK	8000MEN Enclosure Flush Kit
3105PENF	Professional Metal Enclosure, Flush Mount 465mm(w) x 895mm(h) x 113mm(d)
3105PENS	Professional Metal Enclosure, Surface Mount 465mm(w) x 895mm(h) x 113mm(d)

StarServe Packs

Catalogue Number	Description
3105SDU	StarServe Digital Modulator, SD Upgrade Pack (1 X 3105SDM1, 4 x Targets/1 x Emitter)
3105HN	StarServe Home Network Pack (1 x 3105ABEN, 2 x 3105APP8H6, 1 x 95ESW8P1G, 1 x 3105ABENSB, 9 X 300mm C6 Patch Cords)
3105FTVHN	StarServe FTA + Home Network Pack (1 x 3105ABEN, 1 x 3105VDU83IR, 2 x 3105APP8H6, 1 x 95ESW8P1G, 1 X 3105ABENSB, 9 X 300mm C6 Patch Cords)
3105SS/PK4	StarServe Pack #4 (1 x 3105PEN7440, 1 x 3105APP8/6, 1 x 3105SPFP4, 5 x RJ6/05PL-BU)

For more information about Clipsal StarServe, contact your local Clipsal and Schneider Electric Partner Business Representative, electrical wholesaler or visit clipsal.com

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