MEDIASTAR COMPACT

Quick Start Guide

Getting Started With MediaStar Compact 740 & 743

The MediaStar Compact Hub (Part 740 & 743) provides a 16 channel TV/AV service to 16 individual users. Each Hub has 16 video and stereo audio inputs on its rear panel for the connection of local video sources such as DVD players and satellite receivers. Up to 16 independent front panel outlets can be connected, each able to select one of the 16 channels. The outlets are RJ45 sockets which are labelled A to P that allow interconnection with MediaStar Compact Receive Units at distances of up to 400 meters (1,300ft) via a Category 5/6 four pair structured cabling system.

Compact Hub 743 includes an additional 8 front panel outlets that can output what outlet A is showing, or what outlet E is showing. These duplicate outlets can be split so that 4 outlets will duplicate what A is viewing and 4 outlets that duplicate what outlet E is viewing.

Also on Compact Hub 743, an additional 8 differential video and audio inputs are provided on the front panel for the connection of line powered MediaStar Compact Remote Video Transmitters. These facilitate the use of remotely located video sources such as security cameras.

On both Hubs 740 and 743, an optional RF Input board will allow for 8 channels. However, only 16 total inputs must be active at any one time. Installation configuration of the MediaStar Compact Hub is achieved with an infra red remote control and on screen menus. Up to four 1U rack mountable MediaStar Compact Hubs can be looped together to form a larger 64 user 16 channel TV/AV system.

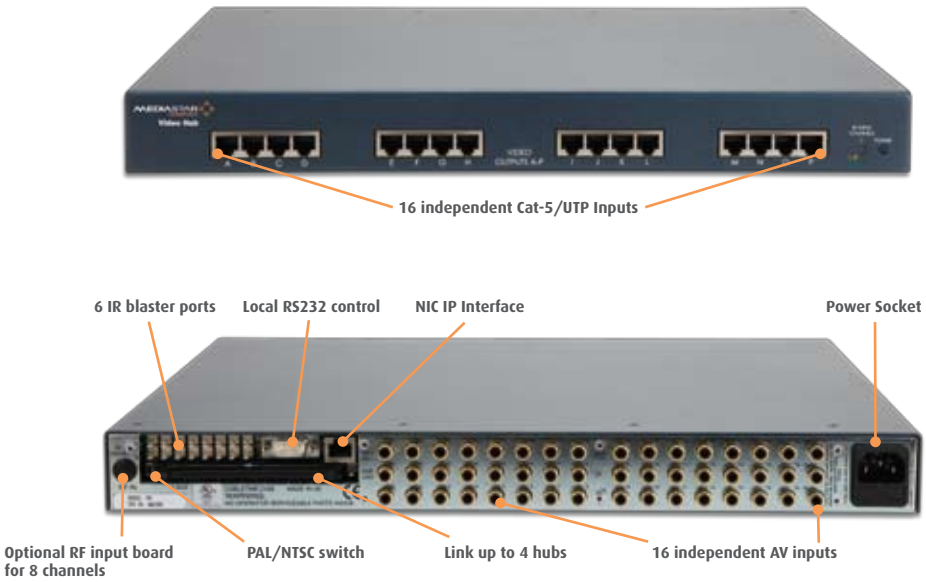
What's in the box

- MediaStar Compact Hub (Part 740 or 743)
- IEC Power Lead
- IR blaster module
- Rack Mounting Kit
- Installation & Viewer CD

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
11. Only use attachments or accessories specified by manufacturer.
12. Use only with the cart, stand tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Installation

Begin by installing the 19" rack mountings on either side of the Hub using the Rack Mount Kit provided.

Once the rack mountings are fitted, mount the Hub into the cabinet or closet using the screws supplied with the Rack Mount Kit. Once the Hub is mounted in the cabinet, connect it to an AC power supply using the IEC Power Lead supplied. Once the lead is connected, the Hub will power on automatically and the Blue LED located on the fascia of the Hub will be lit.

RF Input Board Connection (Optional)

An RF Input module will allow reception of up to 8 RF TV channels, UHF/VHF, PAL I, B/G. If an RF Input board is used it should be connected to the RF feed to the 'RF IN' connector located at the rear of the Hub. Ensure that the correct RF level is set. If an RF Input board is installed, the 'RF Input Channels' indicator will also be lit to indicate which inputs are allocated to this unit. An orange LED indicates channels 1-8 are being used, and a green LED indicates channels 9-16.

Video Format Setting

Set the Hub to the correct video format required, PAL or NTSC, depending on your video sources. The switch can be found at the rear of the Hub, located next to the 64 V-Bus connector.

Connecting A/V Sources

Connect local A/V sources into the rear inputs labeled 1 to 16 noting that the inputs represent the channels displayed, i.e. Input 1 = Channel 1 and Input 16 = Channel 16.

Note: that use of remote feeds with a Compact Hub and the optional Compact RF Input board will affect which rear inputs can be utilised. For more details consult the Installation Guide on the Installation CD provided.

If A/V source devices are to be controlled by their own remote control at the display end, such as in the case of a DVD player, an IR Blaster Lead (Part 911-4147) will need to be connected to the correct IR Blaster connector (1 to 16).

Interconnecting Hubs

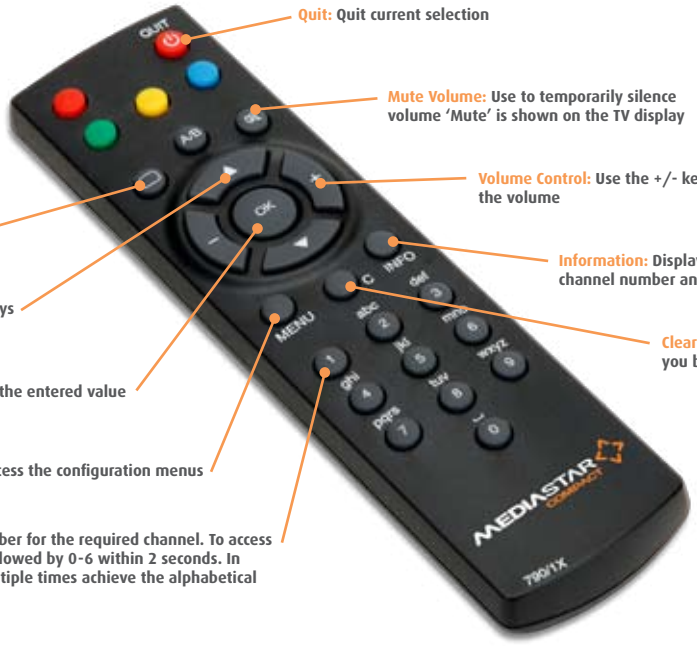
If multiple Compact Hubs are to be utilised, these can be connected together using the Interconnect Cable Kit (Part 747/x) provided. Ensure that both V-BUS and Hub links are connected securely. Only one Hub needs to be connected to the AV sources.

Mediastar Compact Receiver Units

MediaStar Compact Receiver Units (Part 751) enable Composite A/V content to be displayed. They are deployed near the relevant A/V display devices and provide a video and stereo audio output for connection to the TV, Plasma screen, LCD, or PC. Receive Units are DC line powered by the remote MediaStar Compact Hub. Further extension of the Receiver's IR lead can be accomplished using the accompanying IR sensor.

Viewer control of the MediaStar Compact is with either an IR Remote Control Unit (RCU) (Part 790/1X) or, in conjunction with an RS232 to IR Converter Unit (Part 753), a touch screen or PC workstation. Viewers can select channels and adjust volume, assisted by an On Screen Display capability showing channel name and volume status. Additional Infra Red capability is provided for external video sources such as DVDs and VCRs. An IR signal is passed through the device's own RCUs via the MediaStar Compact Receive Unit. This function is supported with both local and remote inputs.

Mediastar Compact Remote Control Unit



Quit: Quit current selection

Mute Volume: Use to temporarily silence volume 'Mute' is shown on the TV display

Volume Control: Use the +/- keys to alter the volume

TV Picture: Returns to the TV picture from within menus

Information: Displays the current channel number and name

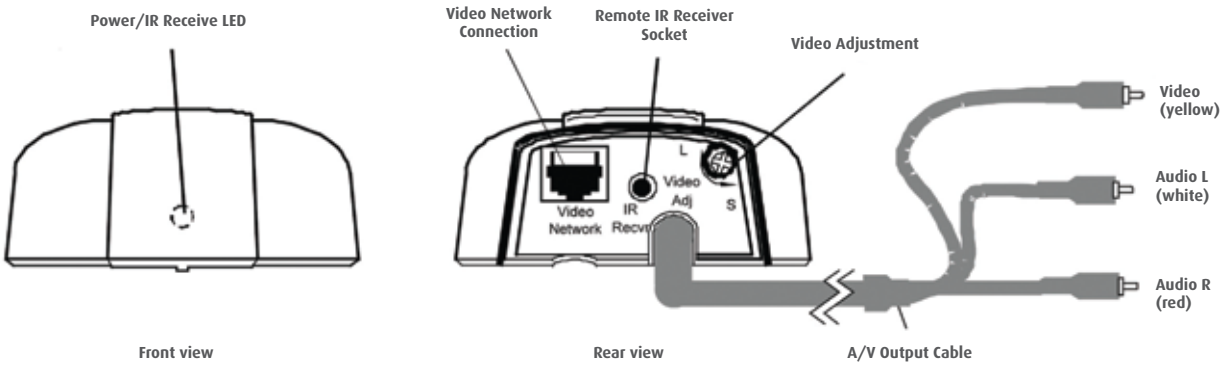
Channel Selection: Use up and down arrow keys to cycle through the 16 channels

Clear: Cancel edits, clears characters or takes you back one menu depending on context

OK: Accepts selected menu; save the entered value

Menu: Access the configuration menus

Channel Selection: Press the appropriate number for the required channel. To access channel numbers greater than 9, press a 1 followed by 0-6 within 2 seconds. In menu mode, pressing the numerical keys multiple times achieve the alphabetical characters displayed above the keys.



Connecting Mediastar Video Receiver Units

Front panel RJ45 sockets allow interconnection with MediaStar Compact Receiver Units at distances of up to 400 meters via Cat-5 cabling.

Connect the Compact Receive Units (Part 751) using the front panel Compact Hub outlets A to P with Cat-5 structured cabling or other appropriate cabling. The unit is powered from the hub. A red LED will be visible on the front of the unit when connected.

Ensure that batteries have been inserted into the Remote Control Unit (RCU) type 24G RO3 AAA 1.5V. The orientation for the batteries is shown in the compartment casing.

An integrated infra red receiver is located at the front of the Receiver Unit, so when the unit receives an IR command, the LED on the unit will flash. The RCU will operate up to 6-8m away from the user terminal.

If the LED flashes without an RCU key press, the IR receiver is seeing IR signals from another source. Reposition the Receiver Unit where it will not see other IR signals.

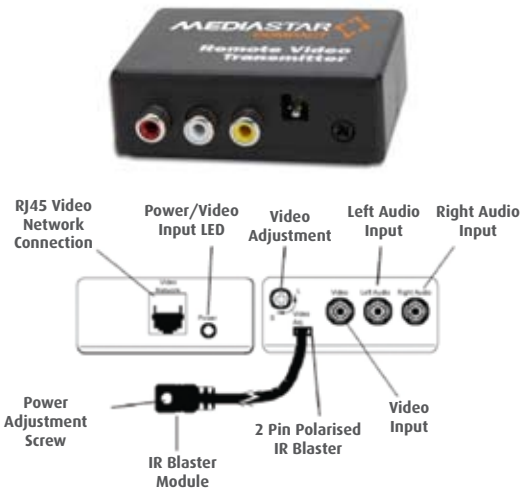
If the Receiver Unit needs to be positioned out of sight, the accompanying remote IR sensor can be used. Plug the sensor into the Remote IR Receiver Socket in the back of the Receiver Unit and position it where it can see commands from the RCU.

Two slotted locating holes are positioned on the underside of the unit to assist fixing the MediaStar Compact Receiver Unit on walls or ceilings. Care must be taken in the use of any fixing screws.

Set the Video Adjustment control on the Receiver Unit to achieve optimum video picture quality. This can be done by viewing the picture or using video test equipment as required.

If you wish to change channels or access other system features from your desktop PC, an RS232 to IR Converter Unit (Part 753) can be used.

Replacement IR sensor modules can be ordered from Cabletime (Part 911-4141). There are no user serviceable parts within the Mediastar Compact Receiver Unit.



Installing the Mediastar Compact Remote Video Transmitter

MediaStar Compact Remote Video Transmitters (Part 752) send Composite A/V content from remote sources such as DVDs to the Compact Hub so that it can be viewed from a display device. The Transmitter is used only with the MediaStar Compact Hub with duplicate output capability (Part 743) and will include an IR Blaster module, Cat-5 patch cable, SCART adapter (PAL units only) and 3-way phono-to-phono cable.

Use the Cat-5 patch cable to connect the Remote Video Transmitter to the MediaStar Compact Video Hub via the Cat-5 structured wiring system. The transmitter is powered from the hub and the LED will show orange when it is connected.

Connect the video source to the transmitter using the 3-way phono-to-phono cable (and SCART connector if required). When a video input signal is present, the Remote Video Transmitter LED will show green.

If the video source unit can be controlled with a 38KHz modulated IR Remote Control, connect the IR blaster to the 2 pin polarised IR blaster connector on the Remote Video Transmitter. The IR blaster head must be carefully fitted over the video source unit's own IR receiver, taking care that the adhesive pad does not damage the surface of the unit.

If the video source unit responds to IR commands intermittently, or does not respond at all, the power of the IR emitted by the blaster may need to be adjusted. Adjust the power by turning the small screw on the outward facing side of the IR blaster head.

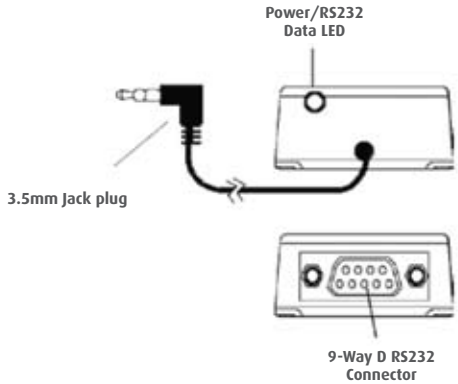
The picture quality from the remote video source will need to be adjusted to overcome the effects of the Cat-5 cable run. To do this, connect a video receiver unit and TV within a few metres of the Hub and view the picture provided by the remote video source. Turn the video adjustment screw on the Remote Video Transmitter to give the best picture quality as viewed at the hub.

Replacement IR blaster modules can be ordered from Cabletime (Part 911-4147). There are no user serviceable parts within the Mediastar Compact Remote Video Transmitter.

Connecting the Mediastar RS232 to IR Converter

The RS232 to IR Converter (Part 753) allows for control from a third party device such as a touch screen, PC or other external controlling device. It includes an RS232 Cable (to PC) and stereo audio phono to 3.5mm jack plug adapter.

Connect the RS232 to IR Converter to the MediaStar Compact Video Receiver Unit by inserting the jack plug into the Remote IR Receiver socket. The converter is powered from the Receiver Unit and the LED will show green when powered on.



Connect the RS232 to IR Converter to the PC using the RS232 cable supplied. Plug the 9-way D RS232 connector into the PC serial communication port (eg COM1). When RS232 data from the PC is received, the LED on the converter unit flashes.

There are no user serviceable parts within the Mediastar Compact RS232 to IR Converter.

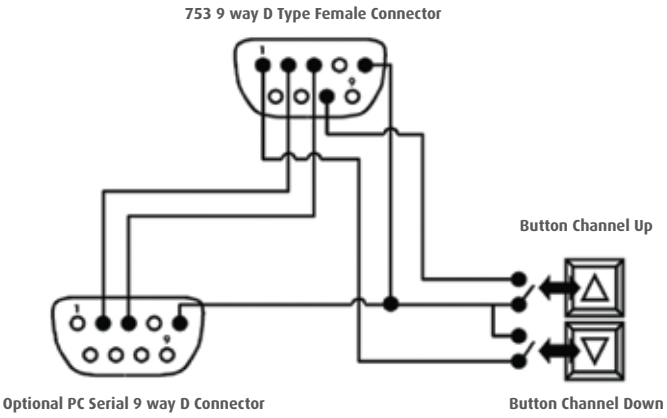
Mediastar Compact RS232 to IR Converter with Switch Closure Inputs

The RS232 to IR Converter unit (Part 753) has four switch contact inputs to support external channel up/down and volume up/down keypads.

The switch inputs are on 4 pins of the Converter's 9-way D connector (see table below). When a switch contact closure is made, the appropriate input pin should be shorted to pin 5 (ground) of the 9-way D connector.

Switches must be of the 'normally open' type. If a switch (button) is held closed (pressed), the button press will auto-repeat after a short pause. Only one button should be pressed at a time. If more than one button is pressed, all buttons will be ignored.

If a suitable 9-way D lead is produced, the unit can accept serial commands from a control system and switch closure inputs at the same time. If these switch inputs are not required, the unit can be connected to a computer using the supplied 9-way cable as usual.



RS232 to IR Converter 9-way D connector pinout:

Function	pin
Channel Up (U)	8
Channel Down (D)	1
Volume Up (+)	9
Volume down (-)	6
Signal ground	5
Serial TX	2
Serial RX	3

Installing the Mediastar Viewer Application

To install the MediaStar Viewer application on a MediaStar Compact System, place the MediaStar Viewer CD supplied in the PC. The installation program will normally run automatically. If it does not, from Explorer, double-click on 'setup.exe' in the CD drive 'Viewer\Disk 1' directory.

When the application is first run, a profile must be created. Do this by selecting **Start\Programs\MediaStar\Viewer\Create a new profile.** Select the relevant COM port, name of profile, unit type and display settings as appropriate. Enter the channels that are to be displayed in the channel list. For further information, see the online help (available by pressing F1).

Once a profile has been set up, run the viewer by selecting **Start\Programs\MediaStar\Viewer\<profile name>**. The viewer will enable you to control the Video Receiver Unit/Micro Settop as if you are using a MediaStar Remote Control Unit.

Refer to the MediaStar Compact Guide for details of all the features of the MediaStar Compact System.

Technical Specifications

Video Standards Supported	PAL /NTSC
Rear Panel Video Inputs	Composite 1V pk-pk (75Ω)
Composite Video SNR (weighted)	>71dB
Rear Panel Audio Inputs	Stereo 2.2V pk-pk (10KΩ)
RF Input	48-862 MHz Type F (75Ω)
Antenna Mode Input	Level 0 to +17dBmV
Video SNR (weighted)	50dB @0 dBmV. 54dB @17 dBmV.
8 RF TV Carriers	Max Input 24dBmV
CAT V Mode	Input level 25 dBmV - 40dBmV
Adjacent Carrier Levels	Max 2dB Between Adjacent Carriers
Video SNR (weighted)	52dB @25dBmV. 56dB @40dBmV.
IR remote control (*see note)	38kHz Modulated
Hub Communications	Proprietary Protocol
Local Control	RS232/RS485, 9 pin D type Male
IP Browser Control	10 Base-T, RJ45

Physical Specification

Dimensions HxWxD	45x437x350 mm
Weight	5Kg/11lb
Mounting 19" Rack	1U
Power Requirement	3 pin IEC Male 100-264V AC, 1.5A
Power Dissipation	80W max
Approvals	CE, UL, FCC part 15 class A
Operating Temperature	0-40°C

***Additional notes on Infra Red control function**

The MediaStar compact Receivers and Hubs provide an IR porting function that enables compact users to send IR control signals from an infra red RCU to remotely located third party equipment. Please note that this function is compatible with third party equipment that utilises the common 38khz modulated IR standards. Other frequencies or proprietary IR codes may not be supported.

Regulatory Requirement Notices

EUROPE

CE Cabletime Limited declare that the products described in this manual conform to the requirements of the following Directives:

- 89/336/EEC
- 92/31/EEC
- Low Voltage Directive 73/23/EEC

THE STANDARDS APPLIED ARE:

BSEN55022:	1998 Limits and methods of measurement of radio interference characteristics of information technology equipment
BSEN50082-1:1998	Electromagnetic compatibility - generic immunity standard
BSEN60950-1:2000	Specification for safety of information technology equipment, including electrical business equipment
BSEN60065:2002	Audio Video and similar electronic apparatus safety requirements

UNITED STATES OF AMERICA

Cabletime Limited declare this equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

- This device complies with part 15 of the FCC Rules.

Operation is subject to the following conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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