

# Typical TV, multimedia and digital signage over IP networks



**Tailor the message**  
Each 760/2M EvoNet unit is individually addressable thereby allowing a particular playlist to be set up for a single unit or a group of units. In a retail outlet an organisation could market a phone only in their London branch, setting up a particular marketing message only for the 10 screens in that store. If successful this playlist is easily rolled out across the region or country through a simple change in the central playlist software.

**Synchronise the message**  
Each EvoNet unit is set up to communicate with the others in the store so that they are able to start the playback of their content with frame accuracy. This ensures that the marketing and branding message is consistent.

**Live TV**  
The 760 EvoNet unit is able to receive live MPEG2/4 streams through the network from the MediaStar Evolution Encoders, delivering the highest quality live video content to LCDs and plasmas.

**Automatically updates**  
The 760/2M EvoNet unit box is set to automatically check the HQ central server for new content and playlist updates. Retrieving content at convenient "out of hours" times, thus minimising user intervention and ensuring a consistent marketing message can be delivered quickly, efficiently and to a wide audience.

## MediaStar EvoNet Equipment

Pt. No. 760	<b>MediaStar EvoNet - Digital Multi-Format IPTV Decoder and Multimedia Player</b> With IP Browser/RS232/USB and IR remote control interfaces and a wide variety of digital and analogue outputs for interconnection to all display types at a wide range of resolutions up to 1360x768. The EvoNet unit, 760, is capable of rendering MPEG-2 and 4 encoded live streams, locally generated S-Video or Composite input and audio insertion, as well as show PowerPoints saved as HTML files and show WebPages directly from a webserver. Included in the scope of delivery: 5V DC external power supply, user guide, IR remote.	
Pt. No. 760/2M	<b>MediaStar EvoNet - Digital Multi-Format IPTV Decoder and Multimedia Player, static memory of 2GB and PCMCIA Cardbus</b> With IP Browser/RS232/USB and IR remote control interfaces and a wide variety of digital and analogue AV outputs for interconnection to all display types at a range of resolutions up to 1360x768. The EvoNet, 760/2M, is capable of rendering MPEG-1/2 and 4 encoded files, local S-Video or Composite input and audio insertion, as well as show PowerPoints saved as HTML/MPEG-1/2 and 4 files and serve Webpages. Multimedia content can be either stored on-board the 760/2M or served directly from a central network server. In addition to network download of content, MPEG-1/2 and 4 and HTML files can be also be automatically retrieved and downloaded to the 760/2M, EvoNet, via a USB key or PCMCIA compact flash memory cards. The 760/2M includes an onboard static flash memory of 2GB that can be expanded to 8GB and a "plug in" hardware interface to support standard Smart Cards and PCMCIA Type II devices such as solid-state memory, hard drives (local storage and play out) and wireless interconnectivity modules. Included in the scope of delivery: 5V DC external power supply, user guide, IR remote.	
Pt. No. 760/XM	The 760/XM is identical to the 760/2M, where X indicates the static memory that can be increased in incremental steps of 1GB through to a maximum of 8GB.	

## MediaStar Evolution Software

Pt. No. 460	<b>MediaStar Evolution Playlist and Scheduling Software.</b> The software allows for the creation and editing of a Playlist and Schedule for use with a group or individual, 760/2M, EvoNet unit(s). The EvoNet unit is able to download the playlist and media files that make up a content update from either a central network server or a USB memory key inserted directly into the EvoNet unit. The Playlist can be either edited or created directly in the download location, or in a separate location on a PC and then the playlist files are copied into the download location(s).	
Pt. No. 461-UG	<b>MediaStar Evolution Administrator</b> Upgrade of Existing MediaStar Pro Administration Software to allow support of the MediaStar EvoNet Digital Multi-Format IPTV Decoder and Multimedia Player, 760, and the MediaStar Evolution IPTV Desktop Viewer Software decoder, 761.	
Pt. No. 761	<b>MediaStar Evolution IPTV Desktop Viewing Software.</b> Application that provides MPEG-2 and 4 viewing at the PC.	

## MediaStar Evolution Encoders

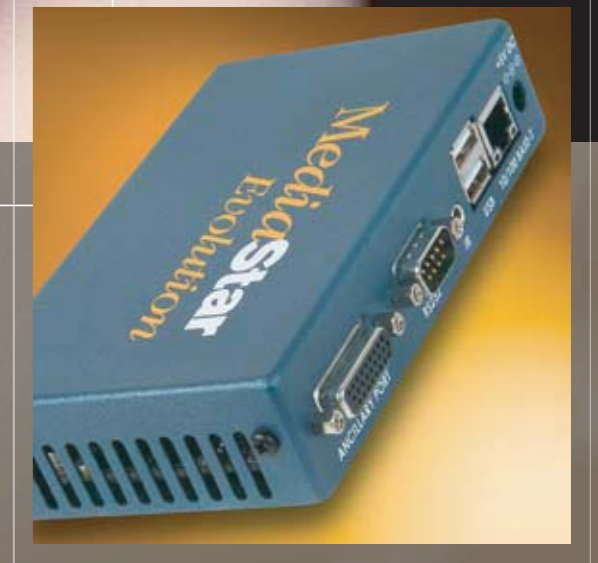
**MediaStar Evolution MPEG2/4 Encoders.**  
With IP Browser/RS232/USBv1.1 control interfaces, built around an ultra reliable dual-core computing engine running under Linux, the MediaStar Evolution Encoder can generate either a single MPEG-2 or MPEG-4 "Dual Output" encoded streams This innovative feature ensures best performance and minimises network impact. A high bit rate stream directs video to large displays where vision quality is paramount; a second lower bit rate stream is simultaneously encoded and can be directed to desktop PCs and small displays where lower resolution is acceptable. Configuration and control of the Evolution Encoder is accessed via a password protected web page server. A simple, yet secure upgrade routine allows new encoding algorithms to be loaded or updated as revisions become available, extending product life and return on investment. To accommodate differing content requirements and network parameters, MediaStar Evolution MPEG-2/4 streams can be configured to run between 500Kbps to 8Mbps, at either pre-defined constant bit rates, irrespective of picture content, or variable bit rates where an acceptable picture quantisation value can be selected to operate within a specified maximum bit rate and, in the case of MPEG-4, to a defined average bit rate limited to a pre determined peak bit rate. This last innovation improves picture quality by allowing instantaneous peak bit rates to be utilised to accommodate complex scenes but allocating lower bit rates to simple scenes, thus maintaining the average bit rate defined by the network administrator. Video inputs: RGB + sync on Green/YpPr/S-Video/Composite, PAL and NTSC. Audio inputs: Stereo line level. The MediaStar Evolution MPEG-2/4 Encoder is available in two forms, either as a freestanding single unit or as part of a 3U, 19" AC powered rack frame that is able to house 9 Evolution Encoder Modules.

Pt. No. 775/MP24	<b>MediaStar Evolution MPEG-2/4 Appliance Encoder.</b> With IP Browser/RS232/USBv1.1 control interfaces, capable of encoding a single MPEG-2 or "Dual Stream" MPEG-4 channel using constant and variable and average bit rate encoding, 500Kbps to 8Mbps. Video inputs: RGB + sync on Green/YpPr/S-Video/Composite, PAL and NTSC. Audio inputs: Stereo line level.	
Pt. No. 770	<b>MediaStar Evolution Chassis.</b> Up to 9 Evolution Encoder Modules may be housed in a standard 3U 19" AC powered rack frame. This robust, scalable, modular design is ideal for system configurations requiring a medium to large number of live digital feeds.	
Pt. No. 772/MP24	<b>MediaStar Evolution MPEG-2/4 Module Encoder.</b> With IP Browser/RS232/USBv1.1 control interfaces, capable of encoding a single MPEG-2 or "Dual Stream" MPEG-4 channel using constant and variable and average bit rate encoding, 500Kbps to 8Mbps. Video inputs: RGB + sync on Green/YpPr/S-Video/Composite, PAL and NTSC. Audio inputs: Stereo line level.	

## MediaStar EvoNet Interface for Mediastar Pro and Compact

Pt. No. 911-6100	<b>MediaStar Pro to Evolution Interface cable.</b> AV cable for insertion of video and audio from a MediaStar Micro Settop (Part No. 507P/N) into the Evolution Endpoint Ancillary Connector. 26 way HDD to 2 x Phono Plug, IR cable fitted with 3.5mm jack, 400mm length.
Pt. No. 764	<b>MediaStar Compact to Evolution interface unit.</b> A 26 way HDD to RJ45 unit for for insertion of video and audio directly from a MediaStar compact hub (Part No. 740P/N or 743P/N) into the Evolution Endpoint Ancillary Connector.

TV, multimedia and digital signage over IP networks



MediaStar EvoNet  
MPEG-2/4, Digital Multi-Format  
IPTV Decoder and Multimedia Player

MediaStar Evolution

Vertrieb/Distributor:  
VIDELCO Europe Limited



# MediaStar Evolution

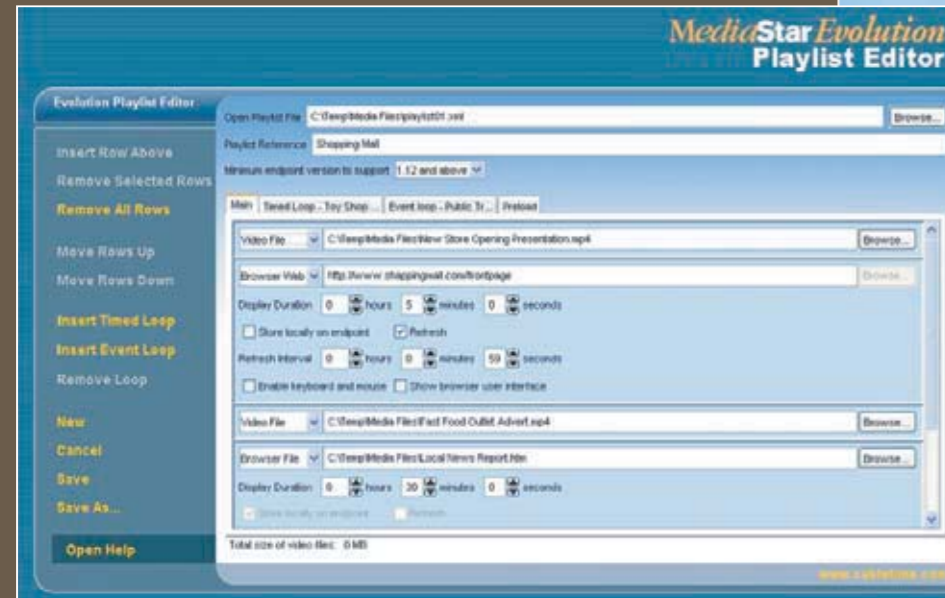
The MediaStar EvoNet unit is a streaming video decoder and multimedia player.

The EvoNet units provide a powerful and ultra reliable, solid state "out of the box" solution for your entire network TV, multimedia and digital signage delivery requirements.

Built around a reliable multi-core computing engine running under Linux, able to render live MPEG-2/4 encoded streams, deliver HTML and up to the minute webpages, retrieve and playout MPEG-1/2 or 4 and HTML files stored on a network. Additionally the units can also receive an AV input either from locally generated analogue sources or via connection to an existing MediaStar Pro or Compact system.

Each EvoNet Unit has a unique IP address; allowing tailored TV, multimedia and web content to be directed to appropriate screens. Configuration and control is simple through the MediaStar Evolution Playlist and Scheduling Software.

The MediaStar EvoNet unit opens the world of IPTV, multimedia and content delivery, all in a single simple to use unit.



**PowerPoint**  
Save PowerPoints as HTML/MPEG-2/4 files onto a server or store directly onto the 760/2M; give easy access to unlimited PowerPoints and no longer be restricted to distance limitation of Cat5. No need to connect the output of a PC to an analogue switching device, simply store unlimited HTML files onto a network server and access to the files can be literally anywhere in the world.

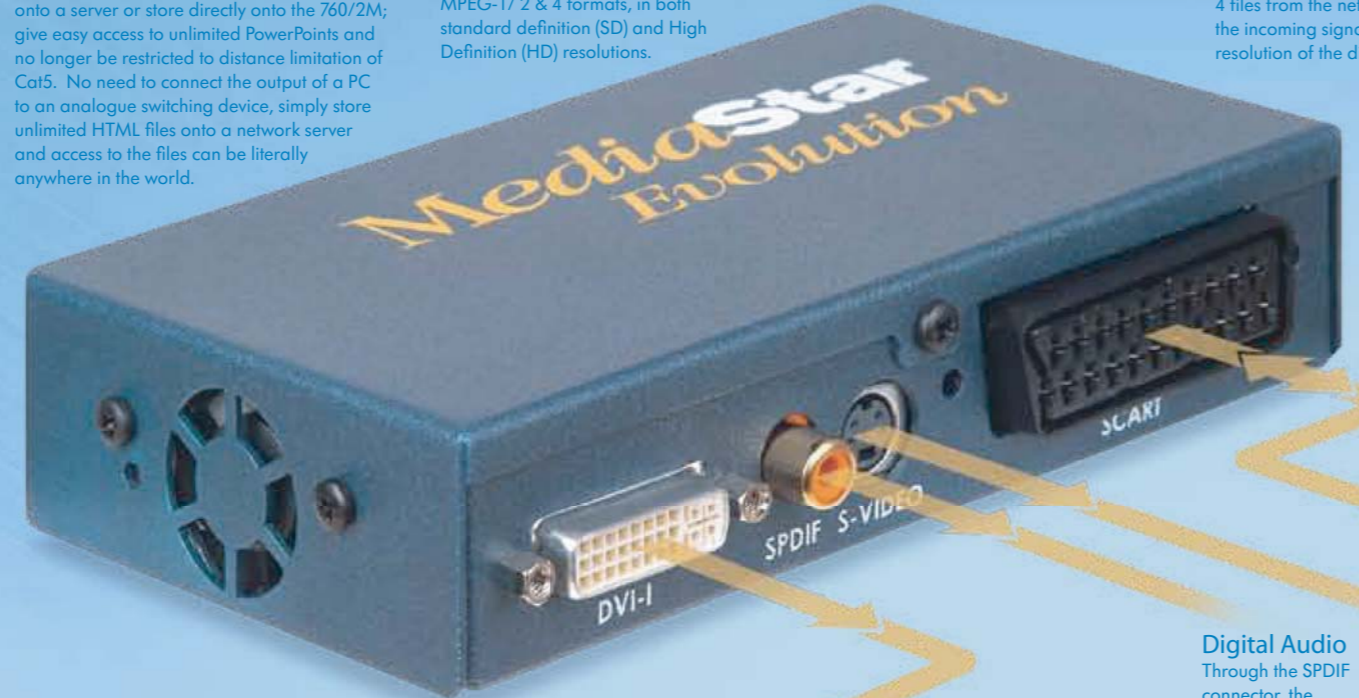
**HD**  
The EvoNet unit can playout video files that have been created in MPEG-1/2 & 4 formats, in both standard definition (SD) and High Definition (HD) resolutions.

**Stability**  
Built around an ultra reliable solid state dual-core computing engine running under Linux, Evolution is the answer to all multimedia display applications where robustness and reliability are a must.

**Digital TV**  
Receive and decode both MPEG-2 and 4 digital encoded streams and MPEG-2 and 4 files from the network and "upscale" the incoming signal to the appropriate resolution of the display device.

**Webpages**  
Serve webpages through the EvoNet unit. Webpages are set up as a "channel" so that the EvoNet unit communicates directly with the webserver without the need for a scan converter or the use of expensive RGB switching systems. A screen in the reception area can be set to automatically show the latest traffic reports or the company's latest news on their own website.

**Scheduling of Multimedia and Webpages**  
A Playlist is set by the Administrator and downloaded to an individual or group of EvoNet units. This Playlist sets out the series of timed content changes; In this sequence shown:  
 7 A Powerpoint (HTML) is set to start is set at 9am  
 7 An Advertising and Promotional MPEG-2/4 file that has been updated and downloaded overnight from the Head Office server to the on-board flash memory of the 760/2M EvoNet unit is set to start at 10am and play uninterrupted until 1.15pm.  
 7 At 1.15pm, the EvoNet 760/2M unit is directed to the BBCNews Webpage and is refreshed every minute to keep the staff and visitors informed of world events.  
 7 At 3pm, the 760/2M EvoNet unit switches to a MPEG-2/4 file.  
 7 At 6pm, the EvoNet unit send an RS232 signal to the plasma and turns the screen off.



**Digital Audio**  
Through the SPDIF connector, the Endpoints deliver digital stereo audio.

**AV Outputs**  
Video is output in a wide variety of formats including Composite, S-Video, VGA - WXGA, RGB, YPbPr, DVI-D, HDMI, at up to 1080p resolutions. This makes the unit compatible with all kinds of displays, including those that support HD resolutions.

**Multi-format Digital Delivery**  
Each EvoNet unit has a wide variety of digital and analogue outputs for interconnection to all display types of a wide range of resolutions up to HDTV. The EvoNet unit is able to show both IPTV and locally generated analogue TV as well as serve content such as PowerPoints saved as an HTML and serve webpages directly from a webserver. Distance limitations of RGB switching and the considerable expense are eliminated through the EvoNet Unit being able to access any HTML or webpages accessed through an IP network.

**Digital Scaling**  
Each EvoNet unit contains a "rendering engine" that scales the incoming video and multimedia input to resolutions: 640x480;800x600;1024x768;1280x768;1280x960;1280x1024;1360x768. Supporting both 4:3 and 16:9 output formats.

**Insert Local AV Content**  
As well as being able to receive streamed TV and multimedia, a CVBS or S-Video input allows insertion of video/audio from locally generated feeds such as cameras, DVDs or remote differential inputs from MediaStar Pro or Compact systems.

**Touchpads and Kiosks**  
Through the 6 contact closures, connect to touchpads and kiosks and playout different stored content.

**Expand**  
Increase storage on the 760/2M through the addition of internal flash memory from the standard 2GB up to 8GB. Or use PCMCIA hard drive memory cards.  
**Wireless**  
Add a PCMCIA Wireless LAN Card to download MPEG-2/4 and HTML files enabling the EvoNet, 760/2M, to be installed into protected locations such as churches, listed buildings and museums.



**Turn Screens On/Off**  
RS232 commands enable external device control such as timed control over the switching on/off of plasma screen.

**Remote Control**  
All system parameters can be set and stored with the IR remote control. Change channel, volume, IP address; on screen menus give you complete control in your hand.

**Updates**  
A simple yet secure upgrade routine via the USB or IP network allows new decoding algorithms to be loaded or updated as revisions become available, extending product life and return on investment.

**Stream Video**  
Receive MPEG-2/4 multicast and unicast video streams through the network.

**Power**  
Each EvoNet unit is designed in a compact freestanding case with an external 5V DC power supply.

**Unique IP Address**  
Each EvoNet unit has a unique IP address; allowing tailored TV and multimedia content to be directed to appropriate screens through the MediaStar Playlist and Scheduling software.



**Synchronise the message**  
EvoNet units can be set so that the playout of MPEG-2/4 files or HTML content can be synchronised across screens. The units can automatically detect new content entered via a USB key or can be set to retrieve MPEG-2/4 and HTML files at convenient times. A retail chain may choose to update its entire store network by placing new content to a location on a server and the EvoNet units would be set to check for new content in the middle of the night when network traffic would be low and automatically download the new files ready to be played out the next day. The EvoNet units are set so that if they are a member of a group in a store, they would automatically redistribute the new content to others in the group.

**Intuitive Use and Control**  
Viewer control of the EvoNet unit is either with an infrared handset, assisted by an On Screen Menu system; through the IP browser based control software served by each EvoNet unit; or through third party touchpanels using the TCP/IP interface.

**Deliver Over IP**  
The EvoNet unit is an IP addressable device so can be positioned wherever your IP network extends or can be set up as a stand-alone multimedia and MPEG2/4 media player. Evolution truly extends the reach of visual and multimedia communications.

**MediaStar Evolution...The EvoNet unit is the complete solution to your IPTV, multimedia and content delivery requirements.**

For more technical information please visit [www.cabletime.com](http://www.cabletime.com)