

## MediaStar HD Encoder with SDI, HDMI & Component inputs (785)

The MediaStar HD Encoder (785) is a robust solid state standalone unit with MPEG2/H264 and HLS encoding capability and a unique auto selecting input facility for all Baseband, Component, HDMI and SDI sources. Its compact size, PoE operation and input flexibility makes it the ideal solution for use in live events, theatres, lecterns and credenzas as well as for mobile camera applications.



### Key Features

- Low power consumption with Power over Ethernet
- Composite, Component, 2 x HDMI and SDI inputs
- Auto input detection with programmable switching capability
- SAP support
- High visibility OLED display and touch controls
- SNMP, event log with email capability
- Internal bar generator
- Network sourced IR blasting capability
- IP to RS232 pass through comms link
- Tough, compact and robust with no moving parts

### Models

- 785-C
- 785-C-PoE
- 785-I
- 785-I-PoE

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The 785 encoder is a versatile unit that allows a video and audio signal to be streamed to an unlimited number of users across an IP network in real-time and to be viewed on screens, PCs, tablets and smart phones.

The encoder is a standalone unit in a robust case that has a wide variety of industry standard analogue and digital video and audio inputs. It can be set to use a specific video input or to automatically scan all inputs and stream the first video signal it detects.

Alternatively, under the control of a third party device such as a touch screen, it can act as an AV switch between multiple input sources that need to be streamed to the network.

Basic configuration/control is by recessed selection buttons and the front panel high visibility OLED display or the full range of controls can be remotely accessed via simple-to-use web pages.

The encoder has a variety of other useful features that make it an essential part of any sophisticated AV system. These include SNMP trap events, an on board event log that can be emailed to a specific recipient as well as IP/RS232 control commands and network sourced IR blasting enabling distance control of third party IR devices at the encoder location.

In addition the unit has an IP to RS232 pass-through capability enabling remotely generated IP commands to establish a duplex communications link via the unit's RS232 port to other co-located devices.

The 785 is powered from an AC mains to DC plug-in power supply or via 802.3af Power-over-Ethernet (PoE). There are no moving parts within the encoder, and it can operate reliably in all dry environments from 0-40°C (32-104°F).

## Specifications

<b>What's in the box</b>	<ul style="list-style-type: none"> <li>• 785 ENCODER UNIT</li> <li>• RJ45 PATCH LEAD (2M)</li> <li>• HDMI TO HDMI LEAD (1M)</li> <li>• RGB TO RGB TRIPLE PHONO LEAD (1.5M)</li> <li>• 3.5MM STEREO JACK TO 2 X PHONO PLUG LEAD (1.8M)</li> <li>• USB A TO B LEAD (2M)</li> <li>• RS232 MALE TO RS232 FEMALE LEAD (1.0M)</li> <li>• 4 SELF ADHESIVE DOMED FEET.</li> <li>• DC POWER ADAPTOR (NON POE VERSIONS ONLY)</li> </ul>
<b>SYSTEM INPUT</b>	<b>Video Inputs</b> <ul style="list-style-type: none"> <li>• <b>CVBS</b> – PAL, NTSC</li> <li>• <b>S-Video</b> – PAL, NTSC (via phono connectors)</li> <li>• <b>Component RGB (SCART)</b> – 480i, 576i</li> <li>• <b>Component YPbPr, Component RGB (Sync-on-Green)</b> – 480i, 480p60, 576i, 576p50, 720p50/60, 1080i50/60, 1080p50/60 (streamed as 1080p25/30)</li> <li>• <b>HDMI 1.4</b> - 480i, 480p60, 576i, 576p50, 720p50/60, 1080i50/60, 1080p50/60 (streamed as 1080p25/30).</li> <li>• <b>SDI</b> - With loop through and adaptive cable equaliser - 480i, 576i SMPTE 259M-C, 1080i50/60, 720p50/60 SMPTE 292M, 1080P50/60 SMPTE 424M (3G-SDI, streamed as 1080p25/30)</li> <li>• De-Interlacing - 480i and 576i inputs can be de-interlaced to 480p30 and 576p25 output streams.</li> <li>• An SD resolution internally generated colour bar stream is also available.</li> <li>• All video inputs are streamed out with the same video resolution, unless otherwise specified.</li> </ul>
	<b>Audio Inputs</b> <ul style="list-style-type: none"> <li>• HDMI – PCM digital stereo audio 32, 44, 48 kHz sampling.</li> <li>• SDI - PCM digital stereo audio, 48KHz sampling.</li> <li>• Analogue – 2.2V pk-pk into 10K Ohms, (via 3.5mm jack) 48KHz sampling.</li> </ul>
<b>ENCODING AND STREAM PROTOCOLS</b>	<b>Video Encoding</b> <ul style="list-style-type: none"> <li>• MPEG 4-10/H.264 MP@L4, CBR/VBR encoding, 1.5 Mbps to 12 Mbps</li> <li>• MPEG-2 MP@ HL, CBR/VBR encoding, 1.5 Mbps to 15 Mbps</li> </ul>
	<b>Audio Encoding</b> <ul style="list-style-type: none"> <li>• MPEG-1 Layer 2 encoding - 64 - 384 Kbps Stereo</li> <li>• AAC LC encoding - 40 - 576 Kbps Stereo</li> </ul>
	<b>Output Streams</b> <ul style="list-style-type: none"> <li>• Multicast/Unicast UDP MPEG2-TS</li> <li>• Multicast RTP video and audio streams (for use with QuickTime<sup>®</sup> via on-board RTSP server)</li> </ul>
<b>NETWORK AND INTERFACES</b>	<b>LAN</b> <ul style="list-style-type: none"> <li>• RJ45 802.3 10/100 Base-T Auto MDIX</li> <li>• Optional 802.3af Power over Ethernet (Class 3)</li> <li>• Static or DHCP IP Address</li> <li>• DSCP stream tagging for QoS</li> </ul>
	<b>Network Protocols</b> <ul style="list-style-type: none"> <li>• UDP, TCP, ARP, DHCP, ICMP, IGMP V3, HTTP, Telnet, SNMP, SAP/SDP, SMTP, DSCP.</li> <li>• USB Comms:- USB 2 type A host port for software upgrades, USB 1.1 type B port for Serial Comms for external configuration and/or control.</li> </ul>

	<p><b>RS232 Port</b></p> <ul style="list-style-type: none"> <li>• Rx, Tx, CTS, RTS up to 115,200 Baud, Configured for SIPI external configuration/control OR IP to RS232 bi-directional pass through for external device control.</li> <li>• Device connected status monitoring.</li> </ul>
<b>CONFIGURATION AND MONITORING</b>	<p><b>Configuration</b></p> <ul style="list-style-type: none"> <li>• Configuration via on-board display and buttons or via Encoder hosted web pages to a PC/Laptop/Tablet.</li> </ul>
	<p><b>Control Interfaces</b></p> <ul style="list-style-type: none"> <li>• SIPI textual based control commands send from 3rd party control systems to the Encoder via RS232, USB comms or IP interface.</li> </ul>
	<p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>• SNMP traps for significant events such a loss of video input or changes in configuration.</li> <li>• On-board Event log with web page download and remote emailing capability.</li> <li>• On-board temperature sensor with over temperature SNMP trap.</li> <li>• RS232 device connected status.</li> <li>• PoE in use status.</li> <li>• Front panel LED indicators and on-board display.</li> </ul>
	<p><b>Software Upgradability</b></p> <ul style="list-style-type: none"> <li>• Fully software upgradeable in the field, from digitally signed files only. Upgrade via USB key in USB host port, or from a remote HTTP server.</li> <li>• Product features are upgradable via unit-specific enablement codes.</li> </ul>
<b>IR BLASTING</b>	<ul style="list-style-type: none"> <li>• Two IR blasters with a network control interface for remote control of local IR controlled devices.</li> <li>• Generation of IR commands with 30, 33, 36, 38, 40, 56 kHz IR modulation frequencies.</li> <li>• On-board emulation of Sky IR Handsets.</li> <li>• IP control interface and text based commands for third party systems.</li> </ul>
<b>SAP ANNOUNCEMENTS</b>	<ul style="list-style-type: none"> <li>• Generation of Session Announcement Protocol (SAP) media announcements.</li> <li>• Support of custom announcement parameters.</li> </ul>
<b>OTHER INFORMATION</b>	<p><b>Physical</b></p> <ul style="list-style-type: none"> <li>• 215 x 133 x 35 mm (8.5 x 5.3 x 1.4") 500g (1.1lbs)</li> <li>• No moving parts</li> </ul>
	<p><b>Power</b></p> <ul style="list-style-type: none"> <li>• 7 Watts, +5V DC, 2A via an external mains/DC power adapter</li> <li>• 802.3af Power over Ethernet (PoE) PD class 3</li> </ul>
	<p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>• 0 - 40°C (32 - 104°F) non-condensing, in-door use only</li> </ul>
	<p><b>Approvals</b></p> <ul style="list-style-type: none"> <li>• FCC, CE class A device</li> <li>• TUV safety certification with CB extensions for USA, Canada Australia and others.</li> </ul>