

Getting Started

Thank you for your purchase of the Adtec mediaHUB-HD 422 Encoder. This Multi-CODEC Encoder supports both MPEG 2 and MPEG 4 AVC standard and high definition encoding at 420 and 422 profiles. Further instructions are available via the manual integrated into the on-board software. You can view it by looking for the HELP tab once your unit is powered up and you are connected to the web-application. See back for more details. This manual and the most recent firmware are available on our support website, www.adtecinc.com. Advanced users can also find direct API command help as part of the on-board web application.

Front Panel LEDs:

Encode

- Not Active
- Pre-rolling (Studio Encoding)
- Encoding
- Transition (Encoding to Idling)

Video

- No Video (Audio Only)
- Video Present
- Not Supported
- No Video Present

Resolution

- Standard Definition (NTSC / PAL)
- 1080i HD
- 720p HD

Audio 1 - 4

- Audio Not Enabled
- Audio Enabled

Control

- Control Mode Off
- Control Detected/Remote Mode
- Control Detected/Local Mode

Alarm

- No Encoder Alarm
- Encoder Alarm

MP2/AVC

- Encoding MPEG 2
- Encoding MPEG 4 AVC

420/422

- Encoding 4:2:0 Chroma
- Encoding 4:2:2 Chroma

Front Panel Menus:

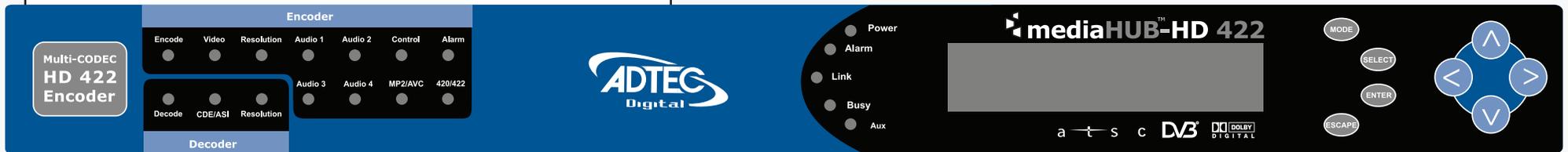
MODE Use Mode Button to move through top layer menus.

< > < > Use arrows for navigation in submenus.

SELECT Use select to enter into edit mode and **ENTER** enter to save selection.

System	Decoder	Encoder Video	Encoder Audio	Transmit	PID	Table	Profile	Encrypt.
Login	Status	Status	Sample Freq.	Mux Rate	PCR	Table	Profile 1-10	Mode
Duration	Conf. Decode	Rate	A1 A2	Vid. AutoFill	Prog. No.	VBI Source		Clear Word
Network	Auto Res.	CODEC	A3 A4	Latency	Map PID	Closed Cap.		Encrypt Word
Time	Display	Chroma	Sync	IP Destinations 1-4	Vid. PID	Service Name		User ID 1
NTP	DVB-ASI Menu	Input	Input		Aud. 1 PID	Srv. Provider		User ID 2
Alarm	Aud. Track	GOP	Mode		Aud. 2 PID			
Mirror	SDI Aud. Matrix	GOP Str.	Type		Aud. 3 PID			
COM2		GOP Size	Bitrate		Aud. 4 PID			
Firmware		SDI Pass	Volume		TS ID			
		Hue			AMOL			
		Bright.			Splice			
		Contr.			VITC Mode			
		Satur.			VITC PID			

Units ship with the front panel logged in by default. If you become logged out and are prompted for a password, use the following key sequence for access.
 Press <Select> when panel displays 'User Login -- logged out'
 Press <Up arrow>
 Press <Select>
 Press <Enter>
 Press <Right arrow>
 Press <Enter>



Decode

- Not Active
- Decoding

CDE/ASI

- Confidence Decoding
- ASI Receiving

Resolution

- Standard Definition
- 1080i HD
- 720p HD

System LED Status

Power

- Power is OFF
- Power is ON

Alarm

- No System Alarm
- Minor Alarm
- Major Alarm

Link

- No Link Detected
- Link Active

Busy

- No Network Traffic
- Network Traffic Present

Aux (Not Used)

Front Panel Status

Video Resolution	Frame Rate	Video Bit Rate
1920x1080	29i	33.77M
1DD	192K	2DD 192K 48
Audio Input 1 & 2		Sampling Rate

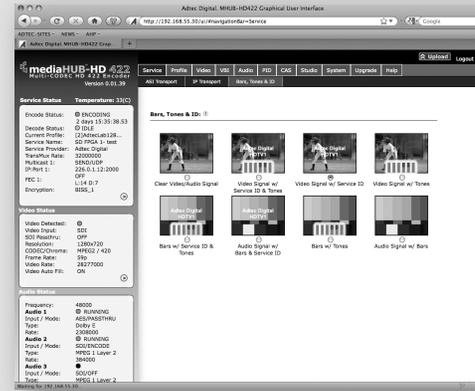
Getting Connected

To begin, you will need to connect to your mediaHUB-HD 422 via ethernet directly, or by adding the mediaHUB-HD 422 to your local area network. The default address for all Adtec devices is 192.168.10.48.

To connect directly to the device, make sure that your computer and the device have IP addresses within the same IP class range (ex. 192.168.10.48 for the device and 192.168.10.49 for your computer). If you need to change the IP address of the device, this can be done via the front panel, System > Network menu. Using a CAT 5 crossover cable, connect one end to your computer and the other to the Ethernet port found on the processor section of the back panel. (Some computers can auto negotiate the connection and a crossover may not be necessary.)

To add the device to a LAN, connect a standard CAT 5 Ethernet cable to your network router and then to the Ethernet port on the back of the device. If your network is DHCP enabled and you prefer that over a static IP, you can turn on DHCP for the device via the front panel, System > Network menu.

Web-Based Control Application



the device. Ex. <http://192.168.10.48>.

The left panel of the application will report current status in real-time while the right panel tabs will allow you to configure your device. Additional hints regarding configuration options can be found by clicking on the hints (?) buttons associated with each field or group of fields.

Adtec Digital has adopted zero-configuration networking technology, streamlining the setup and configuration processes for our products. The use of this technology enables automatic discovery of Adtec devices and services on an IP network. Used in tandem with the web-based control and configuration applications we can now provide 1-click access to any device.

By using the built-in Bonjour® locator in Apple's® Safari® browser or the plug-ins readily available for IE® or Firefox® browsers, users can locate all of the Adtec devices on a network by referencing the serial number on the back of the device. Clicking on the unit in the Bonjour® list will re-route you to a login page. If you do not wish to use Bonjour, you can reach the device's web application by pointing your browser to the IP Address of

You will be prompted for a username and password.

The default username is 'adtec'. The default password is 'none'.

Confidence Decode

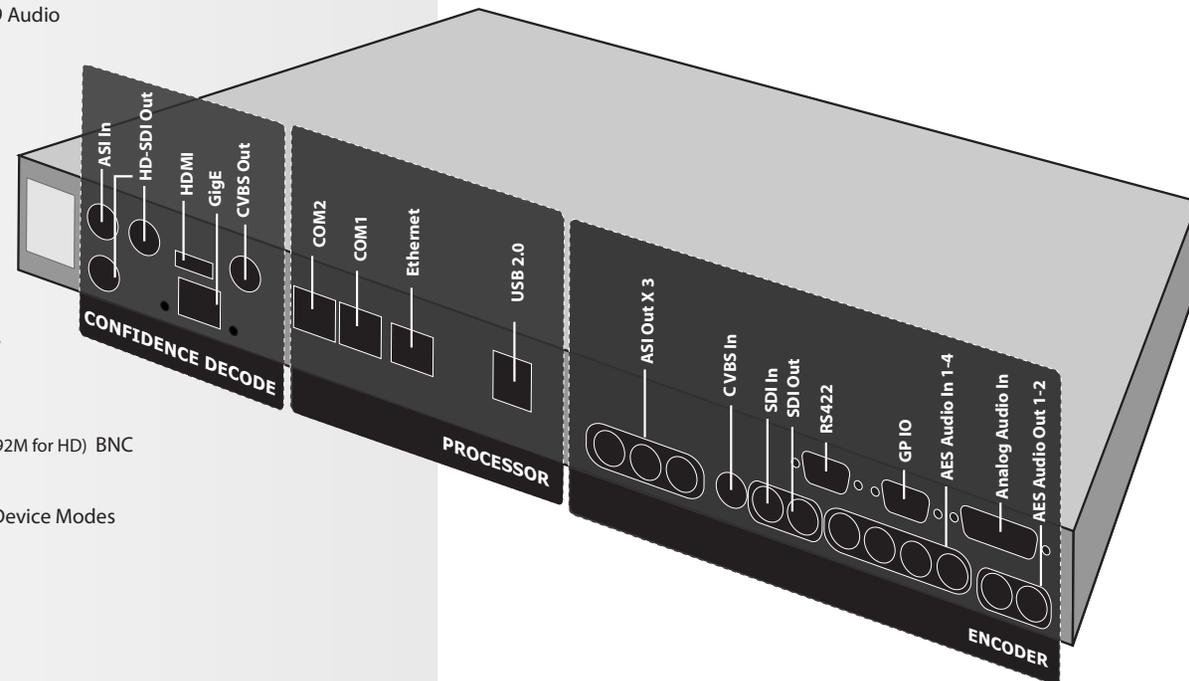
ASI IN	Asynchronous Serial Interface per EN500083-9 BNC 75 Ohm.
HD/SD SDI Out	User Defined (D1-1080i). SMPTE (SD)259/(HD)292 Video and (SD)272/(HD)299 Audio
HDMI	HDMI v1.3, HDCP v1.2, and DVI v1.0 compliant output.
GigE	MPEG2 or RTP multicast transport egress port (SMPTE 2022)
CVBS Out	75 Ohm terminated NTSC or PAL D1 Composite Video Output

Processor

COM2	API Serial Communication Interface
COM1	Serial Port Used for Troubleshooting (Terminal)
Ethernet	10/100 base T ethernet interface
USB 2.0	Not Currently Supported

Encoder

ASI OUT	75 Ohm source ASI x3 per EN500083-9
CVBS In	75 Ohm terminated NTSC or PAL D1 Composite Video Input
SDI In	75 Ohm terminated Input, Video & Audio (SMPTE 259M for SD & SMPTE 292M for HD) BNC
SDI Out	75 Ohm re-clocked source matched to Input Signal
RS422	Sony 9-pin electrical and protocol tape deck interface. Controller and Device Modes
GPIO	Tally and Control Port
AES Audio In 1-4	75 Ohm AES-3 per AES3-2003
AES Audio Out 1-2	Compressed Dolby Bit Stream Out
Analog Audio In	Stereo Pairs 1 and 2 600 Ohm Balanced.



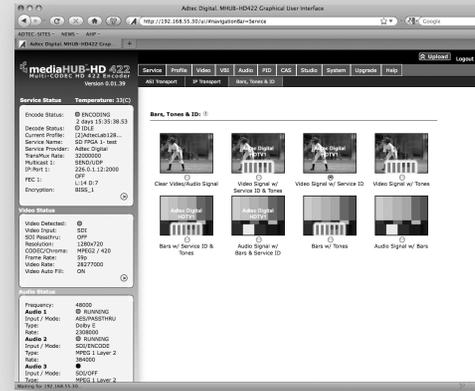
Getting Connected

To begin, you will need to connect to your mediaHUB-HD 422 via ethernet directly, or by adding the mediaHUB-HD 422 to your local area network. The default address for all Adtec devices is 192.168.10.48.

To connect directly to the device, make sure that your computer and the device have IP addresses within the same IP class range (ex. 192.168.10.48 for the device and 192.168.10.49 for your computer). If you need to change the IP address of the device, this can be done via the front panel, System > Network menu. Using a CAT 5 crossover cable, connect one end to your computer and the other to the Ethernet port found on the processor section of the back panel. (Some computers can auto negotiate the connection and a crossover may not be necessary.)

To add the device to a LAN, connect a standard CAT 5 Ethernet cable to your network router and then to the Ethernet port on the back of the device. If your network is DHCP enabled and you prefer that over a static IP, you can turn on DHCP for the device via the front panel, System > Network menu.

Web-Based Control Application



the device. Ex. <http://192.168.10.48>.

The left panel of the application will report current status in real-time while the right panel tabs will allow you to configure your device. Additional hints regarding configuration options can be found by clicking on the hints (?) buttons associated with each field or group of fields.

Adtec Digital has adopted zero-configuration networking technology, streamlining the setup and configuration processes for our products. The use of this technology enables automatic discovery of Adtec devices and services on an IP network. Used in tandem with the web-based control and configuration applications we can now provide 1-click access to any device.

By using the built-in Bonjour® locator in Apple's® Safari® browser or the plug-ins readily available for IE® or Firefox® browsers, users can locate all of the Adtec devices on a network by referencing the serial number on the back of the device. Clicking on the unit in the Bonjour® list will re-route you to a login page. If you do not wish to use Bonjour, you can reach the device's web application by pointing your browser to the IP Address of

You will be prompted for a username and password.

The default username is 'adtec'. The default password is 'none'.

Confidence Decode

ASI IN	Asynchronous Serial Interface per EN500083-9 BNC 75 Ohm.
HD/SD SDI Out	User Defined (D1-1080i). SMPTE (SD)259/(HD)292 Video and (SD)272/(HD)299 Audio
HDMI	HDMI v1.3, HDCP v1.2, and DVI v1.0 compliant output.
GigE	MPEG2 or RTP multicast transport egress port (SMPTE 2022)
CVBS Out	75 Ohm terminated NTSC or PAL D1 Composite Video Output

Processor

COM2	API Serial Communication Interface
COM1	Serial Port Used for Troubleshooting (Terminal)
Ethernet	10/100 base T ethernet interface
USB 2.0	Not Currently Supported

Encoder

ASI OUT	75 Ohm source ASI x3 per EN500083-9
CVBS In	75 Ohm terminated NTSC or PAL D1 Composite Video Input
SDI In	75 Ohm terminated Input, Video & Audio (SMPTE 259M for SD & SMPTE 292M for HD) BNC
SDI Out	75 Ohm re-clocked source matched to Input Signal
RS422	Sony 9-pin electrical and protocol tape deck interface. Controller and Device Modes
GPIO	Tally and Control Port
AES Audio In 1-4	75 Ohm AES-3 per AES3-2003
AES Audio Out 1-2	Compressed Dolby Bit Stream Out
Analog Audio In	Stereo Pairs 1 and 2 600 Ohm Balanced.

