

Getting Started

Thank you for your purchase of the Adtec EN-40 Encoder. This product can be sold with an optional modulation hardware package. Configurations and indicators relevant to that add-on package are noted here. If you purchased this product without the modulator, please ignore settings noted with an asterisks (*).

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:

Video

- ☐ Off - If modulator is installed, ASI Receive mode is enabled.
- ☒ On - Video detected
- ☒ Blink - No video detected and Fault mode is enabled.

Encode

- ☐ Off - No Encoding - Idle State
- ☒ On - Device is encoding.

AVC

- ☐ Off - MPEG 2 is selected for encode.
- ☒ On - MPEG 4 (H264) is selected for encode.

4:2:2

- ☐ Off - Chroma type 4:2:0 is selected for encode.
- ☒ On - Chroma type 4:2:2 selected for encode.

IP Out

- ☐ Off - Transport of IP via Ethernet or GigE is idle.
- ☒ On - Transport of IP via Ethernet or GigE is active.

RF Out *

- ☐ Off - Modulator is not enabled.
- ☒ On - Modulator is transmitting.
- ☒ Blink - Modulator is running in test mode.

Bars

- ☐ Off - B/T/ID options are disabled.
- ☒ On - B/T/ID have been enabled.

A1 - A4

- ☐ Off - Audio encoder configuration is set to off.
- ☒ On - Audio encoder configuration is set to encode or passthru.

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	Modulator *	Encoder Video	Encoder Audio	Transmit	PIDs	Table	Profile	Encrypt.
Login	Transmit	Status	Sample Freq.	Auto TMR *	PCR	Table	Load	Mode
Duration	Mod. Type	Rate	A1 A2	Mux Rate	Prog. No.	VBI Source	Save	Clear Word
Network	Mod. Mode	CODEC	A3 A4	Vid. AutoFill	Map PID	Closed Cap.		Encrypt Word
Time	Frequency	Chroma	Sync	IP Destinations 1-4	Vid. PID	Service Name		User ID 1
NTP	Power	Input	Input		Aud.1 PID			User ID 2
Alarm	Spec Inv.	ASI Rec.	Mode		Aud. 2 PID			
COM2	FEC Frame	GOP	Type		Aud. 3 PID			
Firmware	Roll Off	GOP Str.	Bitrate		Aud. 4 PID			
	Pilot	GOP Size	Volume		TS ID			
	Rate Prior.	Latency			AMOL			
	Sym. Rate	Hue			Splice			
	Inter. Rate	Brightness			VITC Mode			
	Carrier Mode	Contrast			VITC PID			
	Occ. Band.	Saturation						

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>



System LED Status

Alarm

- ☐ Off - No system alarms.
- ☒ On - System alarm. (Typically NTP alarm)

BISS

- ☐ Off - No encryption set
- ☒ On - Encryption active

Busy

- ☐ Off - No network activity
- ☒ On - Network traffic present

Link

- ☐ Off - No network detected
- ☒ On - Network communication active

Front Panel Status

Video Resolution	Frame Rate	Video Bit Rate
720X480	29i	19.40M
1DD 192K	2DD 192K	48
Audio Input 1 & 2		Sampling Rate

Reset:

Should you need to reset your device, you can do so via the front panel by pressing the MODE, ESCAPE and RIGHT ARROW keys simultaneously.

- Device contains L-Band modulator
- Device contains IF modulator
- Device does not contain a modulator



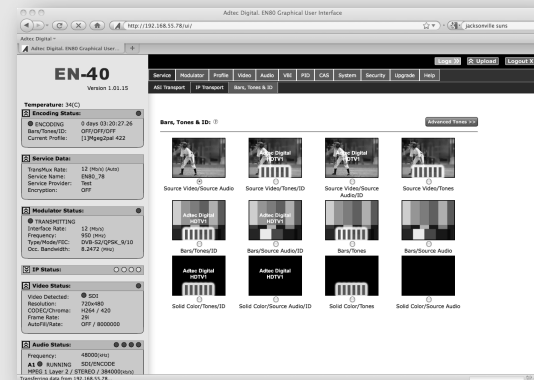
Getting Connected

To begin, you will need to connect to your EN-40 via ethernet directly, or by adding the EN-40 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



web application by pointing your browser to the IP Address of 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.

You will be prompted for a username and password.

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

Power

Power 1 & 2 Redundant AC Power, Standard 3 pin computer power plug
(Auto range 70-240 VAC Input)

Modulator (optional)*

Main

RF output, 50 Ohm BNC

L-Band Model: Frequency range 950 MHz to 1.750 GHz, Power Level -50 to -7 dBm

IF Model: Frequency range 50 MHz to 180 MHz, Power Level -30 to +5 dBm

Monitor

RF output, 50 Ohm BNC

L-Band Model: Fixed power level at -45 dBm

IF Model: Fixed power level at -45 dBm, fixed frequency at 1.08 GHz

10MHz Clock

BNC 50 Ohm connector for external 10MHz reference input

Processor

GigE MPEG2 or RTP multicast transport egress port (SMPTE 2022)

COM2 API Serial Communication Interface

COM1 Serial Port Used for Troubleshooting (Terminal)

Ethernet 10/100 base T ethernet interface (Monitoring/Management)

USB 2.0 Not Currently Supported

DVC Parport 9-pin parallel I/O interface for control systems

RS422 Not Currently Supported

GPIO Tally and Control Port

Encoder

ASI OUT 75 Ohm source ASI x3 per EN500839. Up to 100 Mbps.

CVBS In 75 Ohm terminated Standard Definition Composite Video Input

SDI In 75 Ohm terminated Input, Video & Audio (SMPTE 259M for SD & SMPTE 292M for HD) BNC

AES Audio In 1-4 75 Ohm AES-3 per AES3-2003

AES Audio Out 1 Not Currently Supported

Analog Audio In Stereo Pairs 1 and 2 (600 Ohm Balanced)

