HD-488E
HD TIME CODE READER/GENERATOR/INSERTER

The **HD-488E** is a Time Code Reader, Generator and Inserter for HD (High Definition) Serial Digital Interface (SDI) video. Linear Time Code (LTC) and RP-188 Time Code are both read and generated by the **HD-488E.** The unit also accepts a multitude of HD formats. SD (Standard Definition) is available by specifying the model **HD-488E/SD**, this will allow the unit to also accept 4:2:2 (525 and 625 line) digital video signals. The inserter mode provides the ability to superimpose time and/or user bits onto video with alphanumeric characters. As many as thirty characters of text may also be superimposed onto the video. Flexibility is also provided to the user, allowing for selection of the information to be displayed (time, time and user bits or text) on up to three different windows with multiple lines of text per window.. The three windows are independent of each other and may be blanked. The **HD-488E** also features color fonts and backgrounds and time code in closed caption.

Features

- Generates/Inserts Time Code
- USB Setup Interface
- User Friendly Control
- Color Fonts
- Universal Power Supply (90-264 VAC)
- Accepts Multiple HD Formats
- Time Zone Offset
- LCD Setup/Status Display
- Numerous Options Available
- Dual LTC Output

Uses

- Time Code / Time of Day / User Text Window burn
- Transcode SMPTE Codes to IRIG-B (w/IRIG option)
- Transcode RP-188 to LTC
- Transcode LTC to RP-188
- GPS Sourced NTP Server (w/NTP & GPS options)
- NTP Sourced Master Clock (w/NTP-C option)
- Master Time Code Generator
- GPS Master Clock (w/GPS option)
- IRIG Sourced NTP Server (w/NTP & IRIG options)
- Drive New or Existing Remote Displays with Time of Day
- Transcode IRIG A/B/G to IRIG-B or SMPTE Codes (w/IRIG option)
- IRIG-B Generator (w/IRIG option)

The video input and output are accessible via rear mounted BNC connectors. Time code input and output connectors on the rear panel are XLR(When option IRIG is specified the IRIG-B input is via a BNC connector). The **HD-488E** is housed in a single height rack mount enclosure which is black anodized.

A 16 x 2 character LCD shows the current time and status of the **HD-488E**. The front panel controls allow access to all configuration settings as displayed on the 16 x 2 character LCD, including front panel text entry. The same controls are available on the PC software which is accessible via the rear mounted USB port.

SPECIFICATIONS

Power:	90 – 264 VAC, 47 – 63 Hz, 15 Watts max	**HD SDI Input/Output:**	1080i/60, 1080i/59.94, 1080i/50, 1080p/30sF,
Mechanical:	Rackmount Enclosure 1¾" H x 19" W x10" D		1080p/29.97sF, 1080p/25sF, 1080p/24sF,
Time & Setup/Status Display:	16 x 2 character LCD		1080p/23.98sF, 720p/59.94
Time Code Input:	SMPTE (100 mVpp-10 Vpp;	**Analog Input:**	1 Vpp, terminated
	10kΩ input impedance)	**Color Frame Input:**	Vertical interval negative TTL/CMOS pulse
	Optional-IRIG (100 mVpp-10 Vpp)	**Options:**	*ESE*, GPS, IRIG, NTP, NTP-C, OCXO, RS, UL