

# SMPTE PRESETTABLE UP/DOWN TIMER

The **ES-466** is an eight digit, presettable 24 hour SMPTE/EBU timer (00:00:00:00 – 23:59:59:29) with five top-front mounted controls (UP, DOWN, STOP, RESET and PRESET). A SMPTE/EBU output is provided on a rear panel XLR connector. The "Bit Order Forward" toggle switch also located on the rear panel of the **ES-466** allows the unit to mimic decks that always output "forward" code.

The **ES-466** offers simple user operation.

## Features

- Forward/Reverse or Forward-Only Bit Order
- Thumbwheel Preset of Hours, Minutes & Seconds
- 24 Hour Up/Down Count Range (00:00:00:00 - 23:59:59:29)
- SMPTE Time Code Output



## SPECIFICATIONS

- Power:** 5 Watts Max  
**Electrical:** 110-120 VAC, 50/60Hz  
**SMPTE Time Code Output:** XLR connector  
**Enclosure:** 2.5" High x 10" Wide x 6" Deep  
**Options:** D, EBU, ESE, J, N, P, R, UL, Z

# VERTICAL INTERVAL TIME CODE (VITC) READERS

The **ES-491** and **ES-496** are 8-digit VITC Readers and are able to accept video from either an NTSC or PAL source. The **ES-491** has .55" and the **ES-496** has 1.0" yellow LED displays. A front-mounted push-button "HOLD" switch allows the time on the display to be frozen and a "TIME/USER" switch permits time or user bits to be displayed. Internal DIP switches allow manual selection of VITC video lines, or automatic VITC Identification Mode. The VITC Input/Output loop is accessible on rear-mounted BNC connectors. A 75Ω "Termination" switch can be used when no other device is to be connected to the video output. Several options are available including 220 VAC operation, RS-232C output, **ESE** TC90 output and LTC (Longitudinal SMPTE or EBU Time Code) output. The **ES-491** is housed in a desk top enclosure that measures 2.8" H x 8" W x 6" D and a 1 3/4" x 19" rack mount is optional. The **ES-496** is housed in a 3 1/2" x 19" x 10" rack mount enclosure.

## Features

- Eight Bright-Yellow LED Displays
- Drop-Frame Indicator
- Reads Time or User Bits
- Auto or Manual Line Selection
- Accepts NTSC Or PAL
- Front Panel "Hold" Pushbutton
- Reads SMPTE or EBU
- 75Ω Video Termination Switch



## Specifications

- Video Input:** 1 VPP, 75Ω, BNC loop-thru; switchable termination  
**VITC Lines:** 10 - 24  
**VITC Level:** 80 IRE nominal; 50 IRE minimum  
**Enclosure:** ES-491: Desk-Top  
 ES-496: Rack Mount

- Dimensions:** ES-491: 2.8" H x 8" W x 6" D  
 ES-496: 3.5" H x 19" W x 10" D  
**Electrical:** 117 VAC, 50/60 Hz  
**Power:** 5W maximum  
**Options:** Black, J, LTC, P, RS, UL

