

# IRIG TIME CODE GENERATOR/TRANSLATOR

The **ES-295** is an IRIG (A, B or G) Time Code Generator and Translator. When in the Generator (stand-alone) mode, day of year and time are manually set using the front panel controls or the supplied PC software. In the Translator (sync) mode, the unit accepts IRIG-A, IRIG-B or IRIG-G time code. In either mode, the **ES-295** provides an IRIG-A, IRIG-B or IRIG-G time code output (AM & TTL) and a 1pps output. Input and output time code selections are also made using the front panel controls or the supplied PC software.

Available on the **ES-295** is the option GPS. When in the GPS mode, the unit is synchronized to UTC via the internal GPS receiver. The Generator or Translator modes can alternatively be selected when the GPS option is specified.

## Features

- IRIG-A, B or G Input/Output
- Generates/Translates Time Code
- USB Setup Interface
- Universal Power Supply (90-264 VAC)
- Rack Mount Enclosure
- LCD Setup/Status Display
- Error Bypass/Freeze Modes
- Settings Retained in Battery Backed Ram
- Time Delay
- Analog or TTL Input Modes
- Time Code Lock Output
- Optional GPS Receiver



A nine-digit .56" amber LED display (Days, Hours, Minutes & Seconds) provides a readout of the input/output time code. The IRIG time code input and outputs are via rear mounted BNC connectors. There are two outputs of the AM signal and two outputs of the TTL signal. The 1pps signal is also available on a pair of BNC connectors. The **ES-295** is housed in a single height rack mount enclosure which is black anodized.

The **ES-295** incorporates an Error Bypass mode and a Freeze mode. In Error Bypass mode the outputs are continuously generated whether time code is erroneous or lost. In Freeze mode the outputs stop when errors in the time code input are detected or when time code is lost.

The front panel controls (Menu, Up & Down) allow access to all configuration settings as displayed on the 16 x 2 character "Setup/Status" LCD. 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 maximum  
(Option "DC" only) +11 to +35 VDC, 1 Amp maximum
- Mechanical:** Rackmount Enclosure 1¾" H x 19" W x 9½" D
- Time Display:** 9-digits, 0.56" yellow LED
- Setup/Status Display:** 16 x 2 character LCD
- IRIG Input:** IRIG-A, IRIG-B or IRIG-G  
100 mVPP – 10 VPP AGC input
- IRIG AM Outputs:** IRIG-A, IRIG-B, or IRIG-G  
0.5 – 5 Vpp (mark amplitude), Mark to Space 3 to 1, 600Ω, 2 BNCs
- IRIG TTL Outputs:** IRIG-A, IRIG-B or IRIG-G  
≥ 4.0 V high and ≤ 0.6 V low, 5 Vpp, 2 BNCs
- 1 PPS Outputs:** TTL outputs, positive edge true  
50% duty output < 1 mS accuracy, 2 BNCs
- Options:** DC, GPS, UL, Custom

