

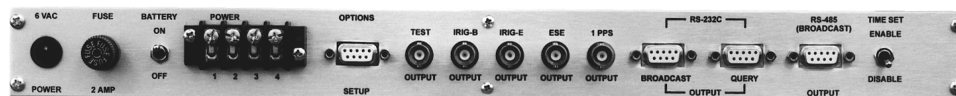
# THE INCREDIBLE TIME-SYNC MACHINE™

The **ES-911/TSM** is a Master Clock and Time Code Generator. The unit is specifically designed to provide the time code outputs recommended by the NENA (National Emergency Number Association) Standard NENA-04-002 for a PSAP (Public Safety Answering Point) Master Clock and is capable of "Time Synchronizing" all components of a PSAP.

The unit displays six digits of time (a front panel "DATE" switch allows MO-DAY-YR to be viewed) and continuously references an internal oscillator. Simultaneously, the **ES-911/TSM** generates several types of time code (IRIG-B, IRIG-E, **ESE**, RS-485, RS232C: "Broadcast" and RS-232C: "Query") and a 1PPS signal. These outputs allow the **ES-911/TSM** to synchronize and easily interface with equipment such as CAD, ANI/ALI Controllers, Voice/Data Recorders and Radio Consoles. The **ES-911/TSM** can also synchronize other computers and digital/analog clock systems.

## Features:

- IRIG-B, IRIG-E, RS-485, RS-232C (Broadcast & Query) And **ESE** Time Code Outputs
- 1 PPS Output
- IRIG Codes Are Switchable Between Modulated And TTL
- Automatic Daylight Savings Time Correction
- Provides NENA-04-002 Master Clock Time Code Outputs
- Rugged Rack Mount Enclosure
- 6-Digit, .56" LED Display
- Loss of Power Relay Outputs
- Switchable Between 12 & 24 Hr
- Simple Operation & Installation
- UL/CSA/CE Approved Power Supply
- Digital, Video & Analog Slave Clocks Available
- Optional 60 Minute Battery Back-Up
- ASCII Outputs Selectable Between Format #0 & Format #1



The **ES-911/TSM** provides a truly economical solution where the need for "time synchronization" and "cost-savings" are the main considerations. The "accuracy" of the Time-Sync Machine™ can be enhanced with the "1 Second per Month" option. For applications requiring better accuracy, please refer to the ES-185A and the ES-911/GPS.

Software is supplied with the **ES-911/TSM** permitting the user to continuously update a computer's DOS clock to the time available on the ASCII output. (Windows® software is available via our Web-site.)

## SPECIFICATIONS

**Outputs:** 1 PPS - TTL, 50% Duty Cycle  
 IRIG-B - 2 To 7 VPP (mark amplitude)  
 IRIG-E - 2 To 7 VPP (mark amplitude)  
**ESE** Time Code - Drives 100 Slaves @ 4000'  
 RS-232C - ASCII Date & Time @ 1200-9600  
 Baud, 8 Data, No Parity, 1 Stop  
 RS-485 - ASCII Date & Time @ 1200-9600  
 Baud, 8 Data, No Parity, 1 Stop

**Displays:** Six Digits, Yellow LED, .56" High

**Accuracy:** 2 -3 Seconds Per Week

**Power:** 10 Watts Maximum

**Electrical:** 117 VAC, 50/60 Hz Via UL/CSA/CE Approved, External Power Transformer

**Mechanical:** 1.75" x 19" Rack Mount, 10" Deep

**Options:** 1 Sec/Mo, One Second Per Month Accuracy

**BBU,** Battery Back-Up (60 minute, all outputs)

**HR,** HR & 1/2 HR Relay Contact Closure

**J,** 220 VAC Operation

