

GPS BASED IRIG TIME CODE GENERATOR

The **ES-911/GPS** is a GPS (Global Positioning System) Master Clock and Time Code Generator. The unit displays six digits of time as received via the internal 12-channel GPS receiver. (Date information is also available on all time code outputs.) Simultaneously, the **ES-911/GPS** generates several types of time code (IRIG-B, IRIG-E, **ESE**, RS-485: "Broadcast", RS232C: "Broadcast" and RS-232C: "Query") and two 1PPS signals. An optional ethernet NTP (Network Time Protocol) port may be specified allowing the clock to be an NTP server and providing clock set-up via a LAN.

The unit is specifically designed to meet 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. This assures that all equipment such as CAD, ANI/ALI Controllers, Voice Recorders and Radio Consoles can easily interface with and be synchronized to the **ES-911/GPS**. The **ES-911/GPS** can also synchronize other computers and digital/analog clock systems.

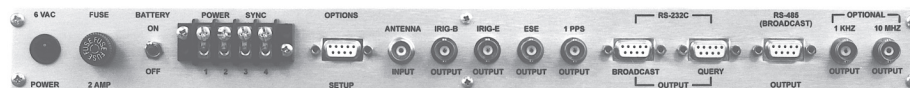
Features

- IRIG-B, IRIG-E, RS-232C (Broadcast & Query) And **ESE** Time Code Outputs
- UL Approved Power Supply
- IRIG Codes Are Switchable Between Modulated And TTL
- Automatic Daylight Savings Time Correction
- Internal 60 Minute Battery Back-Up
- Rugged Rack Mount Enclosure
- "Time Sync" Indicator
- GPS "Lock" Indicator
- 6-Digit, .56" LED Display
- Signature Control ("ON/OFF")
- +/- 10 Nanosecond Accuracy
- Legally Traceable to UTC (Universal Coordinated Time)
- 1 PPS Output
- Time Zone Offset
- Meets Or Exceeds NENA-04-002 Master Clock Specifications
- Digital, Video & Analog Slave Clocks Available
- Loss Of Power & Loss Of Time Sync Relay Outputs
- Loss of GPS Signal Output
- Switchable Between 12 & 24 Hr
- Indoor/Outdoor Antenna With 16' Cable



Included with the **ES-911/GPS** is an indoor/outdoor antenna that is connected to the unit via the provided 16' cable. If additional cable is required, "low-loss" cable, an "in-line" amplifier (**LA-12F** or **LA-12FN** for low-loss cable) or, for extra long cable runs where more than one in-line amplifier is used, an "Antenna Power Supply" (**ES-AB1A**) may be required. Consult the **ESE** factory for more information.

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



SPECIFICATIONS

Accuracy: <10 nS Of UTC When Locked To GPS
Drift: 33 mS/Day (if no GPS signal)
Displays: Six Digits, Yellow LED, .56" High
Power: 15 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
GPS Receiver: Internal 12-Channel
Antenna: Indoor/Outdoor With 16' Cable
Battery: 60 Minute Back-Up (all outputs and displays)

Outputs: 1 PPS - TTL, 20% Duty Cycle
 1 PPS - TTL, 50% Duty Cycle (regenerated)
 IRIG-B - 3 VPP (mark amplitude) (AM or TTL)
 IRIG-E - 3 VPP (mark amplitude) (AM or TTL)
 ESE Time Code - Drives 100 Slaves @ 4000'
 RS-232C - ASCII Date & Time @ 1200-9600 Baud, 8 Data, No Parity, 1 Stop; Broadcast & Query
 RS-485 - (same as RS-232C; no Query)
Options: Ant, HR, J, K, NTP (The ES-911U/GPS/NTP must be specified when requesting the 'NTP' option.)

