

NTP TIME SERVERS

ESE's line of NTP (Network Time Protocol) Time Servers provides a simple method of putting accurate time information onto a network. NTP is arguably the most reliable method for sharing time information on a network (LAN, WAN or Internet, etc.). And, each of these four NTP Time Servers offers a perfect solution for providing accurate and synchronized time throughout a network. The concept is as simple as plugging the Server into the network, configuring the unit and allowing any client to request "highly accurate" time from the NTP Time Server.

Features

- Create NTP From Most Any "Non-NTP" Master Clock
- NTP Primary Time Server (**ES-104E**)
- Several Options Available
- Platform Independent
- Simple Installation & Hands-Free Operation
- 10/100BaseT - NTP Data Port (RJ-45)
- Rugged Desktop Enclosure
- **ESE** Time Code Output



Applications

- Telephone & Radio Dispatch Time Stamps
- Manufacturing Process Control
- Broadcast Facilities
- Financial Institutions
- Securities Exchanges
- Military Installations
- Digital Signatures

The **ES-104E** employs an internal GPS Receiver as its time reference. This provides the user a source of UTC (Universal Coordinated Time) from an NTP Primary (Stratum 1) Time Server. In contrast, **ES-289E**, **ES-299E** and **ES-911E/NTP** receive their time reference from external sources of time code. They are in essence time code translators, each receiving time code and "outputting" NTP. The **ES-289E** accepts either SMPTE/EBU time code (must include Date data) or **ESE** Time Code™, while the **ES-299E** references either IRIG (A,B or E) and NASA 36. Designed to accept ASCII time code, the **ES-911E/NTP** accepts any of the formats that follow: NENA (Format "1"), **ESE** (Format "A"), or NMEA 0183, and also accepts **ESE** (TC-90).

All four units include an **ESE** Time Code™ output which is capable of driving up to 100 **ESE** Slave Clocks at a distance of up to 4000 feet. A rear mounted DB-9 connector allows access to the GPS / Time Code Lock status output. All configuration is accomplished via the 10/100BaseT network connection (RJ-45).

Specifications

I/O Connection:	Network: 10/100BaseT Ethernet, RJ-45
Outputs:	ESE Time Code™ TC89 or TC90, Drives 100 Slaves @ 4000', BNC
GPS Receiver:	Internal 12-Channel (ES-104E only)
Antenna:	Indoor/Outdoor with 16' Cable (ES-104E only)
Antenna Input:	L1, 1.57542 GHz, TNC (ES-104E only)
Time Code Input:	ES-289E: ESE (TC-90), SMPTE or EBU Time Code with Date data, BNC ES-299E: IRIG (A,B or E), NASA 36, BNC ES-911E/NTP: ASCII (RS-232C): NENA (format "1"), ESE ("A"), or NMEA 0183 (GPRMC), DB-9 ESE (TC-90) via BNC
Drift:	33ms/Day (if no GPS signal)
Configuration:	Web page or Telnet
Enclosure:	Desk-Top, Black Anodized Aluminum
Dimensions:	1.6" H x 7" W x 5" D
Electrical:	117 VAC, 50/60 Hz
Power:	5W maximum
Options:	Ant (ES-104E Only), BBU, J, P, P2, UL

