

IRIG TIME CODE GENERATOR/TRANSLATOR/NTP TIME SERVER

The **ES-295/NTP2** is an IRIG (A, B or G) Time Code Generator and Translator, which includes the NTP2 option. 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, or GPS time from the internal GPS receiver. 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. The NTP2 feature provides an NTP time server and function control via ethernet (10/100Base-T, RJ-45).



Specifications

Power: 90 – 264 VAC, 47 – 63 Hz, 15 Watts max (Option "DC" only) +11 to +35 VDC, 1 Amp max	1 PPS Outputs: TTL outputs, positive edge true 50% duty output < 1 mS accuracy, 2 BNCs
Mechanical: Rackmount Enclosure 1¾" H x 19" W x 9½" D	Accuracy: Standard VCXCO >15mS per day Option OCXO >2mS per day Option GPS >10nS
Time Display: 9-digits, 0.56" yellow LED	Options: DC, EXT, GPS, LED, OCXO, UL, Custom
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	

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.

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



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.

Specifications

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

