

SYNCHRONIZATION OF T1 AND E1 DATA STREAMS

Spectracom puts its time and frequency expertise to work for the telecommunications industry in the following areas:

GPS MASTER TIMING REFERENCES

These Primary Reference Sources (PRS) provide Stratum 1 accuracy at reasonable prices for clocking T1 or E1 systems. The internal oscillator is locked to GPS, providing many days of slip-free operation in holdover. Timing outputs available are DS1 or CEPT framed all 1's, or RS-485 at selectable frequencies when used with Model 8140VT VersaTaps.

CLOCK SELECTOR/DISTRIBUTION AMPLIFIERS

Distribution of timing from one source to many network elements is a Spectracom specialty. Some applications are:

- Communications Center Timing Distribution from an incoming T1 to MUX's and PBX.
- SONET Timing Distribution from an add-drop MUX into customer premises separately from the traffic lines.
- Redundant Clock Selection, switches to a backup clock source if the first one fails.
- Timing Source with Stratum 3 accuracy, distributes optional built-in master clock to 12 network elements.

VERSATAP CLOCK CONVERTERS AND CLOCK EXTRACTORS

The Clock Converters will convert almost any clock frequency and format to any other clock frequency and format. The Clock Extractors recover the clock from PCM data streams and provide phase-locked output in a different frequency and format. These units are about the size and shape of a "blue brick" and are factory-configured for your specific needs.

Some examples are:

- 10-MHz Input, DS1 Framed All 1's Output
- 1544-kHz Input, CEPT Framed All 1's Output
- 10-MHz Input, User-Specified Frequency RS-422 Output
- DS1 Input, 1544-kHz Sine & TTL Outputs
- DS1 Input, Repeated Input & 4-kHz Outputs
- DS3 Input, Repeated Input & 4-kHz Output
- STS-1 Input, Repeated Input & 4-kHz Outputs