NTP 7000 Series Master Clock

The master clock shall be the Sapling NTP 7000 Series Master Clock. The master clock shall have an LED display and two buttons that will allow a user to program the clock. The master clock shall be capable of receiving a signal from any NTP or SNTP time server via a local area network or from the internet. The clock shall also be capable of acting as an NTP/SNTP server with the ability to provide NTP time to any other device on the network. The master clock shall have up to ten pre-programmed NTP servers which will be accessible for modification over a network interface. The master clock will be capable of receiving signals from existing master clocks via RS485, 59 minute correction, 58 minute correction, National Time and Rauland transmission protocol, or Dukane transmission protocol. The master clock shall contain two relay circuits that can produce synchronous wire data in the form of 59 minute correction protocol, 58 minute correction protocol, National Time/Rauland protocol, or a once a day pulse for intercom systems. The master clock shall be capable of interfacing with the SAM Series analog clock via Sapling's Converter Box. It shall also be capable of interfacing with the SRM Series analog clock and any of Sapling's 3200 or 3300 series digital clocks via RS485 communication protocol. The master clock shall be powered by 115VAC/60 Hz or 230VAC/50 Hz. The master clock will be capable of acting as a repeater for another master clock. The master clock shall contain the necessary circuitry and programs so that a typical web browser, like Internet Explorer, can access the clock over a local area network. When accessed this way, the clock settings can be modified through a graphic user interface. The interface shall allow the user to program all of the display features for secondary clocks, the IP settings of the master clock, and any system setting that the master clock has.

NTP 7000 upgrade options

GPS – The master clock shall have the option of having a GPS receiver board and antenna port built into the unit. This hardware and software will allow the master clock to receive UTC data from GPS satellites.