

MC3 and WeMC3 Master Clocks



The **MC3 Master Clock** combined with National's clocks creates a **state-of-the-art** time system. The MC3 comes standard with three solid state 120VAC outputs to directly control clock circuits without the need for additional relays. These **solid state outputs** are capable of driving 3 amps each and incorporate **zero-cross technology** to handle undesirable current surges and inrush.

The MC3 uses the **power-line frequency** to keep accurate time eliminating the inaccuracies of crystal oscillators found in other products. The MC3 can be equipped with a **Global Position Satellite (GPS)** antenna (order MC3-GPS) to keep time with the National Institute of Standards and Technology NIST satellite time base accurate to one second over a million years. The **web enabled** version (WeMC3) is also available providing **NIST Atomic Time** or computer network time synchronization as well as a **PC browser based** configuration and event programming. **Thousands of events** can be programmed and easily managed through this user-friendly browser-based interface from any PC on the network or internet. This provides an ideal environment for multiple schedules of school class changes which can be modified and programmed from a central location in the district or campus.

The MC3 series master clocks combine with secondary clocks to create a **maintenance-free** time system automatically synchronizing the clocks and adjusting for **daylight savings and power outages**. The battery-less **environmentally friendly** design can keep time internally for over 150 days.

The MC3 series can correct the complete line of National Time & Signal clocks as well as most clock systems by other manufacturers. The MC3 also provides the desirable National Time **On-Demand Instant clock correction** for Rotary Drive and DX Series clocks. On the WeMC3, spare circuits can be used to control bells, chimes or lighting timed events.

The MC3 will also synchronize time with a sound system, paging system, phone system, media retrieval system through LAN timekeeping or an existing master clock which can provide a synchronizing output. This **universal system synchronization** is easy with an optically isolated input capable of receiving synchronization pulses of 17-132VAC from other sources. The synchronization pulses can be a simple contact closure at 12:00 or one of many common clock reset formats using National's **Automatic Protocol Detection** algorithm. A serial port of either RS232 or RS485 is also available to communicate time information with other equipment. (Consult Factory)