

The **MC3 Master Clock** is available in two versions, the MC3-X10 and MC3-MI. These control National Time's Architectural Clock product line. The **MC3-X10** control the MR Series synchronous driven clock movements which include the 2MR, 3MR, HMR etc. and will correct at 10 times (x10) speed either by a second motor or by utilizing National Time's reversible motor transmission. The **MC3-MI** corrects the minute impulse type clocks like the 2MI, 3MI, HMI, etc. These clocks increment each minute and correct by advancing 1 minute every 10 seconds.

Both MC3s come standard with three solid state 120VAC outputs to directly control clocks 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 **power-line frequency** to keep accurate time eliminating the inaccuracies of crystal oscillators found in other products. In countries that do not regulate the power-line frequency or installations that frequently test backup power generators, the power-line frequency will not be an acceptable time base. For these installations, a minute impulse clock system should be used with an optional GPS or LAN time base.

The MC3 can be equipped with a **Global Position Satellite (GPS)** antenna (separately order **MC3-GPS**) to keep time with the National Institute of Standards and Technology (NIST) satellite time base. Also available is the **MC3-LAN** (separately order) that allows a connection to the local area network. With this connection, the MC3 can synchronize with any simple network time protocol (SNTP) time server. The MC3 series master clocks also automatically correct clocks after a power outage or daylight savings adjustment. The MC3's **battery-less** backup design can keep time internally for over 150 days.

For multiple clock installations, the MC3-4SW (ordered separately) 4 switch module provides individual clock control helpful during installation or when the clocks are being serviced. The clocks can be synchronized with each other to allow the MC3 to advance them to the correct time together.

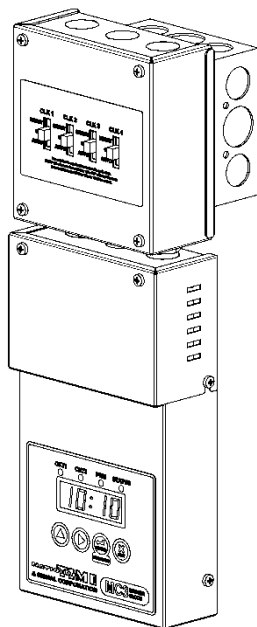
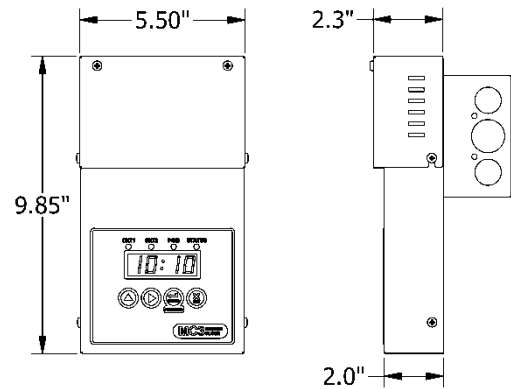
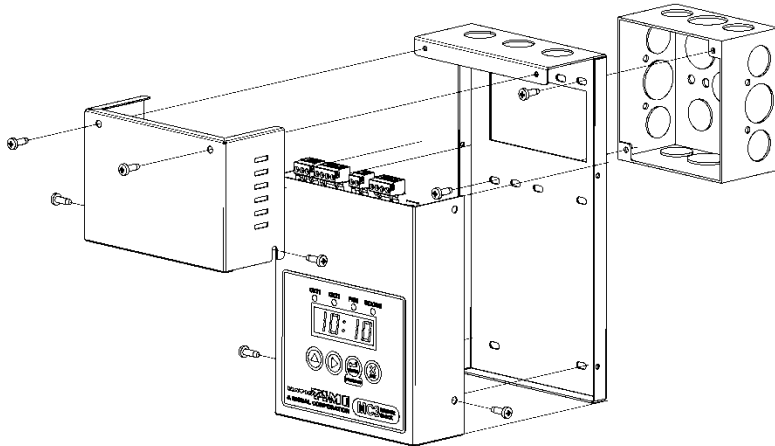


Benefits:

- Controls most Outdoor Clock Types
- Synchronous or Impulse Clock Control
- Long Life Solid-State Outputs
- Large LED Display
- Accurate 50/60Hz Timekeeping
- Automatic Power Failure Correction
- Daylight Savings Adjustments
- GPS or LAN Time base Options
- Wire Terminals Ease Installation Effort
- UL Listed
- Made in USA

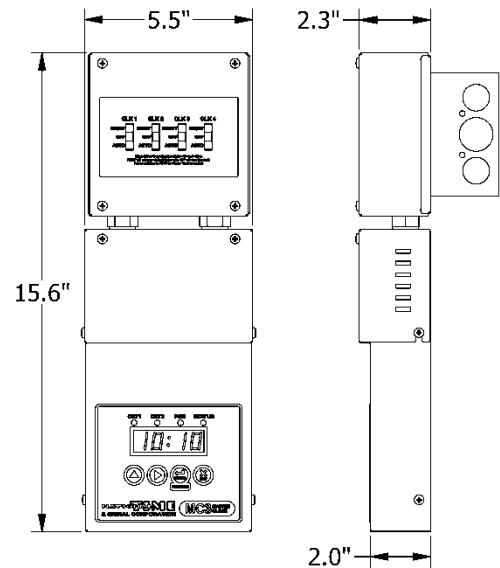
Dimensions

The MC3's durable metal enclosure provides mounting to standard electrical boxes (4"sq., single gang, double gang, handy box etc.) or surface 1/2" conduit entry through 3 top knock outs. Removable wiring cover facilitates easy connections with ample wire cavity space with plug-in connectors.



The MC3 can be mounted onto a Flush 4-square box. If a 4-Switch unit is used, the 4-square box can be behind the MC3 or the 4-Switch.

For surface conduit installations, conduit can enter the top of the MC3 or 4-Switch box. The 4-square electrical box is not used.



Specifications

Primary Volt	120VAC @ 60 Hertz
Primary Current	
<i>Full Load (max devices):</i>	7.025 AMPS @ 120VAC/60Hz
<i>No Load (no devices):</i>	0.025 AMPS @ 120VAC/60Hz
<i>Typical load:</i>	0.025AMP + Device Load @ 120VAC/60Hz
Primary Fuse:	10Amp 250VAC Very Fast Type GBB
Solid State Output Rating:	
<i>Per Circuit:</i>	3 Amp @ 120VAC
<i>3 Circuit Total:</i>	7 Amp @ 120 VAC
RS232 Serial Port Distance	
<i>MC3-GPS:</i>	30 Feet (Standard) 100 Feet using Shielded low capacitance Cable (Extended)
LAN Connector:	RJ45
Ambient Temperature Range	32 to 95 Degree Fahrenheit
Humidity	85% Non-condensing Max
Mounting Enclosures	
<i>Semi-flush Mount:</i>	Mounts to flush mounted 4" square, Double Gang, Handy box, Single Gang
<i>Surface Mount:</i>	Mounts to wall with surface conduit connections
Conduit Entry	
<i>Surface Mount:</i>	3 Knockouts @ ½ inch conduit

Ordering Information

Order No.	Description
MC3-X10	Master Clock for Synchronous Clocks Solid State 120VAC outputs
MC3-X10-4SW	Master Clock for Synchronous Clocks Solid State 120VAC outputs with 4SW switches
MC3-MI	Master Clock for Minute Impulse Clocks Solid State 120VAC outputs
MC3-MI-4SW	Master Clock for Minute Impulse Clocks with Solid State 120VAC outputs with 4SW switches
MC3-GPS	NIST Time based GPS antenna for use with MC3 Master Clock (sold separately).
MC3-LAN	LAN/Internet interface with SNTP Time-base for use with MC3 Master Clock (sold separately).