Installation (cont'd)/Startup

6. Connect line power field and correction line wiring (E) to the 3-wire Molex connector (G). White to neutral, black to positive/hot, red to correction, and green to ground.

7. Join the Molex connectors (G & H) together, placing excess wiring and Molex connectors into the gang box.

Chassis ground MUST be connected to conduit/Earth ground to provide proper protection from electric shock.

CAUTION: Electric Shock Hazard! When making installation, route field wiring away from sharp projections, corners, and internal components.

8. Re-attach the cover assembly (B) to the enclosure base (C) using the sheet metal screws (A) removed in Step 1.

Startup

When power is applied to the clock for the first time, it will scroll its software version number (i.e. $\Box E_r + Z$), followed by a digit check (all digit segments and dots will be illuminated) and scrolling dashes/underscores. Once this is complete, it will go to a time based off the internal real-time clock until it receives a correction from the master.

If the colons between the digits are flashing, the clock has not yet received a 12-hour correction. This may require up to 24 hours after initial installation. The dot in the lower right corner will illuminate when a correction is being received.

If the clock has not received a 12-hour correction after 24 hours, contact American Time technical support at 800-328-8996.

Operation as a Standalone (non-corrective) Clock - 6-Digit Models Only

The 2.5" and 4" 6-digit 3-wire synchronous clocks can also function as a standalone clock, which can be set by use of the American Time Timer Control Station (sold separately).

With the UP/DOWN/CLOCK switch still in the CLOCK position:

• Set the SET/RUN switch to the SET position.

• The clock will prompt for time. The hours digits will be flashing. Press the INCREMENT switch until the desired hour is shown and then press ENTER. The minutes digits will begin flashing.

• Press the INCREMENT switch until the until the desired minutes are shown and then press ENTER. Press the INCREMENT switch again to set the desired seconds and then press ENTER.

• The hours will begin flashing again. If further changes need to be made, pressing ENTER will continue to cycle through the hours/minutes/second.

• If the time is correct, switch the SET/RUN switch back to RUN when you want timekeeping to begin at the time you entered.

The clock will now keep time as a free running clock.



Flush-Mount 3-Wire Synchronous Digital Clock Quick Start **Installation Guide**



Please read this first!

If this is your first installation or you have questions at any time during this process, please call American Time toll free at 800-328-8996.

Introduction -

American Time flush-mount digital clocks are multi-function corrective clocks, using 3-wire correction protocols designed to sync with American Time SiteSync IQ and AllSync IQ master clocks, as well as a variety of master clocks from other manufacturers. These clocks use the correction protocol to continuously update the time and perform adjustments for Daylight Saving Time.

6-digit flush mount clocks can be used with the optional Timer Control Station (TCS) to perform Elapsed Time Indicator (ETI) and Code Blue functions. Instructions on controlling the ETI and Code Blue features are covered in the TCS documentation.

3-wire clocks can also be used as a free-running stand-alone clock. The TCS is required to set the clock time in this application. Instructions on setting the time manually are covered in the TCS documentation.

Safetv -

WARNING: Hazardous voltage in electrical equipment can cause severe personal injury or death. Inspection, installation, and preventive maintenance should only be performed on equipment to which power has been turned off, disconnected and electrically isolated so no accidental contact can be made with energized parts.

CAUTION: This equipment contains electronic devices that are sensitive to static electric charges. To guarantee protection for the circuitry of this unit, it is required that electrostatic handling precautions be observed when installing or repairing this equipment. Any technician or other personnel working on this unit must wear a static grounding wrist strap or similar device to provide protection of sensitive components.

Integrated Solutions

phone: 800-328-8996

fax: 800-789-1882 online: american-time.com mail: 140 3rd St. So.; PO Box 707, Dassel, MN 55325-0707

H005136 Rev 1 Apr 2020



Specifications

	3-Wire	
Weight	6.5 lbs (3 kg)	
Box Dimensions	12.4375" x 7.375" x 3.625" WxHxD (31.5 x 18.7 x 9.2 cm)	
Faceplate Dimensions	13.5" x 8.5" WxH (34.3 x 21.6 cm)	
Line Voltage	24 or 120VAC	
Clock Circuit Current	.85mA (24VAC); 4.9mA (120VAC)	
Code Blue Current	3.0mA maximum at 12-30VAC/VDC	
Operating Temperature	50°-120°F (10°-49°C)	
Humidity	85% relative humidity at 86°F (30° C) maximum	
Accuracy	±1 second; ± 1 minute/year (if correction line is not connected)	
Certifications	Electromagnetic Emissions EN 55032:2012/AC:2013 Class B FCC 15.107:2018 Class B FCC 15.109:2018 Class B ICES-003:2016 Class B	

	Power Consumption (red)	
	24V	120V
3-Wire, 2.5" 6-digit	271mA	75mA
3-Wire, 4" 4-digit	202mA	59mA
3-wire, correction	.85mA	4.1mA

General Maintenance

American Time digital clocks require minimal maintenance. Cleaning should be done with nothing more than a microfiber towel, moistened with water or a mild alcohol solution. No abrasive materials should be used to clean the clock, as it will result in scratching of the case or lens.

Avoid contact with the internal components of the clock when unpacking or preparing for installation, or if the clock is disconnected after installation. Contact with the internal components when the clock is not grounded can result in electrostatic discharge, which could damage the clock.

Installation

The flush-mount digital clock is designed to be mounted into a wall cavity, similar to a single or double gang box. Ensure that installation conforms to the National Electrical Code and local wiring codes.

NOTE: If installing the clock to be used with a Timer Control Station, the clock and TCS must be no more than 30-ft apart.

CAUTION: Electric Shock Hazard! Ensure that NO electrical power is present on any wire before installation.

1. Remove the four sheet metal screws (A) that hold the cover assembly (B) and

stud. Opening is 12.5" x 7.4" x 3.629".

If you are installing a Timer Control Station, proceed to Step 3. To finish clock installation without a Timer Control Station, proceed to Step 6.

3. Pull the wiring from the Timer Control Station (D) through the knockouts in the enclosure. 4. Connect the Timer Control Station wiring to the provided terminal plugs. See wiring detail in the ATSTCS documentation for detailed wiring information.

5. Connect the terminal plug(s) to the terminal blocks on the clock as described in the ATSTCS documentation.

Maintenance/Diagnostics



- enclosure base (C) together. Be sure to keep the sheet metal screws for reassembly.
- 2. Mount the enclosure base (C) into the wall by attaching the side of the back box to a