

# Operating Instructions

## Digi 12E

### One Channel Electronic Time Switch

#### APPLICATION

The Digi 12E time switch provides time of day control of indoor or outdoor loads such as LIGHTING, SECURITY ALARMS, TRAFFIC CONTROLS, HEATING, VENTILATION, and AIR CONDITIONING EQUIPMENT.

#### TECHNICAL DATA

- Output: 1 SPDT relay with dry contacts
- Switching Capacity: 16A @ 120-240VAC (resistive)
- 150 hours battery backup
- Input Voltage:
  - Models Available:
    - 6VDC, 12VDC
    - 24VAC/DC
    - 120VAC, 240VAC
- Shortest Switch Time: 1 minute
- Ambient Temperature Range: 23° – 131°F
- AM/PM LCD display
- Power Consumption: 4VA
- 1/4 inch spade terminal connections
- Accuracy:  $\pm 4$  minutes per year

#### Installation

##### TO THE INSTALLER

1. Read operating instructions carefully.
2. Check the input and output ratings marked on the unit to make sure this product is suitable for your supply voltage and application.
3. Disconnect supply power prior to installation to prevent electrical shock.
4. Damage to the relay contacts caused by short circuiting will void warranty.
5. Wire in accordance with National and Local electrical code requirements.

##### INSTALLATION CHECKLIST

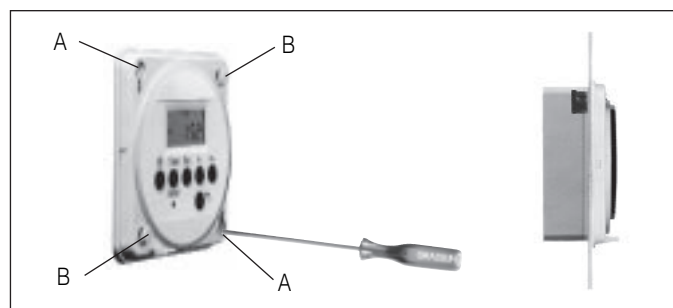
1. The time switch should be located at least 5 feet away from any large electrical contactors or machinery to avoid possible electrical interference problems.
2. The time switch should have its own dedicated power source.
3. Since all electronic instruments are sensitive to voltage spikes, close attention must be paid to the following:
  - a) If possible, power to the digital time switch should be supplied from a phase different than the one supplying power to the load.
  - b) Highly inductive loads, especially fluorescent lights, may require a relay.



##### PANEL MOUNTING - DIGI 12E

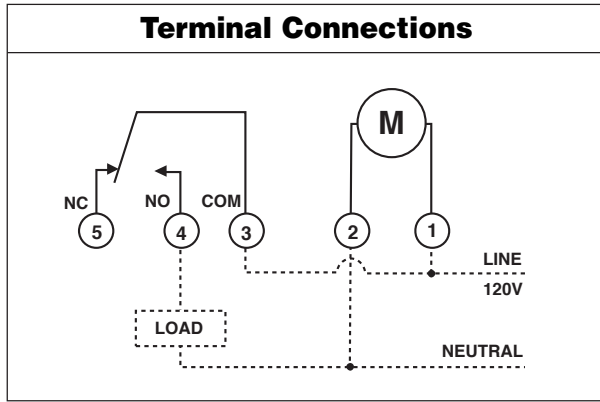
Cut a square hole 2-5/8" x 2-5/8" (66mm x 66mm) in the front of the panel. Insert the time switch through the opening. With a screwdriver, press down and turn outer screws (A) until flanges are in position to fasten the unit in front panel, then release. Insert plugs into holes as per illustration (B).

Use 1/4" quick connects and make connections in accordance with the wiring diagram shown and applicable code requirements.



## MOUNTING

The standard Digi 12E units can be flush mounted (a mounting kit with stand-off spacers and screws is available) or surface mounted inside a panel. An indoor enclosure is available for stand-alone mounting. In addition, unit is also available in DIN housing for flush or surface mounting. Optional clear plastic cover is available for standard or DIN housing units.



## Programming

The Digi 12E incorporates a 24 hour and 7 day time base. Therefore each day of the week can be uniquely programmed. For convenience, Block Programming is also provided, whereby up to seven days can be grouped together if the "on" and "off" times are the same. The Digi 12E displays in AM/PM format. When setting the hours, be sure the "A" is displayed for AM time, and the "P" is displayed for PM time.

### SETTING THE TIME

1. Depress the reset button.
2. Depress clock symbol key "⌚" during entire time setting procedure.
3. Press **Day** key to bring the actual day of the week into display.
4. Press **h+** and **m+** keys to set the actual time of day. If keys are depressed for more than a second, the digits will advance rapidly.
5. Release the "⌚" key when the correct time and day are shown in the display. The colon between the hours and minutes will be flashing indicating the timer has started.

## ENTERING PROGRAMS

1. Press **Timer** key once (do not keep depressed). The display will show "ON" and "--:--" for the time.
2. Press **h+** and **m+** keys to set ON time.
3. If the event is to occur every day, proceed to step 5.
4. If the event is to occur only on selected days of the week, press **Day** key to select the desired days of the week. Successive depressing of the **Day** key beyond Sunday will bring the following blocks of days into the display.

Monday through Friday  
Monday through Saturday  
Saturday and Sunday

All days shown in the respective blocks will be switched on (or off) at the selected hour and minute.

5. Press **Timer** key to enter program. The display will show "OFF".
6. Program OFF command using steps 1-5 above.
7. Repeat for up to 12 programs (6 ON and 6 OFF)
8. Press "⌚" key to return to time of day display.

### CHANGING OR CHECKING PROGRAMS

By operating the **Timer** key, the individual commands as programmed can, at any time, be brought consecutively into the display for revision or checking. Revisions are carried out by writing over the existing programs using the steps outlined above.

### CANCELING PROGRAMS

Use procedure above to bring program to be canceled into display. Use **h+** and **m+** keys to set hours and minutes to null. (symbol "--:--" will be in display). This program has been made ineffective and will no longer be carried out. To cancel all programs, depress **Reset** key. This clears entire memory, including time of day and program.

### MANUAL SWITCH

Press override key "⏏" to turn load ON or OFF without affecting the stored programs (temporary override).

### LOAD STATUS INDICATION

The load status is shown in the display as ON or OFF.

### BATTERY POWERED RESERVE

In case of power failure, the built-in nickel-cadmium battery maintains the time of day, program storage and LCD display for 7 days or more. During power outage relay is de-energized (off).