# Operating Instructions



# MIL 72 Series 24-Hour and 7-Day Universal Time Switches





MIL 72E (Flush Mounting)

MIL 72A (Surface Mounting)

#### **APPLICATION**

Time based control of lighting, ventilating, heating, cooling or other electrical loads in commercial and industrial applications. The MIL 72 time switches are available with a 24-hour or 7-day program dial with a single pole/double throw switch.

The MIL 72A series is intended for surface mounting. The control is completely enclosed in a plastic housing and includes a terminal cover and sub-base for installation and hard wiring.

The MIL 72E is intended for flush (panel) mounting. All units are supplied with a clear plastic cover.

#### **TECHNICAL DATA**

Supply Voltage: Synchronous: 24, 120 and 240VAC,

60Hz models

Quartz: 24V AC/DC, 120 and 240VAC 50/60 Hz

Switch Type: SPDT

Switch Rating: 21A @ 250VAC resistive

1350 W tungsten 1HP @ 120VAC 2HP @ 240VAC

16 FLA, 96 LRA, 120VAC ind. 12 FLA, 72 LRA, 240VAC ind.

Power

Consumption: **24V:** 0.1VA; **120V:** 0.5VA; **240V:** 1.0VA

**Ambient** 

Temperature Range: -40°F to 180°F, synchronous units

-14°F to 131°F, quartz units

Reserve Carryover: 150 hours for quartz units Agency Approvals: UL Recognized

# **INSTALLATION**

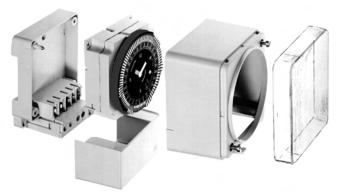
To the installer:

- 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 power and application.
- 3. Disconnect supply power prior to installation to prevent electrical shock.
- 4. Wire in accordance with National and Local electrical code requirements.

The MIL 72 time switch can be surface, flush or rail mounted and is also available with an enclosure for stand-alone applications.

## **SURFACE MOUNTING—MIL 72A**

Remove dust-proof cover, loosen two screws on opposite corners. Remove the housing that surrounds the time switch and the terminal cover away from the base.



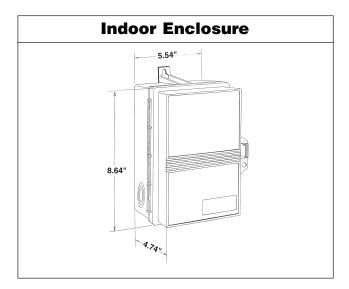
Place screw through pre-set holes in base and screw to back of panel or wall.

Wire in accordance with instructions. Depending upon the specific installation, you may find it more convenient to have wiring completed before attaching the base. Replace terminal cover and push timer firmly onto plug-in base. Now replace housing and secure with screws.

#### **NOTES:**

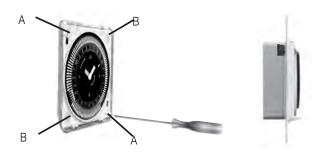
- The MIL 72A may also be DIN rail mounted simply break out housing part that fits over rail on each side.
- 24V quartz unit will operate on 6VDC, 12VDC, or 24VDC

For stand-alone installations, the unit may be surface mounted inside an indoor enclosure which is available from Intermatic Incorporated or your wholesaler.



#### **PANEL MOUNTING—MIL 12E**

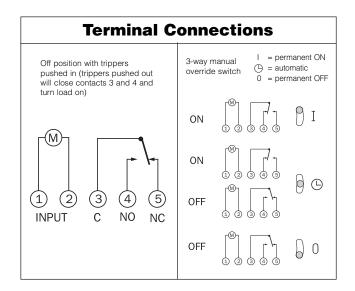
Cut a square hole  $2^5/8$ " x  $2^5/8$ " (66mm x 66mm) in the front of the panel. Insert the time switch through the opening. With screwdriver press down and turn outer screws (A) until flanges are in position to fasten the unit in front panel, then release. Insert plugs into holes as per illustration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



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

## **WIRING**

- 1. Disconnect the power.
- 2. Wire according to the proper voltage marked on the unit. Wiring to incorrect voltage will void the warranty.
- 3. Connect wiring according to the wiring diagram. The terminals on the MIL 72A sub-base will accommodate 10 to 24 AWG wire.



# **PROGRAMMING**

The weekly program dial shows the seven days of the week and AM/PM imprints for each day. The 24hour dial has quarter-hour divisions and AM/PM indications.

The time switch is set by pushing the captive trippers to the outer ring position for the entire period that the load is to be turned ON, i.e., fifteen minutes for each tripper on the 24-hour dial and 2 hours for each tripper on the 7-day dial. When the tripper is pushed to the inside, the switch is in the OFF position.

# **SETTING TIME**

TO SET THE CURRENT TIME (AND DAY OF WEEK ON 7 DAY UNITS), TURN THE MINUTE HAND CLOCKWISE. DO NOT SET THE TIME BY ROTATING "OUTER" DIAL.

Turn the minute hand clockwise until the day of the week (7-day timer) and the time of day on the outer dial is aligned with the triangle marker on the inner dial (two o'clock position).

Example for 7-day program dial Monday 10:30 AM. Turn the minute hand clockwise until Monday 10:30 AM is aligned with the triangle on the inner dial. The hour and minute hand will show exactly 10:30.

Example for 24-hour program dial 10:30 AM. Turn the minute hand clockwise until 10:30 AM is aligned with the triangle on the inner dial. The hour and the minute dial will show exactly 10:30.

#### MANUAL OVERRIDE

All MIL 72 units are available with an optional 3-way manual override (type designation "H").