

STAE Module

12 Hour or 24 Hour, 7 Day Electronic 1-Circuit Timer Module

APPLICATION

Well suited for original equipment manufacturers requiring “timing intelligence” for their products. Applications range from the HVAC industry to security applications, traffic controls, lighting, laboratory use and installation in all types of appliances.

DESCRIPTION

The STAE module has solid state input and output. It provides the timing function, programming keys and time of day display for a multitude of time-of-day control requirements at very low cost.

Conventional supply voltage of 1.5VDC (battery or separate power supply) increases the universal scope of applications for this timer module. It can be integrated directly into electronic circuits with existing C-MOS output.

TECHNICAL DATA

Dimensions (H x W x D) 2" x 2.5" x 0.85" (51 x 64 x 21.5mm)

Panel cutout: 1.85" x 2.36" (47 x 60mm)

Installation depth: 0.55" (14mm)

Weight: 1.8oz (50g)

Supply voltage: 1.30-1.65VDC

Power input: max. 15 μ A/1.50VDC (plus switched power)

Switching capacity: 0.1mA/1.50VDC

Switching output: C-MOS

Operating temperature range: 14°F to 122°F (–10°C to +50°C)

Time base: Standard crystal oscillator 32.768kHz

Operational accuracy: \pm 1sec. per day at 20°C

Number of storage spaces: 6 x ON; 6 x OFF

Shortest switching time: 1 minute

Display: Liquid crystal, 7-segment, 0.35" (9mm)

Manual override: Yes

Switching status indicator: Yes

Connection: 3 pin or 3 stranded wires, 3.5" (90mm) long

Special functions: Multiple day switching groups, day-week program

Operation: Via key pad

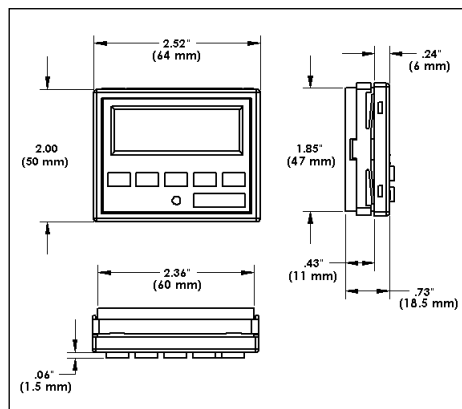
Time display: Models available with either AM/PM or 24:00 hr. military time



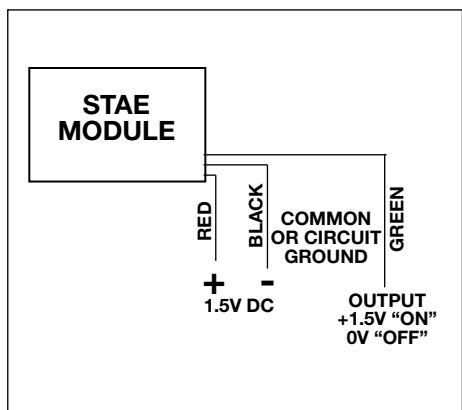
INSTALLATION

The small size makes this unit particularly well suited for applications with stringent size requirements. Snap-in mounting of these units facilitates mounting and installation. The flush panel module is delivered with 3 wire leads.

Dimensions





Wiring Connections



PROGRAMMING

The STAE 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 STAE displays in AM/PM format (24:00 hr. "military time" modules are available).


SETTING TIME AND DAY OF CLOCK

1. Depress the **Reset** button.
2. Depress and hold the clock symbol key  during entire time setting procedure.
3. If being used as a 7 day timer, 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 flash-ing indicating the timer has started.

PROGRAMMING

1. Press **Timer** once (do not keep depressed). The display will show "1ON" 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. The unit will display all the days (MO, TU, WE, TH, FR, SA, SU) indicating that the program will execute on all days. Do not press **Day** key.
4. If the event is to occur only on selected days of the week, press **Day** key to select the desired day of the week. Successive depressing of the **Day** key beyond Sunday will bring the following blocks of days into the display.
 - Monday through Friday
 - Saturday and Sunday
 - Monday through Saturday

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 1 "OFF".
6. Program OFF command using steps 2-5 above.
7. Repeat steps 2-6 for up to 6 programs.
6. Press  key to return to time of day display.


REVIEW AND CHANGE OF 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.

CANCELLING PROGRAMS

Use procedure above to bring program to be canceled into display. Use **m+** key and then **h+** key to set minutes and then hours to null position, "--:--". 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 OVERRIDE

1. Press override key  to turn load ON and OFF without affecting the stored programs (temporary override).