

EM11A Dual Channel Event Timer - User's Manual (Rev. 1)

Specifications

Max. Cycle Time

127 seconds in high resolution mode

254 seconds in low resolution mode

Timing Resolution

1/8 second in high resolution mode

1/4 second in low resolution mode

Unit Cascading

Unlimited number of units can be cascaded.

Max. Relay Load

12A @ 120VAC, 10A @ 240VAC/28VDC

Power Requirement

12V DC, 200 mA

Physical Dimensions

4.25" x 2.75" x 1.6" excluding mounting ears

Inputs & Outputs

Power Jack: VDC

Use a power adaptor capable of providing at least 200 mA at 12V DC, with a 2.1mm center positive coaxial plug. There is no power on/off switch.

Power Light: PWR

The power light will be turned on when power is applied.

Trigger Input Terminal: TRG

Depending on how the switch #2 is set, the unit can be triggered by either making or breaking the connection between the trigger input and the ground (GND). This can be achieved through various devices such as push buttons, pressure mats, and motion sensors with dry contacts.

Reset & Cascade Terminal : RST/CAS

This terminal serves as both reset input and cascade output.

The unit can be reset at any time by shorting this terminal to the ground (GND). The timing cycle, if active at the moment, will be stopped immediately.

See the *Cascading Units* section for the cascade function.

Relay Output Terminals: N.C. / N.O. / COM

Both normally closed (N.C.) and normally open (N.O.) contacts are available for controlling external devices.

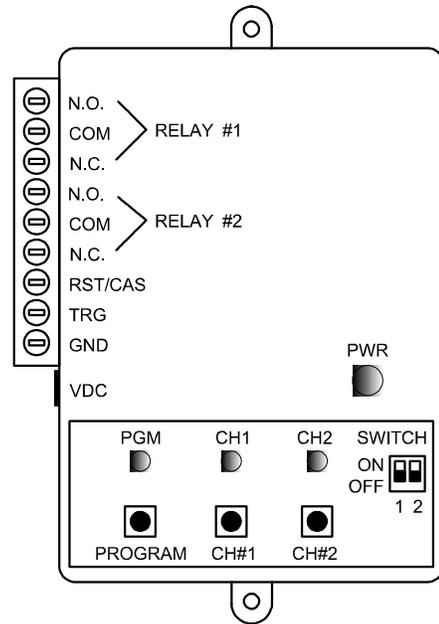
Teach-n-Learn™ Programming

The timing cycle can be programmed into the unit with the following Teach-n-Learn™ procedures:

1. Remove the front cover and press the PROGRAM button. The PGM light will be turned on.

2. Relay #1 is programmed by pressing/holding the CH#1 button at the desired moment for the desired duration. The CH1 light will be lit when relay #1 is on. Use the CH#2 button to program relay #2. Both relays must be programmed within the same cycle. There is no limit on the number of times the relay can turn on/off.

3. Press the PROGRAM button again to end the programming. The timing cycle is now stored in non-volatile memory. The unit can be re-programmed for thousands of times if necessary.



Switch Settings

Switch #1

OFF = high resolution mode (1/8 second)

ON = low resolution mode (1/4 second)

Switch #2

OFF = normally open trigger

(connect TRG to GND to trigger)

ON = normally closed trigger

(disconnect TRG from GND to trigger)

Timing Resolution

The unit has an internal clock that, when the unit is triggered, starts ticking once every 1/4 or 1/8 second depending on the resolution. Relays get turned on/off on the tick only, not between ticks. Therefore, higher resolution means more accurate timing.

Cascading Units

At the very end of the timing cycle, the RST/CAS terminal turns into an open collector output for 0.1 second. This pulse can be used to trigger another unit (which must be configured for normally open trigger.)

