

# ES560 Module Installation Instructions

*Electronic Solutions Inc.*

## Wiring

Refer to the wiring diagrams at the bottom of page 2 for typical applications. Be sure to choose the correct diagram. The ES560 module is equipped with two sets of dry output contacts rated 3A at 28VDC.

The power requirement is 16-24 VAC or 24-35 VDC at 80mA maximum. Power may be obtained from many compatible door controls without the need for an extra transformer.

The ES560 is triggered by a dry contact between CN1-9 and CN1-10. The input burden is 24VDC at 10 mA or less.



**IMPORTANT:** Although the ES560 has built in spike protection devices for the lock contacts, if erratic operation occurs, it may be necessary to provide an additional device (varistor or MOV) across the lock coil. *Normally, this will only be required in extreme situations.*

## Operation

The ES560 functions as a standard strike interface, releasing a mortise strike or magnetic lock, then actuating the door after a short delay. Set the DIP switches on the module as follows:

DIP switches 1-3 set the unlock delay. The first chart on page 2 shows the delays obtained for various settings of these switches. Values of 1-8 seconds may be chosen.

DIP switches 4-5 set the interval between door unlocking and door actuation. The second chart on page 2 shows the delays obtained for various settings of these switches. Values of 0.5, 1, 1.5, or 2 seconds may be chosen. A typical setting for magnetic locks is 1 second. If a mortise strike is used, this value may be reduced. *If the interval delay is set too low, the door will jam.*

DIP switches 6-8 set the door actuation delay (dwell time). The first chart on page 2 shows the delays obtained for various settings of these switches. Values of 1-8 seconds may be chosen.

Set DIP switch 9 to *off* if the lock drops out after its timer expires regardless of whether the door is still open or not, or to *on* if the lock is to remain unlocked through the door dwell time. Normally this switch is left *off*, which prevents buzzing or burn-out of inexpensive mortise strikes.

DIP switch 10 is currently reserved for future use.

The INPUT indicator shows when a trigger input is being received by the ES560.

When the unit is idle, the STATUS indicator blinks once every five seconds. This "heartbeat" indicator shows that the ES560 is functional and is awaiting an input trigger signal.

When the door is unlocking and is about to open, the STATUS indicator blinks rapidly.

When the door is being commanded to open, the STATUS indicator lights solid.

When the door has been released to close, but is still unlocked, the STATUS indicator blinks slowly.

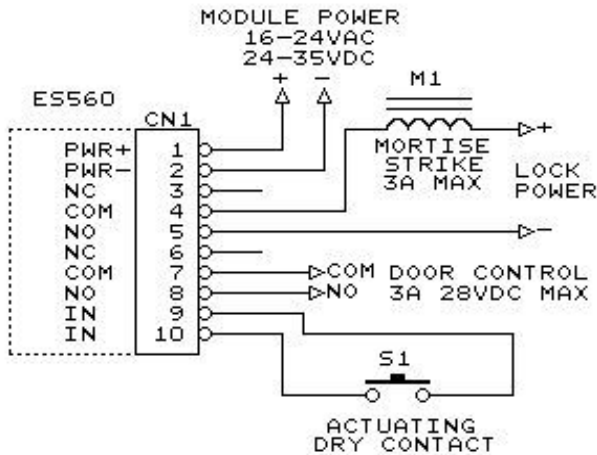
## UNLOCK [DIP1-3] & (DOOR) [DIP 6-8] DELAYS

DIP1 (DIP6)	DIP2 (DIP7)	DIP3 (DIP8)	DELAY
OFF	OFF	OFF	1
OFF	OFF	ON	2
OFF	ON	OFF	3
OFF	ON	ON	4
ON	OFF	OFF	5
ON	OFF	ON	6
ON	ON	OFF	7
ON	ON	ON	8

## INTERVAL [DIP4-5] DELAYS

DIP4	DIP5	DELAY
OFF	OFF	0.5
OFF	ON	1
ON	OFF	1.5
ON	ON	2

TYPICAL APPLICATION – MORTISE STRIKE



TYPICAL APPLICATION – MAG LOCK

