EDS-15

# BI-DIRECTIONAL DOOR SEQUENCER

Version II

# **INSTALLATION MANUAL**



Entrex Door Controls Inc.

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### <u>Technical Specifications</u> <u>for</u> <u>Mdl # EDS-15</u> <u>Bi-Directional Door Sequencer</u>

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Model	EDS-15
Size	3" x 6" x 2".
Enclosure	ABS plastic. Others optional
Mounting	Double sided tape, or screws.
Colour	Black. Others optional
Operating Voltage	24 VAC ±15%
Current Draw	100 mA
Response Time	.03 seconds
Inputs	Up to 3 x N.O. dry Contacts.
Outputs	Three standard Form 'C' relay
	contacts. One has ability to
	supply 24VAC switched power
	to an Electric Strike.
Contact Rating	10 Amps @ 277VAC, or 30
	VDC
Electrical Life	500,000 operations @ 1/2 rated
	capacity
Indicators	Power On L.E.D., and Relay
	On L.E.D.'s.
Time Delays	Four standard.
#1 D.O.R Door "B"	#1 3 - 30 seconds
#2 Sequence Delay.	#2 1 - 15 seconds
#3 D.O.R. for Strike (A)	#3 1 - 15 seconds
#4 D.O.R. Door "A"	#4 3 - 30 seconds

These specifications are subject to change without notice!

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#### EDS-15 Bi-Directional Door Sequencer

#### **Direction of travel-B-**

When Wallswitch 'B' is depressed, Door 'B' (Relay 3) opens immediately. The delay-on-release is adjustable from 3-30 seconds.

After an adjustable delay of 1-15 seconds, Relay 1 energizes. This output could be connected to an electric strike, shunt an alarm, or be used as a status monitor (door chime). This output has a delay-on-release of 1-15 seconds.

After a *fixed* delay of 1/2 second, Door 'A' opens (relay 2). This output has a delay-on-release of 3-30 seconds.

If there is no connection to Relay 1, then turn down Timer #3. Total delay time is calculated as (Delay-on-operate (1-15 sec.) *plus* 1/2 second).

#### **Direction of travel-A-**

When Wallswitch 'A' is depressed, an immediate signal is sent to the Strike, if connected. The delay on release is adjustable from 1-15 seconds.

After 1/2 second, Door 'A' opens (relay 2). The delay-on-release is adjustable from 3-30 seconds.

After an adjustable delay of 1-15 seconds Door 'B' (Relay 3) opens. The delayon-release is adjustable from 3-30 seconds

#### **Emergency Switch**

This switch is located in the vestibule and is to be used only in the case of entrapment. It will open whichever door you deem appropriate (usually the exterior door). Selecting the door is done by a **jumpers.** 

If only JB1 is installed, then Door "A" activates (Relay 3).

If only JB2 is installed, then Door "B" activates (Relay's 1 & 2).

If neither Jumper is installed, then BOTH doors will open with the Emergency switch. If both Jumpers are installed, then LOGIC MODE is active. The proper door is activated based on which wallswitch was last pushed, i.e – the opposite door.

#### Recycling

At any time, either Wallswitch may be pushed thereby opening it's respective door and initiating (or restarting) the timing sequence. While this may leave both doors open longer than desired, it is necessary to prevent "lock-out", or "locked-in" conditions. The goal is not to create a perfect *Mantrap*, but to economize on heating/cooling of the building. Also, at any time, the Emergency switch may be used to open a door.

#### <u>#EDS-15</u>

#### **INSTALLATION INSTRUCTIONS**

- The EDS-15 may be located at either door location, or, centrally to both doors. You must bring wiring from <u>all</u> door *actuators* to this unit. The EDS-15 has three outputs- one for the strike (if equipped), and one for each door operator. Wire to the *Activate* and *Common* terminals of your door operator.
  NOTE: <u>Do not</u> wire *Safety devices* to the EDS-15. If installed, wire your safety device directly to the operator control box as per usual.
- 2. Remove 4 Phillips screws and carefully pry up lid, observing the cable harness for the L.E.D.. Let the Lid hang below the box so you can view the diagram inside lid.
- 3. If one of your doors has an electric strike, then this door is designated **Door "A"**. Door "A" always has the strike. If Door "A" is the exterior door, then remove jumper **-JB1**. If door "A" is the interior door, then door "B" is the exterior door, and you will leave the jumper in place. This presumes you wish the Emergency Vestibule switch to open the *exterior* door.
- 4. We suggest that you leave the fuse in <u>Position One</u>. This gives *Dry Contacts* out to the strike (Term's 3 or 4, &5). If you prefer to supply 24VAC switched power directly to the strike, remove the single fuse, and along with a second fuse, place into <u>Position Two</u>. This will now send 24VAC from the EDS-15 directly to the strike. It is important that you match the Power Supply to the EDS-15 with the *Load rating* of the electric strike. (i.e. If the strike draws 1 Amp, use a 2 Amp transformer).
- 5. Now bring the wiring into the unit through the two supplied squeeze connectors, and connect to the respective terminals. Ensure there are no loose strands of wire touching the board, or other terminals.
- 6. Switch on the power supply to the EDS-15, and observe the Green L.E.D. on the Lid. An On/Off switch may be used to interrupt the 24VAC entering the EDS-15.
- 7. Test unit for proper operation. Moderate time delay settings have been programmed in at our factory, however adjustments to the potentiometers will most likely be necessary due to the varying lengths of vestibules.

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# <u>EDS-15</u>

## Table of Features and Benefits

FEATURES	BENEFITS
•Compact Size 3" x 6" x 2"	You can place anywhere, even inside the Operator header if you wish.
•Electric Strike Compatibility	Either one of the doors can have an electric lock, which will be unlocked a 1/2 second <i>before</i> the door operator is signalled.
•Self contained	Simplifies wiring. Bring all the Inputs and Outputs to one box. Every device has it's own terminal, putting an end to confusing wiring.
•Fully adjustable	Four potentiometers allow generous timing ranges for the strike hold time, operator delay on release times, and sequence delay between the doors.
•Door -select jumpers	By moving two jumper you may select which door(s) open(s) with the <i>Emergency</i> <i>Vestibule Switch</i> . <i>Now with LOGIC MODE</i> , an <i>Entrex</i> <i>Exclusive</i> !
•10 Amp relays	Oversize relays ensure reliability, and compatibility with older style strikes, or magnets.
•Actuation L.E.D's	A Power-On L.E.D., and three Relay L.E.D.'s simplify installation and trouble shooting.
•Adjustable Fuse position	You can select either dry contacts for the strike, or, 24VAC switched power directly to the strike, thereby simplifying wiring.

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