



# Entrex

## International Ltd.

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Toll Free 1-800 MOTIONS

# #ES-100C

## DOOR SEQUENCER

QTY = 1

MADE IN  
CANADA



## General Description

The Entrex Mdl. ES-100C is designed to sequence a set of two Automatic Doors. The ES-100C converts a single input from a Wall switch and provides an immediate output for the first door operator. After a user adjustable delay, a relay closure is made to signal the second automatic door operator. Both relay outputs have user adjustable delay on release timers. **Note:** This relay will allow a recycle while partway through the initial cycle. It also is not intended for *mantrap* applications.

For Bi-directional door sequencing please use our Model EDS-15 Door Sequencer. For Electric strike/Door operator applications please use our Model ES-10 or, EJ-11 Jr. Switching Networks.

## Installation

The ES-100C is typically mounted as close as possible to one of the automatic door operators, preferably in a clean, dry location. It can be loosely tucked into the operator header, or fastened using the supplied double-sided tape.

### **DO NOT DRILL INTO THE CASE!**

Mount the ES-100C with consideration given to accessibility of wiring and adjustments.

The terminal strip is accessible by removing the four Phillips machine screws holding cover. A wiring label is found under the cover.

Feed all wires through the expandable water-tight connector. Gently pry up on one end of the terminal strip and lift straight up.

Once all connections are made press the strip back down onto the pins, straighten wiring and tighten expansion nut securely.

**DO NOT ATTEMPT TO REMOVE CIRCUIT BOARD!**

## Wiring

### Step 1 - Input Connections

Connect the normally open contacts of your *Activating device* to terminals 3 and 4. **Note:** The switch contacts **must** be **isolated!** This is especially true for Radio Receivers which are typically 3-wire! Contact Entrex if in doubt.

Note: It is strongly advised to install a switch inside the vestibule connected directly to the exterior operator to avoid entrapment.

### Step 2 - Relay "1" Connections

Terminals 5 to 7 are Relay "1" contacts and are for the first door operator. Usually the Common (#6), and N.O. (#5) terminals are used.

### Step 3 - Relay "2" Connections

Terminals 8 to 10 (Relay "2" contacts) are intended for connection to the second door operator. Relay "2" is the *delayed* output, with delay adjustable from 1 to 30 seconds. The door operator is normally connected to the Common(#9), and N.O. (#8) terminals.

### Step 4 - Power Supply Connections

Once all other wiring connections have been made, the supply voltage 12 - 24V AC or DC, can be connected to Terminals 1 and 2. Current draw is minimal, so power can be obtained directly from the operator, or, from a separate transformer.

## Adjustments

### Potentiometer Adjustments

Delay on release (D.O.R.) timers are available on both Relay "1" and Relay "2", and are adjustable from 1 - 30 seconds.

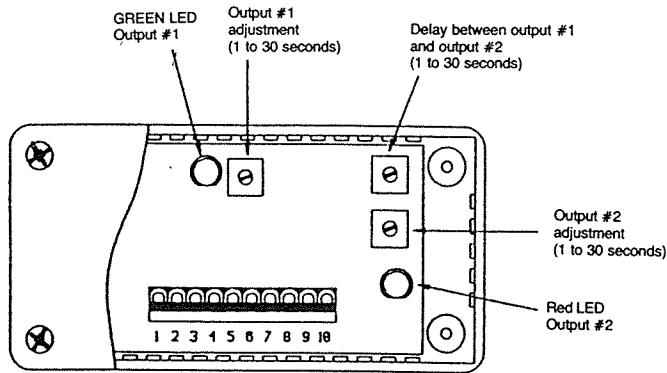
Delay on operate (D.O.O.) is available on Relay "2", and is adjustable from 1 - 30 seconds.

# Specifications

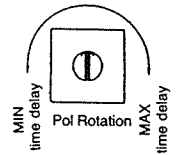
Model..... ES-100C  
 Enclosure..... ABS Flame retardant plastic  
 Colour..... Black Std. Others opt.  
 Mounting..... Double sided foam tape  
 Dimensions..... 2.5" x 4.7" x 1.4"  
 Operating Voltage ..... 12-24 V AC or DC  
 Current draw..... 50ma  
 Response Time ..... 0.03 Seconds  
 Relay Outputs..... #1 & 2 - Form 'C' dry.  
 Time Delays ..... D.O.O. 1 - 30 seconds  
 ..... D.O.R. 1 - 30 seconds

# Warranty

Entrex International Ltd. guarantees the ES-100C to be free from manufacturing defects for 12 months from date of sale. If during the first 12 months the ES-100C fails to perform correctly, it may be returned prepaid to our factory where it will be repaired or replaced (at our discretion) without charge. Except as stated herein, Entrex extends no warranties expressed or implied regarding function, performance or service.



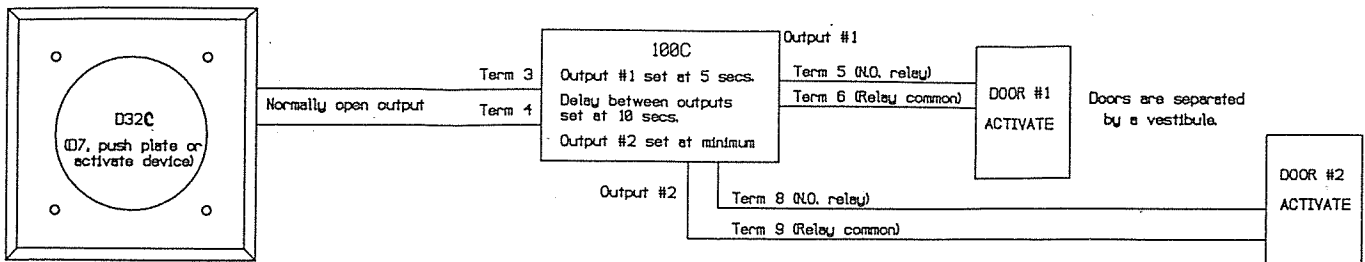
Term 1 & 2	12-24V AC or DC	
Term 3 & 4	Contact Closure Input (from activator)	
Term 5	N.O. Relay	Output #1
Term 6	Relay Common	
Term 7	N.C. Relay	
Term 8	N.O. Relay	Output #2
Term 9	Relay Common	
Term 10	N.C. Relay	



Sequence is initiated by a momentary contact closure on the input terminals (3 & 4). Output #1 relay immediately changes state and the green LED illuminates to indicate it has been activated. Then, 1 to 30 seconds later (depending on the delay between outputs adjustment), Output #2 relay changes state and the red LED illuminates to indicate it has been activated.

The relay releases time for Outputs #1 & #2 can be adjusted from 1 to 30 seconds.

## SEQUENCING APPLICATION



Door #1 will open when the push plate or other activation device is triggered. It will hold open for 5 seconds after activation stops. Door #2 will open 10 seconds after activation (controlled by delay between output pots).