

# **EWC-18**

## **WASHROOM DOOR CONTROL RELAY**

Version 2.0

### **INSTALLATION MANUAL**



**Entrex Door Controls Inc.**

## Entrex International Ltd.

### EWC-18

#### Table of Features and Benefits

FEATURES	BENEFITS
<ul style="list-style-type: none"><li>• Compact Size 3" x 6" x 2"</li><li>• Door Contact Input</li><li>• Self contained</li><li>Panic Switch Input</li><li>• Fully adjustable</li><li>• Time-out jumper (Safety feature)</li><li>• 10 Amp relays</li><li>• Actuation L.E.D's</li><li>• Adjustable Fuse position</li></ul>	<p>You can place anywhere, even inside the Operator header if you wish.</p> <p>By utilizing a hidden magnetic contact switch, even manually opening the door will put the system in <i>unlock mode</i>. Simplifies wiring. Bring all the Inputs and Outputs to one box. Every device has it's own terminal, putting an end to confusing wiring.</p> <p>A Panic switch input is now provided whereby the occupant can signal for assistance. The door will automatically unlock and open (and remain open) until the switch is reset.</p> <p>A fixed time delay of 0.5 seconds allows the lock to retract before the operator energizes. The operator hold-open time is adjustable from 3-30 seconds. The Panic switch output can be maintained or pulsing. By moving a jumper you may select whether the door can stay locked indefinitely, or, automatically <i>unlock</i> after a preset time of fifteen minutes.</p> <p>Oversize relays ensure reliability, and compatibility with older style strikes, or magnets. Alternatively, you could use this output for a lighted sign instead of a door lock.</p> <p>A Power-On L.E.D., and two Relay L.E.D.'s simplify installation and trouble shooting.</p> <p>You can select either dry contacts for the strike, or, 24VAC switched power directly to the strike, thereby simplifying wiring.</p>

**ENTREX**  
**#EWC-18**  
**WASHROOM DOOR**  
**Control Relay**

Theory of Operation

**Automatic Operation:**

Entering automatically is accomplished by pushing the exterior Wall switch. If the Washroom is unoccupied, the door will open automatically. If the Washroom *is* occupied then the door will not open, and may be locked (if the occupant pushed the interior Lock button).

After entering the Washroom, the occupant may push a 1 5/8" Red *Lock* button, which will energize an electric strike, and remove the exterior Push switch from the circuit.

When the occupant desires to exit the Washroom, several options are available. To have the door unlock and open automatically, he/she simply pushes the interior Wall switch. This will reset the EWC-18 to standby mode.

**Manual Use:**

The door may be used manually. If the Washroom is unoccupied, enter by simply pushing (pulling) the door open. Once inside, the door may be locked by pushing the red *Lock* button. To exit the Washroom, turn the (lever) handle and pull (push) the door open. Whenever a *locked* door is opened manually, a concealed magnet switch resets the unit into standby mode.

**Emergency Panic Switch:**

This version of the EWC-18 will accept a maintained input on Terminals 9 & 10. Should an emergency situation occur and assistance from outside be required, the occupant can push a maintaining type push button. The EWC-18 will unlock, then open the Automatic door. (The maintaining type switch is required to keep the door held open continuously). Further, Relay #3 is now activated. This output is used to signal for assistance (visual and/or audible). The installer can choose a continuous, or a pulsing output, with user adjustable On and Off times. Reset of the unit is accomplished by pulling the switch by hand (or key).

**Emergency Time-out Feature:**

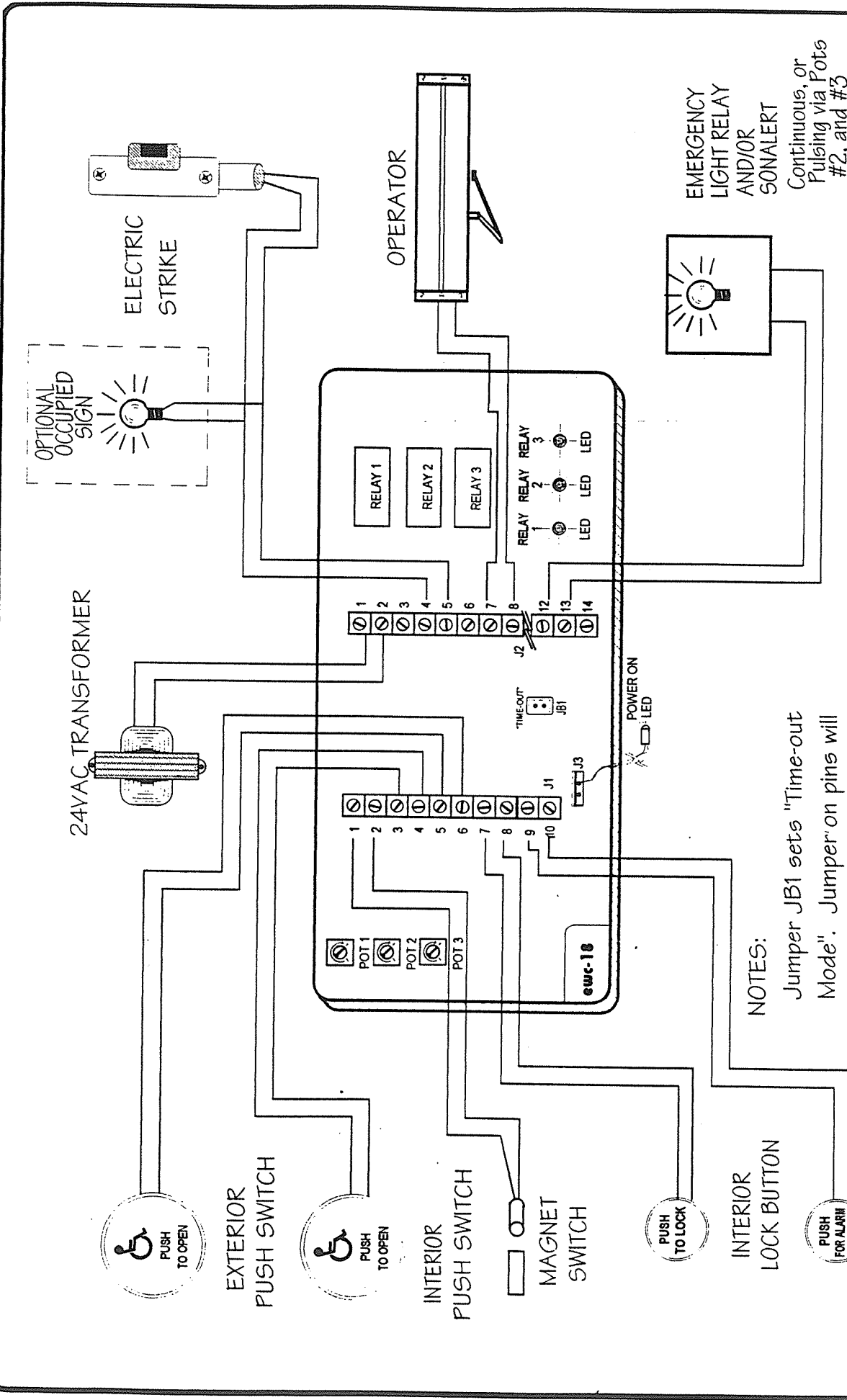
An added safety feature in the EWC-18 is the ability to automatically reset to standby mode after a fixed time period of 15 minutes. This feature may be overridden by removing a jumper on the circuit board.

Technical Specifications  
for  
**Mdl # EWC-18**

Washroom Door Control Relay

<b>Model</b>	<b>EWC-18</b>
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 $\pm$ 15%
Current Draw	100 mA
Response Time	.03 seconds
Inputs	Up to 5 x N.O. dry Contacts.
Outputs	Three standard Form 'C' relays One has ability to supply 24VAC switched power to an Electric Strike. Another signals the door operator. The third is for an Emergency annunciator or light, etc.
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	Three standard.
#1 D.O.R. for Operator	3 - 30 seconds
#2 D.O.O. for Relay #3	0.1 - 3 seconds
#3 D.O.R. for Relay #3	0.1 - Infinity

These specifications are subject to change without notice!



**NOTES:**

- Jumper JB1 sets "Time-out Mode". Jumper on pins will allow the EWC-18 to reset to Standby mode (unlock door) after 15 minutes.
- Jumper off the pins defeats this feature.

DWP FILE NO		EWCWNG-SKD		TITLE	
DRAWN BY	DATE	#EWC-18 WASHROOM CONTROL			
D. G. WOODWORTH	09/01/95	SCHEMATIC DIAGRAM WITH PANIC			
DESIGNED BY	SIZE	EWC-18			
D.G.W.	NONE	950901-01 REV.1			
CUSTOMER ORDER NO	SCALE	NONE			
CUSTOMER NAME	SHEET	1 OF 1			

EMERGENCY LIGHT RELAY AND/OR SONALERT  
 Continuous, or Pulsing via Pots #2, and #3