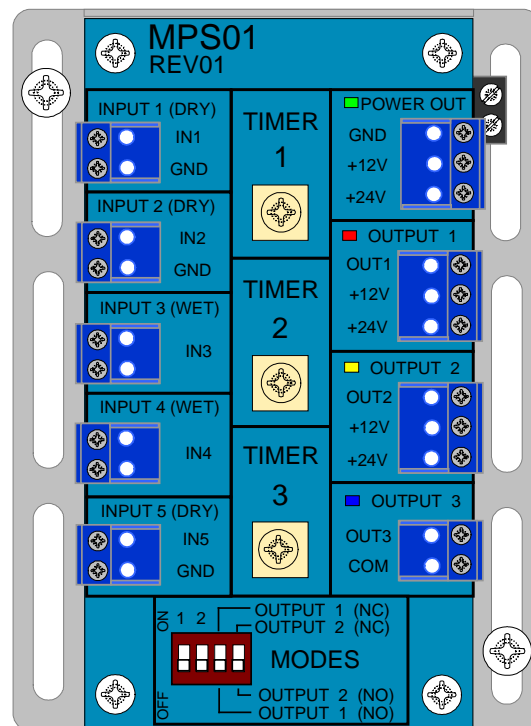

MPS01 - Multi-function Power Supply

Instruction Manual

Document number: MPS01-C

Release: V1.0

Date: OCT 2017



(Company name /address/phone number)

MPS01 Description

The MPS01 power supply is design to power electric locks for applications such as access and automatic doors. This MPS01 can be powered by a 85 - 240 VAC source (Max 100W). The power supply can be used to power 12 VDC and/or 24 VDC loads up to 4 Amps (Ex: Electric exit devices, electric strikes and/or maglocks).

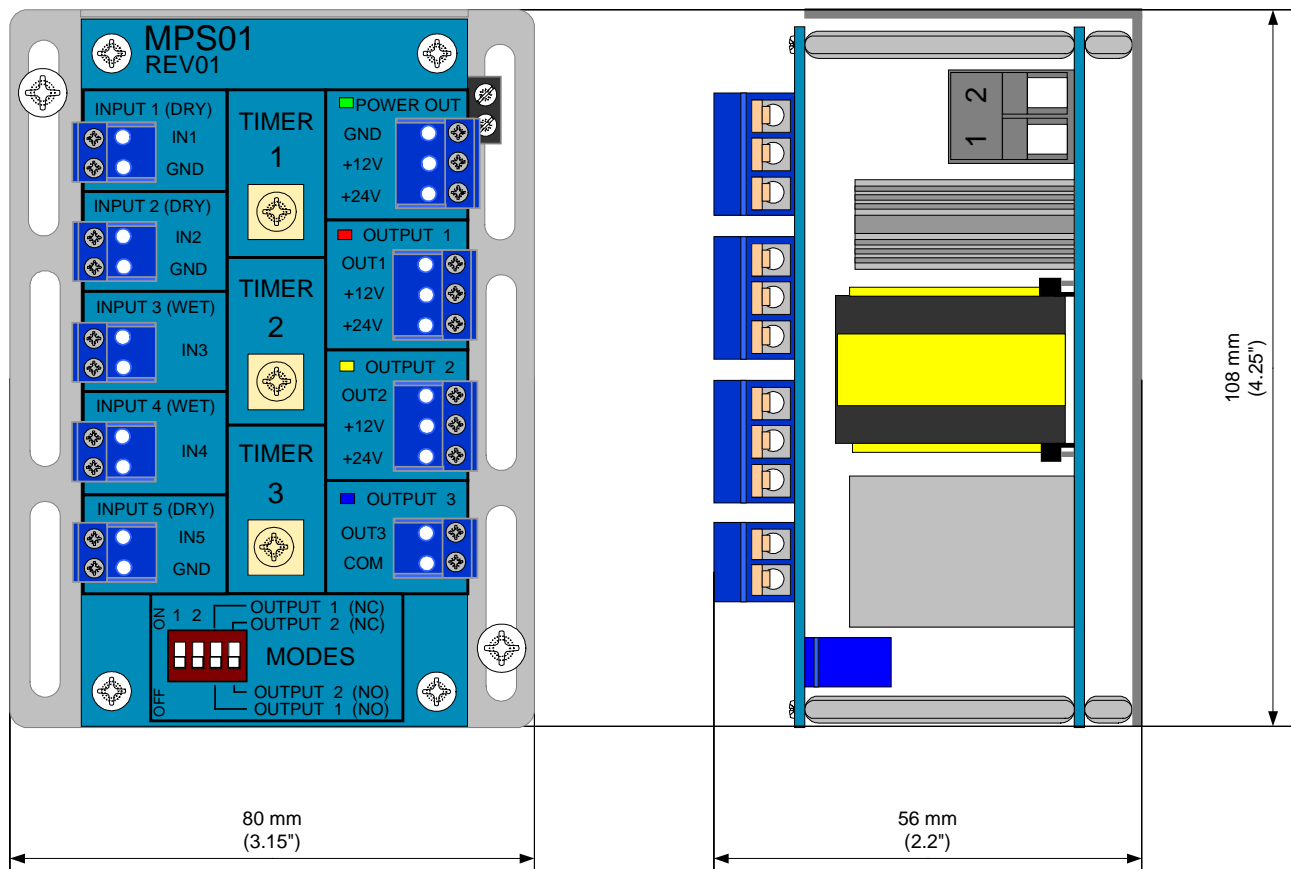
The MPS01 power supply provides logic functionalities such as lock/operator sequencer and handicap washroom control.

Here are some of the benefits;

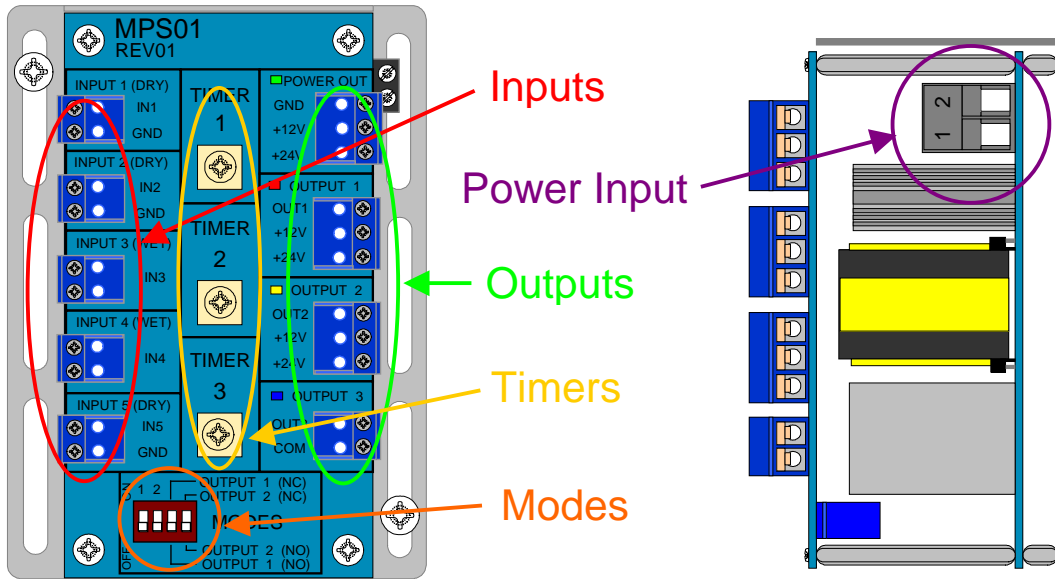
- Small - Fits in automatic door operator enclosures
- Powerful - Can drive constant 12 VDC and/or 24VDC loads up to 4A
- Logic onboard - Lock/operator sequencer, handicap washroom control
- Short circuit protected - (No fuse to replace)
- Plug-in terminal blocks - All connectors can be unplugged without removing wires
- Solid state output (No mechanical relays)
- Fire alarm input
- Simple to use

MPS01 Physical Dimensions

Note: Dimensions are in metric (imperial). mm (inches)



MPS01 Physical Description



1 **Installation**

1.1 **Mounting**

Mount the MPS01 power supply in the operator's enclosure or other enclosure using a minimum of two screws. See example **Figure 1 MPS front view**

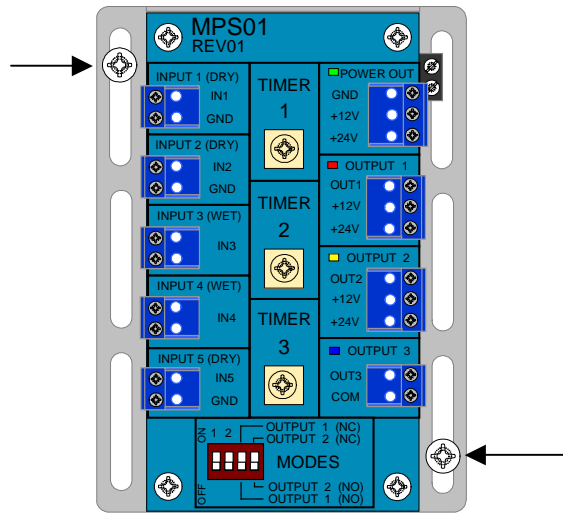


Figure 1 MPS front view

1.2 **Power Input**

Connect the MPS01 to a power source, see **Figure 2 MPS side view**
 Power source: 85VAC to 240VAC (Max 100W)

Connect AC ground (Green 18AWG wire), AC neutral and AC line to the power source.

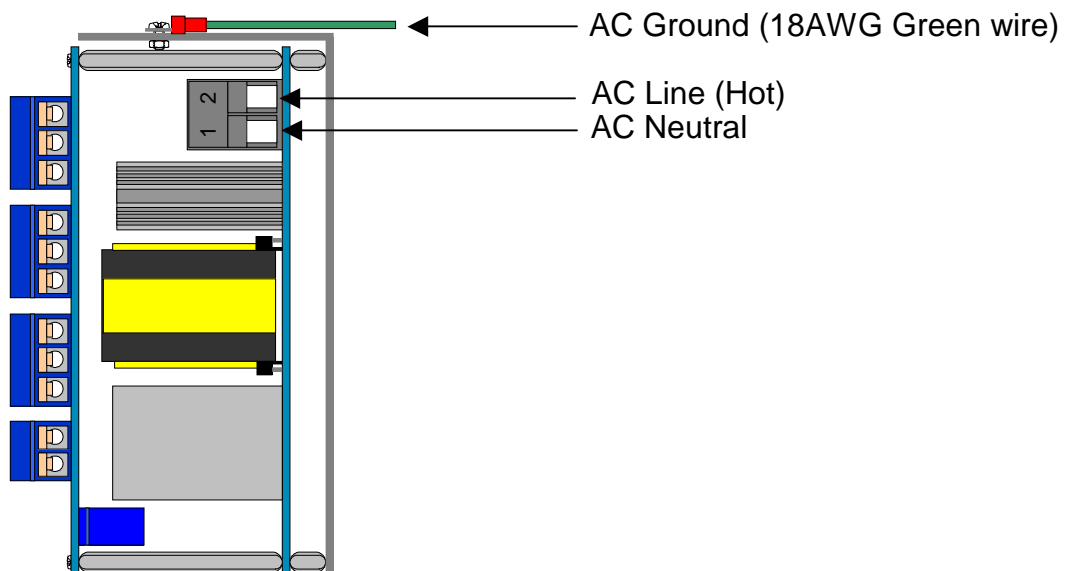


Figure 2 MPS side view

1.3 Modes

The MPS01 inputs and outputs are configured by the Modes switches. Switches 1 & 2 are used to select the function needed. Refer to **Table 1 Operation modes**. If the MPS01 is used as a power supply only, disregard the Modes switches and connect the loads to the "POWER OUT" terminal block.

MODES	Switches		INPUTS					OUTPUTS		
	1	2	IN1 (DRY)	IN2 (DRY)	IN3 (WET)	IN4 (WET)	IN5 (DRY)	OUT1	OUT2	OUT3
Access sequencer	OFF	OFF	Interior button	Exterior button	Unlock	(Not used)	Fire	Lock 1	Lock 2	Operator activation
Single washroom (Normally unlocked)	ON	OFF	Interior button	Exterior button	Push to lock	Door close	Request assistance	Lock	Occupied light	Operator activation
Single washroom (Normally locked)	OFF	ON	Interior button	Exterior button	Push to lock	Door close	Request assistance	Lock	Occupied light	Operator activation
(Reserve for future)	ON	ON								

Table 1 Operation modes

The output1 and output2 can be configured as "normally opened" or "normally closed" with modes switches #3 and #4. Refer to **Table 2 Output 1 & 2 configuration**. Note: Output3 is always configured as "normally opened".

Switches		OUTPUTS		
3	4	OUTPUT1	OUTPUT2	OUTPUT3
OFF	OFF	Normally open	Normally open	Normally open
ON	OFF	Normally close	Normally open	Normally open
OFF	ON	Normally open	Normally close	Normally open
ON	ON	Normally close	Normally close	Normally open

Table 2 Output 1 & 2 configuration

1.4 Timers

The MPS01 has three adjustable timers. Refer to **Table 3 Timer descriptions**

Timers	Description	Potentiometer value
1	After trigger is received, Timer 1 is the lock output active length (In seconds).	1-15 seconds
2	Timer 2 is the delay between the beginning of the lock output and the start of the operator activation output (In seconds).	1-10 seconds
3	The length of the activation time after the trigger is removed	1-30 seconds

Table 3 Timer descriptions

1.5 Power Supply (Only)

Connect the MPS01 to supply to loads, see **Figure 3 Power Supply (Only)**

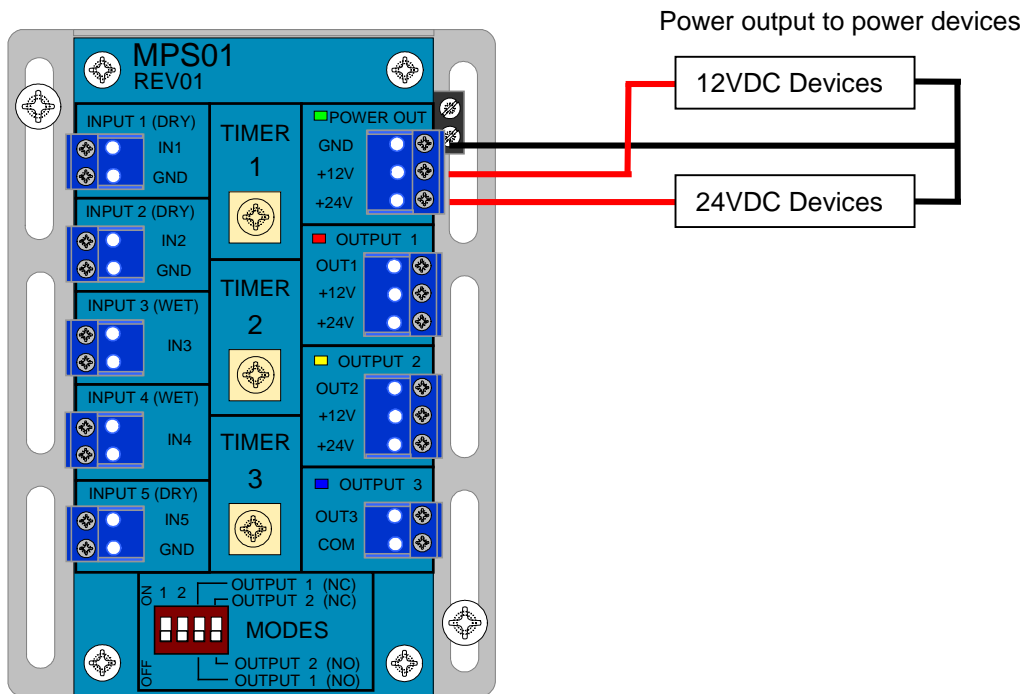


Figure 3 Power Supply (Only)

1.6 Access Mode

Connect the MPS01 inputs to switches and access, see **Figure 4 Access mode**

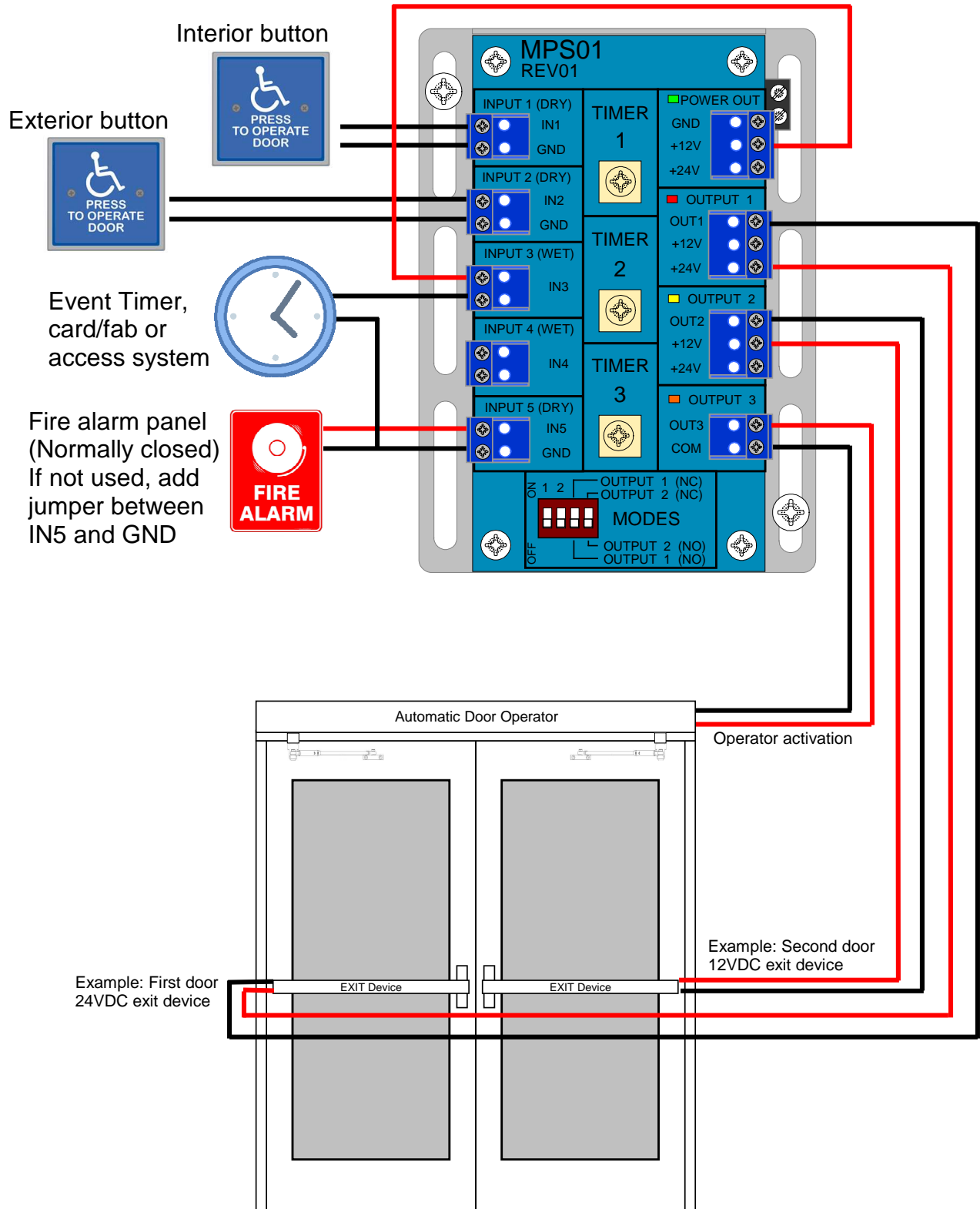


Figure 4 Access mode

1.7 Washroom Mode

Connect the MPS01 inputs to switches and access, see **Figure 5 Washroom mode**

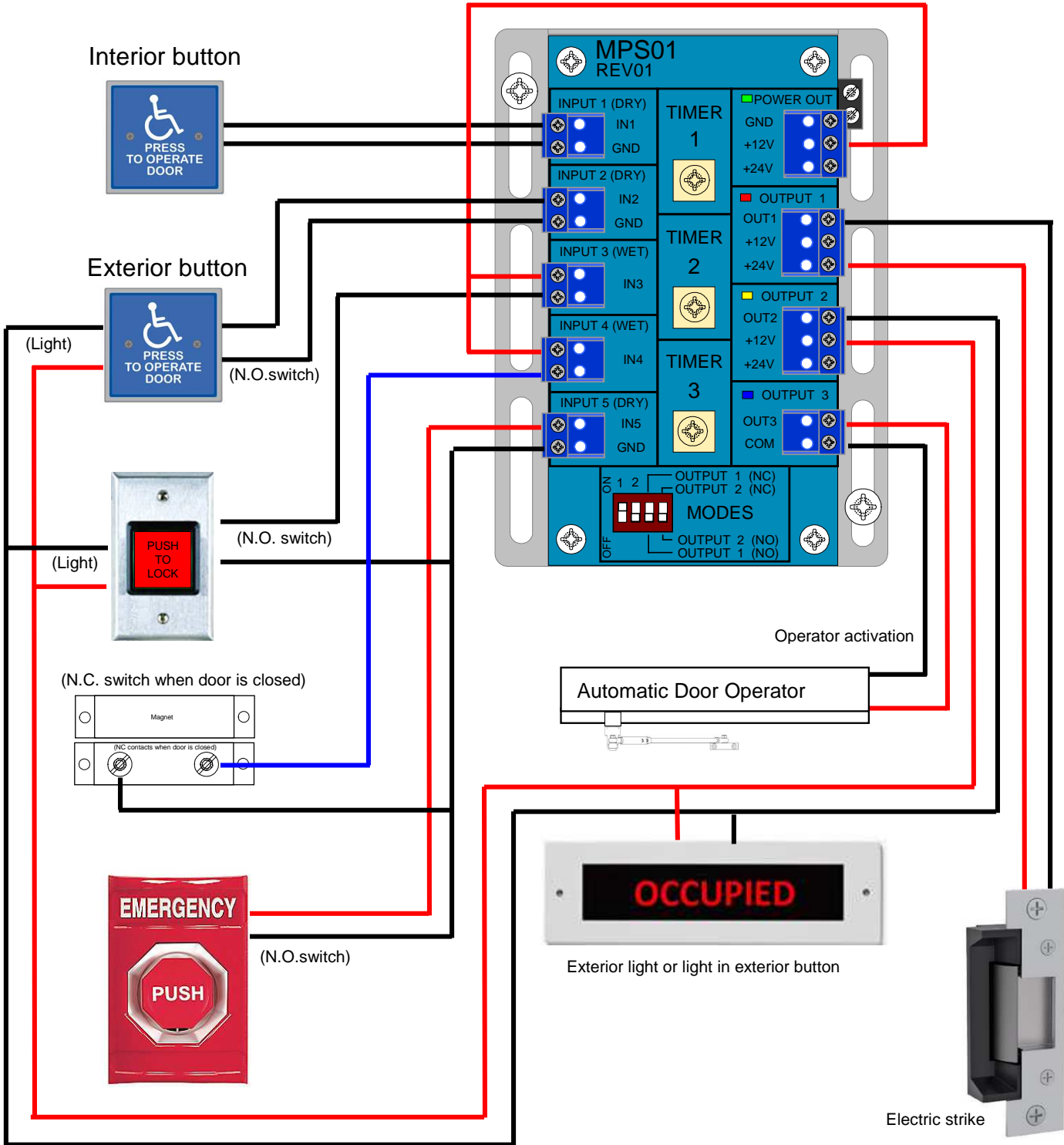


Figure 5 Washroom mode

1.8 Power Out and Outputs (Examples)

Connect the MPS01 to devices and locks, see **Figure 6 Power Out and Outputs**.

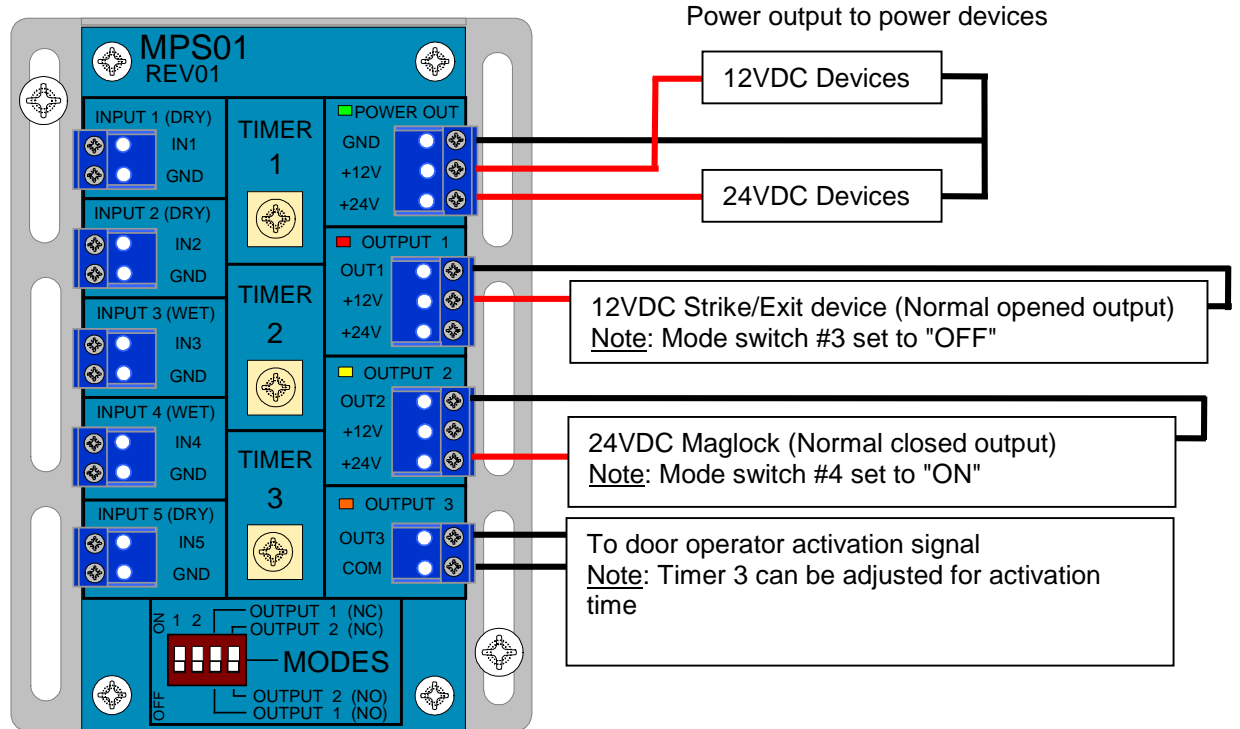


Figure 6 Power Out and Outputs