

# Elmdene International Ltd

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**PSUIR-xx** 

Models:

**PSU Interface Relay** 

PSUIR-12 12Vdc Version PSUIR-24
24Vdc Version

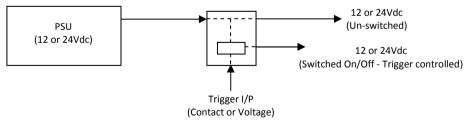
## **FEATURES**

- Available in 12Vdc or 24Vdc models
- Multiple Trigger configurations
- N/O and N/C changeover contacts
- Contact rating: 10A @ 12Vdc

- LED indication when 'Relay Energised'
- Low current consumption
- Standalone device retrofit into any boxed 12Vdc or 24Vdc PSU

## **OPERATION**

This device provides the functionality to control the output of a PSU by the means of either a Volt Free contact (N/O or N/C) or a low voltage signal (12Vdc/24Vdc), as shown in the block diagram below:



# **Typical Applications**

- Access Control Systems where power is required to be removed from the system devices (i.e. door locks) in the event of a Fire Alarm activation. Note: For BS7273-4 compliance, it is necessary to use the device in 'Voltage trigger' mode, to provide fail safe operation under open and short circuit conditions.
- Any system that requires remote control of a Power Supply output (turn on or off) in response to real time events.



# **CONNECTIONS**

I/P: + +12Vdc or +24Vdc from PSU O/P

- 0V from PSU O/P

O/P: + Auxiliary +Vdc un-switched PSU O/P

- 0V output to load (Common 0v for NO, NC & Aux)

NO Normally Open relay output (see chart below)
NC Normally Closed relay output (see chart below)

Trigger: + Trigger I/P from control device (+VE or Contact)

- Trigger I/P from control device (OV or Contact)

#### Warning: This unit is NOT suitable for switching 240Vac. Mains loads.

#### **Trigger & Jumper Configurations**

The device has 3 modes of operation set by the onboard jumpers:

- Contact Mode (Normally Open) Jumper across: 2 & 3
- Contact Mode (Normally Closed) Jumpers across: 1 & 2 and 3 & 4
- Voltage Mode Jumper across: 3 & 4

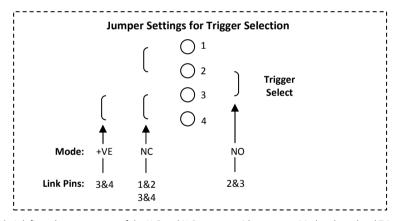


Table 1 defines the output state of the N.O and N.C contacts with respect to Mode selected and Trigger inputs.

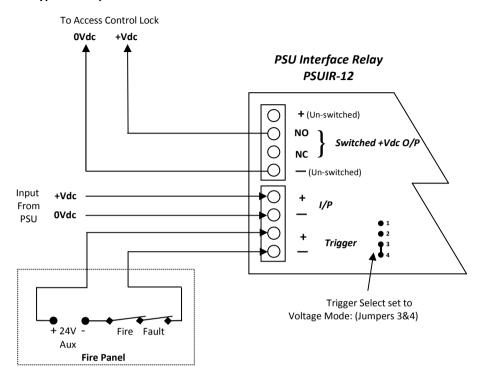
Table 1	Trigger Select	Jumper(s)	Trigger + & -	Out N.O	n.C	LED
	N.O	2 & 3	open closed	no output +12/24V	+12/24V no output	OFF ON
Contact Mode						
Wiode	N.C	1 & 2	open	+12/24V	no output	ON
	IV.C	3 & 4	closed	no output	+12/24V	OFF

Voltage	+VE	3 & 4	removed	no output	+12/24V	OFF
Mode			applied	+12/24V	no output	ON

Note: Trigger Input terminals + and - are only polarity conscious when used in Voltage mode



# **Typical Setup:**



In the example above, power to the lock is removed when the 24Vdc signal from the Fire Alarm Panel is disconnected (BS7273-4 Compliant).

# **INSTALLATION AND SET-UP**

Note: Ensure all power is removed while connections are made to the device.

- 1. Ensure PSU voltage matches the PSU Relay Interface rating (12Vdc or 24Vdc).
- 2. Set jumpers to required Trigger method.
- 3. Mount PSU Interface Relay using self-adhesive mounting feet supplied.
- 4. Make required connections.
- 5. Apply power and test relay operation by using the appropriate Trigger selected.

## **M**AINTENANCE

There is no regular maintenance required of this device.



# **DISPOSAL OF PRODUCT AT END OF LIFE**

This product falls within the scope of EU Directives 2012/19/EU Waste Electrical and Electronic Equipment (WEEE). At the end of life, the product must be separated from the domestic waste stream and disposed via an appropriate approved WEEE disposal route in accordance with all national and local regulations.

For more information see: www.recyclethis.info

## **SPECIFICATION**

Operating Voltage: 12Vdc: 11Vdc to 14Vdc 24Vdc: 20Vdc to 28Vdc

Current: Maximum 30mA @ 12.0Vdc (with relay energised)

Switching Load: 10A @ 12Vdc

Dimensions: L60xW51xH23 (mm)

# **C**OMPLIANCE

This product meets the essential requirements of the following EU Directives:

EMC: 2014/30/EU RoHS2: 2011/65/EU WEEE: 2012/19/EU





# Explanation of symbols: (Not all may apply)



Fault Indication



Shock Risk - isolate before attempting access



Certification Level



Mains Present



Protective Earth



Do not dispose of in unsorted waste

Specifications subject to change without notice

Packaging supplied with this product may be recycled.

Please dispose of packaging accordingly.