# Operating Instructions

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# **P725LO Display Facia**

## Description

The P725LO range of display fascias has been designed to complement the RTK Instruments range of Alarm Annunciators and instrumentation products. In particular the P725 Alarm Annunciator with which it shares many common components and is identical in appearance from the front.

The P725LO range is modular in design and can be supplied in any overall size comprising different window sizes. Switches, pushbuttons and audible sounders can also be integrated to provide a complete solution for plant status monitoring.

The outer frame on the P725LO is designed for panel mounting and is supplied with suitable clamps.

Illumination is available with either bulbs rated at 28VDC or 48VDC or 24VDC ultra-high brightness LED's for low current applications.

#### Installation

The P725LO is supplied with rising clamp terminal blocks on the rear of the unit to accept pin crimps or ferrules. The rear of the unit is marked with the channel numbers corresponding to the windows on the front. Separate terminals are also provided for the power input and lamp test functions.

Refer to the Specification section to calculate the cut-out dimensions to fit the unit into a panel. Use the clamps provided around the perimeter of the unit to secure it into place.

On the rear of the unit, each module will have up to 8 rising clamp terminals fitted. Each terminal has the following function:

0V - 0V supply to power the unit

+V - 24VDC supply to power the unit

LT - Lamp test function

HN – Horn function

1 - Illuminate the first window in that cell

2 – Illuminate the second window in that cell

3 – Illuminate the third window in that cell

4 – Illuminate the forth window in that cell

#### **Electrical connections**

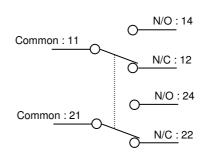
On the rear of the unit, locate the terminals for 0V and +V. Connect these to your power supply. Note on larger units, more than one set of terminals may be provided to share the power. Ensure all are connected to the common power supply

Window illumination with common connection Each window may be illuminated by connecting to the appropriate terminal on the rear of the unit. The polarity of this connection must be specified at the time of ordering.

Refer to page 2 for individual connection diagrams depending on window size and input polarity.

Switches, pushbuttons and audible sounders If specified at the time of ordering, the unit will be supplied with DPDT pushbuttons, DPDT switches or audible sounders, and these are normally fitted in the bottom right hand corner of the unit. To connect refer to the diagrams below.

Pushbuttons and switches:



#### **Audible sounders:**

If specified at the time ordering an integral horn is fitted and driven from terminals on the back. See the connection diagrams below.

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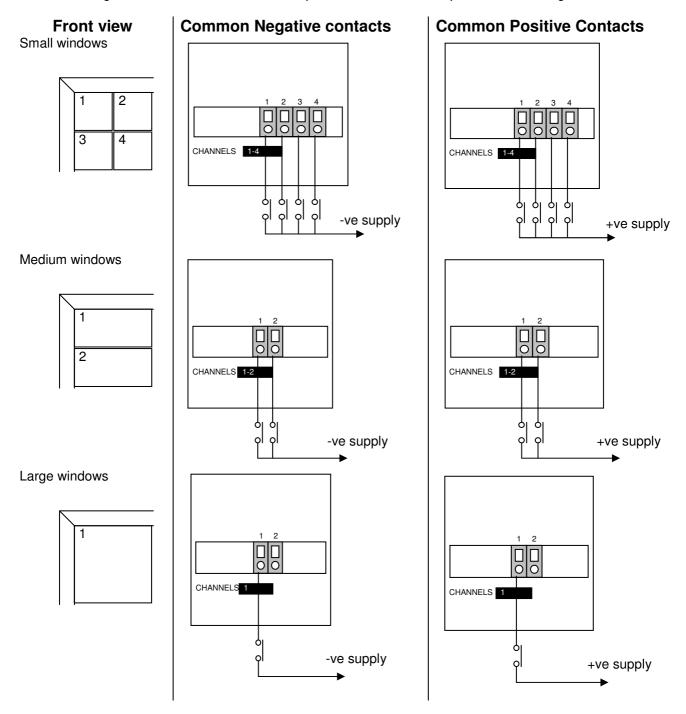


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## **Example Connection Diagrams**

Since the design of the P725LO unit is modular, please refer to the example connection diagrams below.



Page 2 of 4

P725LO Rev 4

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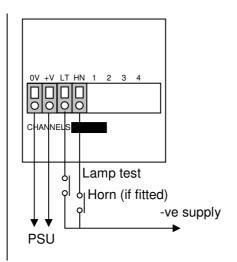
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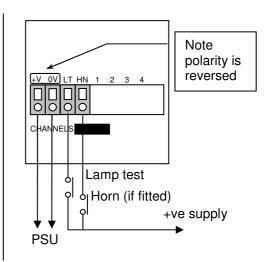
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# Power supply, lamp test and horn connections





#### **SPECIFICATION**

#### Window size

Small: 30x30mm

Medium: 30x60mm (H x W)

Large: 60x60mm

#### **Bulb illumination**

28VDC bulb rated at 50mA per bulb (24VDC units)
48VDC bulb rated at 30mA per bulb (48VDC units)

Small windows have 1 bulb

Medium windows have 2 bulbs in parallel Large windows have 4 bulbs in parallel

#### LED illumination (24VDC only)

LED modules are available in the following colours: Red, Amber, Yellow, White, Green and Blue Small windows have 1 LED module Medium windows have 2 LED modules in parallel Large windows have 4 LED modules in parallel

#### **Environmental**

Operating temperature: -20°C to 50°C (bulb units)
Operating temperature: -20°C to 60°C (LED units)

Storage temperature: -20°C to 80°C Humidity: 0-95% RH non-condensing Protection (front of panel): IP41 Protection (rear of panel): IP20

#### Audible module (24VDC only)

Sound level: 95dB @ 30cm at 24VDC

Frequency: 3.3kHz

Current consumption: 25mA at 24VDC

#### Connection

Rear mounted, rising clamp, screw terminals suitable for 2.5mm<sup>2</sup> solid or stranded cable for bulbs or LED's and 1.25mm<sup>2</sup> for switches and pushbuttons

Recommended torque:

0.6 to 1.0Nm (M3.5 Switches and pushbuttons) 1.0 to 1.3Nm (M3 Bulb and LED holders)

#### **Pushbuttons and switches**

Maximum switch voltage: 250VAC/DC

Thermal current: 5A

Contact type: Silver

Operating voltage / and current (resistive load):

125VAC/3A, 250VAC/2A 30VDC/2A, 125VDC/0.4A

Insulation resistance:  $100M\Omega$  min (500VDC Megger) Dielectric strength: 2500VAC for 1 minute (Between terminals of the same pole: 1000VAC for 1 minute)

#### Overall dimensions and panel cut-out

P725LO with small windows: Height = 24 + (rows x 30) Width = 24 + (columns x 30)

P725LO with medium windows:

Height =  $24 + (rows \times 30)$ Width =  $24 + (columns \times 60)$ 

P725LO with large windows: Height = 24 + (rows x 60) Width = 24 + (columns x 60)

For cut-out size, subtract 10mm from each dimension

Page 3 of 4

P725LO Rev 4

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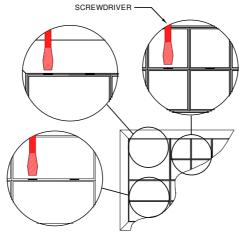


## Operating Instructions

After installation and testing, the unit may be operated according to the wiring configuration. To eliminate any potential wiring faults, please ensure all the switches and windows are fully tested in all conditions prior to use,.

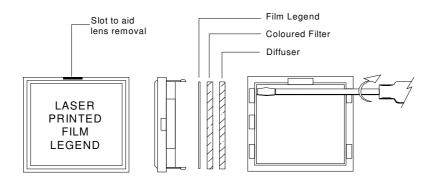
#### Maintenance

For P725LO facias with bulb illumination it is important to ensure all the bulbs are in working order. If the unit incorporates a lamp-test function, it should be used periodically. Any bulbs found to be defective should be replaced by carefully levering out the corresponding window and removing the bulb using a bulb extractor tool. Refer to the diagram below.



## Adding Or Changing Film Legends

Each lens assembly has a small slot in the upper ridge of the surround bezel, which allows a flat blade terminal screwdriver to be used to gently lever the assembly forward. Once the assembly has been removed the diffuser, coloured filter and film legend can be accessed using a flat blade screwdriver to gently lever the lens clear of the associated parts as indicated in the diagram below. This MUST be levered on the side NOT the top or bottom



## Recommended Spares

For bulb illumination it is recommended that 10% of the total number of bulbs in the system are kept as spares. No other spare parts are recommended.

Part number: LP-28V-004 - 28VDC bulb (for 24VDC units) and LP-48V-001 (For 48VDC units)

Due to our policy of continuous product development, we reserve the right to amend these specifications without notice.

Page 4 of 4

P725LO Rev 4

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