

Overall Specification

Supply -
10-30V dc Max 5% Ripple

Output -
Fully protected opto isolated output rated at 30V 100 mA maximum.

Output Mode -
Selectable on or off with beam made depending upon supply connections.

Indication -
1) Variable intensity alignment LED
2) Output state/alignment warning LED

Operating Range -
Through beam - 8m max.
Reflex - 0.5m max. off matt white paper.
Polarised Retro Reflex - 4m max.

Variations

	PL2JV	PT2JO	PL2JV/C	PT2JO/C	PP2JO	PP2JO/C	PR2JO	PR2JO/C
Thro-beam receiver		*		*				
Thro-beam emitter	*		*					
Reflex							*	*
Polarised retro-reflex					*	*		
Lead/connector	L	L	C	C	L	C	L	C

Guarantee

The equipment is covered by a 12 months guarantee from the date of shipment. Any faults arising due to faulty materials or workmanship, within the guarantee period, will be corrected free of charge providing the equipment is returned to us carriage paid.

Certificate of Conformity

The equipment covered by these instructions has been manufactured and tested in accordance with our quality assurance procedures and conforms fully with our published specification.

Health and Safety

Provided that the equipment covered by these instructions is installed and operated as directed, it presents no hazard and conforms fully to health and safety regulations.

CE

THIS PRODUCT CONFORMS TO THE REQUIREMENTS FOR CE MARKING

When this product is incorporated into other machinery or apparatus, that apparatus must not then be put into service (in the E.C) until it has been declared in conformity with the appropriate E.C Directive/s.



SYNATEL

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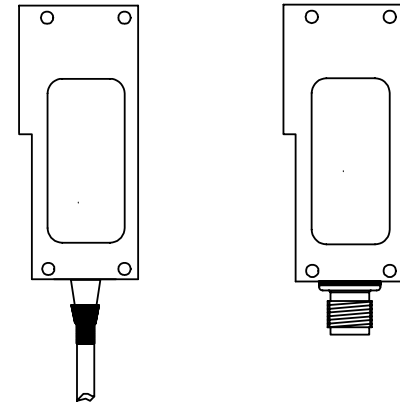
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SLIMPACK
PHOTOELECTRIC RANGE

OPERATING
INSTRUCTIONS



Introduction

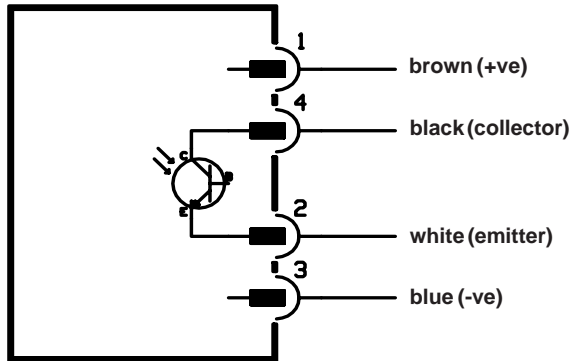
Slimpack comprises a range of self contained photo-electric units in Through Beam, Reflex and Polarised Retro Reflex versions.

All units operate on 10-30V dc supplies and provide a fully protected opto isolated output which may be used to operate either control relays or solid state circuitry.

Output state may be inverted by reversal of the supply and units can be interconnected in series or parallel to fulfil simple logic functions (AND, OR, NAND, NOR etc).

A sensitivity control, variable intensity alignment LED and output state/alignment warning LED are fitted.

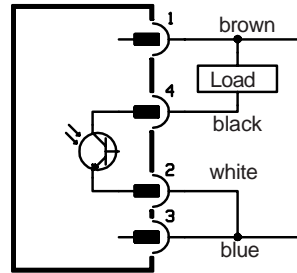
Connections



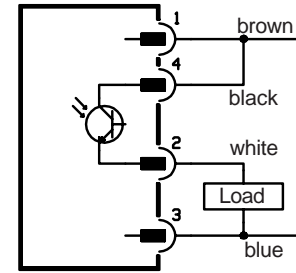
N.B With supply connected as shown, output will be on with beam made. Exchanging the +ve & -ve leads will cause output to be off with beam made.

Typical Connections

npn connection



pnp connection



NB Slimpack is fully protected, suppression of coil is unnecessary.

Installation

Heads should be wired using one of the configurations shown ensuring that the + and - supply connections are correct for the output state required (either energised beam made or energised beam broken).

Cable lengths can be extended to virtually any distance required.

The Slimpack range is well protected against electrical interference but if long runs are used in very noisy environments, the cabling should be segregated from high current conductors. Screened cable is unnecessary.

All Retro Reflex Versions - ensure that the reflector is mounted at least 100mm from the unit.

Reflex Versions - ensure when fixing that there is the greatest possible distance between the object to be detected and the background.

Commissioning

Check that all connections are correct and apply power to the units.

All Slimpack units have a variable intensity alignment LED which illuminates when the light beam is made, it's intensity increasing proportional to signal strength. On all units except the through beam system (PT2JO/PL2JV) the LED also provides an alignment warning by causing the LED to flash at the minimum acceptable signal strength to show that re-alignment is needed.

Retro Reflex Versions - align the head onto the reflector either by adjusting for maximum brightness on the alignment LED or by partially masking the reflector, adjusting until the output LED indicates and then removing the mask.

Reflex Version - Adjust the sensitivity control so that the unit detects the object and ignores the background. Rotating the control clockwise increases sensitivity.

Through-beam versions - emitter and receiver should be mounted securely and facing each other over operating distance. If detecting translucent material, reduce sensitivity to detect object when passing through beam.

Sensitivity Adjustment

A sensitivity control is fitted to all versions. The sensitivity control may be used to set the operating range on reflex units or to prevent the beam penetrating translucent objects such as bottles with polarised or through beam versions.