# **SERIES 300 CONVENTIONAL RELAY BASES**



## **FEATURES:**

- Accepts Series 300 range of detectors
- 12V Non-Latching, 12V and 24V Latching versions
- Compatible with fire & security systems
- Tamper resistant feature
- Detector removal indication (2 wire system)
- Remote LED option
- **■** Extended warranty



The Series 300 range of relay bases are part of System Sensor's Series 300 range of conventional detectors. Series 300 is a

family of conventional fire detectors designed using the latest manufacturing technology and incorporates an array of advanced features, enabling them to "act conventionally, think intelligently".

The range consists of 12V non-latching, 12V latching and 24V latching versions to suit an array of fire and security applications. All bases are fitted with a shorting spring to permit circuit testing prior to fitting the detector and circuit continuity when a detector is removed during normal system operation. There is also a tamper resistant feature, which when activated prevents the removal of the detector without the use of a tool.

Before determining which relay base to use, please consult the control equipment supplier to ensure product compatibility.



The B312NL has been designed to provide interfacing between a Series 300 detector and 12V security control panels that do not provide a reset facility, as the relay base is self-resetting. Therefore, the relay base will automatically reset the Series 300 detector when a fire alarm condition no longer exists. While the detector is in alarm the LED will be on, although it will flash when an alarm check is performed. This base is also ideal for control of any electrical apparatus such as air conditioning systems or apparatus utilising a 12V power supply instead of a control panel.

## **B312RL (12V Latching)**

The B312RL has been designed to provide interfacing between a Series 300 detector and a 12V fire system or security system that require an external contact to activate an ancillary piece of equipment. The relay is controlled directly from the detector. Therefore, in an alarm condition both the detector and relay base will latch into alarm, and can only be reset by removing the supply voltage from the detector. The base can be used with 4 wire security systems that have a reset facility.

### **B324RL (24V Latching)**

The B324RL has been designed to provide interfacing between a Series 300 detector and 24V fire control panels or power supplies that require an external contact to activate an ancillary piece of equipment. The relay is controlled directly from the detector. Therefore, in an alarm condition both the detector and relay base will latch into alarm, and can only be reset by removing the supply voltage from the detector. A break off tab allows the base to be connected to a range of fire control panels. This tab should be broken when there is little current flow or no current limiting resistor such as when used as a stand-alone system powered by a 24V supply.

All System Sensor products are covered by our extended 3 year warranty.

EUROPEAN HEADQUARTERS SYSTEM SENSOR EUROPE 3 HORSHAM GATES HORSHAM WEST SUSSEX RH13 SPJ UNITED KINGDOM TEL: +44 (0)1403 276500 FAX: +44 (0)1403 276501

EUROPEAN MANUFACTURING CENTRE PITTWAY TECNOLOGICA SPA VIA CABOTO 19/3 34147 TRIESTE ITALY

TEL: +39 040 9490111 FAX: +39 040 382137







## **SERIES 300 CONVENTIONAL RELAY BASES**

### SPECIFICATION:

Start-up Time: 24s Maximum (based on 2351TEM)

Remote LED output Voltage: 4.0V
Remote LED output Current: 8mA

Relay Contact Type: Form C (changeover contacts)
Relay Contact Ratings: 1.0A @ 30VDC resistive

Electrical	B312RL	B312NL	B324RL
Operating Voltage	8.5 to 32VDC *	8.5 to 15VDC *	8.5 to 32VDC**
Alarm Voltage (Maximum)	15VDC	15VDC	15VDC
Typical Standby Current	1μΑ***	20μΑ***	1μΑ***
Maximum Permissible Alarm Current	51mA	41mA	25mA
Relay Contact Resistance	100m $\Omega$	100m $\Omega$	100m $\Omega$

<sup>\*</sup> Nominal 12VDC (alarm voltage must be respected)

#### **Environmental**

Operating Temperature Range -20°C to +70°C

Humidity 0 to 93% Relative Humidity (non-condensing)

#### Mechanical

Height 29mm
Diameter 127mm
Weight 96g

Base terminal cable size: 2.5mm² Maximum

Relay terminal block cable size: 1.5mm² Maximum (solid)

1mm<sup>2</sup> Maximum (stranded) Pantone, warm grey 1C

Colour Pantone, warm grey Material Bayblend FR110

## **Base Compatibility Table**

Nominal	System	<b>Panel Reset</b>	Panel	Suitable
<b>Panel Voltage</b>	Type	Facility	Resistance	Base
12V	4 wire	No reset	N/A	B312NL
12V	4 wire	Reset	N/A	B312RL
24V	4 wire	Reset	$<$ 160 $\Omega$	B324RL (tab broken)
24V	2 wire	Reset	$>$ 470 $\Omega$	B312RL
24V	2 wire	Reset	$>$ 160 $\Omega$ to $<$ 470 $\Omega$	B324RL
24V	2 wire	Reset	$<$ 160 $\Omega$	B324RL (tab broken)

<sup>\*\*</sup> Nominal 24VDC (alarm voltage must be respected using break-off tab if necessary)

<sup>\*\*\*</sup> Does not include detector current

## PRODUCT RANGE

Detectors 2351TEM photo-thermal

2351E photoelectric

4351E fixed temperature 78°C

5351E rate of rise and fixed temperature 58°C

Bases (See Note)

**B401 Standard Base** 

B401SD Standard base with Schottky diode B401R Resistor base with 470 Ohm resistor

B401RSD Standard base with 470 Ohm resistor and Shottky diode

B401RM Standard recess base with 470 Ohm resistor

B401DG Deep base

B401DGR Deep base with 470 Ohm resistor B401DGSD Deep base with Shottky diode B312NL 12V non-latching relay base B312RL 12V latching relay base

B324RL 24V latching relay base

Accessories

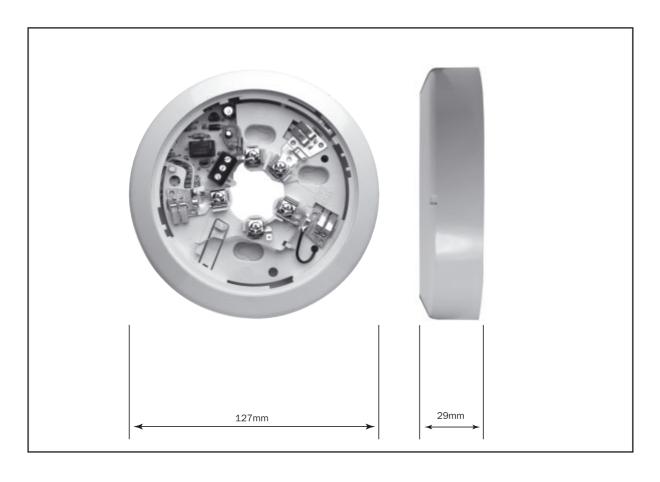
S300RPTU Remote Programming and Test Unit

S300RTU Remote Test Unit

S300SAT Remote Programming Interface Unit

S300ZDU Zonal Display Unit

Note: Bases with other resistor values are available to suit the requirements of most Fire Alarm Control Panels.

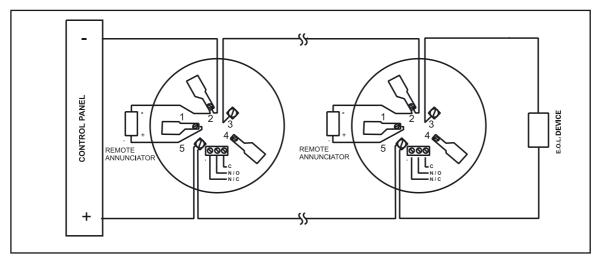


EUROPEAN HEADQUARTERS SYSTEM SENSOR EUROPE 3 HORSHAM GATES HORSHAM WEST SUSSEX RH13 SPJ UNITED KINGDOM TEL: +44 (0)1403 276500 FAX: +44 (0)1403 276501 EUROPEAN MANUFACTURING CENTRE PITTWAY TECNOLOGICA SPA VIA CABOTO 19/3 34147 TRIESTE ITALY

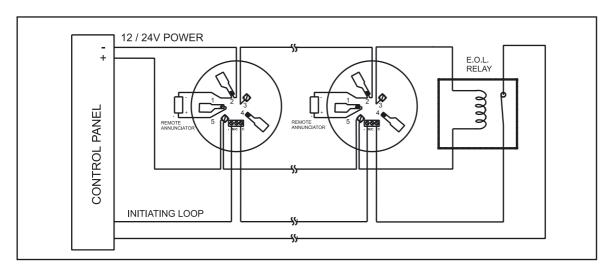
TEL: +39 040 9490111 FAX: +39 040 382137

www.systemsensoreurope.com

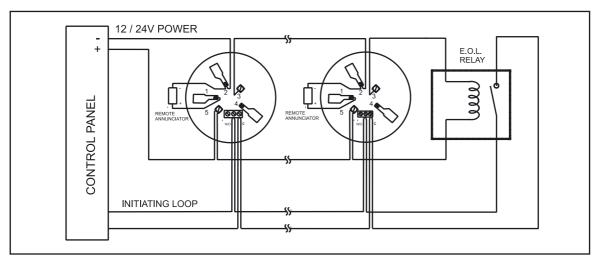




Typical 2-wire system using B312RL / B324RL Relay Base.



Typical 4-wire Security System with normally closed contacts using B312NL / B312RL Relay Base. Note: Contact is normally closed when power is supplied.



Typical 4-wire Fire System with normally open contacts using B312RL / B324RL Relay Base. Note: Contact is normally open when power is supplied. Loss of power to bases/detectors will cause an alarm condition.