

## DS Relay Base – Installation Guide

Item Numbers: 45681-504AMP

### Description:

The DS Series Relay Base features a set of volt-free, form C (change-over) contacts controlled and powered by the remote output of a detector. Low power operation and high maximum operating frequency are achieved by using a latching relay coupled to an efficient drive circuit.

**Warning:** *This base must not be connected to the mains supply. The maximum voltage applied to the relay contact terminals must not exceed the Extra Low Voltage limits of 50V ac and 75V dc.*

It is important to recognise that the relay cannot be controlled unless the base is fitted with the fully functional AMPAC DS Series Addressable detector.

Removal of the detector or disconnection of its supply will cause an energised relay to reset.

**Note:** *Under no circumstances connect an LED or any other device to the base terminals marked -R*

### Installation:

#### Observe anti-static precautions at all times

1. Before installing this Relay Base, check all wiring for continuity, insulation resistance and polarity identification.
2. Confirm that installation position is in accord with fire system drawings and conforms to BS5839 Part 1 or other applicable local rules for positioning the type of fire detector to be plugged into the base.
3. Ensure that the mounting surface for the base is substantially flat, and then use the appropriate screws to secure the base to the ceiling or wiring box using the two screw slots in the base. Do not over-tighten the screws.
4. Use the raised web on the side of the base as a guide for aligning the detector's LED.
5. Connect wiring to terminal blocks and base terminals in accordance with the fire system wiring diagram, which should be in accord with Figure.1
6. Check that no connections have been made to terminal marked -R.
7. Terminate any screen or earth wires to the unconnected earth terminal in the base.
8. Program the DS Series Addressable detector with designated address number. Write this number on the label in the space provided and seal the rear of the detector.
9. Plug the detector into the base.

### Commissioning

After installing the Relay Base and all other devices connected to the fire system in-situ smoke or heat test the AMPAC DS Series Addressable detector.

Check that fire detection and alarm system, and the system controlled by the relay operate correctly.

Repeat this test with the fire panel supplied only by its standby battery.

If this product has been subjected to an excessive shock during transportation, it may be received with the relay contacts in the 'set' position.

Reset the relay by subjecting it to one operating cycle before commissioning the system.

A self adhesive label is provided with each detector, use this to mark the detector address and affix to base.

### Maintenance

In accordance with BS5839 Part 1 or other applicable local rules, regularly subject the detector to an in-situ smoke or heat test as appropriate and check that the relay and its associated system respond correctly.

Annually check supply voltage, the condition and integrity of wiring.

This product is not field serviceable and must be replaced if any part is found to be defective.

The external surface of the base may be cleaned with a damp cloth.

Specification	
Supply Voltage	17 – 28VDC
Supply Current	< 1.0mA
Temperature range	-20°C to 70°C
Humidity	0 -95% Non condensing
Base Material	White Polycarbonate UL94 to V-0
Environment	Indoor Use Only
RELAY RATING	
Max Switching Power	30W 50VA
Max Switching Current	1A (resistive load)
Max Switching Voltage	50 VAC 75 VDC
Drop Out Voltage	< 14 VDC

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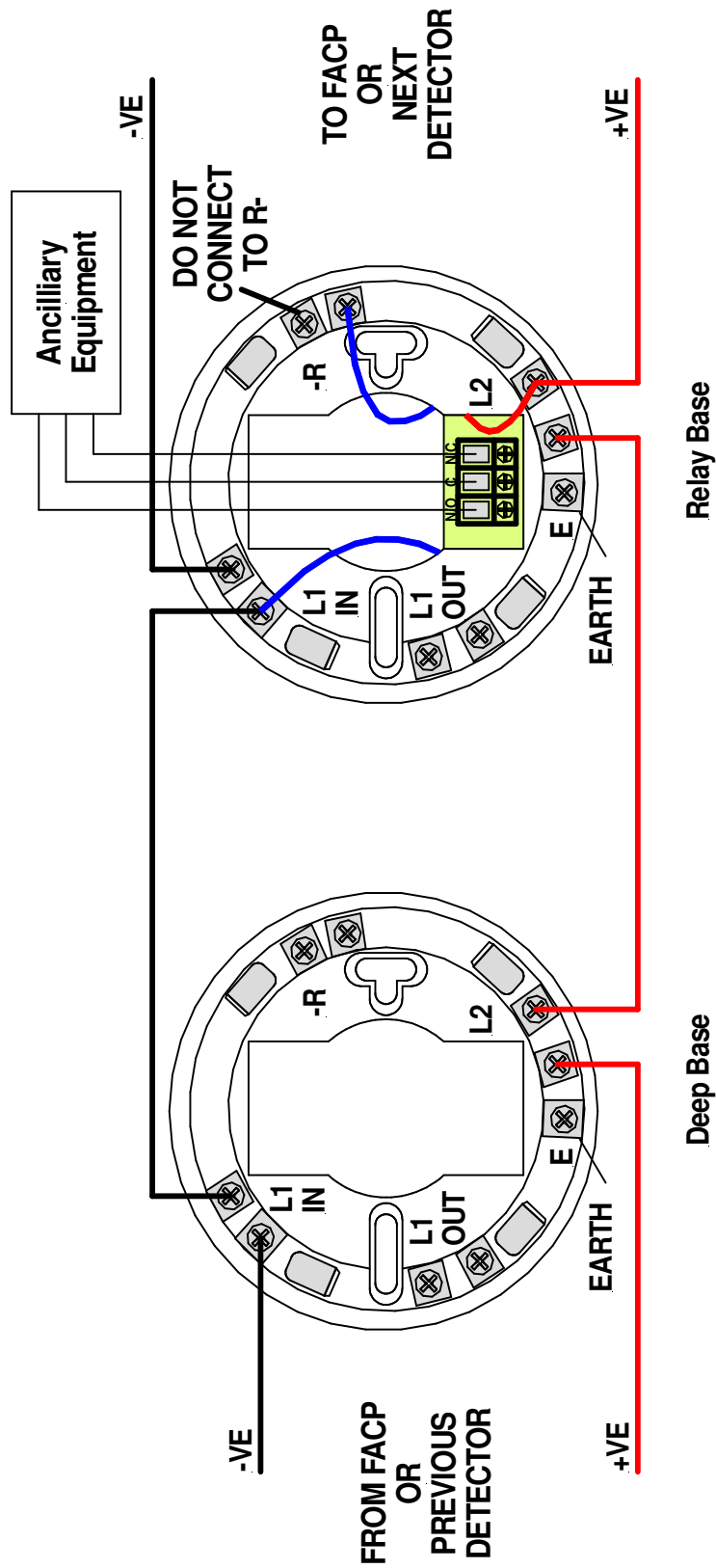


Figure 1: DS Series Addressable Relay Base General Wiring Diagram