

**Commissioning**

It is important that the system be fully tested after installation. Check that the fire detection and alarm system and the system controlled by the relay operate correctly.

**LED Indicators**

Never connect a remote LED (or any other device) to the -R and +R terminals. Use the terminals marked R1 and R2.

**Troubleshooting**

Before investigating individual units for faults, it is very important to check that the system wiring is fault free. Shield continuity faults on a data loop or any ancillary zone wiring may cause communications errors.

Many fault conditions are the result of simple wiring errors.

**Technical Data**

Environment	indoor, non-icing, non-condensing
Operating temperature	14°F (-10°C) to 140°F (60°C) 32°F (0°C) to 100°F (38°C) (UL approved continuous operating range) Humidity 0 to 95%RH
Base Material	white polycarbonate V-0 to UL94

**Electrical**

Supply voltage	17—28V DC plus protocol voltage pulses
Relay reset current	<1μA
Relay set current	40μA
Surge current	5mA, 250ms
Contact ratings	1A at 30V dc resistive, 0.3A at 75Vdc resistive, 0.7A at 50V ac resistive

# FB-AP Series®

## FB-AP Series Low Power Relay Base Installation Instructions

**General**

The FB-AP Series Low Power Relay Base, part no 7254-FBD-4242, is intended for use only with FB-AP Series fire detectors and a compatible control panel. It incorporates a relay to control field equipment.

The relay is controlled by the detector and must therefore be fitted with a FB-AP Series detector in order to function. The detector is powered via the base from the normal loop voltage of 17-28VDC.

**Control Panel Compatibility**

Compatibility Identifier number: 7254-FBD-4242. The base has been approved by Underwriters Laboratories Inc. For details of compatible control panels, contact FireBus.

Where local codes allow, they may be used to provide volt-free control signals to an auxiliary system such as an automatic door closer. They are not suitable for use in systems where it is specified or required that operation of the auxiliary system shall be fail-safe.

**Warning**

These bases must not be connected to a mains supply. The maximum voltage applied to the relay contact terminals must not exceed 50V ac and 75VDC.

**Installation**

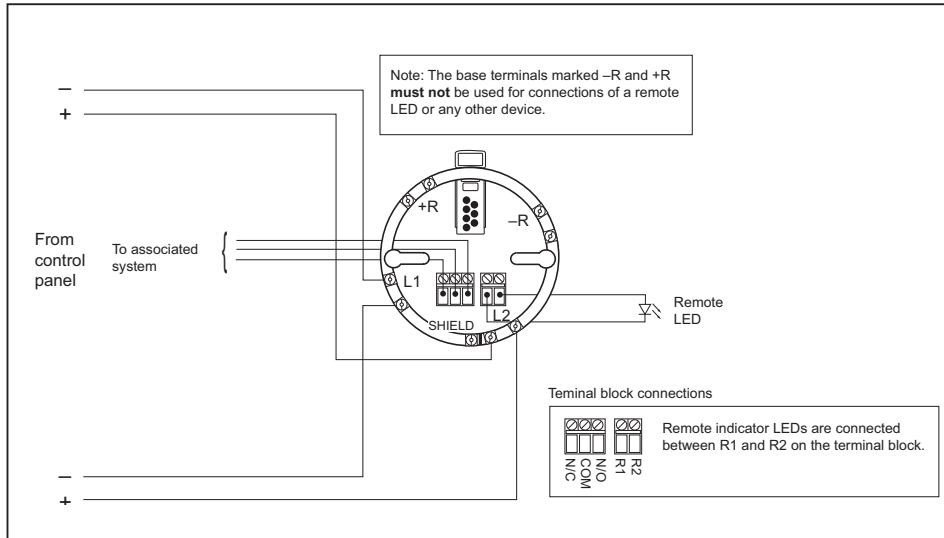
The FB-AP Series Low Power Relay Base must be installed in accordance with the applicable NFPA standards, local codes and jurisdictional authorities. Failure to follow these instructions may result in failure of the detectors to report an alarm condition. FireBus is not responsible for detectors which are improperly installed, maintained and tested.

Before installing relay bases check the continuity, polarity and insulation resistance of all wiring. Check that siting is in accordance with the fire system drawings and conforms to all applicable local codes such as NFPA 72.

Use 3" octagonal box for direct connection to the base. 4" octagonal and 4" square boxes may be used with proper UL listed mounting brackets. When mounting on a wall, install 4" to 12" from the ceiling. Use 3M Weatherban 606 Non-Flammable sealing compound (or equivalent) to seal field wiring conduit opening in the electrical box, this will reduce the stack effect. Secure the base to the electrical box with appropriate screws. Do not over-tighten the screws. The raised mark on the side of the base indicates the direction of the detector LED when fitted. Connect the shield, if required, to the SHIELD terminal on the base. For information on how to set the address of each device correctly refer to the section 'Address Setting'.

**Wiring**

**CAUTION:** Do not use looped wire under terminals L1 and L2. Break wire run to provide supervision of connections. Terminal L1 and L2 are polarity insensitive.



**Fig 1** FP-AP Series Low Power Relay Base wiring diagram

**Address Setting**

Refer to the table below for the complete list of address settings. Select the desired address and remove the pips indicated in black. Remove pips with a small screwdriver.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126									