

## Installation Instructions

### 1.0 Introduction

These instructions cover the installation of the D7042/D7042B Eight Input Remote Modules in a fire system supervised by an FPD-7024 Fire Alarm Control Panel (FACP).

Install, test and maintain the D7042/D7042B Eight Input Remote Modules according to their instructions, NFPA 72, Local Codes and the Authority Having Jurisdiction. Failure to follow these instructions may result in failure of the device to operate properly. Bosch is not responsible for improperly installed, tested or maintained devices.



*These instructions contain procedures to follow in order to avoid personal injury and damage to equipment.*

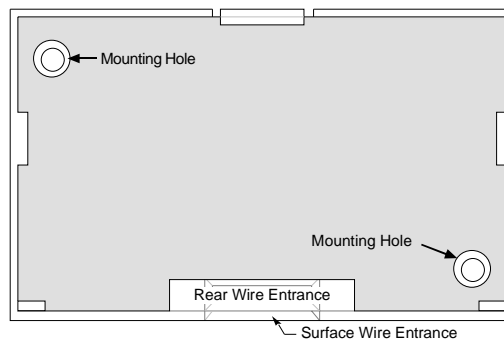
### 2.0 Device Description

The D7042/D7042B is an Eight Input Remote Module that provides a means of addressing up to eight input loops of conventional contacts to the multiplex bus of the control panel. It is suitable for use with the FPD-7024 Fire Alarm Control Panel (FACP) with ROM version 2.0 or greater using a D7039 Multiplex Expansion Module. Up to 30 D7042/D7042B modules can be supported per FACP. One D7039 Multiplex Expansion Module is required in the system to use the D7042/D7042B Eight Input Remote Modules.

### 3.0 Installing the D7042/D7042B

#### 3.1 Mounting the D7042

Use the mounting holes (upper left and lower right corners) to mount the D7042. The D7042 normally is mounted outside of the FACP enclosure.



**Figure 1: Mounting the D7042**



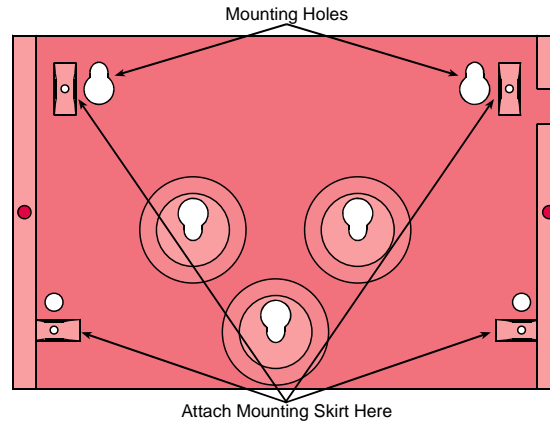
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### 3.2 Mounting the D7042B

The D7042B will come partially preassembled with the circuit board attached to the mounting skirt.

Select a mounting location for the D7042B.

Using the enclosure as a template, mark the mounting holes on the mounting surface and make an opening for the unit's wiring.



**Figure 2: Mounting the D7042B**

Next, attach the mounting skirt if applicable (with the circuit board attached) to the enclosure (hardware provided).

Then complete all wiring (see Section 4.0). Once installation and wiring is completed, attach the enclosure cover and secure with the screws (provided).



**Be sure all wiring is unpowered before routing. Do not use shielded or twisted pair cable.**

Refer to the *D7039 Installation Guide* (P/N: 38685) for multiplex wiring requirements. The length of the wire connected to the loop inputs on the D7042/D7042B must be less than 250 ft. (76 m) per loop. Route wiring as necessary from the D7039 in the FACP enclosure and from remote devices to the D7042/D7042B. If the wiring is to run along the surface of the enclosure, open the D7042/D7042B surface wire entrance. See Figure 2.

4.0 Wiring

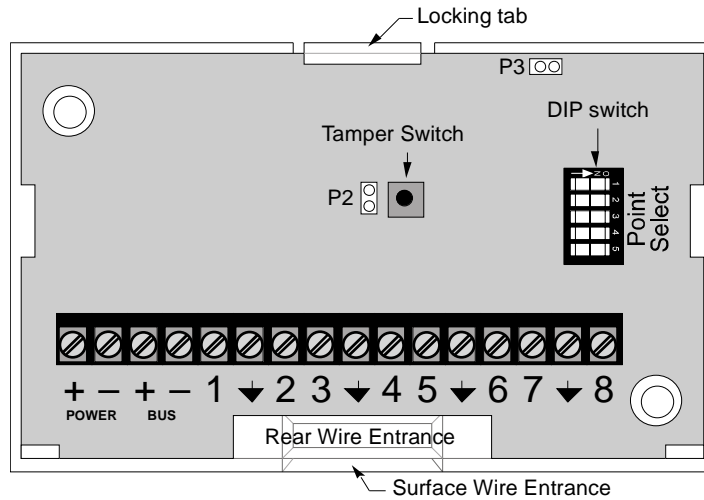


Figure 3: D7042/D7042B Front View without Cover

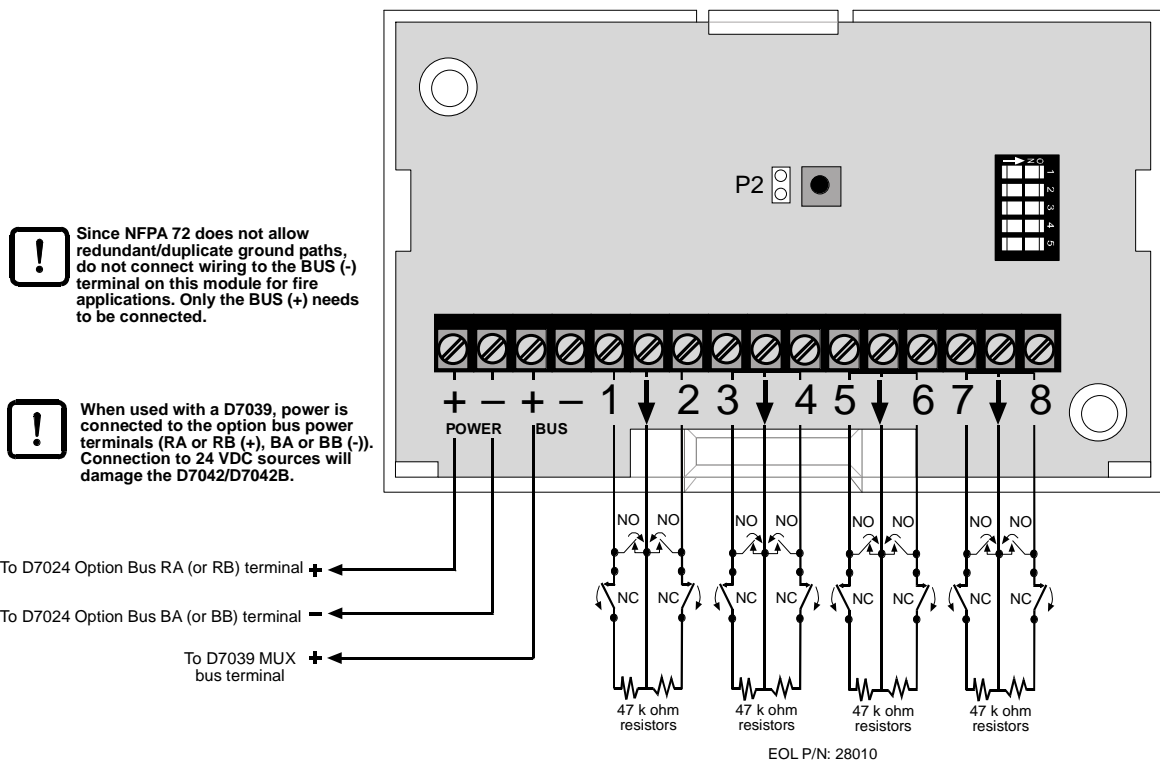


Figure 4: Wiring the D7042/D7042B

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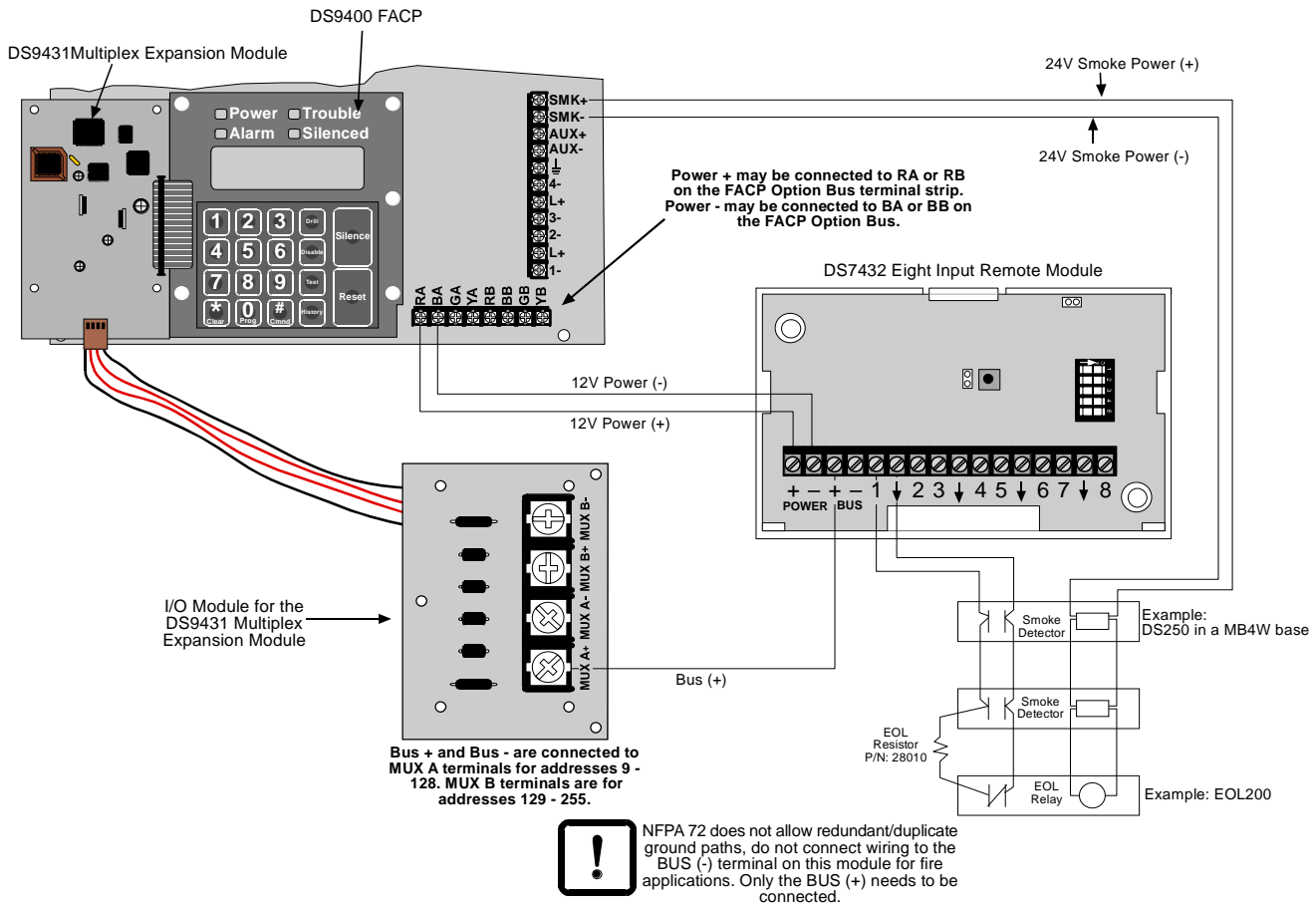


Figure 5: Wiring Four-wire Smoke Detectors

## 5.0 Programming the D7042/D7042B

Refer to the programming section of the *D7024 Reference Guide* (P/N: 31499) for point programming information.



**The D7042/D7042B occupies eight multiplex point addresses when connected to the control panel.**

## 6.0 Setting the Jumpers and DIP Switches

### 6.1 D7042 Jumper Settings

P2 of the D7042/D7042B allows the tamper switch to be bypassed with a jumper when testing or servicing.

**Remove the jumper on P2 when testing or servicing has been completed.**

### 6.2 D7042/D7042B DIP Switch Settings

The DIP switches select which points will be activated by the loop inputs.

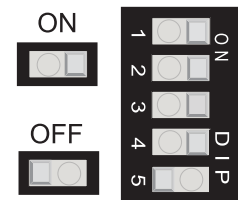
Set the DIP switches as shown in Table 1.



**No two D7042/D7042B DIP Switch settings should be the same.**

The D7042/D7042B occupies eight points when connected to the FACP.

The input loops of the D7042/D7042B correspond to the points of the FACP as shown in Table 2. Figure 6 shows the DIP switch positions for on and off settings.



**Figure 6: D7042/D7042B DIP Switch**

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Points	DIP Switches				
	1	2	3	4	5
9-16	Off	Off	Off	Off	On
17-24	Off	Off	Off	On	Off
25-32	Off	Off	Off	On	On
33-40	Off	Off	On	Off	Off
41-48	Off	Off	On	Off	On
49-56	Off	Off	On	On	Off
57-64	Off	Off	On	On	On
65-72	Off	On	Off	Off	Off
73-80	Off	On	Off	Off	On
81-88	Off	On	Off	On	Off
89-96	Off	On	Off	On	On
97-104	Off	On	On	Off	Off
105-112	Off	On	On	Off	On
113-120	Off	On	On	On	Off
121-128	Off	On	On	On	On
129-136	On	Off	Off	Off	Off
137-144	On	Off	Off	Off	On
145-152	On	Off	Off	On	Off
153-160	On	Off	Off	On	On
161-168	On	Off	On	Off	Off
169-176	On	Off	On	Off	On
177-184	On	Off	On	On	Off
185-192	On	Off	On	On	On
193-200	On	On	Off	Off	Off
201-208	On	On	Off	Off	On
209-216	On	On	Off	On	Off
217-224	On	On	Off	On	On
225-232	On	On	On	Off	Off
233-240	On	On	On	Off	On
241-248	On	On	On	On	Off

**Table 1: D7042/D7042B DIP Switch Settings**

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D7042/D7042B Input Loop	Point Number							
	1	2	3	4	5	6	7	8
Points 9-16	9	10	11	12	13	14	15	16
Points 17-24	17	18	19	20	21	22	23	24
Points 25-32	25	26	27	28	29	30	31	32
Points 33-40	33	34	35	36	37	38	39	40
Points 41-48	41	42	43	44	45	46	47	48
Points 49-56	49	50	51	52	53	54	55	56
Points 57-64	57	58	59	60	61	62	63	64
Points 65-72	65	66	67	68	68	70	71	72
Points 73-80	73	74	75	76	77	78	79	80
Points 81-88	81	82	83	84	85	86	87	88
Points 89-96	89	90	91	92	93	94	95	96
Points 97-104	97	98	99	100	101	102	103	104
Points 105-112	105	106	107	108	109	110	111	112
Points 113-120	113	114	115	116	117	118	119	120
Points 121-128	121	122	123	124	125	126	127	128
Points 129-136	129	130	131	132	133	134	135	136
Points 137-144	137	138	139	140	141	142	143	144
Points 145-152	145	146	147	148	149	150	151	152
Points 153-160	153	154	155	156	157	1158	159	160
Points 161-168	161	162	163	164	165	166	167	168
Points 169-176	169	170	171	172	173	174	175	176
Points 177-184	177	178	179	180	181	182	183	184
Points 185-192	185	186	187	188	189	190	191	192
Points 193-200	193	194	195	196	197	198	199	200
Points 201-208	201	202	203	204	205	206	207	208
Points 209-216	209	210	211	212	213	214	215	216
Points 217-224	217	218	219	220	221	222	223	224
Points 225-232	225	226	227	228	229	230	231	232
Points 233-240	233	234	235	236	237	238	239	240
Points 241-248	241	242	243	244	245	246	247	248

**Table 2: Loop/Point Number Relationship**

## 7.0 Specifications

D7042/D7042B	
Current Draw (from option bus power)	8 mA Standby and Alarm
Current Draw (from multiplex bus loop)	10 mA Standby and Alarm
Total Current Draw for Battery Standby Calculation and Alarm	18 mA Standby and Alarm
Min. Bus Operating Voltage	8 VDC peak
Multiplex Bus Wiring	Refer to the <i>D7039 Installation Guide</i> (P/N: 38685)
Local Alarm Loop Wiring	250 ft. (76.2 m) max.; #18 AWG (1.2 mm) minimum
Operating Temperature Range	+32°F to +120°F (+0°C to +49°C)

