Installation Instructions
for the
DS7432E Eight Input Remote Module

1.0 Description

The DS7432E 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.

2.0 Specifications

- **Control Panel Requirements**: The DS7432E is designed to work with the following control panels:
  - A DS7400, DS7400X, DS7400Xi, DS7400Xi Rev. 3 or DS7400Xi Rev. 4. Up to 7 DS7432E's can be used per DS7400 system. Up to 15 DS7432E modules are allowed on DS7400X, Xi and Xi Rev. 3. The DS7400Xi Rev. 4 control panel can support up to 30 DS7432E modules.
- One DS7430 or DS7436 Multiplex Expansion Module is required in the system to use the DS7432E Remote Module.
- **Current Draw:** 10 mA Standby, 10 mA Alarm
- **Minimum Bus Voltage For Operation:** 8 VDC peak
- **Wiring:** Refer to the reference guide for the panel's multiplex expansion module for multiplex wiring requirements. The length of the wire connected to the loop inputs on the DS7432E must be less than 76 m (250 ft.) per loop.
- The recommended wiring to the control is standard 1.22 mm (#18 AWG) or 0.74 mm (#22 AWG), quad (4-wire) cable. **Do not use shielded or twisted pair cable**.

3.0 Installation

ⓘ **P3 of the DS7432E is required for input tamper dual EOL applications.**

P2 of the DS7432E allows the housing tamper switch to be bypassed with a jumper when testing or servicing.

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

Use the mounting holes (upper left and lower right corners) to mount. It can be mounted inside or outside of the control enclosure.

Route wiring as necessary from the DS7430 or DS7436 in the control enclosure and from the remote devices to the DS7432E.

Connect wiring as shown in Figure 3.

ⓘ **If using separate powered detectors (other than smoke detectors) with a DS7400 Series Control/ Communicator, the DS7432E can be powered from the control panel auxiliary power (terminals 7 and 8). The detector can be connected to the DS7432E (see Figure 4). This eliminates the need for home-run power wiring from each detector to the control when the DS7432E is mounted outside of the enclosure.**

ⓘ **Be sure all wiring is unpowered before routing.**

If the wiring is to enter through the rear of the enclosure, open the DS7432E's rear wire entrance. If the wiring is to run along the surface of the enclosure, open the DS7432E's surface wire entrance. See Figure 2.

4.0 Programming

4.1 System Programming

Refer to the System Programming section in your panel's reference guide for Zone programming information.

4.1 DIP Switch Settings

The DIP switches select which zones will be activated by the loop inputs. Set the DIP switches as shown in Table 1 (Page 2).

- No two DS7432E's should be set the same.
- The DS7432E occupies eight zones when connected to the control panel. The input loops of the DS7432E correspond to the zones of the control as shown in Table 2.
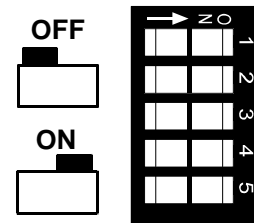

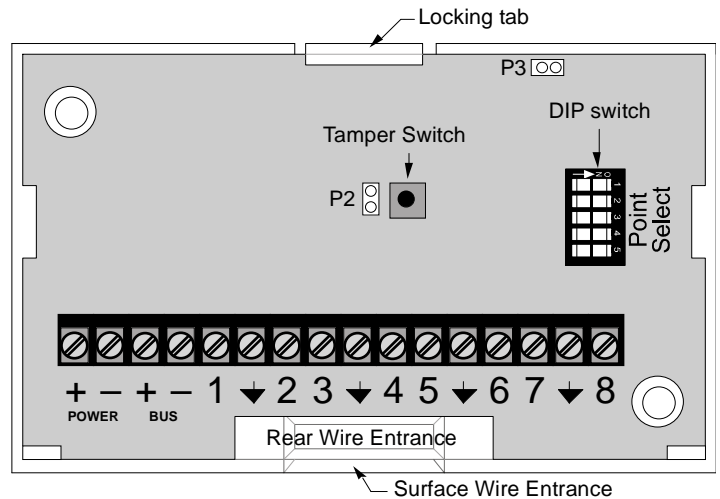**Figure 1: DIP Switch Orientation**

Figure 2: DS7432E Front View Without Cover

BOSCH

DIP Switches					
Zones	1	2	3	4	5
9-16	Open	Open	Open	Open	Closed
17-24	Open	Open	Open	Closed	Open
25-32	Open	Open	Open	Closed	Closed
33-40	Open	Open	Closed	Open	Open
41-48	Open	Open	Closed	Open	Closed
49-56	Open	Open	Closed	Closed	Open
57-64	Open	Open	Closed	Closed	Closed
65-72	Open	Closed	Open	Open	Open
73-80	Open	Closed	Open	Open	Closed
81-88	Open	Closed	Open	Closed	Open
89-96	Open	Closed	Open	Closed	Closed
97-104	Open	Closed	Closed	Open	Open
105-112	Open	Closed	Closed	Open	Closed
113-120	Open	Closed	Closed	Closed	Open
121-128	Open	Closed	Closed	Closed	Closed
129-136	Closed	Open	Open	Open	Open
137-144	Closed	Open	Open	Open	Closed
145-152	Closed	Open	Open	Closed	Open
153-160	Closed	Open	Open	Closed	Closed
161-168	Closed	Open	Closed	Open	Open
169-176	Closed	Open	Closed	Open	Closed
177-184	Closed	Open	Closed	Closed	Open
185-192	Closed	Open	Closed	Closed	Closed
193-200	Closed	Closed	Open	Open	Open
201-208	Closed	Closed	Open	Open	Closed
209-216	Closed	Closed	Open	Closed	Open
217-224	Closed	Closed	Open	Closed	Closed
225-232	Closed	Closed	Closed	Open	Open
233-240	Closed	Closed	Closed	Open	Closed
241-248	Closed	Closed	Closed	Closed	Open
249-256	Closed	Closed	Closed	Closed	Closed

Table 1: DIP Switch Settings

DS7432 Input Loop	Zone Number							
	1	2	3	4	5	6	7	8
Zones 9-16	9	10	11	12	13	14	15	16
Zones 17-24	17	18	19	20	21	22	23	24
Zones 25-32	25	26	27	28	29	30	31	32
Zones 33-40	33	34	35	36	37	38	39	40
Zones 41-48	41	42	43	44	45	46	47	48
Zones 49-56	49	50	51	52	53	54	55	56
Zones 57-64	57	58	59	60	61	62	63	64
Zones 65-72	65	66	67	68	69	70	71	72
Zones 73-80	73	74	75	76	77	78	79	80
Zones 81-88	81	82	83	84	85	86	87	88
Zones 89-96	89	90	91	92	93	94	95	96
Zones 97-104	97	98	99	100	101	102	103	104
Zones 105-112	105	106	107	108	109	110	111	112
Zones 113-120	113	114	115	116	117	118	119	120
Zones 121-128	121	122	123	124	125	126	127	128
Zones 129-136	129	130	131	132	133	134	135	136
Zones 137-144	137	138	139	140	141	142	143	144
Zones 145-152	145	146	147	148	149	150	151	152
Zones 153-160	153	154	155	156	157	158	159	160
Zones 161-168	161	162	163	164	165	166	167	168
Zones 169-176	169	170	171	172	173	174	175	176
Zones 177-184	177	178	179	180	181	182	183	184
Zones 185-192	185	186	187	188	189	190	191	192
Zones 193-200	193	194	195	196	197	198	199	200
Zones 201-208	201	202	203	204	205	206	207	208
Zones 209-216	209	210	211	212	213	214	215	216
Zones 217-224	217	218	219	220	221	222	223	224
Zones 225-232	225	226	227	228	229	230	231	232
Zones 233-240	233	234	235	236	237	238	239	240
Zones 241-248	241	242	243	244	245	246	247	248
Zones 249-256	249	250	251	252	253	254	255	256

Table 2: Loop/Zone Number Relationship

ⓘ **Points 249 - 256 are not available for DS9400 use.**

POWER   BUS

+ − + − 1 ▼ 2   3 ▼ 4   5 ▼ 6   7 ▼ 8

Input Loops

To control panel 12VDC power terminals: +
DS7400, terminals 7 and 8, Fig. 4   −

To DS7430 or DS7436 MUX BUS +
Terminals (see Figure 4)   −

22KΩ 22KΩ   22KΩ 22KΩ   22KΩ 22KΩ   22KΩ 22KΩ

Tamper Tamper Tamper Tamper Tamper Tamper Tamper Tamper

47KΩ 47KΩ   47KΩ 47KΩ   47KΩ 47KΩ   47KΩ 47KΩ

Alarm Alarm   Alarm Alarm   Alarm Alarm   Alarm Alarm

To separate powered detectors

Figure 3: Wiring the DS7432E with Separate Powered Detectors

DS7400Xi Control/Communicator PCB

DS7430 MUX
Expansion Module

Power Bus

Either Bus A or Bus B, or both, may be used
for MUX connections when using the
DS7436 MUX Expansion Module. See the
panel's reference guide for information.

Smoke
Power -

PO2 If Programmed
or
Any LP+ Terminal

Bus +

DS7432E 8-Input Remote Module

Auxiliary
Power -   Auxiliary
Power +

+ − + − 1 ▼ 2   3 ▼ 4   5 ▼ 6   7 ▼ 8
POWER BUS

Smoke Power +

Smoke Power -

Smoke Power -

Smoke
Detector   Example: DS250 in an
MB4W base.

Smoke
Detector

47K
EOL
Resistor

EOL
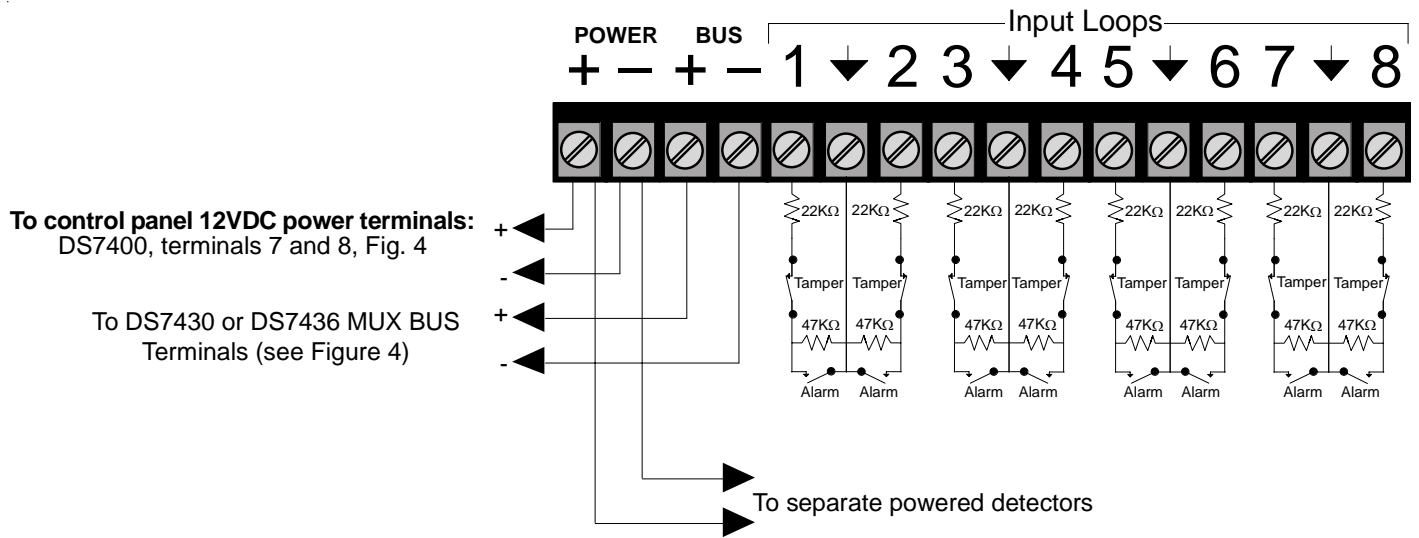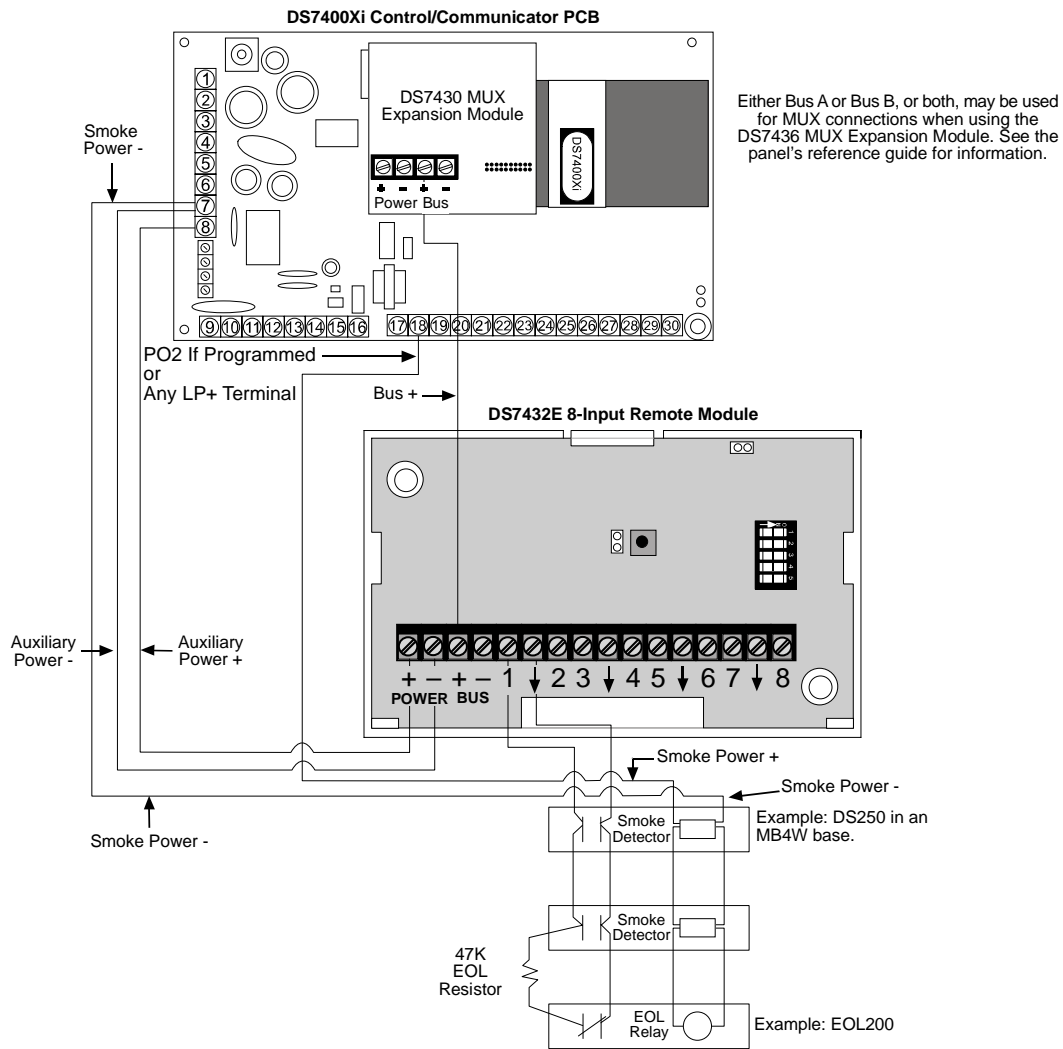Relay   Example: EOL200

Figure 4: 4-Wire Smoke Detector Wiring for the DS7432E and DS7400Xi Control/Communicator.