

Installation Instructions for the DS7457iE Single Zone Input Module

1.0 Description

The DS7457iE is a Single Zone Input Module designed to operate with compatible multiplex systems. It provides a dual resistor, supervised, input zone for connection of conventional normally open or normally closed contacts. Each DS7457iE occupies one multiplex zone address on the system. The DS7457iE connect to the Detection Systems DS7430 or DS7436 Multiplex Expansion Modules.

2.0 Specifications

- **Module Requirements:** The DS7457iE is designed to work with the following multiplex modules:
 - A Detection Systems DS7430 Multiplex Expansion Module.
 - A Detection Systems DS7436 Multiplex Expansion Module.
- **Wiring:** Refer to the literature for the panel's multiplex expansion module for multiplex wiring requirements. The length of the wiring connected to the protection loop (and tamper loop) on the DS7457iE must be less than 250 ft. (76 m).
- The DS7457iE has #22 AWG (0.8 mm) flying leads and is designed for intrusion applications.
- **Current Draw:** 500 μ A Standby and Alarm
- **Minimum Voltage For Operation:** 8 VDC peak
- **Zone Response Time:** 400 ms
- **Operating Temperature Range:** (0° to +49°C) 32° to +120°F.

3.0 Programming

Consult the intended control panel's installation guide for multiplex zone (point) programming information. See page 4 for switch settings.

4.0 Installation

These Installation Instructions assume the control panel is installed and in proper working condition.



The control panel must be programmed and the DS7457iE address switches must be set for the DS7457iE to operate.

Program the control panel as described in the panel's Reference Guide.



Disconnect power to the panel before running wires to connect the DS7457iE.

The DS7457iE is compact enough to fit within most backboxes and enclosures.



5.0 Wiring

DS7457iE Terminals	Description
RED	Multiplex Bus Positive
BLACK	Multiplex Bus Negative
YELLOW	Protection Zone Positive
BLACK	Protection Zone Negative

Table 1: DS7457iE Terminal Descriptions

- Connect wiring to the DS7457iE as shown in Figures 1 and 2.
- Protection zones are designed to monitor Normally Closed dry contacts. They are supervised using 22K ohm end-of-line resistors.



The input zones are power limited and supervised.

5.1 DS7430 Multiplex Expansion Module Wiring

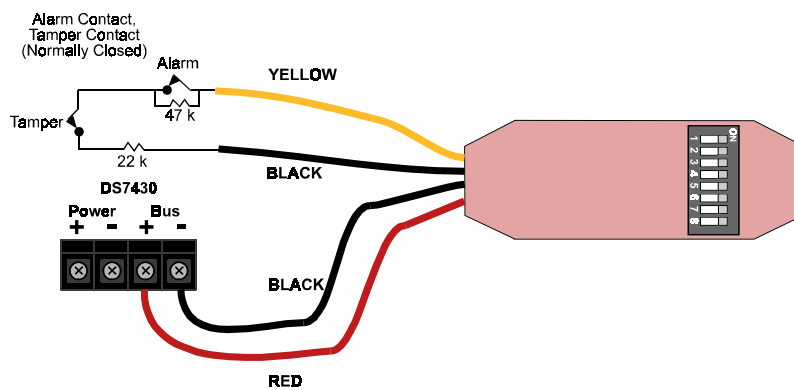


Figure 1: Wiring to a DS7430 Multiplex Expansion Module

NOTE: Either black wire may be used for Bus connection or Alarm Loop.

5.2 DS7436 Multiplex Expansion Module Wiring

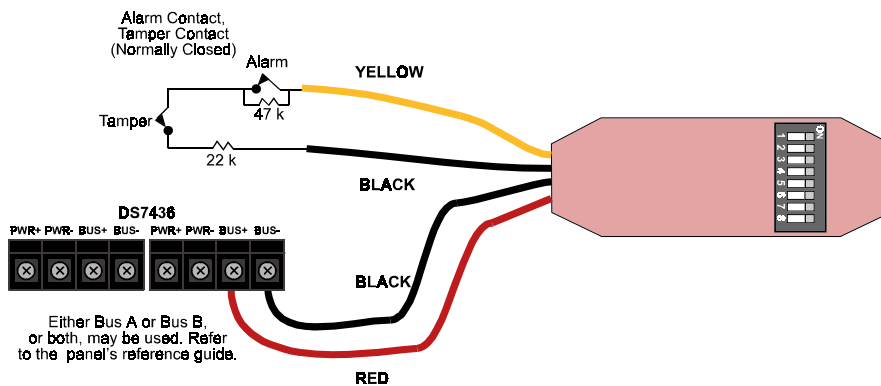


Figure 2: Wiring to a DS7436 Multiplex Expansion Module

NOTE: Either black wire may be used for Bus connection or Alarm Loop.

6.0 Switch Settings

Set the address switch settings before connecting the DS7457iE to the multiplex bus.



No two DS7457iE Single Zone modules may be set to the same address. Having two or more units set to the same address may prevent fault detection or cause multiplex bus failure.

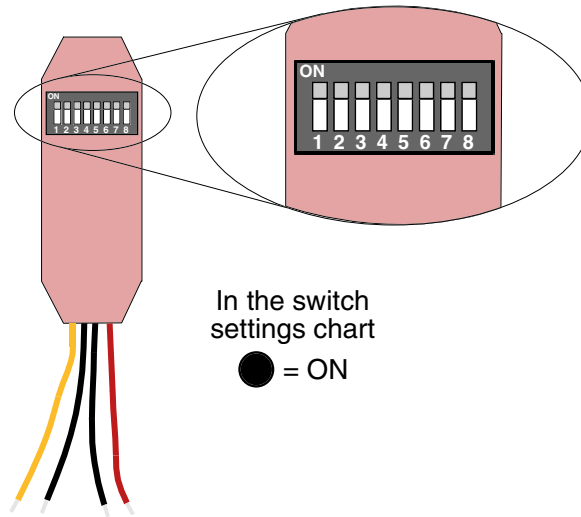
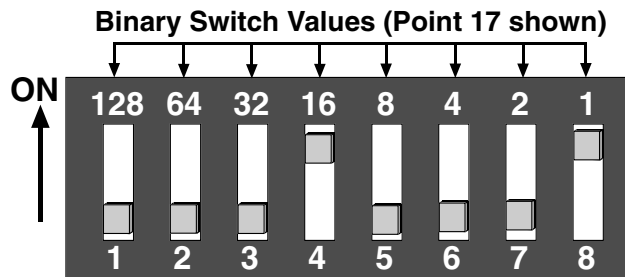


Figure 4: Address Switches

You can find the Address Switch Settings using the chart on the last page, or by calculating the decimal number of the address.



This module may NOT be programmed for Zone (Point) addresses 001-008 when used with the DS7400 Series control/communicators.

● = SWITCH ON (CLOSED)

ZONE (POINT) ADDRESS	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
001								●
002							●	
003							●	●
004						●		
005						●		●
006						●	●	
007						●	●	●
008					●			
009					●			●
010					●		●	
011					●		●	●
012					●	●		
013					●	●		●
014					●	●	●	
015					●	●	●	●
016				●				
017				●				●
018				●			●	
019				●			●	●
020				●		●		
021				●		●		●
022				●		●	●	
023				●		●	●	●
024				●	●			
025				●	●			●
026				●	●		●	
027				●	●		●	●
028				●	●	●		
029				●	●	●		●
030				●	●	●	●	
031				●	●	●	●	●
032			●					
033			●					●
034			●				●	
035			●				●	●
036			●			●		
037			●			●		●
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● = SWITCH ON (CLOSED)

ZONE (POINT) ADDRESS	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
065		●						●
066		●					●	
067		●					●	●
068		●				●		
069		●				●		●
070		●				●	●	
071		●				●	●	●
072		●			●			
073		●			●			●
074		●			●		●	
075		●			●		●	●
076		●			●	●		
077		●			●	●		●
078		●			●	●	●	
079		●			●	●	●	●
080		●		●				
081		●		●				●
082		●		●			●	
083		●		●			●	●
084		●		●		●		
085		●		●		●		●
086		●		●		●	●	
087		●		●		●	●	●
088		●		●	●			
089		●		●	●			●
090		●		●	●		●	
091		●		●	●		●	●
092		●		●	●	●		
093		●		●	●	●		●
094		●		●	●	●	●	
095		●		●	●	●	●	●
096		●	●					
097		●	●					●
098		●	●				●	
099		●	●				●	●
100		●	●			●		
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● = SWITCH ON (CLOSED)

ZONE (POINT) ADDRESS	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
129	●							●
130	●						●	
131	●						●	●
132	●					●		
133	●					●		●
134	●					●	●	
135	●					●	●	●
136	●				●			
137	●				●			●
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143	●				●	●	●	●
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160	●		●					
161	●		●					●
162	●		●				●	
163	●		●				●	●
164	●		●			●		
165	●		●			●		●
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ZONE (POINT) ADDRESS	SWITCH NUMBER							
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213	●	●		●		●		●
214	●	●		●		●	●	
215	●	●		●		●	●	●
216	●	●		●	●			
217	●	●		●	●			●
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