Installation Instructions for the DX3010 Octo-Output Expander

1.0 General Information

The DX3010 is an Octo-Output Expander that provides eight Form "C" relay outputs for compatible control panels. It connects to the control panel via the data bus. The outputs are fully programmable. Each output operates individually from the other seven outputs for complete flexibility. Refer to the control panel's manual for programming instructions.

The DX3010 replaces the DS7488 and D9529 Modules.

2.0 Specifications

- **Operating Voltage:** 10 to 14 VDC
- **Operating Current:** 10 mA + 40 mA for each energized relay
- **Outputs:** Dry Contacts rated 5.0 A @ 28 VDC (maximum for resistive loads)
- **Sensor Loop Terminal Wire Size:** #14 (1.8 mm) to #22 (0.8 mm) AWG
- **Operating Temperature:** +32°F to +122°F (+0°C to +50°C)
- **Relative Humidity:** 5% to 85% @ +86°F (+30°C) non-condensing
- **Control Panel Compatibility:** DS7240, DS7220, D6412, D4412, DS7400Xi*

* The DS7400Xi has not been tested by Underwriters Laboratories for compatability.

3.0 Mounting

Failure to follow the procedures in these instructions can result in personal injury and/or damage to the equipment.

The DX3010 contains static-sensitive components and must be handled with care. Follow the anti-static procedures when handling the modules.

Test according to NFPA 72 if used in fire applications.

Up to three DX3010 Modules can be installed in the control panel's enclosure. The DX3010 Module can be remotely mounted in a D203 Enclosure (see *Figures 1* and *2*).

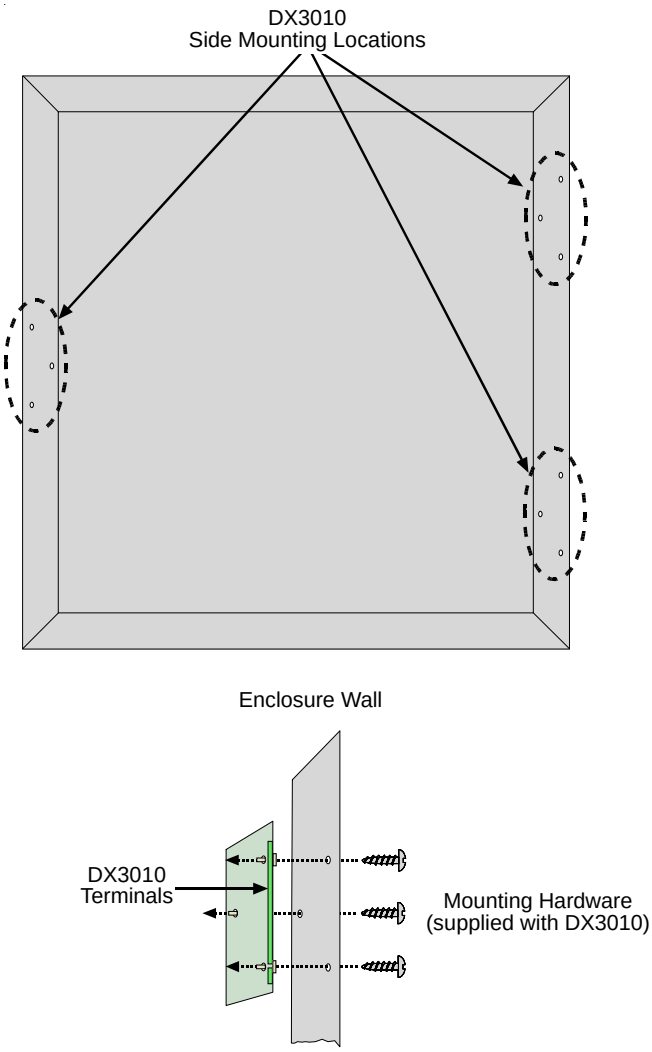

Figure 1: Control Panel Enclosure Side Wall Mounting

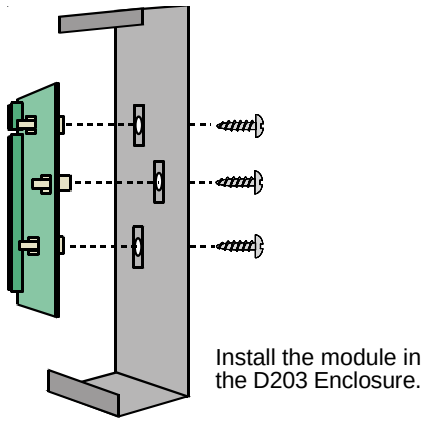

Figure 2: Installing the DX3010 in a D203 Enclosure

BOSCH

4.0 Wiring

WARNING

Remove all power to the system (AC and standby battery) before making or breaking any connections. Failure to do so might result in personal injury and/or damage to the equipment.

4.1 Data Bus Connections

Connect the DX3010 to the control panel data and auxiliary power sources as shown in *Figure 3*.

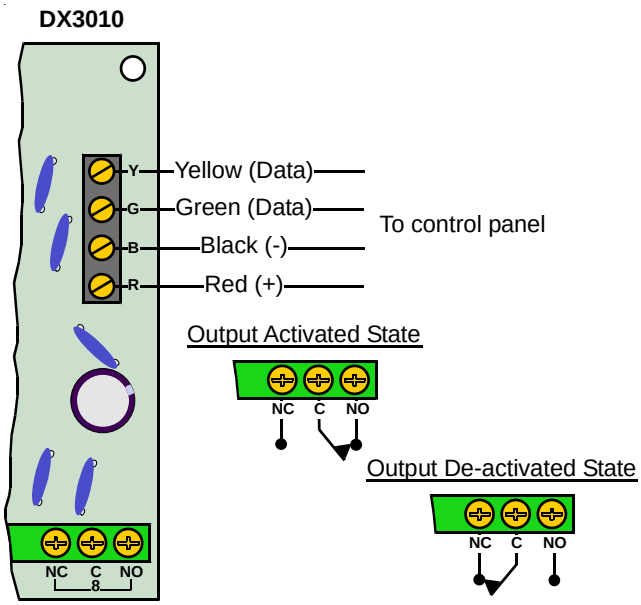

Figure 3: Control Panel Connections

If using an external 12 VDC power supply, wire as shown in *Figure 4*.

IMPORTANT

When using any external power supply, the negative (-) output must not be tied to earth ground. A ground fault condition will be reported if negative (-) is grounded.

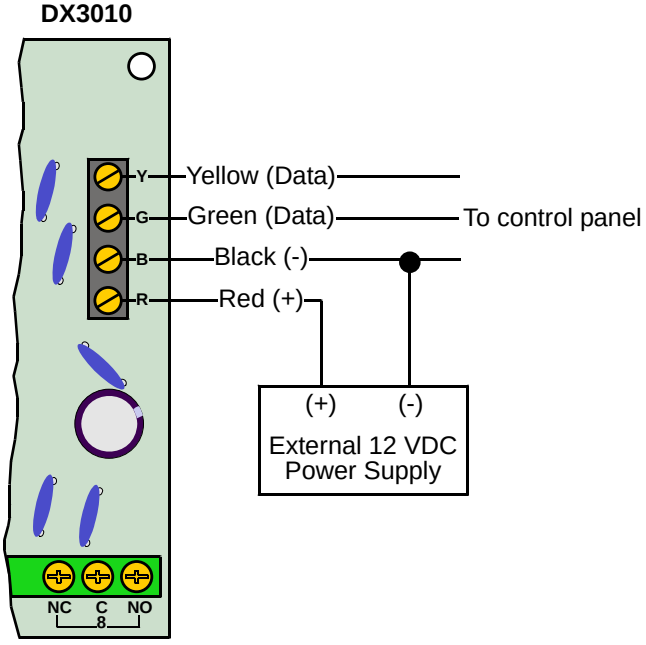

Figure 4: External Power Supply Connections

Refer to *Table 1* for the data bus wiring length requirements.

IMPORTANT

If the DX3010 is to be installed far from the control panel, the control panel cannot be used to power the DX3010. An external power supply must be used. See *Figure 4* for external power supply connections.

	Power Source	#22 AWG (0.8 mm)	#18 AWG (0.8 mm)
Control Panel to DX3010	Control Panel	40 ft. (12.2 m)	80 ft. (24.4 m)
Control Panel to DX3010	External Power Supply	1000 ft (305 m)	2000 ft. (610 m)
External Power Supply to DX3010		40 ft. (12.2 m)	80 ft. (24.4 m)

Table 1: Wire Lengths

Wire length may be restricted by panel limitations. See the control panel's *Installation Instructions* for more information.

5.0 Setting the DX3010's Address

Use *Table 2* to configure the DX3010's address. Consult the control panel's *Installation Manual* to determine the appropriate address for each DX3010 you connect.

IMPORTANT

Each time you change the address DIP switches, you need to cycle the power to the DX3010 (turn the power off and then on) for the address change to take effect.

See *Figure 5* for DIP Switch orientation.

Example:
Module Address 150

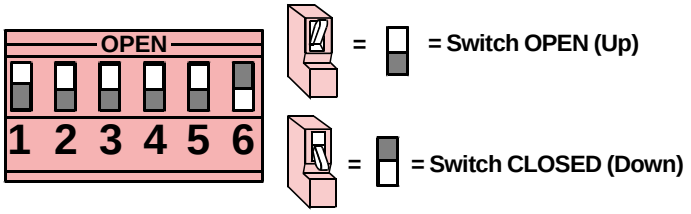

Figure 5: DIP Switch Orientation

In *Table 2*, **DN** indicates the DIP switch is CLOSED (Down); **UP** indicates the DIP switch is OPEN (Up).

	DIP Switch Settings							DIP Switch Settings					
DIP Switches	**S1**	**S2**	**S3**	**S4**	**S5**	**S6**	**DIP Switches**	**S1**	**S2**	**S3**	**S4**	**S5**	**S6**
Module Address	**1**	**2**	**4**	**8**	**16**	**Mode**	**Module Address**	**1**	**2**	**4**	**8**	**16**	**Mode**
0	UP	UP	UP	UP	UP	UP	158	UP	UP	UP	**DN**	UP	**DN**
1	**DN**	UP	UP	UP	UP	UP	159	**DN**	UP	UP	**DN**	UP	**DN**
2	UP	**DN**	UP	UP	UP	UP	160	UP	**DN**	UP	**DN**	UP	**DN**
3	**DN**	**DN**	UP	UP	UP	UP	161	**DN**	**DN**	UP	**DN**	UP	**DN**
4	UP	UP	**DN**	UP	UP	UP	162	UP	UP	**DN**	**DN**	UP	**DN**
5	**DN**	UP	**DN**	UP	UP	UP	163	**DN**	UP	**DN**	**DN**	UP	**DN**
6	UP	**DN**	**DN**	UP	UP	UP	164	UP	**DN**	**DN**	**DN**	UP	**DN**
7	**DN**	**DN**	**DN**	UP	UP	UP	165	**DN**	**DN**	**DN**	**DN**	UP	**DN**
8	UP	UP	UP	**DN**	UP	UP	166	UP	UP	UP	UP	**DN**	**DN**
9	**DN**	UP	UP	**DN**	UP	UP	167	**DN**	UP	UP	UP	**DN**	**DN**
10	UP	**DN**	UP	**DN**	UP	UP	168	UP	**DN**	UP	UP	**DN**	**DN**
11	**DN**	**DN**	UP	**DN**	UP	UP	169	**DN**	**DN**	UP	UP	**DN**	**DN**
12	UP	UP	**DN**	**DN**	UP	UP	170	UP	UP	**DN**	UP	**DN**	**DN**
13	**DN**	UP	**DN**	**DN**	UP	UP	171	**DN**	UP	**DN**	UP	**DN**	**DN**
14	UP	**DN**	**DN**	**DN**	UP	UP	172	UP	**DN**	**DN**	UP	**DN**	**DN**
15	**DN**	**DN**	**DN**	**DN**	UP	UP	173	**DN**	**DN**	**DN**	UP	**DN**	**DN**
150	UP	UP	UP	UP	UP	**DN**	174	UP	UP	UP	**DN**	**DN**	**DN**
151	**DN**	UP	UP	UP	UP	**DN**	175	**DN**	UP	UP	**DN**	**DN**	**DN**
152	UP	**DN**	UP	UP	UP	**DN**	176	UP	**DN**	UP	**DN**	**DN**	**DN**
153	**DN**	**DN**	UP	UP	UP	**DN**	177	**DN**	**DN**	UP	**DN**	**DN**	**DN**
154	UP	UP	**DN**	UP	UP	**DN**	178	UP	UP	**DN**	**DN**	**DN**	**DN**
155	**DN**	UP	**DN**	UP	UP	**DN**	179	**DN**	UP	**DN**	**DN**	**DN**	**DN**
156	UP	**DN**	**DN**	UP	UP	**DN**	180	UP	**DN**	**DN**	**DN**	**DN**	**DN**
157	**DN**	**DN**	**DN**	UP	UP	**DN**	181	**DN**	**DN**	**DN**	**DN**	**DN**	**DN**

Table 2: Address DIP Switch Settings

130 Perinton Parkway, Fairport, New York, USA 14450-9199
(800) 289-0096