# TECHNICAL BULLETIN

## Fire

# D7039 or DS9431

## **Class A Wiring Issue**

## December 22, 2009

Issue Severity:		Products Affected:
	<b>High:</b> Act immediately <b>Medium:</b> Bosch Security Systems, Inc. strongly recommends you take the action(s) described below.	D7039 Multiplex (MUX) Expansion Module (v1.04)
		<ul> <li>DS9431 MUX Expansion Module (v1.04)</li> </ul>
		FPD-7024 Fire Alarm Control Panel (FACP)
		• D7024 FACP
	Low: Advisory	DS9400M FACP

#### 1.0 Issue

When wired in a Class A configuration, the D7039 or DS9431 MUX Expansion Modules (with v1.04 firmware) might not detect a single wire fault on the B side of the MUX bus when it occurs between the first and second device. For example, if one of the wiring locations indicated in *Figure 1* is open, this issue might occur.



This issue also occurs at any location on a system with one device, at the wiring locations indicated in Figure 2.



The result is that the Fire Alarm Control Panel (FACP) might not indicate a MUX wiring fault, and might not initiate an alarm from any device.



## 2.0 Resolution

Use a Class B wiring configuration. If this is not possible, replace the D7039 or DS9431 with a v1.05 or later MUX expansion module. To ensure normal operation, replace all v1.04 MUX expansion modules that are installed in Class A configurations as described in *Section 3.0 Replacing the D7039 or DS9431*. After replacing the MUX expansion module, perform the system test described in *Section 4.0 Class A Broken Wire Certification Test* on page 3.

To obtain a replacement at no charge, call the Bosch Repair Center at 1-800-366-2283, and provide a Purchase Order number. Bosch will send an Advance Replacement, and you will not be charged as long as you return the v1.04 MUX expansion module within 45 days. In addition to the PO number, please provide:

Company Name Company Address Bosch Security Systems Dealer Number Contact Person Phone Number

Send the v1.04 D7039/DS9431 to:

National Repair Center 8601 East Cornhusker HWY Lincoln, NE 68607 USA

## 3.0 Replacing the D7039 or DS9431

Perform the following procedure when replacing the v1.04 MUX expansion module:

- 1. Receive the FACP programming to RPS. This programming will be sent to the FACP later in this procedure.
- 2. Remove the AC and battery power from the FACP.
- 3. Remove the v1.04 D7039/DS9431 MUX Expansion Module.
- 4. Install the replacement D7039/DS9431 onto the FACP. Refer to the Installation Guide included with the D7039/DS9431.
- 5. Power the FACP on.
- 6. The message EEP INIT ERROR appears on the FACP display. Press \* or Back.
- 7. At the keypad, set the time and date to clear the error message.
- 8. Press **PROG/0** to enter programming mode.
- 9. Enter the PIN. The default PIN is **9876**.
- 10. Press 8 to select HISTORY DEFLTS.
- 11. Press 2 to select **DEFAULT EE**.
- 12. Press **#** to confirm, and then wait for the FACP to return to normal.
- 13. Remove the AC and battery power from the FACP, then power the FACP on again. If the message **EEP INIT ERROR** appears on the FACP display, press \* or **Back**.
- 14. At the keypad, set the time and date.
- 15. At the AUTO PROGRAM? prompt, press 0 to select NO.
- 16. Press PROG/0 to enter programming mode.
- 17. Press 3 to select PROG SYSTEM.
- 18. Press 7 to select REMOTE PGM.
- 19. Press 1 to select **ENABLE**.
- 20. Press \* or **Back** twice. You should see **PROG MODES** on the first line of the display.
- 21. Press 6 to select PROG ACC'NTS.

- 22. Press 4 to select **RING COUNT**. Set the ring count to **02**.
- 23. Press #/CMD/Enter.
- 24. Press **\*** or **Back** twice to return the FACP to normal.
- 25. From RPS, send the original programming to the panel.
- 26. Test the system as described in Section 4.0 Class A Broken Wire Certification Test.

### 4.0 Class A Broken Wire Certification Test

Perform the following procedure after replacing the v1.04 MUX expansion module with a v1.05 or later MUX expansion module:

- 1. Verify that the FACP display shows SYSTEM NORMAL.
- Disconnect the MUX A+ wire from the D7039 or DS9431 I/O Module (refer to *Figure 3*). The FACP display indicates a MUX wiring fault. Verify that there are no point troubles or fire alarms. If there are point troubles or fire alarms, the system failed this test. Call Bosch Technical Support at 800-289-0096.
- 3. Reconnect the wire you disconnected in Step 2 to the D7039 or DS9431 I/O Module.
- 4. Wait at least 15 sec.
- 5. Press the FACP's **Reset** button.
- 6. Repeat Steps 1 through 5 three more times, substituting MUX A-, MUX B+, and MUX B- in Step 2.
- 7. If the test passes for MUX A+, MUX A-, MUX B+, and MUX B-, the system passes the Class A Broken Wire Certification Test.
- 8. Walk Test the system.





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