

Quick Start for D8024, D10024 FACP's

1.0 Notice

These instructions cover the installation and programming of Radionics' D9068 Digital Alarm Communicator Transmitter (DACT) for use with Radionics' D8024 and D10024 Analog Fire Alarm Control Panels (FACP).

Install, test and maintain the D9068 and D8024, D10024 according to these instructions, the instructions that accompany the DACT and the FACP's, NFPA 72, Local Codes and the Authority Having Jurisdiction. Failure to follow these instructions may result in failure of the device to operate properly. Radionics is not responsible for improperly installed, tested or maintained devices.

For complete installation, programming and operating instructions for the D9068, refer to the *D9068 Operation and Installation Guide* (P/N: 45386). For complete installation, programming and operating instructions for the D8024 and D10024, refer to the following manuals: *D8024 Installation Guide* (P/N: 38728), *D8024 Operator's Guide* (P/N: 35394), *D10024 Installation Guide* (P/N: 46482), *D10024 Operator's Guide* (P/N: 46521) and the *Analog Fire Alarm Control Panel Programming Guide* (P/N: 38789).



WARNING

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



IMPORTANT

Test the D9068 and the FACP in accordance with NFPA 72.

2.0 D9068 to FACP Connections

2.1 Power Connections

Note: Disconnect all power (AC and standby battery) from the system before making or breaking any connections.

Use the following steps to properly connect the D9068 to the D8024 or D10024:

- 1) Connect the D9068's Power (+) terminal to the FACP's +24 V Auxiliary power terminal. See Figure 1.
- 2) Connect the D9068's Power (-) terminal to the FACP's 0 V Auxiliary power terminal. See Figure 1.
- 3) Connect the D9068's Earth Ground line (green) to the FACP terminal marked EARTH (EAR).

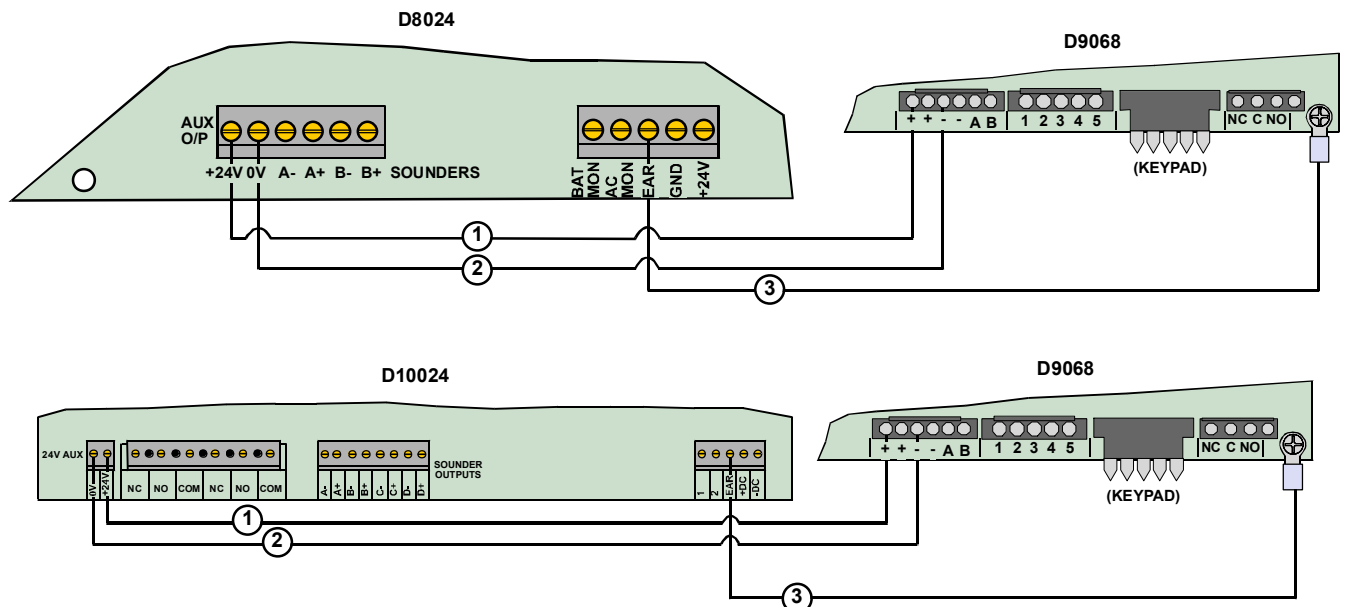


Figure 1: D9068-D8024/D10024 Power Connections

D9068

D9068 to FACP Connections



The D9068 draws a maximum of 192 mA. The FACP can provide up to 320 mA. Verify that the total draw on the FACP's 24 V auxiliary power is less than 320 mA.

2.2 D9068 to D9052 Serial Connections

The D9068 may be used with Radionics' D8024 and D10024 Analog FACPs to send reports to a central station. Use of a D9052 RS-232 Bus Module between the FACP and the D9068 is required. The FACP must be assigned a network address of 1. See Section 3.1 of this Quick Start for instructions on setting the FACP's network address.

Note: Install the D9052 onto Port C on the D8024. The D8024 cannot support the D9068 and a network connection simultaneously through Port C. Connect the D9052 to Port B on the D10024.

For complete installation, addressing and operating instructions for the D9052, see the *D9052 Installation Guide* (P/N: 34096).

See Figure 2 for D9068 to D9052 wiring connections.

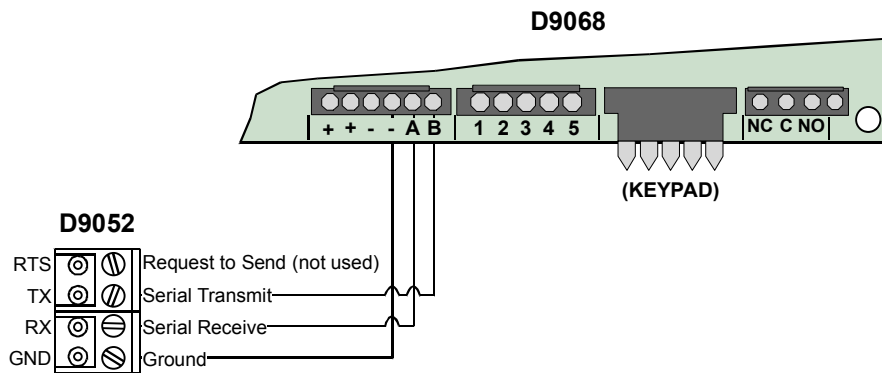


Figure 2: D9068-D9052 Connections

2.3 D9068 to FACP Relay Connections (Optional)

The D9068's five inputs can be used as backup connections to a FACP. The D8024 and D10024 each provide two on-board relays. Additional relay outputs can be added to the FACP using D328A Addressable Analog Relay Modules.

The relays should be installed and configured so that they activate only for the specified FACP events. For FACP relay programming instructions, see the *Analog Fire Alarm Control Panel Programming Guide* (P/N: 38789). For D9068 detailed relay wiring instructions, see the *D9068 Operation and Installation Guide* (P/N: 45386). For D328A wiring, addressing and operating instructions, see the *D328A Installation Guide* (P/N: 37095).

When using the D9068's inputs as backup connections, the mappings shown in Table 1 should be used from FACP event to D9068 input activation type.

FACP General System Event	D9068 Input Activation Type
Fault Event	Fault on Short
AC Fail	AC Fail
Common Fire	Alarm

Table 1: D9068 Input to FACP Event Mappings

To access the D9068's input point configuration from the D7033 Keypad, press the following keys: [0] (Program) - [3] (Program Inputs) - select point number by pressing the corresponding number key followed by [#] - [1] (Configure).



The D9068's inputs can only detect alarm (shorted) conditions when the RS-232 link is broken. When the RS-232 link to the FACP is active, the inputs are not monitored.



When configured to the D8024 or D10024, the D9068's five inputs are only for use as backup connections. They cannot be used as separate or additional zone inputs.

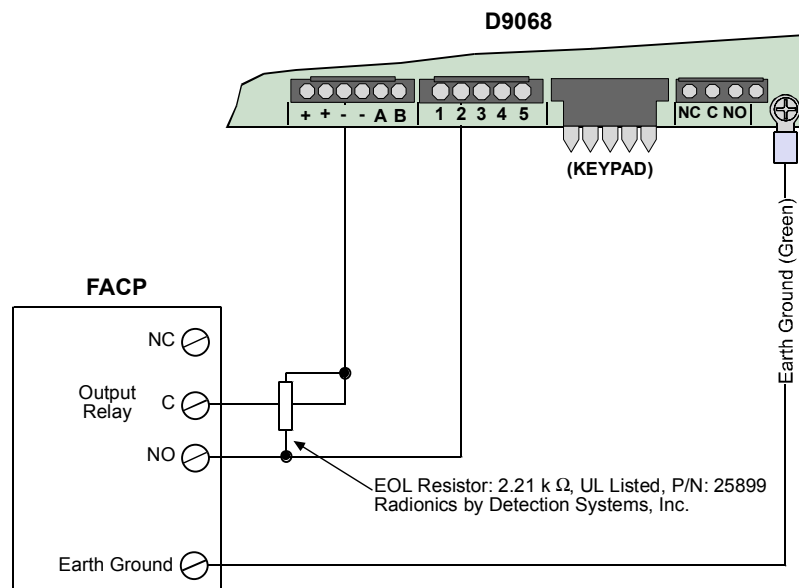


Figure 3: Basic D9068 Relay Connections

Note: The input is supervised and requires an EOL resistor connected as shown in Figure 3.

3.0 FACP Programming

The D9068 must be connected to a FACP with a network address of 1. Communication with the D9068 will not be possible if the FACP's network address is set to any other number. The D9068 uses a network address of 0.

This section only provides the essential programming steps required to set up the D8024 or D10024 for use with the D9068.

3.1 Setting the FACP's Network Address

Use the following steps to set the network address on the D8024 or D10024:

- 1) Press the [**>**] key to display the Main Menu.
- 2) Press the [**1**] key for 1) Commission.
- 3) When the display prompts, "Please key in your passcode," enter the Control Level 3 passcode. The display then shows Commission Menu 1.
- 4) Press the [**Yes**] key twice to page to Commission Menu 3.
- 5) Press the [**3**] key to enter Network options.
- 6) If the display prompts "Memory Locked!", unlock the memory by moving the Memory Lock switch into the OPEN position. See the *Analog Fire Alarm Control Panel Programming Guide* (P/N: 38789) for Memory Lock Switch locations.

Note: The memory must be locked at the end of the programming session. The FACP will not exit Commissioning Mode unless the memory is locked.

- 7) Press the [**3**] key to display Network Menu 1.
- 8) When the display prompts "Panel Network - address number?", press the [**1**] key to enter a network address of one.
- 9) If you are finished with panel programming, return the FACP to normal operating mode by pressing the [**No**] key twice. Then press the [**3**] key to select 3) Normal Operation from Commission Menu 1. Move the Memory Lock Switch to the CLOSED position.

4.0 D9068 Programming

This section only provides the essential programming steps required to operate the D9068 with the D8024 or D10024. For complete D9068 programming instructions, see the *D9068 Operation and Installation Guide* (P/N: 45386).

4.1 D9068 Account Numbers

Use the following steps to set the D9068's account numbers:

- 1) From the Programming Menu, press the **[5]** key on the D7033 Keypad to select PROG ACC'NTS.
- 2) Press the **[1]** key to select ACCOUNT NUMS.
- 3) Press the corresponding number key for the account number you wish to set (**[1]** for Account # 1, **[2]** for Account #2).
- 4) The existing number is shown on the top line. Hexadecimal digits A through F can be accessed for entry by pressing the **[Test]** key. Press **[1]** for A, **[2]** for B, **[3]** for C, **[4]** for D, **[5]** for E and **[6]** for F.
- 5) Enter the new number on the second line and press the **[#]** key to confirm your entry. Press the **[*/Clear]** key to return to the PROG ACC'NTS submenu. Program Account Number 2 using the same procedure.

Note: "0000" is not a valid account number. At least one digit must be non-zero.

4.2 D9068 Phone Numbers

Use the following steps to set the D9068's phone numbers:

- 1) From the PROG ACC'NTS submenu, press **[2]** for PHONE NUMS. The PHONE NUMS window will display.
- 2) Press the corresponding number key for the phone number you wish to set (**[1]** for Phone # 1, **[2]** for Phone #2).

Note: Phone #3 is currently not available and is reserved for future use.

- 3) Enter the phone number. Press **[Drill]** and **[Disable]** to move between digits. Press the **[#]** key when the entry is complete. Press **[*/Clear]** to return to the PROG ACC'NTS submenu.

Several special control characters can be included in the phone number by pressing the **[Test]** key:

- *** CODE:** Press the **[TEST]** key, and then press the **[1]** key for Touch Tone "*" action.
- **# CODE:** Press the **[TEST]** key, and then press the **[2]** key for Touch Tone "#" action.
- **/3 SEC DELAY:** Press the **[TEST]** key, and then press the **[3]** key for a three-second delay.

4.3 D9068 Serial Port

Use the following steps to enable the D9068's serial port:

- 1) From the Programming Menu, press **[8]** for Serial Connection.
- 2) Press **[1]** for Yes.

5.0 Special Notes



Although the D9068 supervises its connection to the D8024 and D10024, the analog FACPs do not supervise the connection of the D9068. If the RS-232 link between the D9068 and FACP is broken, the D9068 will recognize the problem but the FACP will not. For installations that require the FACP to recognize faults on the D9068, the D9068's relay output should be connected to an analog input module such as a D326A or D339A Point Contact Module. On the FACP, the points should be configured for action "Fault." On the D9068, the relay should be configured for "Release on Trouble."



No individual restorals are sent, only system reboot/reset reports are sent when the system is all clear.



No FACP trouble reports are sent when the FACP is in alarm. However, D9068 trouble reports are still sent.



See Appendix F in the D9068 Operation and Installation Guide (P/N: 45386) for codes and events generated by the D8024 and D10024 FACPs.