

D7030X



Fire Systems

EN | Installation Guide
Eight-Zone LED
Annunciator

BOSCH

Notices

This guide covers the installation of the D7030X Eight-Zone LED Annunciator in a fire system supervised by a D7024 Fire Alarm Control Panel (FACP).

Install, test, and maintain the D7030X according to the procedures in this guide, NFPA 72, local codes, and the Authority Having Jurisdiction (AHJ).

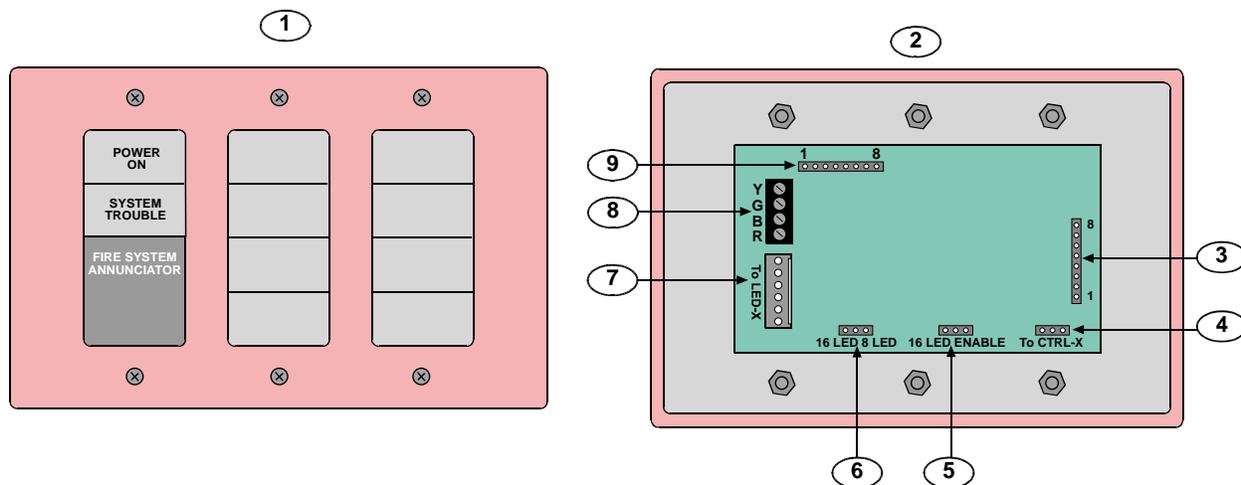


Follow the procedures in this guide to avoid personal injury and damage to the equipment. Failure to follow procedures can cause the D7030X to not operate properly. Bosch is not responsible for improperly installed, tested, or maintained devices.

1.0 Description

The D7030X has power, trouble, and eight-zone LEDs that can be individually labeled. Mount the D7030X in a standard three-gang box (*Figure 1*).

Figure 1: D7030X Features



1 - Front outside view

2 - Inside view

3 - Address jumpers

4 - To D7031 (optional)

5 - LED enable jumpers

6 - 8 and 16 zone selection

7 - To D7032 (optional)

8 - To FACP option bus

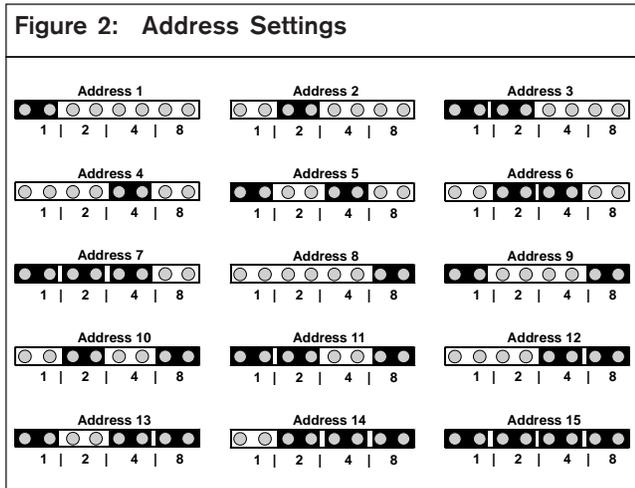
9 - Remote LED pins



For the D7030X to operate with the D7024, use control panel firmware version 2.0 or greater.

2.0 Setting the Address

Figure 2 shows the 15 possible annunciator addresses you can select when setting the D7030X address.

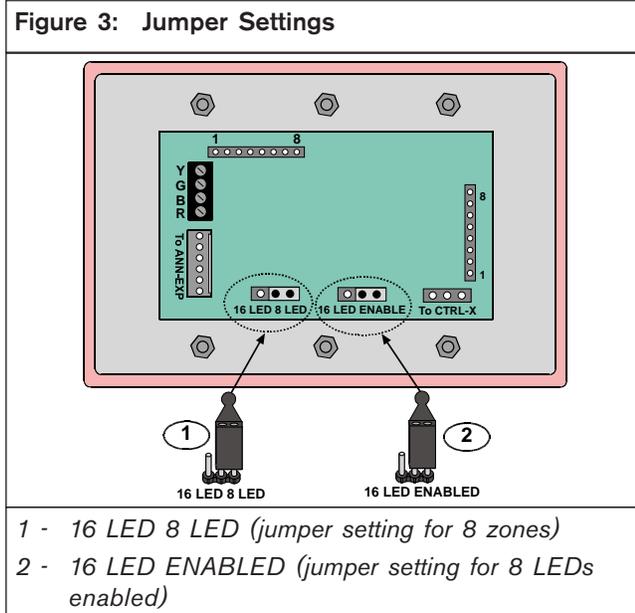


The D7030X must have a unique address set within its address pins. This address cannot conflict with other annunciator addresses or other option bus device addresses. Program the D7030X at the control panel using the Update Bus option in the Programming Mode.

Each address can only support one device.

3.0 Setting the LED Jumpers

Set the LED jumpers to 8 LED (zones) and 8 LED ENABLED as shown in Figure 3. When adding a D7032 Eight-Zone LED Expander, refer to the *D7032 Installation Guide* (P/N: 47169) for jumper settings.

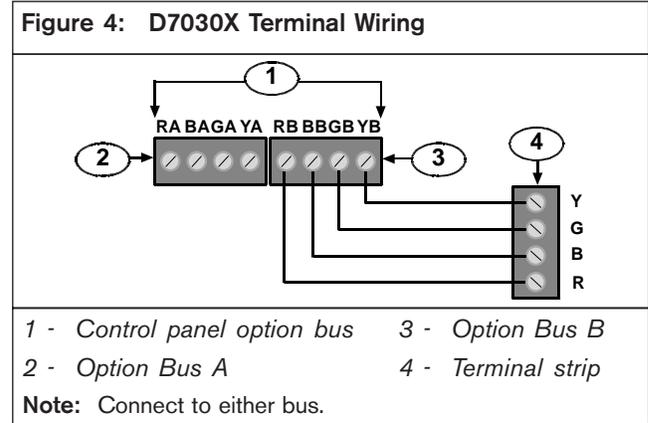


4.0 Wiring

Ensure all wiring is de-energized before routing.

Inform the operator and the local AHJ before installing the D7030X in an existing system. Disconnect all power to the FACP.

1. Remove the AC power from the system at the dedicated 120 VAC breaker.
2. Remove the standby battery power before making or removing any connections to the FACP.
3. Route wiring from the control panel (Option Bus A or Option Bus B) through the three-gang box knockout to the annunciator terminal strip (Figure 4).



To prevent the D7030X from operating improperly, do not use Option Bus A and Option Bus B simultaneously. Use one or the other.

4. Follow the wiring guidelines:
 - Do not use shielded cable.
 - Do not exceed 1000 ft (305 m) between the FACP and the annunciator.
 - Multiple home-runs are permitted but the total length of annunciator wiring is limited to a maximum of 4000 ft (1219 m) per system, depending on the total current draw on the branches (*Table 1*).

Total Current Draw on Branch	Maximum Length of 18 AWG (1.2 mm) Wire
175 mA	4000 ft (1219 m)
200 mA	3500 ft (1065 m)
250 mA	3000 ft (915 m)
300 mA	2500 ft (760 m)
400 mA	1900 ft (580 m)
500 mA	1500 ft (455 m)

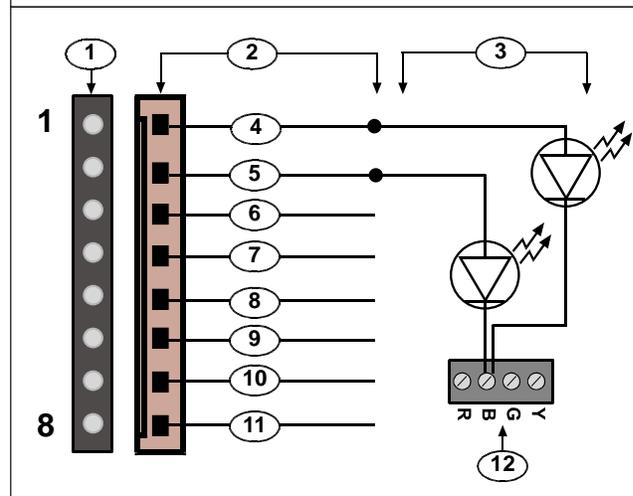
You can use up to three annunciators on a single 500 ft (152 m) run of 18 AWG (1.2 mm) wire, or one annunciator on a 1000 ft (305 m) run. Refer to the *D7032 Installation Guide* (P/N: 47169) for more information on cable length.

5. Refer to *Section 6.0 Mounting* on page 5 to mount the D7030X.
6. Restore power to the system.
7. When wiring is complete, ensure the three-gang box is secured to the mounting surface.

5.0 Adding External LEDs

You can add external LEDs for remote indication of the individual zones by connecting to the remote LED pins (*Figure 5*).

Figure 5: External LED Connections



- | | |
|---------------------|------------------|
| 1 - Remote LED pins | 7 - Yellow wire |
| 2 - Cable harness | 8 - Green wire |
| 3 - Remote LEDs | 9 - Blue wire |
| 4 - Brown wire | 10 - Violet wire |
| 5 - Red wire | 11 - Gray wire |
| 6 - Orange wire | 12 - Option bus |

Note: The remote LED pins are on the D7030X.



The current draw for remote LEDs for any zone cannot exceed 6 mA.

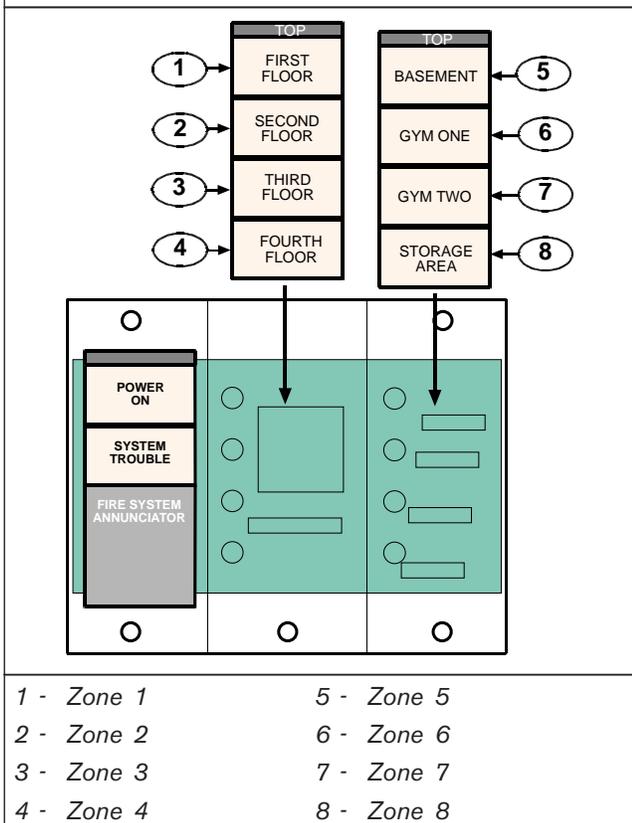
6.0 Mounting



Mount the D7030X in easily seen positions at entry locations.

- Before mounting the D7030X in a standard three-gang box, mark the zone labels and insert them into their respective slots (*Figure 6*).

Figure 6: Zone Label Location



- Set the annunciator in or over the three-gang box.
- Position the faceplate.
- Secure the D7030X to the box using the screws (supplied).
- Connect the standby batteries.
- Close the 120 VAC dedicated breaker controlling the power input to the control panel.

7.0 Programming



Program the D7030X by installing firmware version 2.0 or greater in the FACP.

You can program zones to light whenever points within that zone go into alarm. Do this by assigning an output zone to each D7030X input point. For example, if you assign Output Zone 1 to Input Points 1 through 5, the LED for Output 1 lights when any input point in this zone goes into an alarm.

- Press [0/PROG] to access the Programming Mode. PROG MODES appears across the top line and the Programming Menu options scroll across the second line.
- Enter a personal identification number (PIN) if a prompt appears for this information.
- At the Programming Menu, press [3] for Prog System.
- Press [4] for Option Bus.
- With the D7030X connected to the option bus, press [1] for Update Bus. The FACP indicates a device is added to the option bus.
- Press [*/CLEAR] to return to the Programming Menu.
- At the Programming Menu, press [4] for Prog Inputs.
- Press [1] for Point Number and enter the point number you want programmed.
- Press [# /CMND] to accept the entry.
- Press [2] for Output Zone and enter the output zone for this point.
- Repeat *Steps 7 through 10* until all points are programmed.
- Press [*/CLEAR] three times to exit the Programming Menu and return to the Main Menu.

8.0 Using a D7032 with the D7030X

Each D7030X processes 16 zones of information. When a D7032 Eight-Zone LED Annunciator Expander is connected to the D7030X, an additional 8 LED zones appear allowing the D7030X and D7032 combination to show a total of 16 LED zones. If no D7032 is attached, only the lower 8 zones appear. Up to 8 D7030X and D7032 combinations can connect to the D7024 FACP.

Table 2 identifies the D7030X and D7032 combinations.

D7030X	Zones Covered	Appears on D7030X	Appears on D7032 (if attached)	Comment
1	1 to 16	1 to 8	9 to 16	Combination with lowest option bus address such as Address 1.
2	17 to 32	17 to 24	25 to 32	Combination with second lowest option bus address such as Address 2.
3	33 to 48	33 to 40	41 to 48	Combination with third lowest option bus address such as Address 3.
4	49 to 64	49 to 56	57 to 64	Combination with fourth lowest option bus address such as Address 4.
5	1 to 16	1 to 8	9 to 16	Fifth combination repeats first combination.
6	17 to 32	17 to 24	25 to 32	Sixth combination repeats second combination.
7	33 to 48	33 to 40	41 to 48	Seventh combination repeats third combination.
8	49 to 64	49 to 56	57 to 64	Eighth combination repeats fourth combination.

Note: The column labeled "Appears on D7030X" applies whether or not the D7032 is connected to any D7030X.

9.0 Specifications

Operating Voltage	12 VDC nominal
Standby Current	35 mA (27 mA for battery calculation)
Alarm Current	175 mA (132 mA for battery calculation)
Dimensions (H x W x D)	4.5 in. x 6.5 in. x 0.75 in. (11.4 cm x 16.5 cm x 1.9 cm)
Wire Type	Non-shielded, four-wire
Maximum Distance Allowed Between Control Panel and Annunciators	1000 ft (305 m)
Maximum Distance of Annunciator Wire for each System	4000 ft (1219 m)
Number for each System	Eight D7030X, eight D7032 maximum

Notes

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