



FEDERAL SIGNAL

Safety and Security Systems / Industrial

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Models CMXC-SB, PMXC-SB, and WMXC Series



Installation Manual for Optional Fixture Mounts



Warranty – Seller warrants all goods for five years on parts and 2-1/2 years on labor, under the following conditions and exceptions: Seller warrants that all goods of Seller's manufacture will conform to any descriptions thereof for specifications which are expressly made a part of this sales contract and at the time of sale by Seller such goods shall be commercially free from defects in material or workmanship. Seller reserves the right at the Seller's discretion to "Repair and Return" or "Replace" any item deemed defective during the warranty period. This warranty does not cover travel expenses, the cost of specialized equipment for gaining access to the product, or labor charges for removal and reinstallation of the product. This warranty shall be ineffective and shall not apply to goods that have been subjected to misuse, neglect, accident, damage, improper maintenance, or to goods altered or repaired by anyone other than Seller or its authorized representative, or if five years have elapsed from the date of shipment of the goods by Seller with the following exceptions: lamps and strobe tubes are not covered under this warranty. Outdoor warning sirens and controllers manufactured by Federal Warning Systems are warranted for two years on parts and one year on labor. No agent, employee, representative or distributor of Seller has any authority to bind the Seller to any representation, affirmation, or warranty concerning the goods and any such representation, affirmation or warranty shall not be deemed to have become a part of the basics of the sales contract and shall be unenforceable. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OR MERCHANTABILITY, FITNESS FOR PURPOSE AND OF ANY OTHER TYPE, WHETHER EXPRESS OR IMPLIED. These warranties shall not apply unless Seller shall be given reasonable opportunity to investigate all claims for allegedly defective goods. Upon Seller's instruction a sample only of allegedly defective goods shall be returned to Seller for its inspection and approval. The basis of all claims for alleged defects in the goods not discoverable upon reasonable inspection thereof pursuant to paragraph 8 hereof must be fully explained in writing and received by Seller within thirty days after Buyer learns of the defect or such claim shall be deemed waived.



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Safety Messages to Installers

▲ WARNING

It is important to follow all instructions shipped with this product. This device is to be installed by a trained electrician who is thoroughly familiar with the National Electric Code/Canadian Electric Code and will follow the NEC/CEC Guidelines as well as local codes.

The selection of mounting location for the device, its controls and the routing of the wiring is to be accomplished under the direction of the facilities engineer and the safety engineer. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating this equipment.
- Never alter the unit in any manner. Safety in hazardous locations may be endangered if additional openings or other alterations are made in units specifically designed for use in these locations.
- After installation, ensure that all screws are properly tightened.
- After installation, test the light system to ensure that it is operating properly.
- After testing is complete, provide a copy of this instruction sheet to all operating personnel.
- Establish a procedure to routinely check the light installation for integrity and proper operation.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

Overview of the Fixture Mounts

The optional fixture mounts are designed to replace the original pendant mount on the explosion-proof light housing.

Wiring must comply with Article 500 of the National Electrical Code and the local authority having jurisdiction.

For Marine applications, all wiring, including supply wire, must be stranded wire and meet USCG (CFR46) Sections (110-113.)

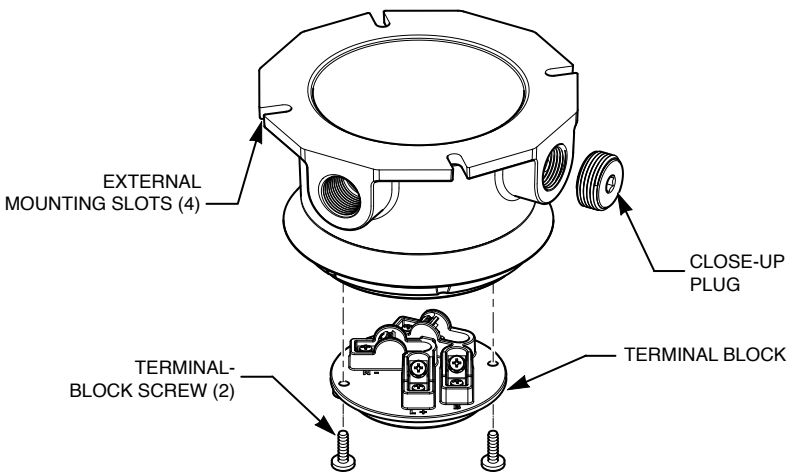
Installing the CMXC-SB Ceiling Mount

To install the ceiling mount on the support surface:

1. See Figure 1. Secure the ceiling mount to the support surface using the four external mounting slots.
2. Remove the terminal block from the ceiling mount by removing the two screws securing it to the fixture.
3. For instructions on wiring the beacon, see page 8 for the DC beacon or page 9 for the AC beacon.

Figure 1 Model CMXC-SB ceiling mount

THE CMXC-SB IS NOT SUITABLE FOR USE WITH THROUGH-BRANCH CIRCUIT CONDUCTORS.

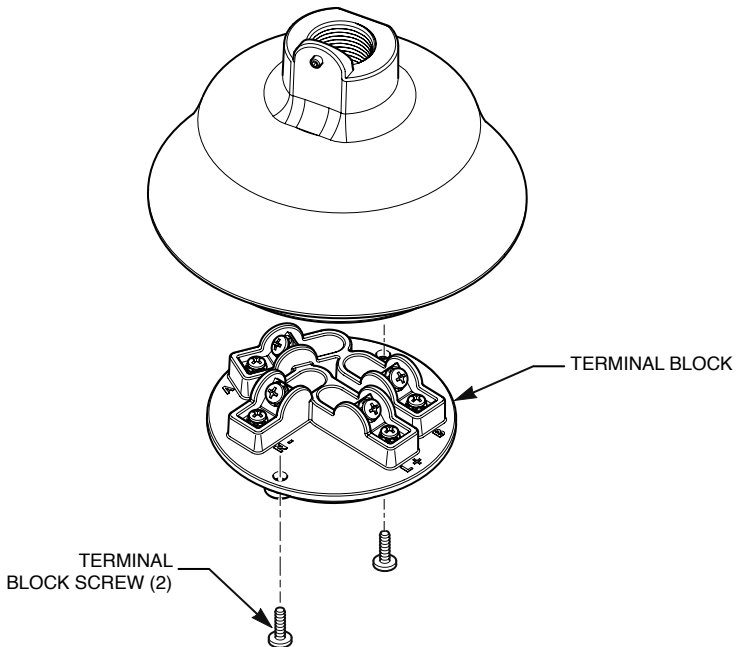


Installing the PMXC-SB Pendant Mount

To install the pendant mount on 3/4-inch pipe:

1. Ensure that the mating threads are clean.
2. Thread the pendant mount onto the 3/4-inch pipe and secure it with the setscrew.
3. Remove the terminal block from the ceiling mount by removing the two screws securing it to the fixture.
4. For instructions on wiring the beacon, see page 8 for the DC beacon or page 9 for the AC beacon.

Figure 2 Model PMXC-SB pendant mount



Wiring the DC Beacon to the CMXC-SB and PMXC-SB

The CMXC-SB is not suitable for use with through-branch circuit conductors.

⚠ WARNING

SHOCK HAZARD—To avoid electrical shock hazards, do not connect the light to the supply circuit when power is applied.

NOTICE

REVERSE POLARITY/MISWIRING—DC strobe units are polarity- and voltage-sensitive and may be damaged by an incorrect electrical hookup. When connecting the 24 Vdc strobe unit to the voltage supply lines, polarity must be observed. In addition, damage will result if the voltage rating of the particular model is exceeded.

See the figures on pages 6 and 7. To wire the DC beacon to the fixture terminal block:

1. Connect the positive (+) power source wire to the terminal block screw marked **L+**.
2. Connect the negative (–) power source wire to the terminal block screw marked **N–**.
3. If required by local building codes, connect the earth ground wire to the green screw in the fixture mount.
4. Place the terminal block in the fixture mount and secure it with the mounting screws.
5. Plug unused conduit entries with the provided close-up plugs.
6. To prevent galling and ease future maintenance, ensure that the fixture mount threads are clean and lubricated.
7. Thread the fixture clockwise into the fixture mount and hand tighten it securely.

Wiring the AC Beacon to the CMXC-SB and PMXC-SB

The CMXC-SB is not suitable for use with through-branch circuit conductors.

⚠ WARNING

SHOCK HAZARD—To avoid electrical shock hazards, do not connect the light to the supply circuit when power is applied.

⚠ WARNING

To reduce shock hazards during maintenance POLARITY MUST BE OBSERVED when connecting AC units to the power source.

See the figures on pages 6 and 7. To wire the AC beacon to the fixture terminal block:

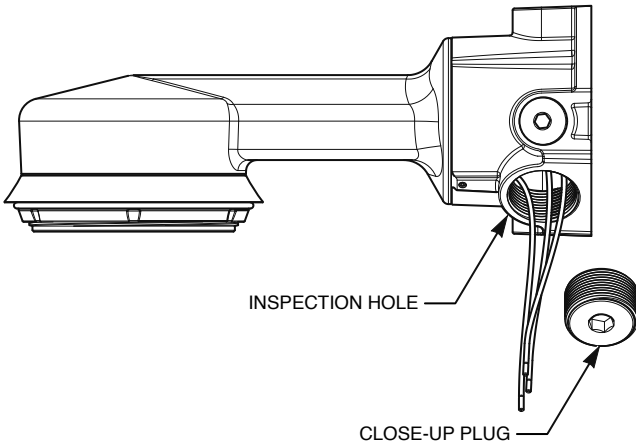
1. Connect the phase (hot) power source wire to the terminal block screw marked **L+**.
2. Connect the common (neutral) power source wire to the terminal block screw marked **N-**.
3. If required by local building codes, connect the earth ground wire to the green screw in the fixture mount.
4. Place the terminal block in the fixture mount and secure it with the mounting screws.
5. Plug unused conduit entries with the provided close-up plugs.
6. To prevent galling and ease future maintenance, ensure that the threads on the fixture mount are clean and lubricated.
7. Thread the fixture clockwise into the fixture mount and hand tighten it securely.

Installing the WMXC-Series Wall Mount

To install the wall mount fixture on the support surface:

1. See Figure 3. Secure the wall mount to the support surface using the two external mounting holes.
2. Use wire nuts to connect power and ground as described in the next sections.

Figure 3 Model WMXC-SB wall mount



Wiring the Non-supervised DC Beacon to the WMXC-SB

⚠ WARNING

SHOCK HAZARD—To avoid electrical shock hazards, do not connect the light to the supply circuit when power is applied.

NOTICE

REVERSE POLARITY/MISWIRING—DC strobe units are polarity- and voltage-sensitive and may be damaged by an incorrect electrical hookup. When connecting the 24 Vdc strobe unit to the voltage supply lines, polarity must be observed. In addition, damage will result if the voltage rating of the particular model is exceeded.

To wire the non-supervised DC beacon to the fixture terminal block:

1. Connect the positive (+) power source to the black wire.
2. Connect the negative (–) power source to the white wire.
3. If required by local building codes, connect the green/yellow wire to earth ground.
4. To prevent galling and ease future maintenance, ensure that the fixture mount threads are clean and lubricated.
5. Thread the fixture clockwise into the fixture mount and hand tighten it securely.

Wiring the Supervised DC Beacon to the WMXC-4 and WMXC-4R

⚠ WARNING

SHOCK HAZARD—To avoid electrical shock hazards, do not connect the light to the supply circuit when power is applied.

NOTICE

REVERSE POLARITY/MISWIRING—DC strobe units are polarity- and voltage-sensitive and may be damaged by an incorrect electrical hookup. When connecting the 24 Vdc strobe unit to the voltage supply lines, polarity must be observed. In addition, damage will result if the voltage rating of the particular model is exceeded.

The Models WMXC-4 and WMCX-4R wall mounts have five leads: two red, two black, and one green/yellow.

To wire the supervised DC beacon to the fixture terminal block for electrical supervision:

1. Connect one red (+) lead to the positive side of the incoming power source.
2. Connect the other red (+) lead to the positive side of the outgoing power source.

Installation Instructions for Optional Fixture Mounts

3. Connect one black (–) lead to the negative side of the incoming power source.
4. Connect the other black (–) lead to the negative side of the outgoing power source.
5. If required by local building codes, connect the green/yellow lead to earth ground.
6. To prevent galling and ease future maintenance, ensure that the fixture mount threads are clean and lubricated.
7. Thread the fixture clockwise into the fixture mount and hand tighten it securely.

Connecting the AC Beacon to the WMXC-SB

⚠ WARNING

SHOCK HAZARD—To avoid electrical shock hazards, do not connect the light to the supply circuit when power is applied.

⚠ WARNING

To reduce shock hazards during maintenance POLARITY MUST BE OBSERVED when connecting AC units to the power source.

See Figure 3 on page 10. To wire the AC beacon to the fixture terminal block:

1. Connect the phase (hot) power source wire to the black wire.
2. Connect the common (neutral) power source to the white wire.
3. If required by local building codes, connect the earth ground wire to the green/yellow wire.
4. Push the wires into the inspection hole Plug unused conduit openings and the inspection hole with the provided close-up plugs.
5. To prevent galling and ease future maintenance, ensure that the fixture mount threads are clean and lubricated.
6. Thread the fixture clockwise into the fixture mount and hand tighten it securely.