

FLASHER MODULE CIRCUIT BOARD REPLACEMENT GUIDE

LEVEL 4











Flasher modules replaced under warranty will automatically have their warranty transferred from the original module to the replacement. Module warranty can be viewed by signing into MX Cloud.

- 1. Disconnect power to system:
 - Solar only: disconnect solar connector and then battery connector(s).
 - MX 300 AC Cabinet Module: open fuse holder.
 - MX 400 AC Cabinet Module: turn off breaker.



- 2. See the following sections for the flasher module circuit board being replaced:
 - 1.0 MX RRFB Module
 - 1.1 MX Beacon Module
 - 1.2 MX LED Sign Module
 - 1.3 MX Chevron Sign Module



90828REVD

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1.0 RRFB Circuit Board Replacement

- 1. Remove four screws and slide off RRFB cover.
- 2. Disconnect all wiring on right-side module RRFB terminals. Take note of color and location.
- 3. Disconnect jumper connector on right side that connects to left RRFB module.
- 4. Disconnect wiring on left-side module RRFB terminals. Take note of color and location.





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- 5. Remove four screws on right-side module and remove it from light bar housing.
- 6. Remove four screws on left-side module and remove it from light bar housing (not shown).
- 7. Take replacement right-side module and install per image below. Ensure module slots onto threaded inserts and sits flush with light bar housing.
- 8. Take replacement left-side module and install (not shown). Ensure module slots onto threaded inserts and sits flush with light bar housing.
- 9. Rewire and reassemble rest in reverse order.
- 10. Locate product label on backside of light bar housing. Clean and dry area then apply new serial number label over existing serial number on product label. Do not rub label as ink may smear.
- 11. Go to Section 2.0.



NOTE

Light bar modules are changed in matched pairs for optimal balance of light output between modules.

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1.1 Beacon Circuit Board Replacement

- 1. Loosen both captive thumbscrews and open beacon signal head.
- 2. Disconnect all wiring on circuit board. Take note of color and location.
- 3. Remove both quick connect LED terminals.



- 4. Remove two screws securing circuit board chassis.
- 5. Flip assembly over and remove three screws. Note: bottom screw may be a bumper or bumper with standoff depending on your configuration.



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- 6. Use removed hardware to fasten replacement circuit board onto chassis.
- 7. Reinstall chassis assembly into signal housing and reconnect wires. Replace any cable ties that were cut.
- 8. Take note of old circuit board that was removed and match DIP switch settings to new circuit board:
 - LED color (RED/YLW).
 - LED size (12"/8").
 - 0.5 second flash delay (ON/OFF).
- 9. Locate product label on backside of signal head housing. Clean and dry area then apply new serial number label over existing serial number on product label. Do not rub label as ink may smear.
- 10. Go to Section 2.0.







Yellow or red wire from the LED is positive.





1.2 LED Sign Circuit Board Replacement

- 1. Loosen screw and remove cap. Ensure O-ring stays captive on screw.
- 2. Disconnect all wiring. Take note of color and location.



- 3. Remove screws and slide out control board.
- 4. Slide replacement circuit board into housing and secure with two screws.
- 5. Reinstall all wires into terminals. Replace and fasten cap.
- 6. Locate product label on backside of LED sign. Clean and dry area then apply new serial number label over existing serial number on product label. Do not rub label as ink may smear.
- 7. Go to Section 2.0.





It may be easiest to remove board before disconnecting the LED +/- wires for better access.



1.3 Chevron Sign Circuit Board Replacement

- 1. Loosen screws and remove junction box cover.
- 2. Disconnect all wiring. Take note of color and location.





- 3. Remove screws and slide out control board.
- 4. Slide replacement circuit board edge into slots shown and secure with two screws.
- 5. Reinstall all wires into terminals. Replace and fasten junction box cover.
- 6. Locate product label on backside of Chevron sign. Clean and dry area then apply new serial number label over existing serial number on product label. Do not rub label as ink may smear.
- 7. Go to Section 2.0.





2.0 Final Connections and System Test

- 1. Reconnect power to system.
- 2. Ensure flasher module is now operating as per your application.
- 3. Within MX Field App, tapping on the yellow light bulb in the upper left corner will cause the flasher module(s) to flash for a brief period. See MX Field App guide for more information.



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NOTE

Once the new flasher module has been installed it will begin to report into MX Cloud connected to its respective system. Contact Carmanah if you would like the old flasher module removed from MX Cloud if this is not a warranty replacement.

NOTE

If a Flasher Removed fault is present in the MX Field App after replacing the flasher module, tap on the ellipses (...) in the upper right corner to perform a soft reboot on the system.