

Rain Bird® ESP-LXIVM Controller

Surge Protection and Grounding

Surge Protection and Grounding

The ESP-LXIVM controller, IVM 2-Wire Interface Module and the 2-Wire path must be properly surge protected and grounded. Doing so can help prevent damage to the controller and irrigation system and also significantly reduce troubleshooting, repair time and expense. Failure to do so could result in failure of the controller and voiding the warranty.

⚠ CAUTION

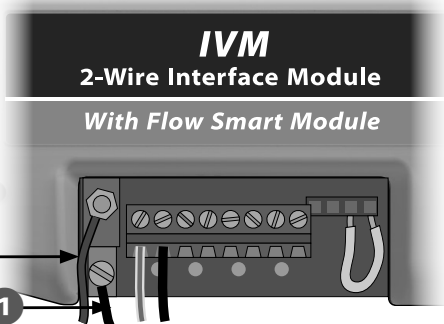
The LX-IVM controller and the IVM 2-Wire Interface Module must be properly grounded. Doing so can help prevent damage to the controller and irrigation system and also significantly reduce troubleshooting, repair time and expense. Failure to do so could result in failure of the controller and voiding the warranty. Ensure that all grounding devices are compliant with local electrical codes.

ESP-LXIVM Controller


The ESP-LXIVM Decoder Controller is protected against electrical surges through the ground provided by the primary ground of the incoming power to the controller.

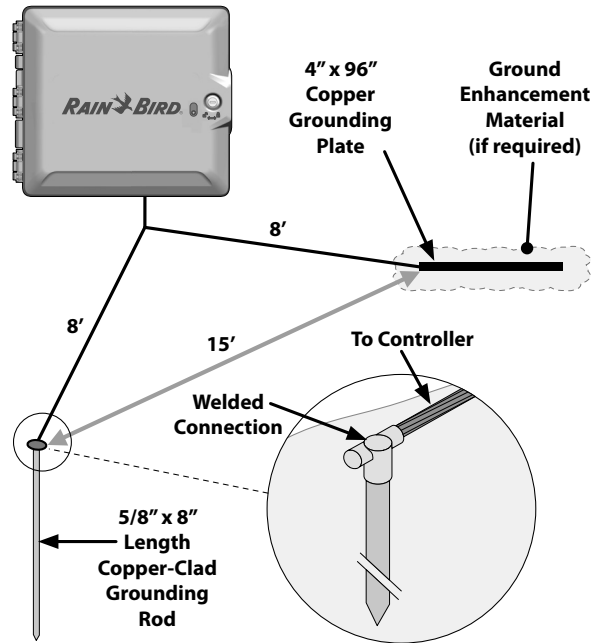
IVM 2-Wire Interface Module

- 1 Connect #8AWG (10mm) or #10AWG (6MM) bare copper wire to the IVM Module ground lug.

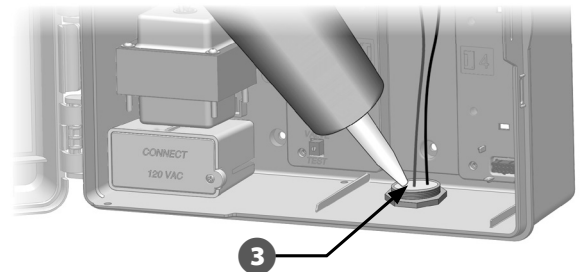


- 2 Connect the other end of the ground wire to a grounding rod(s) and/or plate with a resistance to ground of 10 ohms or less.

 NOTE: More information and guidelines on grounding electronic equipment in irrigation systems can be found on the American Society of Irrigation Consultants (ASIC) website at <https://asic.org/resources/>. If you have any questions about properly grounding the controller, contact Rain Bird technical assistance at 1-866-544-1406.



- 3 Once wiring is completed, fill top of conduit with waterproof caulking to prevent insect intrusion into the controller cabinet.



- 4 IVM-SD provides surge protection for the ESP-LXIVM Controller and the IVM 2-Wire interface module against electrical surges originating from each 2-Wire Path utilized. IVM-SD shall be spliced into each 2-Wire Path immediately where the IVM-SD can be taken to ground to the ESP-LXIVM Controller.

2-Wire Path

The 2-Wire path shall be surge protected and grounded with one IVM-SD every 500 feet or every 15 field devices, whichever is smaller.

Termination of 2-Wire Path – An IVM-SD shall be installed at the end of the 2-Wire path in a STAR configuration.



"Rain Bird" is a registered trademarks of Rain Bird Corp.

2020 Rain Bird Corporation D41895 Rev.07/20