

## Teledyne Detcon Sales Channels and Customers

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### Wiring of the DM700 and PI700 Earth Ground Wire

The DM700 and PI700 from Teledyne Detcon utilize an intrinsic safety barrier in the Intelligent Transmitter Module (ITM) to allow these sensors to be changed out in a classified area. Note that this feature is not present on the 700 series ITM's that utilize a higher power sensor such as the FP700, IR700, or TP700.



The latest version of the DM700 and PI700 ITM's include both a black 0V electrical ground connection as well as a striped green/yellow earth ground connection. Section 2 of the manuals for these two products has always noted that:

- A good ground connection should be verified between the sensor's metal enclosure and the junction box. If a good ground connection is not made, the sensor can be grounded to the junction box using the sensor's external ground lug. Also verify a good ground connection between the junction box and earth ground.
- The sensor power supply common (black wire) must be referenced to the metal enclosure body (ground) during installation

Keeping these notations in mind, proper wiring of these two ITM's with the black 0V electrical ground wire and the green/yellow striped earth ground wire is shown for the ITM in conjunction with the standard 700 series condulet housing:



Note the added ground wire used to comply with the instruction found in the manual. A similar wiring scheme should be used if the DM700 and PI700 are used either without the conduit or with one of the optional Remote Access Modules (RAM) available for these ITM's.

Any questions regarding proper wiring of these or any other Teledyne Gas and Flame Detection product should be addressed with our service department at:

[Detcon-Service@Teledyne.com](mailto:Detcon-Service@Teledyne.com)

713-559-9230

Your Teledyne Gas and Flame Detection Regional Sales Manager will also be able to assist with questions regarding proper use of our products. Please don't hesitate to contact us if you have any questions or need any additional information.

Sincerely,

Brent Kleven – Product/Application Specialist