

Your Data Logger Installation Kit (104151-01, 104152-01, 104047-02, 104048-02) includes the following:

- | | |
|---|------------------------------|
| 1) Data Logger Connector (Hex or Square depending on kit) | 5) Data Logger Cap |
| 2) O-ring (with pre-applied lubricant) | 6) Security Seal |
| 3) Wire Splice | 7) Square Connector Gasket |
| 4) Desiccant (Keep in bag until ready to install) | 8) T-10 Torx Head Screws (4) |
| | 9) Replacement Plug |

AG3000/iMag4700 meters built before October 2023 (S/N 1023XXXX or lower) ship with a functional data logger already available in the electronics.

If a customer has a meter that did not originally ship with a data logger connector, the data logger can be accessed by simply adding the connector and initializing the data logger as usual.

Adding the connector is quite simple but there are a few possible combinations. You will need to choose the correct housing and cable from the instructions below.

Your AG3000/iMag4700 flow meter will come in one of three models:



Base Model (Most Common)



The Remote 'r' Model



The Premium 'p' Model

The data logger will come in one of two mounting designs:



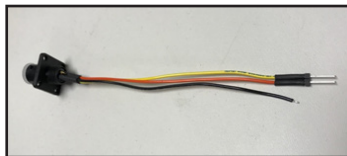
A square flange with four T-10 Torx head screws



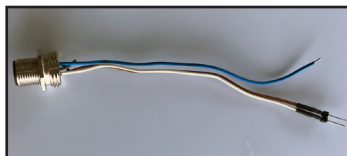
A threaded hexagonal flange



The base model and remote 'r' model use a data logger connector with one wire header and one ground wire.



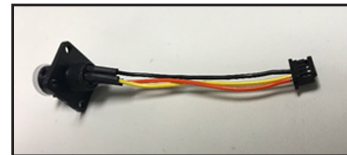
Square connector **In Kit: 104047-02**
Before 8/2017



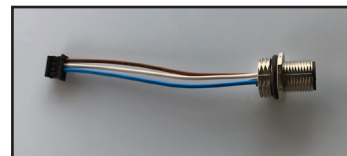
Hex connector **In Kit: 104151-01**
After 8/2017



The premium 'p' model unit uses a data logger connector with one plug.



Square connector **In Kit: 104048-02**
Before 10/2018



Hex connector **In Kit: 104152-01**
After 10/2018

INSTALL THE DATA LOGGER CONNECTOR TO THE HOUSING

Open Housing

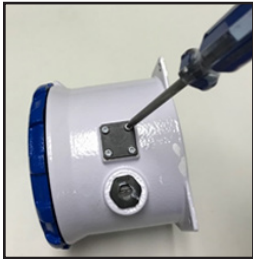
1. Cut security seal, if used, remove and discard.
2. Unscrew the glass cover from over the display and remove. Be sure the o-ring seal stays in place. Use a strap wrench to protect the coating or a pipewrench or large pliers.
3. Remove the 3 silver screws holding the display assembly and remove it from the meter. If the display is held in place by white or silver tabs with straight slots, rather than screws, simply grasp the finger recess and pop the display up and out of the meter.

CAUTION! Before removing display lid, take precautions to prevent water or wind-born dust from getting into the display enclosure while the cover is off.

IMPORTANT: If water usage regulation is in effect, only a person authorized by your regulatory agency should break the seal and replace it when finished.

Install Square Connector

1. Remove the square cap (T-10 Torx head screws)
2. Insert the square connector and gasket
3. When tightening the screws, make two complete circuits around the connector (compression of the gasket while tightening the last screws will leave the first screws a bit loose)



Remove the square cap



Tighten connector screws

Install Hex Connector

1. Remove one of the large M16 hex plug connectors with a socket, crescent or allen wrench. (As long as it is one of the larger M16 connectors you can install your data logger kit in one of the ports on either side of the meter housing.)
2. Insert the hex connector and O-ring.
3. When tightening the hex connector be certain to torque to at least 6-inch pounds. If the connector is not tight enough, it may come loose when the dust cap is removed.
4. If replacing a broken connector in a smaller M12 connector hole, remove the broken connector and replace with the small M12 hex plug and O-ring supplied in your kit. Install your new data logger kit in one of the larger ports on the opposite side of the meter.

**Note: Meters built before April 2020 will have a smaller M12 size data Logger port.
Meters built after April 2020 will have a larger M16 port.**

CONNECTIONS INSIDE THE METER

Premium 'p' Models (Both connector versions)

1. Plug the connector of the wire harness into the receiver on the circuit board. If your 'p' unit is an AC powered unit, the AC/DC power supply may need to be temporarily removed to gain access to the connector on the circuit board.



'p' model connector

CONNECTIONS INSIDE THE METER (CONTINUED)

Base and Remote 'r' Models (Both connector versions)

1. Turn the display over, so you are looking at the back of the circuit board. There will be one short black wire with a white insulator on its end that terminates into the 6-pin green terminal strip.
2. Cut the white insulator off the end of the black wire.
3. The two end slots of the 6-pin green terminal strip will be open. The orange and yellow (or brown and white) wires plug into these open slots. The orange (or brown) pin goes to the outside.
4. Insert the black (or blue) wire from the data logger connector, AND the black wire you cut the insulator from, into the wire splice and crimp them together. This connection must be made, or the data logger cannot communicate.



Cut the white insulator



Splice black wires

FINAL STEPS (ALL MODELS)

1. Return the display (transmitter) board to the housing on base model and 'r' model units and secure.
2. Install the cap on the data logger connector. The connector is water tight without the cap, but the cap helps keep the connector clean.
3. Be sure the window (Base and 'r' models) or the black cover ('p' model) is screwed snugly onto the housing of the meter to assure a watertight seal.

The cover should be tight and sit flush to the top of the head giving sufficient compression of the O-ring.

Always be sure the meter cover is sealed to prevent water ingress.

Warranty could be void if seal is not completely seated to housing.