

Connecting a T5 Series FMS to a Gilbarco Universal Distribution Box

Overview

This document explains how to connect a T5 Series Fuel Management System to a Gilbarco Universal Distribution box for the purpose of collecting dispensing data. The data is collected by the T5 Series Fuel Management System, consolidated, and used to produce inventory reconciliation reports.

The T5 Series Fuel Management System must contain the following equipment to facilitate the collecting of dispensing data

- TS-DIMIB-Internal dispenser interface module
- TS-TRAC-Tank inventory reconciliation and autocalibration software
- TSP-GDCBL Gilbarco Universal cable kit, which includes:
 - (1) 600-0201 Gilbarco Current Loop Cable
 - (1) 600-0202 Gilbarco RS422 Cable
 - (1) 601-1003 DB9F to RJ45 Adapter
 - (1) 601-1004 RJ45 to DB9M Adapter

Gilbarco dispensing systems use several types of distribution boxes. This table of D-Box part numbers with descriptions will assist you in determining which connection method to the TS-DIMIB meets your requirements. Gilbarco uses two different electrical means of transmitting data-current loop and RS422.

Note: Some Universal D-boxes may have the ability to have the communication type changed in the field. If communication cannot be established, the communication type should be verified. Refer to the Gilbarco Universal Distribution Box Installation Manual noting the position choices for jumpers 10 and 12.

D-Box Part No.	Description
PA01330000	Old style D-Box with circular DINN connector (CURRENT LOOP)
PA0261x000010	Universal D-Box with DB9P male (CURRENT LOOP)-one board
PA0261x000020	Universal D-Box with DB9P male (CURRENT LOOP)-two boards
PA0261x000011	Universal D-Box with DB9S female (RS422)-one board
PA0261x000021	Universal D-Box with DB9S female (RS422)-two boards
PA03060020	G-SITE D-Box with RJ45 connector (CURRENT LOOP)
PA0242	TS1000 D-Box with DB9P connector (CURRENT LOOP)

- **If the Gilbarco system uses a current loop style Universal D-Box or a TS1000 D-Box**, disconnect the Gilbarco console/controller from the distribution box and connect the Gilbarco style Dispenser Interface Module Cable (p/n 600-0201) to the Gilbarco D-Box. Plug the long end of the Dispenser Interface Module Cable (p/n 600-0201) into the TS-5 series CURRENT LOOP communication port.

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- If the Gilbarco system uses an RS422 style Universal D-Box, disconnect the Gilbarco console/controller from the D-Box and connect the Gilbarco style Dispenser Interface Module Cable (p/n 600-0202) to the Gilbarco D-Box. Plug the long end of the Dispenser Interface Module Cable (p/n 600-0202) into the TS-5 series RS422/232 communication port (Figure 1).

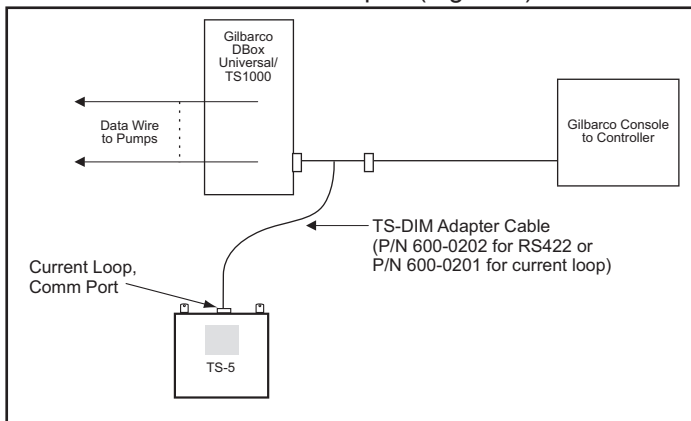


Figure 1: Connecting to Gilbarco D-Box Universal/TS1000

1. If the Gilbarco system uses a PA01330000 D-Box, cut off the “T” end of the Gilbarco style Dispenser Interface Module Cable (p/n 600-0201).
2. Locate an unused position in the Gilbarco D-Box.
3. Check that the switch is in the ‘Isolate’ position.
4. Connect the cut end of the adapter cable to the Gilbarco D-Box at this position.
5. Move the switch to the ‘Normal’ position.

If the D-Box positions are all in use, wire the Gilbarco style Dispenser Interface Module Cable (p/n 600-0201) in series with an existing pump. Plug the connector end of the 600-0201 adapter cable into the TS-5 series CURRENT LOOP communication port (Figure 2).

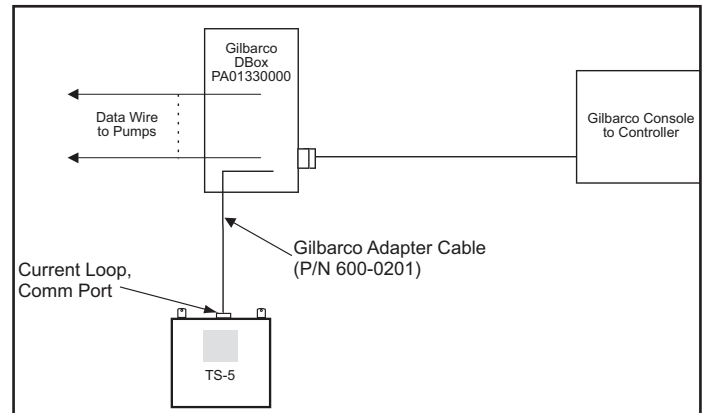


Figure 2: Connecting to Gilbarco D-Box PA01330000

- If the Gilbarco system uses a PA03060020 D-Box, disconnect the Gilbarco console/controller from the distribution box and connect the Gilbarco style Dispenser Interface Cable (600-0201) to the Gilbarco D-Box between the two supplied adapters (p/n 601-1003 and 601-1004). Connect the long end of the Gilbarco style Dispenser Interface Cable (600-0201) to the TS-5 series CURRENT LOOP communication port (Figure 3).

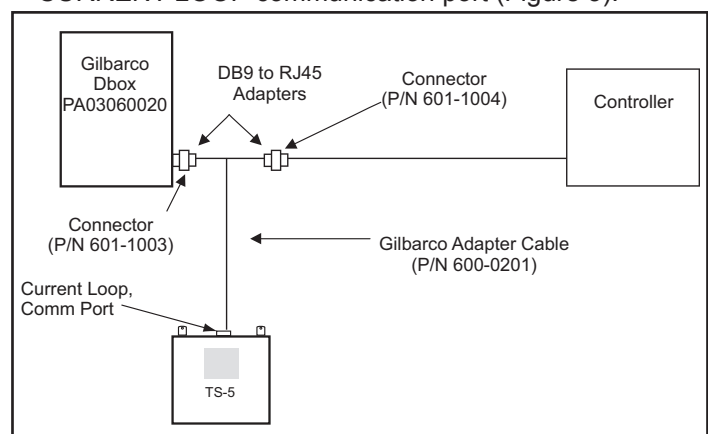


Figure 3: Connecting to Gilbarco D-Box PA03060020

See DIMIB Installation and Programming Manual 000-2048 for more information.