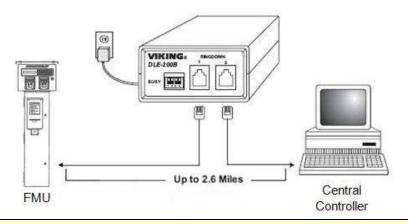


## Direct Connect through a Two-Way Ring Down Device



**NOTE** The Two-Way Ring-Down Device cannot be used by retail customers to attain credit card authorization.

The Two-Way Ring-Down Device is a Viking SP443, which is a Viking DLE-200B modified for a better ring signal recognizable by newer modems. Appearance, and installation and operation instructions for the SP443 are the same as for the DLE-200B. Syntech part number is 259624.

Basic phone line communication between the Fuel Management Unit (FMU) and the Central Controller requires the use of phone lines with separate telephone numbers. The Direct Connect through a Two-Way Ring-Down Device precludes the need for telephone numbers by converting a modem signal from the Central Controller to an analog telephone ring at the FMU modem.

The FMU and Central Controller must be at the same physical location, and only one direct connection may be installed per system; however, an installation may combine modem-connect and direct connect FMUs. Where the Two-Way Ring-Down Device is used, the FMU and Central Controller are equipped with modems the same as a modem-connect system using telephone lines. The Two-Way Ring-Down Device is placed in-line on a communications cable routed directly from the Central Controller modem to J3 on the FMU Pedestal I/O Board.

## Steps

1. Ensure a conduit is available to route a communications cable from the FMU to the building containing the Central Controller.

NOTE The communications cable cannot be pulled through the same conduit with AC power.

The communications cable will require 2-conductors. Recommended cable is shielded 20-24 AWG CMX (i.e., Belden 8771 or equivalent).

2. Pull a communications cable from the FMU to the building containing the Central Controller, then to the Two-Way Ring-Down Device. Maximum cable length from the FMU to the Central Controller cannot exceed 2.6 miles.

3. At the FMU end of the communications cable, connect two conductors with wire nuts to the red and black leads from the 4-wire harness of the surge panel.

NOTE Position the Two-Way Ring-Down Device where the communications cable from the FMU can be disconnected from the Two-Way Ring-Down Device and plugged into a telephone jack for troubleshooting. The phone number of the telephone jack connection must be given to Syntech's CSC.

There is a BUSY indicator light on the Viking SP443 illuminates when the device is receiving a modem input and sending a phone signal to the FMU. The RES button will reset power if needed. Positioning the device within eyesight and reach of the Central Controller operator will permit reset and verification of device operation.

- 4. Locate the Two-Way Ring-Down Device, so it can receive the cable routed from the FMU and receive a cable routed from the Central Controller modem. The Two-Way Ring-Down Device must be located where its DC power supply may be plugged into an AC outlet.
- 5. Route a communications cable from the Two-Way Ring-Down Device to the Central Controller modem.
- 6. The two conductors of the communications cables must locate in the center two pins of an RJ11 connector. Attach RJ11 connectors to the ends of the communications cables: one on the end coming from the FMU, one on the end from the Central Controller modem, and one at the end going to the Central Controller modem.
- 7. Plug the communications cables into the Two-Way Ring-Down Device (either phone jack may be used for either cable) and the LINE side of the Central Controller modem. When fully connected there should be one cable running from either phone jack in the Two-Way Ring-Down Device to the red and black leads of the 4 wire connector of the FMU surge panel and one cable running from the other phone jack in the Two-Way Ring-Down Device to the LINE side of the Central Controller modem.
- 8. Plug the DC power supply into the Two-Way Ring-Down Device; then, plug the AC plug into an AC receptacle.
- 9. Verify the FMU is displaying:

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INSERT KEY, HOLD 1 SECOND TO BEGIN

10. Refer to the Central Controller Manual, as required, for assistance. Use FMPlus software to upload or download configuration records. If successful, send an authorization list to the site. If both communication attempts are successful, the installation is complete.

TIP

If any questions arise, contact Syntech Systems, Inc.'s Customer Satisfaction Center (CSC) at 1-800-888-9136, ext. 2, or email support@myfuelmaster.com.

## **Change History**

Date	Description
04/16/1997	Original
11/03/2015	Changed the reference from Viking DLE-200B to Viking SP443 (Syntech part number 259624). Started using the SP443 in 2012 for compatibility with more, newer modems.
	Inserted different illustration with more detail on page 1.
09/28/2020	Reformatted, rebranded, and edited for conciseness.