OMNTEC
Advanced Tank Monitoring & Leak Detection

PROTEUS®
Mini-Me™
INSTALLATION MANUAL
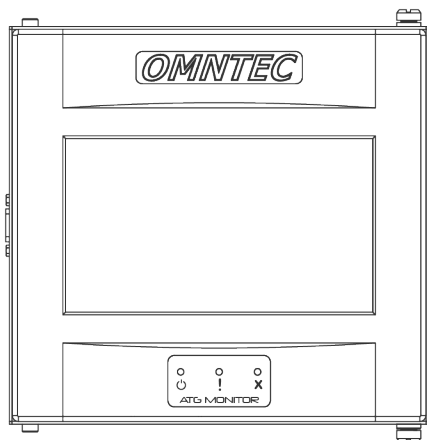
RD7CTS
UNIVERSAL REMOTE DISPLAY

Revision 2213

Document No. DI00028 rev2213

OMNTEC Mfg., Inc. has been certified by DQS Inc. to ISO 9001:2015
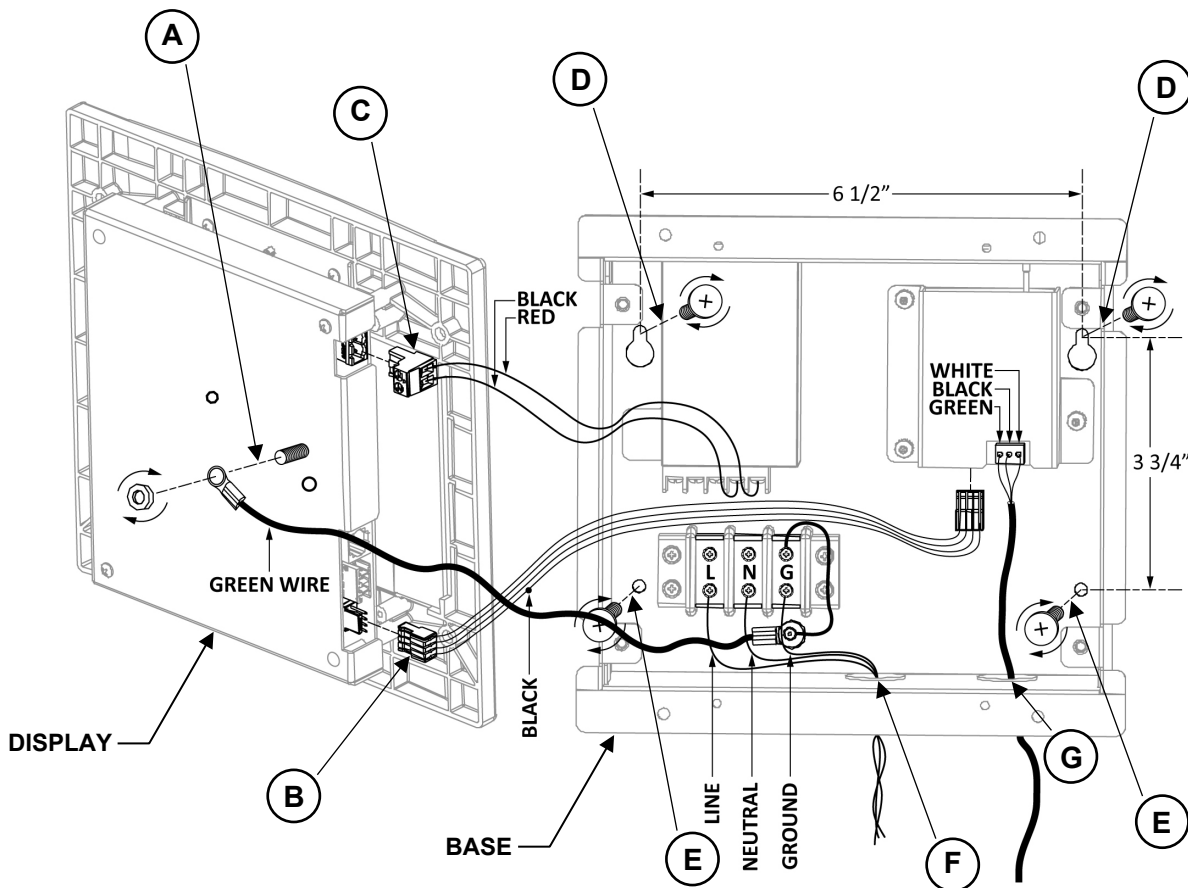
RS-485 Installation and Setup

Figure 1.0

IMPORTANT:

Read all instructions prior to starting the installation process.

Do not apply power to the Mini-Me until the unit has been mounted and all wiring connections have been made.

All work must be performed by authorized installers in accordance with Local and National Electric Code®.

SUPPLIED HARDWARE

(1) **OMNTEC 2.3mm flathead screwdriver**
(4) **Wall anchors**
(1) **Allen wrench**

1. Use the supplied Allen wrench to loosen the four Allen screws **(H)** that mount the display to the base (see Figure 2.0).
2. Place the display face down on a flat surface to keep it from being damaged.
3. Disconnect the green wire **(A)** by loosening and removing the #10-32 nut and lock washer from the display shield.
4. Unplug connectors **(B)** and **(C)** to separate the display from the base.
5. Measure base mounting dimensions and fasten the supplied wall anchors. Install screws for the top two mounting holes **(D)** leaving a minimum of ¼-inch of thread exposed.
6. Mount the base onto the top two screws **(D)** then tighten and secure.
7. Fasten the two bottom screws **(E)** to the base mounting holes and secure.
8. Bring power wires **(100-240 VAC)** through the left preformed knockout **(F)** and secure on the terminal block as illustrated.

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9. Bring a low-voltage RS-485 cable **(EC-4 or 4 conductor 22 AWG twisted pair with shield)** through the right preformed knockout **(G)** and secure to the terminal block (see Figure 1.0).

10. Secure the green wire **(A)** with #10-32 nut and lock washer.

11. Connect the data harness **(B)** making sure that the black wire is facing the bottom of the display as illustrated.

12. Connect the low-voltage power supply harness **(C)** to the display.

13. Place the display back onto the base and secure with the four Allen screws **(H)** (see Figure 2.0).

CAUTION!

DO NOT OVERTIGHTEN THE ALLEN SCREWS. DO NOT PINCH WIRES BETWEEN THE DISPLAY AND THE BASE.

14. Prepare the proper ATG connection for RS-485. The RS-485 connection is located on the Proteus® MCU on a small red board (see Figure 3.0).

15. Pin 1_____ BLACK
    Pin 2_____ WHITE
    Pin 3_____ GREEN
    Pin 4_____NO CONNECTION

16. Configure the RS-485 port in the system programming settings of the Proteus® ATG. Select the COMM TYPE to be RD7CTS **(**Must have ATG firmware version 6.0 or higher. Consult OMNTEC for help**).**

17. Power up the Mini-Me and view the programming guide to adjust system settings.

** Connecting via RS-485 is currently available for PROTEUS® K & X only.**
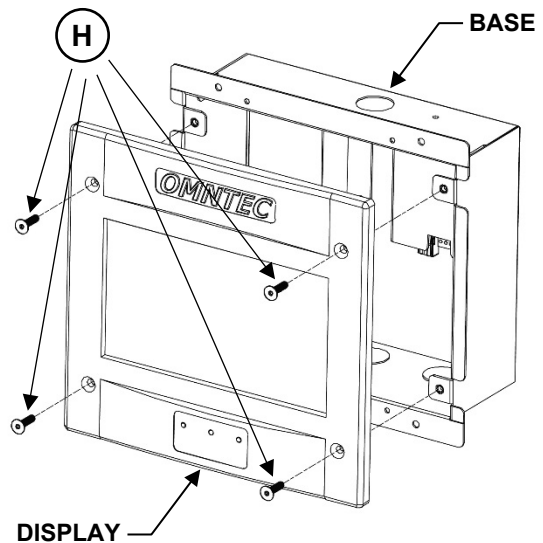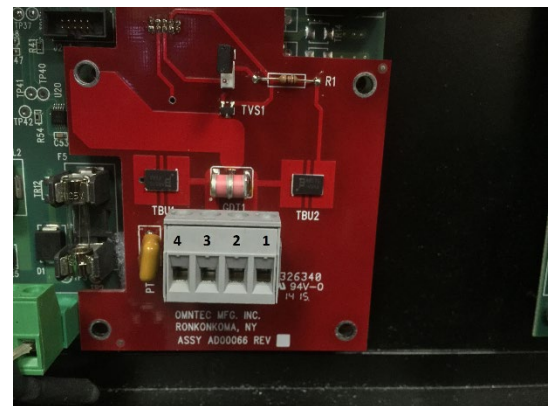

Figure 2.0

Figure 3.0

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RS-232 Installation and Setup

Figure 4.0

IMPORTANT:

Read all instructions prior to starting the installation process.

Do not apply power to the Mini-Me until the unit has been mounted and all wiring connections have been made.

All work must be performed by authorized installers in accordance with Local and National Electric Code®.

SUPPLIED HARDWARE

(1) **OMNTEC 2.3mm flathead screwdriver**
(4) **Wall anchors**
(1) **Allen wrench**

1. Use the supplied Allen wrench to loosen the four Allen screws **(H)** that mount the display to the base (see Figure 2.0).
2. Place the display face down on a flat surface to keep it from being damaged.
3. Disconnect the green wire **(A)** by loosening and removing the #10-32 nut and lock washer from the display shield.
4. Unplug connectors **(B)** and **(C)** to separate the display from the base.
5. Measure base mounting dimensions and fasten the supplied wall anchors. Install screws for the top two mounting holes **(D)** leaving a minimum of ¼-inch of thread exposed.
6. Mount the base onto the top two screws **(D)** then tighten and secure.
7. Fasten the two bottom screws **(E)** to the base mounting holes and secure.
8. Bring power wires **(100-240 VAC)** through the left preformed knockout **(F)** and secure on the terminal block as illustrated.

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9. Bring a low-voltage RS-232 cable **(Quabbin 7325 or 3-conductor 22 AWG with shield)** through right preformed knockout **(G)** and secure to the terminal block (see Figure 4.0).
10. Secure the green wire **(A)** with #10-32 nut and lock washer.
11. Connect the data harness **(B)** making sure that the black wire is facing the bottom of the display as illustrated.
12. Connect the low-voltage power supply harness **(C)** to the display.
13. Place the display back onto the base and secure with the four Allen screws **(H)** (see Figure 2.0).

CAUTION!

DO NOT OVERTIGHTEN THE ALLEN SCREWS. DO NOT PINCH THE WIRES BETWEEN THE DISPLAY AND THE BASE.

14. Prepare the proper ATG connection for RS-232 (see Figure 5.0).
15. Configure the RS-232 port from the main ATG through the programming settings.
16. Power up the Mini-Me and view the programming guide to adjust system settings.

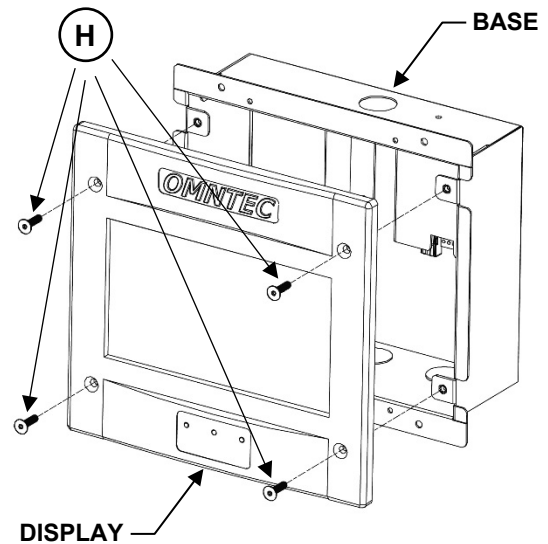****When using a RS-232 connection, the Mini-Me can be connected to any industry standard ATG.****
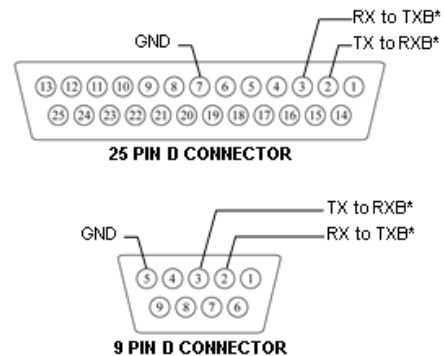
Figure 2.0

Figure 5.0

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