Pit Stop 2™ RF Reader

Mueller SYSTEMS

Features

APPLICATIONS: The Mueller Systems **Pit Stop 2™** RF Reader™ is a high performance RF Reader, designed for use with the **Hot Rod®** Mobile AMR System. It is compatible with all current Hersey meters utilizing the Translator® Positional Encoder Register and **Hot Rod** AMR transmitters. The primary function of the **Pit Stop 2** RF Reader is to interrogate **Hot Rod** transmitters to obtain the encoder serial number from the Translator register, water consumption, leak detection, backflow, no flow, register disconnect and duration data via radio frequency transmission. Initial electronic readings for new services and final readings can be obtained quickly and easily without the need of loading the entire route database for last minute reads on the fly. Verification of proper installation is easy with this simple to use RF Reader.

OPERATION: The **Pit Stop 2** RF Reader is easy to use. The **Pit Stop 2** RF Reader can be utilized with all Translator registers connected to any of the **Hot Rod** options available; Metal Pit Option (Yellow), Standard Option (Gray), and the Integral Mount **Hot Rod**. Simply input the Translator serial number into the device via the keyboard to interrogate individual **Hot Rod** transmitters via RF transmission or turn it on to capture up to nine available RF readings and scroll through the list to the desired device. ID, reading and Event and Duration Data is displayed on the large black and white LCD screen for easy verification of reading information. The **Pit Stop 2** RF Reader is capable of storing data for up to 1000 meters in memory which can be scrolled through by pressing a single key. An integral power management system shuts down the **Pit Stop 2** RF Reader after ten minutes of inactivity to conserve battery power. An internal Lithium Ion battery provides up to 20 hours of continuous operation.

CONFORMANCE TO STANDARDS: FCC compliance: Part 15 certified. The **Pit Stop 2** RF Reader complies with Standard C707 for Encoded Remote Reading Systems. No FCC License is required for operation.

CONSTRUCTION: The **Pit Stop 2** RF Reader consists of a compact printed circuit board which is encased in a thermoplastic enclosure to provide protection against shock, dust and water intrusion. The replaceable, short whip antenna permits communication with nearby **Hot Rod** transmitter units. A tactile response, twelve key, overlay membrane provides immediate feedback for operation in colder climates with gloved hands. A rechargeable battery required for power is sealed with the electronics to protect it from water damage. The small size and ergonomic shape permit the **Pit Stop 2** RF Reader to be carried in a shirt pocket making it a great installation and RF Reader. There are no customer serviceable parts inside the **Pit Stop 2** RF Reader.

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Materials and Specifications

Radio Frequency	Operates on 902 to 928 MHz
Model	**Pit Stop 2™** RF Reader
Enclosure	UV Stable Thermoplastic
LCD Screen	4 lines x 20 Characters
Keyboard	Raised 12 Key Tactile Response
Power Source	Rechargeable Lithium Polymer Battery
Typical Range	up to 1200 feet
Temperature Range	-10ºF to +130ºF (-23ºC to +54ºC)
Storage Temperature	-14ºF to +140ºF (-25ºC to +60ºC)
Humidity	0% to 95% noncondensing
Dimensions	3" X 3.5" X 1"
Weight	0.5 lb
Compatibility	**Translator** Registers and **Hot Rods**

FCC Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: Changes or Modifications. Any changes or modifications not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment.
Caution: Exposure to Radio Frequency Radiation. The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such that the potential for human contact during normal operation is minimized.

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BATTERY
The unit uses a rechargeable lithium polymer battery that can be charged through the USB interface.

- Battery life is a minimum of 10 hours.
- Recharging occurs in < 12hrs.
- Rechargable ~ 2K time (10 year life)
- The LCD display has a battery power indicator

USB
There is a female USB 1.x/2.0 mini type B receptacle on the PitStop. This interface will be capable of powering and recharging the PitStop

- USB 2.0

AUTO POWER OFF
When operating in the troubleshooting mode, the unit will auto power down after 10 minutes of inactivity (E.g. no button push). This feature is disabled when in reading mode

BELT CLIP
A belt clip will be fitted to the rear of the case. An optional holster can be ordered for the unit direct from an OEM manufacturer, or any holster that it fits in could be used.

ACCESSORY: HOLSTER

MENU TREE
The menu tree is as follows for the Meter Reading functionality

- **Main Splash Screen Displays:**
  1. **Version Number**
  2. **Eight Digit Serial Number**
- **Main Menu**
  1. **Meter Reading**
  2. **Installation Tool**
- **Meter Reading Menu**
  1. **Meters Logging**
  2. **Transparent Mode**
  3. **Setup**
- **Meters Logging Menu**
  1. **Start Logging**
  2. **View List Data**
  3. **View Unlist Data**
- **Transparent Mode Screen**
- **Setup Menu**
  1. **Clear Meter Data**
  2. **Clear List Data**
  3. **Change Frequency**
- **Change Frequency**
  1. **909 MHz**
  2. **910 MHz**

The Menu tree is as follows for the Installation Tool functionality

- **Main Splash Screen Displays:**
  1. **Version Number**
  2. **Eight Digit Serial Number**
- **Main Menu**
  1. **Meter Reading**
  2. **Installation Tool**
- **Installation Tool Menu**
  1. **Receive**
  2. **View Last 9**
  3. **Change Frequency**
- **Receive Menu**
  1. **Receive All**
  2. **Receive One**
- **Receive One Menu**
  1. **Input 10 Digit ID**
- **Change Frequency Menu**
  1. **909 MHz**
  2. **910 MHz**