

# IntelliCheck™

## Advanced Leak Rate Monitor

### Installation, Operation, and Instruction Manual



St. Louis, MO  
800-325-3936  
[www.pottersignal.com](http://www.pottersignal.com)

Manual #5403773-A 11/20



# WARRANTY INFORMATION

## GENERAL PROVISIONS & LIMITATIONS

Potter Electric Signal Company, LLC (the "Company") warrants to each original purchaser ("Purchaser") of its new products from the Company or its Authorized Distributor that such products are, at the time of delivery to the Purchaser, made with good materials and workmanship. No warranty is made with respect to:

1. Any product, which has been repaired or altered in such a way, in the Companies judgment, as to affect the product adversely.
2. Any product, which has, in the Companies judgment been subjected to negligence, accident, improper storage, improper installation or application.
3. Any product, which has not been operated or maintained in accordance with the recommendations of the Company.
4. Components or accessories manufactured, warranted and serviced by others.
5. Any reconditioned or prior owned product.

Claims for items described in 4 above should be submitted directly to the manufacturer.

## WARRANTY PERIOD

The Company's obligation under this Warranty is limited to repair or, at its option, replacing during normal business hours at the designated facility of the Company, any part that in its judgment proved not to be as warranted within the applicable Warranty Period as follows.

## COMPONENTS

All non-consumable components are warranted for 12 months from the date of purchase. Consumable are not covered under warranty. The unit must have been installed by either a factory authorized distributor or agent in accordance with the factory recommendations taking into account all other local site conditions not originally noted to the factory. The unit must be operated and maintained in accordance with the Factory recommendations and original design conditions. Failure to provide such proof of the above may void warranty.

## LABOR TRANSPORTATION & INSPECTION

The Company will repair or replace any product or part thereof which in the Companies judgment is proved to be not as warranted. Labor costs are not covered under warranty.

All costs of transportation of product, labor or parts claimed not to be as warranted and, of repaired or replaced parts to or from factory shall be borne by purchaser. The Company may require the return of any part claimed not to be as warranted to one of its facilities as designated by the Company, transportation prepaid by Purchaser, to establish a claim under this warranty.

Replacement parts provided under the terms of the warranty are warranted for the remainder of the Warranty Period of the product upon which installed to the same extent as if such parts were original components.

## DISCLAIMER

THE FOREGOING WARRANTY IS EXCLUSIVE AND IT IS EXPRESSLY AGREED THAT, EXCEPT AS TO TITLE, THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY.

THE REMEDY PROVIDED UNDER THIS WARRANTY SHALL BE THE SOLE, EXCLUSIVE AND ONLY REMEDY AVAILABLE TO THE PURCHASER AND IN NO CASE SHALL THE COMPANY BE SUBJECT TO ANY OTHER OBLIGATIONS OR LIABILITIES. UNDER NO CIRCUMSTANCES SHALL THE COMPANY BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOSSES OR DELAYS HOWSOEVER CAUSED.

No statement, representation, agreement, or understanding, oral or written, made by any agent, distributor, representative or employee of the Company which is not contained in this Warranty will be binding upon the company unless made in writing and executed by an officer of the Company.

This warranty shall not be effective as to any claim which is not presented within 30 days after the date upon which the product is claimed not to have been as warranted. Any action for breach of this warranty must be commenced within one year after the date upon which the cause of action occurred.

Any adjustment made pursuant to this warranty shall not be construed as an admission by the Company that any product was not as warranted.

## PROMPT DISPOSITION

The Company will make a good faith effort for prompt correction or other adjustment with respect to any product, which proves to be defective within the warranty period. Before returning any product, write or call the distributor, agent or authorized company from which the product was purchased, describing defect and giving date and number of original invoice, as well as proof of Factory supplied consumable and proof of scheduled maintenance. Title and risk of loss pass to buyer upon delivery to the common carrier.

## PRODUCT SUITABILITY

Many States, Localities and Countries have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Potter attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, please review the product application, and national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

**Potter Electric Signal Company, LLC**  
St. Louis, MO • (866) 956-0988

# CONTENTS

|  |    |
|--|----|
| Safety Guidelines .....                        | 4  |
| Important Notice to Users .....                | 4  |
| Unpacking .....                                | 4  |
| General Safety Information .....               | 4  |
| System Overview .....                          | 6  |
| LRM Controller .....                           | 6  |
| IntelliCheck Exterior View .....               | 7  |
| IntelliCheck Interior View .....               | 8  |
| LRM Display .....                              | 9  |
| Installation of the IntelliCheck .....         | 10 |
| Dip Switch Settings .....                      | 10 |
| Supplying Power to the IntelliCheck .....      | 10 |
| Suggested Install Diagrams .....               | 11 |
| Wiring Diagram .....                           | 12 |
| LRM Transducer Installation .....              | 12 |
| LRM Current Transformer Installation .....     | 12 |
| Optional LRM Solenoid Kit Installation .....   | 12 |
| IntelliCheck Startup .....                     | 13 |
| Setting Sprinkler System Pressure Limits ..... | 14 |
| IntelliCheck Leak Detection System .....       | 14 |
| Leak Rate Test Operation .....                 | 15 |
| Setting Sprinkler System Size .....            | 15 |
| IntelliView™ Dashboard Connectivity .....      | 16 |
| Trouble Alerts and Probable Causes .....       | 16 |
| IntelliCheck Dimensional Drawings .....        | 18 |
| Menu Trees .....                               | 19 |

## Safety Guidelines



**This manual contains safety information that is important to know and understand. This information is provided for the safety of installers, operators, and users of the Potter Leak Rate Monitor as well as attached equipment. To help recognize this information, observe the following symbols.**

### **DANGER**

Danger indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

### **WARNING**

Warning indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

### **CAUTION**

Caution indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.

### **NOTICE**

Notice indicates important information, that if not followed may cause damage to equipment or property.

## Important Notice to Users

The Installation, Operation, and Instruction Manual supplied with each unit must be read thoroughly and completely understood before installation and operation of the Potter IntelliCheck Leak Rate Monitor.

## Unpacking

After unpacking unit, carefully inspect all parts and equipment for any damage that may have occurred during transit. Make sure to tighten fittings, bolts, etc. before putting unit into service.

### **WARNING**

Do not operate if damage occurred during shipping, handling, or use. Contact Potter immediately.

## General Safety Information

**Important:** Read all of the safety information in this manual before operating this equipment. Use of the equipment in a manner not specified within this manual could result in an unplanned release of pressure, which may cause serious injury or damage.

When handling, installing, or operating this equipment, personnel must employ safe engineering practices and observe all related local regulations, health, and safety procedures, and legal requirements for safety. Ensure that the equipment is depressurized and electrically isolated, before carrying out any of the scheduled maintenance instructions specified in this manual.

The warnings in this manual cover most known potential hazards, but by definition cannot be all-inclusive. If the user employs an operating procedure, item of equipment, or a method of working that is not specifically recommended by Potter Electric Signal Company, the user must ensure that the equipment will not be damaged or become hazardous to persons or property.

**⚠ WARNING**

Operation of the IntelliCheck above the rated design specifications may be hazardous.

Specific procedure must be developed for maintenance of the equipment.

**NOTICE**

Do not attempt to disassemble the IntelliCheck. Equipment damage may occur and cause the system to function incorrectly.

**NOTICE**

All wiring should be performed by a licensed electrician and conform to NEC and all applicable local standards

**⚠ WARNING**

Removing the air supply can trip the valve and fill the system. Take all necessary precautions before isolating the air supply from the system and installing the IntelliCheck.

## System Overview

The Potter IntelliCheck Advanced Leak Rate Monitor (LRM) is specifically designed to provide similar data as our Intelligen controller on existing or new systems that may not utilize our Intelligen N2 Generators as well as a system that utilizes a nitrogen generator to supply supervisory gas to multiple systems.

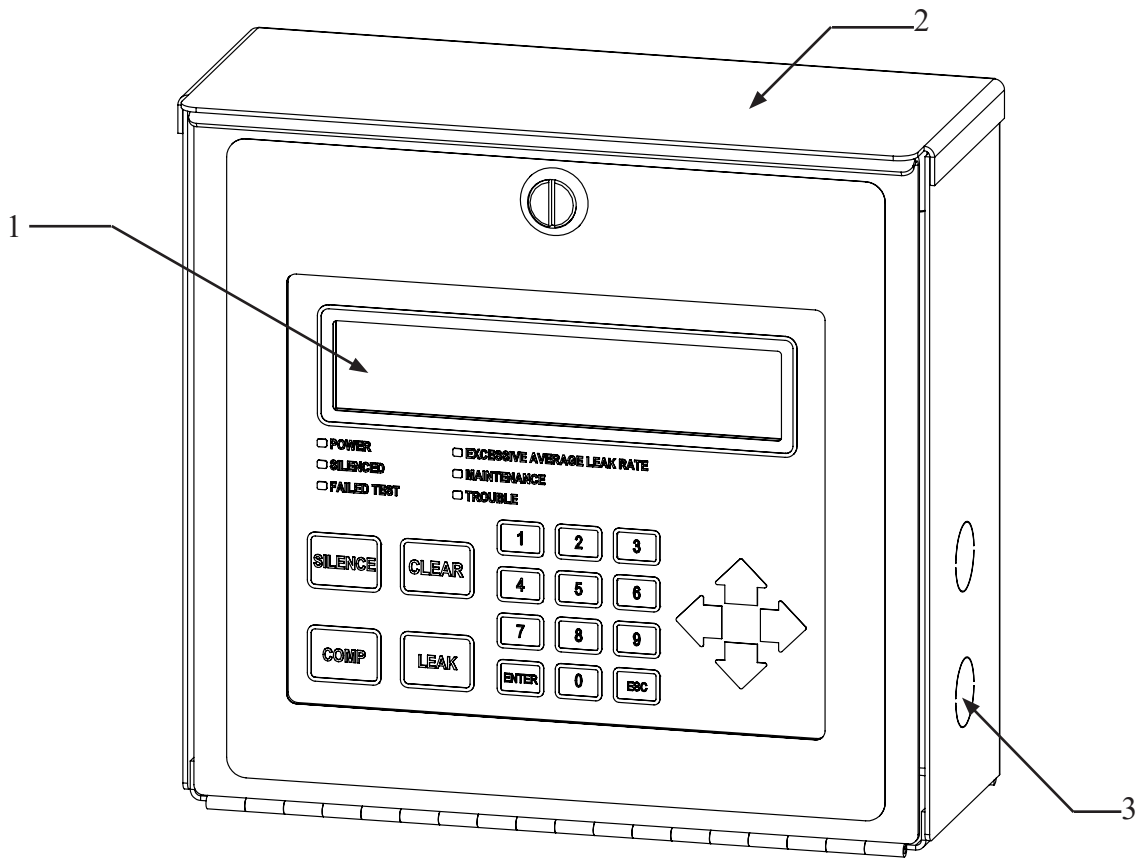
## LRM Controller

At the heart of the IntelliCheck is the LRM Controller. The LRM Controller monitors many aspects of a single dry sprinkler system to ensure the system and air supply are performing optimally. The LRM Controller can monitor pressure, compressor runtime, ambient temp, leak rate, and can run NFPA 13 and NFPA 25 leak rate tests. Also, by monitoring these conditions the controller can indicate the development of sprinkler system leaks, user interaction, and even if maintenance to the compressor is required.

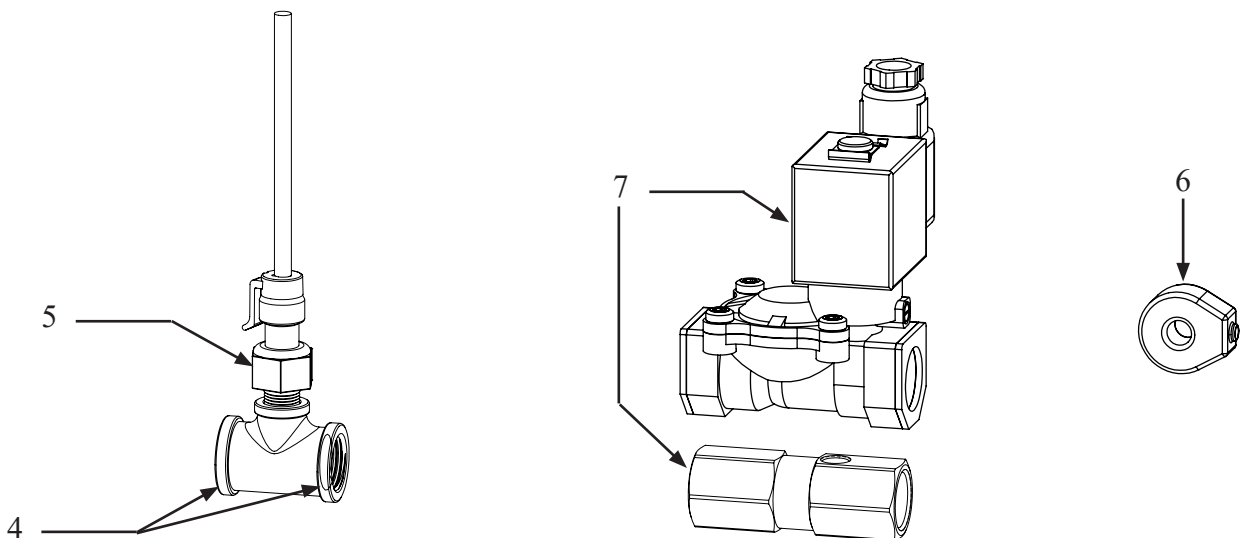
| Part Number | Model            | Description                    |
|-------------|------------------|--------------------------------|
| 1119664     | LRM              | IntelliCheck Leak Rate Monitor |
| 0090241     | LRM-SK           | LRM Solenoid Kit               |
| 5270752     | LRM Power Supply | Wall Adapter 24VDC 2A          |

# IntelliCheck Exterior View

Fig 1

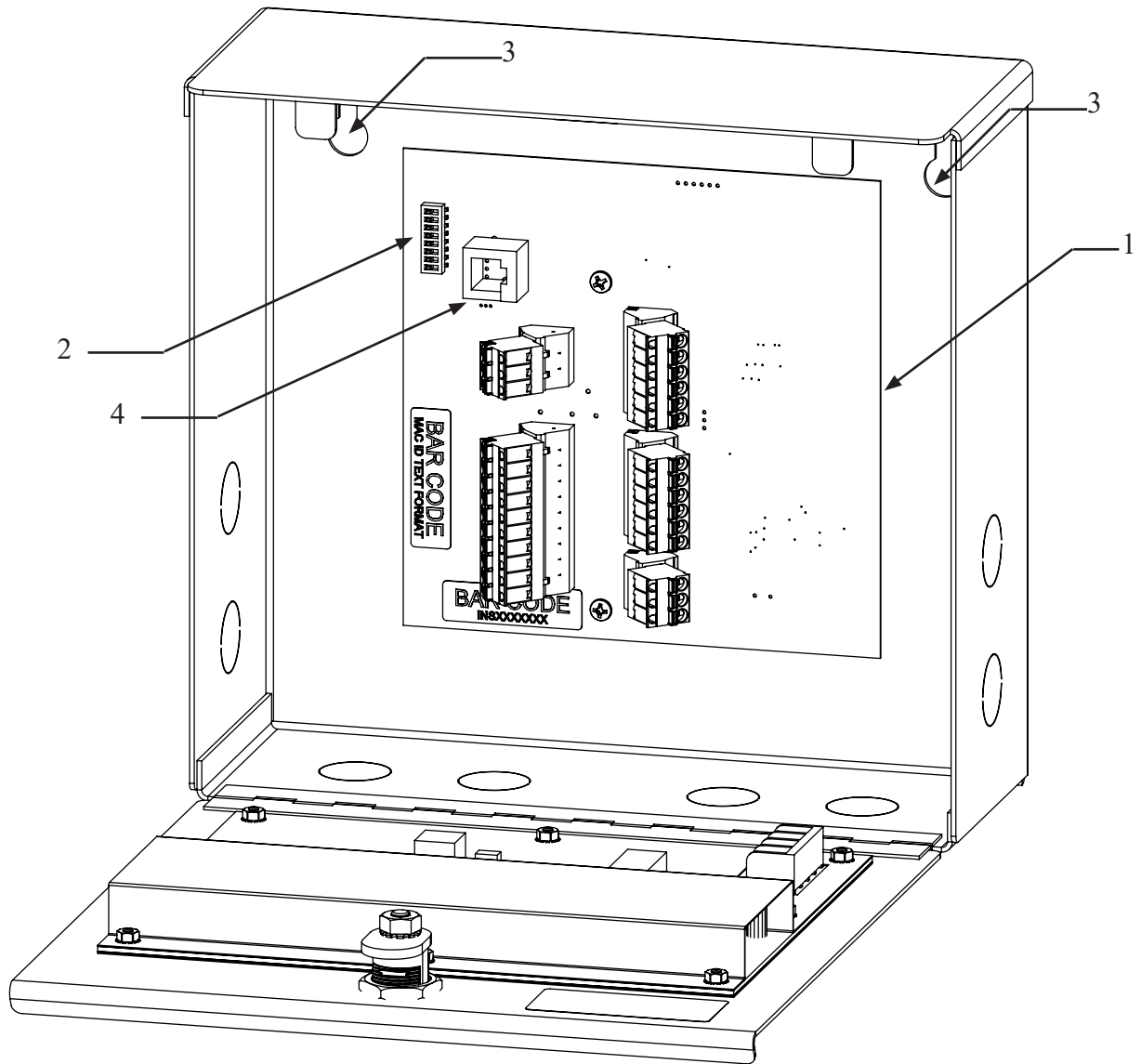


1. LRM Display
2. LRM Housing
3. Knockouts for 1/2" Conduit Connection (Qty. 8)
4. ½" FNPT Pipe Connections
5. LRM Pressure Transducer
6. LRM Current Transformer
7. LRM Solenoid Kit (optional kit)



# IntelliCheck Interior View

Fig 2



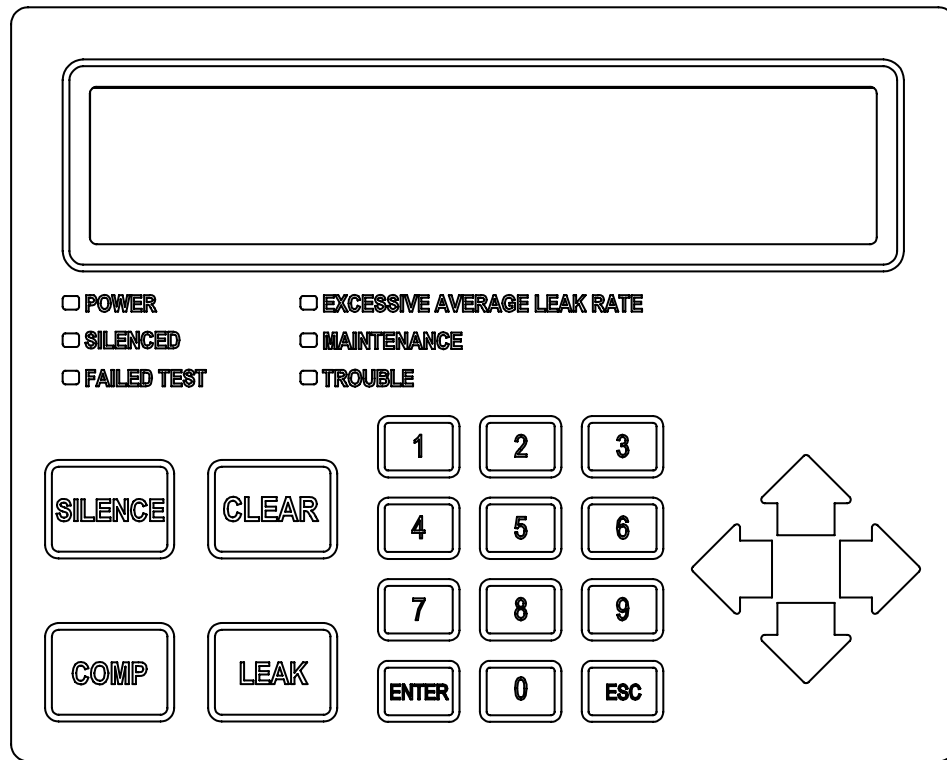
1. LRM Controller
2. Dip Switches
3. ¼" Mounting keyhole slots
4. Ethernet Port



**LRM Display:**

The LRM Display is the interface to the IntelliCheck. This display shows the LRM's history, parameters, and troubles.

Fig 3

**LRM Display LED Light Indications:**

**POWER** – The green POWER LED indicates if the Leak Rate Monitor has power.

**SILENCED** – The amber SILENCED LED indicates the Trouble Horn on the Leak Rate Monitor is silenced.

**FAILED TEST** – The amber FAILED TEST indicates the Leak Rate Monitor has failed a previous test

**EXCESSIVE AVERAGE LEAK RATE** – The amber EXCESSIVE AVERAGE LEAK RATE LED indicates the Leak Rate Monitor continuously exceeded the allowable leak rate of 36 psi/24 hrs for existing systems. NFPA 25 allows a leak rate of 1.5 psi/2 hrs

**MAINTENANCE** – The amber MAINTENANCE LED indicates the set compressor runtime hours has been reached

**TROUBLE** – The red TROUBLE LED indicates the Leak Rate Monitor has a trouble condition.

**LRM Display Button Indications:**

**SILENCE** – The "SILENCE" button will silence the Trouble Horn on the Leak Rate Monitor.

**CLEAR** – The "CLEAR" button will clear all Troubles.

**COMP** – The "COMP" button will display the Compressor Status Menu.

**LEAK** – The "LEAK" button will display the Leak Rate Status Menu.

## Installation of the IntelliCheck

**NOTE:** An accurate system size will increase the accuracy in calculating SCFM Loss

1. On arrival, do a full inspection by checking all components in the packaging
2. If damage is found, sign for the damage or refuse the shipment. Contact the carrier immediately and file a shipping damage claim with the carrier.
3. Check to ensure all components are contained and no visible damage has occurred during shipping.
  - LRM Housing
  - LRM Display
  - Pressure Transducer
  - Current Transformer
  - Three (3) - clip on ferrites
  - Three (3) - strain relief conduit fittings
  - Solenoid Kit (optional) - Necessary for system with tank
  - LRM Power Supply (optional)
4. Installation Requirements
  - Dry, clean, and well-ventilated
  - Housing Dimensions: 9.5" X 9.75" X 4.25" (H x W x D) - Weight: 6 lbs.
  - Allow 6 inches to sides and bottom of cabinet for wiring and conduit
  - Ambient temperatures above 32° F at all times
  - Access to front for service
  - Located near fire sprinkler system connections
  - Access to a 120 VAC electrical outlet (12ft of cable with LRM Power Supply)
  - 20 ft of current transformer cable supplied to reach compressor
5. Mount housing to studs and/or anchors in the wall using (2) screws and appropriate wall anchors

### To Set Dip Switch Settings for Application:

1. Set dip switches according to Fig 4 below:
2. The device will recognize the setting change upon power up and will be ready for the set application

**Note:** If the dipswitch setting needs to be changed after the device has been powered on: Remove the DC Power terminal block, change the dipswitch setting per Fig 4 , and then reconnect the DC Power terminal block

Fig 4

| DIPSWITCH 2 | MODE NAME | SYSTEM CONFIGURATION  | AMD | TANK | SOLENOID KIT | CT       |
|-------------|-----------|---|-----|------|--------------|----------|
| OFF         | TANKLESS  | With or without AMD and no tank installed - (CT required to ensure valid LR Test) | NO  | NO   | NO           | YES      |
| OFF         | TANKLESS  |   | YES | NO   | NO           | YES      |
| ON          | TANK      | AMD and tank installed - (CT is optional)   | YES | YES  | YES          | OPTIONAL |

### Supplying Power to the IntelliCheck

1. LRM requires 24 VDC 2A power supply for operation. Run optional LRM Power Supply (5270752) or other 24 VDC power supply cable (see Fig 5 below for minimum AWG) through supplied strain relief fitting and a knockout on the LRM Housing.

Fig 5

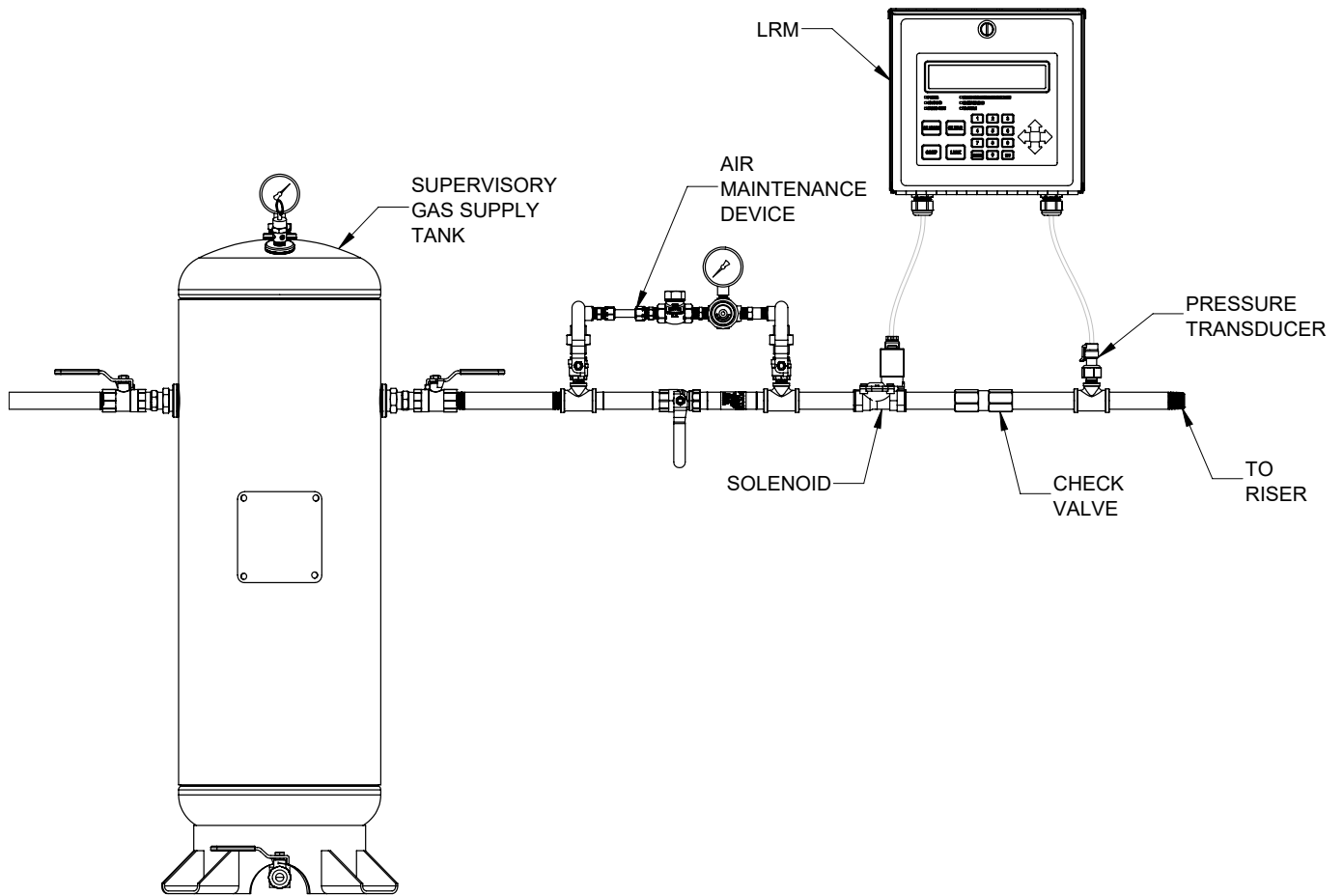
| MINIMUM AWG | FT.  |
|-------------|------|
| 22          | <40  |
| 20          | <70  |
| 18          | <100 |
| 16          | <160 |
| 14          | <300 |

2. Insert wires into 3-terminal connector by depressing orange tab, inserting wire, and releasing tab on the LRM Controller terminal block labeled DC Power according to the Fig 8 wiring diagram on page 12
3. Place a supplied clip-on ferrite around the power supply cable inside the LRM housing
4. Run LRM power supply and cable (12ft in length if using optional power supply) to nearby 120 VAC Outlet

**Note:** Do not connect power until after completing the rest of the IntelliCheck installation.

## Suggested Install With Tank

Fig 6



## Suggested Tankless Install

Fig 7

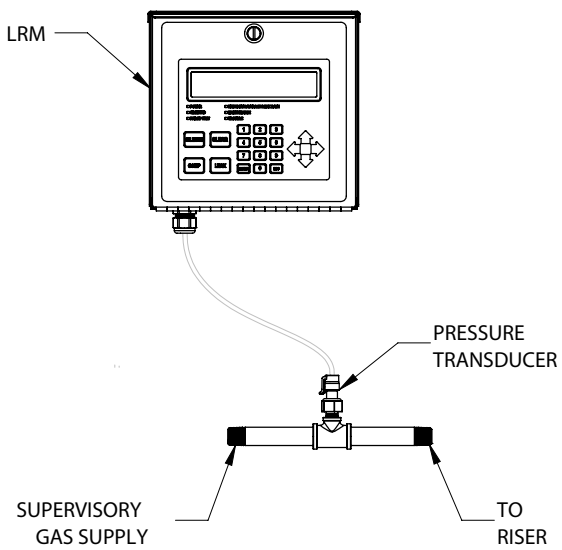
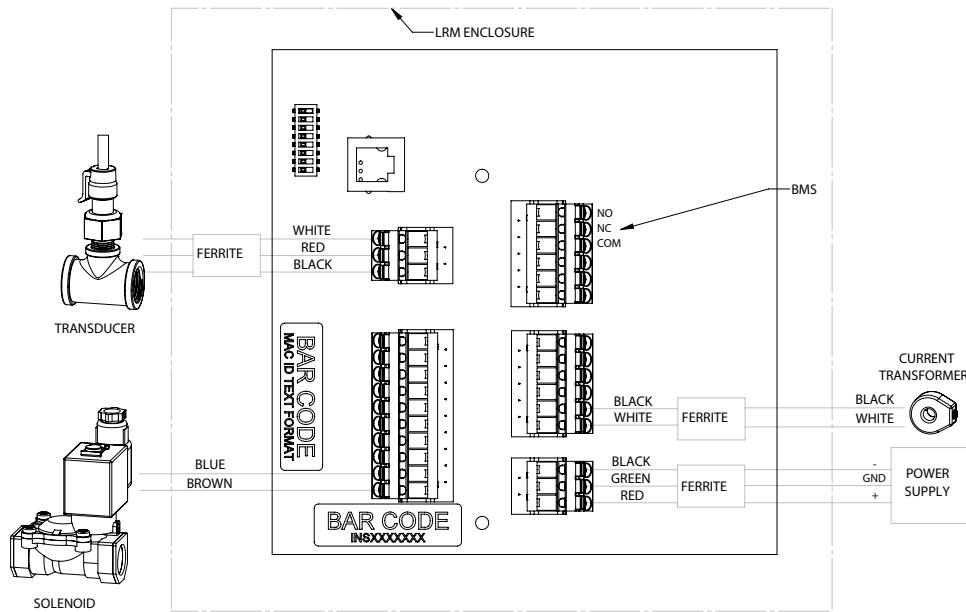


Fig 8



### **LRM Transducer Installation**

LRM Transducer must be installed within reach of the provided 6ft transducer cable to the LRM Display

1. Install ½" FNPT pipe-tee with transducer in-line of the air supply, after the AMD, if applicable, and before the sprinkler system. See Fig 6 and 7 on page 11.
2. Leak check new connections
3. Connect supplied transducer cable into the transducer and run the opposite end through a supplied strain relief fitting and a knockout on the LRM Housing
4. Insert wires into 3-terminal connector by depressing orange tab, inserting wire, and releasing tab on the LRM Controller terminal block labeled N2 Tank according to wiring diagram in Fig 8 above
5. Place a supplied clip-on ferrite around the transducer cable inside the LRM Housing

### **LRM Current Transformer Installation**

LRM Current Transformer must be installed within reach of the provided 20ft current transformer cable.

1. Disconnect the power to the compressor on the nitrogen generator or the riser mount compressor
2. Run (1) wire that powers the compressor through the current transformer
3. Reconnect the wires to the compressor
4. Run the cable of the current transformer back to the LRM and through a supplied strain relief fitting and a knockout on the LRM Housing
5. Insert the two (2) wires of the current transformer into the bottom 2 terminals by depressing orange tab, inserting wire, and releasing tab of the middle right 6-terminal block labeled "CT" per Fig 8 wiring diagram on page 12
6. Place a supplied clip-on ferrite around the current transformer cable inside the LRM Housing
7. Reconnect power to the compressor

### **Optional LRM Solenoid Kit Installation**

The Solenoid Kit is required when a tank is supplying the system. LRM Solenoid Kit must be installed within reach of the provided 7 ft solenoid cable to the LRM Display

1. Install ½" FNPT LRM Solenoid in-line of the air supply, after the compressor or AMD and the kit supplied 1/2" check valve. See Fig 6 & 7 on page 11
2. The supplied check valve with 1/2" FNPT inlet and outlet will need to be installed inline and between the solenoid and transducer. Ensure the flow arrow on the check valve is in the direction of the supervisory gas flow. See Fig 6 & 7 on page 11
3. Leak check new connections

4. Insert supplied solenoid DIN cable onto the solenoid and run the opposite end through a supplied strain relief fitting and a knockout on the LRM Housing
5. Insert wires into the bottom 3-terminals of the 10-terminal block by depressing orange tab, inserting wire, and releasing tab on the LRM Controller per the Fig 8 wiring diagram on page 12

#### **IntelliCheck Startup**

1. Apply power to the IntelliCheck
2. The IntelliCheck will power up in Trouble Alert #6 – Low Pressure Limit Exceeded. Press "SILENCE" on the LRM Display keypad and continue.
3. Set the Date/Time
  - a. Press "ENTER" on the LRM Display keypad
  - b. Select "Settings" using the keypad. Press "ENTER"
  - c. Enter passcode "0000"
  - d. Select "Date/Time"
  - e. Select "Set Date/Time"
  - f. Follow prompts
4. Follow instructions in **To Change Sprinkler System Size** on page 15 to set system size and increase the accuracy of the SCFM loss on the sprinkler system
5. Complete hardware tests of BMS Relay and Solenoid Valve (if applicable)
  - a. Press "ENTER" on the LRM Display keypad
  - b. Select "Settings" using the keypad. Press "ENTER"
  - c. Enter passcode "0000"
  - d. Select "Hardware Test"
  - e. Select "BMS Relay" (if applicable)
  - f. Press "ENTER" to initiate test
  - g. Confirm BMS signal was received
  - h. Select "Solenoid Valve" (if applicable)
  - i. Press "ENTER" to initiate test
  - j. Confirm the LED on the solenoid valve is illuminated

## Sprinkler System Pressure Limits

The LRM low pressure set point needs to be set using the system pressure displayed. The LRM's system pressure will need to correlate with the gauge on the sprinkler system.

### NOTICE

If the pressure displayed on the LRM does not correlate with the system pressure gauge, further investigation to identify the cause may be required. Incorrect pressure settings could result in inadvertent tripping of the dry pipe valve.

The low pressure set point needs to be set 1 psi above the valve manufacturer's actuator trip point or valve trip point determined by water supply pressure and valve ratio. Consult the valve manufacturer's data sheet to determine this pressure. The LRM low and high pressure set points will not necessarily correlate to the low and high pressure settings for the supervisory pressure switch. Refer to the valve manufacturer's data sheet for details. The high pressure set point needs to be set at or below the manufacturer's recommended maximum allowable pressure for the valve. The AMD or system air pressure needs to be set at least 5 psi above the valves minimum pressure.

### To Set the Sprinkler System Pressure Limits:

1. Press "ENTER" on the LRM Display keypad.
2. Select "Settings" using the keypad. Press "ENTER".
3. Enter passcode "0000".
4. Select "Leak Rate". Press "ENTER".
5. Select "Pressure Limits". Press "ENTER".
6. Using the numeric pad, enter the system min, press the right arrow key and enter the max in psi
7. Press "ENTER".
8. Press "ESC" to return to main menu.

### IntelliCheck Leak Detection System

The IntelliCheck Leak Detection System uses pressure decay to calculate the pressure loss in 24 hours, or the Leak Rate of the sprinkler system.

This Leak Rate is displayed on the LRM Display as "LR # PSI/24HR". # is the number in psi that is calculated.

Increases in the Leak Rate can cause excessive demand on the supervisory air or nitrogen gas, resulting runtimes and more frequent maintenance and repairs.

The Leak Detection System is designed as a rolling average to ensure an average leak rate. To reset the LR number, reset the Maintenance Alert #2 under maintenance on the LRM display.

The default leak rate warning setpoint is 36 psi/24 hrs. If the average Leak Rate of the sprinkler system is greater than that value, a trouble will display on the Leak Rate Monitor.

The device leak give a preemptive warning that the system leak rate has increased above the acceptable level.

#### NOTE:

- NFPA 13 allows a maximum leak rate of 1.5 psi loss per 24 hours for new systems.
- NFPA 25 allows a maximum leak rate of 3 psi loss per 2 hours for existing systems.

## Leak Rate Test Operation

### Initiating a Leak Rate Test

1. Press "ENTER" on the LRM Display keypad.
2. Select "Settings" using the keypad. Press "ENTER".
3. Enter passcode "0000".
4. Select "Leak Rate". Press "ENTER".
5. Select:
  1. "Reg LR Test" to run an average leak rate test
    - The Reg LR Test is a 1 hr test
  2. "NFPA 25 Test" to run the NFPA 25 test to see if your system has an average leak rate less than 3 psi/2 hrs.
    - The NFPA 25 Test is a 2 hr test
    - The NFPA 25 test can scheduled for a specific date/time
      1. After selecting "NFPA 25 Test", select "Adjust Schedule"
      2. Input Recurrence in years
      3. Press the right arrow on the LRM Display keypad
      4. Set the date on which you would like the test to occur, use the right arrow to move to the next field
      5. Press the right arrow on the LRM Display keypad
      6. Set the time you on which you would like the test to occur
      7. Press "ENTER" to save settings
  3. "NFPA13 Test" to run the NFPA 13 test to see if your system has an average leak rate less than 1.5 psi/24hrs
    - The NFPA 13 Test is a 24 hr test
  4. Press "ENTER".
6. Select "Initiate Now"
7. Press "ENTER" to initiate test
8. Press "ESC" to abort test and return to main menu

### To Change the Sprinkler System Size:

NOTE: Setting the system size will increase the accuracy of SCFM loss on sprinkler system.

1. Press "ENTER" on the LRM Display keypad.
2. Select "Settings" using the keypad. Press "ENTER".
3. Enter passcode "0000".
4. Select "Leak Rate". Press "ENTER".
5. Select "Sprinkler Capacity". Press "ENTER".
6. Using the numeric pad, enter the total system volume size in gallons.
7. Press "ENTER".
8. Press "ESC" to return to main menu.

## IntelliView™ Dashboard Internet Connectivity

Potter's LRM Controller is designed to provide you with live status updates of your IntelliCheck. The IntelliCheck needs to be wired using a Cat 5 Ethernet cable. The Ethernet port is located on the top left of the LRM Controller. When the unit is connected to the internet and powered on, data will be accessible at [www.potterintelliview.com](http://www.potterintelliview.com). Refer to Fig 2 for location of CAT 5 jack and MAC ID/Serial Number labels.

Register your IntelliCheck at [www.potterintelliview.com](http://www.potterintelliview.com). The Intellicheck has been tested using a Netgear Nighthawk Hotspot and the LRM device can utilize this option.

**Note:** Potter is unable to provide tech support issues with global hotspots.

Log In or Register New User.

1. If you are a new user you will be required to enter your name, company information, and a valid e-mail address.
2. You will receive an e-mail confirmation with an account verification link.
3. Once logged in, click the "Register Device" button on the Dashboard Overview page.
4. Enter the unit's MAC ID Number and the Serial Number which can be found on the LRM Controller inside the cabinet.
5. Add a name for the Leak Rate Monitor and the building where the generator is located.
6. A window will appear indicating that you have successfully added the Leak Rate Monitor. Click save.
7. The page will refresh with information on the new Leak Rate Monitor.
8. For more information on the Potter IntelliView™ Dashboard, watch a tutorial at [www.potterintelliview.com](http://www.potterintelliview.com).

## Trouble Alerts and Probable Causes

A trouble alert is a critical alert to the operation of the IntelliCheck. The trouble light will turn on and a trouble alert will be created when an issue occurs. If connected to the IntelliView™ website, an e-mail will also be sent. The Trouble Horn will sound and the BMS will trip. Trouble Alerts can be cleared by fixing the issue and pressing "CLEAR" on the display keypad and entering passcode "0000".

### Trouble Alert #1 - NFPA 13 Leak Test Failure

**Issue:** Leak Rate exceeded 1.5 psi/24 hrs while running NFPA 13 Test

**Probable Cause:**

1. Leak on air supply or sprinkler system
2. Leak on air source

### Trouble Alert #2 - Compressor On Time Exceeded

**Issue:** Air compressor exceeded Max. Run Time (90 min. standard)

**Probable Cause:**

1. Leak on sprinkler system
2. Compressor not creating adequate supply

### Trouble Alert #3 - Compressor Cycle Count Exceeded

**Issue:** Air compressor exceeded Max. Cycle Count (10 cycles/hr. standard)

**Probable Cause:**

1. Leak on sprinkler system

### Trouble Alert #4 - NFPA 25 Leak Test Failure

**Issue:** Leak Rate exceeded 3 psi/2 hrs. while running NFPA 25 Test

**Probable Cause:**

1. Leak on sprinkler system
2. Leak on air source



#### Trouble Alert #5 - Pressure Transducer Issue

**Issue:** Transducer not detected by LRM Controller

**Probable Cause:**

1. Transducer cable has bad connection or is not plugged in
2. Damage to transducer cable
3. Bad transducer

#### Trouble Alert #6 - Low Pressure Limit Exceeded

**Issue:** System pressure has gone below lower set point limit

**Probable Cause:**

1. Leak on the system too large for air source

#### Trouble Alert #7 - High Pressure Limit Exceeded

**Issue:** System pressure has gone above upper set point limit

**Probable Cause:**

1. Malfunction of the AMD
2. Malfunction of riser mount pressure switch

#### Trouble Alert #8 - Temperature Limits Exceeded

**Issue:** LRM detects temperature above max. limit

**Probable Cause:**

1. Location of the LRM has exceeded the high or low limit

#### Trouble Alert #9 - Compressor Maintenance Unacknowledged Time Exceeded

**Issue:** Maintenance Delay Timer has exceeded setpoint (250 hrs. standard)

**Probable Cause:**

1. Max number of maintenance reminder silenced time exceeded

#### Trouble Alert #10 - Average Leak Rate Limit Exceeded

**Issue:** Leak Rate Average exceeded 36 psi/24 hrs.

**Probable Cause:**

1. Leak on sprinkler system
2. Leak on air source

#### Trouble Alert #11 - Short Circuit Detected

**Issue:** LRM Controller failure detected

**Probable Cause:**

1. Short circuit on output wiring

LRM Housing Dimensional Drawing

Fig 9

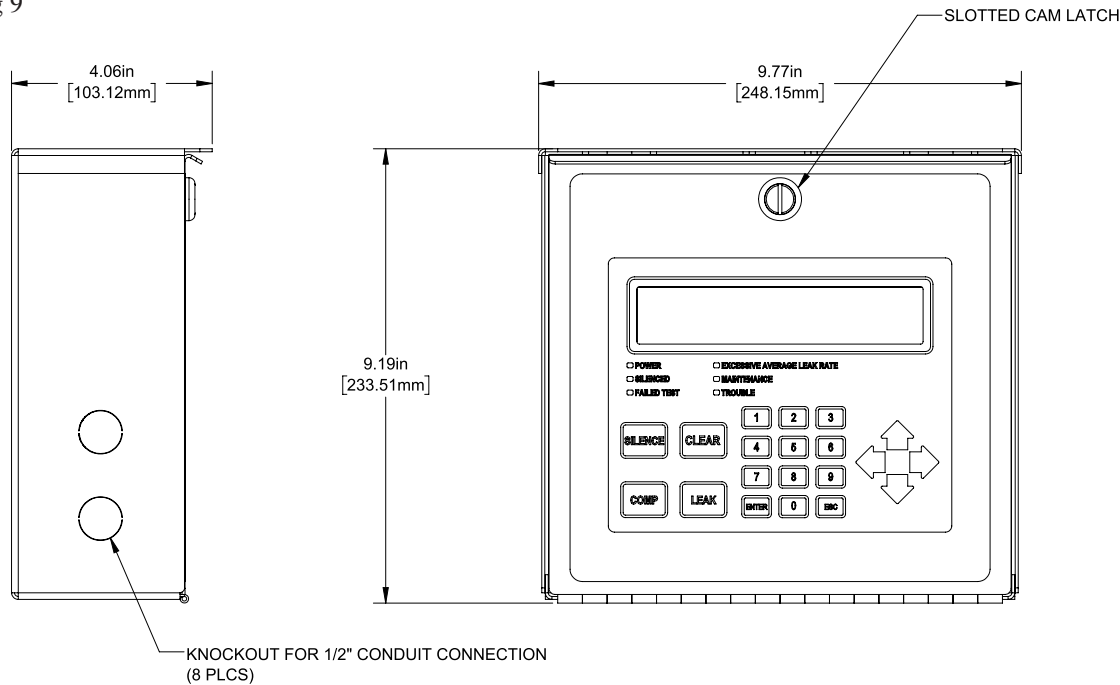


Fig 11

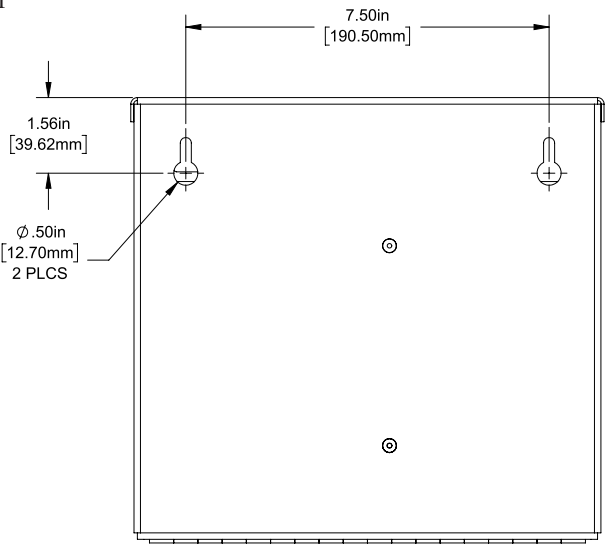


Fig 10

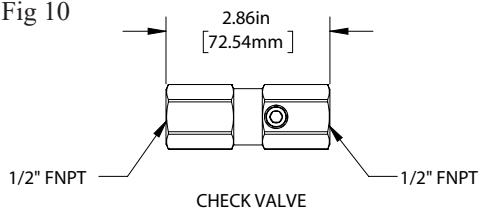


Fig 12

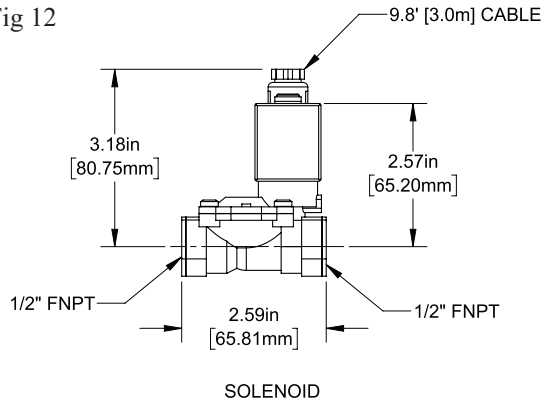
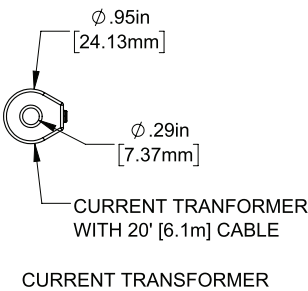
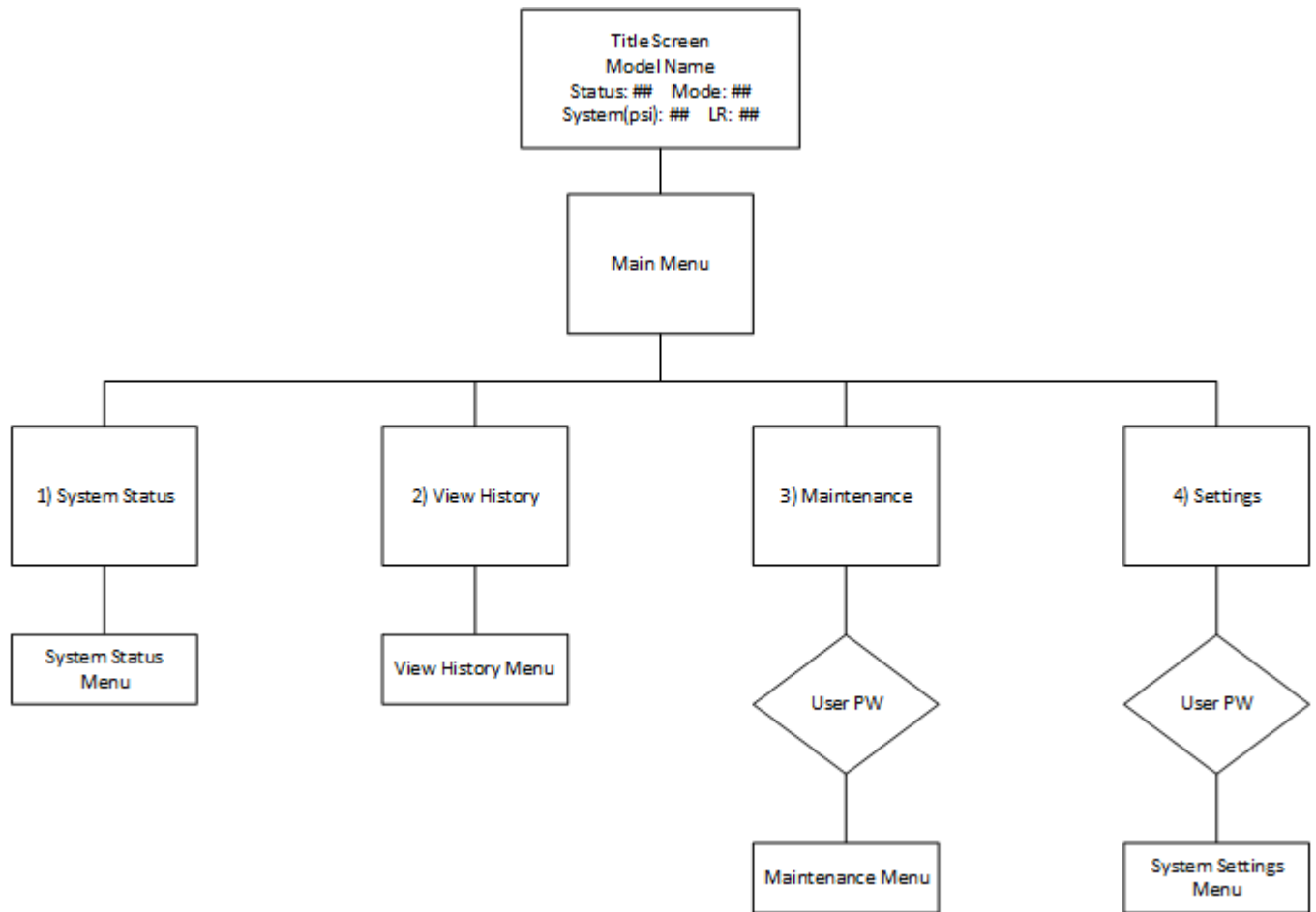


Fig 13

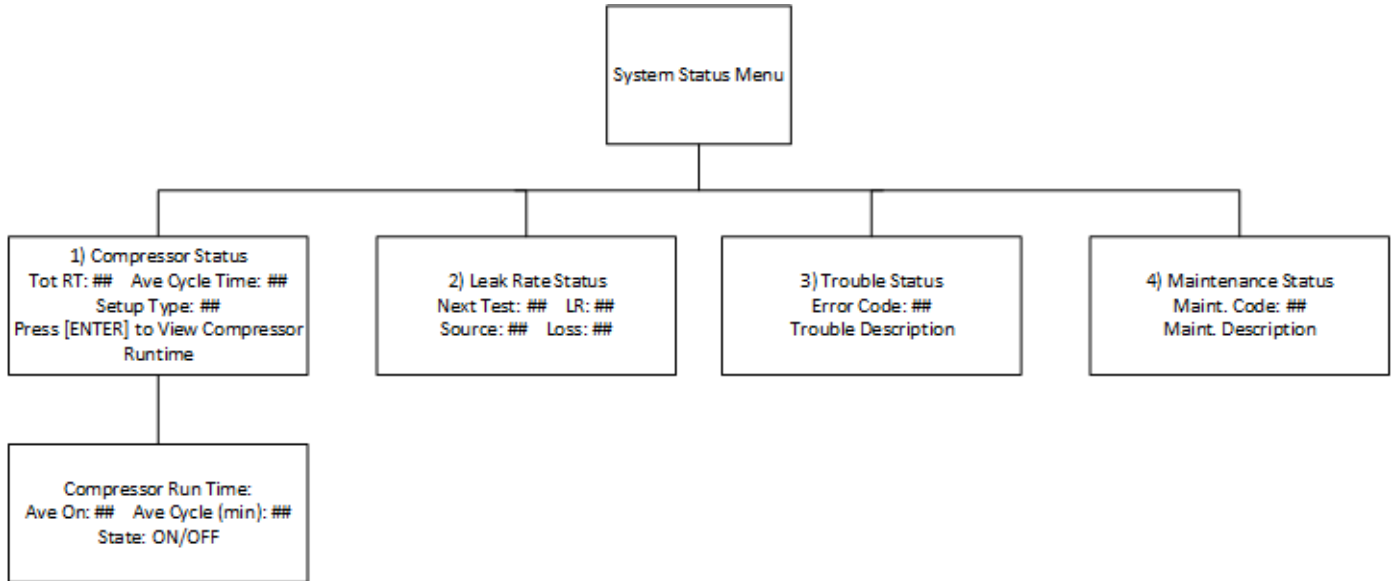


## Menu Trees

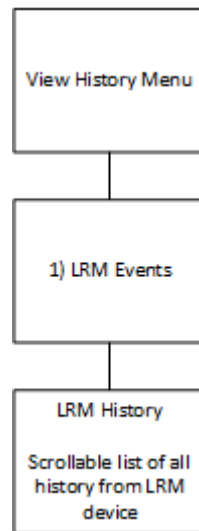
### 1. Main Menu



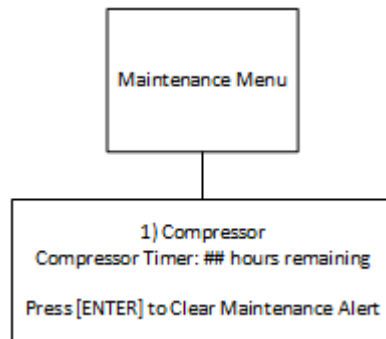
## 2. System Status Menu



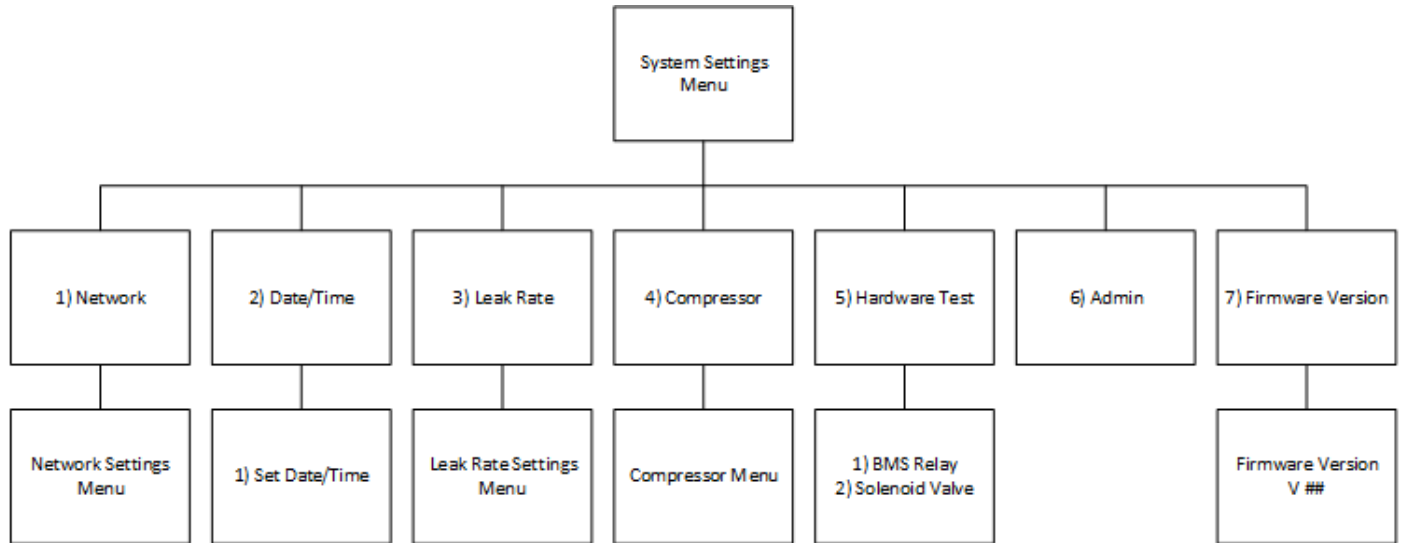
## 3. View History Menu



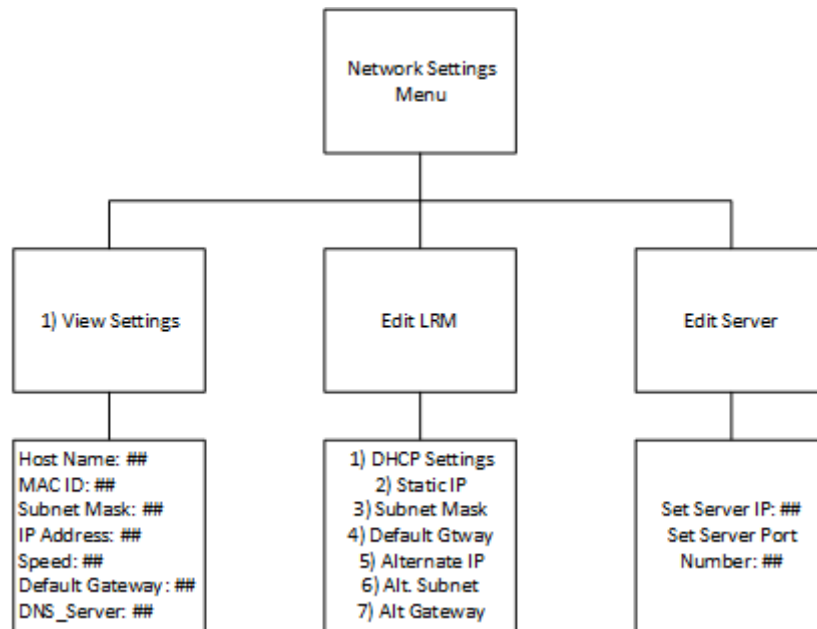
## 4. Maintenance Menu



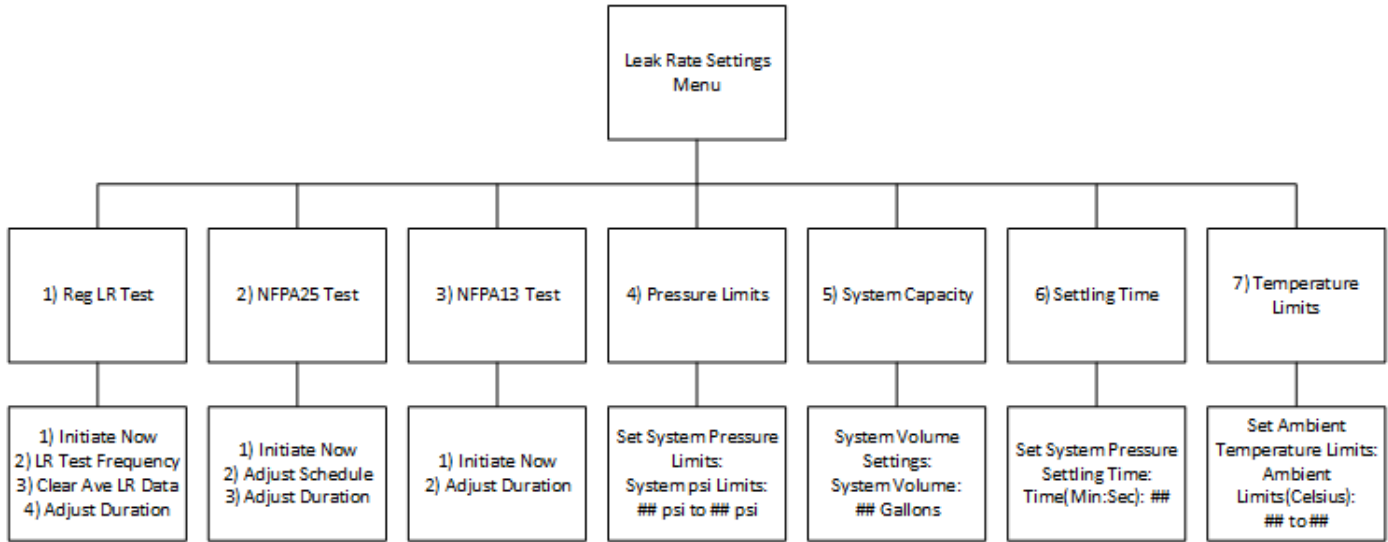
## 5. System Settings Menu



## 6. Network Settings Menu



## 7. Leak Rate Settings Menu



## 8. Compressor Settings Menu

