### Controls

**Power Button**
- Hold for 2 seconds to power On/OFF meter.

**Backlight Button**
- On/OFF

**Menu Button**
- Push to enter menu functions

**Left or Max/Min Button**
- Push once to activate and repeat to cycle through options

**Right or Hold Button**
- Push once to activate. Push again to deactivate

**Pair Button**
- On/Off Wireless BLE Module.

When powered on, the wireless module will strobe when searching for smart device. When connected with smart device, symbol will indicate signal strength.

### Display Features

**Temperature Readings:**
- T1: Low Side Temperature
- T2: High Side Temperature
- °F: Degree Fahrenheit

**Pressure Readings:**
- Lo: Low Side Pressure
- Hi: High Side Pressure
- Psig: Pressure (pounds/in²)
- Kpa: Pressure (kilo-Pascals)

**Kg/cm2**
- Negative Pressure (cm of mercury)
- Negative Pressure (inches of mercury)

**APO**
- Value is held

**Max**
- Show maximum value in record mode

**Min**
- Show minimum value in record mode

**APD**
- Auto Power Off enabled. Settings: 30 Min., 120 Min. or Manual On/OFF

**Battery Life Indicator**
- When powered on, the wireless module will strobe while searching for smart device. When connected with smart device, symbol will indicate wireless connection strength.

### Menu Navigation

Menu button accesses Auto Power, Pressure, and Temperature preferences.

Right and Left buttons navigate menu options.

Up and Dow buttons change the preference in the menu.

Enter button selects the preference.

### Getting Started

1. Install (6) AA batteries by removing the protective rubber boot. Start at the top of the meter and rotate boot around to gain access to the rear battery compartment. NOTE: Do not peel back and bend the protective rubber boot as this may stretch and deform the material.

2. Hold the Power Button for 2 seconds to power on your new manifold.

3. Connect hoses and temperature clamps to manifold; use the Velcro cable straps to organize the lead wires onto the blue and red hoses. Attach protective padded boot to manifold. NOTE: Do not peel back and bend the protective rubber boot as this may stretch and deform the material.

4. Download the free Uniweld SmarTech Digital Manifold app on your compatible device. When connected with smart device, symbol will indicate signal strength.

5. Turn on the SmarTech Manifold and press CONNECT on the app. Press SCAN and the USMAN device will appear. Press CONNECT (wait 5 seconds) to confirm connectivity.

6. Press to go back to the Home Screen and view system's real-time pressure, temperature, Superheat and Subcooling readings. CONNECT will change to indicating connectivity.

### Home Screen

- **Select from 109 refrigerant profiles and create saved list.**
- **MENU**
- **Power Button**

### Home Screen Icons

- **CONNECT OF**
- **CONNECTED**
- **EMAIL REPORT**
- **REPORT**
- **SETTINGS**
- **HOME**

- **UNBOXING**

- **ROTATE BOOT**

- **PUSH HERE**

- **NON-TXV**

- **TXV**

- **SMART CHARGE ZONE™**

- **APD**

- **HOLD MIN MAX**

- **MANUAL DATA ENTRY**

- **REPORT**

- **EMAIL**

- **UNIWELD**

- **Ravenswood Road, Fort Lauderdale, FL 33312 U.S.A.**

- **Customer Service: 800.523.2711.**

- **495.536.2000.**

- **Fax: 495.537.0109**

- **info@uniweld.com www.uniweld.com**

- **Press the SmarTech logo to visit the website for tutorial videos, FAQ, and Resources.**

- **Export a SmarTech Verified Report and email system performance data as a PDF or CSV file that can be easily tracked and saved. Images from the job site can be attached to the email for a complete back up report before and after the work is completed.**

- **Enter data for Company Information, Project Details, and Project Notes that will be saved and automatically appear in the SmarTech Verified Report. Project Details and Project Notes must be edited for each job location.**

- **Device Settings for Wireless and Manual Input, Superheat and Subcooling Input, Elevation, Energy Preferences, and Update Profile. There are also instructions for restoring the meter to Factory Default, Temperature and Pressure Calibration, and selecting Pressure and Temperature preferences.**

- **Pressing the HOME button will take you back to the Home Screen.**
**Evacuating System**

Prior to evacuating the system it may be necessary to discharge unwanted refrigerant or nitrogen from the hoses, see Discharge & Purge Hoses steps 1-2 before proceeding.

See Figure 3

1. Connect Red EZ Turn Hose to High side service fitting.
2. Open Low Side and High Side manifold valves.
4. Open Low side and High side manifold valves.
5. Connect (C) Blue EZ Turn Hose to High Side service valve and Ball Valve open to vacuum pump.
6. Evacuate system according to manufacturer’s specification.
7. Close (A) Low Side and (B) High Side manifold valves.
8. Close black 3/8” Hose Ball Valve and disconnect from the vacuum pump.
9. Turn vacuum pump off and proceed with charging system with refrigerant.

**Charging System**

Prior to charging a system with refrigerant the hoses must be evacuated or purged with nitrogen needed for service, see Discharge and Purge Hoses before proceeding.

See Figure 3

1. Turn system off and connect (E) Red EZ Turn Hose to High side service fitting.
2. Attach 3/8” Male Flare “T” Fitting /f_itting to High Side service valve and Ball Valve open to vacuum pump.
3. Flush new system installation.
4. Open Low side and High Side manifold valves.
5. Open (A) Low Side and (B) High Side manifold valves.
6. Open nitrogen tank valve and set delivery pressure to system manufacturer’s specification.
7. Turn vacuum pump off and proceed with charging system.

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**Package Contents**

1. SmarTech Wireless Digital Manifold w/ Rubber Boot
2. (1) Blue and (11) Red Temperature Clamp K-Type with 6 Ft. lead cable
3. Multi-function ¼” Male Flare “T” Fitting™
4. Red 5 Ft. EZ Turn™ Anti-Blowback Hose
5. Blue 5 Ft. EZ Turn™ Anti-Blowback Hose with 1/4” EZ Access™ Fitting™
6. Blue 5 Ft. EZ Turn™ Anti-Blowback Hose with 1/4” EZ Access™ Fitting™
7. (1) Adapter 3/8” x 1/4” F/F
8. SmarTech Protective Padded Case
9. (6) AA Batteries (not shown)
10. (10) Velcro Cable Tie Straps

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**Discharge and Purge Hoses**

To bring the hoses to a safe condition and open the ball valve to discharge the unwanted refrigerant from the hoses.

See Figure 2

16. Close (C) Low Side and (G) High Side manifold valves.
17. Close (D) Black 3/8” Hose Ball Valve from refrigerant cylinder.
18. Disconnect (C) Black Hose from nitrogen regulator.
19. Open High Side and (G) Low Side manifold valves.
20. Open nitrogen tank valve and set delivery pressure to system manufacturer’s specification.
21. Do not use this product in the presence of flammable or explosive gases or vapors.
22. WARNING: HIGH PRESSURE AND HAZARDOUS GASES IN ALL SYSTEMS FOR USE BY PROFESSIONALS. This manifold is designed for use by technically trained refrigeration and air conditioning service technicians, due to the unusually HIGH PRESSURE AND HAZARDOUS GASES IN ALL SYSTEMS, misapplication could result in injury or death. The manufacturer warns against the sale of this product to, or its use by other than professional trained personnel.
23. Package Contents against the sale of this product to, or its use by other than professional trained personnel.
24. Warner/California Proposition 65: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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**Manifold and Hoses Leak Test**

The SmarTech Digital Manifold is extremely accurate and can be used to pressurize the hoses for a leak test. For NOE oil used in 8410A is very aggressive and causes the rubber seals in the hoses and manifold valve stems to wear rapidly; they may need replacing every couple of months depending on usage. It is recommended to check your hoses and manifold valves for leaks due to normal wear on rubber gaskets and seals.

See Figure 1

1. Open (C) Blue EZ Turn Hose to manifold 45° hose holder fitting.
2. Connect (D) Red EZ Turn Hose to manifold 45° hose holder fitting.
3. Connect (E) Black 3/8” Hose with Ball Valve open to nitrogen regulator using the 3/8” x 1/4” adaptor.
4. Open Low Side and High Side manifold valves.
5. Open nitrogen tank valve and set delivery pressure between 400 to 500 psi.
6. Close (C) Blue 3/8” Hose Ball Valve. A slight pressure drop is normal as the hoses stretch under pressure but will stabilize after a couple of minutes.
7. Close Low Side and High Side manifold valves.
8. If digital pressure readings are stable the hoses and manifold are leak-free.
9. If the pressure readings continue to decrease there is a leak in the hose or manifold that must be repaired. Determine origin of the leak and replace the gaskets and O-rings as needed. Repeat pressure test.

Operation of this equipment may cause reproductive harm.