

# Fieldpiece

## Job Link® System Manometer Probe

### OPERATOR'S MANUAL

Model JL3MN



www.fieldpiecejoblink.com

## Quick Start

- 1 Install the Fieldpiece Job Link® System app on your mobile device and sign up for an account if you're a new user.
- 2 Remove the single screw of the yellow battery cover and install 2 x AAA batteries.
- 3 Press  $\phi$  for 1 second to power on.
- 4 Open Measurements in the Job Link app and favorite the probe in the tool manager.
- 5 Tap  $\phi$  to zero.
- 6 View live measurements on your mobile device up to 350 feet (107 meters) away.

## What's Included

- Job Link® System Manometer Probe
- 2 x AAA Batteries
- Tubing with brass fitting
- Bulk tubing
- Gas adapter
- Static pressure tip
- Operator's manual
- 1 Year limited warranty

## Description

The JL3MN Job Link® System Manometer Probe sends static pressure or gas pressure measurements directly to the Fieldpiece Job Link app up to 350 feet (107 meters) away.

Use two JL3MN probes to do even more. Because they are untethered, you don't need long hoses to measure differential pressures. Measure and view real-time return static, supply static, and total external static pressure all at once. Use your static pressure tip with short tubing for accurate static pressure measurements. Measure real-time inlet and manifold pressures simultaneously with 2 Job Link manometers.

Mount your manometer to equipment for hands free use in tight spaces. The powerful rotating magnet holds tight even when the hose is tugged or the equipment shakes. Slide the switch and the app immediately knows which side of the system you're going to place your manometer probe.

## Maintenance

**CLEANING:** Clean the exterior with a damp cloth. Do not use detergents or solvents. Do not apply pressurized air into the connection port.

**BATTERIES:** When the LED slow-blinks Red, the batteries must be replaced. Ensure the power is OFF. Remove the single screw from the yellow battery cover. Install 2 x AAA batteries. You can also monitor battery life in the Job Link app tool manager.

**SENSOR CARE:** Store JL3MN in a protective cover when not in use to prevent debris or foreign contaminants from entering the barb tip. Do not pressurize the probe above its max specification.

### WARNING

Prevent damage, do not drill holes blindly into a plenum that houses the evaporator or heat exchanger.  
Do not apply more than 11.6 psi.

## Specifications

### Minimum Device Requirement:

BLE 4.0 devices running iOS® 7.0 or Android™ 5.0  
(Latest compatibility at [www.fieldpiece.com](http://www.fieldpiece.com))

**Compatible Media:** Dry, non-corrosive gas

**Pressure Port:** Tube connector for flexible tubing (4.5 to 8mm ID)

**Units of Measure:** inWC, mmWC, mbar, psi, Pa

### Accuracy and Ranges:

inWC:  $\pm 0.02$  on 0.00 to  $\pm 2.00$  ( $\pm 1.5\%$  FS on 2.00 to  $\pm 60.00$ );  
mmWC:  $\pm 0.5$  on 0.0 to  $\pm 51.0$  ( $\pm 1.5\%$  FS on 51.0 to  $\pm 1500.0$ );  
mbar:  $\pm 0.05$  on 0.00 to  $\pm 5.00$  ( $\pm 1.5\%$  FS on 5.00 to  $\pm 150.00$ );  
psi:  $\pm 0.001$  on 0.000 to  $\pm 0.072$  ( $\pm 1.5\%$  FS on 0.072 to  $\pm 2.165$ );  
Pa:  $\pm 5$  on 0 to 498 ( $\pm 1.5\%$  FS on 498 to  $\pm 14930$ )

**Maximum Overload Pressure:** 321.08 inWC (11.6 psi; 80.0 kPa)

**Battery Type:** 2 x AAA, NEDA 24A, IEC LR03

**Battery Life:** 150 hours typical alkaline. LED slow-blinks red when battery replacement is needed.

**Auto Power Off:** 2 hours (APO can be disabled)

**Wireless Range:** 350 feet (107 meters) line of sight.

Obstructions affect distance.

**Radio Frequency:** 2.4 GHz

**Operating Environment:**  $-10^{\circ}\text{F}$  to  $122^{\circ}\text{F}$  ( $-23^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ ) at  $<75\%$  RH

**Storage Temperature:**  $-10^{\circ}\text{F}$  to  $140^{\circ}\text{F}$  ( $-23^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ ) at  $<80\%$  RH (with batteries removed)

**Temperature Coefficient:** 0.1 x (specified accuracy) per  $1.8^{\circ}\text{F}$  ( $-10^{\circ}\text{F}$  to  $64^{\circ}\text{F}$ ,  $82^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ ), per  $1^{\circ}\text{C}$  ( $-23^{\circ}\text{C}$  to  $18^{\circ}\text{C}$ ,  $28^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ )

**Weight:** 0.30 lbs (137 g)

**US Patent:** [www.fieldpiece.com/patents](http://www.fieldpiece.com/patents)

# Operation



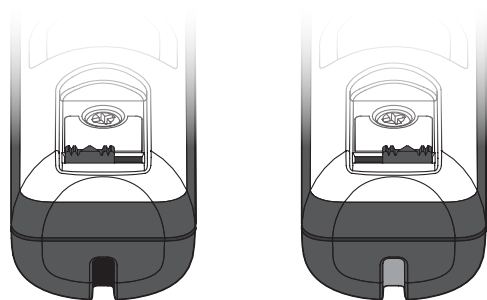
Press for 1 second to power ON/OFF.  
Tap to zero measurements.

## LED Color Indications

Green slow blink: normal operation  
Red slow blink: batteries need to be replaced

## Supply or Return Side Switch

The Job Link® System app knows which side you have selected for each probe. Select **P1** or **P2** and place it on the system appropriately.



P1  
(Supply)  
(Blue)

P2  
(Return)  
(Red)

## Static Pressure

Static pressure testing ensures if the equipment is operating within factory specifications.

1 Zero your JL3MN while in ambient pressure with any tubing/probes attached before taking measurements. For measurements less than 2 inWC, take reading within 1 minute after zeroing for best accuracy.

2 Use the included static pressure tip when checking static pressure in an airflow stream.

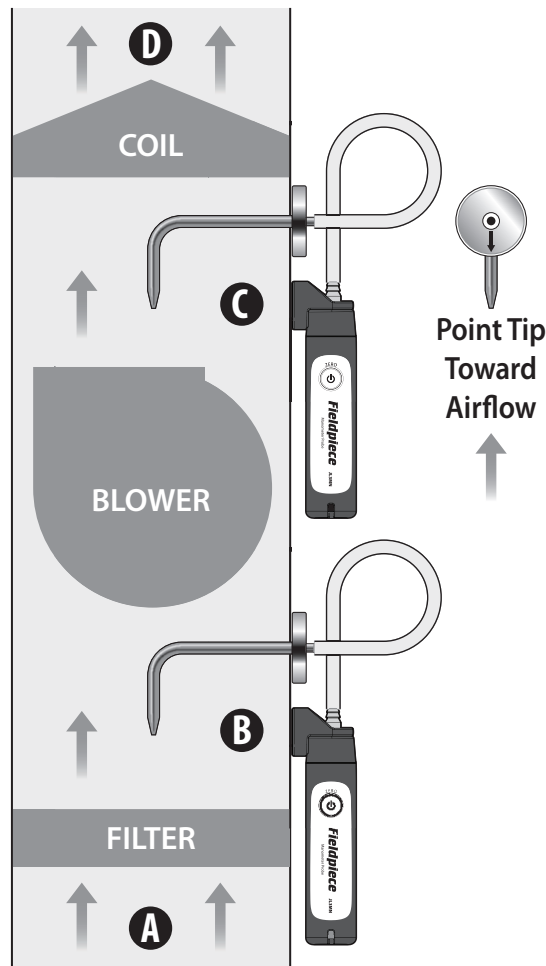
NOTE: The red arrow on the static probes should point toward the airflow of the stream.

3 Place a JL3MN before and after the filter to measure your filter pressure drop (**B** **A**).

4 Place a JL3MN before and after the coil to measure your coil pressure drop (**D** **C**).

5 Place a JL3MN in the inlet and outlet air of the equipment to measure your total external static pressure (**C** **B**). Check with manufacturer to determine TESP test locations.

NOTE: If you are in an environment where the temperature is noticeably changing while you are taking your reading, it is advised that you disconnect the probe from the tubing and ZERO it relative to the ambient air before each reading.



## Gas Pressure

Prevent symptoms like rough starts or overheating your heat exchanger by checking your gas pressure.

1 See manufacturer's specification for target inlet and outlet fuel or gas pressures.

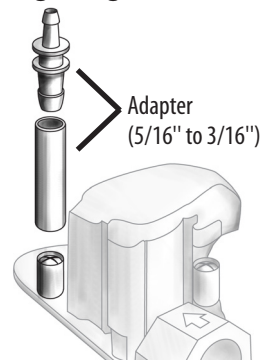
2 Shut off main gas supply power to furnace.

4 Zero your JL3MN while at ambient pressure with tubing attached before taking measurements.

5 Remove outlet pressure tap screw and insert the brass screw fitting of the hose into the outlet pressure tap of the gas regulator.

NOTE: Some pressure taps have a 5/16" boss instead of an insert screw. In this case, use the included 5/16" adapter tube. Loosen the tap screw about 1 revolution and slide the tube over the boss.

6 If you suspect high or low inlet pressure to the regulator, connect the JL3MN to the inlet tap.  
7 Put furnace into operation and begin to take measurements.



## Auto Power Off (APO)

The probe will automatically power off after 2 hours. To disable APO until powered off, while power is on tap  $\odot$  twice. The LED will briefly blink red. To enable APO, while power is on tap  $\odot$  twice. The LED will briefly shine red.

## Certifications and Module IDs



EN 300 328



2ALHR003



00263-18-10972

IC: Industry Canada

22518-BT003



Regulatory Compliance Mark



Waste Electrical and Electronic Equipment



Restriction of Hazardous Substances Compliant

IFETEL: Federal Telecom Institute

RCPFI2A18-0235

## 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 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.

**FCC Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada licence-exempt RSS-247 standard. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**IC Radiation Exposure Statement:** This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0.5 cm between the radiator and your body.

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## IFETEL Statement

*La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.*

The operation of this equipment is subject to the following two conditions: (1) this device or device may not cause harmful interference, and (2) this device or device must accept any interference, including interference that may cause undesired operation.

## ANATEL Statement

*Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.*

This equipment is not subject to the protection from harmful interference and may not cause interference with duly authorized systems.

## Limited Warranty

This probe is warranted against defects in material and workmanship for one year from date of purchase from an authorized Fieldpiece dealer. Fieldpiece will replace or repair the defective unit, at its option, subject to verification of the defect.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument.

Any implied warranties arising from the sale of a Fieldpiece product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. Fieldpiece shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss.

State laws vary. The above limitations or exclusions may not apply to you.

## Obtaining Service

For international customers, warranty for products purchased outside of the U.S. should be handled through local distributors. Visit our website to find your local distributor.

**Fieldpiece**  
Designed in USA  
MADE IN TAIWAN

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