

# User Manual

## SMG-1 Series Manifold Gauge



SMG-1L



SMG-1H

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# User Manual

## SMG-1 Series Manifold Gauge

Thank you for buying our brand new pressure gauge. Please read this manual thoroughly before use and keep it with the gauge for further consultation.

### **The gauges are for technical professionals only.**

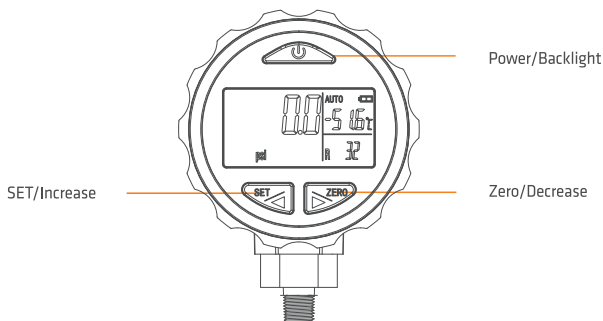
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- ⓘ Do not contact the gauges with harmful or corrosive liquid, especially ammonia refrigerant.
- ⓘ Never face the fittings directly to human body because the remaining refrigerant in the gauges and hoses may cause injury.
- ⓘ Wear protective clothing, protective gloves and safety goggles when working with refrigerants, which can cause cold injury, etc. Disconnect hoses with extreme caution.
- ⓘ Do not inhale refrigerant vapor, lubricant and oil mist. Inhalation of refrigerant with high concentration may cause arrhythmia, anesthesia or even death by suffocation.
- ⓘ If your eyes are in direct contact with the refrigerant, rinse immediately with water and see a doctor.
- ⓘ Remove the batteries if the gauge is not to be used for a long time in case the leakage corrodes the gauge. The batteries included are not rechargeable. Please do not charge them.
- ⓘ The battery is dangerous. Be extra careful when using it. Never dispose of used batteries in regular trash can (but in the battery recycle box) to cause danger or harm to environment.
- ⓘ Please dispose of the refrigerant in compliance with local environmental regulations.



# Overview

SMG series are professionally digital gauges used for maintaining, monitoring and evacuating refrigeration systems and charging refrigerant. The gauges can measure system pressure and display various parameters such as the evaporation temperature of corresponding refrigerant. They have backlight, auto off, unit switch, over range alarm and other functions.



# SPECIFICATIONS

High Pressure Gauge:	-14.5psi~800psi
Low Pressure Gauge:	-14.5psi~500psi
Resolution:	0.5psi
Accuracy:	±0.5%FS
Sampling Rate:	1s
Temperature Unit:	°C/°F
Pressure Units:	MPa, bar, psi, kPa, kg/cm <sup>2</sup> , cmHg
Auto OFF:	10min, 20min, 30min, 40min, OFF
Compatible Types:	87
Battery:	3 AAA batteries
Battery Life:	6 months
Over Range Alarm:	Displays -OL-

# Operation

## 1. ON/OFF

ON: Press  button and the gauge will display current pressure.


OFF: Press and hold  button until the screen is off.

*Note: When pressure is over measuring range, -OL- shows, backlight flashes and ALM symbol lights.*

## 2. Backlight

When the gauge is ON, press  button to light up backlight.

## 3. Max/Min Memory and Clear

Light up backlight and press  button to display MAX symbol & value. Then hold  button until 8888 shows on screen, to clear current the Max value.

When backlight is on, press  button twice to display MIN symbol and Min value, then hold  button until 8888 shows on the screen to clear the current Min value.

## 4. Zero

Press and hold  button until 8888 shows on the screen, then release to clear the current value to 0.




*Note: Please use  button to zero the gauge before connecting it to the system.*

## 5. Refrigerant Selection

Under normal running status, press  or  to switch between refrigerants,





## 6. Settings

### ◆ Auto OFF





Press and hold  button until AUTO shows on the screen, then use  and  to switch ON/OFF Auto OFF function.

*Note: AUTO symbol will show on the screen if Auto OFF function is enabled.*





### ◆ Temperature Unit

Press and hold  button until AUTO shows on screen, press  button once until C-F shows, then use  or  to switch between °C and °F.

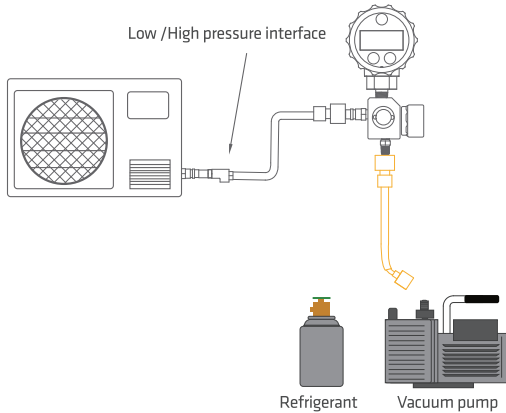
### ◆ Pressure Unit

Press and hold  button until AUTO shows on the screen, press  button twice until UNIT shows, then use  or  to switch between pressure units.

### ◆ Backlight Time

Press and hold  button until AUTO shows on the screen, press  button three times until b-L shows, then use  or  to switch backlight auto off time.

# Connecting to an A/C system



## Compatible Refrigerants

R402B	R408A	R14	R290	R413A	R422B	R449A	R508A
R403A	R409A	R141B	R32	R414A	R422C	R449B	R508B
R403B	R114	R142B	R401A	R414B	R422D	R450A	R509A
R404A	R12	R143A	R401B	R415B	R423A	R452A	R513A
R406A	R123	R152A	R401C	R416A	R427A	R455A	R600
R407A	R1234yf	R161	R402A	R417A	R437A	R50	R600a
R407B	R1234ze	R170	R409B	R419A	R441A	R500	R601
R407C	R124	R21	R41	R420A	R442A	R502	R601a
R407D	R125	R218	R410A	R421A	R443A	R503	R740
R407E	R13	R22	R410B	R421B	R444A	R504	R744
R407F	R134a	R23	R412A	R422A	R448A	R507A	/