

Pangaea® Technologies LLC
DIGITAL RV PROPANE GAS DETECTOR

PRG1000-A Flush Installation Model (White/Black)
PRG1000-B Surface Installation Model (White/Black)

USER MANUAL

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PANGAEA®

WARNING!


NOT SUITABLE AS A SMOKE AND FIRE DETECTOR.


NOT SUITABLE AS A CARBON MONOXIDE ALARM.


NOT SUITABLE FOR INSTALLATION IN HAZARDOUS LOCATIONS AS DEFINED IN THE NATIONAL ELECTRICAL CODE.


CONNECT ONLY TO WIRING THAT CANNOT BE TURNED OFF BY A WALL SWITCH OR GROUND FAULT PROTECTOR.


KEEP THIS MANUAL FOR FURTHER SUPPORT.


THIS PROPANE DETECTOR IS SUITABLE FOR USE IN MOTORHOMES AND TRAILERS.


IMPORTANT: Always follow the operation and safety instructions of your gas appliance manufacturer.

Understanding the Dangers of Propane Gas

Propane (LP) is used as fuel for heating and cooking appliances. The lower-explosive-limit (LEL) concentration is 2.1%, or 21,000 ppm (parts per million).

The Pangaea RV gas detector will activate an alarm at 800 ppm, or 3.8% LEL.

When propane concentrations exceed that threshold, the alarm signal will activate. A reset function can be activated to temporarily silence the alarm if necessary.

Propane gas is denser than air, and will usually accumulate close to the floor. Therefore, your propane detector should be installed near the floor (4-10 inches).

Limitations of Pangaea Propane Gas Detectors

This detector will not work without power.

This detector will only indicate the presence of propane gas in the area around the sensor. Explosive gas may be present in other areas.

This detector may not be heard in some cases. For example, if people are outdoors, they may not hear the alarm if the detector is indoors and the door is closed. People who are hard of hearing may also not hear the detector.

This detector is not suitable for installation in hazardous areas as defined in the National Electrical Code.

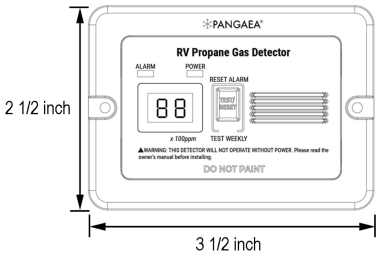
1. KEY FEATURES

- Highly sensitive semiconductor sensor.
- Fast response to propane gas exposure.
- Digital display showing real-time concentrations and error codes.
- Can replace the MTI Safe-T-Alert™ 20 series, 30 series, 40 series, and CCI controls series.
- TEST/RESET button allows for testing and silencing of unwanted triggering.
- 85dB sound notifies occupants of propane gas.
- Low power draw (45mA on average).
- Sleek and modern design.

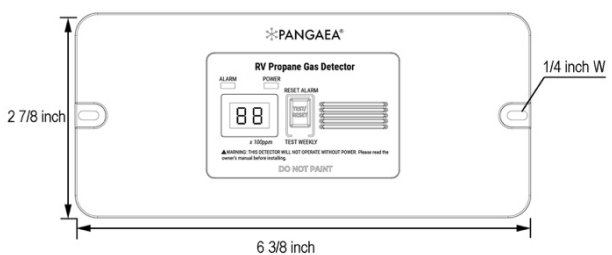
2. SPECIFICATIONS

POWER SUPPLY	12 VDC
OPERATIONAL VOLTAGE	9-24 VDC
CURRENT DRAW	Normal: 45 mA at 12 VDC Alarm: 170 mA at 12 VDC
OPERATIONAL TEMPERATURE	-31 ° F to 150 ° F (-35 ° C to 66 ° C)
AUDIBLE OUTPUT	85 dB at 10 feet
PROPANE DETECTION THRESHOLD	800 ppm
UNIT LIFETIME	5 years (powered operation)
CASE DIMENSIONS (Surface)	3 1/2" W x 2 1/2" H x 7/8" D (89 mm W x 63.5 mm H x 22 mm D)
CASE DIMENSIONS (Flush)	6 3/8" W x 2 7/8" H x 7/8" D (162 mm W x 73 mm H x 22 mm D)
WARRANTY	2 Years Limited

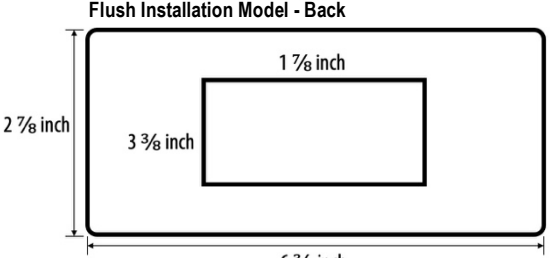
Surface Installation Model



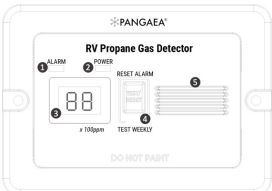
Flush Installation Model - Front



Flush Installation Model - Back



3. DIAGRAM & DESCRIPTION



1. Power LED / Green light
2. Alarm LED / Red light
3. Digital display
   (Gas concentration level in every 100ppm)
4. Test Weekly / Reset Alarm key
5. Sensor area

4. INSTALLATION GUIDELINES

4.1. WARNING: THIS DETECTOR SHOULD NOT BE INSTALLED IN THE FOLLOWING LOCATIONS:

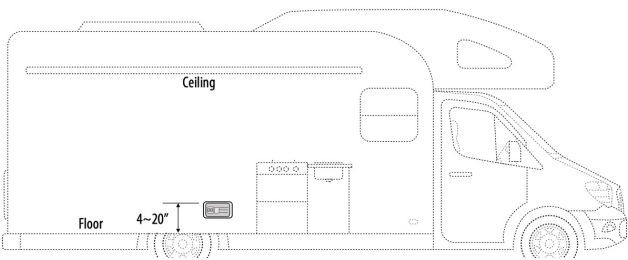
- AREAS BLOCKING AIRFLOW, INCLUDING BEHIND FURNITURE, NEAR DRAPES, OR IN CLOSETS.
- WITHIN 12 INCHES OF EXTERIOR DOORS, WINDOWS, HEATING OR RETURN VENTS, OR OTHER DRAFTY AREAS.
- EXTERIOR WALLS.
- NEAR A WALL SWITCH-CONTROLLED POWER LINE, GROUND FAULT CIRCUIT OR CIRCUIT BREAKER.

4.2. WHERE TO INSTALL GAS DETECTORS:

This detector is used for installation in recreational vehicles, like motorhomes or trailers. Install this detector near propane sources such as a stove, oven, or

water heater. If propane sources are in separate areas, Pangaea recommends installing a detector in each area.

CAUTION: Propane is heavier than air. Install this Detector between 4 and 20 inches off the floor.



4.3. INSTALLATION INSTRUCTIONS

Power Supply 12 VDC. Connect the detector to a properly fused circuit.

Step 1a (Surface installation): drill a ¼ inch hole for the power leads.

Step 1b (Flush installation): drill a hole with the following dimensions: 3 ½ inches (width) × 2 inches (high) × 1 inch (depth).

Step 2: Connect the RED (+) power lead to the fused circuit.

Step 3: Connect the BLACK lead to the ground (-).

Step 4: Install the detector enclosure onto the wall.

Step 5: Reconnect the power supply.

5. OPERATION

WARNING: This detector cannot detect propane gas for 35 seconds after powering on.

POWER ON: When powered on, the power LED light will be green (Operational).

5.1. STARTUP SELF-CHECKING PROCESS

1) The Power LED light is green and the Alarm LED light flashes twice.

2) Digital display shows “88”.

After the self-checking process, the Power LED light will be green, the Alarm LED and the digital display will switch off.

5.2. SENSOR WARM-UP PROCESS

The sensors will warm up and be ready for propane detection 30 seconds after powering on.

5.3. ALARM STATE AND SIGNAL

When the sensor detects propane gas levels above 800 ppm:

- The alarm LED light will flash RED.
- The digital display will show real-time concentrations (× 100ppm).
- The audio alarm will activate (85 dB within 10 feet) until the gas clears or the Test/Reset key is pressed to mute the alarm.

6. WEEKLY TESTING

TEST THE DETECTOR AT LEAST ONCE A WEEK AND BEFORE TRIPS.

DO NOT USE A LIGHTER TO TEST THE SENSOR, AS THIS MAY DAMAGE IT.

The TEST/RESET KEY accurately tests the unit's operation.

Test procedure:

Press the TEST/RESET KEY when the detector is operating. The Alarm LED light should flash RED and the alarm will sound. The digital display will activate also. Release the TEST/RESET KEY when finished testing.

IMPORTANT: If this detector does not operate properly, please replace it or contact customer support immediately.

6.1. MUTE ALARM

Press the TEST/RESET key when the detector alarm is activated.

1) The audio alarm signal and sound will stop.

2) The RED alarm LED light will continue flashing and the digital display will show the concentrations until the sensor doesn't detect propane.

3) If propane concentration still exceeds the alarm threshold after the end of the Mute cycle (about 90 seconds) the alarm will re-activate.

6.2. FAULT ALARM

A fault in the sensor's operation will activate the Fault Alarm:

- Digital display will show "ER".

- The sound will be two separate Beeps times and will repeat 15 seconds once.

IMPORTANT: If the Fault Alarm is activated, please power off the detector and power on it again. If the Fault Alarm is still active, please contact customer support or replace a new detector immediately. Do not use your RV without a working propane detector.

6.3. LOW POWER OPERATION

This detector will operate normally down to 9 VDC. If the power supply is lower than 9 VDC:

- Digital display will show “LP”.
- The sound will be a single beep tone and repeat 15 seconds once.

7. AUDIO & VISUAL SIGNAL INDICATOR

LED, Digital Display, and Audio Signals				
OPERATION	DIGITAL DISPLAY	ALARM LED	POWER LED	AUDIBLE SIGNAL
POWER OFF	NONE	NONE	NONE	NONE
NORMAL	NONE	NONE	ON	NONE
PROPANE ALARM	DISPLAY CONCENTRATIONS	FLASH	ON	CONSTANT
ALARM RESET	DISPLAY CONCENTRATIONS	FLASH	ON	NONE
FAULT ALARM	DISPLAY “ER”	NONE	ON	Beeps 15s
LOW POWER	DISPLAY “LP”	NONE	FLASH	Beeps 15s repeat

8. TROUBLESHOOTING GUIDE

8.1. ALL LED LIGHTS ARE OFF

1) Check for a faulty wire connection.

2) Reverse the polarity.

3) Check for a bad or missing fuse.

4) Check power level (the battery may be damaged or need to be charged).

8.2. NO SOUND MADE WHILE TESTING

Replace the detector or contact customer support immediately.

8.3. NO ALARM LED LIGHT OR DIGITAL DISPLAY WHILE TESTING

Replace the detector or contact customer support.

8.4. ALARM ACTIVATES AFTER WARM UP WITHOUT GAS PRESENT OR INDICATED ON DIGITAL DISPLAY

Press the Test/Reset key and wait 90 seconds.
If an issue is still present, replace the new detector or contact customer support.

8.5. AUDIO ALARM AND ALARM LED LIGHT CANNOT BE RESET

Replace the detector or contact customer support.

8.6. TAKING CARE OF YOUR DETECTOR

To keep your detector in good working order, you must:

- Test the detector per week.

- Check the power and alarm LED light on the front of the unit regularly.

• Clean dust off the detector cover regularly (more frequently in dusty locations) using the soft brush attachment of your vacuum.

DO NOT SPRAY CLEANER directly onto the detector. This may damage the sensor or cause the alarm to activate.

9. LIMITED PRODUCT WARRANTY

Pangaea Technologies LLC guarantees that for a period of two years from the date of purchase, this product will be free from defects in materials and workmanship. Pangaea, at its discretion, will replace or repair this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new or refurbished product or component. If the product is no longer available, a replacement may be made with a similar product of equal or greater value. This is your exclusive warranty. Your replacement unit will be returned to you for no charge and will be covered under this warranty for the balance of the warranty period.

This warranty is valid for the original retail purchaser from the date of initial retail purchase and is not transferrable. Keep the original sales receipt.

Proof of purchase is required to obtain support under the warranty. Pangaea dealers, service centers, or retail stores selling Pangaea products do not have the right to alter, modify or in any way change the terms and conditions of this warranty.

LIMITS OF WARRANTY

This warranty does not cover negligent use or misuse of the product, use with an improper voltage or current, use contrary to the operating instructions, disassembly, repair, or alteration by anyone other than Pangaea.

Further, the warranty does not cover "Acts of God," such as fire, flood, hurricanes, or tornadoes.

Pangaea Technologies LLC will not be liable for any loss, damage, incidental or consequential damages of any kind arising in connection with the sale, use, operation, inoperability, malfunction, or repair of this product.

This warranty does not cover any product that:

a) has been subject to misuse or neglect; or

b) has been used in a manner inconsistent with the warning and instructions contained in the owner's manual.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

WARRANTY RETURN POLICY

Warning: Opening this product for any reason voids the warranty. There are no user-serviceable parts in the case.

If service is required, do not return the product to your retailer. Please send an email to support@go-pangaea.com. To assist us in serving you, please have the model number and date of purchase available.

Pangaea reserves the right to make changes at any time, without notice or obligation, in colors, specifications, accessories, materials, and models.

Pangaea Technologies LLC
363 North Sam Houston Parkway East
Suite 1100 #1405
Houston, Texas 77060
support@go-pangaea.com
+1-855-787-7666

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