



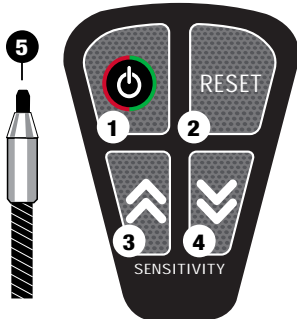
**Mastercool<sup>®</sup>**  
*"World Class Quality"*

**ENGLISH  
OPERATING INSTRUCTIONS**



**MODEL#-56100**





## KEYPAD FUNCTION & PARTS

1. Turns unit ON and OFF
2. Resets Sensitivity Level to Zero Reference
3. Increases Sensitivity
4. Decreases Sensitivity
5. Sensor Tip

## BATTERY INSTALLATION

Hold the leak detector handle horizontally. To remove the battery door, slide the door away from the unit. Load the two “C” cell batteries into the compartment with the positive (+) end up. Reinstall the battery door.

## BATTERY TEST

Turning the unit ON will automatically run the battery function test and display the battery condition on the UNITS LED display. To view the remaining battery life, press and hold the **ON/OFF** button.



## OPERATING PROCEDURES

### 1. SENSITIVITY LEVELS

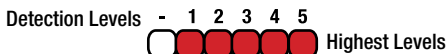
Three sensitivity levels (Low-Med-High). It will detect leaks as low as 1/10 oz (3 grams) per year. Turn **ON** the unit, it will default to the Medium Level. (The Medium Level is the recommended setting to begin inspection). To view the sensitivity level on the LED display, press either the **UP** or **DOWN** arrow. The LED display will illuminate for approximately two seconds. Two Red LEDs will progressively illuminate for every sensitivity level.



The sensitivity level can be increased by the UP arrow and decreased by the DOWN arrow. Pressing the selected arrow once will adjust the sensitivity to the next level. Pressing and holding the arrow will continue to move the setting until the arrow is released.

### 2. DETECTION LEVELS

5 levels of detection. As the unit approaches the leak source and the refrigerant concentration increases, the audible alarm will increase in speed and the LED will display 5 levels of detection.



The detection level will vary depending on the level of the sensitivity setting. The same size leak will display higher detection levels in higher sensitivity settings and lower detection levels in the lower sensitivity settings.

### 3. RESET FUNCTION

The primary use for the RESET function is to pinpoint the leak source. When the unit detects a leak and goes into full alarm, press the **RESET** button. Resetting will ignore any leaks at that level and only detect leaks of higher concentration.

## IMPORTANT LEAK DETECTION TIPS:

- Make sure that the air conditioning/refrigeration system is turned OFF before inspection. A sufficient amount of refrigerant must be present in the system. A minimum gauge pressure of 50 PSI at ambient temperature of 60° and above with the system OFF is required for efficient leak detection.

- B. For the best leak detection results, the probe should be moved across the leak detection area at the rate of 1" - 2" per second (25 - 50mm per second) and held 1/4" (5mm) away from the surface. An increase in the alarm rate will indicate a leak. To confirm the correct leak location, blow shop air around the suspected leak area, move the probe into fresh air, reset and reinspect.
- C. When inspecting in contaminated or high humidity areas, erratic alarming may occur. For best results in these areas, allow the unit to adjust to the existing environment before inspecting. Pressing the **RESET** button will adjust the unit to an existing environment.

## **SENSOR TIP REPLACEMENT**

The sensor tip performs at full potential for approximately 20 hours. As the tip wears, it will require replacement. Signs of a worn tip are erratic and irregular alarm response in clean air environments. Before replacing the tip, make sure that it is free of grease, moisture, dust and dirt. To remove any of these materials, use compressed air or alcohol. Make sure the sensor tip is completely dry before using.

## **TROUBLESHOOTING TIPS**

When the unit starts to display an erratic or irregular alarm response, check or change the sensor tip or the battery (to check the battery, refer to battery test procedure).

## **WARRANTY**

The product is warranted for a period of one year from the date of purchase to the original purchaser. A repair or replacement will be made at no charge with proof of purchase. Damage caused by tampering or improper use will void warranty. This warranty does not cover batteries, sensor tips or other materials that wear out during normal use. **BEFORE RETURNING THE UNIT, PLEASE REPLACE OR CLEAN THE SENSOR TIP AND CHECK BATTERIES.** This warranty is given in lieu of any other warranty, express or implied, including, without limitation, any implied warranty or merchantability or fitness for a particular use.



### **WARNING!**



- **Pressurized systems can leak**
- **Keep self and tools clear of moving parts**
- **Wear safety shield (User and bystander)**



- **Pressurized leaks and breathing vapors may cause injury**
- **DO NOT breathe refrigerant vapors!**



**Design Certified by MET LABORATORIES INC. to meet SAE J1627 for R134a, R12 and R22.**

**MADE IN USA**

WARNING: This product contains one or more chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.