



User's Manual For Model Aero-551 (Rev. Orig.)

Document: 551-100 REV A

LOG OF REVISIONS

REV NO.	PAGE NO.	DATE	DESCRIPTION	APPROVED
Orig.	1 thru 5	12/4/06	Initial Release	ASH VIJ
A	2 and 3	10/22/06	Deleted word 553 from Page 2 and 3 and updated Installation drawing Rev. A	ASH VIJ

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Background

Model 551 is a CO Detector that Displays CO Level between 10PPM (Parts per Million) to 999PPM. The detector consists of one Red button that is used to test and silence the alarm. Every time the unit is turned on or the reset button is pressed in a non alarm condition, the system will test the entire circuit for integrity. If the unit alarms, the unit can be silenced by pressing the **Red** reset button. The lights and display continue displaying till CO goes below 10 PPM.

Installation

Install Aero-551 per CO Guardian installation drawing number 01-551-01-Rev. A (Or later revision) for hardware and wiring diagram installation.

SELF TEST SEQUENCE AT STARTUP:

When you power up the Aero-551, you will notice the following test sequence:

The screen will show the word "CO Guardian" along with two short beeps followed by a third one and the wording "CO LEVEL NORMAL" will display. Internally in the background, the system will check the sensor for 30 seconds and all internal components. If any components fail, the display will show the word "Failed" and the unit must be returned for repair.

CARBON MONOXIDE LEVEL INDICATION:

DISPLAY: CO LEVEL

Aero 551 can detect Carbon Monoxide from as low as 10 PPM. Aero 551 will trigger an alarm for CO long before the pilot/passengers can be affected by exposure to CO.

The effect of CO level on the human body is linked to the duration of exposure to CO. Our units are designed to set off CO alarms in progressively shorter durations as the concentration of CO increases. The intention is to prevent a false alarm when the CO level poses no danger, but at the same time ensure full protection when the level starts becoming dangerous.



LAYOUT OF BUTTONS / CONTROLS:

The Aero 551 features a 1.75 x 1 inch LCD display. The display is backlit continuously. There is basically 1 button which can control the detector: The red button at the top (marked RST) is the Test/Re-set button which can be used to test or re-set the unit.

CO LEVEL ALARM ACTIVATION:

CO level alarm activated after: in PPM (Parts per million)

PPM	
11 - 50	Display only, No alarm
50 - 70	04 minutes
70 - 100	03 minutes
200	02 minutes
300>	01 minutes

NOTE: Concentration of CO in air Inhalation time and toxic developed

- 50 parts per million (ppm) Safety level as specified by the FAA**
- 200 PPM Slight headache within 2-3 hours**
- 400 PPM Frontal headache within 1-2 hours**
- 800 PPM Dizziness, nausea, convulsions within 45 minutes**



How Aero 551 protects you against CO

The CO display page in the Aero 552 shows the CO level in PPM (Parts per million). The Aero-551 can display CO from 10 PPM to 999 PPM. (For any level above 999 PPM, the display will register only 999). The alarm will sound within 5 minutes if the CO level stays above 75 +/- 5 PPM. If the CO level rises above 300 PPM, the alarm will trigger within one minute.

The alarm sequence for CO is:

4 short beeps from the buzzer and 4 flashes from the LED, and 4 beeps to the audio panel once every 4 seconds.

Technical Specifications:

Power supply: 12 - 30 V DC
Power consumption: 2 W
Current drawn: 300 milli-amps
Fuse: Use GMI type, fast acting fuse 2A 250V
Temperature range: 0 F to 120 F
Humidity range: 10-90% RH (Non condensing)
Sensor calibration: Each unit calibrated at 75 PPM

Self Test Sequence:

When you press the test/re-set button, the buzzer will beep 2 times, and the yellow light will flash twice.

UNIT FAILURE INDICATION:

Malfunction of the Carbon Monoxide detection mechanism, will be indicated by a constantly glowing LED, and a display message of "FAILURE" in the CO level page. Please contact CO Guardian LLC for technical help if the problem persists.



LIMITED WARRANTY

Unit comes with a 1 year limited warranty.
The warranty will be void if the unit is opened or tampered with.

WARRANTY COVERAGE: CO GUARDIAN LLC. WARRANTS TO THE ORIGINAL CONSUMER PURCHASER, THAT THIS DETECTOR WILL BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF 12 months FROM DATE OF PURCHASE. THE MANUFACTURER'S LIABILITY HEREUNDER IS LIMITED TO REPLACEMENT OF THE PRODUCT, REPAIR OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT WITH REPAIRED PRODUCT AT THE DISCRETION OF THE MANUFACTURER. THIS WARRANTY IS VOID IF THE PRODUCT HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLIGENCE, TAMPERING OR OTHER CAUSES NOT ARISING FROM DEFECTS IN MATERIAL OR WORKMANSHIP. THIS WARRANTY EXTENDS TO THE ORIGINAL CONSUMER PURCHASER OF THE PRODUCT ONLY.

Warranty Disclaimers: Any implied warranties arising out of this sale, including but not limited to the implied warranties of description, merchantability and fitness for a particular purpose, are limited in duration to the above warranty period. In no event shall the Manufacturer be liable for loss of use of this product or for any indirect, special, incidental or consequential damages, or costs, or expenses incurred by the consumer or any other user of this product, whether due to a breach of contract, negligence, strict liability in tort or otherwise. The manufacturer shall have no liability for any personal injury, property damage or any special, incidental, contingent or consequential damage of any kind resulting from gas leakage, fire or explosion.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

For Warranty Service:

In case you experience any problems with the unit, you may contact our customer service department at 1-800-639-7139 for assistance. Even if you have purchased the unit from one of our distributors, you can contact us directly at the following address for technical support or in case you have any problems with your unit:

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Tel 520-889-1177; Fax 520-889-8249;
Email support@coguardian.com