



A771

CO Accessory Instruction Manual



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CAUTION

The A771 is factory calibrated and designed to measure quantitative readings and alarm in the presence of Carbon Monoxide only. The A771 can be used with any digital multimeter with a 2-4 volt DC range capable of measuring 0.001 volts DC.

The A771 is factory set to alarm at 30ppm, both when new or when returned from an authorized repair center.

PRODUCT FEATURES



1. ON/OFF switch
2. Power LED
3. Alarm LED
4. Zero adjustment
5. Cord

GENERAL DESCRIPTION

The A771 is an advanced state-of-the-art Carbon Monoxide monitor that may be used to measure levels of carbon monoxide (CO) in the part per million (ppm) range when used with a digital multimeter (DMM).

The instrument has both audible and visual alarms when CO has reached the preset level. This unit may be operated as an alarm only personal monitor.

NOTE: The product may be used with any DMM capable of measuring 2-4 volts DC. The signal output is 1 mV DC = 1 ppm CO.

The A771 uses an advanced electrochemical sensor that measures Carbon Monoxide only. A built-in filter reduces most cross-sensitivity to other gases. This product should be used with DMM's with greater than or equal to 10 megohm impedance.

OPERATION

(Investigation Use)

1. Attach the banana jack to the COM and V input jacks of the DMM.
2. Turn on the DMM and select the 2 or 4 volt range DC.
3. If the voltage reading is below 4 VDC with the A771 in the off position, replace the 9 volt battery in the A771.
4. Turn on the A771. The alarm LED with flash and the green LED should stay on.
5. In a clean environment, adjust the zero knob until the DMM reads zero.
6. Place the A771 in the area to be tested and read the CO in ppm on the DMM.
7. To deactivate the alarm sound, set the slide switch to MUTE.

OPERATION

(Monitor Use)

1. Follow steps 1-5 above.
2. Unplug the A771 from the DMM.
3. Place the A771 in the belt pouch with the sensor facing outward.
4. If an alarm occurs, use a DMM to measure the concentration.
5. The red LED will illuminate continuously during alarms

BATTERY REPLACEMENT

1. Remove the single screw in the case back.
2. Slide open the battery compartment cover in the direction of the arrow.
3. Replace the 9 volt battery and reassemble the unit.

SPECIFICATIONS

Size:	6.5" x 2.0" x 1.25" (65 x 50 x 29mm)
Weight:	5.0 oz (142g)
Battery:	9 volt alkaline
Duty Cycle:	2,000 hours
Sensor:	Long life Electrochemical
Range:	0 - 1999 ppm
Alarms:	Visual, Audible
Alarm Set Range:	0-200 ppm
Calibration:	100ppm
Response Time:	90% of reading in 60 seconds
Temperature:	0 - 120 F
Relative Humidity:	5 - 95%
Accuracy:	+/- 5ppm or 5% of reading, whichever is greater

ALARM ADJUSTMENT

The alarm on the A771 is factory set at 30ppm. Use the following procedure to select a different level between 0 and 200ppm:

1. Remove the battery compartment cover on the A771.
2. Using a DMM set to the DCmV range, touch the tips of the test leads to the GND and Alarm test points on the PCB (located on the left and right next to the VR1 and VR2 adjustment pots).
3. Reading the DMM, set the alarm to the desired level (1ppm = 1mV DC) by adjusting VR2.
4. Remove the leads and reassemble the A771.

CALIBRATION

1. Attach the banana jack to the COM and V input jacks of the DMM.
2. Turn on the DMM and select the 2 or 4 volt range DC.
3. If the voltage reading is below 4 VDC with the A771 in the off position, replace the 9 volt battery in the A771.
4. Turn on the A771. The alarm LED with flash and the green LED should stay on.
5. In a clean environment, adjust the zero knob until the DMM reads zero.
6. Attach proper gas, regulator and adapter assembly to the A771.
7. Allow to stabilize for 1 minute.
8. Adjust VR1 in the battery compartment to the proper gas value.
9. Disconnect gas and allow A771 to zero.

WARRANTY

The A771 is warranted to be free from defects in materials and workmanship for the period of one year from the date of purchase. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at our option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance. Instruments out of warranty will be repaired for a service charge.

Return unit freight prepaid to:

TPI Service Center
9615 SW Allen Blvd. Ste 104
Beaverton, OR 97005
(503) 520-9197

This warranty gives you specific legal rights. You may have other rights which vary from state to state.

