

## Operators training outline

### AMS 1201 CO and LEL monitor

#### Decide if you want “on” or motion switch management;

If your department is very active, leave the monitors on full time since each start up requires more power than continuous operation.

A reasonable protocol for full on management would be a new set of two AA batteries each month since they will go about 40 days in a clean environment if on full time.

If your department has only occasional calls, the motion switch will allow your batteries to last dramatically longer.

#### Turn on the switch;

If your choice is to leave them on full time this is all that is necessary since full time “on” is the default setting.

If you wish to activate the motion switch management simply press the multi purpose button for about 5 seconds at start up. You will hear a series of beeps to acknowledge the motion switch has been activated. The 1200 and 1201 monitors will also show Alt in the screen for a short time. This action must be repeated each time the switch is cycled or the batteries are replaced since full “on” is the default setting.

Note: the motion switch will turn the monitor on with any movement and off after 45 minutes of not sensing either gas or motion. It will not turn off in the presence of a dangerous gas.

Note: When the motion switch has turned the monitor off, it is off. It will not sense gas in that state and must be moved to turn on again.

#### Look for the green status light;

You will see the status light process through rapid red flashes while it checks electronics, then slower red and then to green. At the point it turns green it is confirming the electronics are good and the sensor is functioning.

#### Look for zero in the LCD screen;

Sensor contamination, unfortunately, can happen with all monitors – that’s one of the reasons you need to routinely bump test everybody else’s product. If you see a ppm value, or get an alarm at start up, simply take it into clean air and if it clears, it was “seeing” a dangerous gas. If the reading “sticks”, the sensor has a contamination. See troubleshooting below for dealing with that.

#### Alarms are translated on the back of the monitor;

If your monitor does alarm, turn it over for help in interpreting the alarm.

#### To get the fastest possible response when entering an area of concern, cycle the switch;

If the monitor has been “on” (not on motion switch management) it will go into a standby mode with slower sampling after ½ hour of not seeing gas. If it senses gas it will step up to 4 second updates again to help you manage the event. Cycling the switch will return the monitor to 4 second updates at any time. Monitors that are being managed by the motion switch will usually remain within that first half hour of rapid updates since each movement turns it on again.

**Give your monitor at least a full minute to register the amount of gas present before starting a motor or creating a spark if you suspect a flammable gas may be present.** Some of the molecules in the hydro carbon gases are larger than CO and can take longer to reach the sensor. The saturation amounts (parts per million) are also much larger.

The monitor will continue to increase in ppm reading over that first minute or so as more molecules hit the sensor. Wait at least until two four second updates have passed without further increase in the readings before assuming you have a final reading. CO updates are faster.

**After an alarm event, wait for the monitor to regain zero before turning it off;**

Our technology burns off the contamination to bring the sensor back to its original condition and may need a few minutes to get to a solid zero after significant exposures. Turning it off before that process is complete may result in the monitor taking longer to zero the next time it is turned on.

**The multi purpose button lights the backlight for the LCD screen, overrides the audio and vibrate alarms and activates the motion switch;**

Press the button at any time to turn on the backlight.

Press the button to acknowledge an alarm which automatically lights the backlight and turns off the heavy energy users of the alarm sequence. The alarm will reactivate every four minutes if gas is still present.

**Troubleshooting;**

**The status light not continuing past red indicates an electronics issue.**

A blinking red light is non fatal – the sensor will function but something is wrong.

A solid red light means the monitor requires new batteries or repair before it can be used. The battery light will also be lit if that's the issue.

Repair is covered by warranty for the first five years.

**A reading or alarm that won't clear in clean air is our fail safe telling you the sensor has a contamination it can't clear.**

Any time you have a question about a reading simply walk into clean air and if the reading clears, it's a dangerous gas. If it sticks, it's probably contamination.

If the reading doesn't clear, put in fresh batteries and leave the monitor in clear air for several hours. It should self clean to a zero. If the self cleaning can't clear it, send it in for service.

Note; A monitor showing a small reading is still usable. It will accurately register any amount of gas above the reading it is showing, but should be serviced before further use.

**A monitor in full alarm reading ERR in the screen is fatally contaminated or otherwise poisoned and cannot be used.**

Call for a return authorization so we can repair it for you. Accidental poisoning is covered under our warranty.

**Never test your monitor in vehicle exhaust;** We offer a full check of all systems and unit calibration at any time for \$25.00. You can do a simple bump test by placing the monitor in a small plastic bag and running some CO in. We sell a bump test kit if you have several and want to occasionally test them. If you must use vehicle exhaust, leave the monitor in a place AWAY FROM THE VEHICLE in a building with

a vehicle running. Don't leave it long – the buildup of CO could become dangerous and it builds very quickly. The contents of vehicle exhaust will poison any CO sensor held directly in it.

This is being provided as a training aid and is not a complete operator's handbook and does change any of the terms and conditions of that handbook. Please do read the handbook that came with your monitor for full instructions, warranty provisions, precautions and warnings.