

Warm Up/Initial Start Up

- Slide back panel to the right and put switch in upper ON position.
- LCD will display the following screens:
 - a. '46 HAWK 3.0
 - b. BATTERY %
 - c. WARM UP
 - d. ALARM 1 PPM? ALARM 5 PPM? ALARM 50 PPM? ALARM 500 PPM? ALARM 5000 PPM?
 - i. The alarms will display in the above sequence. Press Operation Button when you reach the desired alarm point. You **MUST** choose an alarm level.
 - e. MUTE/HEADSET?
 - i. Press Operation Button if you want to mute alarm and utilize headset. If not, briefly wait until the unit automatically goes on to the next step.
 - f. CLEARING CELL
 - i. This takes approximately one minute.
 - g. START SURVEY 0 PPM
 - i. 0 PPM indicates that you are ready to survey.

Daily Response Test

- When at 0 PPM, twist demand flow regulator on to 1000 PPM test glass cylinder. Disconnect the quick connect between the filter and cone on top.
- Connect demand flow regulator tubing with barb to quick connect on probe.
- The LCD should display 2% - 3% LEL.
- Disconnect demand flow regulator with gas cylinder.
- LCD should then display 0 PPM.
- If the reading is not 2% - 3% LEL, calibrate (see Calibration Procedure below).
- Reconnect cone and tubing to the probe quick connect.

Calibration Procedure

- Start with LCD at 0 PPM, then press the Operation Button and hold until Option Menu appears.
- The Option Menu will scroll through the following:
 - a. GO TO SURVEY?
 - b. ALARM LEVEL?
 - c. REZERO?
 - d. CALIBRATE?
 - e. MUTE ALARM?
 - i. Press the Operation Button when CALIBRATE? appears.
- The LCD will now display ZERO CHECK. Do not press the button; wait approximately 1.5 minutes.
- The LCD will display ENTER 1000 PPM. Twist demand flow regulator onto 1000 PPM test gas cylinder.
- Disconnect quick connect between filter and cone on probe.

- Connect demand flow regulator tubing with barb to quick connect on probe.
- Press Operation Button.
- LCD will display CALIBRATING. Wait for the unit to calibrate.
- LCD will display CAL ACCEPTED then REMOVE CAL GAS. Disconnect demand flow regulator tubing from probe cone. Press Operation button and LCD will display CLEARING CELL for approximately 1.5 minutes. START SURVEY will then appear, followed by 0 PPM.
- If LCD displays CALIBRATION FAIL, turn off unit, slide back panel, and put switch into middle (off) position. Wait 5 minutes, restart unit, and put switch in upper (on) position.
- After warm-up is complete, follow directions again for Calibration Procedure.
 - Check for secure connections – calibration test gas cylinder must be at least 350 psi.

End of Day Shut Down

- Shut down unit by sliding the back panel to right, put switch to middle (off) position.

Operational Suggestions

- The '46 Hawk is manufactured with precision parts. Avoid shaking or shocking unit.
- If '46 Hawk gets wet, immediately remove backup batteries and dry unit thoroughly.
- Do not put a wet '46 Hawk back into its case.
- The unit has a built-in alarm activated vibrating handle. This setting is always armed regardless of whether the audible alarm is muted.
- To shut unit off completely, slide back panel, put switch in middle (off) position.
- Wipe down the unit daily with a clean, dry cloth. Always store in case.

Troubleshooting Common Errors

- **Rezero:** Use this option to prompt the unit to manually perform a zero reset. This option is useful if you suspect the unit has drifted off zero (i.e., showing low PPM numbers when in known clean air). Press and hold Operational Button until OPTIONS MENU appears on LCD screen, then release Operational Button. When the prompt REZERO appears, press Operation Button. The LCD will show CLEARING CELL and then START SURVEY mode showing 0 PPM.
- **Dead Battery:** To recharge the batteries, slide the back panel and put switch in middle (off) position. Turn power switch back to On (upper or recharge battery) position. Allow unit to start up in charge mode. Full charge time is 12-15 hours.
- **Low Battery:** When LOW BATTERY warning is displayed, time remaining is approximately one hour before battery completely discharges. Keeping the unit charged is recommended.
- **Dirty Filter:** A DIRTY FILTER message indicates blockage. Replace dirty filter with a clean, dry filter. Inspect probe for obstructions. Press Operation Button once to restart unit.
- **Error Message:** If an ERROR MESSAGE is displayed, note error code number. Turn off instrument. Ensure clean filters are installed, then restart. If error continues, call Southern Cross Support at 1 (800) 241-5057.
- **Other Techniques:** Relocate to a noncontaminated environment, recalibrate, shut off, and restart the '46 Hawk.