8.0 Analyzer Start-Up procedure

8.1 System Start-Up

Tool Required
Digital Multimeter

Procedure

8.1.1 **Connect power supply to analyzer through suitable breaker.**

8.1.2 **Ensure proper power supply is selected at control unit(if 240 VAC is the incoming power supply then keep the power switch on control unit at 240VAC).**

8.1.3 **Keep multimeter in ohms, measure the resistance across Hot (terminal- 50) & Neutral (terminal- 49), it should read approx. 390 Ohms when power switch is kept at 240VAC & approx. 120 ohms when switch kept at 120VAC.**

8.1.4 **Do the cable termination at analyzer & probe side. Refer Fig: 9 for more details.**

8.1.5 **Install jumper between 18 & 19 to by-pass the safety interlock, so that power supply should be extended to probe heater.**

8.1.6 **Switch ON the breaker power supply first & then analyzer power switch.**

8.1.7 **Analyzer will perform the initial test & will back into "Analyze or RUN" mode".**

8.1.8 **Press the "SET-UP" button on the front panel keypad. Use Function "UP & DOWN" keys to check the following in the Set-Up functions -**

1	Number of Sensors
2 to 6	Date /time
22 & 23	Sensor type
26 & 27	Output channel #1
28 to 30	Output channel #2
70 to 78	Alarm set-up

Select the number of sensors in the set-up function #1, set the current Date & Time in set-up function 2 to 6. Select the type of Sensor in set-up function 22(Note: if single sensor is selected in function#1 then function 23 is not required). Select the analog output #1 type & span

range in set-up function 26 & 27. Select analog output# 2 type from the available option in function 28 & zero & span ranges should be selected for the analog output #2 for selected option. Select Yes or NO option in function # 70 & set the alarm set point & other function in set-up functions 71 to 78.

8.1.9 Once the set-up function is finished, check Power supply to probe heater is extending & probe temp. increasing slowly. Wait until probe temp. reaches at set limit (i.e. 720 deg. C). Once probe temp. is stable at 719 or 720 deg. C. Leave the system at this condition for one hour before performing any test.

8.1.10 Perform the probe Offset setting as per procedure mentioned in chapter # 9(Setting the Probe Offset). Enter the probe Offset value in set-up function

11 & 12 Probe offset

Enter probe #1 Offset, in function 11 & probe # 2 Offset, in function 12(if probe #2 is installed)

8.1.11 Measure the four reference voltages on the Main Board PCB (refer Fig: 2 for more details) & enter these values in set-up function

7 to 10 Reference voltages

Once these voltages are entered in the set-up functions, press "Auto Cal" from the front panel, so that analyzer will perform internal checks or software calculation.

8.1.12 Perform the Calibration gas check as per procedure "Certified Calibration Gas Check" mentioned in chapter#9.

8.1.13 If Auto Purge & Cal gas Check has been selected then enter the set-up function

53 to 56 Auto purge

57 to 69 Auto gas calibration checking

Select option "Yes" in the function 53 & frequency, duration & freeze time in set-up function 54,55 & 56 respectively.

Select number of Cal gases in set-up function 57. Select & enter the required parameters in the set-up functions 58 to 69 for Cal Gas 1 & 2.

Note: Whenever any option is changed or selected in the set-up function, press, "ENTER" to save this option in the set-up function.