



MOISTURE ANALYZER QUICKSTART GUIDE



INSTALLATION

- a) The moisture probe may be installed directly into the sample stream through a ½ inch NPT adapter. The depth into the sample stream can be adjusted at initial installation before cinching the compression fitting.

When installation into the sample stream is impractical or not advisable (for reasons of high temperature or when installation of protective filter (coalescing or similar) are required, then the moisture probes may be installed in bypass flow cells. When moisture probes are installed in bypass flow cells, the sample flow rate should be set between 250 and 500 cc per minute.

- b) Connect the signal cable from the instrument to the mating connector on the probe.

Note: The probe can be installed using a maximum cable length of fifteen (15) feet. If a greater length of cable is required, up to a maximum of one thousand (1,000) feet Please refer to Use of Non Standard Probes section in manual.

- c) Connect the instrument to a voltage source.

Note: Instruments are configured with 115 VAC and 220 VAC. Other specific voltage source is available. ENSURE THE CORRECT VOLTAGE IS APPLIED. CONNECTING TO A VOLTAGE OTHER THAN THAT SPECIFIED MAY CAUSE DAMAGE.

- d) Turn on the power switch. The NYAD SERIES 101T MOISTURE ANALYZER will cycle through its startup routine (see Section 3). The routine is complete when an LED, above the display, illuminates indicating the currently selected operating units and the current moisture measurement is displayed.

STARTUP ROUTINE

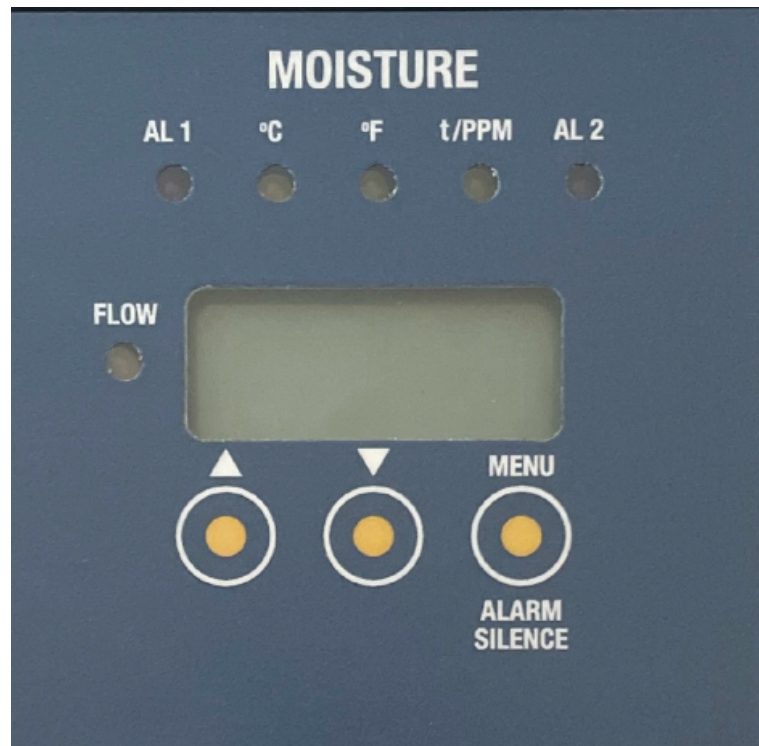
After the instrument and the probe have been installed, connected and power applied, the instrument will proceed through it's startup routine with the display and indicating LED's stepping through the following sequence:

Note: Each step is displayed for approximately one second.

| | |
|----|--|
| A) | All display segments ON – all LED indicators ON. This tests the display and LED's to ensure all are working. |
| B) | "NYAD" is displayed |
| C) | Operating System Version |
| D) | "EE 2" is displayed: Indicates processor trying to read external memory for probe calibration data. If data is found in memory EE 2 on the display, proceed to step 3.7. If no external memory is found on the display, proceed to step 3.5. |
| E) | "EE 1" is displayed: Indicates processor trying to read redundant internal memory. If no data is found there, the processor loads to internal memory. |
| F) | "INT" is displayed: Indicates all operating data is being taken from internal memory. This will be followed by the internal memory default "9999". |
| G) | "A four figure number is displayed: This is the last four digits of the serial number of the moisture probe that has it's calibration data transferred into the instrument data memory. |
| H) | "Erop" is displayed: Indicates output is out of range. See "Setting Analog Output "OUT" (oPHi and oPLo). |

On completion of the startup routine the measured moisture value is displayed in units of Dew point either °C, °F, or concentration PPM, indicated by one of the three yellow LED's located directly above the display panel. If any alarm condition exists, this will be indicated by one or both of the red LED's (Al 1 or Al 2) being illuminated. The alarm condition will indicate six seconds after the measured value is displayed.

FRONT PANEL CONTROLS



These switches control the following:

1) UP ▲ / DOWN ▼

CHANGES SELECTED FUNCTION

- a) Displayed Units (°C, °F or PPM)
- b) Alarm Setpoints
- c) Toggle Hi and Lo
- d) Analog Output Span
- e) Pressure constant (PPM only)
- f) Calibration Correction Factor

2) MENU

| | | |
|------------------------|----------------------|---|
| 1) DEPRESS ONCE | ALARM 1 | "Al 1" for 1 second, then setpoint displayed. See menu section for changing "Al" setpoint. |
| 2) DEPRESS TWICE | TOGGLE FUNCTION | "Al 1t" for 1 second, then setpoint displayed. See menu section for changing "Al 1t" setpoint. |
| 3) DEPRESS THREE TIMES | ALARM 2 | "Al 2" for 1 second, then setpoint displayed. See menu section for changing "Al 2" setpoint. |
| 4) DEPRESS FOUR TIMES | TOGGLE FUNCTION | "A2 2t" for 1 second, then setpoint displayed. See menu section for changing "A2 2t" setpoint. |
| 5) DEPRESS FIVE TIMES | ANALOG OUTPUT "Hi" | "oPHi" for 1 second, then the Hi value (Hi corresponds to span on analog range). See menu section for changing "Hi" values. |
| 6) DEPRESS SIX TIMES | ANALOG OUTPUT "Lo" | "oPLo" for 1 second, then the Lo value (Lo corresponds to zero on analog range). See menu section for changing "Lo" values. |
| 7) DEPRESS SEVEN TIMES | PRESSURE OUTPUT | "CON" use only if PPM concentration selected See menu section for changing "CON" value. |
| 8) DEPRESS EIGHT TIMES | CALIBRATION FUNCTION | "CAL" for field calibration. See menu section for changing "CAL" value. |

3) POWER

Power On – Off.

OEM Model MA-120N does not have power switch on front panel.

SETTING ALARM POINTS

The analyzer has two alarm indication points, Al 1 and Al 2, indicated by the red LED's located above the display.

All units have two alarm relays as standard (SPDT) 1A @ 120V. There are no signal or voltage through the relays, just open contacts. The alarm relays are energized when the measured value of moisture exceeds the setpoint value of Al 1 and Al 2 for a sustained period of about six seconds.

a) Find the current Alarm Setpoint values for the selected units

- 1) Momentarily depress MENU once “Al 1” will be displayed, this will be followed, in one second, by the alarm 1 setpoint value. If no change is made to the setpoint, then in six seconds “DISP” will flash followed by the measured moisture value
- 2) Momentarily depress MENU three times “Al 2” will be displayed, this will be followed, in one second, by the alarm 2 setpoint value. If no change is made to the setpoint, then in six seconds “DISP” will flash followed by the measured moisture value.

DEFAULT UNITS

NYAD SERIES 101T MOISTURE ANALYZERS are preset at the factory with the following default values:

| FUNCTION | °C | °F | PPMV | FREQUENCY (HZ) |
|----------|------|------|------|----------------|
| Al 1 | -60 | -80 | 10 | 1000 |
| Al 2 | 0 | 32 | 100 | 7000 |
| oPLo | -80 | -100 | 0 | 0 |
| oPHi | 0 | 32 | 100 | 0000 |
| CON | 14.7 | 14.7 | 14.7 | 14.7 |
| CAL | 0 | | | |

FOR TROUBLE SHOOTING AND WARRANTY
INFORMATION PLEASE SEE MANUAL