

# Model 12i MicroLyzer

## Front Panel

### FRONT PANEL

Light-Emitting Diode (LED):  
 ● Inject Sample  
 ● Analysis is Complete

Adjust CALIBRATION control only when the LED is RED ●

Adjust ZERO control only when the LED is GREEN ●



Front Panel DRYING TUBE, (Please see maintenance section below.)

Front PUMP switch should be turned down when your machine is not in use.

Inject Samples into this PORT when the VALVE stem is out and the LED under the meter is GREEN ●

Hold down the OFFSET CHECK button ONLY when adjusting the Hydrogen (H<sub>2</sub>) meter with the screwdriver.

## Rear Panel Components

POWER SWITCH should be left on at all times.



A luer lock fitting connects the Air Inlet Port with the No-Pressure Drying Tube. This lock must be tight.

Please refer to your Operator's Manual for important information regarding the LINEARIZER.

A Strip Chart Recorder may be connected to the MicroLyzer™ using these terminals.

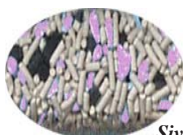
## IMPORTANT MAINTENANCE INFORMATION

### No-Pressure Drying Tube and SivRite™-3

The No-Pressure Drying Tube, located on the Top Panel of the MicroLyzer™ 12i, is filled with SivRite™-3 (QT01153-C) desiccant and must be replaced periodically. The blue granules will turn to purple/pink as the SivRite deteriorates. When the blue granules up to the red indicating line have changed to purple/pink, the contents of the tube must be replaced.



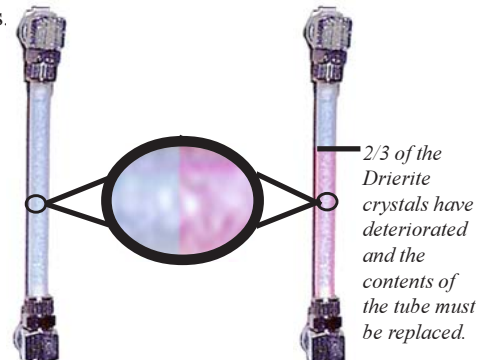
No-Pressure Drying Tube filled with fresh SivRite™-3



SivRite™-3 has deteriorated to the RED LINE and must be replaced

### Front Panel Drying Tube and 10/20 Mesh

The Front Panel Drying Tube of the MicroLyzer™ 12i is filled with 10/20 Mesh Indicating Drierite (QT01156-C), which must be replaced periodically. When 2/3 of the blue crystals have turned to pink/purple, remove the contents of the tube and replace with fresh drierite. Replace the plastic tube (QT01138-K) after it has been refilled 10 times.



2/3 of the Drierite crystals have deteriorated and the contents of the tube must be replaced.

# Model 12i MicroLyzer    Abbreviated Operating Instructions

## Preparing for Analysis

◆The **POWER SWITCH** located on the back of the instrument should be **ON** at all times.

◆When your machine is not in use, the **PUMP SWITCH** located on the **FRONT** of the instrument should be **DOWN** in the **STANDBY** position.

## Warming Up...

◆Flip the **FRONT PUMP SWITCH UP**, preferably the night before tests are scheduled, but at least 40-60 minutes prior to use.

◆Have the **VALVE** stem in the **OUT** position. The **LED** under the meter will be **GREEN** ●.

## Set Operating Conditions...

◆**DEPRESS** the **OFFSET CHECK BUTTON** located on the lower left portion of the **FRONT** panel.

◆The **HYDROGEN (H<sub>2</sub>) METER** should read **035±1**. If it is not in this range, adjust the **OFFSET ADJUSTMENT SCREW** with the small screwdriver until the display reads **035**.

◆**RELEASE** the **OFFSET CHECK BUTTON** and set the meter to **000** with the **ZERO** control.

## Calibrating Your Machine

◆Attach a 1-way **STOPCOCK** to a **SYRINGE** larger than 20ml.



◆Withdraw at least 20 ml of gas from the **QUINGAS-1 (Normal QT07011-G)** cylinder, and close the stopcock **BEFORE** removing the syringe from the cylinder.

◆Transfer the syringe with stopcock to the **SAMPLE** port and inject the sample into the instrument.

◆Push the **VALVE** stem in. Remove the syringe assembly. The **FRONT PANEL LED** will turn to **RED** ● while the analysis is in progress.

◆The meter will display a value within 1 minute. When the meter reading is stable, use the **CAL** adjustment to set the meter to read the concentration listed on the **QUINGAS-1** cylinder.

◆Pull the **VALVE** stem out. The **FRONT PANEL LED** will change to **GREEN** ●. The meter should return to 000 within 3 minutes. If it does not, return to the "Set Operating Conditions..." section to make sure that the **OFFSET LEVEL** is adjusted appropriately.

◆Repeat the Calibration Procedure. The meter should show the previously calibrated value within ± 2-3 ppm. If it does not, adjust the meter accordingly and recheck by repeating the Calibration Procedure.

## Analyzing Patient Samples

◆Use one of the several collection devices available to collect at least 20 ml of alveolar air from the patient.

◆With the **FRONT PANEL LED GREEN** ●, align the **SAMPLE DRYING TUBE** with the **FLUSH** port and inject the patient sample into the machine **THROUGH THE SAMPLE DRYING TUBE**.



◆Push the **SAMPLE** valve stem in. Remove the syringe assembly. The **FRONT PANEL LED** will turn to **RED** ●.

◆When the meter has stabilized, record the **H<sub>2</sub>** concentration.

**NOTE:** If the **RED LED** flashes when the peak value is reached, the instrument is not able to display accurately the high **H<sub>2</sub>** concentration. Either dilute the sample with room air, or return to the "Set Operating Conditions..." section, lower the **OFFSET LEVEL** by 5, recalibrate the instrument, and reanalyze the patient sample.

◆Pull the **SAMPLE** valve stem out. The **FRONT PANEL LED** will change to **GREEN** ●.

◆When the meter reading returns to "000", the instrument is ready for another sample or a calibration check.

◆Check the calibration hourly, (or more frequently if results are erratic) when your machine is being used to analyze samples.



**NOTE:** If the instrument can not be set to the proper readings, call QuinTron's Service Department Toll Free: 1-800-542-4448, or contact a qualified Biomedical Engineer in your institution to check and adjust the instrument.



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