

DataMaster DMT™

Advanced Technology / Unmatched Judicial Acceptance

**Touch Screen
Graphics Display**

Real Time Graphing

CPU Platform

**Simple to Upgrade and
Expand**

The DataMaster DMT™ uses infrared spectroscopy to determine breath alcohol levels. This technology is judicially accepted, and highly accurate. A thermoelectrically cooled PbSe detector improves the DMT's sensitivity and precision, while maintaining a stable output. The DMT uses narrow-bandpass optical filters that allow only a limited frequency range of infrared energy to pass. This technology makes the DMT more specific to ethanol than any other alcohol breath analysis instrument available. The gray body infrared source on the DMT has an extended useful life, minimizes power consumption and reduces instrument temperatures. These characteristics make the DMT highly stable and efficient.

Proven Technology

**Precision Filter
Control**

**Advanced Breath
Sampling**

Dual Voltage Design



DMT



DMT - option G

CALIBRATION

The DMT is calibrated at the factory using a fast, single point calibration method. An internal quartz standard checks the calibration of the instrument with every test.

- Wet bath external simulation is a standard feature.
- Dry-gas, with automatic barometric pressure compensation is optional.

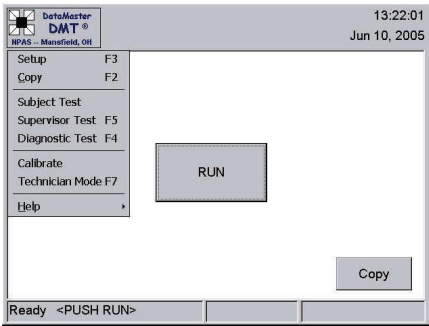
BREATH SAMPLING SYSTEM

The advanced breath sampling system generates an accurate measurement of the breath flow rate and volume. This precision virtually eliminates concerns about sample acceptance. The long path on the DMT sample chamber produces an accurate measurement of the deep lung sample across a wide range of subject blowing patterns and vital lung capacities.

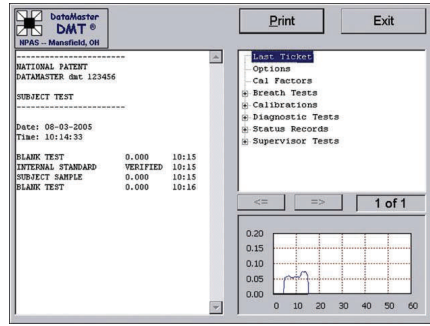
The DMT also recognizes and prevents subject "suck back."

COMMUNICATION, DATA COLLECTION AND NETWORKING

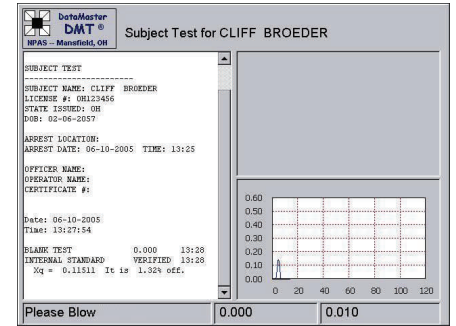
The DMT can be connected to a network using high-speed modem or Ethernet. Troubleshooting, voltage adjustments and control of internal components of a DMT can all be done from remote locations. Software updates can be done remotely using flash capable memory. A serial (RS-232) port is standard in order for the DMT to communicate with digital simulators. A wide variety of common printers can be connected via USB port, for printing in black and white or color.



MAIN MENU SCREEN



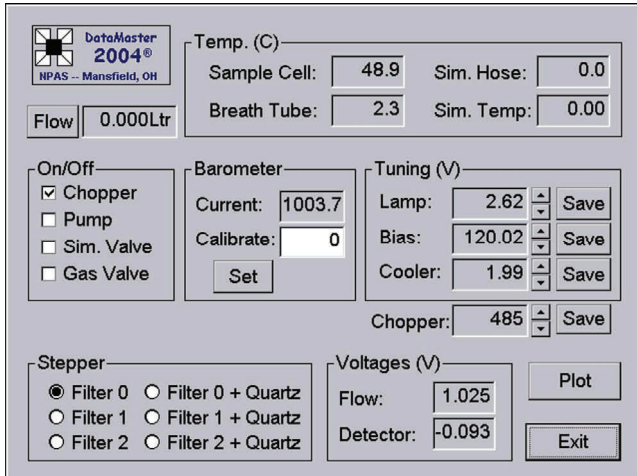
COPY RETRIEVAL SCREEN



SUBJECT TEST SCREEN

USER INTERFACE

The powerful 32 bit processor embedded PC, the color graphics touch screen and the sampling system allow the display of a subject's breath flow and alcohol absorption curve in real time. These allow an operator to determine a subject's level of cooperation during a test. This information is printed on the test ticket and is stored electronically for later retrieval. All functions and operations of the DMT are accessible through icons and menus on the touch screen display. The DMT uses a standard USB keyboard. Modular instrument software is designed to be dynamic and is easily adaptable to all customer specifications.



ON SCREEN VOLTAGE ADJUSTMENTS

SERVICE WITHOUT HAVING TO OPEN THE INSTRUMENT!

- All user-serviceable components are easily accessible.
- All necessary voltages in the instrument are displayed on the screen and are adjustable without opening the instrument.

TECHNICAL SPECIFICATIONS

Electronic:

32 Bit Embedded PC
 Color touch screen 8.4 in. LCD display (optional size 6.5 in.)
 Expandable memory
 USB keyboard
 High speed modem/Ethernet capable
 10-18VDC power input
 90-240VAC 47-63Hz power input
 RS-232 serial output
 USB communications
 Speaker output (option)
 Media player (option)

Analytical:

Range: .000 to .600 g/210L BrAC
 Accuracy: .002 @ .100 g/210L BrAC
 Infrared spectroscopy at 3.44, 3.37 and 3.5 micron using narrow bandpass filters
 Lead selenide cooled detector
 Quartz internal standard
 Sample chamber volume (23cc)
 Sample path length (54cm)
 Advanced breath sampling system
 Wet bath or dry gas external simulation
 Automatic barometric pressure compensation
 Single point calibration
 Heated breath tube and simulator tubes

Physical:

Modular construction in hard anodized high strength aluminum
 Lightweight (20 lbs)
 Small size: 15"(38cm) x 15"(38cm) x 5"(13cm)

Environmental:

Temperature range: Exceeds US DOT specification
 RFI: meets EMC Directive
 89/336/EEC, EN 61326:1997