



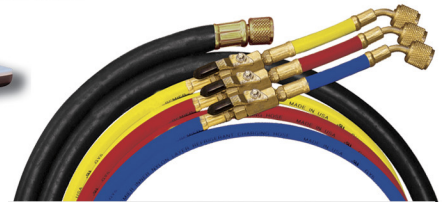
**Mastercool<sup>®</sup> Inc.**  
"World Class Quality"

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## 4-WAY BALL VALVE DIGITAL MANIFOLD + DATA LOGGER APPLICATION



- Record and store up to 24 hours of data or 15 jobs
- Over 60 Refrigerants
- Displays Pressures, Saturated, Actual, Superheat and Subcool Temperatures
- Clamp-on Thermocouple Connector displays Actual Temperature and Automatically Calculates Superheat or Subcool Temperature
- Vacuum Sensor Cable displays Deep Vacuum
- Ball valve design includes 3/8" bore through the block for increased flow



**99903** Manifold only

**99961** Manifold with a set of 3-60" ball valve hoses with manual shut-off valves and a 60" black vacuum hose, vacuum sensor with cable, clamp-on thermocouple, data logger CD and USB cable in a plastic box

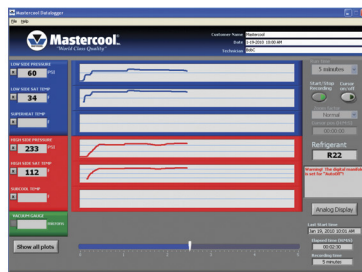
**99972** Manifold with a set of 3-72" ball valve hoses with manual shut-off valves and a 72" black vacuum hose, vacuum sensor with cable, clamp-on thermocouple, data logger CD and USB cable in a plastic box

### Mastercool's 4-Way Digital Manifold Recording Function:

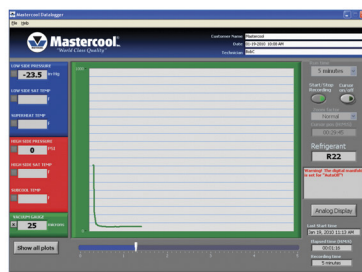
- Records and stores data directly into the manifold memory
- Records up to 24 hours of data or 15 jobs before having to download
- Downloads data at a rate 115 kb per second (24 hrs of data = approx. 15 min of download time)
- Uses Mastercool's Data Logger Application to easily view data

### MASTERCOOL DATA LOGGER APPLICATION

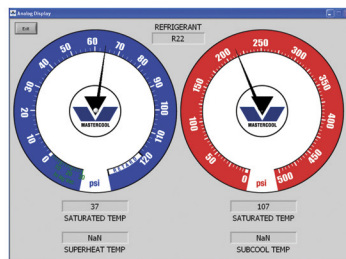
- Display data in "real time" using a USB connection, computer and software
- Platform: Windows 2000, XP, Windows Vista and Windows 7.
- Log Customer Name, Date and Technician's Name
- Recorder/Cursor Function Features
  - (1) Recorder TIME command. Record in intervals of 5, 15 min, 1, 4, 8 and 24 hrs.
  - (2) Recorder ON/OFF command.
  - (3) ZOOM: NORMAL, 5X or 10X. Use the zoom option to view specific data points of interest.
  - (4) The TIME-LINE measures the selected recording time. Moving the cursor along the timeline easily displays specific plot points.
- The Data Logger program uses the Units information contained in each data bit on the manifold and displays these units on the screen.
- Display Function Features
  - (1) Display ALL command. This enables all parameters of the Digital Manifold to be displayed simultaneously. As the line functions propagate across the screen, the "real-time" data will also be displayed digitally.
  - (2) Monitor specific functions of interest. The Data Logger continues to record all the functions in the background, regardless of how many individual functions are being displayed.
  - (3) Display DEEP VACUUM ONLY command. This enables only the deep vacuum readings to be displayed on the screen.
  - (4) View ANALOG GAUGES function enables the user to represent the Digital Manifold data in the form of high and low pressure analog gauges.



TEMPERATURE/PRESSURE SCREEN



VACUUM SCREEN



ANALOG GAUGE SCREEN

### SPECIFICATIONS:

- Pressure Display: PSI, INHg, Bar, MPa, Kg/cm<sup>2</sup>
- Temperature Display: °F or °C
- Deep Vacuum Display: Micron, mBar, KPa, Pa, Torr, mTorr, mmHg
- Sensing Resolution: 1 psi (.07 Bar, .007 MPa, .07 Kg/cm<sup>2</sup>)
- Sensing Accuracy: ±1 psi or 1% of reading (whichever is greater)
- Working Pressure: 0 to 750 psi (52 Bar, 5 MPa, 52 Kg/cm<sup>2</sup>)
- Proof Pressure: 1000 psi (70 Bar, 7 MPa, 70 Kg/cm<sup>2</sup>) (Tolerable pressure w/o internal damage)
- Refrigerant Temperature Range: -40 to 200°F (-40 to 93°C)
- Operating Temperature: 32 to 122°F (0 to 45°C)
- Temperature Accuracy: ±1°F (±0.5°C) between 32 to 160°F (0 to 71°C)
- Storage Temperature: 10 to 120°F (-12 to 49°C)
- Connections: 1/4" M-Flare
- Power: 9V DC battery with optional AC/DC adapter
- Battery Life: 30-36 hours pressure and temperature mode only (continuous use) 25-30 hours vacuum and backlight mode (continuous use)
- Auto-Off: 15 min. with disabling capability

### EASILY UPDATE REFRIGERANTS: New refrigerants can be updated with a USB connection and Mastercool Software

Includes 63 Refrigerants: R11, R12, R13, R21, R22, R23, R32, R113, R114, R115, R116, R123, R124, R125, R134, R134a, R141B, R142B, R143, R143A, R152A, R176, R218, R290, R401A, R401B, R401C, R402A, R402B, R403A, R403B, R404A, R405A, R406A, R407A, R407B, R407C, R407D, R408A, R409A, R410A, R410B, R411A, R411B, R412A, R413A, R414A, R414B, R417A (ISCEON M059), R422A (ISCEON M079), R422D (ISCEON M029), R427A (FX100), R501, R502, R503, R504, R507A, R508B, R509A, R600, R600A, R601, R601A