# THERMOTRON®

## 8800 PROGRAMMER CONTROLLER



## Robust, Intuitive, Secure

Thermotron's exclusive 8800 Programmer Controller incorporates state-of-the-art controlling, monitoring, graphing, and report generation on a 12" color touchscreen. Data collection and operation are easy and reliable with a Windows®-based interface, giving the controller a familiar look and feel. The unique screens allow users increased data access with a single touch. The 8800 Programmer Controller, a true paperless recorder, stores more than 15 years of data. The controller is Ethernet-compatible and web-enabled for anytime/anywhere access.

The 8800 Programmer Controller supports robust operations with a familiar, intuitive user interface. USB ports and the serial communications panel are ergonomically located near the controller for fast, convenient connection and data transfer.

The secure multi-level, password-based system protects the chamber and sensitive data.

The 8800 Programmer Controller is available on SE, AGREE, Walk-In, and custom product lines. A specialized version of the 8800 can be found on AST and Thermal Shock product lines.

The controller can be retrofitted to most existing environmental testing chambers.

### PTC: Product Temperature Control
The 8800 is programmed with distinctive algorithms to not only monitor the product's temperature, but to control it.

### Expanded Graphing Capabilities
Drag & Zoom
Cursor Bar
Enhanced Calendar
Status Flags

### Reporting
Electronic or Printable
Exportable Raw Data in .csv Format

### PDC: Product Dewpoint Control (*optional*)
Unique algorithms programmed into the 8800 automatically maintain the product to be warmer than the surrounding air, preventing condensation.

## VNC (Virtual Network Computing) Compatible

The 8800 Controller is a vital component of many Thermotron Environmental Test Chambers and Thermal Shock Chambers. Now you can have access to the Controller display screen even if you are away from the lab. To better align with a mobile workforce, the 8800 Controller is equipped with a VNC (Virtual Network Computing) Server. With the Controller connected to a network, you can enable its VNC server, which allows the test chamber to be remotely monitored or controlled through a desktop computer, mobile device, or tablet with VNC software.

With wireless access to the controller, you'll now be able to maintain productivity within your office space, while remotely checking in on your testing process. Know everything is functioning properly, with confidence, as you utilize this practical functionality to streamline your efforts.
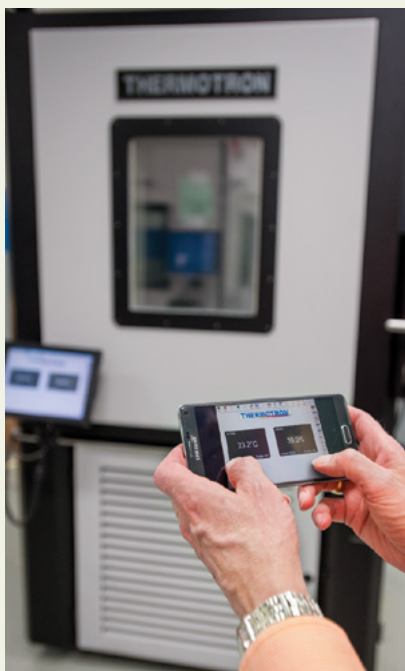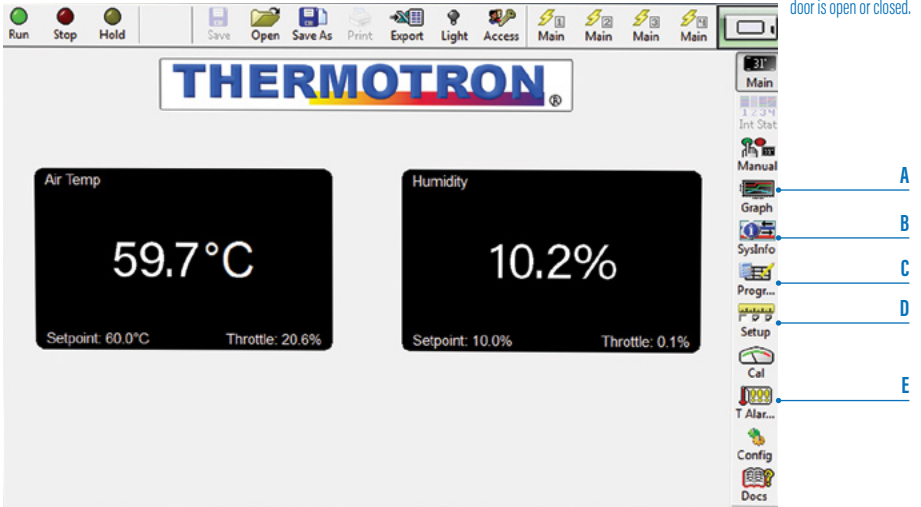
# SAMPLE SCREENS

**Navigation Buttons**

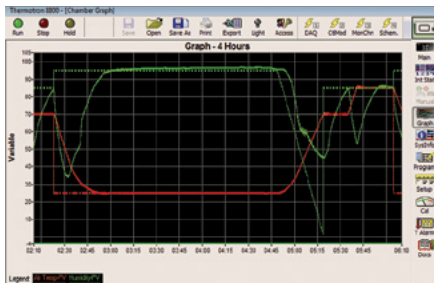Shortcuts to user-defined access screens.

**Export Button**

Transfers data to a common spreadsheet format.

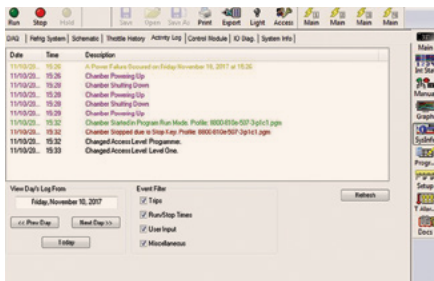**Door Indicator**

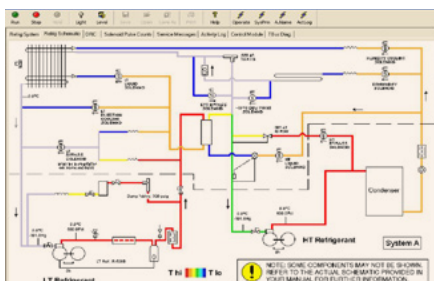Indicates whether the door is open or closed.

## A. GRAPHING SCREEN

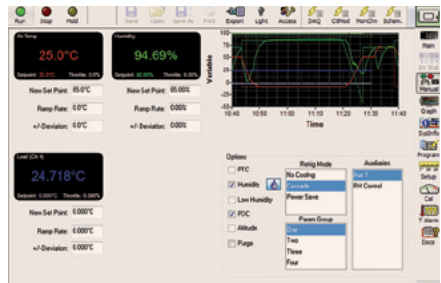Offers expanded capabilities with enhanced programming and reporting.

## B. ACTIVITY LOG

Provides more than 15 years of comprehensive equipment history.
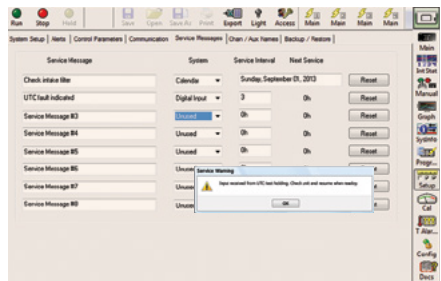
## B. REFRIGERATION SCHEMATICS*

Assists with electronic monitoring and troubleshooting.

## C. PROGRAM ENTRY

Allows users to load, view, and edit profiles by utilizing a wizard or by manual entry.

## D. SERVICE MESSAGES

Allow users to program maintenance notifications.

## E. THERMALARM®

Prevents temperatures from exceeding user-defined limits.

*Standard on SE-Series models.

# GENERAL SPECIFICATIONS

| General | |
|---|---|
| Channels | One to four independently programmable channels |
| Measuring Accuracy | 0.25% of span typical |
| Temperature Scale | Celsius or Fahrenheit (user selectable) |
| Color Display | 12" touchscreen display (800 x 600 resolution) |
| Resolution | 0.1°C or F, 0.1% RH, or 0.01 for other linear applications |
| Sample Rate | Process variable samples every 0.5 seconds |
| Real Time Clock | Internal real time clock provides time of day and delayed start capability |

| Software | |
|---|---|
| ThermoTrak II | Simplifies lab management by allowing multiple controllers to be linked to a central computer |
| VNC Compatible | Allows users to remotely control the 8800 from a PC, smartphone, or tablet |
| Free Software Updates | Available at www.thermotron.com |

| Programming | |
|---|---|
| Control Method | Digital, one of four independent parameter groups can be selected for each interval |
| Proportional Band | Programmable 1 to 99,999 |
| Integral Time | Programmable 0 to 1,000 seconds |
| Machinery Cycle Time | Software controlled |
| Intervals | Limited only by internal storage capacity |
| Interval Length | 1 second to 99 hours and 59 minutes, with 1 second resolution |
| Operation | Automatic or manual mode |
| Program Storage | Limited only by internal storage capacity |
| Looping | Up to 64 loops per program; can be repeated up to 9,999 times; up to 64 nested loops per program |

| Outputs | |
|---|---|
| Process Outputs | Proportional-control outputs, 1 to 15 second duty cycle; 0 to 10 VDC/0 to 20 mA, staged heating and cooling, bypass, MTO, and system enable; TTL high/low |
| Analog Outputs | Analog outputs send throttles, setpoints, or process variables; 2 standard, 8 total. (Optional) |
| Alarm Outputs | Deviation alarm output, TTL high (active); programmable per interval for each channel; each channel has configurable "Program Value Limits" for over/under programming protection. |
| Event Outputs | Outputs can be programmed independently or manually controlled; 2 standard, up to 16 event outputs are available |

| Inputs | |
|---|---|
| Inputs 1 and 2 | Thermocouple (type "T", "K", "E", or "J") or RTD |
| Inputs 3 through 8 | Thermocouple (type "T", "K", "E", or "J") |
| Analog Inputs | 4 analog inputs available. 0-20 mA or 0 to 10 VDC |

## Your Service

You will have the best before- and after-service care in the industry. Thermotron has the largest, best equipped, and most highly-trained direct sales representatives, application engineers, and field service engineers to help throughout the entire purchasing process. After your installation, you'll receive options for preventive maintenance, along with everything from yearly service seminar training to parts, worldwide service centers, and technical support. Expert assistance will be available throughout the life of your equipment.

## Your Promise

We promise to meet and exceed your expectations by continually growing and improving our company. As industries evolve and specifications change, our customers face new challenges. We'll help meet your challenges by providing quality, state-of-the-art equipment. Quality. Trust. Confidence. Build yours with a Thermotron.

## THERMOTRON.COM