

NEW TECHNOLOGY IN SOLAR HEAT / SOLAR PHOTOVOLTAICS AND REFRIGERATION



Hampden[®]
ENGINEERING CORPORATION



HAMPDEN WILL TAKE YOU INTO THE FUTURE WITH THESE SOLAR HEAT AND REFRIGERATION TRAINERS

Hampden CDL-DEMO Trainers

Hampden **CDL-DEMO Trainers** are equipped with dual purpose computer touch screens. Through the touch screen, the student will have the ability to run a full demonstration program. The demonstration program will cycle through a detailed presentation of the trainer's abilities. After the demonstration the student can select the run feature and have full control over the trainer through its Computer Data Logging Program. Hampden is providing you with the next step in hands-on training.



H-SHSP-1-CDL-DEMO - Front View

Hampden **H-SHSP-1-CDL-DEMO** Solar Heat and Solar Photovoltaic Trainer is a fully mobile solar heat solar photovoltaic control system trainer which lets the student technician examine the hot water and electrical layouts and operational features normally associated with a solar heating system and photovoltaic power source. The trainer demonstrates the characteristics of the solar array, water heating, water circulation, storage battery, AC and DC distribution, and AC and DC loading. The complete water heating and charging sequence can be observed.



H-SHSP-1-CDL-DEMO - Rear View

Hampden **H-GTL-1-CDL-DEMO** Geothermal Trainer provides hands-on training by allowing students to conduct tests and adjustments on a modern Geothermal Heat Pump.

The **H-GTL-1-CDL-DEMO** Geothermal Trainer is equipped with:

1. Exclusive double isolation compressor mounting system
2. Insulated divider and separate compressor/air handler compartments
3. Extended range operation (20°F to 120°F)
4. Exceeds ASHRAE 90.1 efficiencies
5. Internally trapped condensate drain line
6. Unit Performance Sentinel performance monitoring system



Hampden **H-HPT-3-CDL-DEMO** Heat Pump Trainer simulates the split system heat pump. Split system heat pump units are designed for use with a wide variety of fossil fuel furnaces, electric furnaces, air handlers, and evaporator coil combinations.

A heat pump is a heat moving mechanism. Heat is absorbed in an evaporator in one location and released through a condenser in another location. The system can reverse its operation so that the evaporator becomes the condenser and the condenser becomes the evaporator.



Hampden **H-RST-2-CDL-DEMO** Refrigeration System Trainer was designed to provide students with an actual working model of a refrigeration system, complete in every detail.

The Hampden **Model H-RST-2-CDL-DEMO** Mobile Refrigeration System Trainer helps students to develop a thorough understanding of the refrigeration cycle. It can

operate in five different modes, allowing testing & trouble-shooting experience for various types of refrigeration systems. A student may operate the trainer by opening and closing the appropriate valves and switches.

Hampden **H-IMD-1-CDL-DEMO** Ice Machine Demonstrator demonstrates the principles, mechanics, and maintenance aspects of commercial ice machine systems.



The unit consists of three sections: the ice cube machine, bin, and the control panel with six electrical and four mechanical programmable faults (optional). The ice cube machine has an efficient vertical plate design with positive release harvest assist. The foamed-in-place polyurethane insulated head and fan pressure control maintains proper gas temperature to maximize freezing and harvest cycles. The bin provides support and ice storage for the ice cube machine.

Hampden **H-ACD-1-CDL-DEMO** Air Conditioning Demonstrator has been designed to teach the principles of thermodynamics as related to the field of air conditioning and refrigeration. The unit comes complete with operating instructions, experiment and teacher's manuals. Areas covered include air flow, inlet heating and humidification, air cooling, and air reheating. It consists of eight basic segments: 1. Blower, 2. Pre-Heater, 3. Vaporizer, 4. Observation Port, 5. Refrigeration, 6. Re-Heater, 7. Observation Port, 8. Manometer. This unit is designed to demonstrate complete energy balance with provisions to inject heat, water vapor, heat extraction, and changes in air flow.

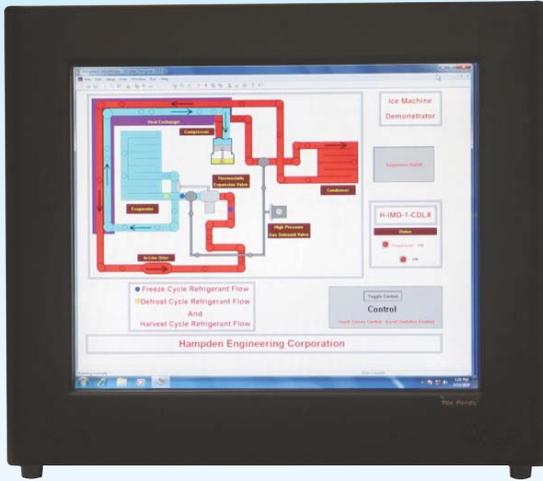


Hampden **H-CRT-4B-CDL-DEMO** Commercial Multi-Compressor Rack Refrigeration System Trainer is designed to provide students with a thorough understanding of the refrigeration cycle, including measurement of pressure, vacuum, flow rate, and temperature. The system components are panel mounted to provide easy access for testing and troubleshooting. The Hampden **Model H-CRT-4B-CDL-DEMO** is also supplied with an integral Fault Package, comprised of preset electrical faults mounted in a locking box on the side of the trainer.

Standard Products...Designed to Meet Your Growing Needs!

NEW TECHNOLOGY – IRTOUCH TEK PANEL 190T

Hampden's CDL-DEMO Trainers Featuring the Tek Panel 190T



Features

- Efficient Fully-Integrated Design
- Optional Built-In Touch Screen
- Brilliant 19" TFT/LCD Display
- 1280 x 1024 Resolution
- Intel® Processor
- ATI® or NVidia® Graphics
- Rugged Aluminum Enclosure
- Digital Signage Systems Available
- Made and Supported in the USA

The **Tek Panel 190T** is a high performance, small footprint, all-In-One LCD/Computer/Touch Screen featuring the power of a desktop. The Tek Panel 190T features a 19" TFT/LCD display and infra-red touch screen. The Tek Panel 190T comes with Intel® processor, Gigabit ethernet, hard drive, DDR3 memory, multiple USB and Firewire ports and Windows® Operating systems. The unit can be easily configured to fit any application and with its all-metal case provides off the-shelf ruggedness. Optional wall-mounting hardware also available.

**Powerful, Durable,
Portable All-In-One
Computer Rugged
Reliability - Maximum
Performance**

TEK PANEL®



Hampden is committed to providing industry-leading technology.

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