AIR CONDITIONER SIMULATOR SIMUAIR™

SIMUAIR™ simulates two generic versions of residential and light-commercial air conditioning systems that a service technician would commonly encounter in the field. These consist of a packaged unit with a capillary tube and PSC motor circuit, and a split-system with a thermostatic expansion valve and CSR motor circuit. Simulation of R-22 and R-410A refrigerants are included.

Animated color-coded graphics provide detailed mechanical and electrical schematic diagrams of the simulated system, in “real-time”. The mechanical diagrams show the liquid, vapor, liquid/vapor, and superheated vapor states of the refrigerant, whereas the device contacts shown in the electrical ladder diagrams constantly change state as the system operates. Providing a means of visually tracing the refrigerant and current flow during system operation, makes it much easier for the trainee to understand how an air conditioner works.

Indoor and ambient temperatures, and relative humidity are user-adjustable and continuously displayed on the screen. The thermostat setpoint, and settings of the limit switches, TXV, circuit breakers, and other controls may also be changed by the user. With the capability of changing operating temperatures and relative humidity, a system may be observed under various environmental conditions; something very difficult to do with real mechanical equipment. Pressure-temperature charts, performance charts, and an electrical nomenclature, are available on-screen. In addition, you can “zoom” into the system to visually inspect various components, including dirt or ice on coils, and a dirty air filter.

Up to 20 commonly encountered mechanical and electrical faults may be selected by either the instructor or user. The fault list for SIMUAIR is shown below.
**SIMUAIR** allows easy-to-use “point-and-click” selection of meters and test points. Temperatures may be displayed in either *Fahrenheit* (°F) or *Celsius* (°C), and pressures may be displayed in either *imperial* (psig) or *metric* (kPa/barg). The following on-screen test instruments are included:

- Gauge manifold set
- Thermometers
- Leak detector
- Clamp-on ammeter
- Voltmeter
- Ohmmeter

**SYSTEM REQUIREMENTS**

**SIMUAIR for Windows** requires the following minimum computer system to run:

- IBM compatible PC (486DX, Pentium series, Celeron, AMD-K6, Athlon, Duron, or equivalent)
- Minimum RAM required by operating system
- Windows 95/98/2000/NT/Me/XP or later
- VGA/SVGA display
- Hard disk drive, minimum 1.8MB available disk space (for maximum users)
- Sound card, Sound Blaster compatible
- Pointing device, such as Windows-compatible mouse

**Network Use**

The site-license version of **SIMUAIR** is fully network compatible (Novell, Windows NT/2000/XP, or equivalent)

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**FREE DEMO DISK**

www.simutechsystems.com
(800) 648-6209

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>MA-500</td>
<td>SIMUAIR Version 5.4</td>
<td>$495.00</td>
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<tr>
<td>MA-550</td>
<td>SIMUAIR Version 5.4, with site-license</td>
<td>$1,095.00</td>
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<td>TA-500</td>
<td>ACINST Instructor Interface Module</td>
<td>$125.00</td>
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Refer to Page 16 for additional ordering information