READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION
Thank you for purchasing this Display Devices product. Our products are designed to be maintenance-free, saving you future service time. If you experience any difficulties, please contact us at 303-412-0399. Thank you for your support.

It is the responsibility of the dealer installer to ensure this product is properly supported and meets all local building codes. Ensure the ceiling structure is capable of holding at least four times the combined weight of the enclosure (300 lbs.) and projector (100 lbs). This is a minimum requirement. Follow any local or state codes that apply to your specific area.

Tools required:

- Philips Head Screwdriver
- Wire-management tools (stripper/crimper, etc.)
- Wrench Set - based upon your mounting hardware

**Temperature Control Operation**

The Temperature Controller in its basic configuration controls and displays the temperature of the enclosure.

To start operation, turn on the AC switch on the power supply. The controller will sound an alarm (if enabled), turn on the air conditioning for 10 to 20 seconds, and then reset the system to a start state.

While operating, the display will show the current temperature and alarm status, if any.
There are five parameters to set for your desired operation. Each is set the same way. On the operators panel there are four buttons. The left-most button selects the parameter to adjust (will show current setting). The next button (up arrow) will change the level up, and the next button (down arrow) will change the level down. The last button (most right) will save the level after adjustment. If you do not press the SAVE button, then the changes made will be lost. The five parameters are as follows:

**Set A/C:** Temperature at which the air conditioning will come on. Factory setting is 80 degrees (all settings in Fahrenheit).

**Set Heat:** Non-functional in this unit.

**Set Alarm Level:** Temperature at which the alarm will sound. There is an onboard alarm, which may be disabled, and a dry contact out to tie into an external alarm system. Factory setting is 110 degrees.

**Set Power Level:** Temperature at which the switched AC outlet on the power supply will turn off. A last measure attempt to prevent damage to equipment by turning off power. Factory setting is 120 degrees.

**Temperature Readout:** Select either Fahrenheit or Celsius. Factory setting is Fahrenheit.

**NOTE:** BE SURE THE AIR CONDITIONER CONTROL PANEL IS SET TO THE LOWEST TEMPERATURE SETTING POSSIBLE.
Installing the Projector

NOTE: The projector may be installed into the enclosure prior to hanging the enclosure. It just depends upon the situation you are in.

1. Unlatch door and open to the left (as facing the glass window)

2. To extend the projector cage, loosen the thumbscrew connected to the safety bracket (shown below) and slide the clamp to the left. This will allow you to slide the cage out for easy access.

3. Use two hands and pull the AVStack cage. Be careful when fully extended out that the entire enclosure cannot tip forward.

4. Place the projector onto the mounting pan within the frame, align mounting pan holes with the projector mounting points, and attach with enclosed mounting hardware.

5. To align projector, remove the side access panel, slide the AVStack cage into the enclosure and lock tighten the thumbscrew on the safety brack.

6. Turn the thumbwheels on the AVStack to adjust pitch, height and tilt.

7. Replace the access panel.
Hanging the Enclosure

1. Use the two Unistrut channels on the top of the enclosure to attach to your structural ceiling/truss. We recommend ½” strut hardware. You may attach rated C-Clamps or Cheesboroughs to these structural channels.

2. Raise the unit with an equipment lift (or lower truss to enclosure).

3. Tighten all hardware.

4. Bring cabling through the holes on the side of the enclosure – secure both power and signal cables with strain relief.
SHOW POSITION

Service Position

1. Estimated unit weight: 280lb (without projector).
2. Projector: Sanyo PLC-XF45 (provided by customer).
3. Maximum ambient air temperature: 100°F.
4. Power requirements: 120VAC, 60Hz, 20A.
5. Customer to provide liquid/air tight fittings at AC and video/control openings.
6. Customer responsible for installation to any applicable codes/building requirements.

Notes:

- .XX = .02
- .XXX = .01
- .XXXX = .005

- UNLESS OTHERWISE SPECIFIED
-规模

服务位置

- 105-100
- 4.0

- 6/30/2005, 4:07 PM
- 105-100
- 105-100
47.0 15.5

REAR ACCESS PANEL

A/C CONDITIONING UNIT

1/2" EMT KNOCK-OUT FOR POWER

1/2" EMT KNOCK-OUT FOR VIDEO/CONTROL

A/C CONDENSATION DRAIN HOLE

20.0

45.0

37.6

30.0

21.0

200.0

250.0

450.0

30.0

20.0

5880 SHERIDAN BLVD
ARVADA, CO 80003

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Temperature Controller with
Active AC and Heater
RS232 Interface

**Hardware**
Standard three pin hookup, 2,3,5, on DB9. Baud rate 9600,N,8,1. No handshaking.

**Software**
ASCII letters followed by a delimiter, carriage return (ASCII 13).

### Commands from Host to Controller:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>Request Current Temperature</td>
<td>Q↵</td>
</tr>
<tr>
<td>Axxx</td>
<td>Set Level that AC turns on/off at (will turn on if temp above this level)</td>
<td>A080↵</td>
</tr>
<tr>
<td>Bxxx</td>
<td>Set Level that Heater turns on/off at (will turn on if temp below this level)</td>
<td>B050↵</td>
</tr>
<tr>
<td>Cxxx</td>
<td>Set Alarm Level (alarm on if hotter than this level)</td>
<td>C110↵</td>
</tr>
<tr>
<td>Dxxx</td>
<td>Set Power Cutoff Level (cutoff if above this level)</td>
<td>D120↵</td>
</tr>
</tbody>
</table>

xxx-temperature ↵ Carriage Return (13)

### Communications from Controller to Host:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Txxx</td>
<td>Current Temperature</td>
<td>T073↵</td>
</tr>
<tr>
<td>G</td>
<td>AC On</td>
<td>G↵</td>
</tr>
<tr>
<td>H</td>
<td>Heater On</td>
<td>H↵</td>
</tr>
<tr>
<td>I</td>
<td>Alarm On</td>
<td>I↵</td>
</tr>
<tr>
<td>J</td>
<td>Power has been switched off</td>
<td>J↵</td>
</tr>
<tr>
<td>S (O,C)</td>
<td>Door Switch is Open/Closed</td>
<td>SO↵</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SC↵</td>
</tr>
<tr>
<td>M</td>
<td>Motion Sensor Tripped</td>
<td>M↵</td>
</tr>
<tr>
<td>K</td>
<td>Received Set command, Executed OK</td>
<td>K↵</td>
</tr>
<tr>
<td>X</td>
<td>Can not understand Command</td>
<td>X↵</td>
</tr>
</tbody>
</table>

xxx-temperature ↵ Carriage Return (13)

Notes: All temperatures are in Fahrenheit. Host program to convert to Celsius if required. G,H,I,J are sent every few seconds when those levels have been tripped. S is sent upon change of state. M is sent upon shock sensor being tripped. Temperatures range is from 1 to 250. Temperature and settings are in two degree increments. On reporting only, if current temp is negative, then response will be T-015.

Do not set Axxx equal or below Bxxx!

Heater will turn off when door is open.