4. Electrical Interface:

<table>
<thead>
<tr>
<th>Terminals</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switched Side, 24 VAC</td>
<td>R</td>
</tr>
<tr>
<td>Reversing Valve (Cool)</td>
<td>O</td>
</tr>
<tr>
<td>Reversing Valve (Heat)</td>
<td>B</td>
</tr>
<tr>
<td>Fan</td>
<td>G</td>
</tr>
<tr>
<td>Heating Output</td>
<td>W</td>
</tr>
<tr>
<td>Cooling Output</td>
<td>Y</td>
</tr>
<tr>
<td>Unswitched Side, 24 VAC</td>
<td>C</td>
</tr>
</tbody>
</table>

Wiring diagram for thermostat:

1. Installation Location:
The thermostat is restricted to be used indoors only. It should be mounted on an inner wall about 1.5m above the floor at a position where it is readily affected by changes of the general room temperature with freely circulating air. Avoid mounting above or near hot surfaces or equipment (e.g. TV, heater, refrigerator). Avoid mounting where it will be exposed to direct sunlight, drafts, or in a laundry room or other enclosed space. Do not expose this unit to dripping or splashing.

2. Wiring:
- Be sure main switch is at the middle (OFF) position, and fan switch is at the (FAN AUTO) position.
- Wire the proper cables at the terminal block according to the circuit diagram.
- Afterward, push all cables back into the wall.
- Do not use metal conduit or cable provided with a metal sheath.
- It is recommended to add fuse or protective device in the line circuit.

3. Mounting:
Using the accessory screws and wall anchors provided, mount the thermostat with the key-hole at the back. The thermostat should be mounted on the wall as shown in Figure 1.

4. Jumpers
- FAN ON: (Depends on HE:ON / HG:OFF setting)
- Fan turns on whenever Heating or Cooling is on.

Model LVT2 Digital programmable Indoor Thermostat with Heat Pump

User Interface

1. Slide switch select System Mode
OFF:

Heating will be activated when condition is met. Changeover valve always stays at Heat side.

COOL:

Cooling will be activated when condition is met. Changeover valve always stays at Cool side.

2. Push Buttons

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>▲</td>
<td>Up</td>
</tr>
<tr>
<td>▼</td>
<td>Down</td>
</tr>
</tbody>
</table>

3. Select Fan Mode
Use the Fan slide switch to select Fan mode.

FAN AUTO:
Fan turns on whenever Heating or Cooling is on.

Feature list
- Operates on 1 stage Heat and 1 stage Cool
- 2 programs (Mo-Fr, Sa-Su)
- 4 Separate Time and Temperature Settings for each program

Operation

Normal Mode

Time Setting
1. Press [D/T], the day icon starts flashing. Use the [▲]/[▼] keys to set the day.
2. Press [D/T], the hour digits start flashing. Use the [▲]/[▼] keys to set hour.
3. While hour digits are flashing, press the [TEMP] key to toggle between 12-hour and 24-hour time mode.
4. Press [D/T], the minute digits start flashing. Use the [▲]/[▼] keys to set minute.
5. Press [RTN] to confirm time settings; Press [D/T] to loop back to set minutes.

Programming
Below is the default program:

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
<th>Heat</th>
<th>Cool</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAKE</td>
<td>6:00 AM</td>
<td>70 °F (21°C)</td>
<td>78 °F (26°C)</td>
</tr>
<tr>
<td>OUT</td>
<td>8:00 AM</td>
<td>62 °F (17°C)</td>
<td>85 °F (29.5°C)</td>
</tr>
<tr>
<td>BACK</td>
<td>6:00 PM</td>
<td>70 °F (21°C)</td>
<td>78 °F (26°C)</td>
</tr>
<tr>
<td>SLEEP</td>
<td>10:00 PM</td>
<td>62 °F (17°C)</td>
<td>82 °F (28°C)</td>
</tr>
<tr>
<td>WAKE</td>
<td>6:00 AM</td>
<td>70 °F (21°C)</td>
<td>78 °F (26°C)</td>
</tr>
<tr>
<td>OUT</td>
<td>10:00 AM</td>
<td>62 °F (17°C)</td>
<td>85 °F (29.5°C)</td>
</tr>
<tr>
<td>BACK</td>
<td>6:00 PM</td>
<td>70 °F (21°C)</td>
<td>78 °F (26°C)</td>
</tr>
<tr>
<td>SLEEP</td>
<td>11:00 PM</td>
<td>62 °F (17°C)</td>
<td>82 °F (28°C)</td>
</tr>
</tbody>
</table>
To modify the program settings:
1. Press [PRG], and all 4 event icons and day icon representing the program number start flashing, indicating that is the program setting mode. Time and temperature digits become blank.

2. Use the [▲] / [▼] to select the program to be changed.
3. Press [PRG] to advance to set the WAKE time; the hour and minute digits will flash. Minute is set in steps of 10 minutes. Press [D/T] to set the program on or off for each event, the display will show “-:-:-” when it is off.
4. Press [PRG] to set the heat temperature. Temperature and the “HEAT” icon starts flashing. Temperature is set in steps of 1°F/0.5°C
5. Press [PRG] to set the cool temperature.
6. Press [PRG] to continue setting the next three events. Repeat steps 3 – 5, when all programming is finished, the operation will return to step 1.
7. Select the next program to be modified, or press [RTN] to exit.

To copy a program
1. Press and hold [TEMP] for 2 seconds, “P1” (default) is selected. The “OVERRIDE” icon will turn on. If the system slide switch is at cool position, the heat set-point and “HEAT” icon will start flashing; while if the system slide switch is at heat, the cool set-point and “COOL” icon will start flashing. There is no reaction if System switch is at OFF mode.
2. Use the [▲] / [▼] keys to adjust. Press [RTN] to confirm.
3. Temporary program override will be cancelled automatically when the next event's time is met; or it can be manually released by pressing [PRG] normal mode.

To Clear the Filter and System Usage counter
1. To read the usage hours, press [USAGE], and the “FILTER” icon is shown on the display, while the number of filter usage hours is shown on the time digits.
2. Press and hold [▲] and [▼] for 2 seconds; the filter usage counter will be cleared.
3. When the “USAGE” icon is shown on the display, the number of System Usage hours is shown on the time digits.
4. Press and hold [▲] and [▼] for 2 seconds, so the system usage counter will be cleared.

Adjusting Temperature Control Span
1. Press and hold [TEMP] for 2 seconds, “P1” (default) is flashing at the time digits.
2. Use the [▲] / [▼] keys to select .

Reading the Setting Temperature
1. At normal mode, when the system slide switch is at the Heat position, press [TEMP] to display the heat setting temperature for 10 seconds. All system icons will momentarily turn off, except the “HEAT” icon turns on. After 10 seconds, the display will resume to show room temperature.
2. If the system slide switch is at the cool position, press [TEMP] to display the cool setting temperature instead. All system icons will momentarily turn off, except the “COOL” icon turns on.

Low Battery Indicator
When the battery power is running low, the warning icon is shown on display. Insert fresh batteries and press [RST] button on the front plate. Be sure main switch is at the (OFF) position and fan switch is at the (FAN AUTO) position.

Operating Specifications
- Temperature measure range: 32 – 99 °F / 0 – 40 °C
- Setting Temperature range: 40-95 °F / 5-35 °C
- Temperature Resolution: 1°F / 0.5°C
- Battery: 2 x AA alkaline battery
- Relay Contact Voltage: 24 VAC 50/60 Hz
- Relay Contact Current: 1A Max. (inductive)
- Operating Temperature: +/− 1 °F
- Operating Temperature: 32 – 122 °F / 0 – 50 °C
- Storage Temperature: 32 – 122 °F / 0 – 50 °C
- Operating Humidity: 5-95%RH non-condensing