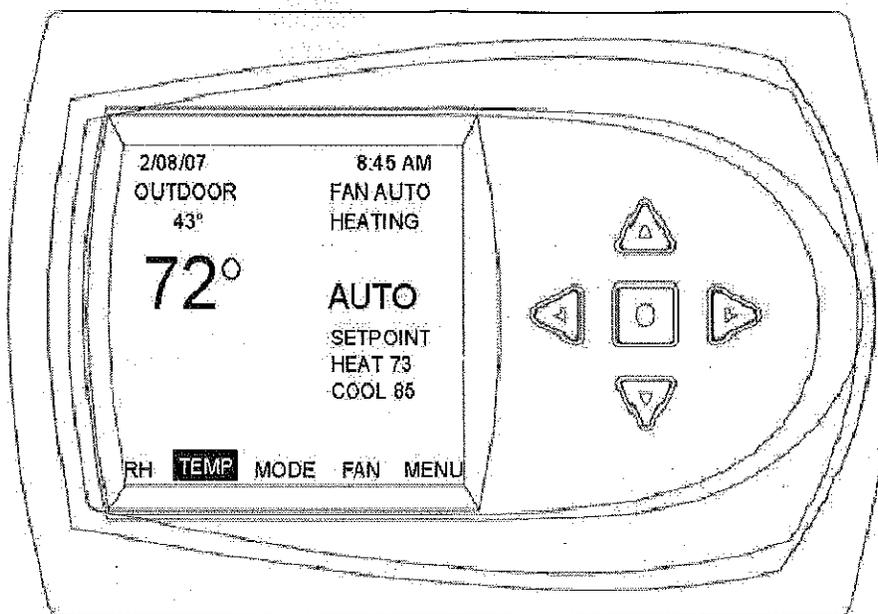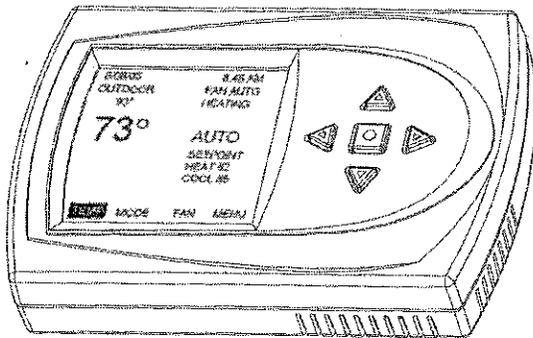# User's Manual

ATP32U05 and ATP32U06 Programmable, Non-Programmable, Night Setback Thermostats

Menu Driven Display

Heat Pump Thermostat
User Information

I.   THERMOSTAT OPERATION
ADJUSTING TEMPERATURE (Temporary Override in Programmable configuration)
1. Before you can adjust the temperature, a MODE must be selected. If you are already in a Heating or Cooling mode, then skip to step 5.
2. To select a MODE, use the keypad arrows to scroll to MODE, and then press the center button on the key pad to enter the operating mode menu.
3. Select the desired mode by scrolling up or down, with the arrows, and then press the center button on the keypad to enter into that mode.
4. You are now returned to the Main Menu and Figure 1 is a similar view. NOTE: Outdoor temperature is only displayed if an outdoor sensor is installed.
5. To increase the temperature set point, use the arrow up button. To decrease the set point, use the arrow down button. Press the center button on the key pad for the new set point to be effective[1].
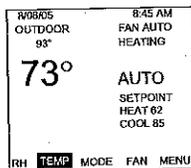

Figure1

SETTING DATE AND TIME
1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select SET DATE AND TIME
3. If your area observes daylight savings time, select AUTO DAYLIGHT SAVING, scroll to ON, then press the center button ■ to save. You will be returned to the select SET DATE AND TIME menu.
4. To select whether the date and time are displayed on the main screen, select DISPLAY DATE AND TIME, select the preferred display option, then press the center button ■ to save. You will be returned to the select SET DATE AND TIME menu.
5. To set the date and time, select SET DATE AND TIME.
6. SET MONTH by using the up and down arrows ▲ ▼, and then press the center button on the keypad to save the month.
7. SET DAY by using the up and down arrows ▲ ▼, and then press the center button on the keypad to save the day.
8. SET YEAR by using the up and down arrows ▲ ▼, and then press the center button on the keypad to save the year.
9. SET HOUR by using the up and down arrows ▲ ▼, and then press the center button on the keypad to save the hour.
10. SET MINUTE by using the up and down arrows ▲ ▼, and then press the center button ■ on the keypad to save the minute.
11. Date and Time are now set. You can return to the Main Menu by pressing the left arrow key to return to the previous menu.

HOLD SETTING – Vacation & Permanent (Programmable config. only)
This section describes the HOLD functions. You can program the thermostat to hold the temperature for a period of time. If you want to hold the temperature for a few hours or a few weeks, your thermostat can accommodate your schedule.

VACATION HOLD (Programmable configuration only)
1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select HOLD → VACATION
3. First, the thermostat prompts you for a temperature to hold. If you are in AUTO MODE you will be prompted for both a heat setting and a cool setting. Use the up and down arrows keys ▲ ▼ to select the desired temperature and press the center button on the keypad.
4. Next it will prompt you for a date and time that you wish to return to programmed operation. Returning to the Main Screen, you will notice that in the upper part of the screen is alternating HOLD TIL *date and time you specified* and the actual date and time.
5. To cancel this hold, scroll to CANCEL HOLD from the Main Menu and press the center button ■.

PERMANENT HOLD (Programmable configuration only)
1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select HOLD → PERMANENT
3. First, the thermostat prompts you for a temperature to hold. If you are in AUTO MODE you will be prompted for both a heat setting and a cool setting. Use the up and down arrows keys ▲ ▼ to select the desired temperature and press the center button on the keypad.
4. Returning to the Main Screen, you will notice that in the upper part of the screen is alternating PERMANENT HOLD and the actual date and time.
5. You can adjust to permanent hold temperature at will, and the temperature you select will remain until the permanent hold is canceled.
6. To cancel this hold, scroll to CANCEL HOLD from the Main Menu and press the center button ■. This will revert to the programmed settings.

FAN OPERATION
The thermostat can operate the fan in three ways:
AUTO (on only during heating and cooling calls)
ON (always on)
PROGRAMMED FAN (fan follows the AUTO or ON settings in the program screen, based on current time period) (programmable configuration only)
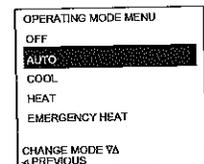1. From the Main Menu, scroll to MENU and press the center button on the keypad ■ or select FAN from the Main Menu.
2. Select FAN.
3. Select the operation you desire as described above.

CHANGING MODES
1. From the main screen select MODE.
2. Select the operating mode you need and press the center button ■.
NOTE: If selecting EMERGENCY HEAT, the backlight color will change from blue to red indicating that auxiliary heat will be used instead of the heat pump compressor.
Auxiliary/emergency heat is significantly more expensive to operate than the heat pump compressor, and should not be selected unless the heat pump compressor is not operational.

FAHRENHEIT OR CELSIUS
1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select SETTINGS → SCREEN SETTINGS → FAHRENHEIT OR CELSIUS
3. Select which temperature scale you prefer.

12 OR 24 HOUR CLOCK
Within this menu option, you can change the time displayed by your thermostat to 24 Hour time (Military Time).
1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select SETTINGS → SCREEN SETTINGS → 12 OR 24 HOUR CLOCK
3. Select which time base you prefer.

[1] Review PROGRAM and HOLD sections to know effects of changing the set point

CONTRAST ADJUSTMENT

You can change the contrast level of your thermostat screen to be displayed to your preference.

1. From the Main Menu, scroll to MENU and press the center button on the keypad.
2. Select SETTINGS → SCREEN SETTINGS →CONTRAST
3. Use the up and down arrows ▲ ▼ to increase or decrease the contrast level.
4. Press the center button to accept the new setting.

BACKLIGHT ON TIME

This thermostat has a two color backlight feature. Anytime a button is pressed, the blue backlight stays on for a certain amount of time. A red backlight is visible if you are selecting Emergency Heat mode. You can adjust the amount of time the backlight stays on in the menu options.

1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select SETTINGS → SCREEN SETTINGS →BACKLIGHT ON TIME
3. You can change the backlight on time by using to up and down arrows ▲ ▼. 30, 60, 90, 120, and ON (all the time) are your choices. Press the center button to save the new backlight on time.
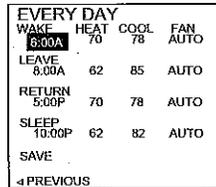
DATE DISPLAY

1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select SETTINGS → SCREEN SETTINGS → DATE DISPLAY
3. Select the date display format you prefer.

II. PROGRAMMING YOUR THERMOSTAT (programmable configuration only)

PROGRAMMING A DAY OR A SERIES OF DAYS

After selecting the programming screen, you have the option of programming everyday, weekdays, weekends, or individual days. Once you've selected a certain day to program, a screen appears that allows you to set the time, heat setting, cool setting, and fan operation for each event.

1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select PROGRAM
3. You can program each day differently by going through each day and personalizing them. Or, you can program everyday the same by scrolling to EVERYDAY. Or, you can program the weekdays or weekends the same by selecting the appropriate menu item.
4. To program everyday the same, select EVERYDAY and then press the center button ■.
5. Using the right arrow button ►, highlight the WAKE time, and change to desired time by using the up and down arrow ▲ ▼ buttons. Move to the next entry by using the right arrow button ►. To change the HEAT set point, use the up and down arrows. Continue this process until all settings are to your liking.
6. To save these setting, scroll to SAVE, and press the center button ■.

```
PROGRAM MENU

SAVE              MONDAY
TUESDAY           WEDNESDAY
THURSDAY          FRIDAY
SATURDAY          SUNDAY
EVERY DAY         WEEKDAYS
WEEKENDS          COPY
SELECT OPTION ▼▲
◄PREVIOUS
```

```
EVERY DAY
WAKE     HEAT  COOL  FAN
6:00A    70    78    AUTO
LEAVE
8:00A    62    85    AUTO
RETURN
5:00P    70    78    AUTO
SLEEP
10:00P   62    82    AUTO
SAVE
◄PREVIOUS
```

COPYING A PROGRAM FROM ONE DAY TO ANOTHER

In the PROGRAM menu, there is an option to COPY. The option can be used to copy the program from one day to another day. After COPY is selected, the thermostat will prompt you for which day to copy from. Next, it will prompt you for which day to copy the program to. After these selections, it will then confirm what is being copied to where. At this point you have the option of canceling the copy process, by pressing ◄ to return to the copy menu, or saving what you have by pressing the center button ■. The SAVED screen will appear returning you to the copy menu. Pressing ◄ will return you to the PROGRAM menu. Pressing ◄ again will return you to the MAIN MENU.

III. ADVANCED SETTINGS

SECURITY LOCKOUT

This thermostat has the option to set security features to lockout everything but the adjustment of the temperature or a total keypad lockout.

```
SECURITY LOCKOUT

TEMP ADJUST ONLY

TOTAL KEYPAD LOCKOUT

SELECT OPTION ▼▲
◄PREVIOUS
```

1. From the Main Menu, scroll to MENU and press the center button ■ on the keypad.
2. Select SECURITY LOCKOUT.
3. Select whether you want to lockout everything but TEMP ADJUST ONLY or TOTAL KEYPAD LOCKOUT.
4. Either selection will bring you to the Enter Pin Number screen.
5. Using the up and down arrows ▲ ▼, select a pin number to lock out the thermostat. The right arrow ► moves you to the next pin digit.

```
SECURITY LOCKOUT

ENTER PIN NUMBER

0 0 0 0
↑
CHANGE NUMBER ▼▲
◄PREVIOUS
```

6. Once you've entered the 4-digit pin number, press the center button ■ to save the pin. The screen will display LOCKED and return to the main Screen.
7. Once you return to the Main Screen, in the upper left of the screen will alternate between LOCKED and the date and time.
8. If you selected TEMP ADJUST ONLY, you will only be able to adjust the set point temperature. Any other operation will require the pin number to unlock the thermostat.
9. Once unlocked, you'll have to set a pin number again to lockout the thermostat again.
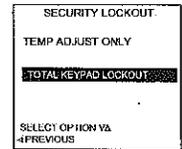
OFFSETS

MENU → SETTINGS → OFFSETS

TEMPERATURE OFFSETS

This option allows calibration (or deliberate miscalibration) of the room temperature sensor(s). There are various reasons why the displayed temperature would be adjusted to a higher or lower value. **NOTE:** Do not adjust for 30 minutes after installation because board may be heated by handling. The selected number is the number of degrees, plus or minus, which will be added to actual temperature. The numbers can range between -5° and +5°. Default values are set to 0° offset.
   Temperature Offset
   Remote Indoor Offset (if sensor is attached)
   Outdoor Offset (if sensor is attached)

HUMIDITY OFFSET (Humidification/Dehumidification models only)

This option allows calibration of the humidity sensor. Adjustments can range between -10% and +10%. Default is 0% offset.

ANTICIPATOR

This adjustment controls the sensitivity of the thermostat. Higher numbers decrease the sensitivity. Lower numbers increase the sensitivity. Default value is 3, and the range is 1-9.

DIFFERENTIAL (Differential configuration only)

This adjustment will vary the number of degrees, from the set point, before a call for heating or cooling is made. Adjustments can range between 1° and 4° differential. Default is 1° offset. (If your set point is 70°F in heating, your thermostat will not call for heat until the temperature is 69°F, with a 1° differential).

CYCLES PER HOUR

This feature will not allow more than the specified number of equipment cycles per hour. Values can be 4 or 6 (or 1 cycle every 15 minutes (default) or 1 cycle every 10 minutes, if 6 is set). Factory default setting is 4. This default selection will provide optimum performance in nearly all installations.
MENU → SETTINGS → CYCLES PER HOUR

AUTO CHANGEOVER TIME

With auto changeover, the thermostat automatically switches itself from heating to cooling, or vise versa, based on the setpoints. This setting sets the minimum off time before the thermostat can change from one mode to another. Default is 15 minutes. Range is from 0-120 minutes in 15 minute increments. Mode must be set to AUTO for this operation to work.
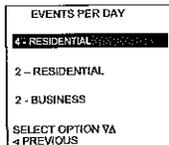MENU → SETTINGS → AUTO CHANGEOVER TIME

PROGRAM SETTINGS
MENU → SETTINGS → PROGRAM SETTINGS

SMART RECOVERY (Programmable configuration only)

Smart recovery is a feature of your thermostat designed to save energy by gradually adjusting temperatures. When it's time for a programmed temperature change, smart recovery begins working in advance, turning the system on and off as needed to slowly adjust the indoor temperature. During these transition periods, you may notice that the actual temperature and your temperature setting don't match. That's smart recovery in action, adjusting temperatures in small increments for greater energy efficiency. This is more energy efficient than simply allowing the system to operate at full capacity until the desired temperature has been met. Smart Recovery helps avoid excessive use of auxiliary heat when recovering from night setback in the heating mode. Auxiliary heat will not be used during Smart Recovery.

EVENTS PER DAY (Programmable configuration only)

This is where you can set the number of events per day. (An event is a period of time scheduled with a certain heating and cooling setpoint.) For instance if you are away from your home from 8am to 5pm, make this period of time an event and set the thermostat at an energy saving setting. You have the option of setting the events per day to 4-RESIDENTIAL (4 events), 2-RESIDENTIAL (2 events) or 2-BUSINESS (2 events).

```
EVENTS PER DAY

4 - RESIDENTIAL

2 – RESIDENTIAL

2 - BUSINESS

SELECT OPTION ▽△
◄ PREVIOUS
```

```
EVERY DAY
       HEAT  COOL  FAN
WAKE    70    78   AUTO
6:00A
LEAVE   62    85   AUTO
8:00A
RETURN  70    78   AUTO
5:00P
SLEEP   62    82   AUTO
10:00P
SAVE
◄PREVIOUS
```
4-RESIDENTIAL
(Default)

```
EVERY DAY
DAY   HEAT  COOL  FAN
6:00A  70    78   AUTO

NIGHT  62    82   AUTO
10:00P
SAVE
◄PREVIOUS
```
2-RESIDENTIAL

```
EVERY DAY
ACTIVE HEAT COOL  FAN
6:00A   70   78   AUTO

IDLE   62    82   AUTO
10:00P
SAVE
◄PREVIOUS
```
2-BUSINESS

SMART HEAT STAGING

This will control how the thermostat to engages 3rd stage or auxiliary heating when needed. Options are ON or OFF. Default is OFF. When the option is set to ON, the time range for this option is 5-120 minutes in 5 minute increments, if set to ON. 5 minutes is the default time. This is the minimum amount of time after temperature conditions for activating auxiliary heat are met, before the electric heat is engaged.
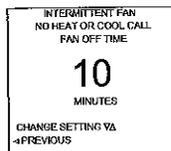
ELECTRIC HEAT LOCKOUT

When an outdoor temperature sensor is installed, you can set it up so the electric heat option doesn't energize if the outdoor temperature is above a certain temperature. Ranges for this option are OFF (default), 5°F to 60°F in 5° increments.

INTERMITTENT FAN

Temperature conditions can vary widely between the thermostat location and extremities of the space the thermostat serves. This air stratification problem can be especially pronounced during mild outdoor conditions when long periods elapse between space conditioning demands from the thermostat. This intermittent fan operation can also improve the performance of air cleaning or special filtration systems that locate the cleaning or filtration media at the return air side of the fan.

1. MENU → SETTINGS → INTERMITTENT FAN
2. If the FAN hasn't been on for the selected OFF time, the fan will start cycling. Default is OFF. The first screen is the amount of time you want the fan to be energized. Ranges are OFF, or 5-20 minutes in 5 minute increments.
3. After entering this time and pressing the center button ■, the next screen is the amount of time the fan will be OFF. Range is 5-90 minutes, in 5 minute increments. Default is 40 minutes.
4. After entering this time and pressing the center button ■ you will be returned to the Setting Menu screen.
5. Fan ON and OFF cycles will continue based on these times until the fan has been energized by a call for heating or cooling.

```
INTERMITTENT FAN
NO HEAT OR COOL CALL
FAN ON TIME

5
MINUTES

CHANGE SETTING ▽△
◄PREVIOUS
```

```
INTERMITTENT FAN
NO HEAT OR COOL CALL
FAN OFF TIME

10
MINUTES

CHANGE SETTING ▽△
◄PREVIOUS
```

SERVICE NEEDED

This screen indicates the heat pump has a fault condition, and is not operating. The backlight will be red, and information will be displayed to help an installer or contractor to have an understanding of what problem might have occurred before arriving for service. Auxiliary heat will continue to operate as needed when the heat pump has a fault condition. An appropriate service contactor should always be contacted for any fault condition.

```
SERVICE
NEEDED
PHONE CONTRACTOR
CLIMATEMASTER DEALER
555-1234
CLIMATEMASTER
MODEL NUMBER
SERIAL NUMBER
E2 – HIGH PRESSURE
```

To reset a fault condition, the following steps must be followed:

1. From the SERVICE NEEDED screen, press the left arrow ◄ button to activate the main menu.
2. Within 5 seconds of activating the main menu, change the operating mode to OFF.
3. After 5 seconds the fault condition should be cleared.

SERVICE INFORMATION

These additional screens help an installer or contractor to have a better understanding of what problems might be occurring before arriving for service.

```
SERVICE INFORMATION

FAULT STATUS
SAFETY STATUS
INPUT STATUS
OUTPUT STATUS
TEMPERATURE STATUS
CLEAR FAULT HISTORY

SELECT OPTION ▽△
◄PREVIOUS
```

Humidity Control (RH) (Humidification/Dehumidification models only)

The Humidity (H) output will energize when the room humidity is less than the HUMIDITY set point. Thermostats with an OUTDOOR thermistor installed will automatically adjust the HUMIDITY setting to the optimum comfort level. The fan will be energized anytime there is a call for humidification, and there is NOT a call for cooling.

The DEHUMIDIFY (DH) output will come on when the room humidity is greater than the DEHUMIDIFY set point. If the Humidity option is set to CLIMADRY or BOTH, the output turns ON when the Humidity is greater than the set point and there is NOT a call for heating. If the Humidity option is set to ECM, the output (DH) turns OFF when the room humidity is greater than the set point and there is NOT a call for heating. To change the operation of the DEHUMIDIFY option, see INSTALLER INFORMATION.

The Humidity Control setpoints can be adjusted from the main menu.

1) Select RH from the Main Menu. The Humidify/Dehumidify setting set from installation will be displayed.
2) To change the set points, select the desired setting and press the center button ■.

NIGHT SETBACK (Night Setback configuration only)

When configured for Night Setback operation, an external signal activates the Night Setback mode. While the Night Setback mode is active, the thermostat will operate using alternate Night Setback heating and cooling setpoints, and the screen backlight will be red when ON. While the Night Setback mode is active, the alternate Night Setback setpoints may be temporarily overridden, by using the normal temperature adjustment screen. If the heating and cooling setpoints are adjusted while Night Setback is active, these temporary setpoints will remain active for the current Night Setback Override time, unless they are adjusted again, or the Night Setback mode is de-activated. For thermostat models with humidity control, the humidity control may be configured to operate using alternate setpoints, or be disabled when the Night Setback mode is active.

MENU → NIGHT SETBACK

SETPOINTS

This option will allow the alternate Night Setback heating and cooling setpoints to be set.

OVERRIDE

This allows the Night Setback Override time to be set. The range is 1-8 hours, in 15 minute increments. The default value is 2 hours.

DEHUMIDIFICATION (Humidification/Dehumidification models only)

This option will allow the humidity control operation during Night Setback to be configured. The options are OFF (default) or ON. If the ON selection is made and the center button ■ is pressed, a screen to set the humidification setpoint during Night Setback will be activated. After the Night Setback humidification setpoint is selected by pressing the center button ■, a screen to set the dehumidification setpoint during Night Setback will be activated.

4

INSTALLER
INFORMATION / ADVANCED FEATURES

SAFETY CONSIDERATIONS
Improper wiring or installation may damage thermostat. Wiring must conform to local and national electrical codes

> **WARNING:** Before installing thermostat, turn off all power to unit. There may be more than one power disconnect. Electrical shock can cause personal injury or death.

INTRODUCTION
The thermostat is a wall mounted, low-voltage thermostat which maintains room temperature by controlling the operation of a heating and air conditioning system. Batteries are not required; temperature and mode settings are preserved with the power off.

INSTALLATION CONSIDERATIONS
The thermostat requires no batteries. The thermostat is not a power stealing device and MUST have both R and C connected.

INSTALLATION

I. THERMOSTAT LOCATION
Thermostat should be mounted:
- Approximately 5 ft. (1.5m) from floor.
- Close to or in a frequently used room, preferably on an inside partitioning wall.
- On a section of wall without pipes or duct work.

Thermostat should NOT be mounted:
- Close to a window, on an outside wall, or next to a door leading to the outside.
- Exposed to direct light and heat from a lamp, sun, fireplace, or other temperature-radiating object which may cause a false reading.
- Close to or in direct airflow from supply registers and return-air grilles.
- In areas with poor air circulation, such as behind a door or in an alcove.

II. INSTALL THERMOSTAT
1. Turn off all power to unit.
2. If an existing thermostat is being replaced:
   A. Remove existing thermostat from wall.
   B. Disconnect wires from existing thermostat, one at a time. Be careful not to allow wires to fall back into the wall.
   C. As each wire is disconnected, record wire color and terminal marking.
   D. Discard or recycle old thermostat.
   NOTE: Mercury is a hazardous waste and MUST be disposed of properly.
3. Separate the front and back pieces of plastic.
4. Route thermostat wires through hole in back piece of plastic. Level plastic against wall (aesthetic value only - thermostat need not be leveled for proper operation) and mark wall through 2 mounting holes.
5. Drill two 3/16-in. mounting holes in wall where marked. (Note: Mounting holes on thermostat are designed to fit on a horizontal J-box).
6. Secure back plastic to wall with 2 anchors and screws provided making sure all wires extend through hole in plastic.
7. Connect wires to proper terminal of the connector block in the front plastic.
8. Push any excess wire back into wall. Excess wire inside the thermostat plastic case can interfere with proper air flow across the temperature sensor. Seal hole in wall to prevent air leaks. Leaks can affect operation.
9. Snap front and back pieces of plastic together.
10. Turn on power to the unit.

III. WIRING DIAGRAMS
All excess wire should be pushed back into the wall as far as possible. Excess wire inside the thermostat plastic case may interfere with the air flow across the temperature sensor.
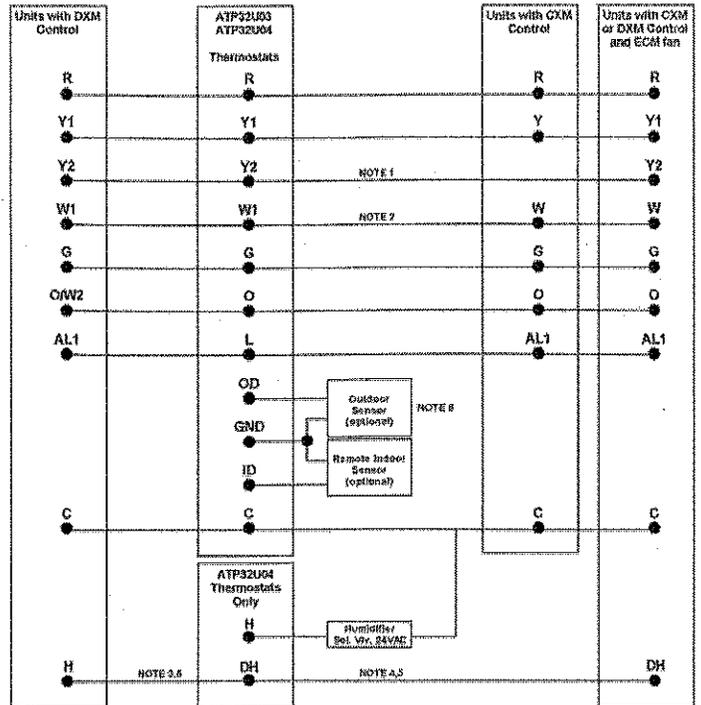
NOTES:
1. Single compressor units with CXM control only (No ECM fan) do not use terminal Y2.
2. Thermostat terminal W1 only used for backup electric heat. For residential units, thermostat terminal W1 is wired to CXM, DXM or ECM board. For commercial units, thermostat terminal W1 is wired to an external duct heater.
3. For units with ClimaDry modulating reheat, thermostat terminal DH is wired directly to DXM terminal H.
4. For units with ECM fan, thermostat terminal DH is wired to terminal DH on the ECM board.
5. For units with ClimaDry and ECM fan, thermostat terminal DH is wired directly to DXM terminal H (not to the ECM board).
6. For units configured for Night Setback, there will be no Outdoor Sensor option available. A contact closure at the normal Outdoor Sensor connections (OD & GND) will activate the Night Setback mode. Anything other than a contact closure or short circuit at the Outdoor Sensor connection will result in normal operation for a thermostat configured for Night Setback operation.

THERMOSTAT CONNECTIONS
C – 24V Common for Control Circuit
DH – Dehumidify Output (ATP32U02 only)
R – 24V Supply for Control Circuit
W1 – Auxiliary Heat
H – Humidifier (ATP32U02 only)
O – Reversing Valve - energized in COOL mode
Y2 – 2nd Stage Compressor / Cooling / Heating
Y1 – 1st Stage Compressor / Cooling / Heating
G – Fan
L – Alarm Input
V – Not Used
A+, B – Not Used.
GND – Ground
OD – Outdoor Temperature Sensor (Night Setback Signal)
ID – Indoor Temperature Sensor

IV. INSTALLER SETTINGS
NOTE: These options are intended to be used by the installer. End users are not advised to change or modify any of these settings. Doing so may make your equipment stop working properly and/or may void the warranty of the thermostat as well as the equipment hooked up to the thermostat. To access the installer setting menu, the mode must be set to OFF. Then, press both the up and down arrows keys at the same time for at least 5 seconds to enter the installer screen.

MODEL CONFIGURATION

Configuration options to select from: Single Stage or Multi Stage, Electric, Multi Fuel, or no Auxiliary Heat, Programmable, Non-Programmable, or Night Setback.

ACCESSORIES

Each of these options has settings for Cumulative Run Time and Calendar Time. Messages will flash at the top of the Main screen when these events are met to alert the owner that it is time service these options.

Air Filter – Default is OFF. Values can be set to OFF, or 400-3600 hours for Cumulative Run Time (in 100 hour increments), or Calendar Time can be set to OFF, or 3-48 months (in 3 month increments).

Humidifier - Default is OFF. Values can be set to OFF, or 400-3600 hours for Cumulative Run Time (in 100 hour increments), or Calendar Time can be set to OFF, or 3-24 months (in 3 month increments).

UV Lamp - Default is OFF. Values can be set to OFF, or 400-3600 hours for Cumulative Run Time (in 100 hour increments), or Calendar Time can be set to OFF, or 3-48 months (in 3 month increments).

Air Cleaner - Default is OFF. Values can be set to OFF, or 400-3600 hours for Cumulative Run Time (in 100 hour increments), or Calendar Time can be set to OFF, or 3-24 months (in 3 month increments).

INPUT DEALER INFO

Contractors are able to input Brand Name, Model Number, Serial Number, Contractor Name, and Contractor Phone number into these screens. This way, the owner could give this information to the contractor so that he would know what system the owner has prior to the service visit.
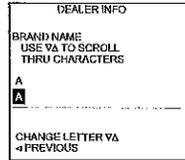
1. Scroll to the info you want to enter and press the center button ▪.
2. Enter the information by scroll through the characters using the up & down arrows ▲ ▼. Once the character you want is set, press the right arrow ▶ to move to the next space and begin entering another character.
3. Once you've completed filling out the field, press the center button ▪ to save the entry and return to the INPUT DEALER INFO screen. Repeat this process for all fields you want saved.
4. Once all fields have been entered, scroll to SAVE and press the center button ▪.

REVERSING VALVE OPTION

Option of the reversing valve (O output) being on when in cooling or heating. Default is COOLING.

RESTORE DEFAULTS

This will allow you to revert to the factory default settings. The Model Configuration settings are not effected by this operation.

TEMPERATURE ALGORITHM

This will allow the selection of the temperature control algorithm to be used by the thermostat.

The Proportional Integral (default) option will use a combination of temperature differential and operating time to determine the appropriate heating or cooling stages for operation. This algorithm will allow the heating or cooling outputs to "de-stage" as the demand is being satisfied, rather than keeping all activated heating or cooling stages energized until the demand is fully satisfied, like the Differential algorithm does. This algorithm will normally maintain the temperature much closer to the selected setpoint than the Differential algorithm. In addition to the time and temperature based algorithm, this option requires first stage heating or cooling to be active for a minimum of 5 minutes, before energizing second stage. When configured for multi stage operation, second stage heating must be active for a minimum of 5 minutes or the selected Smart Heat Staging time, before energizing third stage heating.

The Differential option will use temperature differential only to determine the appropriate heating or cooling stages for operation. This algorithm will keep all activated heating or cooling stages energized until the demand is fully satisfied, rather than "de-staging" them as the demand is being satisfied, like the Proportional Integral algorithm does. This option will activate first stage heating or cooling when the temperature is more than the first stage differential value, below or above the setpoint. Second stage eating or cooling will be activated when the temperature is more than the first and second stage differential values combined, below or above the setpoint. Third stage heating will be activated when the temperature is more than the first, second, and third stage differential values combined, below the setpoint.

For example: With a heating setpoint of 70°, first stage differential value of 1°, second stage differential value of 1°, and third stage differential value of 2°, first stage heating will be activated when the temperature drops to 69°, second stage heating will be activated when the temperature drops to 68°, and third stage heating will be activated when the temperature drops to 66°.

HUMIDITY OPTION (Humidification/Dehumidification models only)

If your system is setup with a humidifier, or a dehumidification option (ClimaDry or ECM dehumidification mode), select the appropriate setting.
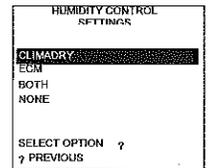
CLIMADRY
ECM
BOTH
NONE

To adjust the Set Point for Humidification or Dehumidification, Select the RH from the Main menu. The values can be selected and adjusted from that screen.

NOTE: If you have an outdoor sensor attached to the thermostat, the Humidification setting is adjusted automatically based on the outdoor temperature.

CLIMADRY - This logic will allow the thermostat to operate with DXM using the ClimaDry option. Standard logic per the DIPs on the DXM implies that when the humidity is greater than the set point, thermostat energizes the DH output with 24 VAC (acts as a dehumidistat). DH output will be 0VAC when humidity is below setpoint. Reverse logic per the DIPs on the DXM implies that when the humidity is greater than the set point, thermostat energizes the DH output with 0 VAC (acts as a humidistat). DH output will be 24VAC when humidity is below setpoint.

ECM - This logic will allow thermostat to operate with ECM motor and no ClimaDry option. The ECM control board works on reverse logic. Reverse logic implies that when the humidity is greater than the set point, thermostat energizes the DH output with 0 VAC. ECM fan will run at a slower speed when the DH terminal at the ECM board is energized with 0VAC. When humidity is below setpoint, the 24 VAC output to the ECM board will return the airflow to normal speed. The ECM interprets the 0VAC call, which is actually 13.3VAC at the DH terminal on the ECM control board.

BOTH – Same as the ClimaDry logic.

NONE – The DH output is not active.