

# ATA32V01



Controls Single or Dual Stage  
Geothermal Heatpump Systems with strip heat

Up to 3-heat & 2-cool



- Dual Setpoint
- Large, Easy To Read Display
- Thermoglow™ Backlight
- Auto-Changeover
- No batteries required
- Locking Keypad

## Owner's Manual & Installation Instructions

# Table of Contents

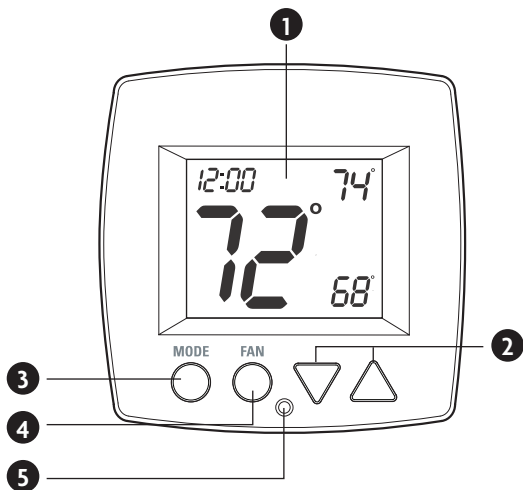
Front Panel .....	2
Display .....	3
Wiring Diagrams.....	5
Quick Start - Setting the Clock .....	6
Selecting The Heat or Cool Mode .....	7
Basic Operation.....	8
Advanced Setup.....	9
Advanced Setup Table.....	12
About Advanced Features & Operation.....	13
Warranty .....	19



## IMPORTANT

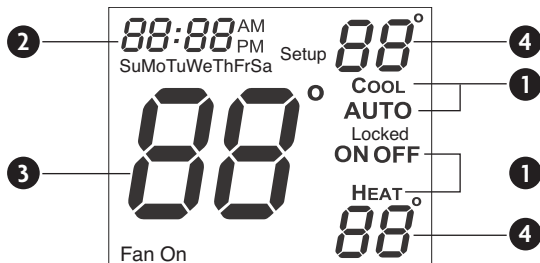
Follow Installation Instructions carefully. Disconnect Power to your heatpump before removing the old thermostat and installing the new thermostat.

# Front Panel



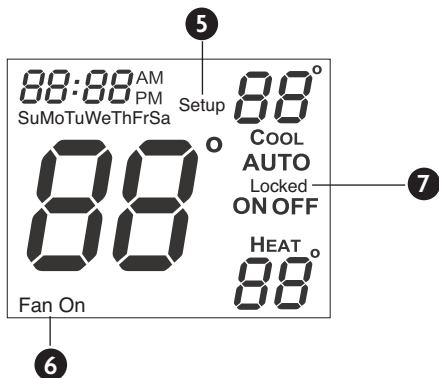
- 1 Liquid Crystal Display**  
*with Thermoglow™*
- 2 Up/Down Buttons**
- 3 Mode Button**
- 4 Fan Button**
- 5 Heat or Cool Indicator**  
Red = Heat, Green = Cool

# Display



- 1 Mode Indicators - Page 7**  
Selects the operational mode of the equipment.  
**HEAT** - Indicates the heating mode.  
**COOL** - Indicates the air conditioning mode.  
**AUTO** - Indicates the system will automatically changeover between heat and cool modes as the temperature varies.  
**OFF** - Indicates heating and cooling are turned off.
- 2 Clock with Day of the Week - Page 6**  
Indicates the current time and day.
- 3 Room Temperature Display**  
Indicates *current* room temperature.
- 4 Desired Set Temperature - Page 8**  
Indicates *desired* room temperature(s).

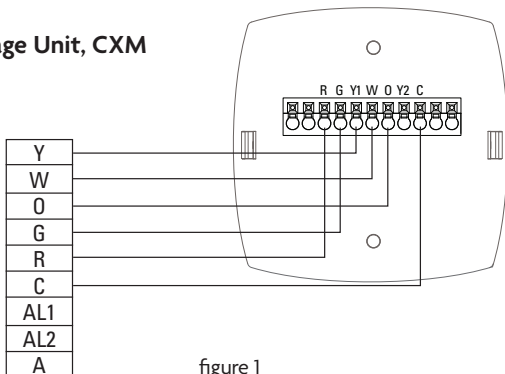
# Display



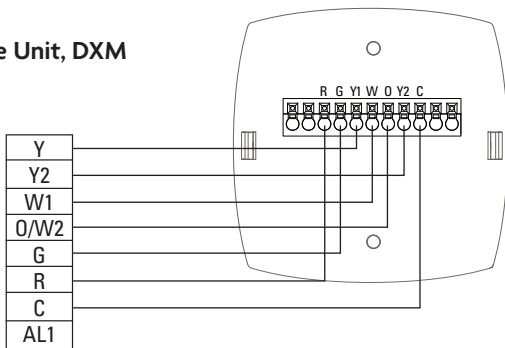
- 5 Setup icon - Pages 9-12**  
Indicates the thermostat is in the setup mode.
- 6 Fan On icon - Page 8**  
Indicates constant, continuous fan operation.  
When **Fan On** is not lit - indicates the fan will only operate when necessary to heat or to cool.
- 7 Locked icon - Page 18**  
Indicates the keypad has been locked.

# Wiring Diagrams

## Single Stage Unit, CXM



## Two Stage Unit, DXM



# Quick Start *Setting the Clock*

## How to Change Settings in the Setup Screens

*To enter the setup screens, press the MODE button, and simultaneously press FAN button for 2 seconds. Release the buttons when you see "Setup" on the display. Use the WARMER or COOLER buttons to adjust the value of your selection. Press MODE to advance to the next setup step. Press MODE and FAN together again to leave the setup screens.*



## Setting the Clock and Day: Setup Steps 1 & 2

To set the time and day; enter the setup screens by pressing the MODE button and simultaneously pressing the FAN button for 2 seconds.

**During Setup & Programming:** Pressing the UP or DOWN buttons will modify the flashing selection.

*Tip: To change hours quickly, press and hold the FAN button and press the UP or DOWN buttons.*

The thermostat is preprogrammed from the factory to operate one or two stage equipment without the need for further programming. To optimize the installation of this thermostat, follow the instructions in the Advanced Setup section.

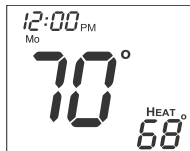
# Quick Start *Selecting the Heat or Cool Mode*

## Select Mode by Pressing the MODE Button

### Heating Only

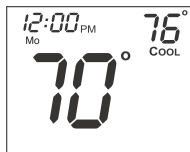
The **HEAT** setting indicates the temperature the room has to reach before the furnace will turn on to heat the room.

MODE



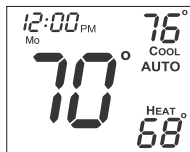
### Cooling Only

The **COOL** setting indicates the temperature the room has to reach before the air conditioner will turn on to cool the room.



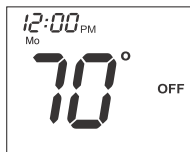
### Heating or Cooling

**AUTO** will automatically select heat or cool based on room temperature demand.



### Off

**OFF** indicates both heating and air conditioning systems are turned off.



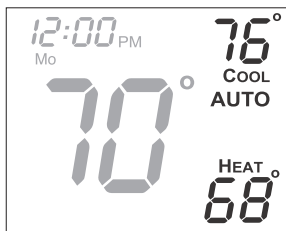


# Basic Operation

## Selecting Your Desired Temperature (adjusting the setpoints)

### AUTO MODE

Pressing the **UP** or **DOWN** buttons in Auto will adjust **both** the heat and cool set temperatures simultaneously.



### HEAT OR COOL MODE

Pressing the **UP** or **DOWN** buttons in Heat **OR** Cool mode will adjust only the heat **OR** cool set temperature.



### USING THE FAN BUTTON

**Fan On** indicates constant fan operation. You may turn the fan on even if the thermostat is in the **Off** mode. Pressing the **FAN** button toggles this feature on or off.

**FAN**



# Advanced Setup

Press the **MODE** button. While holding **MODE**, press the **FAN** button for 10 seconds to enter setup screens.

**MODE**



**FAN**

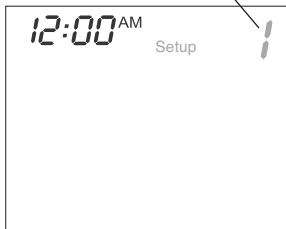


Pressing the **FAN** button while holding in the **MODE** button for 2 seconds will bring up the Clock Set screen on the display. Continuing to hold both buttons in for an additional 8 seconds will allow access to the Advanced Setup Steps that follow the Clock Set steps. It is important to note the display will not change and will look the same whether it is in Clock Set or Clock Set **plus** Advanced Setup.

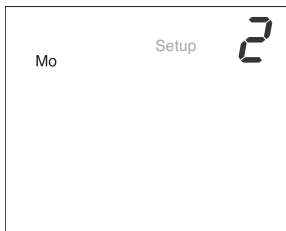
**NOTE:** *Each step# is located at the top right corner of the display for easy reference.*

Adjust the time of day clock by using the **UP** and **DOWN** buttons.

**TIP:** *To change hours quickly, press and hold the **FAN** button and press the **UP** and **DOWN** buttons.*

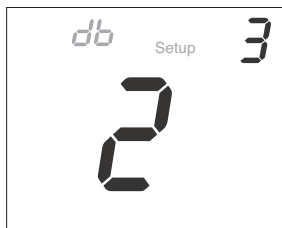


Select the day of the week by using the **UP** and **DOWN** buttons.

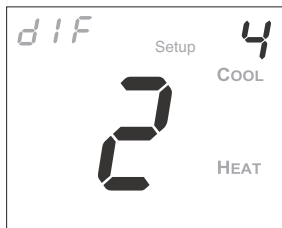


# Advanced Setup

Adjust the deadband for the 1st stage (1° - 6°) by pressing the **UP** and **DOWN** buttons.



Adjust the minimum difference between cooling & heating setpoints by pressing the **UP** and **DOWN** buttons.



# Advanced Setup



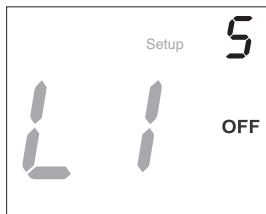
On

Select backlight operation:

**ON** - Light continuously

**OFF** - Light for 8 seconds  
after a button press

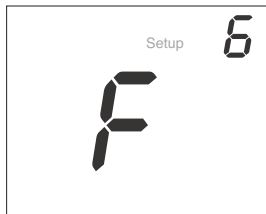
Off



C

Select thermostat operation in  
degrees **F**ahrenheit or **C**elsius.

F



After programming is complete, press the MODE and FAN buttons at the same time for two seconds to leave the Setup screens. If no buttons are pressed, the display will leave the setup screens after 30 seconds.

# Advanced Setup Table

FD = Factory Default Setting

Step#	Description	Pg#	Range	FD
1	SetTime of Day	9	24 hour	12:00am
2	Set Day of Week	9	Monday - Sunday	Mo
3	Deadband/Temp. Swing 1st Stage	10	1° - 6°	2°
4	Minimum Heat/Cool Differential	10	0° - 6°	2°
5	Thermoglow Backlight	11	Off/On	OFF
6	Fahrenheit or Celsius	11	F/C	F

# About Advanced Features & Operation

**CALIBRATION** - Under normal circumstances it will not be necessary to adjust the calibration of the temperature sensor. If calibration is required, please contact a trained HVAC technician to correctly perform the following procedure.

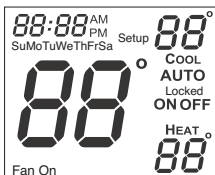
- 1 Place the thermostat in the **OFF** mode by pressing the **MODE** button.

MODE



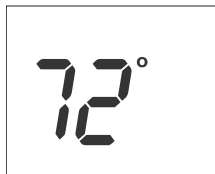
- 2 Press and hold the **MODE** button. While holding the **MODE** button, press and hold the **DOWN** button for 5 seconds. All icons will appear on the display.

MODE



- 3 Press the **MODE** button once. The thermostat temperature will be displayed and may be calibrated using the **UP** or **DOWN** buttons.

MODE



- 4 After calibration is complete, press the **MODE** button **once** to save your changes and return to normal operation.

MODE



# About Advanced Features & Operation

**DEADBAND OPERATION** - Controls up to three Heat and two Cool stages (*please see the diagram on the next page*).

The **1st Stage** of heat or cool is turned on when:

- (A) The temperature spread from the setpoint is equal to or greater than: *the setpoint plus the 1st stage deadband (step #3, page 10)*. This 1st stage deadband is adjustable from 1-6 degrees and the default is two degrees.

The **2nd Stage** of heat or cool is turned on when:

- (A) The 1st Stage has been on for a minimum of *two minutes*.

**AND**

- (B) The temperature spread from the setpoint is equal to or greater than: *the setpoint plus the 1st stage deadband (step #3, page 10), plus the 2nd stage deadband*. This 2nd stage deadband is fixed at two degrees and is not adjustable.

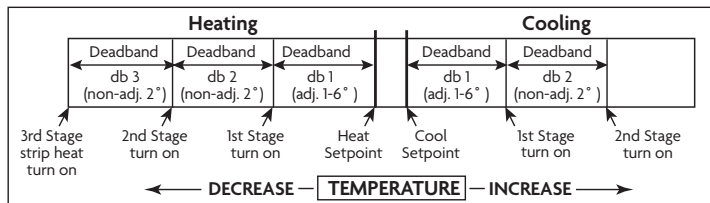
The **3rd Stage** of heat is turned on when:

- (A) The 2nd Stage is running for a heat demand.

**AND**

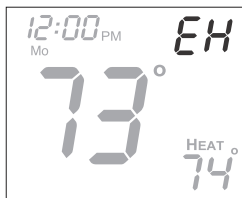
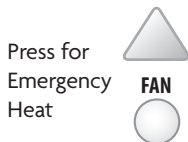
- (B) The temperature spread from the setpoint is equal to or greater than the setpoint plus the 1st stage deadband (step #3, page 10), plus the fixed two degree 2nd stage deadband plus the 3rd stage deadband. The 3rd stage deadband is also fixed at two degrees and is not adjustable.

# About Advanced Features & Operation



*The above figure assumes the minimum on time for the prior stage has been met to allow the next stage to turn on, once the deadbands have been exceeded.*

**EMERGENCY HEAT** - To initiate the Emergency Heat feature, press the **FAN** button. While holding the **FAN** button press the **UP** button. The Cool setpoint display will read 'EH' (emergency heat).



**Exit Emergency Heat** - Follow the same steps as entering Emergency Heat by pressing the **FAN** and **UP** buttons. During Emergency Heat, only OFF and HEAT modes are available by pressing the **MODE** button.

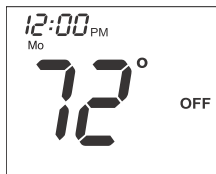


# About Advanced Features & Operation

**FACTORY DEFAULTS** - If, for any reason, you desire to return all the stored settings back to the factory default settings, follow the instructions below.

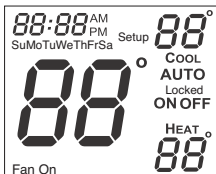
- 1** Place the thermostat in the **OFF** mode by pressing the **MODE** button.

**MODE**



- 2** Press and hold the **MODE** button. While holding the **MODE** button, press and hold the **DOWN** button for 5 seconds. All icons will appear on the display.

**MODE**



- 3** After all of the icons appear, release the **MODE** and **DOWN** buttons. Then press and hold the **FAN** button for 5 seconds.

**FAN**



- 4** After the letters **Fd** appear on the display (Factory Default), release the **FAN** button. Press the **MODE** button **twice** to return to normal operation.

**MODE**



# About Advanced Features & Operation

**WARNING:** *This will reset all Advanced Programming to the default settings. Any information entered prior to this reset will be permanently lost.*

**HEAT/COOL DIFFERENTIAL** - The Heat and Cool setpoints will not be allowed to come any closer to each other than the value set in Advanced Setup step #4, on page 10. This minimum difference is enforced during Auto-changeover operation.

**Note:** *To increase the spread between the heating and cooling setpoints, press the MODE button until only the heat setpoint is displayed; adjust to the desired setpoint. Press the MODE button until only the cool setpoint is displayed; adjust to the desired setpoint. Press the MODE button again to enter the Auto-changeover mode where both the heat and cool setpoints are displayed.*

**MEMORY BACKUP** - In the event of a power loss, the thermostat will retain all stored settings without external power or batteries. However, the clock will not advance during the absence of power

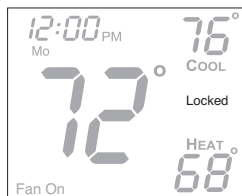
# About Advanced Features & Operation

**KEYPAD LOCKOUT** - To prevent unauthorized use of the thermostat, the front panel buttons may be disabled. To disable, or 'lock' the keypad, press and hold the **MODE** button. While holding the **MODE** button, press the **UP** and **DOWN** buttons together. The LOCKED icon will appear on the display, then release the buttons.

Press all three buttons in the order outlined above for keypad lockout



**MODE**



To **unlock** the keypad, press and hold the **MODE** button. While holding the **MODE** button, press the **UP** and **DOWN** buttons together. The LOCKED icon will disappear from the display, then release the buttons.

# Warranty

**One-Year Warranty** - This Product is warranted to be free from defects in material and workmanship. If it appears within one year from the date of original installation, whether or not actual use begins on that date, that the product does not meet this warranty, a new or remanufactured part, at the manufacturer's sole option to replace any defective part, will be provided without charge for the part itself provided the defective part is returned to the distributor through a qualified servicing dealer.

THIS WARRANTY DOES NOT INCLUDE LABOR OR OTHER COSTS incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts. Such costs may be covered by a separate warranty provided by the installer.

THIS WARRANTY APPLIES ONLY TO PRODUCTS IN THEIR ORIGINAL INSTALLATION LOCATION AND BECOMES VOID UPON REINSTALLATION.

**LIMITATIONS OF WARRANTIES** – ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH THE LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER. ALL WORK UNDER THE TERMS OF THIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME AS THEIR WARRANTY PERIOD ONLY THE REMAINING TIME PERIOD OF THIS WARRANTY.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation and servicing instructions or owner's manual, including filter cleaning and/or replacement and lubrication.
2. Damage or repairs required as a consequence of faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
3. Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
4. Damage as a result of floods, winds, fires, lightning, accidents, corrosive environments or other conditions beyond the control of the Manufacturer.
5. Parts not supplied or designated by the Manufacturer, or damages resulting from their use.
6. Manufacturer products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
7. Electricity or fuel costs or increases in electricity or fuel costs for any reason whatsoever including additional or unusual use of supplemental electric heat.
8. ANY SPECIAL INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion of incidental or consequential damages, so the above may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

