



TSTATD2152-2  
RESIDENTIAL

# Digital Thermostat

Heat Pump • 5+2 Day Programmable



for  
Residential Use

Owner's  
Manual

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# Safety Warnings

## CAUTION



Follow Installation Instructions carefully. DISCONNECT POWER TO THE HEATER - AIR CONDITIONER BEFORE REMOVING THE OLD THERMOSTAT AND INSTALLING THE NEW THERMOSTAT.




## WARNING

The two Alkaline “AA” batteries must be replaced at least once every 12 months to ensure proper operation. The Low Battery icon (fig. 1) will appear on the display when it is time to replace the batteries. If the thermostat is connected to 24v power, the batteries should still be installed, but are not required.



fig. 1

When  is displayed the batteries must be replaced immediately. The manufacturer cannot be liable for improper operation of the thermostat if the batteries are not immediately replaced.

Annual battery replacement is especially critical in locations subject to freezing temperatures. The thermostat will be unable to turn on the heating system if the batteries are exhausted.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# Location of Controls

## PROGRAM SWITCH

RUN program  
Program OFF  
SET program

## AUX HEAT SWITCH

Emergency  
Normal  
Lockout

## FAN SWITCH

On or Auto

## NEXT BUTTON

For programming

How to use: The NEXT button is used to advance from one step to the next in the programming and advanced setup screens (pg 9 - 18).

## RESET FILTER

How to Use: Press and hold the RESET FILTER button to clear the ✓ FILTER icon from the display (pg 5). To adjust when the ✓ FILTER icon appears, see Advanced Setup screens (pg 19).

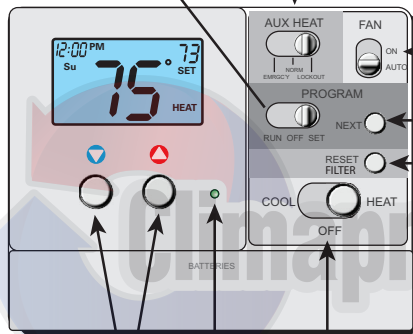
## COOLER & WARMER BUTTONS

## MODE SWITCH

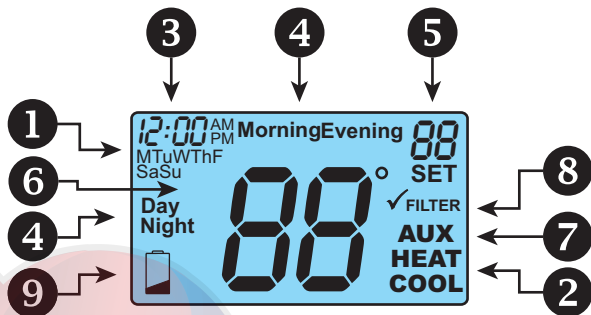
Cool, Off, or Heat

## BI-COLOR LED

Heat or Cool demand indicator when system powered: Red = Heat  
Green = Cool



# Display

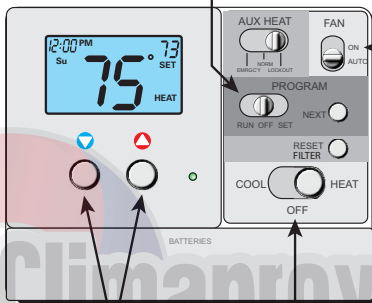


- 1 Day of the week. When programming, MTuWThF represent the five weekdays and SaSu represent the two weekend days.
- 2 Heat and Cool indicators. In normal operation, Heat or Cool appears, depending on the Mode Switch position. When heat or cool is energized, the Heat or Cool indicator will flash.
- 3 Clock Display.
- 4 Time period indicators. These indicate the part of the program that is currently active, if the Program Switch is positioned to RUN.
- 5 Desired set temperature.
- 6 Current room temperature.
- 7 Indicates that 2nd stage of heat is energized.
- 8 Indicates when the filter should be serviced. Appears after 0 - 1950 hours of blower operation (adjustable).
- 9 Indicates batteries need replacement.

# Normal Operation

## PROGRAM SWITCH

RUN program  
Program OFF  
SET program



## FAN SWITCH

On or Auto

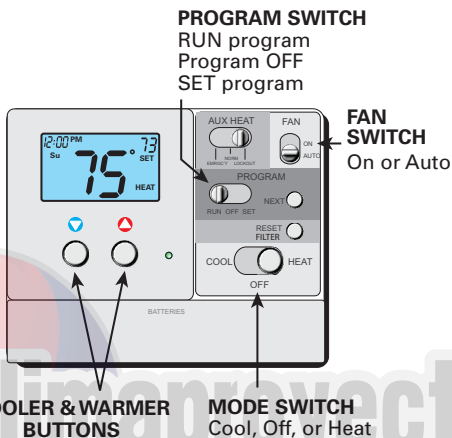
COOLER & WARMER  
BUTTONS

MODE SWITCH  
Cool, Off, or Heat

## Manual Operation (Program Switch OFF)

- 1 Select Cool or Heat with the Mode Switch.
- 2 Normally leave the fan switched to Auto. In Fan Auto, the fan will turn on only with a heat or cool demand. When Fan On is selected, the fan will run continuously.
- 3 Adjust the desired set temperature with the COOLER and WARMER buttons.

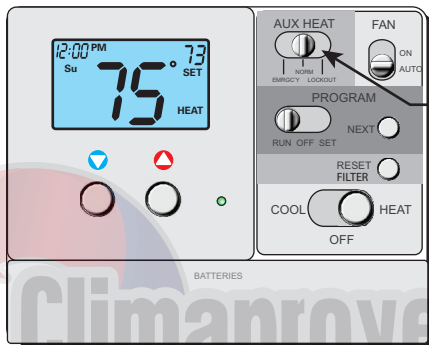
# Normal Operation



## Programmed Operation

- 1 Select Cool or Heat with the Mode Switch.
- 2 Select RUN with the Program Switch.
- 3 Normally leave the fan switched to Auto. In Fan Auto, the fan will turn on only with a heat or cool demand. When Fan On is selected, the fan will run continuously.
- 4 The desired set temperature may be temporarily overridden. The thermostat will revert to the programmed settings in the following time period.

# Aux Heat



**AUX HEAT SWITCH**

**Emergency** - Disables all compressor functions\* and energizes only Aux Heat to satisfy the heat demand.

**Normal** - Aux Heat is allowed to run, if necessary, along with the heat pump to satisfy the heat demand.

**Lockout** - Aux Heat will never turn on regardless of the heat demand.

*\* When the Aux Heat switch is in the Emergency position the compressor will also be locked out during cooling operation.*



# Clock Set



**Slide the Program Switch  
to the SET position.**

Setting the time & day are the first two steps after sliding the Program Switch to SET.

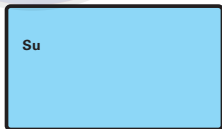


Use these buttons to  
adjust the current time.

Press NEXT  
to advance



*To slew the time more rapidly, push and hold the  
COOLER or WARMER buttons.*



Use these buttons to  
adjust the current day.

This thermostat is preprogrammed from the factory to operate 1 or 2-Stage equipment without the need for further programming. To optimize the installation of this thermostat follow the instructions in the Advanced Setup section.

# Time Period Programming

## Overview

- Slide the Program Switch to the SET position.
- The blinking icon(s) on the display may be changed by pressing the COOLER or WARMER buttons.
- After the blinking icon is changed to the desired selection, press the NEXT button.
- Each item in the time period programming screens will flash and can be modified with the COOLER & WARMER buttons.
- Continue the steps above until programming is complete.
- Slide the Program Switch to RUN and the thermostat will run the time period program.
- If the Program Switch is in the OFF position, the thermostat will not run the time period program. In this case, the thermostat will be a manual heat or cool only thermostat.

### **PROGRAM SWITCH**



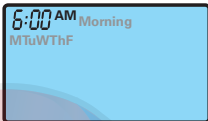
# Time Period Programming

## Weekday Programming



Setting the time & day are the first two steps after sliding the Program Switch to SET (page 9).

Press NEXT to advance



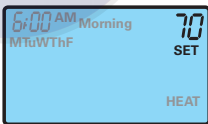
Use these buttons to adjust the start time for the morning time period.

Press NEXT to advance



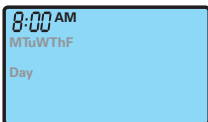
Use these buttons to adjust the cool setpoint for the morning time period.

Press NEXT to advance



Use these buttons to adjust the heat setpoint for the morning time period.

Press NEXT to advance



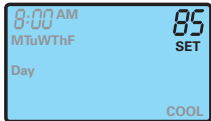
Use these buttons to adjust the start time for the day time period.

Next Page

# Time Period Programming

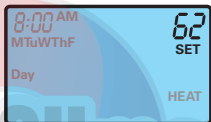
## Weekday Programming

Press NEXT  
to advance



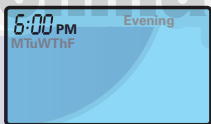
Use these buttons to adjust the cool setpoint for the day time period.

Press NEXT  
to advance



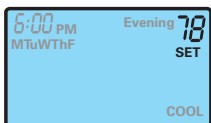
Use these buttons to adjust the heat setpoint for the day time period.

Press NEXT  
to advance



Use these buttons to adjust the start time for the evening time period.

Press NEXT  
to advance



Use these buttons to adjust the cool setpoint for the evening time period.

Next Page

# Time Period Programming

## Weekday Programming

Press NEXT  
to advance



Use these buttons to adjust the heat setpoint for the evening time period.

Press NEXT  
to advance



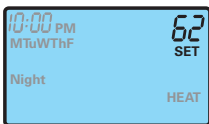
Use these buttons to adjust the start time for the night time period.

Press NEXT  
to advance



Use these buttons to adjust the cool setpoint for the night time period.

Press NEXT  
to advance



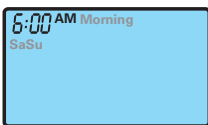
Use these buttons to adjust the heat setpoint for the night time period.

Next Page

# Time Period Programming

## Weekend Programming

Press NEXT  
to advance



Use these buttons to  
adjust the start time for  
the morning time period.



Press NEXT  
to advance



Use these buttons to  
adjust the cool setpoint for  
the morning time period.



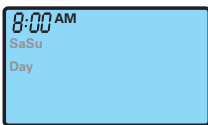
Press NEXT  
to advance



Use these buttons to  
adjust the heat setpoint for  
the morning time period.



Press NEXT  
to advance



Use these buttons to  
adjust the start time for  
the day time period.

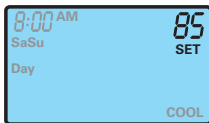


Next Page

# Time Period Programming

## Weekend Programming

Press NEXT  
to advance



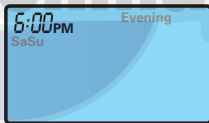
Use these buttons to adjust the cool setpoint for the day time period.

Press NEXT  
to advance



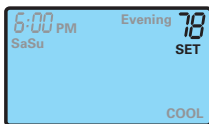
Use these buttons to adjust the heat setpoint for the day time period.

Press NEXT  
to advance



Use these buttons to adjust the start time for the evening time period.

Press NEXT  
to advance



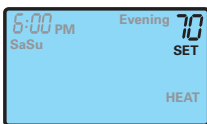
Use these buttons to adjust the cool setpoint for the evening time period.

Next Page

# Time Period Programming

## Weekend Programming

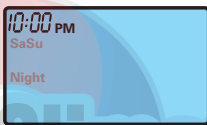
Press NEXT  
to advance



Use these buttons to adjust the heat setpoint for the evening time period.



Press NEXT  
to advance



Use these buttons to adjust the start time for the night time period.



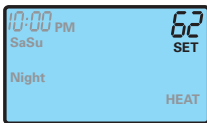
Press NEXT  
to advance



Use these buttons to adjust the cool setpoint for the night time period.



Press NEXT  
to advance



Use these buttons to adjust the heat setpoint for the night time period.



Next Page



# Time Period Programming

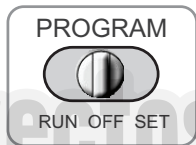
After you have completed setting the time period programming, you have two options:

1) Run the time period program by sliding the Program Switch to the RUN position.



OR

2) Do not run the time period program. The thermostat will operate as a manual heat or cool thermostat. Slide the Program Switch to OFF in this case.



# Advanced Setup

This is normally done by installer at initial installation.

**Enter advanced setup by sliding the Program Switch to SET. When the clock is flashing, press the NEXT button for 5 seconds. Do not release the button until this screen appears.**

Press NEXT to advance

NEXT 



Use these buttons to adjust the deadband from 1 to 6 degrees.

Press NEXT to advance

NEXT 



Use these buttons to adjust the Cycles Per Hour from 2 to 6.

d=no limit (zoning)  
d1=d+no compressor lockout (page 19).

Press NEXT to advance

NEXT 



Select backlight operation when a button is pressed:  
OFF: Never turns on.  
2,4,6 or 8: Seconds backlight will be on.  
ON: Always on.\*

Press NEXT to advance

NEXT 



Use these buttons to select thermostat operation in degrees C or F.

Continued

\* ON is only available if the thermostat is system powered.

# Advanced Setup

Press NEXT to advance

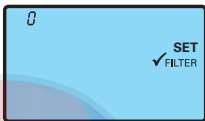


Actual hours of fan operation

Press RESET FILTER



Press and hold the RESET FILTER button to reset the filter counter to 0 and remove the ✓ FILTER icon from the display.



Adjust the number of hours the blower will run before the ✓ FILTER icon appears on the display. 0 = off.

Slide the Program Switch to OFF or RUN to exit Advanced Setup.

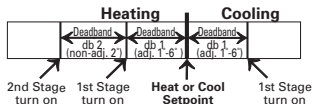
## About Advanced Features & Operation



**CYCLES PER HOUR** - The Cycles Per Hour setting (page 18) monitors the number of times per hour your HVAC unit may energize. For example, at a setting of 6 cycles per hour the HVAC unit will only be allowed to energize once every 10 minutes. The Cycles Per Hour limit may be temporarily overridden by pressing the WARMER or COOLER button.



**TWO STAGE OPERATION** - The 2nd stage of heat (auxiliary heat) is turned on when the room temperature is equal to or less than: the setpoint minus the 1st stage deadband (one degree, adjustable), minus the 2nd stage deadband (two degrees, non-adjustable).



✓ **FILTER ICON** - The ✓ FILTER icon will appear after a set number of hours for fan run time (see above) has been achieved. This counter keeps track of the number of hours of fan run time whether the fan is energized in the heating or cooling modes, or in stand alone 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.



**Enter advanced setup by sliding the Program Switch to SET. When the clock is flashing, press the NEXT button for 5 seconds. Do not release the button until this screen appears.**



When the Cycles Per Hour is flashing, press and hold the NEXT button until this screen appears.



Press and hold the NEXT button again until this screen appears.



After restoring factory defaults, the thermostat screen will display all icons.



Slide the Program Switch to OFF or RUN to return to normal operation.

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

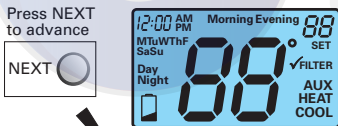
# Calibration

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.

**CAUTION**



**Enter advanced setup by sliding the Program Switch to SET. When the clock is flashing, press the NEXT button for 5 seconds. Do not release the button until this screen appears.**



Slide the Program Switch to OFF or RUN to return to normal operation.

When the Cycles Per Hour is flashing, press and hold the NEXT button until this screen appears.

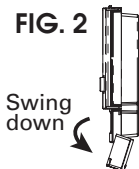
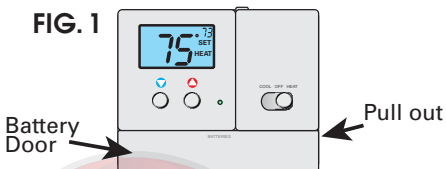
Press the NEXT button **twice** to advance to the calibration screen.

Adjust the temperature reading using the WARMER and COOLER buttons, then **press the NEXT button to store the new value.**

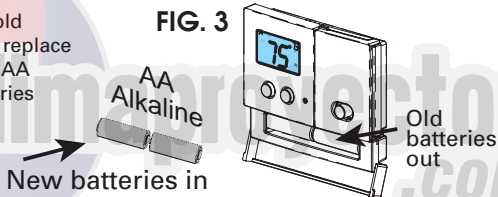


# Battery Replacement

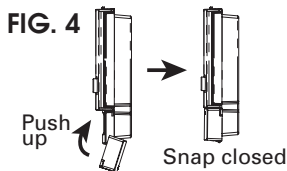
- 1 The batteries are easily accessible from the battery door located on the bottom front of the thermostat (fig. 1). To open the battery slot, pull out on the battery door (fig. 1) and swing down (fig. 2).



- 2 Remove the old batteries and replace with the new AA alkaline batteries (fig. 3).



- 3 Push up on the battery door and snap closed (fig. 4).



The batteries must be replaced immediately when the thermostat displays the low battery icon (fig. 1). If the thermostat is connected to 24v power, the batteries should still be installed. Installing the batteries when system powered (24VAC) will keep the clock running in the event of line power interruption.

**FIG. 1**



# Limited Warranty

**Models: TSTAT\*1100-2, 2100-2, 1152-2, and 2152-2**  
\*2200C-2, \*4271C, \*4272C, \*2111-2, \*4272, \*4273

This thermostat is warranted by Daikin to be free from defects in materials and workmanship under normal use and maintenance, as described below:

- The thermostat is warranted for a period of ONE YEAR, except as provided below.

No warranty continues after the thermostat is removed from the location where it was originally installed.

No warranty applies to, and no warranty is offered by Daikin on, any thermostat ordered over the Internet.

The warranty period begins on the date of the original installation. If that date cannot be verified, the warranty period begins twelve weeks from the date of manufacture (as indicated by the first four digits of the serial number (yyww) where "yy" indicates the year and "ww" indicates the week of manufacture).

As its only responsibility, and your only remedy, Daikin will, without charge, replace any thermostat or thermostat part found to be defective due to workmanship or materials under normal use and maintenance. For warranty credit, the defective thermostat or thermostat part must be returned to a Daikin heating and air conditioning products distributor by a state certified or licensed contractor.

This warranty does not apply to labor, freight, or any other cost associated with the service, repair or operation of the unit.

This warranty is in lieu of all other express warranties. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WARRANTY.

Some states and provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

DAIKIN SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO EXTRA UTILITY EXPENSES OR DAMAGES TO PROPERTY.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Daikin is not responsible for:

1. Damage or repairs required as a consequence of faulty installation or application.
2. Damage as a result of floods, fires, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of Daikin.
3. Use of components or accessories not compatible with this thermostat.
4. Products installed outside the United States or Canada.
5. Damage or repairs required as a result of any improper use, maintenance, operation or servicing.
6. Failure to start due to interruption and/or inadequate electrical service.
7. Changes in the appearance of the unit that do not affect its performance.

This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state or province to province.

Installer Name \_\_\_\_\_

Installation Date \_\_\_\_\_

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

For further information about this warranty, contact Daikin Consumer Affairs at (877) 254-4729 or by mail to 7401 Security Way, Houston, Texas 77040.

# Programming Worksheet

See page 10

DAY	PERIOD	START TIME	COOL	HEAT	
<b>MONDAY</b>	Morning				
	Day				
	Evening				
	Night				
<b>TUESDAY</b>	Morning				<i>Copy Mon to Tues</i> <input type="checkbox"/> No <input type="checkbox"/> Yes
	Day				
	Evening				
	Night				
<b>WEDNESDAY</b>	Morning				<i>Copy Tues to Wed</i> <input type="checkbox"/> No <input type="checkbox"/> Yes
	Day				
	Evening				
	Night				
<b>THURSDAY</b>	Morning				<i>Copy Wed to Thurs</i> <input type="checkbox"/> No <input type="checkbox"/> Yes
	Day				
	Evening				
	Night				
<b>FRIDAY</b>	Morning				<i>Copy Thurs to Fri</i> <input type="checkbox"/> No <input type="checkbox"/> Yes
	Day				
	Evening				
	Night				
<b>SATURDAY</b>	Morning				<i>Copy Fri to Sat</i> <input type="checkbox"/> No <input type="checkbox"/> Yes
	Day				
	Evening				
	Night				
<b>SUNDAY</b>	Morning				<i>Copy Sat to Sun</i> <input type="checkbox"/> No <input type="checkbox"/> Yes
	Day				
	Evening				
	Night				

