Jackson SYSTEMS

Comfort System™
T-21-P Touchscreen Thermostat

User Manual

Version 1.40

INTRODUCTION

Your new Comfort System™ T-21-P touch screen thermostat has been manufactured using the highest quality components and design currently available. As a result, when properly installed and configured by a professional heating and air conditioning contractor, the T-21-P will provide years of trouble-free operation.
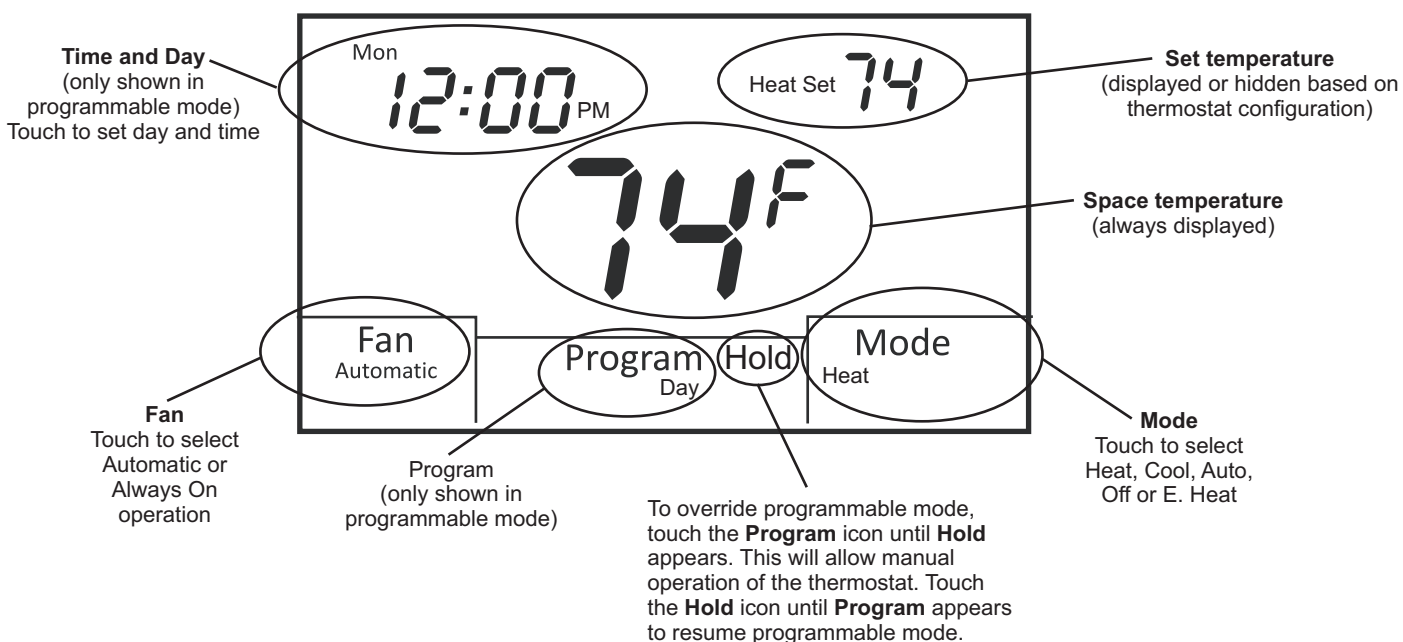
The T-21-P has been designed to be an attractive, highly reliable and easy-to-use thermostat. By taking time to read and understand this User Manual, you can take advantage of the many features offered in this premium product.

Great care has been taken in the preparation of this manual. Jackson Systems takes no responsibility for errors or omissions contained in this document. It is the responsibility of the user to ensure that this thermostat, or equipment connected to it is operating to their respective specifications and in a safe manner.
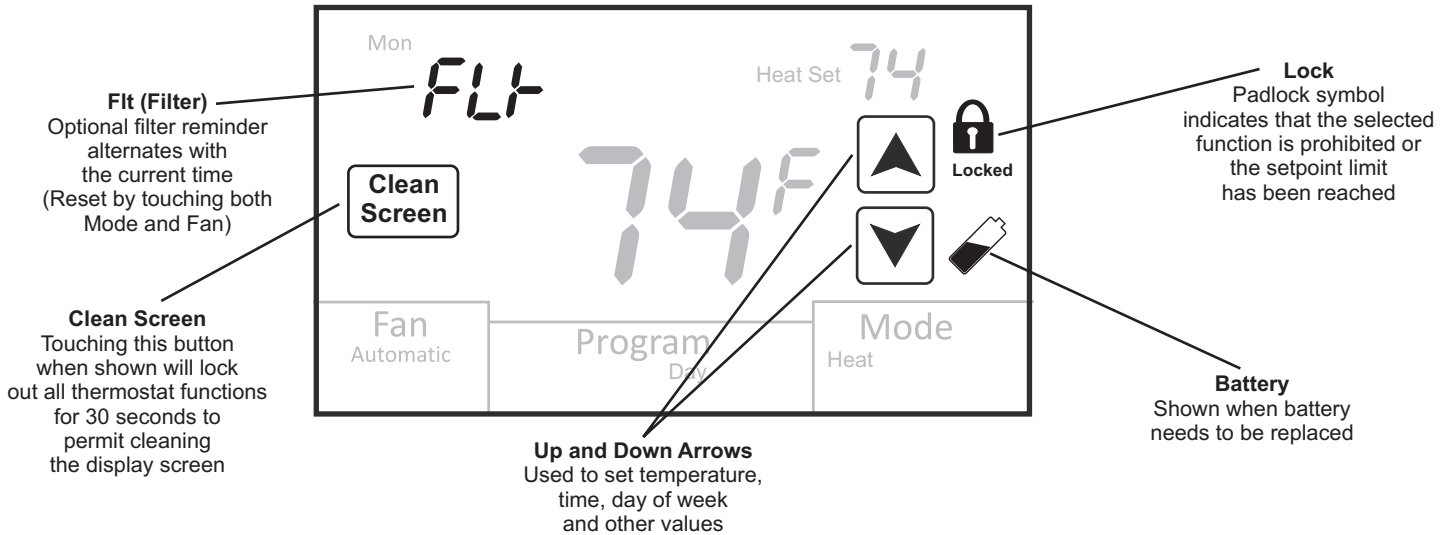
BASIC FUNCTIONS

To simplify use, the T-21-P only displays information relevant to the current mode of operation. When adjustments are required, the thermostat will display additional functions.

Time and Day
(only shown in programmable mode)
Touch to set day and time

Mon
12:00 PM

Heat Set 74

74 F

Set temperature
(displayed or hidden based on thermostat configuration)

Space temperature
(always displayed)

Fan
Automatic

Program
Day

Hold

Mode
Heat

Fan
Touch to select Automatic or Always On operation

Program
(only shown in programmable mode)

To override programmable mode, touch the **Program** icon until **Hold** appears. This will allow manual operation of the thermostat. Touch the **Hold** icon until **Program** appears to resume programmable mode.

Mode
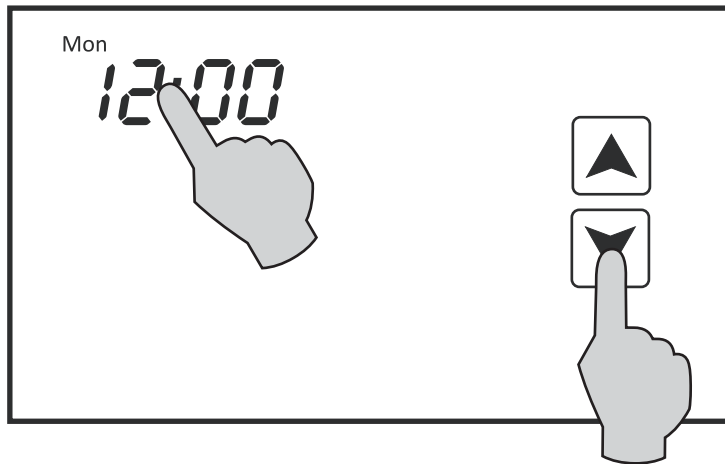Touch to select Heat, Cool, Auto, Off or E. Heat

BASIC FUNCTIONS

Some symbols and display functions are normally hidden from view until needed or may not appear based on the thermostat configuration. Make sure your contractor configures the T-21-P to suit your specific needs.

Flt (Filter)
Optional filter reminder alternates with the current time (Reset by touching both Mode and Fan)

Clean Screen
Touching this button when shown will lock out all thermostat functions for 30 seconds to permit cleaning the display screen

Mon

FLt

Heat Set 74

Clean Screen

74F

Locked

Fan
Automatic

Program
Day

Mode
Heat

Lock
Padlock symbol indicates that the selected function is prohibited or the setpoint limit has been reached

Battery
Shown when battery needs to be replaced

Up and Down Arrows
Used to set temperature, time, day of week and other values

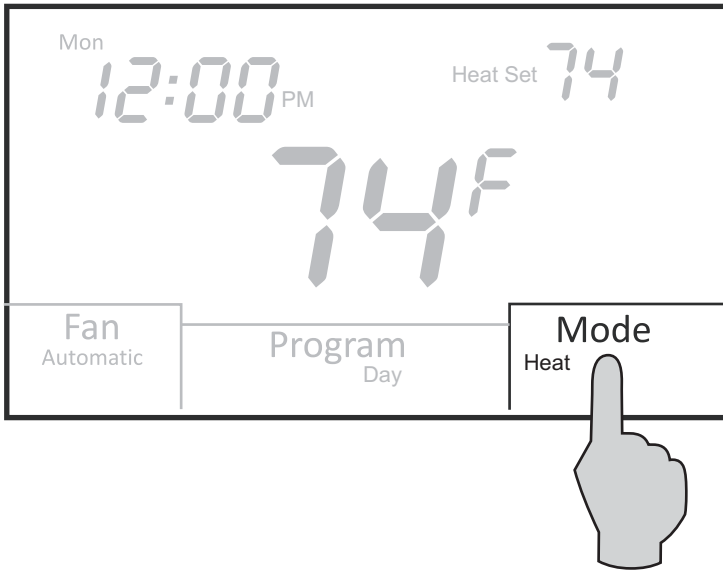# RESIDENTIAL 5-2 DAY PROGRAMMING MODE

Setting the clock

Touch the clock on the display. The day of the week will flash. Use the UP and DOWN arrows to adjust the day. Touch the clock again. The hour will flash. Use the UP and DOWN arrows to adjust the hour. If the time is PM, adjust the hour until the PM symbol appears. Touch the clock again. The minutes will flash. Use the UP and DOWN arrows to adjust the minutes. Touch the clock again and the thermostat will resume normal operation.

Mon

12:00

Mode selection
The T-21-P can control both heating and cooling. Touch the Mode box to cycle through and select available modes. Based on equipment and thermostat configuration, mode selection can be as follows:

Off - Thermostat will not call for heating or cooling.
Heat - Thermostat only controls heating. When heating system is running, **Heat** flashes.
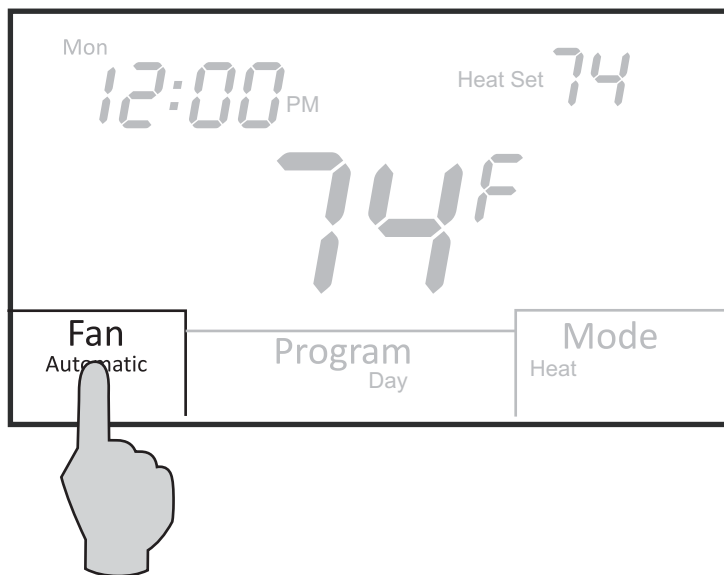**Cool** - Thermostat only controls cooling. When cooling system is running, **Cool** flashes.
Auto - Thermostat controls both heating and cooling. **Heat** or **Cool** will flash when equipment is running.
E. Heat - Emergency heat for heat pump systems should the compressor fail.

Fan selection
Touch the Fan box to select **Automatic** or **Always On** fan mode. In Automatic mode, the fan operates with a heating or cooling call. If set to Always On, the fan will run continuously. If the thermostat is turned Off while the fan is set to Always On, the fan will switch to Automatic mode but can be set back to Always On for constant ventilation when the thermostat is Off.
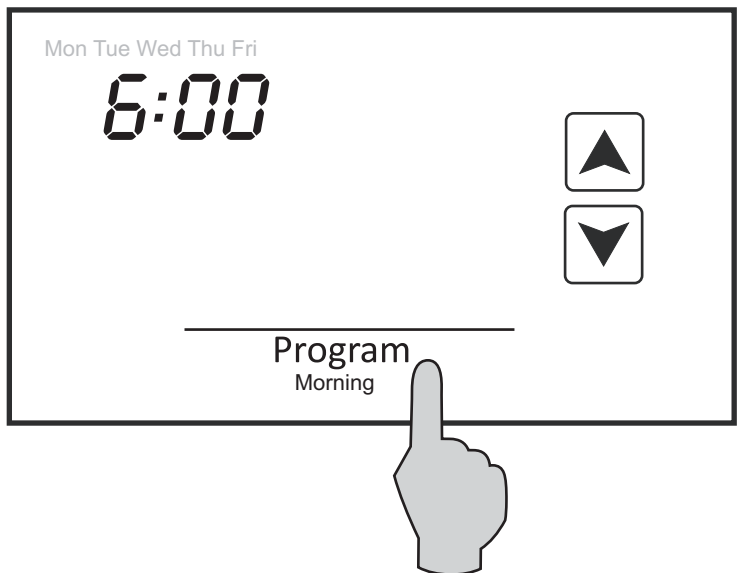
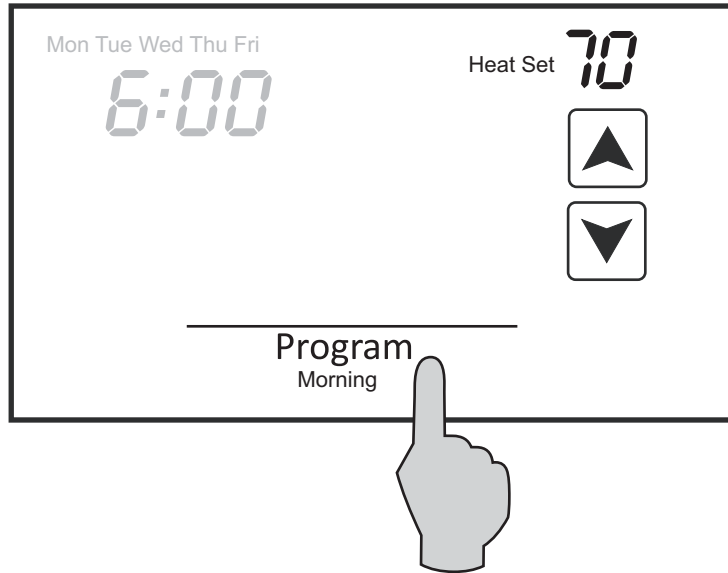**Programming 4 daily events (5-2 schedule)**

Touch and hold the **Program** box until the UP and DOWN arrows along with the flashing days of the week appear. The program format starts with Monday through Friday. You will now be able to program four schedules per day with individual heating and cooling setpoints for all five days of the week. If the Programmable Fan option is ON, you may also program the fan operation for each scheduled event.

Mon Tue Wed Thu Fri

▲

▼

—————————————
Program

Touch the Program box again and the start time for the Morning program will appear and the hour will flash. Use the UP and DOWN arrows to adjust the Morning start time hour. Touch the Program box again and the minutes will flash. Use the UP and Down arrows to adjust the minutes in 10 minute increments.

Mon Tue Wed Thu Fri

6:00

▲

▼

—————————————
Program
Morning

Touch the Program box again and the Morning Heat Set temperature will appear and flash. Use the UP and DOWN arrows to change the heating setpoint.

Mon Tue Wed Thu Fri

6:00

Heat Set 70

▲

▼

Program
Morning

Touch the Program box again and the Morning Cool Set temperature will appear and flash. Use the UP and DOWN arrows to change the cooling setpoint. Repeat the same steps for the Day, Evening and Night programs. After the Night Cool Set temperature is confirmed, touch the Program box again and Saturday and Sunday (Sat Sun) will flash. Repeat the same steps for the Saturday and Sunday programs.

Mon Tue Wed Thu Fri

6:00

Cool
Set 75

▲

▼
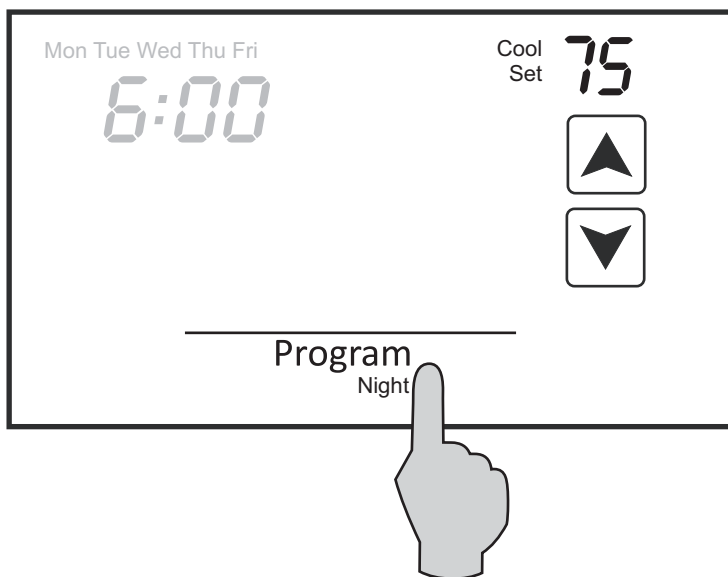
Program
Night

After the Saturday and Sunday Night Cool Set temperature is confirmed or Programmable Fan (if used), the thermostat will resume normal operation in approximately 20 seconds. All scheduled events will be saved in non-volatile memory.
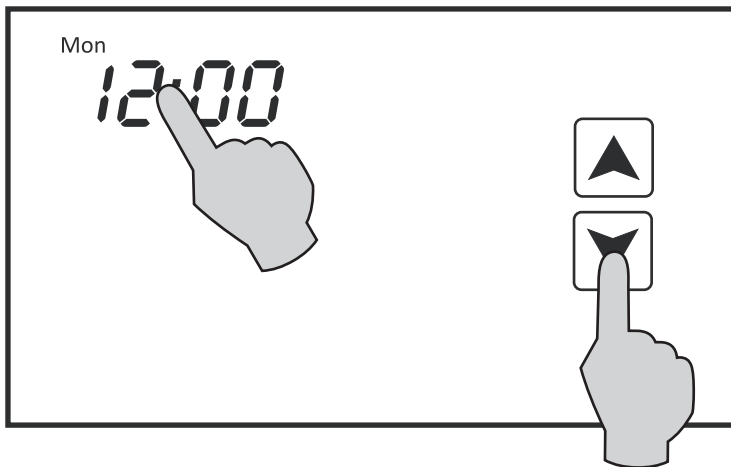
Residential 5-2 Day FactoryDefault Schedule

	Start Time		Set Temperature	
Schedule	(Mon-Fri)	(Sat-Sun)	Heating	Cooling
Morning	6:00 AM	6:00 AM	70	75
Day	8:00 AM	8:00 AM	62	78
Evening	6:00 PM	6:00 PM	70	75
Night	10:00 PM	10:00 PM	62	78

RESIDENTIAL 7-DAY PROGRAMMING MODE

Setting the clock
Touch the clock on the display. The day of the week will flash. Use the UP and DOWN arrows to adjust the day. Touch the clock again. The hour will flash. Use the UP and DOWN arrows to adjust the hour. If the time is PM, adjust the hour until the PM symbol appears. Touch the clock again. The minutes will flash. Use the UP and DOWN arrows to adjust the minutes. Touch the clock again and the thermostat will resume normal operation.

Mode selection

The T-21-P can control both heating and cooling. Touch the Mode box to cycle through and select available modes. Based on equipment and thermostat configuration, mode selection can be as follows:

Off - Thermostat will not call for heating or cooling.
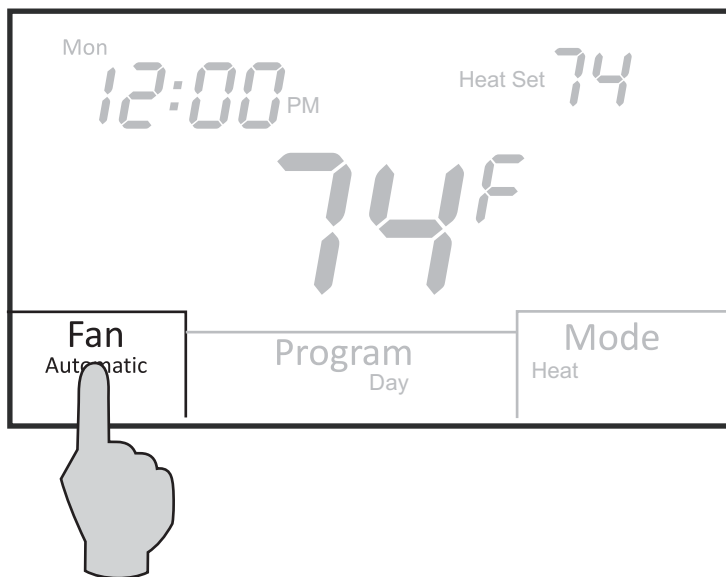**Heat** - Thermostat only controls heating. When heating system is running, **Heat** flashes.
Cool - Thermostat only controls cooling. When cooling system is running, **Cool** flashes.
Auto - Thermostat controls both heating and cooling. **Heat** or **Cool** will flash when equipment is running.
**E. Heat** - Emergency heat for heat pump systems should the compressor fail.

Fan selection

Touch the Fan box to select **Automatic** or **Always On** fan mode. In Automatic mode, the fan operates with a heating or cooling call. If set to Always On, the fan will run continuously. If the thermostat is turned Off while the fan is set to Always On, the fan will switch to Automatic mode but can be set back to Always On for constant ventilation when the thermostat is Off.
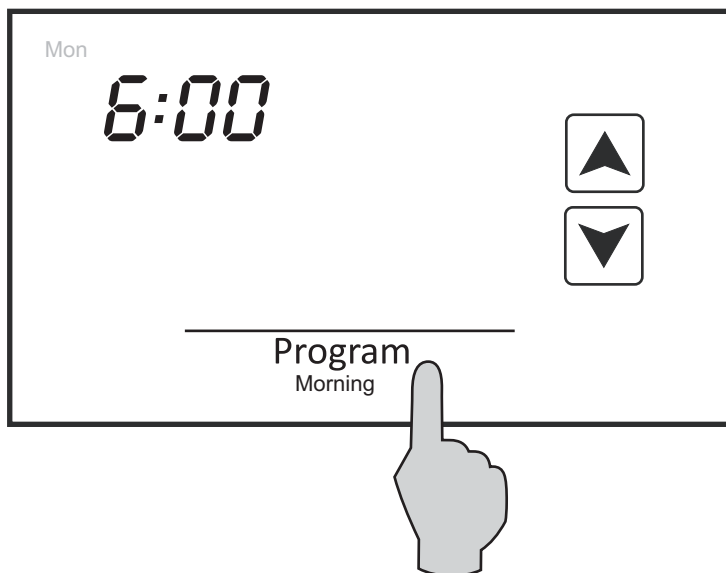

7

**Programming 4 daily events (7 individual days)**

Touch and hold the **Program** box until the UP and DOWN arrows along with the flashing days of the week appear. The program format starts with Monday. You will now be able to program four schedules per day with individual heating and cooling setpoints for each day of the week. If the Programmable Fan option is ON, you may also program the fan operation for each scheduled event.
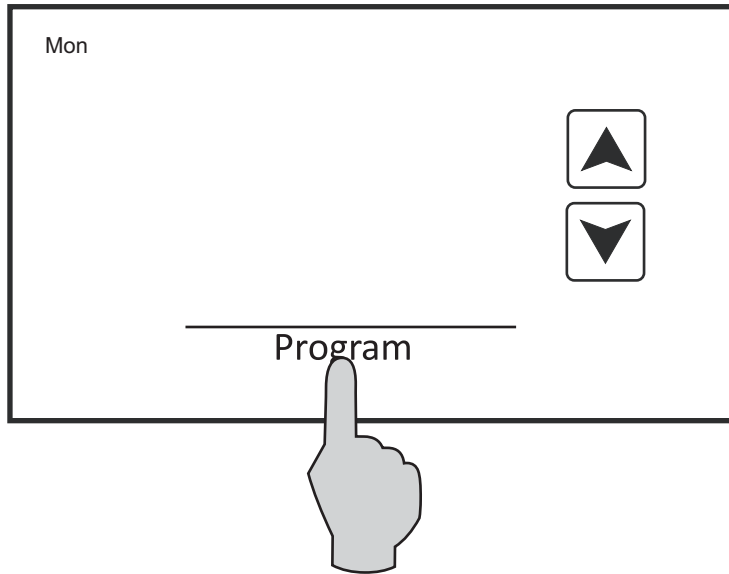
Touch the Program box again and the start time for the Monday Morning program will appear and the hour will flash. Use the UP and DOWN arrows to adjust the Morning start time hour. Touch the Program box again and the minutes will flash. Use the UP and Down arrows to adjust the minutes in 10 minute increments.

Touch the Program box again and the Morning Heat Set temperature will appear and flash. Use the UP and DOWN arrows to change the heating setpoint.

Mon

6:00

Heat Set 70

▲
▼
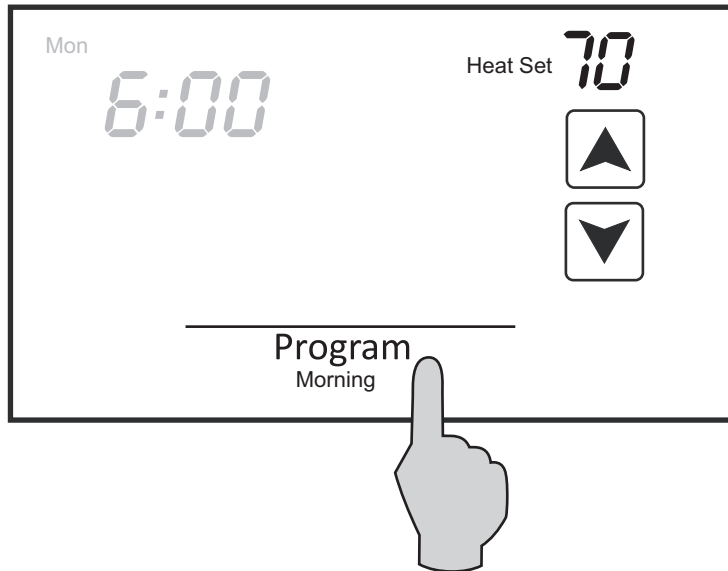
Program
Morning

Touch the Program box again and the Morning Cool Set temperature will appear and flash. Use the UP and DOWN arrows to change the cooling setpoint. Repeat the same steps for the Day, Evening and Night programs. After the Night Cool Set temperature is confirmed, touch the Program box again and the copy symbol will appear. If you wish to copy the Monday schedule to additional days of the week, use the UP and DOWN arrows to select

Mon

C PY

▲
▼
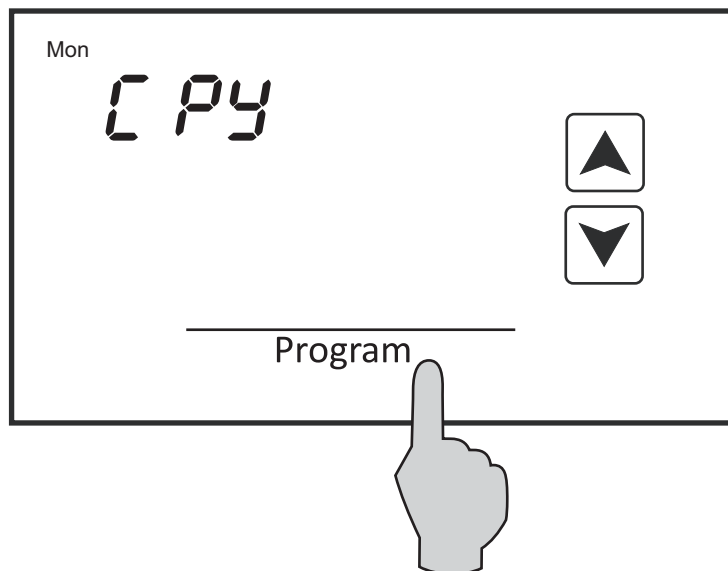
Program

each additional day. For example, you might want to copy the Monday schedule to Tuesday and Wednesday. Once you have selected the days, touch the Program key and the copy symbol will flash confirming that the Monday schedule has been copied to the additional days selected. Touch the Program key again and programming will commence with the next
non-scheduled day, which in the example would be Thursday.
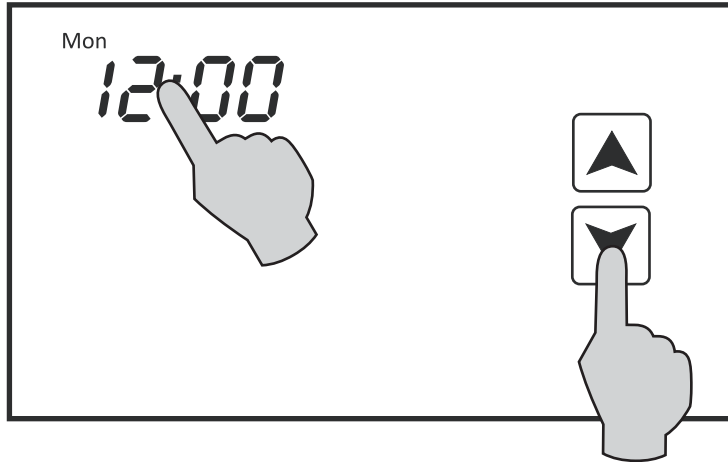
Mon Tue Wed

C PY
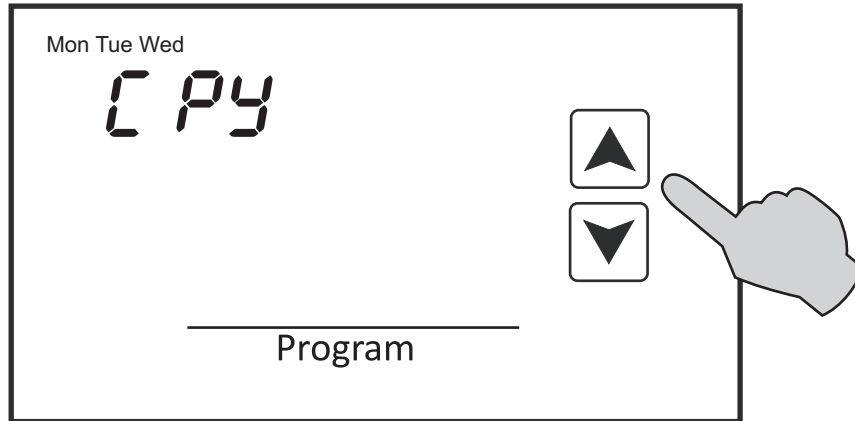
Program

To skip the copy feature and advance to the next day, simply press the Program key after the copy symbol appears. You can program a different schedule for each day of the week.
The factory default schedule is the same as the 5-2 programming mode.

Tue
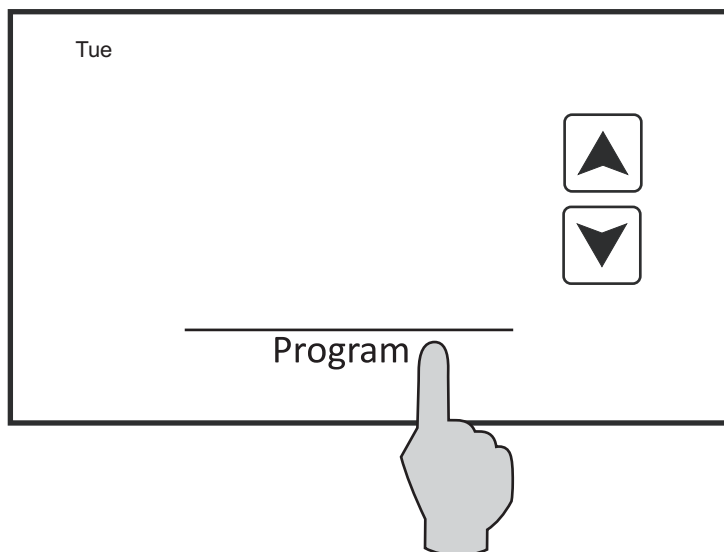
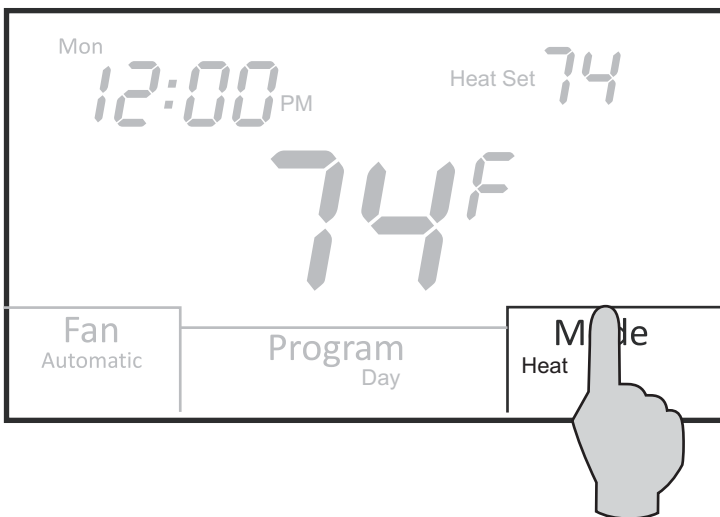Program

COMMERCIAL PROGRAMMING MODE

Setting the clock
Touch the clock on the display. The day of the week will flash. Use the UP and DOWN arrows to adjust the day. Touch the clock again. The hour will flash. Use the UP and DOWN arrows to adjust the hour. If the time is PM, adjust the hour until the PM symbol appears. Touch the clock again. The minutes will flash. Use the UP and DOWN arrows to adjust the minutes. Touch the clock again and the thermostat will resume normal operation.

Mode selection
The T-21-P can control both heating and cooling. Touch the Mode box to cycle through and select available modes. Based on equipment and thermostat configuration, mode selection can be as follows:

Off - Thermostat will not call for heating or cooling.
Heat - Thermostat only controls heating. When heating system is running, **Heat** flashes.
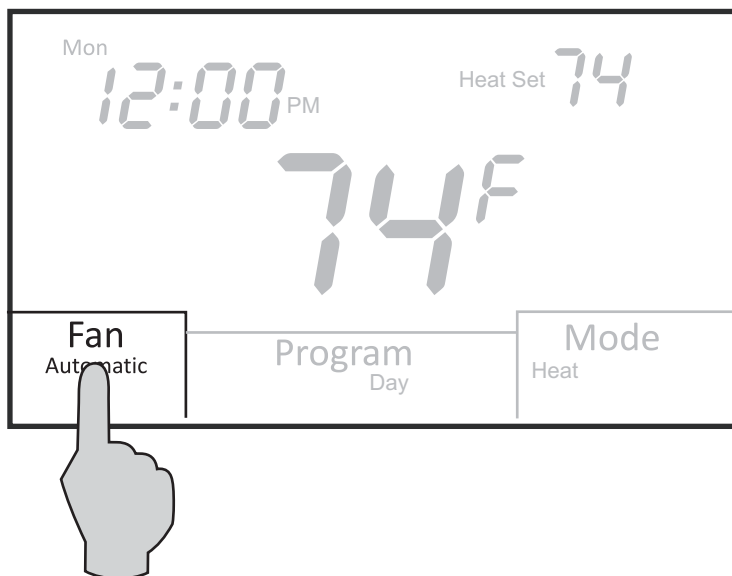**Cool** - Thermostat only controls cooling. When cooling system is running, **Cool** flashes.
Auto - Thermostat controls both heating and cooling. **Heat** or **Cool** will flash when equipment is running.
E. Heat - Emergency heat for heat pump systems should the compressor fail.

Fan selection

Touch the Fan box to select **Automatic** or **Always On** fan mode. In Automatic mode, the fan operates with a heating or cooling call. If set to Always On, the fan will run continuously. If the thermostat is turned Off while the fan is set to Always On, the fan will switch to Automatic mode but can be set back to Always On for constant ventilation when the thermostat is Off.

Mon
12:00 PM
Heat Set 74
74 F

Fan
Automatic

Program
Day

Mode
Heat

Programming 2 daily events (7 Day or 5-2 Schedule)

Touch and hold the **Program** box until the UP and DOWN arrows along with the flashing days of the week appear. The program format starts with Monday for 7-Day programming and Monday through Friday for 5-2 programming. You will now be able to program two schedules per day (Day and Night) with individual heating and cooling setpoints for each schedule. If the Programmable Fan option is ON, you may also program the fan operation for each scheduled event.

Mon

▲
▼
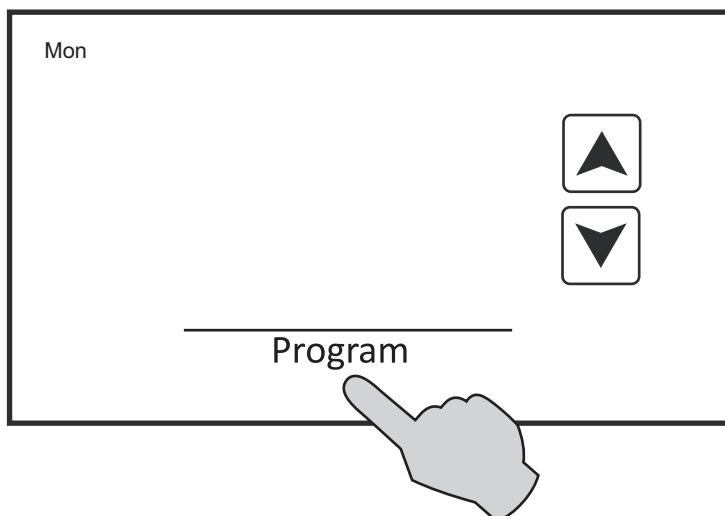
Program

Refer to the programming steps as outlined in the Residential 5-2 or 7-Day programming section. The only difference is that two schedules per day (Day and Night) will be programmed.

Commercial Default Schedule

Schedule	Start Time 7 Days Per Week	Set Temperature Heating	Cooling
Day	6:00 AM	70	75
Night	10:00 PM	62	83

MANUAL MODE

When the T-21-P is configured for manual mode, it provides setpoint adjustment, Mode and Fan selection only. The thermostat clock is hidden and no programming is necessary.

Typical Manual Mode Display

Heat Set 74

74F

Fan
Automatic
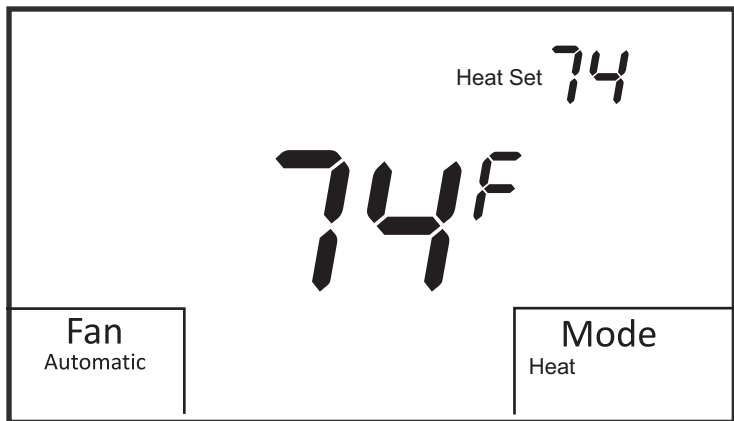
Mode
Heat

TROUBLESHOOTING

Display is blank
- Check HVAC circuit breaker and reset if necessary.

- Make sure power switch at HVAC system is on.

- If thermostat is battery powered only, replace batteries.

Heating or cooling
- Touch MODE to set system to Heat or Cool. Set the heating does not respond temperature a few degrees above the space temperature or the cooling temperature a few degrees below the space temperature. Heat or Cool should flash confirming that the thermostat is calling.

- The thermostat has a 4 minute equipment time delay for cooling and heat pump systems. Wait 4 minutes for the system to restart.

- Contact your installing HVAC contractor if T-21-P does not function properly.

06-1074-080811