## REMOTE CONTROL OPERATION

#### BASIC CONSTRUCTION

- Touch-Screen LCD and three push buttons will allow input from users.
- LCD screen will provide system status & input feedback to user.
- Backlight will illuminate LCD screen for 5 seconds after any user input the 1st touch
  of the LCD screen will only illuminate the backlight (will not respond to associated zone
  function). To activate any command, the backlight for the screen must be on and the
  command must be touched before the backlight goes off.
- Powered via four AAA sized batteries (6V nominal) with LOW BATTERY INDICATOR (5.0V).

# Touch-Screen LCD and Button Layout (Not to scale)

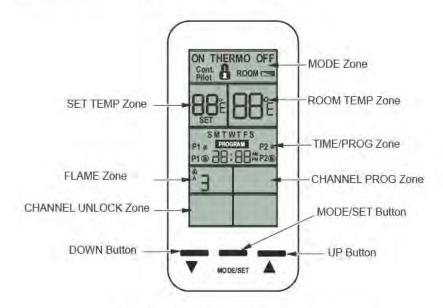


Figure 43 - Touch-Screen LCD and Button Layout

### **FUNCTIONAL DESCRIPTION**

Note: All function adjustments will be automatically accepted 15-seconds after pressing a given touch zone or button. The user may press the MODE/SET button to immediately accept the adjustment manually.

### **CHANNEL SELECTION**

This control may be operated in 3 different sub-channels for applications where 2.4GHz interference causes delayed operation of the remote control. The factory default is Channel 3. To change the channel on the transmitter:

- Touch the CHANNEL PROGRAM and CHANNEL UNLOCK zones simultaneously and hold for 5-seconds.
- The LCD screen will go blank except "Ch" will be displayed in the SET TEMP Zone and either "01", "02", or "03" will be displayed in the ROOM TEMP Zone.
- Press the UP or DOWN buttons to change the channel number (01-03).
- Press the MODE/SET Button to return to the normal operating display.

### Receiver Operation Notes:

- The receiver manufacturer may refer to channels 01, 02, or 03.
- Receiver must be paired with transmitter in the receiver's factory default channel.
- Once paired, the channel selection may be changed in the transmitter per the instructions above.
- Once the channel selection is changed in the transmitter, the power supply to the receiver must be removed for at least 30-seconds, then re-applied.
- The receiver will recognize the new channel selection after about 30-seconds to 1-minute and normal operation will resume.

## **MODES OF OPERATION**

#### **OPERATION MODES:**

- MANUAL OFF
- MANUAL ON
- THERMOSTAT (with optional PRO-GRAM Mode)

The modes may be cycled in the order above by touching the MODE Zone or pressing the MODE/SET Button.

### MANUAL OFF MODE:

- · Transmits flame OFF command.
- Pilot Method: Intermittent Pilot Ignition (IPI)/Spark-to-Pilot only (continuous/ standing pilot not allowed)
- · Pilot flame will be turned OFF
- LCD Displays:
- MODE Zone: OFF is displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: Blank
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: Blank

## **MANUAL ON MODE:**

- Transmits flame ON command.
- Pilot Method: Intermittent Pilot Ignition (IPI)/Spark-to-Pilot only (continuous/ standing pilot not allowed)
- Pilot flame will be ignited before turn Main Flame ON.
- LCD Displays:
- MODE Zone: ON is displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: Blank
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: A Flame Icon and flame setting level number is displayed

#### THERMOSTAT MODE:

- Will cycle flame on and off based on room and set temperatures. Will transmit ON command if SET TEMP (+SWING) is higher than ROOM TEMP and will transmit OFF command if SET TEMP (-SWING) is lower than ROOM TEMP.
- Built-in thermostat will measure room temperature.
- All programming should be written for deg. F and converted to deg. C when selected
- Temperatures may be displayed in degrees F (factory default) or degrees C. Press the UP and DOWN Buttons simultaneously to change between degrees F and C.
- SET TEMP: While in THERMOSTAT mode, press the UP or DOWN Button

- to change the SET TEMP (45-90 deg. F, 7-32 deg. C); the new set temperature will automatically be accepted after 2 seconds. The factory default SET TEMP is 68 deg. F.
- SWING Temperature: This model does not allow for SWING temperature adjustment. This model utilizes thermostatic flame modulation that will modulation the main flame based on the difference between room temperature and set temperature (see example below).
- Important factory SWING TEMPERA-TURE setting is 2 degrees. The thermostatic flame modulation feature will not allow this SWING to be changed.

#### **EXAMPLE:**

Set Temperature	Room Temp.	Flame Level
	74F	OFF
	73F	Level 1
Set Temperature (72) -	— <b>►</b> 72F	Level 2
	71F (or less	s) Level 3

- Pilot Method: Continuous/Standing Pilot only (Intermittent Pilot Ignition (IPI)/ Spark-to-Pilot not allowed).
- Pilot flame will remain ON when Main Flame Cycles ON and OFF.
- Manual Flame Adjustment while in THERMOSTAT mode: If Flame-A is manually adjusted while in thermostat mode, it will override the automatic flame setting until the flame cycles off, then back ON thermostatically; when the flame cycles ON again, automatic flame adjustment will resume. Automatic flame adjustment will also resume if the operational mode is cycled out of, then back into THERMOSTAT mode or if the SET temperature is changed.
- THERMOSTAT OFF LCD Displays:
- MODE Zone: THERMO and OFF is displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: SET TEMP is displayed
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: Blank
- THERMOSTAT ON LCD Displays:

- MODE Zone: THERMO and ON are displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: SET TEMP is displayed
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: A Flame Icon and flame setting level number is displayed

#### **Thermostat Disable Feature**

- The Thermostat Mode (descr bed above) may be disabled for applications where a thermostat is not allowed or undesirable. When Thermostat Mode is Disabled:
  - The Modes of operation will cycle between MANUAL ON and MANUAL OFF (omitting THERMO).
  - Program Operation (described below) is also disabled.
  - The SET TEMP zone will be blank.
  - The room temperature will still be measured & displayed in the ROOM TEMP Zone
  - The TIME/PROG zone will continue to display the Clock and Day of week, but none of the icons associated with Program Mode will be displayed.
- To disable or re-enable the Thermostat, the transmitter must be in MANUAL OFF Mode, then touch and hold the SET TEMP Zone and the DOWN Button simultaneously for 10- seconds. The LCD screen will go blank except either THERMO and OFF or THERMO and ON will flash 3-times (0.5-seconds OFF, 0.5-seconds ON) to indicate the change has been made.

## DAY AND TIME DISPLAY

- The current day of week and time of day will be continuously displayed in the TIME/PROG Zone (except during Setup operations).
- The day of week will be displayed as one of the following: S, M, T, W, T, F, S
- The time of day will be in 12-hour AM, 12-hour PM format. Midnight will be displayed as 12:00am.
- Day/Time Setup:
  - 1. Press and hold the MODE Zone for 5 seconds to enter Day/Time Setup.

- Touch the UP or DOWN Buttons to adjust the day of week (press the MODE/SET Button or wait for 15 seconds for adjustment to be accepted, then enter hour of day adjustment).
- 3. Press the UP or DOWN Buttons to adjust the hour of the day. The time will advance in 1-hour increments; AM and PM will change when the hour advances to 12:00 midnight and 12:00 noon respectively (press the MODE/SET Button or wait for 15 seconds for adjustment to be accepted, then enter minute of hour adjustment).
- 4. Press the UP or DOWN Buttons to adjust the minute of the hour. The time will advance in 1-minute increments (press the MODE/SET Button or wait for 15 seconds and the transmitter will exit Day/Time Setup and return to normal operation).
- LCD Displays when in Day/Time Setup:

MODE Zone: Blank

· ROOM TEMP Zone: Blank

· SET TEMP Zone: Bank

 TIME/PROG Zone: Day of Week, or Time of Day will Flash

· FLAME Zone: Blank

#### **Program Operation**

- Touch the TIME/PROG Zone to activate or deactivate Program Operation. Touching the MODE Zone or pressing the MODE/SET Button will also deactivate Program Operation. When Program Operation is deactivated, the transmitter will return to MANUAL OFF Mode.
- Program Operation will cycle fireplace ignition ON and OFF based on time settings (2 weekend periods and 2 weekday periods) and thermostat settings. Press the MODE/SET Button or wait for 15 seconds to advance to each subsequent program setting.
- Pilot Method (same as Thermostat Mode): Continuous/Standing Pilot only (Intermittent Pilot Ignition (IPI)/ Spark-to-Pilot not allowed).
  - Pilot flame will remain ON when Main Flame Cycles ON and OFF.

- To enter Program Setup, touch and hold the TIME/PROG Zone for 5 seconds.
- · Program OFF LCD Displays:
  - MODE Zone: OFF
  - ROOM TEMP Zone: Measured temperature is displayed
  - SET TEMP Zone: Blank
  - TIME/PROG Zone: Current day indicator, current time, and Program status (P1- OFF or P2-OFF) is displayed
  - FLAME Zone: Blank
- Program ON LCD Displays:
  - MODE Zone: THERMO and either ON or OFF is displayed
  - ROOM TEMP Zone: Measured temperature is displayed
  - SET TEMP Zone: SET TEMP is displayed
  - TIME/PROG Zone: Current day indicator, current time, and Program status (P1- ON or P2-ON) is displayed
  - FLAME Zone:
  - ☐ If Thermostat is ON, A Flame Icon and flame setting level number is displayed.
  - ☐ If Thermostat is OFF, display is blank.

#### **Program Disable Feature**

- The Program Mode (described above) may be disabled for applications where a program operation is not allowed or undesirable. When Program Mode is Disabled:
  - The user will not be able to activate Program Mode
  - The user will not be able to enter Program Setup or edit Program Mode settings.
  - The TIME/PROG zone will continue to display the Clock and Day of week, but none of the icons associated with Program Mode will be displayed.
- To disable or re-enable the Program Mode, the transmitter must be in MAN-UAL OFF Mode, then touch and hold the TIME/PROG Zone and the DOWN Button simultaneously for 10-seconds. The LCD screen will go blank except either PROGRAM and OFF (OFF display in MODE Zone) or PROGRAM and ON (ON display in MODE Zone) will flash 3-times (0.5-seconds OFF, 0.5-seconds

ON) to indicate the change has been made.

# Flame-A (or Main) Adjustment

- Transmits a flame height setting command to the control module to adjust the Flame-A height.
- Available settings are 1-3 with a factory default of 3. Refer to the THERMOSTAT Mode section for additional details on flame modulation in THERMOSTAT mode.
- While in MANUAL ON, THERMOSTAT ON, or PROGRAM ON modes, touch the FLAME Zone to enter Flame-A Adjustment, then press the UP or DOWN buttons to raise and lower the flame; press the MODE/SET Button or wait for 15 seconds to accept the new setting.
- LCD Display: When setting the Flame-A height, the Flame-A icon, and Flame-A setting number will flash in the FLAME Zone.

## Child-Lock Operation

- Child-Lock operation prevents any user input to the transmitter. No mode of operation or feature may be adjusted when Child-Lock is activated. All automatic functions (thermostat, program, etc.) will continue normally.
- To activate or deactivate the Child-Lock feature, press and hold the MODE/SET and DOWN Buttons simultaneously for 5 seconds.
- LCD Displays:
  - When activated, the LOCK icon will appear in the MODE Zone.
  - If any touch-zone or button is pressed when activated, the LCD backlight will illuminate and the LOCK icon will flash for 5 seconds in the MODE Zone.

#### Room Temperature Limit

• The Room Temperature Limit Shutdown feature will operate in MANUAL ON, THERMOSTAT ON mode, and PROGRAM ON modes. If the room temperature reaches 95 deg. F or greater, the transmitter will automatically change to MANUAL OFF mode and send a MANUAL OFF command to the control module. If the user turns the control back ON and the room temperature is still 95F or greater, the transmitter will switch to back manual OFF and send another OFF command the next time the transmitter reads & updates the room temperature (2-minute update interval).

#### PAIRING

The remote and receiver are paired at the factory but in case they do not communicate after proving the batteries are fresh, repairing may be necessary. Follow the steps below to repair the remote to the receiver.

It is helpful to have a flashlight so you can see the connections as described below. Before proceeding, locate the S1 button on the receiver shown in the figure below. You will need to access this button during the re-pairing procedure and only have 20 seconds to press and release it.

To enter pairing mode press and hold the MODE/SET Button for 10-seconds.

- Transmitter will transmit a pairing signal for 20-seconds, then automatically exit pairing mode and return to normal operation.
- LCD Displays When pairing mode is activated:
  - 1. MODE Zone: Blank
  - ROOM TEMP Zone: The letters "On" will flash.
  - SET TEMP Zone: The letter "P" is displayed
  - 4. TIME/PROG Zone: Blank
  - 5 FLAME Zone: Blank

Receiver Operation Note: Once transmitter is in pairing mode, press the yellow or black pairing button on the receiver.

