

Touch Screen Full Function Signature Command (TSFSC) **OPERATING INSTRUCTIONS**

This remote control transmitter provides a multifunctional, reliable and user-friendly remote control for the signature command system. The transmitter can be manually or thermostatically turned the system on and off. Always check the appliance home owner's manual for additional information, or warnings regarding accessory installation before using this remote control system.

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately contact the dealer from whom you purchased the kit or Ambient Technologies Technical Support at 1 800 398 6195. Do not attempt to install any part of the kit unless all parts are in good condition. Please keep this booklet for future reference.

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FEATURES

- Large LCD display
- Touch Screen Panel
- Thermostatic Control Mode with Smart Mode Option
- Timer Mode
- Sleep Mode to Save Battery
- Slide Function for Fast Operation
- Three Flame Height Settings
- Three Brightness Settings for Lights
- Three Speed Control for Blower
- **Auxiliary Control**
- Low battery Indication
- Child Proof Lock-out
- Programmable Timer to turn blower on and off
- LCD Backlight
- On-screen Security Codes Setup

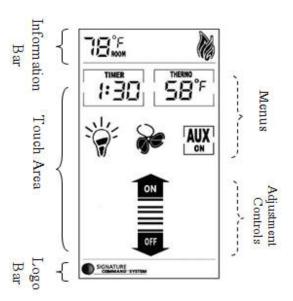
Function Areas of the LCD Display

The figure on the right shows a typical display of the TSFSC LCD.

Information Bar

The information bar shows the room temperature, the "sending signal" radio icon, the low battery indication icon, the child-proof icon, and the flame icon. This area doesn't have touch buttons.

- The room temperature will always be shown after power-up. It displays the room temperature from 40 °F to 99 °F. "Lo" and "HI" will be displayed when the room temperature is lower than 40°F or higher than 99°F, respectively.
- The radio icon will be shown when the transmitter is sending a signal.
- The low battery indication icon will be shown when the battery voltage is low.
- The child-proof icon will be shown when the childproof mode is activated.
- The flame icon indicates the current flame height Off, Low, medium, and High.



Function Areas of the LCD Display

Touch Area

The touch area contains all touch buttons to control the transmitter. It consists of two categories: menus and adjustment arrows. The blue LED backlight lights up for 8 seconds when any of the touch buttons is pressed.

- The menus include TIMER, THERMO, LIGHT, FAN, and AUX.
- The adjustment arrows include ON/up and OFF/down. Their default function is to adjust the flame height. When a button from the menu is pressed, the ON/up and OFF/down buttons will temporarily become adjustment controls for the selected item. When the adjustment is done, the ON/up and OFF/down buttons go back to flame height controller again.

Logo Bar

The Logo Bar contains the brand logo: Signature Command System.

WARNING **Important Safety Information**

- Read this manual thoroughly prior to programming or operating any remote control.
- This remote control system requires **Four (4)** "AAA" alkaline batteries to power the transmitter.
- This remote control system should only be used as described in this manual. Any other use is not recommended and will void the warranty.

TOTE

Due to the sensitive temperature monitoring components in the transmitter, it is necessary to allow the transmitter to stabilize to room temperature before accurate room temperatures are displayed. If the transmitter is activated from a severe cold condition, allow 15 minutes for accurate temperature readings to appear on the LCD display.

WARNING

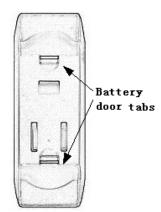
Turn appliance OFF (at the Master Switch) if you are away from your house for an extended period of time. Never leave anything on top of the surface of the transmitter.

■ Initialization and Setting up

Installing Batteries:

The remote transmitter has two battery compartments, one on each end of the transmitter. **Always change all four batteries at the same time.** To install batteries,

- 1. Press down the battery door tab and pull out to remove the battery door
- 2. Install the batteries as indicated inside the battery compartments.
- 3. Close the battery door by snapping in place.
- 4. When all **four** batteries are installed, the transmitter will initialize for 5 seconds and then is ready for use.
- 5. The batteries should be replaced every 6 months or when the low battery icon indicator is displayed.



Changing Temperature Unit

When batteries are installed in the transmitter,

- 1. All available icons on the LCD will be turned on then be cleared.
- 2. The LCD will display temperature unit: °F. Use ON Δ to toggle the units between °F and °C within the first 5 seconds.
- 3. The transmitter enters Manual Mode
- 4. The LCD displays room temperature with the chosen unit.

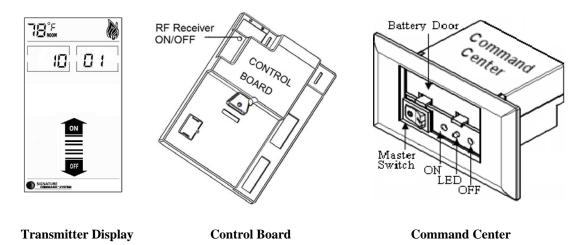
Setting Privacy Code on Transmitter and performing Learn Function:

The remote transmitter privacy code is preset in factory. In the event of activation or interference from other nearby transmissions, change the code using the following procedures (learn function must be performed after changing the code):

- 1. Press the ON/arrow button and the TIMER button at the same time to enter privacy code setup mode.
- 2. The setup display is shown in the figure. The four digits on the top stand for the privacy code (as the actual DIP switches on Monessen's previous remotes). The default values of the four digits will be all "1".
- 3. The first digit will be flashing upon entering the setup mode. Push the "ON" button to toggle its value between "0" and "1", and push the "OFF" button to jump to the next digit. The next digit will then start flashing and the first one stops flashing. Set up the four digits to your choice.
- 4. After setting up all the four digits, push "OFF" to finish the process and return to the previous mode.

The Signature Command control board then needs to re-learn the new setting.

- The RF receiver button on the control board must be in the on position before the learn function can begin. Use paper clip to depress the recessed button, one beep for RF receiver ON or two beeps for RF receiver OFF.
- Holding the OFF button on the Command Center while turning on the master switch will activate the learn function for the transmitter.
- After the above operation, two beeps will be given and the green LED on the Command Center will flash for 10 seconds.
- During the 10 seconds, press the OFF button on a transmitter to learn. Another two beeps will be given to confirm a successful learning.



Do not use two (2) or more remote control systems in the same area with the same privacy code setting, as they will communicate with each other. This may cause the appliances to malfunction.

Resetting the transmitter:

If the transmitter is not working properly, reinstall the batteries to reset the transmitter.

- 1. Pull out at lease one of the batteries.
- Press any key on the screen to discarge.
- Wait for 10 seconds and then reinstall the batteries.

Pushing and holding any key for more than 10 seconds until the display refreshes will also reset the transmitter.

Functions and Operations

General:

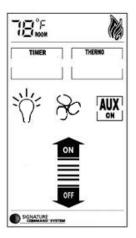
The RFSC Remote Control has two (2) operating modes: Manual and Thermostatic. The control system can be set to temperature range between 45°F and 90°F. The blower speed and flame height can be adjusted in either the manual and thermostatic mode.

The transmitter will operate the remote receiver from 1 foot to a maximum of 30 feet. The distance is reduced when batteries are low.

Manual Mode

In this mode, the TIMER button and the THERMO button will only display "TIMER" and "THERMO", respectively, without showing the time and the Set temperature. Pressing the ON/up and OFF/down buttons will change the flame height if none of the menu buttons (TIMER, THERMO, LIGHT, FAN, AUX) are pressed and flashing.

- Press the ON/up button to turn on the fireplace. The flame icon on the LCD displays High.
- 2. Press the OFF/down button to decrease the flame height and turn off the fireplace. When the OFF/down button is pressed for three times, the flame icon changes from High to Medium, to Low, then to Off.
- 3. If the OFF button is held for more than 3 seconds at any flame height, the fireplace will be turned off and the flame icon shows Off.



Timer Mode

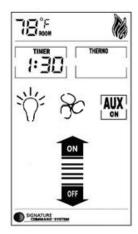
Press the TIMER button to enter timer mode. The fireplace will stay on for a period of time as specified by the timer and then be shut off by the transmitter when the timer counts down to zero.

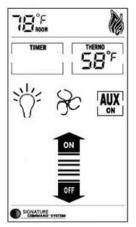
- 1. When the TIMER button is pressed, the Set Time appears in the frame of the button and flashes.
- Use ON/up and OFF/down to increase or decrease the Set Time in 15 min increment, between 0:00 to 6:00. Slide up and down on the arrow buttons will increase or decrease the Set Time in 1 hour increment.
- 3. Push the TIMER button again to confirm the Set Time, the transmitter sends an ON signal to turn on the fireplace.
- The flashing stops and the ON/up and OFF/down buttons become flame height controller again. The flame height will then stay as set up by the ON/up and OFF/down buttons.
- The TIMER button can be used when the transmitter is in Manual Mode or in Thermostat Mode. In both modes, the fireplace will be shut down completely when the timer counts down to zero.
- To exit Timer Mode,
 - a. Push and hold the TIMER button for 3 seconds Or
 - Use the OFF/down buttons to decrease the Set Time to zero.

Thermostat Mode (Auto Mode)

Presse the THERMO button to set the transmitter in thermostat mode. The transmitter will automatically turn on the fireplace when the room temperature is below the set temperature and turn off the appliance when the room temperature is above the set temperature within one degree.

- When the THERMO button is pressed, the Set temperature appears in the frame of the button and flashes.
- Use ON/up and OFF/down to increase or decrease the Set temperature in 1 degree increment, between 45 degrees and 90 degrees. Slide up and down on the arrow buttons will increase or decrease the Set Temperature in 10 degrees increment.



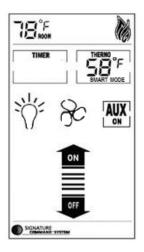


- 3. Press the THERMO button again to confirm the Set Temperature. The transmitter will send out an On signal or an Off signal depending on the relationship between the Set temperature and the Room temperature.
- The flashing stops and the ON/up and OFF/down buttons become flame height controller again. The flame height will then stay as set up by the ON/up and OFF/down buttons.
- To exit Thermostat Mode, push and hold the THERMO buttons for 3 seconds.

Smart Mode Option for Thermostat Mode

Press and hold the THERMO button and the ON/UP button together for 3 seconds to toggle between Smart Mode and the regular Thermostat mode. The icon "Smart Mode" will appear under the Set Temperature. The transmitter will automatically adjust the flame height according to the difference between the Set temperature and the Room temperature.

- When T_{SET} $T_{ROOM} >= 3$ °F, flame height will be on High; 1.
- When T_{SET} $T_{ROOM} = 2^{\circ}F$, flame height will be on Medium; 2.
- 3. When T_{SET} - $T_{ROOM} = 1$ °F, flame height will be on Low;
- When $T_{SET} = T_{ROOM}$, flame height doesn't change;
- When $T_{ROOM} > T_{SET}$, the fireplace will be shut off;
- When T_{SET} T_{ROOM} = 1°F again, flame height will be on Low;
- The fan speed follows the flame height, if the fan is turned on.

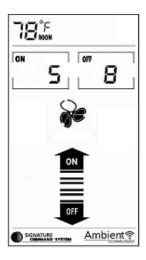


Bower Speed Control

- 1. Press the FAN button to enter the blower speed control mode. The fan icon will start flashing.
- 2. Press the ON/up and OFF/down buttons to increase/decrease the blower speed.
- Press the fan button again to confirm the speed setting. If the fireplace is on, the blower speed will take effect right away; if the fireplace is off, the receiver will remember this setting and the blower is still off (see blower On Delay and Off Delay in the next section).
- After the signal is sent, the O N/up and OFF/down buttons become flame height controller again.
- When the fan button is flashing, slide up and down on the arrow buttons will turn the blower speed to High or Off derictly without pressing the fan button again to confirm.

Blower On Delay Time and Off Delay Time Setup

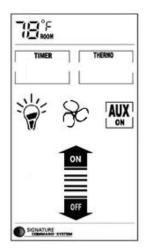
- 1. Hold the FAN button for 3 seconds until two numbers show up on the LCD screen. The left number is blower On Delay Time and the right number is blower Off Delay Time.
- When the first number is flashing, use the ON/up button to set the desired On Delay Time from 0 to 15 min.
- 3. Press the OFF/down button to jump to the Off Delay Time setup.
- When the second number is flashing, use the ON/up button again to set the desired Off Delay Time from 0 to 15 min.
- Press the OFF/down button again to finish the setup and the new settings will be transmitted to the receiver.
- The default settings are 5 minutes for the On Delay Time and 8 minutes for the Off Delay Time, as shown in the figure.



<u>Light Brightness Control</u>

The light brightness control function is used to adjust the brightness of the light bulbs connected to the AC module on the Signature Command System. There are four light brightness levels defined: Off, Low, Medium and High.

- 1. Press the LIGHT button to enter the light brightness control mode. The LIGHT icon will start flashing.
- Press the ON/up and OFF/down buttons to increase/decrease the light brightness (Off-Low-Medium-High).
- Press the light button again to confirm the setting. The new setting will be transmitted to the receiver.
- 4. After the signal is sent, the ON/up and OFF/down buttons become flame height controller again.
- When the light button is flashing, slide up and down on the arrow buttons will turn the light brightness to High or Off derictly without pressing the light button again to confirm.



AUX Control

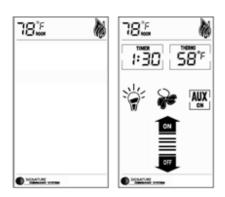
The AUX control function only exists on RFSC. It is used to turn on or turn off the auxiliary connected to the AC module of the Signature Command System. Press the AUX button to to turn on or turn off the auxiliary.

- When the auxiliary is turned on, the icon will become solid text and the "ON" icon will appear below the "AUX" icon.
- When the auxiliary is turned off, the icon will become hollow text and the "ON" icon will disappear.

Setting up Blank Screen or Constant Display in Idle

There is an option to set up how the LCD displays and functions when the transmitter is in idle. There are two choices:

- A) Mode. When the transmitter is in idle, the icons in the "touch area" (timer, thermostat, blower, light, and AUX) will disappear, as shown in the figure on the left. When any of the touch buttons is pressed, those icons will appear and ready to operate.
- B) Mode. The transmitter always displays all available icons showing current status of timer, thermostat, blower, light, and AUX, as shown in the figure on the right.



Press TIMER and THERMO buttons at the same time to toggle between A) and B).

- 1. When the current setting is B), pressing TIMER button and THERMO button at the same time will switch to A) Mode. The touch area icons will disappear.
- When the current setting is A), touch any place in the touch area to bring up the icons then press TIMER button and THERMO button at the same time. The backlight will flash once to indicate that the setting has changed to B).

Safety Features

1. Low Battery Detection

When low battery condition occurs, the transmitter will turn off the fireplace.

A) Battery voltage is checked every one minute. When the battery voltage is low, the LCD displays a low battery icon which will exist in all modes.



The transmitter will not operate with low battery voltage. Change the batteries before the batteries become too weak for normal operations.

Power On Initialization

After the power-on initialization, the transmitter sends a signal to turn off the fireplace.

Thermal Shutdown

When the ambient temperature is more than 99°F, the transmitter will turn off the fireplace.



- The LCD will display "HI".
- The Transmitter will not function until the room temperature has dropped below 99 degree Fahrenheit.

4. Low Temperature Condition



When the ambient temperature is less than 40 degrees Fahrenheit, the LCD will display "LO", and NO SIGNAL will be sent to turn on the appliance.

All functions still remain the same for both Manual Mode and Thermostat Mode

5. Child-proof Protection

The child-proof icon will be shown when the child-proof mode is activated by pressing the ON button and the OFF button at the same time for three seconds.



- A) Enter childproof mode by pressing and holding both the ON button and the OFF button simultaneously for 3 seconds. The Childproof indicator will be shown on the LCD.
- B) Deactivate childproof mode by pressing and holding the ON button and the OFF button simultaneously for 3 seconds again. The Childproof indicator disappears on the LCD.
- C) The transmitter can not be operated in childproof mode.

TROUBLESHOOTING

| Symptom | Causes | Action |
|-----------------------|---|----------------------------------|
| 1. Battery icon on | 1. Low Battery | 1. Replace batteries. Change |
| LCD on transmitter. | | batteries every 6 months. |
| 2. LCD display is | | 2. Check battery installation or |
| blank | | replace batteries. |
| 3. LCD display shows | | 3. Reset the transmitter (see |
| "funny" display | | Resetting the transmitter |
| | | section). |
| 4. Appliance does not | 2. The transmitter did not match with the receiver. | 1. Make sure the transmitter has |
| come on. | | learned to the receiver. |
| | 3. Transmitter measures temperature exceeding | 1. Move transmitter to a cooler |
| | 99 degrees Fahrenheit and shows "HI" on LCD | place and wait until temperature |
| | | drops below 99 degree. |

| | 4. Distance between the transmitter and receiver is more than 30 feet | 1. Make sure the operating distance is less than 30 feet |
|--|---|---|
| 6. Blower is not on after the fireplace is turned on | Blower setting is off Blower delay setting is set too high | Press FAN key to select Fan speed you desire. Press and hold FAN key to set desired ON/OFF delays. This is done in minutes. |

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARRANTY

This warranty gives you specific legal rights and you may also have other rights that vary from state to state or province to province. Answers to any questions regarding our limited warranty may be obtained by writing our corporate offices.

Ambient Technologies warrants each new Ambient Technologies remote control against any defects that are due to faulty material or workmanship to the original owner, for a period of five years after the original date of purchase. This warranty and our liability does not apply to batteries, nor does it include damage to merchandise or the remote control resulting from accident, alteration, neglect, misuse, improper installation or any other failure to follow Ambient Technologies installation and operating instructions.

After contacting Ambient Technologies Tech Service to receive a return authorization number, we agree to repair or replace at our option any Ambient Technologies remote control under warranty. Provided it is returned postage prepaid to our warranty facility in a padded carton within the warranty period, with proof of the original date of purchase and a brief description of the malfunction. This limited warranty does not include the cost of removal or re-installation.

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FOR TECHNICAL SUPPORT CALL 800-398-6195