



Smart Forced Air, Inc.

Director

Operators Manual

Version 1.3

28 January 2019



### **Liability Disclaimer**

**BEFORE INSTALLING AND USING THIS SYSTEM PLEASE READ AND UNDERSTAND THIS IMPORTANT LIABILITY DISCLAIMER:**

Incidental, consequential, punitive, and other similar damages associated with the operation of our system components are liabilities not assumed by Smart Forced Air, Inc. In any event, our maximum financial liability is limited to the total cost of the SFA products associated with any claim. Our liability and warranty do not cover any equipment or products other than Smart Forced Air, Inc. products. Our equipment is designed to be used with the vast majority of HVAC equipment. We strongly advise our customers to seek professional HVAC Dealer support to confirm there are no compatibility issues.



## Welcome!

Thank you for your purchase of the Smart Forced Air Director product.

### Physical Installation

The Director product is designed to be near the furnace. The best mounting will be in an open location where you can secure the device to a piece of wood, or other non-metallic object, with two screws.

Screw the Director to the chosen mounting location using the two included screws.

Once the Director has been mounted, turn off the breaker to the HVAC unit to ensure the power is off for the wiring process.

Once the power has been disconnected, it is time to wire the Director to the furnace control interface. Make note of any previous connections, possibly using a note pad or a camera phone, then disconnect the pre-existing wires.

The kind of HVAC unit you have, conventional or heat pump type, will determine how you wire the system up. The wiring is as follows:

| <u>Connection</u> | <u>Conventional Furnace</u> | <u>Heat Pump</u>    | <u>Typical Color</u> |
|-------------------|-----------------------------|---------------------|----------------------|
| G                 | Fan                         | Fan                 | Green                |
| W1                | Heat Stage 1                | O/B Reversing Valve | White                |
| W2                | Heat Stage 2                | Aux Heat            |                      |
| W3                | Heat Stage 3                | Emergency Heat      |                      |
| Y1                | Cooling Stage 1             | Compressor Stage 1  | Yellow               |
| Y2                | Cooling Stage 2             | Compressor Stage 2  |                      |
| HUM               | (De)Humidification          | (De)Humidification  |                      |
| C                 | Common                      | Common              | Blue                 |
| Rc                | 24Vac Cooling               | 24Vac Cooling       |                      |
| R(h)              | 24Vac (Heating)             | 24Vac (Heating)     | Red                  |

Wire up each of the available wires matching the connection on the Director module to the connection on the HVAC unit. Please note that in MOST cases, not all connections will be made. Most Conventional HVAC units only make use of Fan, Heat 1, possibly cool 1, and 24Vac. More advanced systems will sometimes utilize multiple stages of heating and/or cooling and possibly make use of a humidifier or dehumidifier.

Please note:

- The Director module **REQUIRES** the use of the common wire
- If your HVAC system only uses one transformer and performs cooling, you will need to add a jumper wire between R(h) and Rc – This jumper wire might already be installed in the unit when you receive it. If your system utilizes two transformers (one for heating and one for cooling), you will need to remove that jumper while wiring in the two transformers.



If you have any questions about this process, contact your preferred HVAC dealer as there are hundreds of styles of HVAC unit.

Once the wiring has been completed, the HVAC can be powered up and the Director can be configured using the menu system on the device.

### **Device Configuration**

Once the HVAC unit has been powered up, the Director module should indicate it is operating properly by lighting up the Power LED and periodically flashing the Running LED. In addition, the main display should also be showing system status information.

To configure the device, enter the main menu by pushing the “MENU” button. Scroll down to the “Installer Settings” menu. Once in the Install Settings menu, scroll up and down to the appropriate selection to, then press the “Change” button to cycle through the options until all fields are setup to match the HVAC system’s capabilities.

Exit the menu by pressing the “Main Menu” button to complete the changes to the Installation Settings

### **System Linking**

If not already in the main system menu, select the MENU option. Using the up and down buttons, scroll to the “Link Settings” option, and press the “Select” button. Scroll to the “Enable Linking” item and press the “Select” button. The unit will now be in Linking mode for 60 seconds. During this time, the Linking LED will be flashing on the front panel of the unit, and the display will show status about the Linking process.

Once Linking has been enabled, Linking can also be enabled on another compatible device from Smart Forced Air. Any device except for a register can be linked into the system from the Director; the Register will need to be linked into the system starting with a Thermostat that has already been linked into the system. The reason for this is that each Register must be associated with a specific Thermostat.

Once Linking to another device has successfully completed, the Linking LED will cease to flash, and the unit will display the status. If the unit fails to Link in the allotted time, the LED will cease to flash, the unit will exit Linking mode, and the unit will display the status.

### **Regulatory Info**

To view the device’s regulatory info, press the “Menu” button from the home screen. Using the up and down buttons, scroll down to the “Regulatory Info” line, and press “Select.” This screen indicates the device’s FCC ID and any other pertinent regulatory info.



### How to Contact Us

Find us on the web:

[www.smartforcedair.com](http://www.smartforcedair.com)

Email Us:

[support@smartforcedair.com](mailto:support@smartforcedair.com)

You can contact us via snail mail:

Customer Service

Smart Forced Air

PO BOX 4090

Bozeman, MT

59772



## Warranty

Smart Forced Air, Inc. (SFA) provides a two-year limited warranty against defects in materials and labor in the manufacturing process. The warranty period begins thirty days after we ship the product to the customer. We are aware of your shipping date and grant extra days to our warranty to allow for a reasonable worst-case shipping times and delays in getting the system installed and operational.

Our modules are not expected to be repaired in the field and therefore any hardware issues will involve the fast, no-charge replacement of a warranty covered module. Free shipping is FOB Montana, via ground shipping to the customer for warranty replacements. A free-shipping return shipping label for the return of the failed unit is also included. Out of warranty shipping is charged a nominal freight fee both directions, but we will send you a pre-paid return shipping tag to simplify the customer experience and expense (because we get discounts for commercial freight).

Firmware updates are going to be provided at no charge to present customers during the warranty period. Out-of-warranty hardware replacements will be made at a discounted price contingent on the return of the failed unit. Out-of-warranty firmware updates might be provided at a reasonable fee if new added features are included.

Any warranty-replacement unit will have a 90-day warranty extension granted beyond the remaining warranty period for that module. The customer will be given directions for how to claim her warranty replacement module by going to [www.smartforcedair.com/smartservice](http://www.smartforcedair.com/smartservice). A brief interactive troubleshooting guide will determine if the unit has indeed suffered a hardware failure. Otherwise, suggestions for easy repairs will be given to avoid any un-necessary delays waiting for a replacement unit. For more Customer Service information refer to the Operators Manual.

Smart Forced Air, Inc. is not responsible for defects caused by shipping damage. In that event, the customer must make a claim with the shipping company. We also do not warrant our products against any kind of damage (such as abuse, water, or fire) caused outside the normal expected use of our products. This warranty gives the customer specific legal rights. Some states offer their citizens special warranty protections that may give you special rights over and above those we offer to all customers.



## Regulatory Information

FCC ID: 2ASCS-SFA2019DIR011

### **CAUTION:**

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

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.

### **NOTE:**

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 the 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



## FCC Warning Statement

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 the 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.