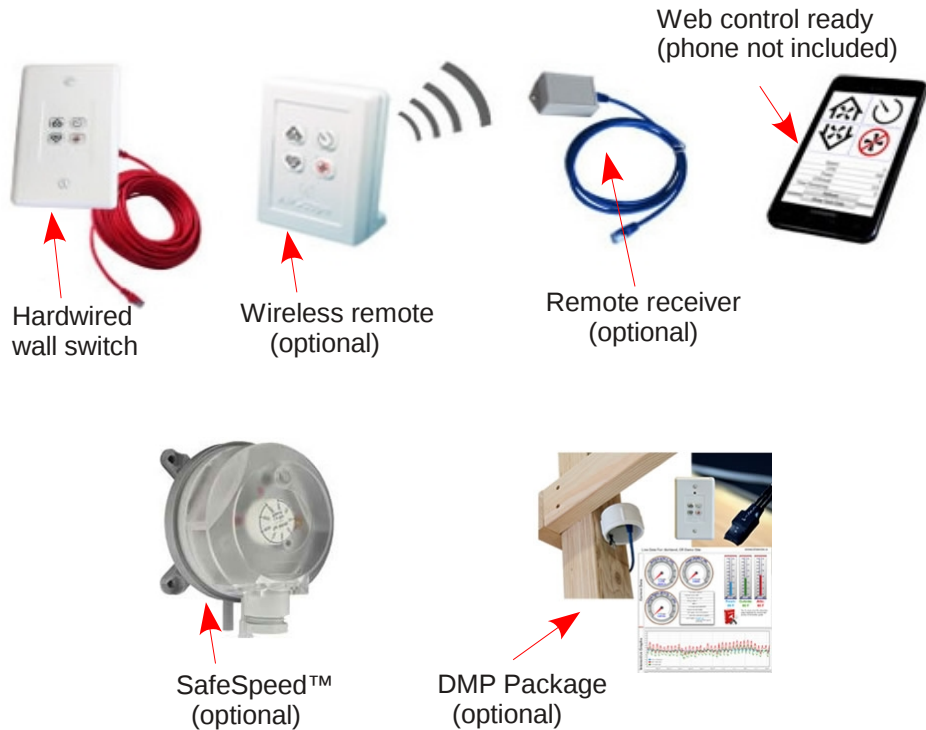




Whole House Fan 2nd Gen Controls Installation & Operation Manual

Controls at a Glance



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Basic Operation

Whether you are using the hardwired switch, the wireless remote or the web control interface, the look and operation is essentially the same. There are 4 buttons that control the speed, on/off and fan timer functions.



Pressing the POWER ON/SPEED Up button will start the fan on low and increase the speed incrementally up to the maximum speed (high speed on 2 speed units).

Pressing the SPEED Down button will decrease the fan speed incrementally down to the minimum speed (low speed on 2 speed units).

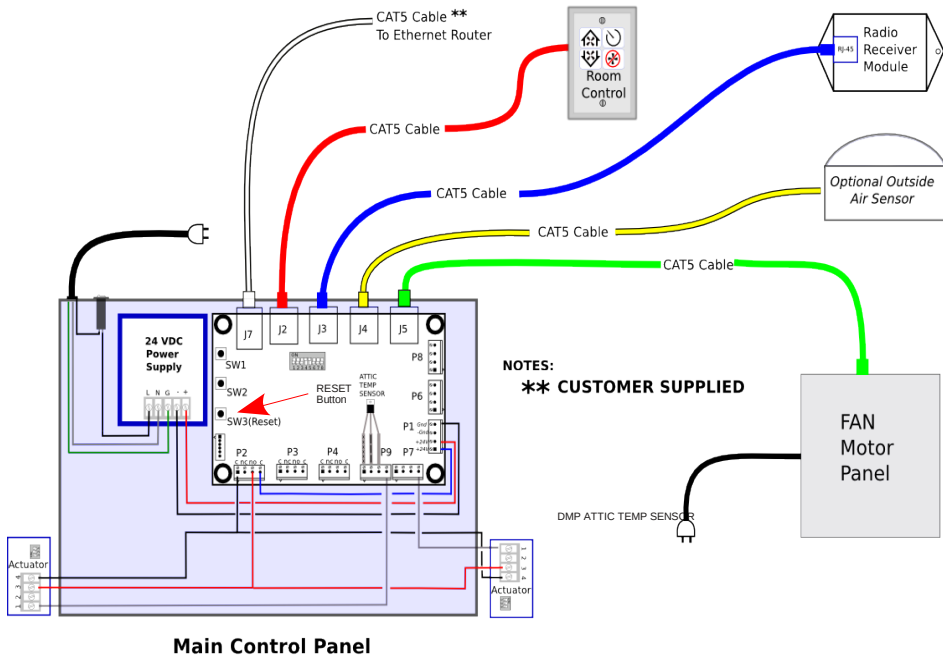
Press the power off button to turn fan off, regardless of current speed setting.

TIMER Operation

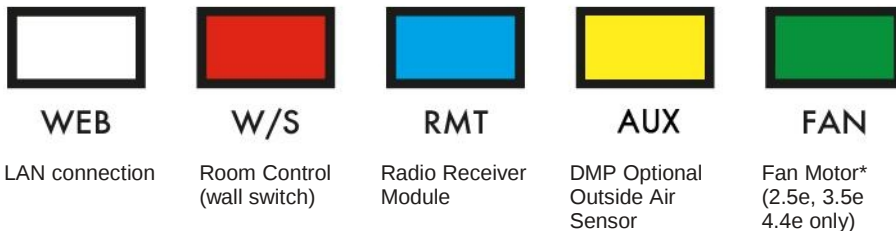
1. Turn ON the whole house fan using the POWER ON/SPEED Up button.
2. Press TIMER button (once for 1 hr, twice for 2 hrs, etc... up to 12 times for 12 hrs).
3. Changing the fan speed after setting the timer will not effect the timer setting.
4. Fan will turn off after set time. Press OFF at any time to cancel remaining time and turn the fan off.

Basic Installation

During the fan install you will need to connect the hardwired switch (room control), remote receiver (if RC-KIT purchased), LAN connection (optional), the optional outdoor air temp sensor (if DMP purchased) and the SafeSpeed™ (if purchased).



All connections are done using CAT5 cables, most of which are supplied with your whole house fan. We recommend shielded CAT5e or CAT6 cables for runs longer than 25 ft. Look for a series of 5 RJ45 ports on the side of the electrical box with this label:



WARNING: Plugging a cable into an incorrect port can cause controller damage

Wall Switch and DMP Interior Temperature Sensor Installation

****Install wall switch in accordance with local codes.**

****Never run wall switch cable in parallel to 110v household wiring. Shielded conduit is recommended.**

****Even if you do not intend to install the wall switch in the wall, we advise connecting it to the unit with the cable kept spooled in the attic for future use**

Whether or not you have purchased the DMP package, the hardwired wall switch looks the same on the switch side and has identical CAT5 connections. The DMP version of the switch has the additional space temperature sensor attached to the metal pin on the back side.



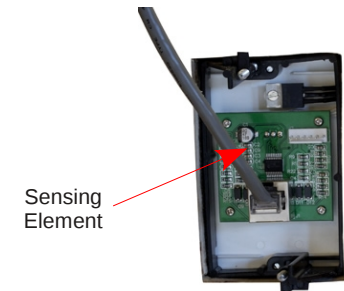
1. Locate a suitable installation location. Use the mounting bracket as a template to mark the hole location.



2. Cut out the hole for the mounting bracket.



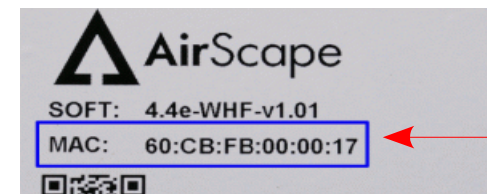
3. Place the mounting bracket in the hole and secure with the locking tabs by tightening the silver screws.



Sensing Element

4. Plug the CAT-5 cable to the port on the back side of the wall switch. Attach wall plate to the mounting bracket using the provided screws.

If you have the DMP version of the switch we recommend insulating the temperature sensing element on the back of the switch to ensure it picks up an accurate space temperature and does not get affected by cool drafts within the wall cavity. In addition, the location of the switch within the home can have an effect on sensor readings. Keep the switch away from any sources of heat or cool such as hot exterior walls or direct sun exposure.



MAC Address of Whole House Fan

Web Interface*

The web control interface can be accessed using any smartphone, tablet or computer that has a web browser and access to the same local network* as your whole house fan.



Control buttons. Operation is the same as the wall switch and remote control.

Fan information such as current speed, timer status, CFM and IP address. The DMP package adds room, attic and outdoor temperature sensors readings.

Your AirScape WHF gets an IP address (something like 192.168.xxx.xxx) from your router through a process called DHCP. This IP address stays the same for long periods, but may change because of power failures, unit resets, etc. For convenience we don't want to have to look for that IP address or URL whenever we want to change fan speeds or set the timer.

Method 1: Download the AirScape Fan Controller App

Method 2: Fix the IP address or set an IP address reservation on your router

Follow the instructions to reserve or fix an IP address as described in <http://blog.airscapfans.com/archives/ip-address-reservation>

Put the IP address into your browser URL window and save that page as a bookmark.

Method 3: Use the AirScape server to find your IP address

Note: To use Method 2 you need to have purchased and be actively using the AirScape Data Monitoring Package (DMP).

Make a bookmark on your browser with the address as follows:
<http://airscapfans.com/control/local-link.php?mac=last-6-characters-of-your-MAC>

You can find the "last-6-characters-of-your-MAC" on the sticker of your WHF control panel. This one (pictured on previous page) has a MAC address of 60:CB:FB:00:00:17. The bookmark for this example would be:
<http://airscapfans.com/control/local-link.php?mac=000017>

***These methods will only work when your device (smartphone, tablet, computer, etc.) is connected to your LAN (local area network).**

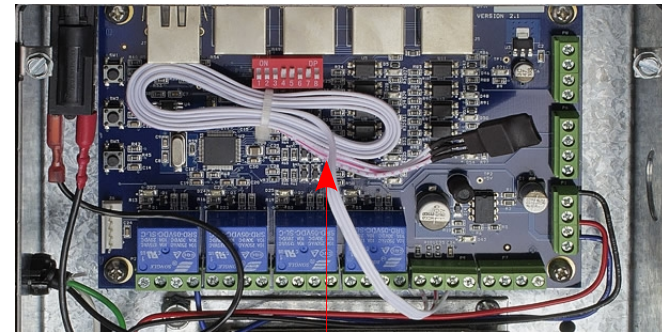
DMP Package Installation (optional)

DMP Interior Air Temperature Sensor Installation

See wall switch installation instructions on page 4.

DMP Attic Temperature Sensor Installation

The attic temperature sensor comes pre-installed from the factory if you have purchased the DMP at the same time as the fan. To complete the setup, remove the cable tie holding the wiring bundle and pass the sensor through one of the control enclosure knockouts. We have provided a strain relief to mount into knockout to hold the temp sensor wire. You can leave the sensor hanging anywhere in the attic. To verify that the sensor is operational, look at the web interface screen or your DMP page.



Attic Temperature Sensor Bundle

DMP Outdoor Air Temperature Sensor Installation

The DMP outdoor air temperature sensor is connected to the whole house fan using a standard CAT5 or CAT5e network cable. Attach the cap sensor cover to your mounting location with a standard wood screw, taking care not to crack the cap.



Sensing Element

DMP Outdoor Air Temperature Sensor Installation (cont)

Here are some tips and guidelines for sensor placement to minimize the chance of false readings or damage to the sensor:

- Install on a North facing wall, away from any direct sunlight exposure.
- Avoid eaves above lower roof lines that might expose the sensor to radiant heat or heat pooling.
- Avoid areas subject to excessive vibration or electrical noise.
- Install with the cap opening facing down to prevent any water entry or pooling.
- The mounting height can be from near ground level, all the way up into the eaves. It is best to mount the sensor at least 2 feet above the ground level.

DMP – How to see the data after the sensors are installed

1. If you purchased your whole house fan and DMP directly

Log into the airscapfans.com website and go to your account page using the email address and password used when purchasing your WHF.

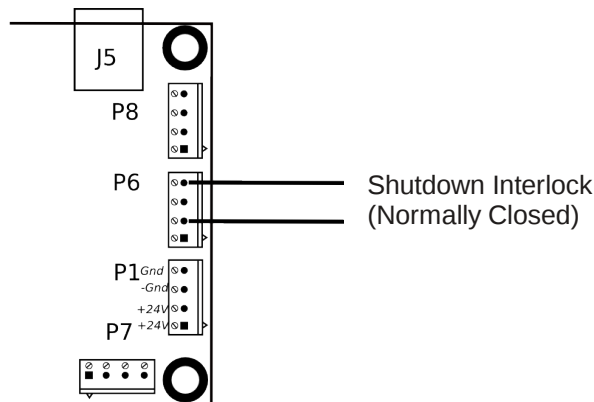
2. If you purchased your WHF and DMP through an installer or 3rd party

Create a profile at airscapfans.com/login.php. Have your fan MAC address available and contact AirScape customer service at 866-448-4187 to register your WHF and DMP to your own profile.

Fan Shutdown Interlock (optional)

The AirScape whole house fan can be remotely shut down by devices such as a smoke detectors or a furnace interlock. To enable the shutdown interlock function, DIP switch 4 must be set to the OFF position (factory default is ON position).

The interlock requires a **DRY CONTACT**, such as a relay contact, wired to terminals P6-2 and P6-4. This is a normally closed (NC) interlock so an open circuit (contact) will cause a fan shutdown. Note that the fan will remain off even after the contact re-closes until a new start command is issued either through the remote control or the wall switch.



SafeSpeed™ Kit and DPS-SENSE Installation (optional)



The SafeSpeed™ sensor (DPS-SENSE) is typically installed in the attic close to the whole house fan.

It must be installed in the **VERTICAL ORIENTATION** with pressure connections pointed downward to function properly.

Outside Pressure Sensing Tube Connection (P1)

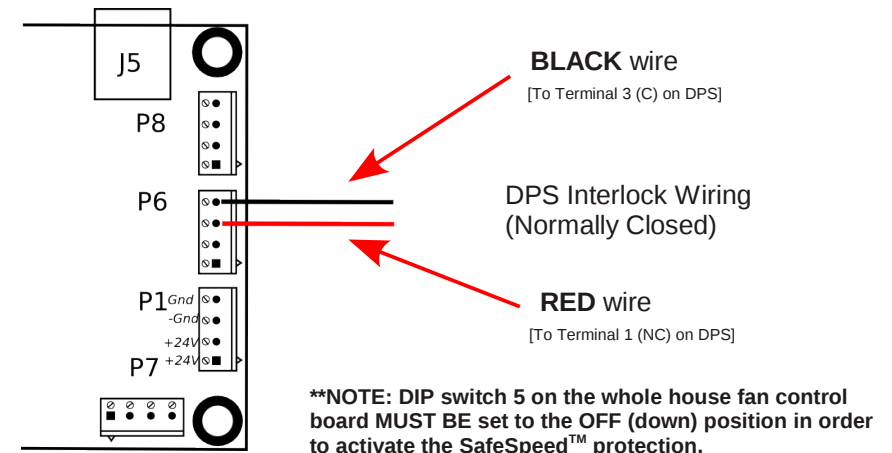
House Pressure Sensing Tube Connection (P2)

The sensor has 2 pressure sensing connections. Connection P1 is for the outside air pressure and connection P2 is for the house pressure.

For the house pressure connection, drill a small hole in the wood framing between the whole house fan and the grille and insert the tube into that hole. Seal any gaps around the tube with caulking to prevent leaks.

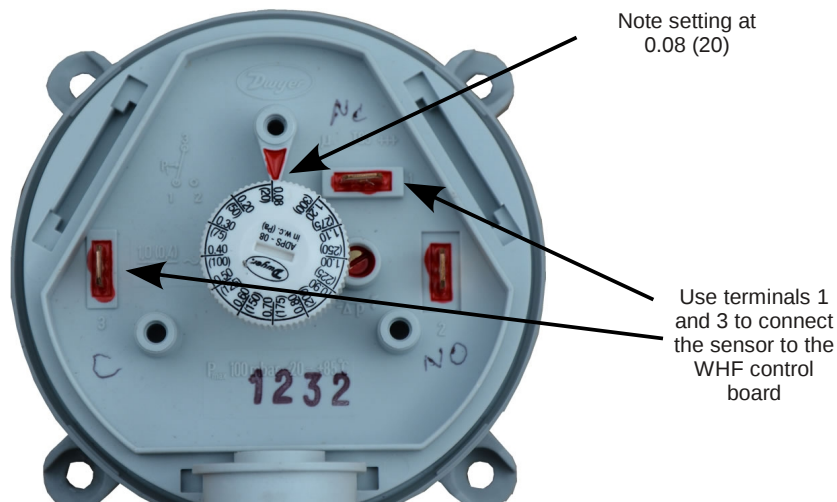
For the outside air pressure connection, run the tube to an eave and push the tube through one of the vents so that the open end is outdoors. We recommend using the 3/16" ID (inside diameter) clear vinyl tubing which is included with the DPS-SENSE kit.

After installing the tubing, connect the wiring connections from the DPS-SENSE to the whole house fan control board as per the diagram below.



****We do not advise adjusting the pressure setting knob in most applications. It comes factory set at 0.08(20). See installation tips for more information****

DIP switch 5 on the whole house fan control board MUST BE set to the OFF (down) position in order to activate the SafeSpeed™ protection.



Here are some tips and guidelines on sensor placement to minimize the chance of false readings:

- The sensor must be mounted in a VERTICAL ORIENTATION with the pressure tube connections facing DOWNWARD.
- Tubes must not have any sharp bends or kinks
- Leaky tubes or tube connections will result in inaccurate operation
- Avoid high wind areas that can create false outdoor pressure readings
- Avoid areas subject to excessive vibration or electrical noise

Sequence of Operation:

During whole house fan operation, the SafeSpeed™ system monitors the difference between the indoor and outdoor pressures to determine if the pressure inside the house has become overly negative.

If the negative pressure crosses the alarm threshold, the AirScape controller begins reducing the fan speed. The controller reduces the speed of the fan by 1 speed setting every 30 seconds until the house pressure is lowered below the alarm threshold. If the fan gets to its minimum speed and the alarm is still active the whole house fan will shut down.

Note that the web interface will indicate that the SafeSpeed™ protection had activated via the "Reduced by Pressure Control" message. Pressing any button resets the "Reduced by Pressure Control" message and returns the whole house fan to normal operation.

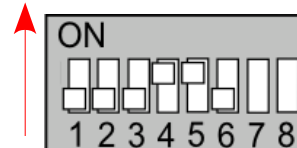
SafeSpeed Kit and DPS-SENS Installation Tips & Troubleshooting

1. Check that there is adequate Net Free Area and open windows.
2. Confirm orientation of the sensor – perfectly vertical with ports pointing down.
3. Confirm that sensor tubes at the sensor are firmly attached to ports.
4. Consider adjusting location of sensor tubes to avoid alignment directly with airflow (for instance, not directly through the cube core grille) and aspect (experimenting with different angles).
5. As a last recourse, slightly adjust the pressure setting knob to 0.20 (50).

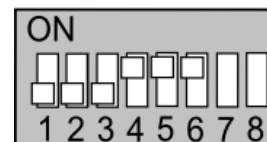
Dip Switches

DIP switches on the main control board allow on-site modification of fan settings. The unit ships pre-configured so there are **no modifications required** to the dip switch position during a typical installation.

ON Position Direction
(up towards RJ45 jacks)



Factory default with no DMP.



Factory default with DMP and data upload enabled.

**DIP switches 7 and 8 must NOT be modified from the factory configuration.*

More detail on DIP switch functions

DIP 1,2,3 = not used (default of OFF position).

DIP 4 = Fan shutdown interlock. Set to ON position to disable the interlock function (default of ON position).

DIP 5 = DPS interlock. Set to ON position to disable the interlock function (default of ON position).

DIP 6 = DMP data upload. Set to OFF position to disable data upload.

DIP 7,8 = Factory settings. DO NOT MODIFY.

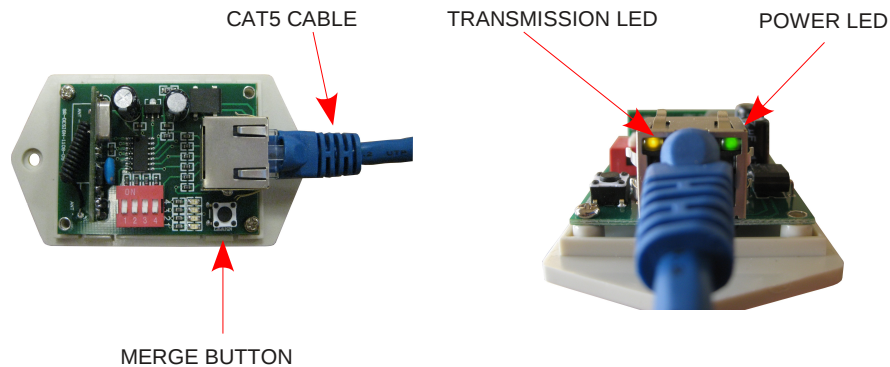
NOTE: The controller must be reset following any DIP switch changes.

Controller Reset

To reset the whole house fan main controller, press the SW3 button on the left side of the control board for 1 second. Controller LED lights will turn off indicating reset in progress.

Wireless Remote Merging Instructions (optional)

The remote control receiver and transmitter units need to be installed and merged prior to use. Step 4 in the following procedure will need to be repeated if a merge is lost (i.e. long term power outage or dead battery) or if you purchase additional transmitters.



STEP 1: Remove the wireless receiver cover.

STEP 2: Attach the wireless receiver to the Blue RMT port on the damper box.

STEP 3: Provide power to the damper box. The power LED will illuminate on the receiver.

STEP 4: Press and release the merge button on the Wireless Receiver as pictured above to begin the merging process. The transmission LED will illuminate indicating the receiver is ready to merge with the transmitter. IMMEDIATELY press any button on the Remote Transmitter to merge it with the Receiver. The transmission LED will turn off indicating a successful merge.

STEP 5: Repeat step 4 for additional transmitters.

STEP 6: Re-install the receiver cover.

The wireless remote has an average range of 60 feet and the RF signal will travel through walls and most building materials

NOTE: To reset memory of all merged transmitters press and hold the merge button until the transmission LED turns off.

NOTE: If the remote stops communicating with the receiver, clear the memory and re-merge the transmitter(s)

NOTE: Do not change the DIP switch configuration on the remote receiver

Warranty

Hardware

AirScape warrants the original end user ("Customer") that new AirScape branded controls will be free from defects in workmanship and materials, under normal use, for one (1) year from the original purchase date.

Software

AirScape warrants to Customer that the AirScape Controller software will perform in substantial conformance to its program specifications for a period of one (1) year from the date of the original purchase.

Exclusions

This warranty excludes (1) physical damage to the surface of the product, including cracks or scratches on the LCD screen or outside casing; (2) damage caused by misuse, neglect, improper installation, unauthorized attempts to open, repair, or modify the product, or any other cause beyond the range of intended use; (3) damage caused by accident, fire, power changes, other hazard, or Acts of God; or (4) use of the product with any device if such device causes the problem.

Exclusive Remedies

Should a covered defect occur during the warranty period and Customer notifies AirScape, Customer's sole and exclusive remedy will be, at AirScape's sole option and expense, to repair or replace the product. Replacement products or parts may be new or reconditioned or a comparable version of the defective item. AirScape warrants any replaced product or part for a period of ninety (90) days from shipment, or through the end of the original warranty, whichever is longer.

Obtaining Warranty Service

Customer must contact and return product to AirScape, Product dealer or Installer within the applicable warranty period to obtain warranty service. Dated proof of original purchase will be required. AirScape will not be responsible for Customer's memory data contained in, stored on, or integrated with any products returned to AirScape for repair, whether under warranty or not.

Warranty Exclusive

The foregoing warranties and remedies are exclusive and in lieu of all other Warranties, express or implied, including warranties of merchantability, Fitness for a particular purpose, correspondence with description, and Non-infringement, all of which are expressly disclaimed by AirScape and its suppliers.

Disclaimer

Neither AirScape nor its suppliers shall be liable for incidental, consequential, indirect, special, or punitive damages of any kind, or financial loss arising out of or in connection with the sale or use of this product, whether based in contract, Tort (including negligence) or any other theory, even if AirScape has been advised of the possibility of such damages AirScape's entire liability shall be limited to replacement or repair of the product.



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For all technical or warranty related issues or for more information on AirScape products, please contact us.