



ORDER #: _____

S/N: _____

MAC: _____

(Required for Warranty)

1.0/1.0XR & 1.7/1.7XR

WHOLE HOUSE FAN

INSTALLATION AND OPERATION MANUAL



Thank you for purchasing an AirScape® whole house fan. Your fan has been designed to provide your home with natural, quiet, and energy-efficient cooling for many years.

Please take a few minutes to read over this manual and its accompanying documents to make sure you are prepared to install the fan. In particular:

- The green THEORY OF OPERATION insert provides information critical to locating this fan within the home, and to ensuring the home's attic has adequate ventilation for its operation.
- This manual's ELECTRICAL REQUIREMENTS section described the electrical supply necessary to operate this fan.

Before installing this fan, inspect it and all of its parts for any damage it may have sustained during shipping. DO NOT INSTALL DAMAGED EQUIPMENT. If you suspect this fan has been damaged during shipping, contact AirScape technical support by phone at 1.866.448.4187, or email at experts@airscapefans.com.

Whole House Fans are designed to be installed within a home's attic, which makes them and their sub-components extremely difficult to access once installed. **TEST THIS FAN OUTSIDE OF THE ATTIC BEFORE INSTALLING IT. Connect the fan to its controls and to a power supply, and ensure it operates properly by turning it on and cycling through its speed settings.** If any difficulties are encountered, contact AirScape technical support at the numbers listed above.

SAFETY INFORMATION



Some of the principles of this product's safe installation and operation are not immediately obvious. Read the following safety information before continuing further:



- **Never** operate this fan without a window or door opened.
- This fan is meant for general ventilation. ***It has NOT been designed to ventilate particle laden and/or explosive mixtures of air.***
- This fan is NOT for use in kitchens.
- **Never** force open the damper doors, this could severely damage the actuators. **Always** use the yellow clutch releases located on the actuators before attempting to manually open or close the damper doors.
- Before installing or servicing this fan, switch power off at the home's electrical panel to reduce the risk of damaging circuit boards, fire, electrical shock, or injury.
- Install this fan in accordance with this manual and all local codes and standards.
- If people or animals are expected to be in close proximity to an operating fan there is a risk of injury from the fan blades. If this situation may occur, do not operate the fan without a fan guard. Contact AirScape technical support for more information.

SUPPLIES INCLUDED IN THE BOX

Prior to beginning installation, please verify all of the following items were received with the fan:

- Fan & Damper Assembly
- Cube-core Grille (incl. 4 powder-coated wood screws)
- Adhesive-backed Foam Gasket
- 6 Wood Screws
- 2nd generation control package—including one hard-wired wall control, one wall mounting bracket, and 50 feet of red CAT5 cable.

REQUIRED TOOLS & SUPPLIES NOT INCLUDED

In addition to the included items listed above, the following tools and supplies are required to install the fan:

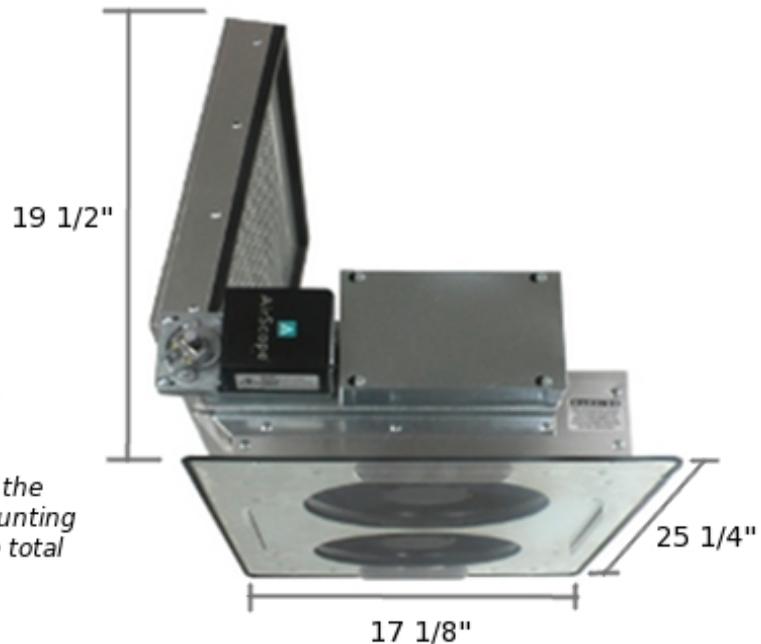
- Drywall Cutter
- Cordless screwdriver with Phillips head and miscellaneous drill bits
- High quality latex caulk
- Lumber matching dimensions of the attic joists (e.g. 2"x6", 2"x8", etc.) and cut to fit according to the INSTALLATION: FRAMING section

UNIT PARTS AND DIMENSIONS

1.0 WHF

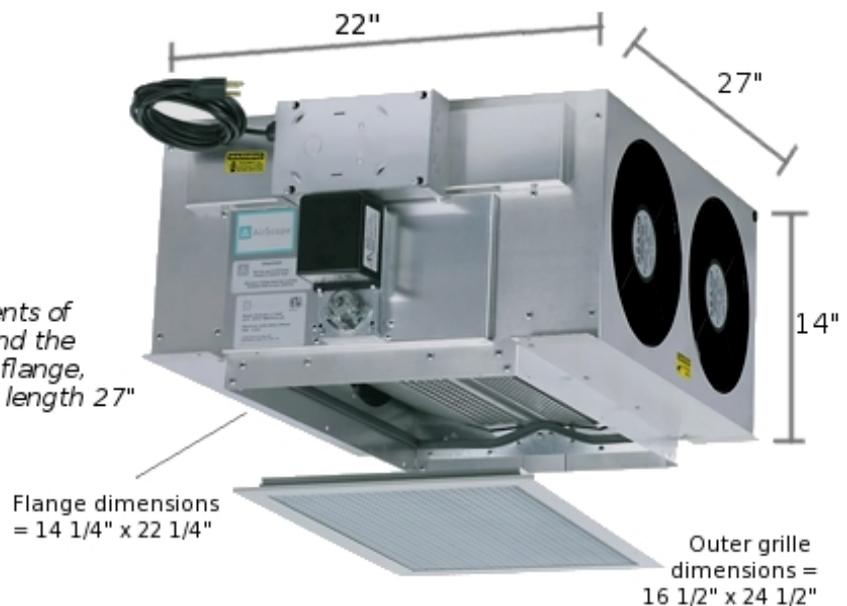
Note: The 1.0 Unit needs 20" of total clearance to allow the damper door to open fully.

The electronic components of the 1.0 extend 2" beyond the mounting flange of the unit, making the total overall length 27 1/4"



1.7 WHF

The electronic components of the 1.7 extend 2" beyond the length of the mounting flange, making the total overall length 27"



ELECTRICAL REQUIREMENTS

The 1.0 model requires an 120 volt, 1 amp, and the 1.7 model a 120 volts, 2 amp, uninterrupted power supply. These specifications must be taken into account when allocating power from existing circuits. We strongly recommend providing a dedicated circuit.

This fan has a factory-installed, 10 ft. power cord. Consider this length when choosing a location for this fan. Depending on the location of existing outlets in the attic, the installation of an additional outlet may be required. *Consult an electrician if necessary.*

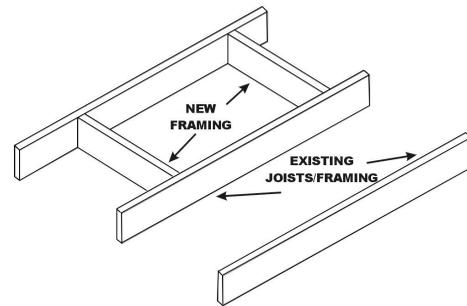
All wiring and connections must be made according to this manual and acceptable wiring standards. All local codes must be followed.

INSTALLATION

The 1.7 and 1.0 units have been designed to fit into a 14½" x 22½" wall or ceiling opening. Since most modern houses have been built with either 16" or 24" on-center (o.c.) spaced joists or studs, a simple "box" is constructed in the ceiling or wall.

Figure 1

In Figure 1 at right, two 2'x8's (to match existing 2'x8' attic joists) have been cut 14½" long and nailed in place 24" o.c. apart to form the box shown. If your joists or trusses use 2x4, 2x6, 2x10, etc., use the appropriate depth pieces. For 24" o.c. joists, place the cross pieces 16" o.c. apart, creating a box with inside dimensions of 14½"x22½".



Use a stud finder to locate the joists or studs from the living space or drill pilot holes from the attic space to outline the grille opening in the drywall ceiling or wall. Cut the opening with a drywall cutter. The opening should be 14½" x 22½".

Place the included foam tape gasket over the top of the joists, position the fan on top of the joists, and attach the unit with the wood screws (included). Do not over tighten the screws, since this may reduce the vibration isolation qualities of the foam gasket.

Figures 2 and 3 below show the 1.7 and 1.0, respectively sitting on top of 2x8 joists. The joists are 16" apart on-center and have a total distance between them of 14½".

If installing the unit vertically in a wall, frame a box with the same dimensions as above. However, use longer wood screws than those provided (at least 1½") to mount the fan to the framing, and make sure the damper door(s) open about their vertical axis. Also, consider bracing the underside of the unit with additional framing.

Use a good quality latex caulk to seal all wood-to-wood and wood-to-metal joints to create an air-tight enclosure. This is important to ensure that all air drawn in by the fan will be from inside the house.

Attach the interior grille to the joists with the included white-capped grille screws.

Figure 2



Figure 3



WIRING & CONTROLS

The standard control package included with this fan contains: the control box; 1 hardwired wall switch; 1 mounting bracket for the wired switch; and, 50 ft. of red CAT5 cable.



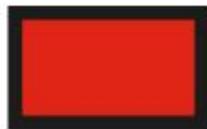
Because a hardwired switch is necessary for providing technical support, the wall switch included with this fan **MUST** be connected to the fan's control box regardless of whether or not it will be installed in a wall. **FAILURE TO CONNECT THE HARDWIRED WALL SWITCH WILL VOID THIS FAN'S WARRANTY!** If it is not desired to be installed in a wall, the hardwired switch can be connected to the control box and left in the attic with the CAT5 cable kept spooled.



The fan's control box is mounted to its side. Look for an electrical box with a series of 5 RJ45 ports labeled with the following label:



WEB



W/S



RMT



AUX



FAN

The green **FAN** port is not used by this fan.

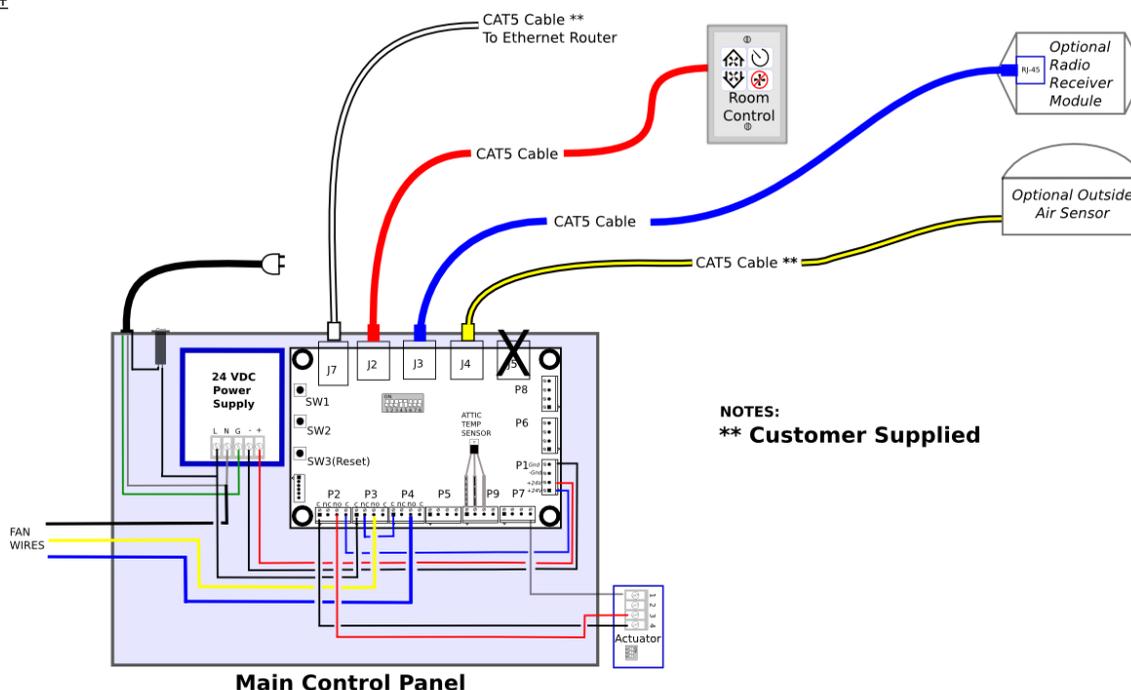
Connect the red CAT5 cable to the red **W/S** port. Then, run the cable through the attic and down a wall to the desired location for the hardwired wall switch. **Note: This cable is low-voltage but unshielded. Building Codes require unshielded low-voltage wiring to be run through shielded conduit.**

Using the provided mounting bracket as a template, trace an outline on the wall where the switch is desired. Following this outline, cut a hole for the mounting bracket, place it inside, and secure it with the locking tabs by tightening the silver screws. Then, connect the free end of the red CAT5 cable to the port in the back of the wall switch. Set the switch in place and secure its face plate to the mounting bracket using the attached white screws.

Finally, plug the attached power cord into an 120 volt grounded outlet with uninterrupted power.

For reference, Figure 4 at the top of the next page describes this fan's and its accessories' general wiring scheme.

Figure 4



START-UP, OPERATION, & TECHNICAL SUPPORT

Make sure that all wiring and connections have been made per this manual and acceptable wiring standards and that no tools or construction debris have been left on, inside, or around the whole house fan. Plug the power cord into a 120v grounded outlet.

Turn the unit ON using the arrow up button on the wall switch control. The damper doors will open and there will be a 10 second delay before the fans turn on. Once the fans start running in low speed, press the up button again to change to high speed to verify that the unit runs in both speeds. Allow for a slight delay when changing speeds for the fans to adjust speed. Use the arrow up and down buttons to change between speeds while the unit is running. Both the 1.0 WHF and the 1.7 WHF have 2 speed settings.

Always turn the fan on using the UP button. Use the up and down arrows to change between the speeds. Turn the unit on before pressing the timer button. Press the timer button 1 time for 1 hour, up to 12 times for 12 hour operation. You can vary speeds while the timer is programmed, but turning the unit off will cancel the remaining time on timer.

When the power is turned OFF, the fans will shut down and the damper door(s) begin to close. The door(s) will shut tightly within 60 seconds.

For additional operating tips, maintenance information or troubleshooting tips, please see the warranty card and the Control manual. **Please contact AirScape technical support at 1.866.448.4187 or experts@airscapefans.com with any questions regard the installation, operation, or maintenance of this fan.**

WIRELESS REMOTE (OPTIONAL) & WEB CONTROLS

A wireless remote is an available accessory for this fan. It is not included as part of this fan’s standard control package. See the yellow “Controls” manual for specific instructions for this accessory’s installation and operation. Briefly, the steps for installing the remote are as follows:

- Plug the provided blue CAT5 cable into the remote receiver and the blue **RMT** port on the fan’s control box. Remove the top cover of the remote receiver.
- Press and release the black button on the receiver’s circuit board to begin the merge sequence; the transmission LED on the receiver will illuminate.
- Press and release any button on the wireless transmitter while the transmission LED on the receiver is illuminated; replace the top cover on the receiver.

This fan is network-enabled and can be connected to your home’s local area network by running CAT5 cable from the white **WEB** port on the control board to your router. If it is so connected, this whole house fan can also be controlled by any computer, smartphone, or tablet with access to your home’s local area network. For more details, visit our blog at blog.airscapefans.com and type “web control” into the search field.

Contact AirScape technical support at 1.866.448.4187 or experts@airscapefans.com with any questions.

SPECIFICATIONS*

	1.0 & 1.0-XR	1.7 & 1.7-XR	
Dimensions:	27¼" x 17¼" x 7" **	27" x 22" x 14"	(L x W x H)
Weight:	26 lbs	38 lbs	
Speed Settings:	2	2	
Tested Airflow:	600/1047 CFM	1000/1712 CFM	(Low / High)
Tested Power:	55/88 watts	105/159 watts	(Low / High)
Tested Noise***:	43/53 dBA	44/55 dBA	(Low / High)
Insulation	R-14 / R-49	R-7 / R-47	(Standard / XR)
Rough Opening:	14½" x 22½"		
Grille Dimensions:	16½" x 24½"		(cube-core, powder-coated white)
Electrical:	120 VAC, 60 Hz, 2.0 amps		
Installation:	Installs easily on 16" or 24" O/C joists		
Controls:	Low Voltage; Hard-wired wall switch, web interface, or optional wireless remote		
Warranty:	3 years parts; 1 years controls		

** Actual performance will vary from installation to installation. Due to our continual product improvement efforts, performance ratings and specifications are subject to change without notice.*

****** Requires at least 20" of overhead clearance for the damper door to open fully.

******* Tested at 45° and 1 meter from source.