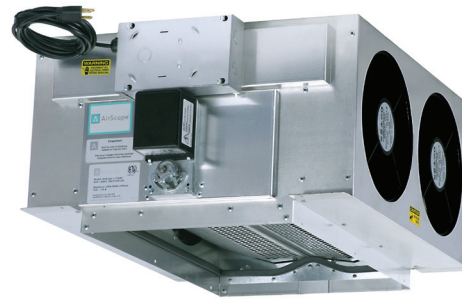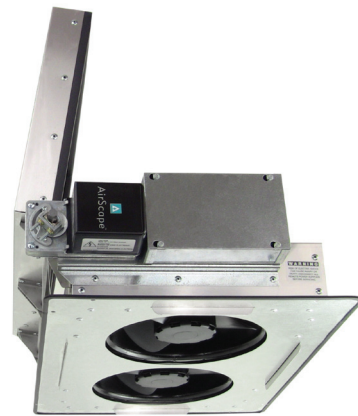**AirScape®**

1.0 & 1.7
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 describes the electrical supply needed to operate this fan.

Before installing this fan, inspect it and all of its parts for any damage that may have been sustained during shipping. DO NOT INSTALL DAMAGED EQUIPMENT. If you suspect this fan was damaged during shipping, contact AirScape technical support by phone at 1.866.448.4187, or email at experts@airscape-fans.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 door(s), this could severely damage the actuator. *Always* depress the actuator's yellow clutch release before manually opening or closing the damper door(s).
- 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.
- 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 recieved with the fan:

- Fan & Damper Assembly
- Cube-core Grille (incl. 4 powder-coated wood screws)
- Adhesive-backed Foam Gasket
- 6 Wood Screws
- Digital Touch Controller package—including one Digital Touch controller, 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 instructions in the INSTALLATION section

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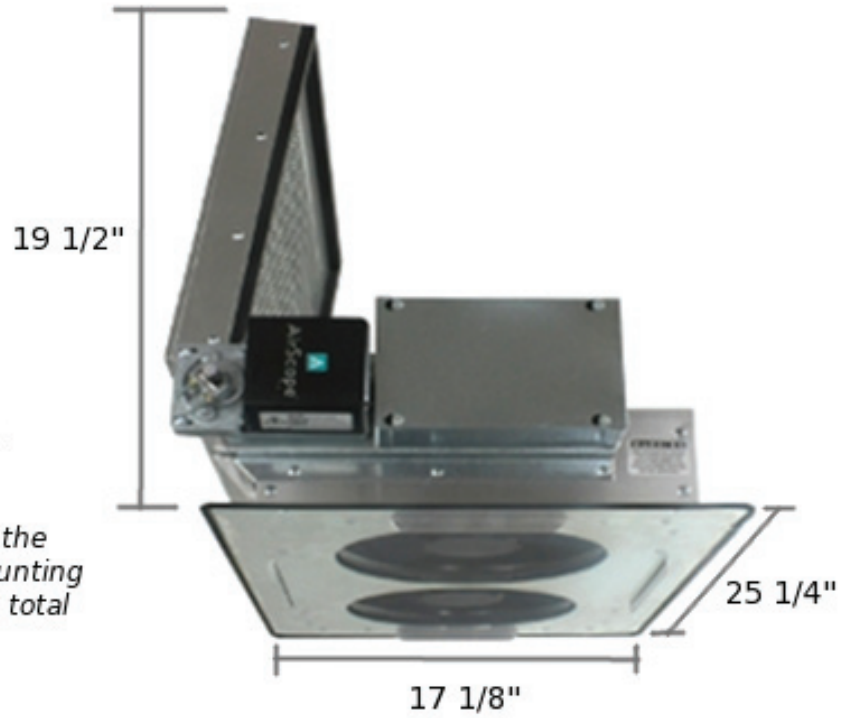
This fan has a factory-installed, 10 ft. power cord. Consider this length when choosing a location for this fan. Depending on the location of existing outlets in the attic, the installation of an additional outlet may be required.

All wiring and connections must be made according to this manual and acceptable wiring standards. All local codes must be followed. Consult an electrician if necessary.
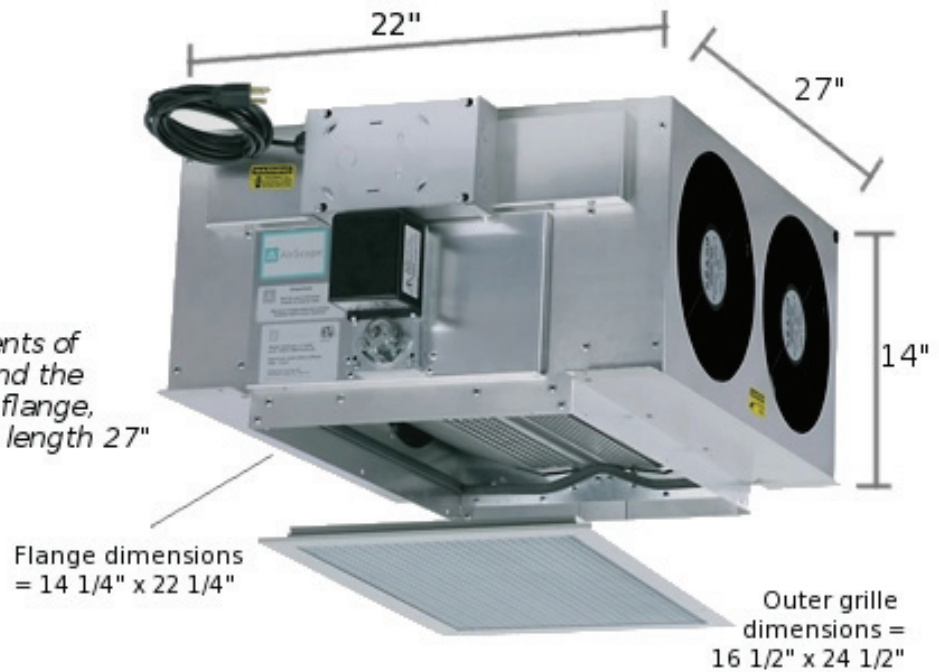
1.0 WHF

19 1/2"

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"
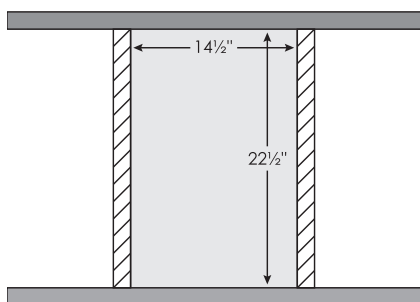
25 1/4"

17 1/8"

22"

1.7 WHF

27"

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

14"

Flange dimensions = 14 1/4" x 22 1/4"

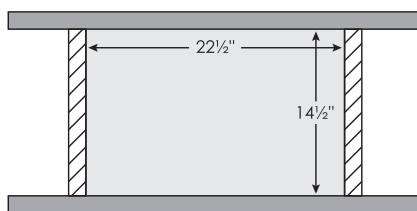Outer grille dimensions = 16 1/2" x 24 1/2"

INSTALLATION

First, using appropriately sized lumber (e.g. 2" × 6", 2" × 8", etc.) cut to fit, frame in a rough opening from the living space into the attic as shown below. Cut out the drywall inside of the framing to create the rough opening.

24" On-Center Framing

14½"

22½"

16" On-Center Framing

22½"

14½"

 Existing Framing

 Additional Framing

 Rough Opening

Next, adhere the included foam tape to the top of the joists. Then, position the fan on top of the joists and fasten the unit to the framing with the included wood screws. Do not over tighten the screws, since this may reduce the vibration isolation qualities of the foam gasket. Figures 1 and 2 below show the 1.7 and 1.0, respectively, mounted to 16" on-center framing.

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.

To ensure that all air drawn in by the fan will be from inside the house, use a good quality latex caulk to seal all wood-to-wood and wood-to-metal joints to create an air-tight enclosure. Finish by attaching the white, cube-core grille to the joists with the included white-capped grille screws. We strongly recommend pre-drilling holes in the framing for these screws; be careful to prevent them from stripping.
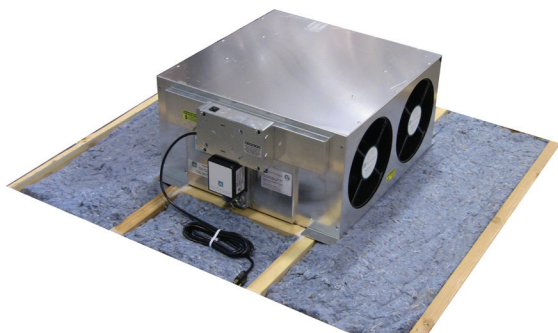
Figure 1

Figure 2

INSTALLATION: WIRING & CONTROLS

The Digital Touch Controller provided with this fan is necessary for operating it, and must be connected to it regardless of whether the controller will be installed in a wall. **THIS FAN WILL NOT FUNCTION IF NOT CONNECTED TO A DIGITAL TOUCH CONTROLLER!** If it is not desired to be installed in a wall, the controller can be connected to the fan and kept in the attic with the CAT5 cable kept spooled.

The standard control package included with this fan contains 1 wall-mounted Digital Touch Controller; 1 mounting bracket for the controller; and 50 ft. of red CAT5 cable.

All wiring connections to the fan assembly are made at the fan-mounted electrical box. These are a 10 ft, black, factory-installed power cord, and three RJ45 ("ethernet") ports for connecting the fans controls and accessories, labled as follows:

W/S   FAN   RMT

First, locate the desired location for the Digital Touch Controller. Install the mounting bracket according to Figures A–C below.

Return to the attic and connect the red CAT5 cable to the RJ45 port on the fan electrical box labled **W/S**. Run this cable from the electrical box to the location of the controller. NOTE: this is a low-voltage cable, DO NOT RUN IT PARALLEL TO HIGH-VOLTAGE WIRING; building codes generally require low-voltage cable to be run through shielded conduit.
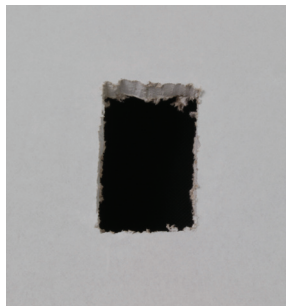
Connect the CAT5 cable to the RJ45 port on the back of the Digital Touch Controller. Mount the controller's faceplate to the mounting bracket with the provided white screws, as shown below in Figure D.
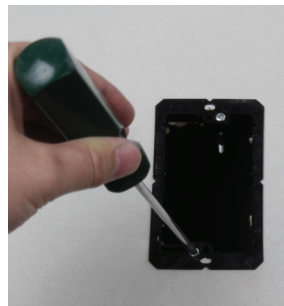
Figure A	Figure B	Figure C	Figure D

Use the mounting bracket as a template to mark the hole location.

Cut out the hole.

Place the mounting bracket and secure its locking tabs by tightening the silver screws

Connect the CAT5 cable. Mount the faceplate to the bracket with the provided white screws

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WIRELESS REMOTE (NOT INCLUDED)

A wireless remote and AirScape's "2nd Generation Control Package" are available accessories for this fan. The 2nd Generation Controls include a webserver that allows you to operate your fan from any smartphone, tablet, or computer with access to your home's local area network ("LAN"); they are also necessary to use AirScape's Temperature Sensor Package ("TSP") and SafeSpeed™ Pressure Interlock accessories.

Neither of the wireless remote, nor the 2nd Generation Controls are included as part of this fan's standard control package. The yellow manual included with these accessories provides specific instructions for their installation and operation.

If purchased, the wireless remote recieve is connected to the fan-mounted electrical box at the blue **RMT** RJ45 port, and the 2nd Generation Controls at the green **FAN** port.
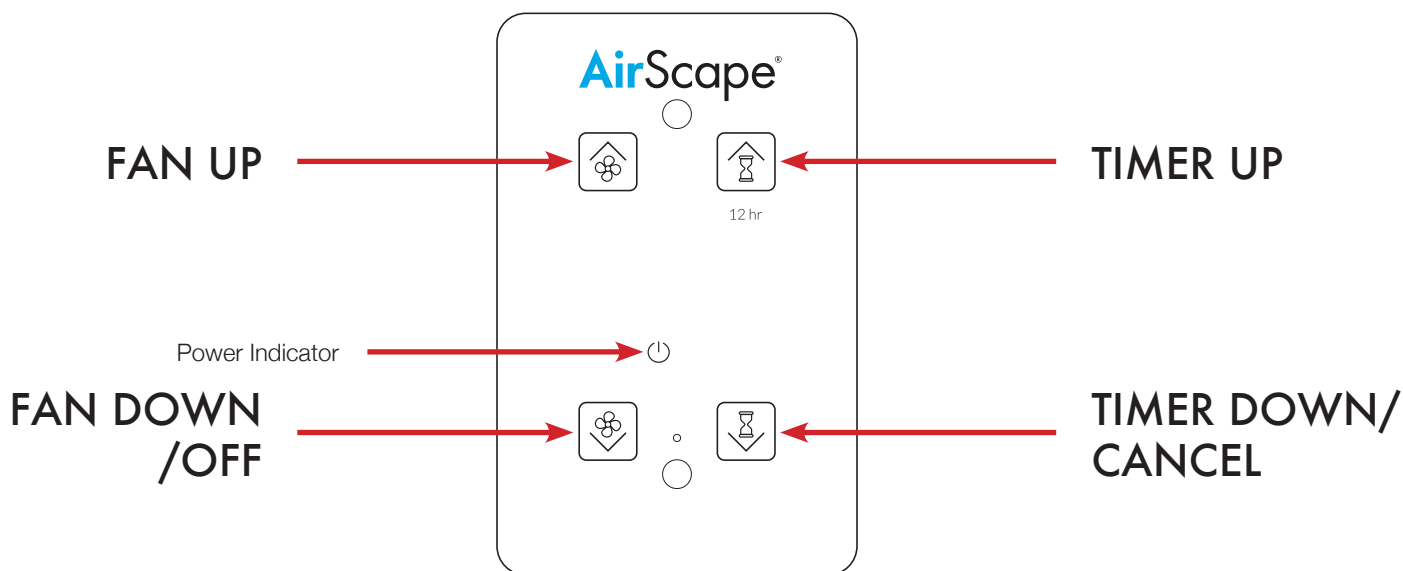

Before starting this fan for the first time, verify that:

1. All wiring and connections have been made according to this manual and acceptable wiring standards, and that this manual and all local codes and standards have been followed in this fan's installation;

2. No tools or construction debris have been left in, on, or around the fan;

3. The fan's power cord has been plugged into a 120-volt outlet with uninterupted power; and,

4. The area in front of the fan is as unobstructed as possible, with no object closer than 24" to the face of the fan.

When running this fan for the first time, make sure to observe it turning on, running at each of its speed settings, and turning off from both the attic (to observe the fan itself) and the living space (to observe its damper door(s)).

As shown below, there are four buttons on your fan's control interface:

When the Digital Touch Controller is connected to the fan, and the fan to power, a red LED will illuminate beneath the Power Indicator shown above. If the Power Indicator is not illuminated, double-check the connections between the fan and the controller, and between the fan and the power outlet.

The AirScape 1.7 and 1.0 each have two speed settings. Turn on the fan by touching **FAN UP** or **TIMER UP**. Its damper door(s) will open and there will be a 10 second delay before the fan begins to operate. The fan will start at minimum speed. Green LEDs will illuminate to indicate the speed setting. If the fan was turned on by **TIMER UP**, the timer will be set to one hour and blue LEDs will illuminate to indicate the timer setting.

Press or hold **FAN UP** to increase the fan's speed to maximum. Press or hold **TIMER UP** to increase the time on the timer in one hour increments until the desired time, or the maximum time of 12 hours, is achieved.

If the fan is already operating at minimum speed, touch **FAN DOWN/OFF** to turn off the fan; any time remaining on the timer will be canceled. If the fan is at maximum speed, press or hold **FAN DOWN/OFF** to decrease the speed to minimum and once again to turn the fan off.

Press or hold **TIMER DOWN/CANCEL** to reduce the time on the timer in one hour increments until the desired time is achieved or the timer is canceled. If the timer is canceled, the fan will remain on at its current speed. When the timer expires, the fan will turn off.

Whenever the fan is turned off, its damper door(s) will close tightly within about 60 seconds.

MAINTENANCE, TROUBLESHOOTING, TECHNICAL SUPPORT

There is no routine maintenance required for this fan other than making sure the fan and its damper door(s) remain clear of dust or debris, and that the area in front of the fan remains as unobstructed as possible, with no object closer than 24" to the face of the fan.

A resettable circuit breaker is located on the fan-mounted electrical box to protect circuit boards from power surges. In the case of a power surge, this breaker can be reset by simply pushing the button back in.

If problems are encountered, please take a few moments to run through the troubleshooting procedures described on the blue Warranty Card. If these suggestions do not work, contact AirScape technical support at 1.866.448.4187 or by email at experts@airscapefans.com for further assistance.

SPECIFICATIONS*

	1.0	1.7	
Dimensions:	27¼" × 17¼" × 7" **	27" × 22" × 14"	(L × W × 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-49	R-47	(Standard / XR)
Rough Opening:	14½" × 22½"		
Grille Dimensions:	16½" × 24½"		(cube-core, powdercoated white
Electrical:	120 VAC, 60 Hz, 2.0 / 1.0 amps (1.7 / 1.0)		
Installation:	Installs easily on 16" or 24" O/C joists		
Controls:	Low Voltage; hardwired Digital Touch Controller, 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.