

SmartExhaust™

Bath Fan/Light Switch/Delay Timer/Ventilation Controller

The SmartExhaust™ is a simple, flexible and economical solution for your exhaust ventilation requirements. It is designed to replace the bathroom fan and light switches and provide both functions with one easy operation. It works as a bath fan/light switch with a delay timer to ensure both healthy indoor air quality and adequate bathroom ventilation. SmartExhaust™ is now available in both toggle and Decora® options in a variety of colors.

There are two settings on the SmartExhaust™: VENTILATION and DELAY. The VENTILATION setting allows the user to set the number of minutes per hour that the fan should run. The DELAY setting allows the user to set the number of minutes the fan should run after the bathroom light has been turned off. The DELAY setting provides additional run time for the fan to complete ventilating the bathroom after use bathroom after use.

When the switch is turned off, the light turns off, but the fan continues to run for a pre-set DELAY time. With other fan and light switches, occupancy time alone does not always provide sufficient run time for the fan to eliminate all of the humidity in the bathroom. By combining the fan switch with the light switch, the light switch becomes an occupancy sensor.



Features & Benefits

- Earn LEED and ENERGY STAR points for enhanced exhaust ventilation*
- Make standard bath fans ASHRAE 62.2 compliant*
- Replaces both fan and light switches for one easy operation
- Microprocessor technology provides precise ventilation times
- Programmable DELAY and VENTILATION settings
- Excess manual and/or delay operation is subtracted from the next hour's programmed ventilation time
- Works with most incandescent, CFL, fluorescent and LED lights
- Optional light and fan time out after 60 minutes (Decora version only)

**When used with ASHRAE 62.2 compliant fans*

Light:

450 Watts @120 VAC (Blue Wire)

Fan:

150 Watts @120 VAC
(Red Wire)

Operation:

120 VAC 60hz ± 10%
(Red Wire)

2.5" minimum wall box
recommended

Cover plate not included
Use any standard switch plate



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This product may be covered by one or more of the following patents and patents pending:
8,185,244

CONFIGURING VENTILATION TIME

In order to properly set the VENTILATION time on your SmartExhaust™, you will need to know the code required CFM (Cubic Feet Per Minute) for your home and the Fan CFM. Follow this simple equation to calculate the VENTILATION minutes per hour.

$$\frac{\text{Code Required Ventilation in CFM}}{\text{Fan CFM}} = \text{Hour Fraction}$$
$$\text{Hour Fraction} \times 60 \text{ Minutes} = \text{Ventilation Settings in minutes}$$

CFM = Cubic Feet Per Minute

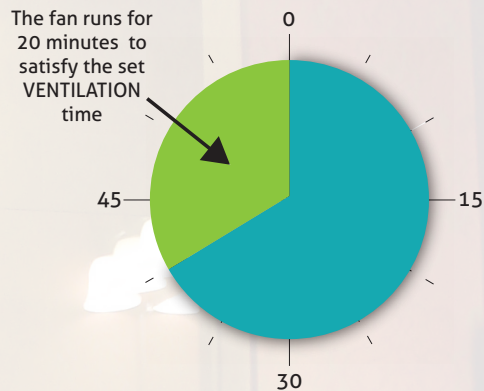
EXAMPLE

The SmartExhaust™ has a microprocessor in it that reads the two settings dials. If for example the VENTILATION dial is set to 20 minutes/hour, the microprocessor will subtract 20 minutes from 60 minutes and determines that the SmartExhaust™ needs to come on 40 minutes into the hour and run for the remaining 20 minutes of that hour.

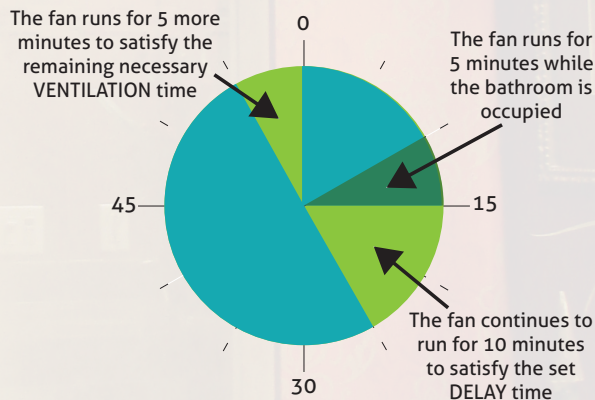
If the DELAY dial is set to 10 minutes and the light/fan switch is manually turned on for 5 minutes, the microprocessor will keep track of the 5 minutes of use. When the switch is turned off after the 5 minutes, the microprocessor will continue to run the fan for the 10 minutes of DELAY setting adding up to a total of 15 minutes. The 15 minutes will be subtracted from the total required 20 minutes of VENTILATION time. 55 minutes into the hour, the fan will turn on and run for the 5 additional minutes needed to complete the required ventilation.

See diagram for more details

A Normal Hour of Operation with no occupancy



The Bathroom is occupied for 5 minutes



OPERATION

- Move switch up to turn on the fan and light
- Move switch down to turn off the light. The fan will continue to run for a pre-set DELAY time (unless manually canceled)
- To cancel DELAY time for the toggle version, turn the switch off and back on again within three seconds. Within another three seconds, turn the switch off and the fan will shut off canceling the DELAY for that use. For the Decora version, simply turn the switch off again after use.
- DELAY will not activate until the light/fan has been on for at least 10 seconds
- The fan will automatically come on once per hour for the pre-set VENTILATION time.

Part Number: Description:

SE1-W	SmartExhaust™ Toggle - White
SE1-A	SmartExhaust™ Toggle - Almond
SED-S	SmartExhaust™ Decora - Includes White & Ivory Rockers
DEC-A	Almond Rocker Replacement
DEC-BL	Black Rocker Replacement
DEC-BR	Brown Rocker Replacement