



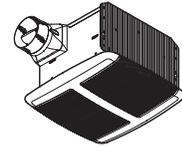
# BROAN - SENSONIC SERIES - BATHROOM FAN INSTALLATION GUIDE

# BROAN®

MODEL SPK110

## MODEL SPK110 SPEAKER FAN

To register this product visit:  
[www.broan.com](http://www.broan.com)



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## READ AND SAVE THESE INSTRUCTIONS

### WARNING

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. Acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit (ceiling installation only).
8. This unit must be grounded.

### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up. **DO NOT MOUNT THIS PRODUCT IN A WALL.**
3. To avoid motor bearing damage, noisy and/or unbalanced impellers, or speaker damage, keep drywall spray, construction dust, etc. off power unit and speaker diaphragms.
4. Please read specification label on product for further information and requirements.

### CLEANING & MAINTENANCE

For quiet and efficient operation, long life, and attractive appearance - lower or remove grille and vacuum interior of unit with the dusting brush attachment. Be careful vacuuming around speakers.

The motor is permanently lubricated and never needs oiling. If the motor bearings are making excessive or unusual noises, replace the blower assembly (includes motor and impeller).

### OPERATION

Use an on/off switch to operate this ventilator. Do not use a solid-state speed control with this Speaker Fan. See "Connect Wiring" for details.

The *Bluetooth*® word mark and logos are registered trademarks owned by *Bluetooth*® SIG, Inc. and any use of such marks by Broan-NuTone LLC is under license. Other trademark and trade names are those of their respective owners.

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.

This device complies with Part 15 of the FCC Rules and RSS-210 of Canada. Operation is subject to the following two conditions:

- (1) This device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- FCC ID: 2ADLL-99528551 IC: 2143B-99528551

This *Bluetooth*® wireless technology enabled Speaker complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying exposure compliance. This speaker must not be co-located or operate in conjunction with any other antenna or transmitter.

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



#2 Chootoo Road, South Aranguéz, San Juan, Trinidad



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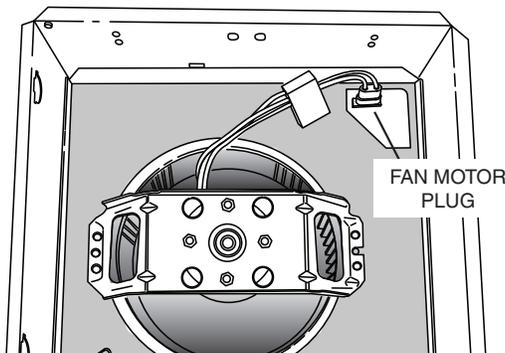
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MODEL SPK110

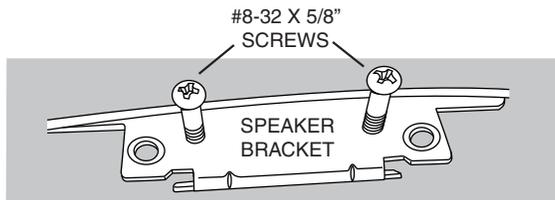
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## INSTALL SPEAKER INTO HOUSING

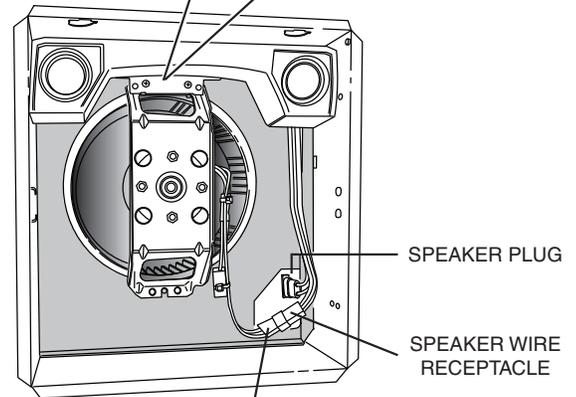
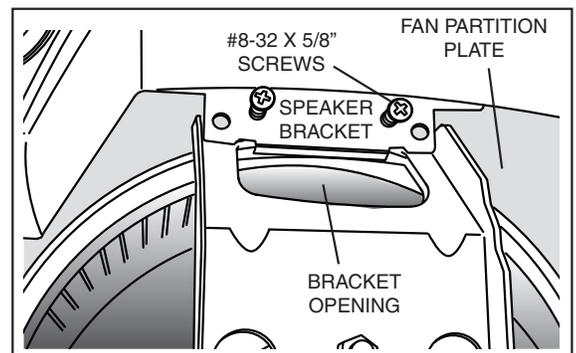
Video instruction for speaker installation are also available at: [www.broan.com](http://www.broan.com)



1. Disconnect **FAN MOTOR PLUG**.



2. Partially install (2) #8-32 x 5/8 screws (Included in parts bag - discard short screws and metal bracket) into threaded holes in **SPEAKER BRACKET** - only so ends of screws are flush with bottom surface of speaker bracket. Note: Installing screws below flush will make the next couple of steps difficult.



3. Insert speaker into fan housing. Make sure **SPEAKER BRACKET** hooks over edge of **BRACKET OPENING**.
4. Make sure rear surface of speaker is located as close to wall of fan housing as possible.
5. Turn **#8-32 X 5/8" SCREWS** (partially installed in Step 2) until they make contact with **FAN PARTITION PLATE**. Alternately tighten both screws. **DO NOT OVERTIGHTEN**.  
**NOTE:** Screws are designed to raise and tighten speaker bracket against motor bracket. Screw heads may or may not contact speaker bracket when tight.
6. Insert **SPEAKER PLUG** into power receptacle where motor plug was disconnected.
7. Connect **FAN MOTOR PLUG** into **SPEAKER WIRE RECEPTACLE**.



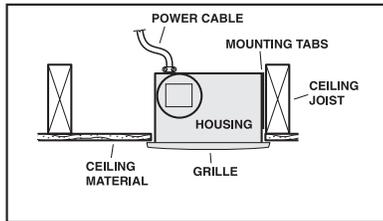
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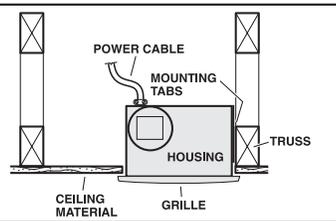
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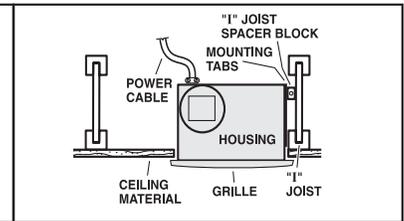
## TYPICAL INSTALLATIONS



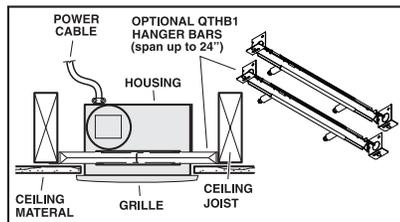
Housing mounted to joists.



Housing mounted to truss.

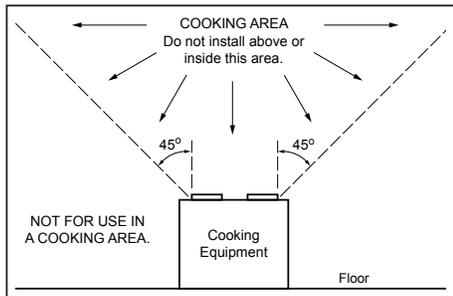


Housing mounted to I-joists.  
Use I-joist spacer block (provided).

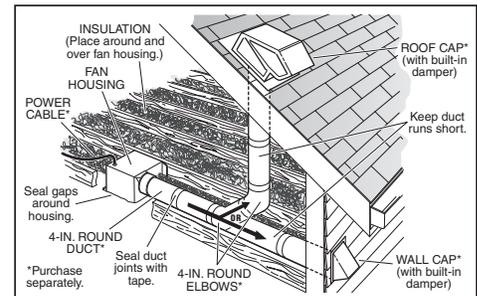


To mount housing anywhere between joists, i-joists or trusses, use optional hanger bar kit QTHB1 (sold separately). Follow mounting instructions included with kit.

## PLAN THE INSTALLATION

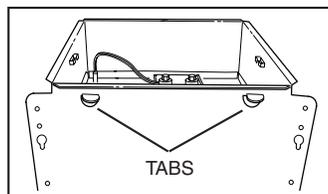


The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.

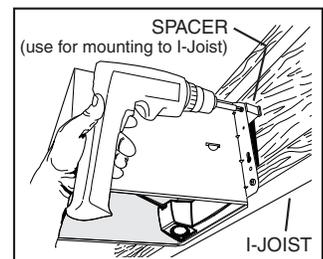


## INSTALL HOUSING & DUCT

1. Use a pliers to bend housing TABS out to 90°.



2. Hold housing in place so that the housing tabs contact the bottom of the joist. The housing mounts with four (4) screws or nails. Screw or nail housing to joist through lowest holes in each mounting flange, then through highest holes. NOTE: Mounting to I-JOIST



(shown) requires use of SPACERS (included) between the highest hole of each mounting flange and the I-joist.



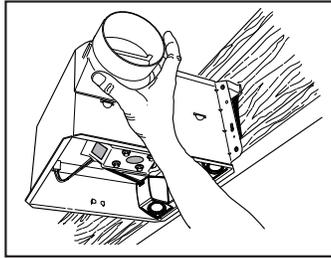
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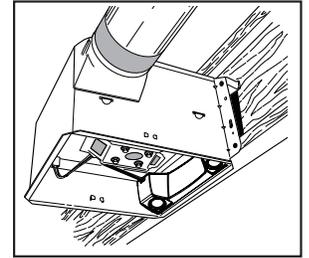
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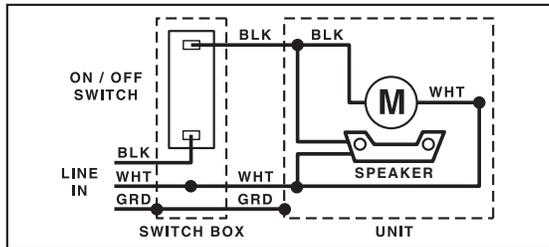
3. Snap damper / duct connector onto housing. Make sure connector is flush with top of housing and damper flap falls closed.



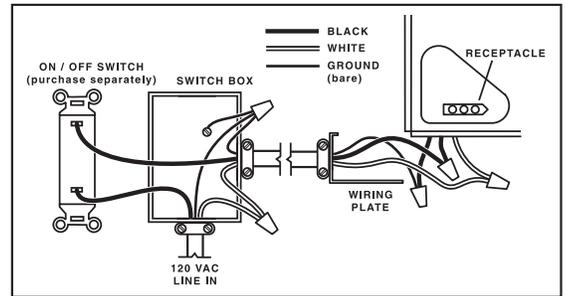
4. Connect 4-inch round ductwork to damper / duct connector. Run ductwork to a roof cap or wall cap. Tape all ductwork connections to make them secure and air tight.



## CONNECT WIRING



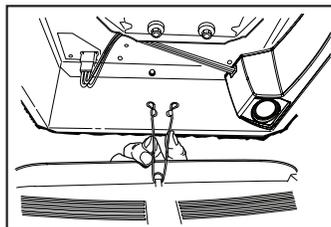
1. Run 120 VAC house wiring to installation location. Use proper UL approved connector to secure house wiring to wiring plate. Connect wires as shown in wiring diagrams.



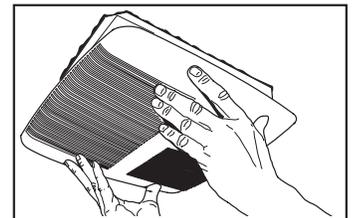
## FINISH CEILING & INSTALL GRILLE

- BEFORE FINISHING CEILING:**
- To avoid motor bearing damage, noisy and/or unbalanced impellers, or speaker damage - you may want to cover the housing opening - to keep drywall spray, construction dust, etc. off power unit and speaker diaphragms.

1. Install ceiling material. Cut out around housing.
2. Squeeze grille springs and insert them into slots on each side of housing.



3. Push grille against ceiling.



4. Turn on power to fan.
5. Go to *Bluetooth®* Speaker Operation section for *Bluetooth®* speaker operating instructions.

## SERVICE NOTES

**To remove Blower Assembly:**  
Remove speaker assembly. Unplug motor. Remove thumbscrew (10) from motor plate flange. Find the single **TAB** on the motor plate (located next to the receptacle). Push up near motor plate tab while pushing out on side of housing. Or insert a straight-blade screwdriver into slot in housing (next to tab) and twist screwdriver.

**To remove Speaker Assembly:**  
Unplug motor from speaker wiring. Unplug speaker wiring from wire panel. Remove (2) screws from speaker bracket. Unhook speaker bracket from motor bracket and remove speaker.



# BROAN - SENSONIC SERIES - BATHROOM FAN INSTALLATION GUIDE

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### Bluetooth® wireless technology SPEAKER OPERATION

#### To connect to the Broan-NuTone Bluetooth® wireless technology Speaker for the first time:

1. To play your personal music or audio files, you need a Bluetooth wireless technology enabled Smart Phone, Tablet, or any other such device.
2. Set your device to a low-to-midrange volume before connecting to the speaker.
3. Make sure Fan is **ON** and Bluetooth® wireless technology enabled device is located within 10 meters (approximately 33 feet) of the Speaker/Fan.
4. Pairing your Bluetooth® wireless technology enabled device with the Speaker:
  - a. For iPad/iPhone/iPod touch:
    - i. From your iPad/iPhone/iPod touch home page, tap **Settings**.
    - ii. From Settings, tap **General** (if you have iOS 7 or greater, you can skip this step).
    - iii. From General, tap **Bluetooth**.
    - iv. Move the **Bluetooth® Slider** to **ON**/green (if it isn't ON already). When you do this, a list of discoverable Bluetooth® wireless technology devices will appear.
    - v. The Broan-NuTone Speaker has the Bluetooth® identifier "**Sensonic™ Vent Fan**". This identifier should be in the list of **Discoverable Devices**. If not, turn the Fan OFF, then ON, then turn Bluetooth® OFF, then ON.
      - If "Sensonic™ Vent Fan" is still not on the list, consult with the owner's manual for your device and follow the procedure for Pairing/Connecting a Bluetooth® wireless technology device.
    - vi. Tap on "**Sensonic™ Vent Fan**" to complete the pairing of the Bluetooth® wireless technology Speaker with your Apple device.
  - b. For Android Phone/Tablet:
    - i. From your smart phone/tablet home page, tap **Settings**.
    - ii. From the Settings menu, go to **Wireless & Controls, Wireless & Networks**, or something similar.
    - iii. Find **Bluetooth®, Bluetooth® Settings** or something similar and tap **Bluetooth®** or move **Bluetooth® Slider** to **ON** (if it isn't on already).
    - iv. On the **Bluetooth®** screen, tap "**Scan for Devices**", "**Search for Devices**" or something similar.
    - v. The Broan-NuTone Speaker has the Bluetooth® identifier "**Sensonic™ Vent Fan**". This identifier should show up in the list of **Available Devices**. If not, turn Fan OFF, then ON, and repeat pairing procedure.
      - If "**Sensonic™ Vent Fan**" is still not on the list, consult with the owner's manual for your Android device and follow the procedure for Pairing/Connecting a Bluetooth® device.
    - vi. Tap on "**Sensonic™ Vent Fan**" to complete the pairing of the Bluetooth® wireless technology Speaker with your Android device.

#### c. For all other Bluetooth® wireless technology enabled devices:

- i. Follow the instructions that came with your Bluetooth® wireless technology enabled Phone, Tablet or Pad device to set it to search for Bluetooth® wireless technology accessories.
  - ii. Most Bluetooth® wireless technology enabled devices will require you to go to the "Paired Devices" (or similar) screen and SELECT "Search for Devices" or something similar.
  - iii. The Broan-NuTone Speaker has the Bluetooth® identifier "**Sensonic™ Vent Fan**". This identifier should show up in the list of **Available Devices, Discoverable Devices** or similar. If not, turn Fan OFF, then ON, and repeat pairing procedure.
5. Open up the audio program on your device and play your music or other audio files. The audio file should play over the Bluetooth® Fan Speakers.
  6. When done playing/listening to your audio files, disconnect from the Speaker by either turning OFF the fan, disconnecting Bluetooth® wireless technology from your device (Smart Phone, Tablet, etc) or simply walking away. The Bluetooth® wireless technology will automatically disconnect when the device is out of range of the Speaker, which should occur when device is approximately 10 meters (33 feet) away from the Speaker.

#### To connect to the Bluetooth® wireless technology Speaker each subsequent time (after initial connection is made):

1. The Sensonic™ Speaker can only play audio files from one Bluetooth® wireless technology device at a time, therefore one device must be **DISCONNECTED** (but not necessarily **UNPAIRED**) before using the Speaker with another device.
2. If your Bluetooth® wireless technology device was **DISCONNECTED** but not **UNPAIRED** from the Speaker last time it was used, then it should automatically connect next time the device is within range of the Speaker, unless the Speaker is already **CONNECTED** to another device.
  - a. If your device does not **CONNECT** automatically with the Speaker, then find your "Paired Devices" or similar list and **TAP** on "Sensonic Vent Fan" to reconnect with the Sensonic™ Speaker.
3. If your Bluetooth® wireless technology device was **UNPAIRED** from the Speaker after the last time it was used, you must follow the connection procedure in the previous section for **PAIRING** your device with the Speaker.
4. Open up the audio program on your device and play your music or other audio files. The audio file should play over the Bluetooth® wireless technology Fan Speakers.
5. When done playing/listening to your audio files, disconnect from the Speaker by either turning OFF the fan, disconnecting Bluetooth® wireless technology from your device (Smart Phone, Tablet, etc) or simply walking away. The Bluetooth® wireless technology will automatically disconnect when the device is out of range of the Speaker, which should occur when device is approximately 10 meters (33 feet) away from the Speaker.

