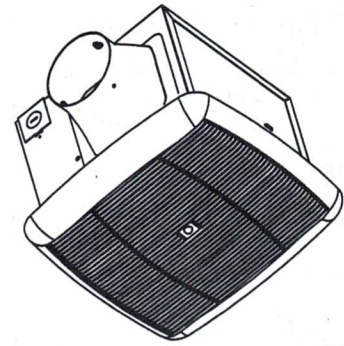




# Ventilation Fans Installation Instructions



Models: SBF90DC-MS SBF130DC-MS

## READ AND SAVE THESE INSTRUCTIONS

Please read these instructions carefully before attempt to install, operate, or service this MAGIC AIR Ventilation Fan. Failure to comply with instructions may result in personal injury and/or property damage. This document should be retained for future reference. The signal words shown below are used to alert you to potential personal injury and property damage hazards. There are two hazard classifications based on potentially dangerous situations. Obey all safety instructions that show these symbols to avoid possible injury, death and property damage.

**CAUTION:** Indicates a potential hazardous situation which, if not avoided, MAY result in minor or moderate injury.

**WARNING:** Indicates a potential hazardous situation which, if not avoided, COULD result in death or serious injury.

## GENERAL SAFETY INFORMATION:

1. This fan should not be installed in area where temperature may exceed 40°C (104°F).
2. Electrical power for this fan is 120V AC 60Hz.
3. All local electrical and safety codes should be followed during fan installation.
4. When working on/ near the fan, the electrical power to fan should be disconnected first.

### CAUTION:

1. This fan should not be used in area where hazardous/ explosives materials or vapors exist.
2. To avoid fan unit damage, prevent construction dust, such as dry wall or ceiling stucco spray, from entering the fan at all time.
3. 'Sold State Speede Control Switch' should not be used with this fan as it could cause fan motor humming and damage.
4. Do not use the fan in cooking area. (Figure 1)

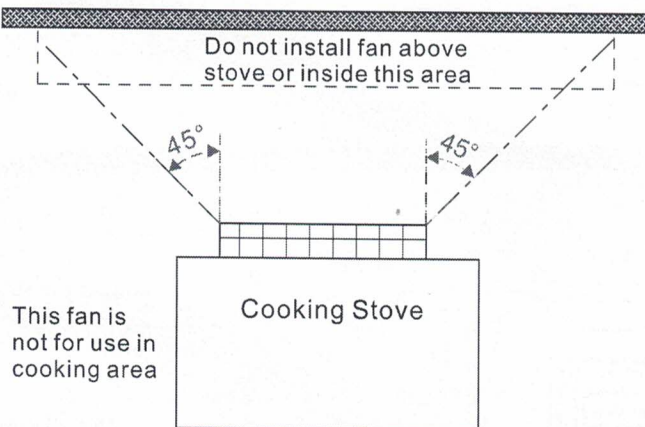


Figure 1

### WARNING:

- To reduce the risk of fire, electric shock or injury to persons, the following should be observed.
1. This fan should only be used in the manner intended by the manufacturer. If in doubt, please contact the manufacturer.
  2. The fan installation work and electrical wiring must be carried out by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
  3. When cutting wall and ceiling, precautions should be taken to avoid damaging of electric wirings and other utilities.
  4. A ducted fan should always be vented to outdoors.

5. Before cleaning or servicing of fan, switch the electric power of fan off at electrical panel and lock the switch to prevent power from being switched on by the others. If such switch cannot be locked, a prominent warning sign should be posted at the panel to warn others not to switch the fan power on accidentally.
6. The fan should not be installed in a ceiling thermally insulated to a value greater than R40.
7. The fan unit must be connected to a ground.

**INSTALLATION:**

Housing Size(lxwxh): 230 cm X 230cm X 180cm or 9" X 9" X 7"

**1. Fan unit mounted between wood joists**

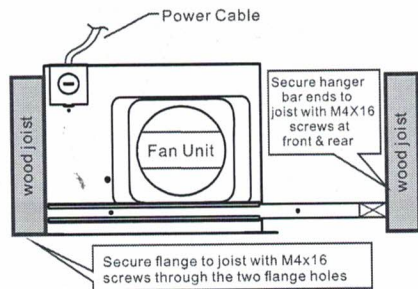


Figure 2: Mounted with one side onto joist

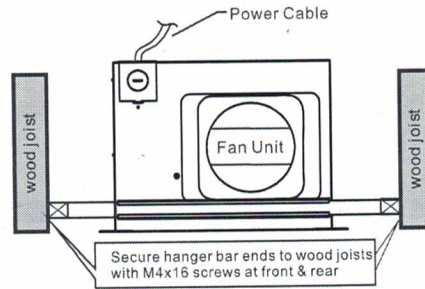


Figure 3: Mounted between wood joists by hanger bars

- i) Hold the fan unit in place so that the flange of housing is flushed with the base of the joists.
  - ii) For method in figure 2, secure the fan unit to wood joists by driving two screws onto base of joist through the holes on housing flange and driving screws onto the other joist through the holes at the ends of hanger bars.
  - iii) For method in figure 3, secure the fan unit by driving screws onto the joists through the holes at the ends of hanger bars.
2. Fan unit mounted between ' I ' joists  
To mount the fan unit between ' I ' joists, an 'Additional Framework' is recommended to be installed as shown in Figure 4. Such additional framework is made by plywood or lumber with height/length as shown and with a thickness equals to 'A'. It should rest on the flange of the ' I ' joist and fixed in place by wood glue and screws. There are four common types of ' I ' joists with the following width 'A':

- 9/16"(14.3mm)
- 11/16"(17.5mm)
- 31/32"(24.6mm)
- 1-17/32"(38.9mm).

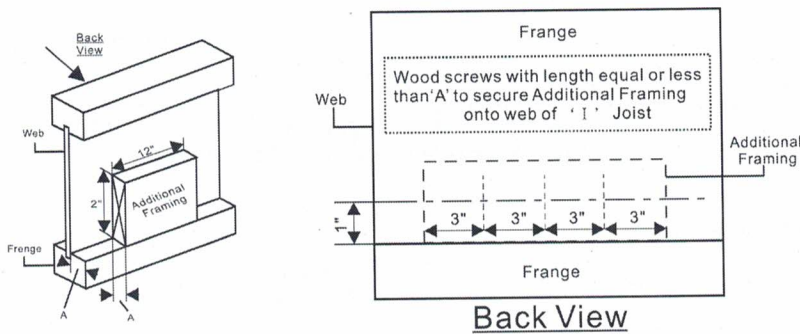


Figure 4: Additional Framework installation

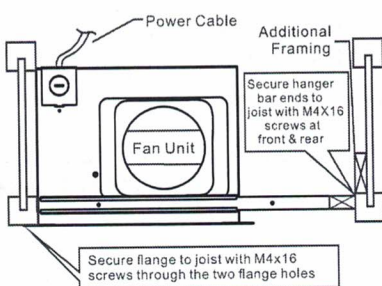


Figure 5: Mounted with one side onto ' I ' joist

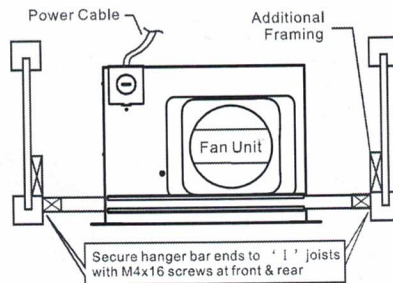


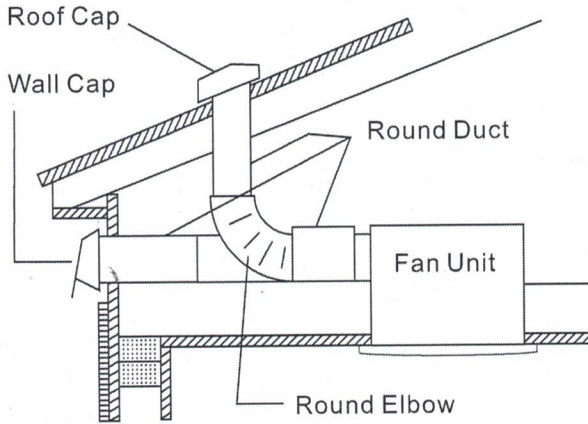
Figure 6: Mounted between ' I ' joist using hanger bars

- i) Hold the fan unit in place so that the flange of housing is flushed with the base of the ' I ' joists.
- ii) For method in figure 5, secure the fan unit to ' I ' joists by driving two screws onto base of joist through the holes on housing flange and driving screws onto the other ' I ' joist through the holes at the ends of hanger bars.
- iii) For method in figure 6, secure the fan unit by driving screws onto the ' I ' joists through the holes at the ends of hanger bars.



3. Connect ductwork and electrical supply.

- i) Connect round ductwork to damper. Run ductwork to a roof cap or wall cap.(Figure 7)
- ii) All ductwork connections should be secured by fasteners and sealed by tape.
- iii) Run 120V A.C. house wiring to fan location. Use proper UL approved connector to secure house wiring to fan housing wiring box.(Figure 8).
- iiii) At least 14 AWG should be used for connection to branch circuit in filed install.



\* All these parts are not supply with fan unit

Figure 7: Ductwork to roof cap or wall cap

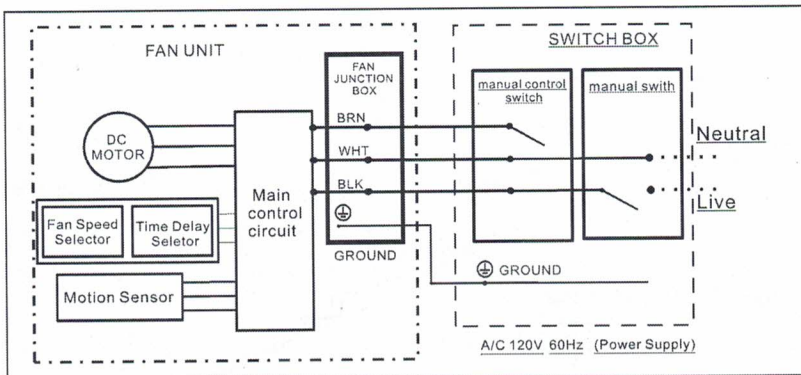
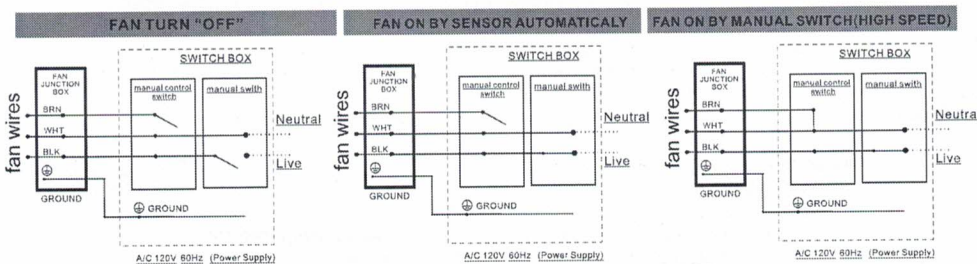


Figure 8: Wiring diagram

\*Fan speed selector, Time Delay Selector, Motion sensor are Options

| 2GANGS WALL SWITCH           |   | MOTION SENSOR           |  |             |
|------------------------------|---|-------------------------|--|-------------|
| MASTER SWITCH (POWER ON/OFF) | MANUAL CONTROL SWITCH (MANUAL/SENSOR CONTROL) | SENSOR DETECTING MOTION | FAN SPEED  | TIME DELAY  |
| OFF                          | ON/OFF  | ON                      | STOP   |             |
| ON                           | SENSOR(CONTACT OPEN)                          | YES                     | IF MOTIONS, FAN SPEED SWITCH "HIGH";<br>IF NO MOTIONS, SWITCH TO "LOW" WITH "SET" TIME DELAY | AS SET TIME |
| ON                           | MANUAL(CONTACT CLOSE)                         | IGNOR                   | FAN SPEED SWITCH "HIGH" CONTINUOUSLY   | IGNOR       |



4. Grille Installation

- i) Squeeze the grille spring and insert them into the slot on one sides near adjustor(option, if any) of the fan housing.(Figure 9.1)
- ii) Lock Sensor(Option, if any) slot on adjustor panel. (Figure 9.2)
- iii) Squeeze another spring, push the grille upward lightly until the grille is rested on ceiling.

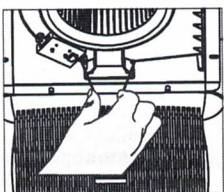


Figure 9.1

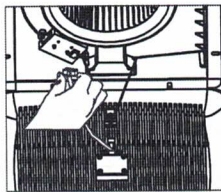


Figure 9.2

## 5. SPEED/TIME DELAY OPERATION

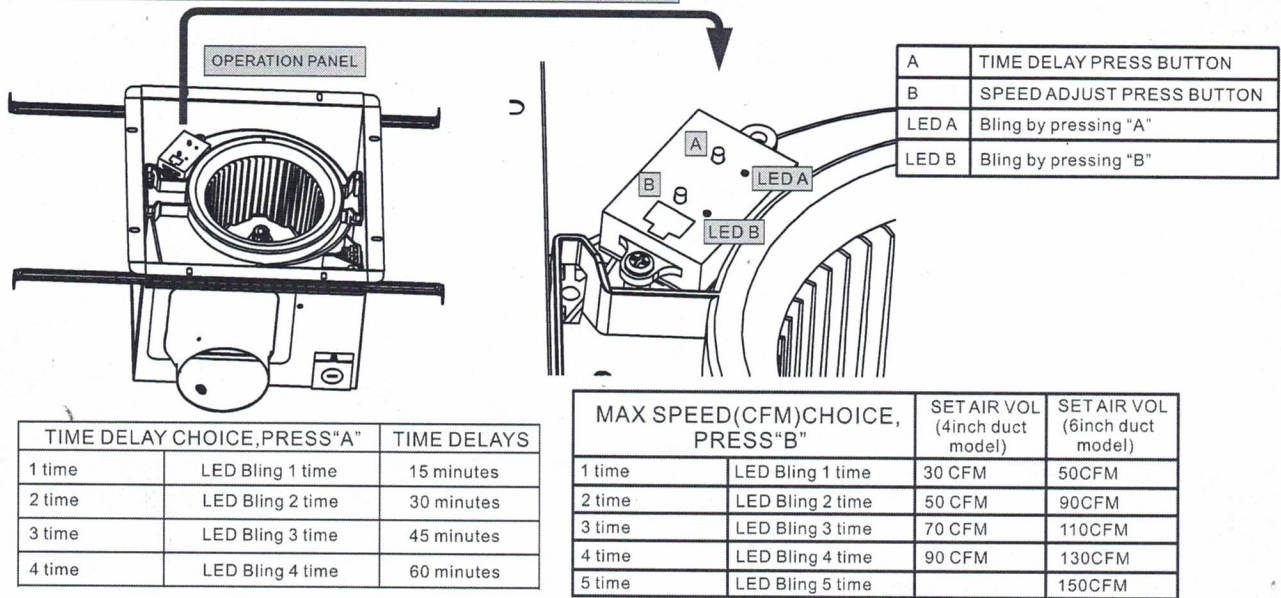


Figure 10: Fan Speed adjust & Time Delay

### MAINTENANCE:

1. Switch off the electrical power to the unit at the electric power panel before any maintenance work is performed.
2. The interior of fan housing should be vacuumed from time to time to ensure quiet and efficient operation of fan.
3. The motor bearings are permanently lubricated and require no oiling.
4. Do not use solvent, thinner, petrol, benzene or other chemicals to clean any part of the fan.

### SPECIFICATION:

| Model No.   | Air Direction | Voltage (V) | Hz | Ducgt Dia. (inches) | Noise (Sones) | Power consumption(W) | Speed (RPM) | *Air Deliver (CFM) | Weight (kg) |
|-------------|---------------|-------------|----|---------------------|---------------|----------------------|-------------|--------------------|-------------|
| SBF90DC-MS  | Exhaust       | 120         | 60 | 4                   | 0.3~0.8       | 10                   | 880         | 90                 | 3.99        |
| SBF130DC-MS | Exhaust       | 120         | 60 | 4                   | 0.8~1.6       | 20                   | 1140        | 130                | 3.99        |

Remarks \* Static Pressure at 0.1" water gauge.  
 Specifications are based on HVI standard.  
 Product specifications are subject to change without prior notice.

### LIMITED WARRANTY:

1. KORA warrants to the original purchaser of its products that such products are free from defects in materials and/or manufacturing workmanship for a period of 2 years for KORA series from the date of original purchase. Proof of purchase must be produced.
2. During the warranty period, KORA shall repair or replace, without charge, any product or parts which is found to be defective under normal use and service.
3. This warranty shall be voided if the product is purchased outside North America.
4. This warranty shall be voided if the product or any of its parts has been altered or repaired in such a way that would affect the reliability or detract from the product's performance.
5. KORA's obligation shall be to repair or replace the fan at KORA's option. KORA shall not be liable for incidental, consequential, or special damages arising out of or in connection with product use or performance.
6. Misuse, abuse, owner negligence including improper installation or maintenance shall render the warranty void.

Date of installation:

Buiders/Installer's Name:

Manufactured by: Eagle Imports Ltd.

E-mail: Sales@eagleimportsltd.com