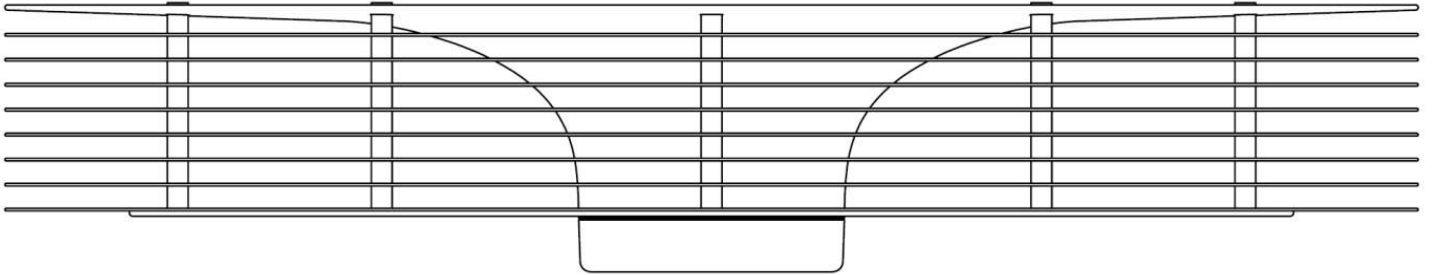


exhale FANS MODEL EF34



Owner's Guide & Installation manual

Please read this manual before installing and using your Exhale fan to avoid injury and product damage.

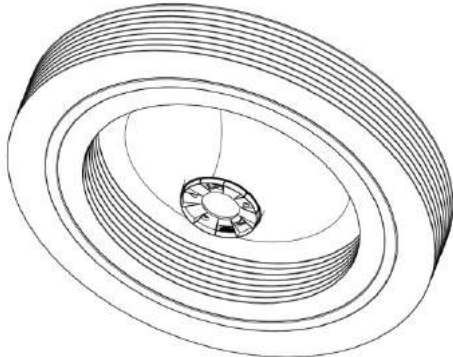
We recommend to ask for a qualified electrician to install the fan for you.

Keep this manual in a safe location for future reference. The manual can also be downloaded from our Website.

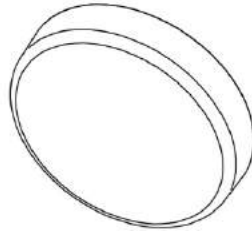


MODEL EF34

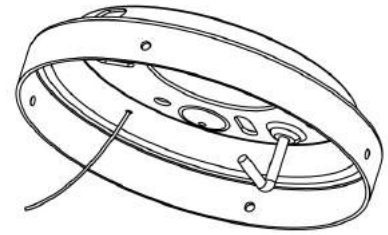
Part List



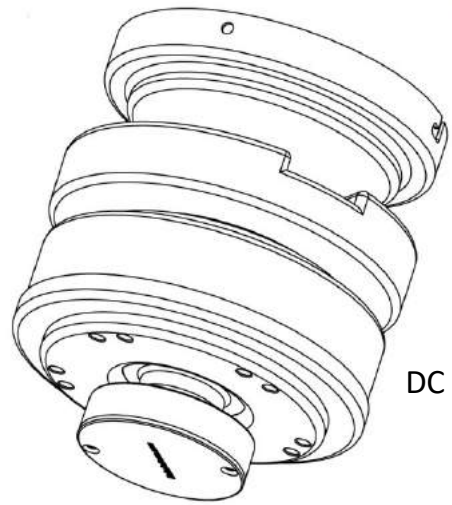
Exhale Fan (Prebuilt)



LED Light



Ceiling Mount



DC Motor



Flat countersunk head screw,
Quantity 5, for fixing the fan on the
underside of the motor



Wire nuts
Quantity 3

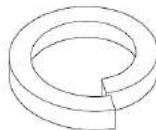


Screw flat rounded heads,
for mounting the motor
on the ceiling mount quantity 4



Various screws for fixing the
support to the ceiling only
on wooden ceiling

Quantity: 4



Tightening Washer
(vibration)
Quantity 4



Spacers

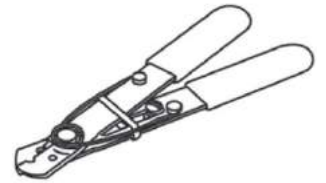


Wireless remote
(Bluetooth)

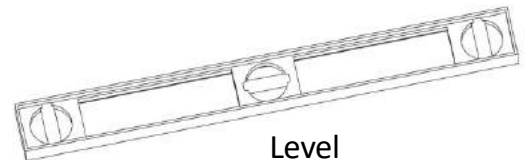
Tools Required



Screwdriver



Wire strippers



Level
Magnetic if available



Please read this manual entirely before starting the installation of the Exhale fan and keep it. If necessary, you can download this manual again from the Exhale online shop

To reduce the risk of electric shock, ensure that the power has been turned off at the circuit breaker or fuse box before beginning any installation procedure

Children (even if supervised) must not play with the device.

All wiring must comply with local electrical standards. It is recommended that the electrical installation is carried out by a qualified electrician

Do not modify or alter the fan or its motor as this will invalidate the warranty

WARNING: To reduce the risk of electric shock and fire, use only the supplied remote control to interact with the fan.

WARNING: To reduce the risk of injury, install the fan at a minimum height of 2.3 m from the ground.

The ceiling and support structure must be securely mounted and capable of supporting a minimum of 11,3 kg.

Do not use water or detergents to clean the fan or discs. A dry dust cloth or a slightly damp cloth will do for most cleaning.

To avoid personal injury or damage to the fan and other parts around it, be careful when working on or cleaning the fan

After making the electrical connections, the clamps should be turned upwards and carefully pushed in.

MODEL EF34

Installation

Step 1. Determine the location

The preferred location for the EF34 is in the center of the room, this position will provide the best performance of the fan.

If you intend to place multiple fans in the same room you should divide the room into equal sections and place the fans in the center of each section. In both instances of one or multiple fans, the above recommendations will provide air movement coverage to all corners of the space.

Step 2. Remove contents from the package

The 2-piece protective foam covers the entire fan. Lift the top cover of the case. Located in each corner of the protective foam, you will find all the parts located in storage slots. The DC motor, mounting hardware, remote control and LED light are included. Carefully remove each part, ensuring that all parts are referenced with the "Parts List" on page 2.

Do not remove the body of the Exhale Fan at this time; that will come later in the installation.

Step 3. Turn off all electrical power

Locate your electrical panel or fuse box and turn off the power to the room where you are installing the fan.

WARNING: Turn off all electrical power prior to making any electrical connections. Failure to do so could result in electrical shock

If you are unsure how to disconnect the electrical power, please consult a licensed electrician for assistance.

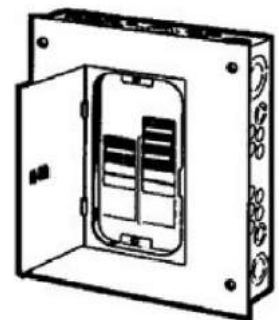


Table of electric circuit breakers in the house

MODEL EF34

Step 4. Ceiling Mount

- a. Pass the electrical wires from ceiling through the ceiling mount center hole as shown on Figure 1
- b. Fix the support to the ceiling with suitable screws
- c. Using a level make sure the mount is plumb and level to the floor, adjust if necessary.
- d. The Exhale fan must be installed flat to maintain its efficiency and service life

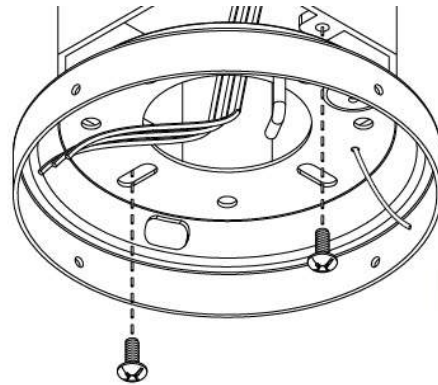


Figure 1.

We offer a solution for inclined ceilings up to 45 degrees with a tilting rod, see options or contact us

i Installation in a concrete ceiling requires optional mounting hardware (see options page 11)

Step 5. Electrical Connections

Start by hanging the motor from the ceiling mount hook as shown on figure 2 and secure the motor with the cable and pin.

- a. Connect the fan neutral wire (black) to the neutral household supply wire. Connect the phase supply (red) to the phase household supply. Connect the ground fan wire (green and yellow) to the ground household and secure the motor with the cable and pin
(see figure 3)
- b. After connecting all the wiring, spread them apart so that the green and red wires are located on the one side of the electrical box and the black one on the other.
- c. Turn the wire nuts upwards and push the wires neatly into electrical box so they are out of the way

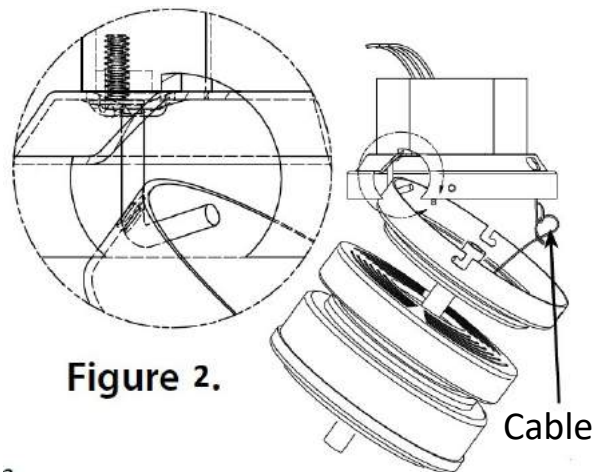


Figure 2.

MODEL EF34

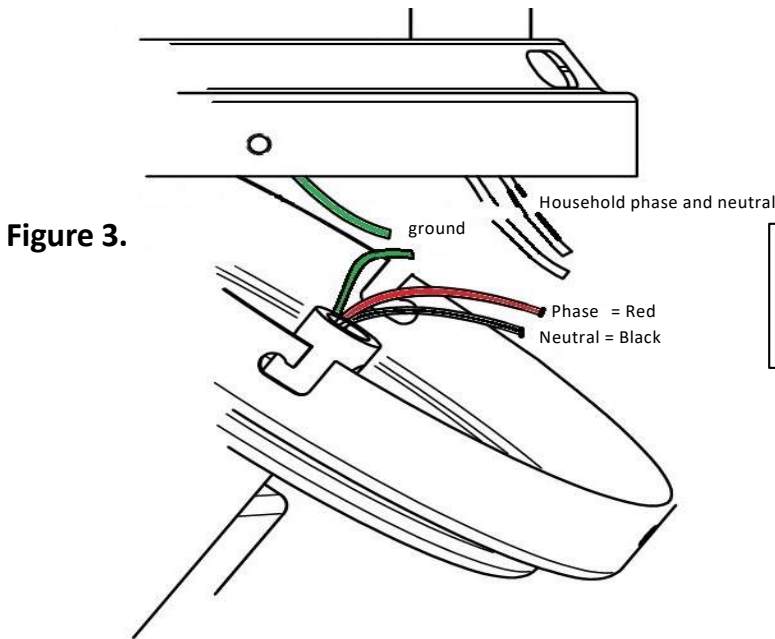


Figure 3.

Red wire with household phase
Black wire with household neutral
Yellow / Green wire with household ground

Step 6 Mounting the motor

Pre-install 2 of the included #10-24 screws half-way into the ceiling mount on either side

Install the motor onto the ceiling mount by sliding the preinstalled bottom mount over the ceiling mount as shown in figure 4

Using a clockwise twisting motion, the motor will temporarily lock into the ceiling mount while you install the remaining 2 #10-24 screws and tighten all connections.

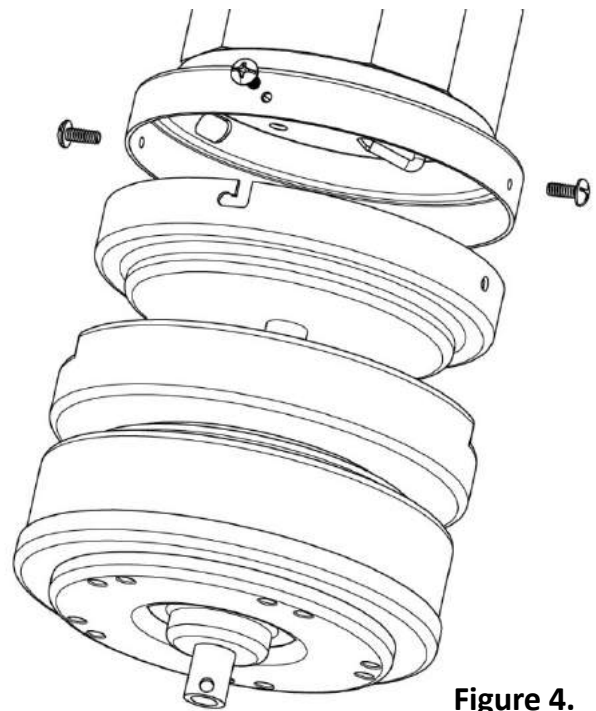


Figure 4.





Be sure an align the two twist lock channels with the 2 pre-installed screws added first

MODEL EF34

Step 7. Hanging the Disc Array

- a. Using only 2 of the included ¼-20 flat head motor mount screws, install them full rotation as shown on figure 5

 NOTE: these screws will be tightened completely in a later step

 **WARNING:** Not installing the screws a full 2 rotations could result in them backing out and causing disc array to fall prior to installing the remaining screws

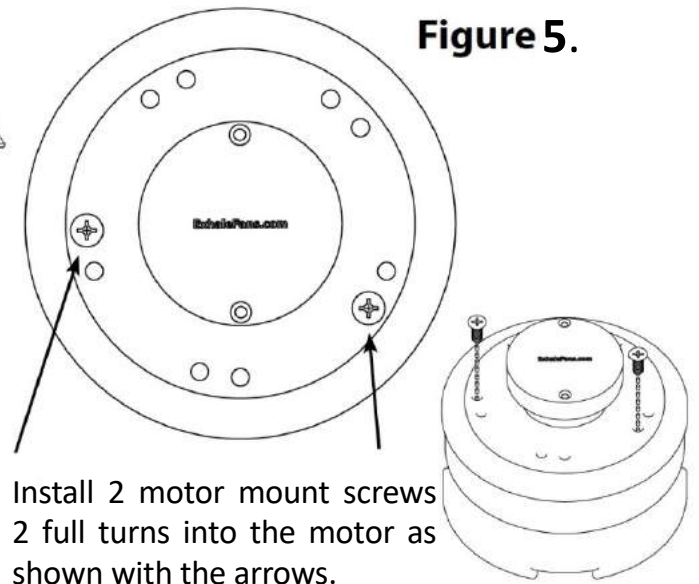
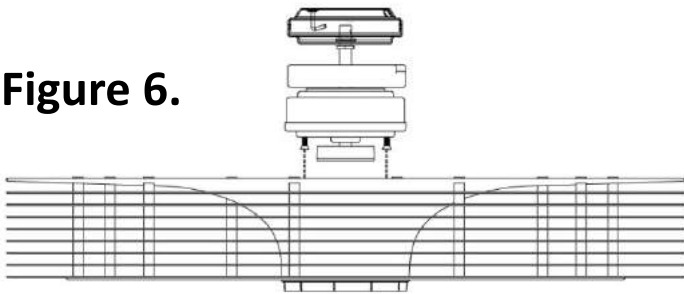


Figure 5.

Install 2 motor mount screws 2 full turns into the motor as shown with the arrows.


Figure 6.



- c. Rotate the entire disc array counter clockwise to lock the screws into the disc array as shown in figure 7.

NOTE: The disc array should be free hanging from the (2) mounting screws.

- d. Install the remaining (3) screws into the disc array tightening all (5) using an alternating pattern to ensure an even pressure is put on all screws.

 **WARNING:** Not tightening the motor mounting screws properly could result in a weak connection of disc array to the motor and cause the fan to become unstable or fall.

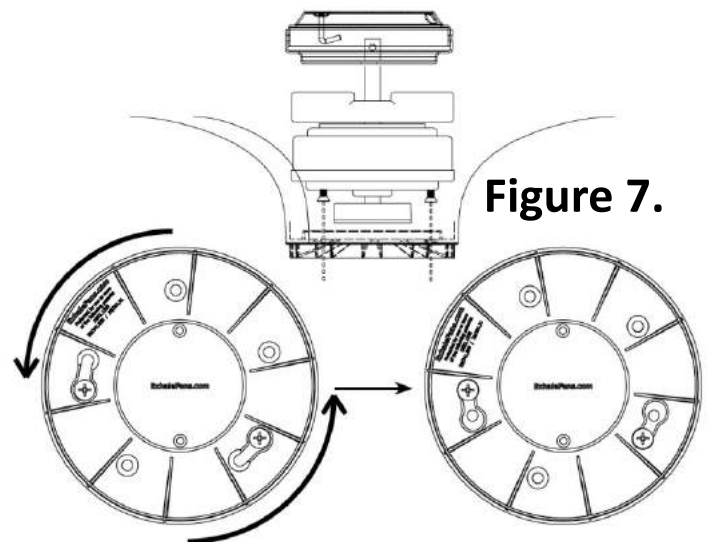


Figure 7.

MODEL EF34

Step 8. Install the plastic cover (If LED Option go to next step)

Install the plastic cover by sliding it over the centre of the disc block (see figure 8). The cover is held in place by friction. There is no need to force it on, just push lightly

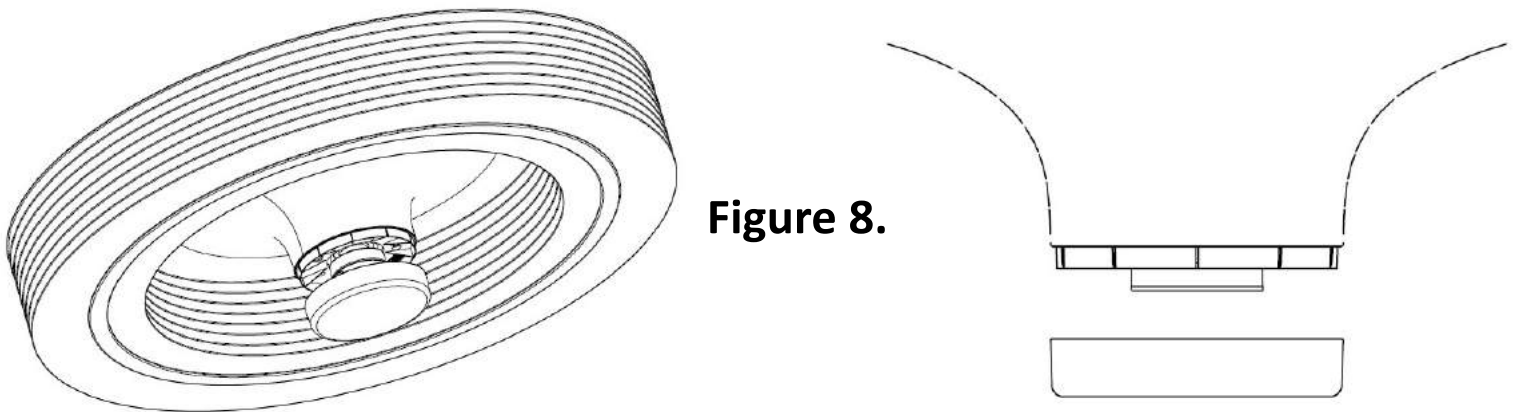
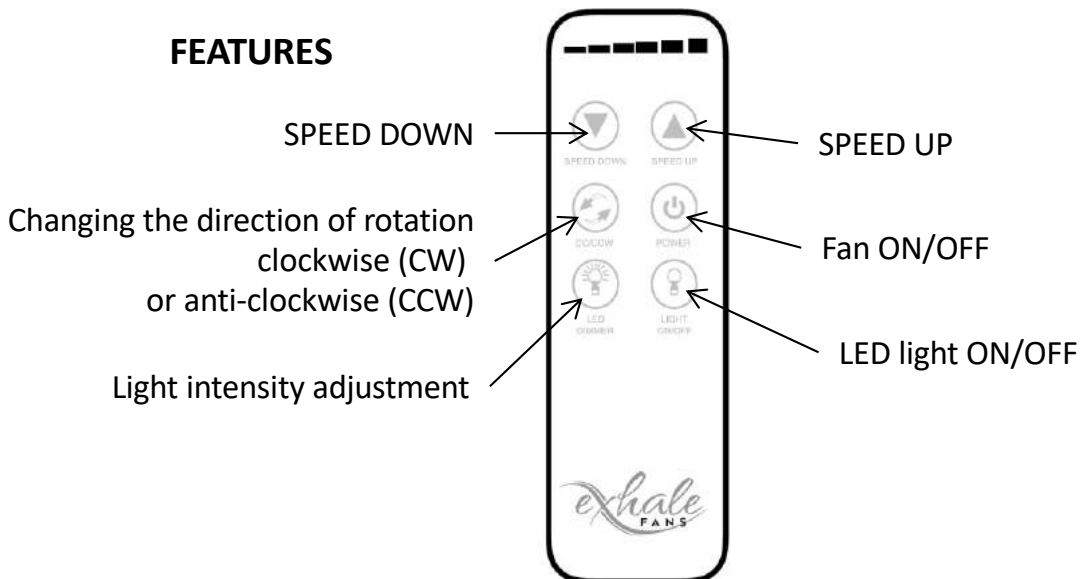


Figure 8.

Remote Operation

FEATURES



Each remote is pre-programmed to motor when packaged at the factory. However, we have added instructions below on how to program the remote in the event that it may become necessary.

Install the two AAA 1.5 Volt Batteries into the remote transmitter by first removing the battery cover on the back cover. Insert the batteries as indicated with the positive + end of the battery aligned with the + sign on the battery holder

MODEL EF34

Remote Operation (cont.)

Operating Functions of the Remote:

The motor has 6 speeds (1 to 6)

- To turn the fan ON and OFF select the button labeled POWER.
- To Increase or Decrease fan speed select SPEED UP or SPEED DOWN button. The illuminated scale at the top of the remote will indicate the speed selected 1 through 6.
- To change the direction of rotation, toggle the CW/CCW button for ClockWise direction or CounterClockWise. With your Exhale Fan rotational direction is of personal preference, performance and temperature are not affected. (if you have 2 fans in the same room, we suggest that you turn them in opposite directions to increase the air flow)
- Turning on the LED light is made by pressing the LED LIGHT ON/OFF button
- The LED DIMMER button is used to provide a full-scale dimmer function for your LED. Press and Hold the dimmer button to select the level of illumination that you desire. While holding this button the level of illumination will increase to 100% and then decrease to 20%, just release the button at the level of illumination that you desire.

Remote Reprogramming (Syncing the remote)

- Turn the power OFF for at least 10 Seconds, if necessary, turn off the Circuit Breaker that routes power to your fan.
- Turn Power to the Fan ON
- Within 60 seconds of turning the power on, press and hold the LED ON/OFF button for 5 seconds. Do not touch any other button during this process, doing so will cause this process to fail.
- Once the Synchronization is completed and detected you will hear an audible “BEEP” which indicates a successful synchronization.
- After completing the steps all fan functions will be available.

Please note that if a Power Failure occurs you may have select the CW / CCW direction button since it is not remembered by the fan.

MODEL EF34

Optional Accessories

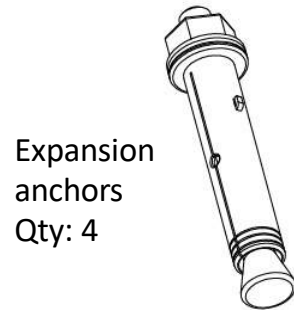
A- Concrete Mounting Hardware

Concrete mounting hardware **MUST** be used when installing directly to concrete without the use of a junction box.



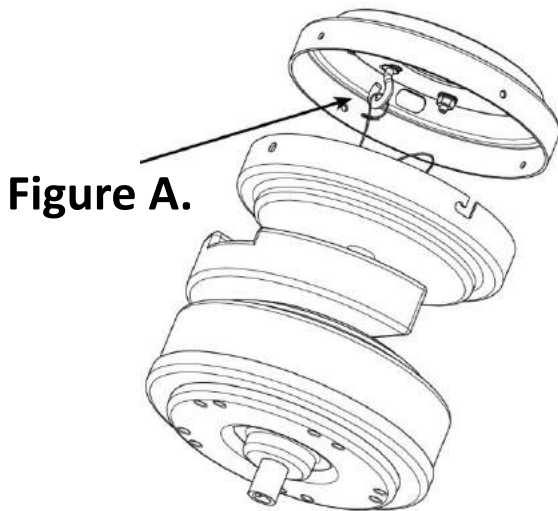
Installation step 1-3 should be completed prior to installation of the ceiling mount.

- a. Place the ceiling mount flush onto the ceiling in the location where the fan will be mounted.
- b. Using the mount as a guide, mark the 4 bolt locations onto the ceiling where the expansion anchors will be installed.



Expansion anchors
Qty: 4

- c. Remove the ceiling mount from the ceiling and check that the 4 locations marked are clear and free from obstacles.
- d. Using a 10 mm drill bit, drill the 4 bolt locations at least 40 mm deep into the concrete ceiling. (Be sure to clean any remaining dust from the hole when finished).



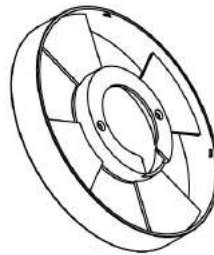
- e. Run the supply wires through the center of the ceiling mount and secure the mount to the ceiling using the included 4 expansion anchors.
- f. [Refer to step 5. Electrical Connections]
- g. Secure the fan safety cable from the motor to the support hook by sliding open loop of the safety cable over the hook and sliding the loop collar until its tight around the shaft of the hook as seen in figure A
- h. [return to Installation Step 6. Mounting the motor]

Optional Accessories (continued)

B. LEDS Lighting system

WARNING: Turn off all electrical power prior to making any electrical connections. Failure to do so will damage the led and could result in electrical shock, personal injury or death

Part List:



Main housing



LED Warm / Cool



Spacers

- a. Turn off all electrical power to the fan while making any electrical connections
- b. Once the disc array has been installed, leveled, and you h-are happy with the operation, remove the black cover located dirctly below the fan shown figure B

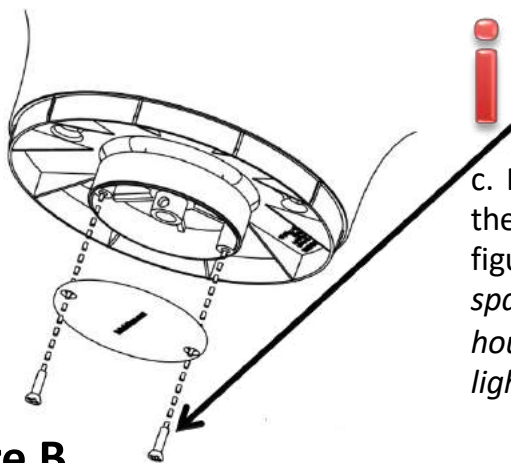


Figure B.

Retain the 2 mounting screws removed from the lower housing, the will be used later

- c. Mount the Main LED housing to the black lower housing of the motor using the 2 screws retained from the last step, shown figure C. *Note: You may need to use one or more of the included spacers between the black lower housing and the main LED housing to achieve clearance between the fan and the LED lighting system to ensure smooth operation without rubbing.*

Please take the time to make sure the fan rotates freely with the main LED housing

- d. Make the appropriate electrical connection from the LED housing to the motor. *Note the connectors used from the motor to the LED Housing are Male/Female and can only be installed one way!*

- e. Take care to tuck the wires into the lower housing using the main housings cutaway as a channel to run the wires.

- f. You can now line up the tangs of the main housing and gently rotate clockwise to lock them in place.

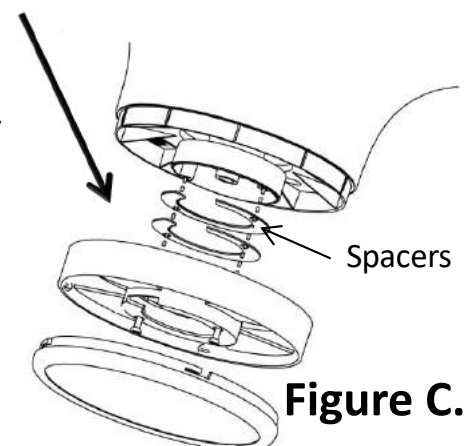
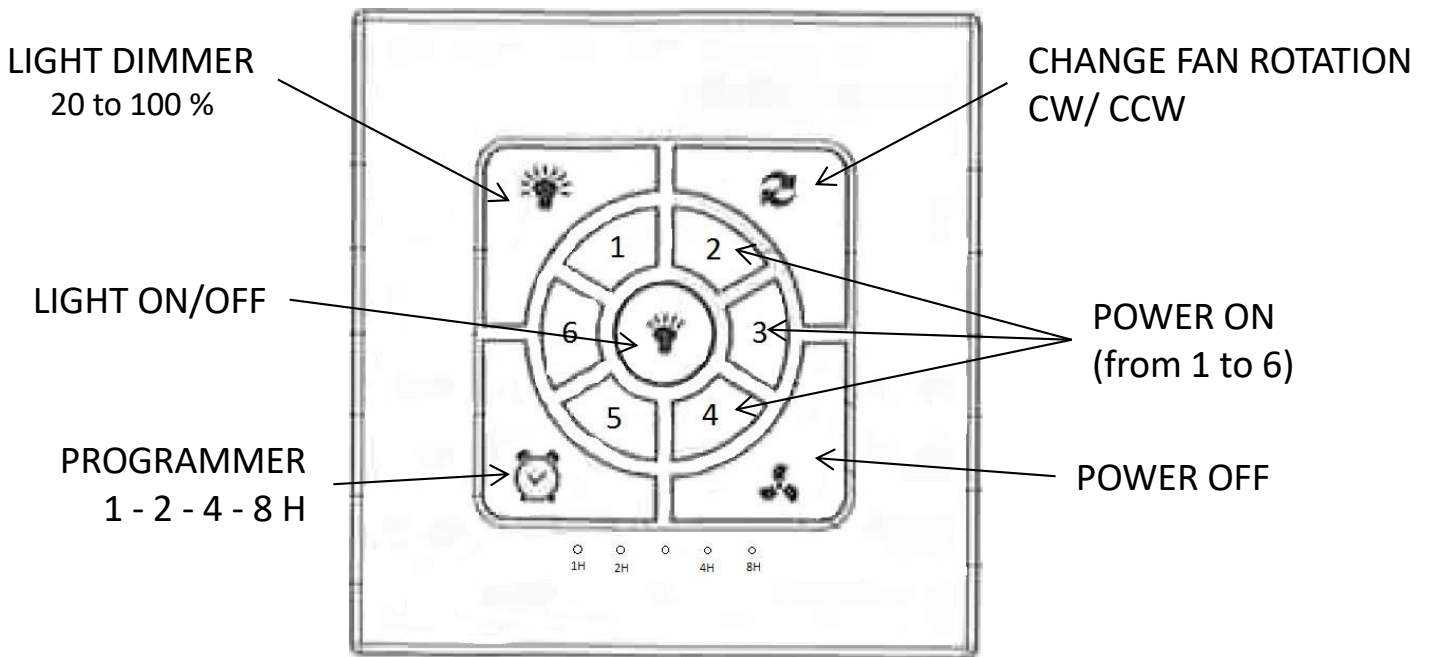


Figure C.

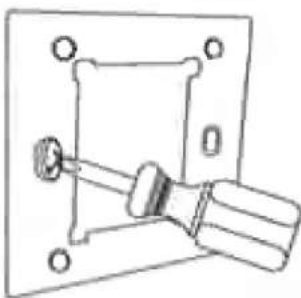
MODEL EF34

Optional Accessories (continued)

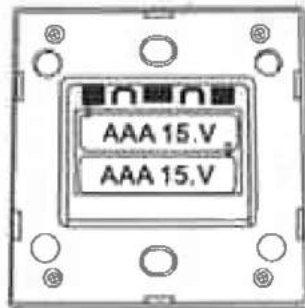
C. WIRELESS WALL SWITCH



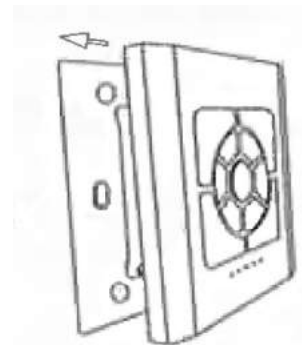
a. Installation



1- Fix the metal plate to the wall using the 2 screws provided



2- on the back of the wall switch – remove the cover and place 2 AAA batteries 1.5 V



3- Clip the switch control to the wall bracket using the built-in magnets

MODEL EF34

Optional Accessories (continued)

b. Synchronisation of the wall switch (wireless wall control)

- Turn off the electricity at the electrical panel and wait at least 10 seconds.
- Reconnect the electricity
- Within 60 seconds of turning on the power, hold down the LED (orange) button (center button) until you hear a beep (about 5-10 seconds).

*** Do not press any other button during this process or it will fail ***

- Once these steps are completed, all functions of the switch will be available.

Reprogramming / resynchronisation with several fans in the same room

If you want to pair several (up to 7) fans on the same remote control

- 1- switch off the power supply of all fans at the electrical panel for at least 10 sec
- 2- select the group of fans, power up only the desired fans and within 30 seconds of powering up again, press and hold the ON/OFF LIGHT button on the remote control
- 3- Once the synchronization has been completed and detected, you will hear a BEEP SOUND on each fan of the group which indicates a successful synchronization.

If you want to go back to the initial configuration, (i.e. one fan, one remote control) it is mandatory to do it fan by fan:

- 1- switch off the power supply to all fans in the room and then power only the desired fan without powering any other one.
- 2- Power up **only** the desired fan, within 30 seconds of powering up, hold down the LED ON/OFF button for at least 10 sec. Make sure you do not press any other button, otherwise the process will fail.

NB: A motor can have up to 2 remote controls. If you wish to pair a second remote control - repeat the same operation with the second remote control.

MODEL EF34

Optional Accessories (continued)

D. EXTENDABLE AND TILTABLE ROD

This rod is suitable for fixing the fan to a sloping ceiling



Tiltable from 0 to 45°

5 levels of adjustment

It has 5 levels of adjustment (from 29 to 39 cms in total)

It supports slope angles of up to 45 degrees

It has been developed especially for Exhale fans

MODEL EF34

SPECIFICATIONS TECHNIQUES



DIMENSIONS

Height: 7,5 in / 18,4 cm
Width: 34 in / 86,4 cm
Weight: 25 lbs / 11,4 kg



VOLTAGE OTIONS

AC INPUT 220 V, 50 Hz
50 W, max 0,5A



ENERGY USAGE

Level 1	4 Watts , 120 RPM
Level 2	6 Watts , 158 RPM
Level 3	9 Watts , 198 RPM
Level 4	16 Watts , 236 RPM
Level 5	36 Watts , 274 RPM
Level 6	50 Watts , 312 RPM



SOUND (dB)

Level 1	35.3 dB
Level 2	36.2 dB
Level 3	37.5 dB
Level 4	38.1 dB
Level 5	38.7 dB
Level 6	40.1 dB

(40 dB = silent library)



OPTIONAL LED LIGHTING SYSTEM

Watts	15 at 100 %	Cool White	5500 K
Dimmable	20% at 100%	Warm White	3000 K
Lumens	1050 (WARM) - 1200 (COOL) à 100%		

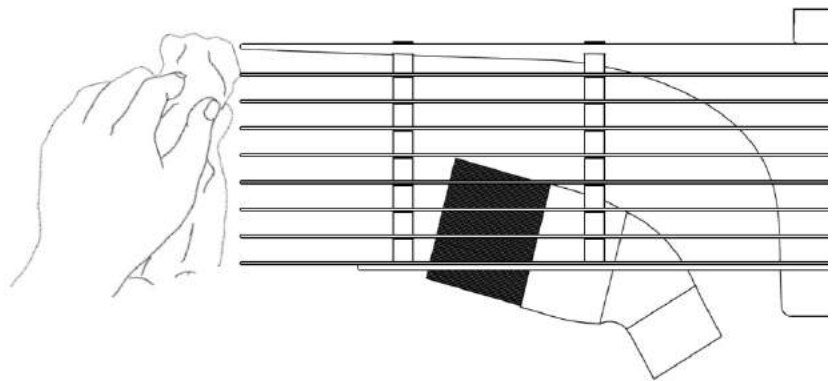
Cleaning and Maintenance

With any fan, dust will collect on the leading edges where the air passes over.

Using a damp cloth with a mild detergent, wipe the dust from the interior and exterior edges of the discs.

Alternatively, you can use the brush attachment of your vacuum cleaner to remove dust collected on the interior and exterior surfaces of the fan.

We recommend cleaning the fan once a month to keep dust to a minimum and keep your fan running at its optimum.



WARNING: Make sure the fan is turned off and is not spinning before attempting to clean with either of the methods listed above.

MODEL EF34

LEXICON



LEVEL 1

Black metal mounting bracket with holes for ceiling mounting.

On the circumference four threaded holes to receive the 4 golden curved fixing screws for connection with the top of the engine and this support.

A hook for engine support the time of the electrical connection with the ceiling wires.

LEVEL 2

Metal cup with 2 round holes and 2 oblong holes for fixing with the screws above.

First fasten the screws 1 and 2 in the floor bracket 1 and then insert the floor 2, turn it to lock the motor and fix and lock the screws 3 and 4. Finish by blocking screws 1 and 2.

We see out of the central axis locked by a pin the 3 wires and the cable of fixation.

LEVEL 3

Protective plastic box for Printed Circuit Board (PCB) Motor control and lighting by remote control. This case has a flexible mounting on the central axis of the engine. **Can slightly move.**

LEVEL 4

The motor itself. NO NOT OPEN.

LEVEL 5

Black plastic case for LED lighting support (warm W or Cold light C) or replacement cover.