## MODERN FORMS SMART FANS

# VOX FLUSH 26" & 38" FH-W1802-26L; FH-W1802-38L

**INSTALLATION INSTRUCTIONS** 



















#### All Modern Forms Smart Fans are:



Durably finished and Rated for interior and exterior use



**SMART** 

Able to coordinate with smart devices for voice-activated and thermostat control



Wet location-listed to the strictest ETL/cETL safety regulations



Quiet, reliable, and up to 70% more efficient than AC fans



Wi-Fi and RF enabled for unlimited control

# APP INSTRUCTIONS AND SMART HOME DEVICE INTEGRATION modernforms.com/mfappins



#### FREE APP DOWNLOAD

Sync with our exclusive Modern Forms app to control fan speed, use smart features like Adaptive Learning, create groups and reduce energy costs







RF WALL CONTROL F-WC-WT Included with each fan 6 Fan speeds Dims light to 1% ON/OFF



WIFI TOUCH PANEL WALL CONTROL F-TS-BK Black F-TS-WT White Sold separately Full app control

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#### 1. SAFETY RULES

For operation, maintenance, and troubleshooting information, visit modernforms.com/help.

- To reduce the risk of electric shock, ensure electricity has been turned off at the circuit breaker or fuse box before beginning.
- All wiring must be in accordance with the National Electrical Code "ANSI/NFPA 70" and local electrical codes. Electrical installation should be performed by a qualified licensed and insured electrician.
- The outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 35 lbs (15.9 kg). Use only UL-listed outlet boxes marked "FOR FAN SUPPORT."
- 4. The fan must be mounted with a minimum of 7 ft. (2.1m) clearance from the trailing edge of the blades to the floor.
- 5. Avoid placing objects in the path of the blades.
- 6. To avoid personal injury or damage to the fan and other items, be cautious when working around or cleaning the fan.
- Do not use chemicals when cleaning the fan or fan blades.
   A dry dust cloth or lightly dampened cloth will be suitable for most cleaning.
- After making electrical connections, spliced conductors should be turned upward and pushed carefully up into the outlet box. The wires should be spread apart with the grounded conductor and the equipment-grounding conductor on one side of the outlet

box and ungrounded conductor on the other side of the outlet box.

 All set screws must be checked and re-tightened where necessary before installation.

**WARNING**: To reduce the risk of electric shock, this fan must be installed with the supplied wall control, or controlled from the Modern Forms app or wall panel.

**WARNING:** To reduce the risk of personal injury, do not bend the blade arms (also referred to as flanges), when installing the brackets, balancing the blades or cleaning the fan.

**WARNING**: Do not insert foreign objects between rotating fan blades.

**WARNING**: To reduce the risk of fire, electric shock or personal injury, mount the fan to the outlet box marked acceptable for fan support with the screws provided with the outlet box.

**NOTE**: For use only with light kits marked "Suitable for use in wet locations." Maximum of 12 fans can operate on a circuit through an on/off switch or breaker when utilizing the app for the fan control (without the wall control in the circuit).

**NOTE**: Maximum of 2 fans can operate on a circuit through the wall control.

#### 2. FTC ENERGY GUIDE & SPECIFICATION

| FAN | FAN SIZE | VOLTS | N.W<br>(lbs) | G.W<br>(lbs) | STANDARD         | ELECTRICITY | AIR FLOW | ENERGY COSTS* | FAN EFFICACY   |     |          |        |           |
|-----|----------|-------|--------------|--------------|------------------|-------------|----------|---------------|----------------|-----|----------|--------|-----------|
| Vox | 26"      | 120 1 | 120          | 15 22        | 15 22            | 15 22       | 15.32    | 120 15 22     | High Speed 11W | 11W | 2145 CFM | \$3/yr | 195 CFM/W |
| VOX | 20       | 120   | 13.32        | 19.02        | Weighted Average | 8W          | 1189 CFM | \$2/yr        | 159 CFM/W      |     |          |        |           |

| FAN | FAN SIZE | VOLTS | N.W<br>(lbs) | G.W<br>(lbs) | STANDARD       | ELECTRICITY | AIR FLOW         | ENERGY COSTS* | FAN EFFICACY |         |             |
|-----|----------|-------|--------------|--------------|----------------|-------------|------------------|---------------|--------------|---------|-------------|
| Vox | 38"      | 120   | 17.57        | 17.57 2      | 120 17.57 20.7 | 20.77       | High Speed       | 38W           | 5084 CFM     | \$11/yr | 133.8 CFM/W |
| VOX | 30       | 120   |              |              |                |             | Weighted Average | 29W           | 2895 CFM     | \$8/yr  | 101 CFM/W   |

<sup>\*</sup>Estimated annual energy cost based on \$0.12 per kWh and 6.4 hours use per day.

## 3. TOOLS AND MATERIALS REQUIRED

- Phillips screwdriver
- Step ladder
- Wire cutters
- Electrical tape







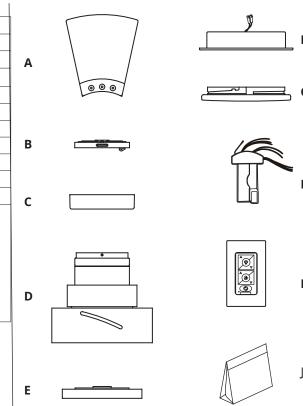


#### **4. PACKAGE CONTENTS**

Unpack your fan and check the contents. You should have the following items:

| REF. | DESCRIPTION                              | PART NO.           |    |
|------|--|--------------------|----|
| Α    | Blade Set of 5 (26")                     | RPL-F1802-26-BD-** |    |
|      | Blade Set of 5 (38")                     | RPL-F1802-38-BD-** |    |
| В    | Mounting Plate                           | RPL-F1802-HGR      |    |
| С    | Trim Ring Decorative                     | RPL-F1802-TRIM-**  |    |
| D    | Motor Assembly                           |                    |    |
| E    | Adapter Plate                            |                    |    |
| F    | LED Module                               | F6IN-120V-R1-30    | 1  |
| G    | Glass Shade                              | RPL-F1802-GLA      |    |
| н    | Control Receiver W/Hardware (26")        | RPL-F1802-26-REC   |    |
|      | Control Receiver W/Hardware (38")        | RPL-F1802-38-REC   | 1  |
| 1    | Wall Control W/ Hardware                 | F-WC-WT            | ١, |
| J    | Hardware Bag                             |                    | 1  |
|      | W/Mounting Hardware                      | RPL-VOXFLUSH-PARTS |    |
|      | wood screws (2), screws (2)              |                    |    |
|      | 5/32" lock washers (2), flat washers (2) |                    |    |
|      | 5.4mm lock washers (2), flat washers (2) |                    |    |
|      | W/ Blade Attachment Hardware             |                    | [  |
|      | screws with rubber washers (16)          | 1                  |    |

**NOTE:** \*\* denotes finish code of fan



#### 5. MOUNTING OPTIONS

If there isn't an existing UL/cUL listed mounting box, then read the following instructions. Disconnect the power by removing fuses or turning off circuit breakers.

Secure the outlet box directly to the building structure. Use appropriate fasteners and building materials. The outlet box and its support must be able to fully support the moving weight of the fan (at least 35 lbs). Do not use plastic outlet boxes.

Figures 1 and 2 are examples of different ways to mount the outlet box.

To hang your fan where there is an existing fixture but no ceiling joist, you may need an installation hanger bar as shown in Figure 3.

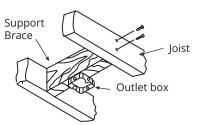


FIGURE 1

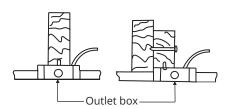


FIGURE 2

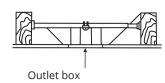


FIGURE 3

#### 6. HANGING THE FAN

**REMEMBER** to turn off power at the breaker. Follow the steps below to hang your fan properly:

- 1. Disconnect power at the breaker to the fan location. A licensed electrician must install the fan. (Fig. 4)
- 2. Remove 2 of 4 screws from the bottom of mounting bracket and save for use in section 9. Loosen the other two screws. (Fig. 5)
- 3. Pass the 120-volt supply wires through the center hole in the ceiling mounting bracket as shown in (Fig. 5)
- 4. Secure the mounting bracket to the ceiling outlet box with the screws and washers provided with your outlet box. (Fig. 6)

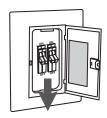
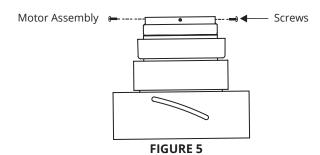
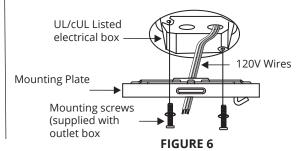


FIGURE 4





#### 7. MAKING THE ELECTRICAL CONNECTIONS

**WARNING**: To avoid possible electrical shock, be sure electricity is turned off at the main fuse box before wiring.

**WARNING:** Installation of this fan requires that a three-conductor cable (including ground wire) which should run between ceiling and wall outlet box.

**WARNING**: Check to see that all connections are tight, including ground, and that no bare wire is visible at the wire nuts, except for the ground wire.

Place trim ring onto the canopy. Opening of 4 clips facing up (Fig. 7)

The flat side of the receiver should face the ceiling.

Follow the steps below to connect the fan to your household wiring. Use the plastic wire nuts with your fan. Secure the plastic wire nuts with electrical tape. Make sure there are no loose strands or connections.

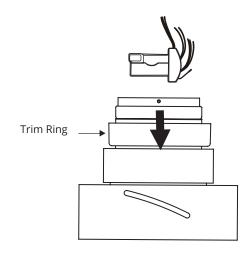


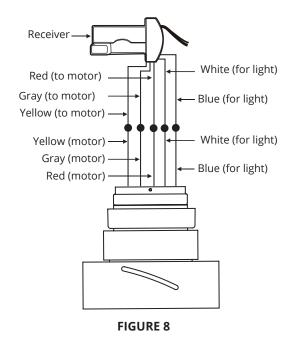
FIGURE 7

### 7. MAKING THE ELECTRICAL CONNECTIONS (cont.)

#### Motor to receiver electrical connections: (Fig. 8)

Place motor on flat surface before connecting receiver wires.

- Connect the red wire from the fan to the red wire marked "TO MOTOR" from the receiver.
- Connect the gray wire from the fan to the gray wire marked "TO MOTOR" from the receiver.
- 3. Connect the yellow wire from the fan to the yellow wire marked "TO MOTOR" from the receiver.
- 4. Connect the white wire from the fan to the white wire marked "For Light" from the receiver.
- Connect the blue wire from the fan to the blue wire marked "For Light" from the receiver.
- 6. Drop the receiver into the motor assembly, flat side up.



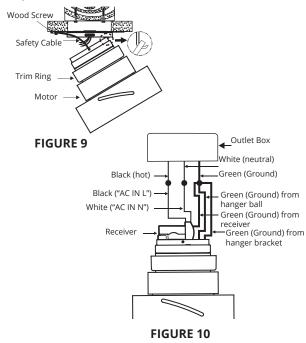
#### 7. MAKING THE ELECTRICAL CONNECTIONS (cont.)

Receiver to house supply wires electrical connections: (Fig. 9 &10)

- 1. Lift motor assembly and hang it on the hook of mounting bracket using one of the screw holes. (Fig. 9)
- 2. Secure the safety cable to the building structure using a wood screw (not included). (Fig. 9)
- Connect the fan assembly ground wire, mounting bracket ground wire and receiver ground wire to the ground wire in outlet box. (Fig. 10)

**WARNING**: Failure to connect ground wires could result in poor fan control functionality .

- 4. Connect the black (hot) wire from the ceiling to the black wire marked "AC in L" from the receiver. (Fig. 10)
- 5. Connect the white (neutral) from the ceiling to the white wire marked "AC in N" from the receiver. (Fig. 10)

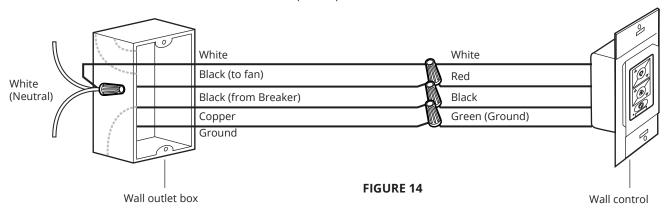


#### 8. INSTALLING THE WALL CONTROL

Wall control to wall outlet box electrical connections: (Fig. 14)

**WARNING**: Remember to shut the power off at the circuit breaker or fuse box.

- 1. Connect ground wires Important for proper control function.
- 2. Connect the black wire marked "LINE IN" from the control to the black LINE VOLTAGE wire from the outlet box that feeds back to the breaker.
- 3. Connect the red wire from the control to the black wire from the wall outlet box that feeds up to the fan.
- 4. Connect the white wire from the control to the white (neutral) wire from the wall outlet box.



#### 8. INSTALLING THE WALL CONTROL

- Carefully tuck the wire connections inside the junction box.
   Secure the wall control with the two wall control mounting screws provided. (Fig. 15)
- 2. Attach the wall mounting plate over the wall control and secure with the two wall mounting plate screws provided.
- 3. Fasten the wall plate to the wall mounting plate.

**NOTE**: Maximum of 2 fans can operate on a circuit through the wall control.

Maximum of 12 fans can operate on a circuit through an on/off switch or breaker when utilizing the app for the fan control (without the wall control in the circuit).

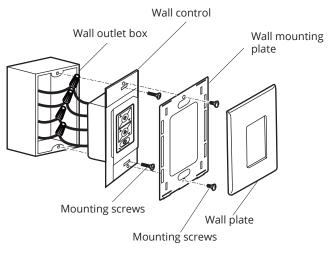


FIGURE 12

#### 9. FINISHING THE INSTALLATION

- Secure all wire connections with supplied wire ties to assist in fan installation.
- 2. Tuck connections neatly into ceiling outlet box.
- Remove the motor from the hook on the mounting bracket. Slide
  the motor up to the mounting bracket and place the key hole on
  the motor over the screw on the mounting bracket. Turn motor
  until it locks in place at the narrow section of the key holes.
  (Fig. 13)
  - Note: Make sure the receiver sits flat and does not interfere with the hook.
- Align the circular hole on canopy with the remaining hole on the mounting bracket. Secure by tightening the two screws previously loosened and the two screws previously removed.
- Raise up trim ring and line up the 4 tabs with the 4 grooves on the mounting bracket. Once lined up, slide the trim ring and secure it to the canopy until snug.

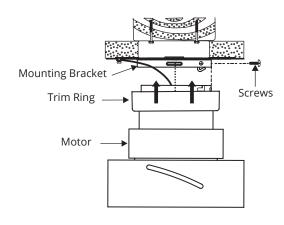


FIGURE 13

#### 10. ATTACHING THE FAN BLADES

- 1. Insert the blade through the slot in the housing. Align the holes in the blade with the fan motor assembly holes and secure with a blade attachment screw with rubber washers. (Fig. 14)
- 2. Repeat this procedure with the remaining blades.

#### 11. INSTALLING THE ADAPTER PLATE

- 1. Remove one of the three screws from the mounting ring and loosen the other two screws. (Do not remove.)
- Place the key holes in the adapter plate over the two screws previously loosened from the mounting ring. Turn the adapter plate until the adapter plate locks in place at the narrow section of the key holes. (Fig. 15)
- 3. Tighten the two mounting ring screws previously loosened and the one previously removed to secure the adapter plate.

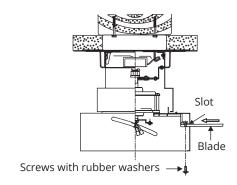
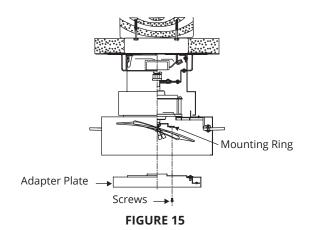


FIGURE 14



#### 12. INSTALLING THE LED LUMINAIRE MODULE

**WARNING:** Before starting installation, disconnect the power by turning off the circuit breaker or removing the fuse at fuse box. Turning power off using the fan switch is not sufficient to prevent electric shock.

**NOTE:** If you do not plan to install the luminaire module with your fan at this time, skip to step 5.

- Remove 1 of the 3 screws from the outer perimeter of the adapter plate and keep it for future use. Loosen the other 2 screws (Do not remove)
- Raise and hold the LED luminaire module close to the adapter plate and proceed to secure the wire connections. Connect the white wire connectors from the luminaire module to the white wire of the fan.
   Follow the same procedure with the black wire connectors. (Fig. 16)
- 3. Tuck connections neatly into mounting plate, Place the luminaire module key holes over the 2 screws previously loosened from the mounting ring, turn luminaire module until it locks in place at the narrow section of the key holes. Secure by tightening the 2 screws previously loosened and the one previously removed. (Fig. 16)
- Raise glass shade up against the luminaire module, and secure it to fan by turning glass shade clockwise until snug. Do not over-tighten.

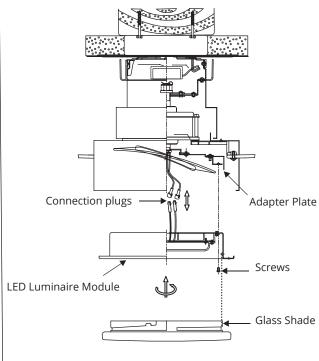


FIGURE 16

#### 13. WALL CONTROL OPERATING INSTRUCTIONS

Your DC brushless motor is equipped with an intuitive wall control.

Restore power to ceiling fan and test the wall control as below for proper operation.

#### Pairing the Wall Control to Your Fan

Your fan is pre-paired at the factory, NO pairing is necessary.

#### **Wall Control Button Definitions**

These seven buttons are used to set the fan speed as follows:



Button: turn the light ON or OFF

Press/Hold  $\triangle$  to increase the desired light level.



Button: turn the fan ON or OFF

Press/Hold the  $\triangle$  button to increase the fan speed through

the speed settings.

the speed settings.



Button: Switch between summer mode and winter mode.

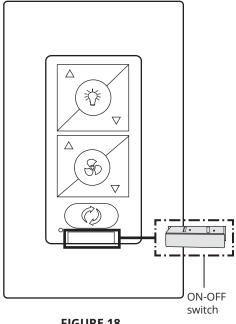


FIGURE 18

17

**ON-OFF** Switch: Pull switch tab to power off in case of emergency. Not necessary for normal fan operation.

#### 13. WALL CONTROL OPERATING INSTRUCTIONS (cont.)

**NOTE**: Maximum of 2 fans can operate on a circuit through the wall transmitter.

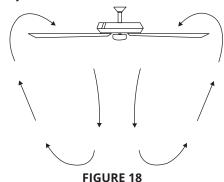
Maximum of 12 fans can operate on a circuit through an on/off switch or breaker when utilizing the app for the fan control (without the wall transmitter in the circuit).

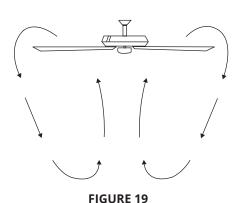
**Summer mode** - (Counter-clockwise) A downward airflow creates a cooling effect as shown in Fig. 19. This allows you to set your air conditioner on a warmer setting without affecting your comfort.

**Winter mode** - (Clockwise) An upward airflow moves warm air off the ceiling area and redistributes the warm air that hovers around the ceiling to the living space as shown in Fig. 20. This should allow for savings on heating costs.

**NOTE**: To operate the reverse function on this fan, press the reverse button while the fan is running.

**NOTE**: Fans do not change the temperature in the room, they change the comfort level allowing you to save energy.





#### 14. APPLICATION

In addition to the included wall control, you can control the fan through the Modern Forms app.

- To use the app, download it for free from the App Store or Google Play.
- Open the app to create your account. You can also log in with your Facebook or Google account.
- Next, set up a WiFi connection. You'll need the SSID and WiFi password for the network you want to connect to.
- You'll receive a prompt to name your fan device and upload a picture of it if you choose.
- The app will walk you through the main screen and show you how to create schedules, change fan speeds, dim the light, switch between Summer/Winter mode, invite users, create groups and much more. Refer to app instructions for more details.

**NOTE**: Maximum of 2 fans can operate on a circuit through the wall control.

Maximum of 12 fans can operate on a circuit through an on/off switch or breaker when utilizing the app for the fan control (without the wall control in the circuit). FH-W1802

#### FIGURE 20



#### FIGURE 21



APP INSTRUCTIONS AND SMART HOME DEVICE INTEGRATION modernforms.com/mfappins

### 15. TROUBLESHOOTING

| Problem             | So | lution  |
|---------------------|----|---|
| Fan will not start. | 1. | Check circuit fuses or breakers.  |
|                     | 2. | Check wall control LED indicator light. If LED is not illuminated when pushing a button, it is not transmitting a signal. Please check power to wall control and all electrical connections.  |
|                     | 3. | Assure that there are no more than 2 fans operating on a circuit through the wall control. Assure that there are no more than 12 fans operating on a circuit through an on/off wall switch or a breaker (not through a wall control). |
|                     | 4. | Assure that the fan is within range of the Wifi (150 ft.) or wall control (30 ft.).   |
| Fan sounds noisy.   | 1. | Allow a 24-hour "breaking-in" period. Most noise associated with a new fan will disappear during this time.   |
|                     | 2. | Make sure all motor housing screws are securely fastened.   |
|                     | 3. | Make sure the screws that attach the fan blade to the fan are tight.  |
|                     | 4. | Make sure your ceiling box is secure and rubber isolator pads are used between the mounting bracket and outlet box.   |
| Fan wobbles.        | 1. | Check that all blade and blade arm screws are secure.   |
|                     | 2. | If the blade wobble is still noticeable, interchanging two adjacent (side by side) blades can redistribute the weight and possibly result in smoother operation.  |

### **16. ACCESSORIES**

| PRODUCT                          | MODEL | DESCRIPTION  | FINISH |
|----------------------------------|-------|--|--------|
| WIFI TOUCH PANEL<br>WALL CONTROL |       |  |        |
|                                  | F-TS  | Full app control<br>Wi-Fi range: Up to 150ft from router<br>Sold Separately                                      | вк, wт |
| RF WALL CONTROL                  |       | Included with each fan   |        |
|                                  | F-WC  | 6 Fan speeds<br>Dims light to 1%<br>ON/OFF   | WT     |
|                                  |       | Wall control range: Up to 30ft from fan<br>Works in conjunction with Modern Forms Fan receiver<br>(Not included) |        |
|                                  |       |  |        |

# Español

For instructions in Spanish please visit the link below. Para obtener instrucciones en español, visite el siguiente enlace.

www.modernforms.com/fan-instructions-espanol

# Français

For instructions in French please visit the link below. Pour obtenir des instructions en français, veuillez visiter le lien ci-dessous.

www.modernforms.com/fan-instructions-français

# MODERN FORMS LUMINAIRES + SMART FANS

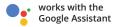
# Get Smart

The Modern Forms app synchronizes seamlessly with smart home devices you already own. To learn more go to **modernforms.com/mfappins** 











#### Free App Download

Sync with our exclusive Modern Forms App to control fan speed, use smart features like Adaptive Learning, create groups and reduce energy costs.







modernforms.com/mfappins

# MODERN FORMS SMART FANS

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