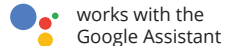


# MODERN FORMS SMART FANS

## ELF

FR-W1802-38L

INSTALLATION INSTRUCTIONS



All Modern Forms Smart Fans are:



WET

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

DC  
MOTOR

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

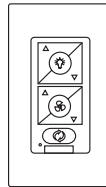


Wi-Fi and RF enabled for unlimited control

APP INSTRUCTIONS AND SMART HOME DEVICE INTEGRATION  [modernforms.com/mfapps](https://modernforms.com/mfapps)



**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



**WI-FI 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](https://modernforms.com/help).

1. To reduce the risk of electric shock, ensure electricity has been turned off at the circuit breaker or fuse box before beginning.
2. 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.
3. 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.
7. 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.
8. 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.
9. 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, 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."

NOTE: A 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.

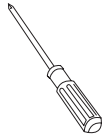
NOTE: A maximum of 2 fans can operate on a circuit through the wall control.

## 2. FTC Energy Guide & Specification

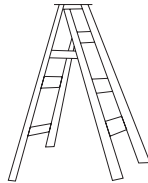
FAN	FAN SIZE	VOLTS	N.W (lbs)	G.W (lbs)	STANDARD	ELECTRICITY	AIR FLOW	ENERGY COSTS*	FAN EFFICACY
Elf	38"	120	15.12	18.17	High Speed	39W	5150 CFM	\$11/yr	132.1 CFM/W
					Weighted Average	30W	2920 CFM	\$8/yr	97 CFM/W

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

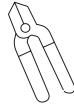
## 3. Tools and Materials Required



Phillips screwdriver



Step ladder



Wire cutters



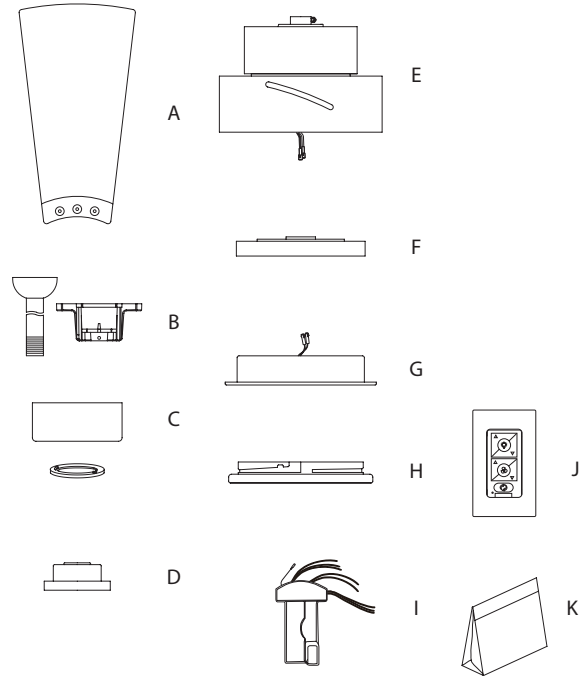
Electrical tape

## 4. Package Contents

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

REF.	DESCRIPTION	PART NO.
A	Blade Set of 5	RPL-F1802-26-BD-**
B	Hanger Assembly	RPL-HGR-ASM-**
	-Hanger Bracket	
	-Downrod Assembly	
C	Canopy & Canopy screw cover	RPL-CAN-CYL-**
D	Coupling Cover	RPL-COU-CVR-**
E	Motor Assembly	---
F	Adapter Plate	---
G	LED Module	F6IN-120V-R1-30
H	Glass Shade	RPL-F1802-GLA
I	Control Receiver	RPL-F1802-38-REC
J	Wall Control W/ Hardware	F-WC-WT
K	Hardware Bag	RPL-ELF-PARTS
	W/ Mounting Hardware	
	wood screws (2), screws (2)	
	5/32" lock washers (2), flat washers (2)	
	5.4mm lock washers (2), wire nuts (3)	
	W/ Blade Attachment Hardware	
screws with rubber washers (16)		

NOTE: \*\* denotes finish code of fan



## 5. Mounting Options

**CAUTION:** To prevent electrical shock, ensure electricity has been turned off at the circuit breaker before beginning.

If there isn't an existing UL/cUL listed outlet box, please refer to the following instructions. Secure the outlet box directly to the building structure. Use appropriate fasteners and building materials. The outlet box and support structure must be able to fully support the moving weight of the fan (at least 35 lbs/15.9 kg). Do not use plastic outlet boxes. Use only UL/cUL listed outlet boxes marked "FOR FAN SUPPORT."

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 1-4 are examples of different ways to mount the outlet box.

**NOTE:** To hang your fan where there is an existing fixture but no ceiling joist, you may need an installation hanger bar.

**NOTE:** Downrod fans can be suspended up to a maximum recommended length of 72" using additional downrods (sold separately) and the included 80" lead wire.

**NOTE:** The sloped ceiling kit (sold separately) is required for sloped ceiling applications, and will accommodate slopes up to 45° (Fig.3).

**NOTE:** You may need a longer downrod to maintain proper blade clearance when installing on a steep, sloped ceiling (Fig. 3).

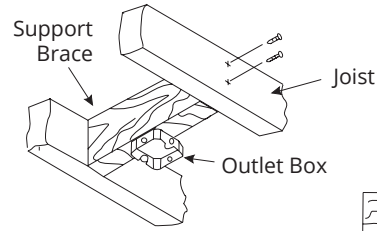


FIG. 1

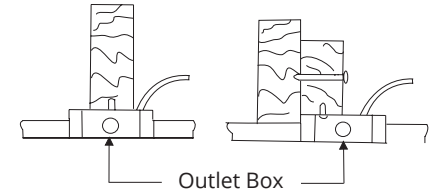


FIG. 2

SLOPED CEILING  
MAX 30° ANGLE

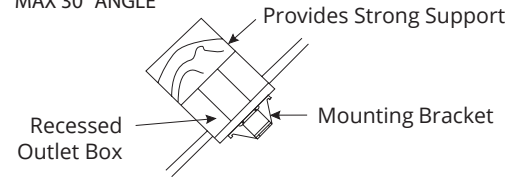


FIG. 3

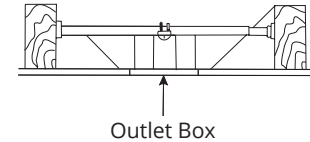


FIG. 4

FR-W1802



## 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. 5).
2. Remove 1 of 2 screws from the bottom of mounting bracket and save for use in section 9. Loosen the other screw (FIG. 6).
3. Pass the 120-volt supply wires through the center hole in the ceiling mounting bracket as shown in (FIG. 7).
4. Secure the mounting bracket to the ceiling outlet box with the screws and washers provided with your outlet box (FIG. 7).

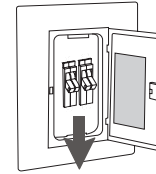


FIG. 5

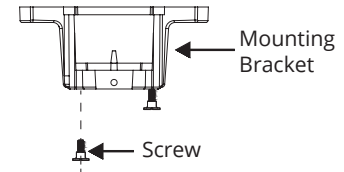


FIG. 6

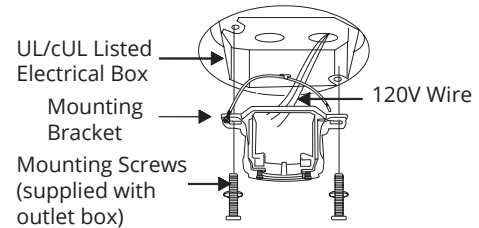


FIG. 7

## 6. Hanging the Fan (cont.)

1. Take out the set screw located in the hanger ball, lower the hanger ball and remove the cross pin. Remove the hanger ball from the hanger ball/downrod assembly (FIG. 8).
2. Remove the clevis pin and cotter pin, and loosen the two collar screws from the motor collar (FIG. 9).
3. Carefully feed the motor wires and safety cable up through the downrod. Thread the downrod into the collar.
4. Align the holes of downrod and collar and insert the cotter pin and clevis pin. Tighten the two collar screws (FIG. 9).

**WARNING:** Failure to properly install the cotter pin and/or tighten the screws could result in the fan loosening and possibly falling.

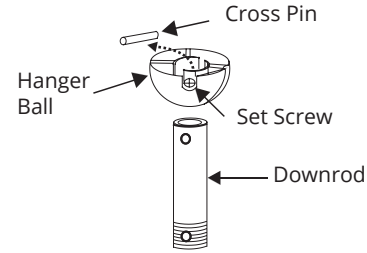


FIG. 8

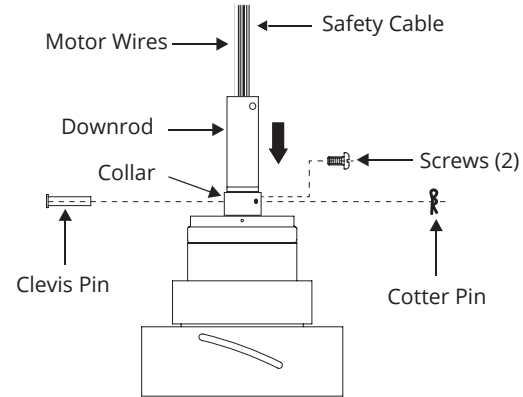


FIG. 9

## 6. Hanging the Fan (cont.)

1. Slip the coupling cover, canopy screw cover (painted side face down), and canopy (opened side up) onto the downrod (FIG. 10). Coupling cover goes all the way to the bottom.
2. Carefully reinstall the hanger ball onto the downrod, being sure that the cross pin is in the correct position, the set screw is tightened and wires are not twisted (FIG. 10).
3. Carefully lift the fan motor assembly up to the mounting bracket and seat the hanger ball in the mounting bracket socket. Make sure the tab on the mounting bracket socket is properly seated in the groove in the hanger ball (FIG. 11). Rotate the socket assembly until the ball drops and locks into the hanger bracket screw.
4. Secure the safety cable to the building structure using wood screw (FIG. 11).

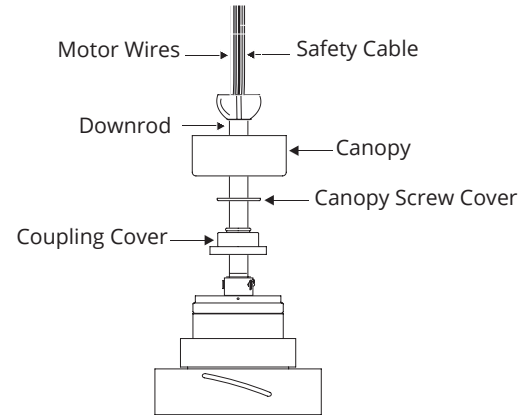


FIG. 10

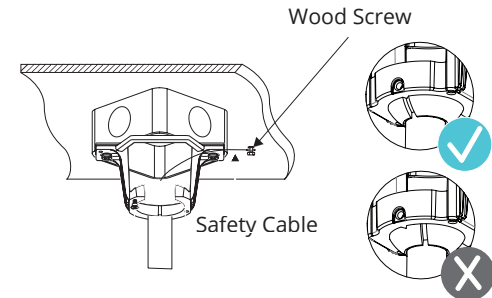


FIG. 11

## 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.

Insert the receiver into the mounting bracket with the flat side of the receiver facing the ceiling (FIG. 12).

Complete the follow 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.

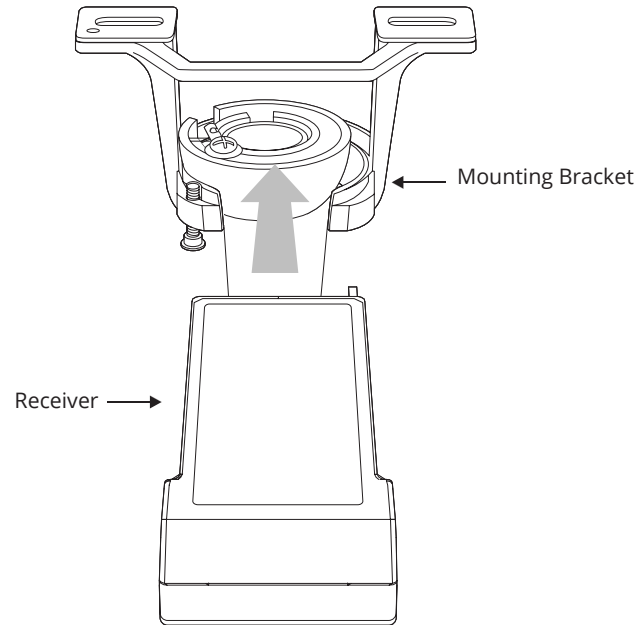


FIG. 12

## 7. Making the Electrical Connections (cont.)

Motor to receiver electrical connections: (FIG. 13)

1. Connect the hanger ball/downrod assembly ground wire, mounting bracket ground wire and receiver ground wire to the ground wire in outlet box.  
**WARNING:** Failure to connect ground wires could result in poor fan control functionality.
2. Connect the red wire from the fan to the red wire marked "to motor" from the receiver.
3. Connect the gray wire from the fan to the gray wire marked "to motor" from the receiver.
4. Connect the yellow wire from the fan to the yellow wire marked "to motor" from the receiver.
5. Connect the white wire from the fan to the white wire marked "for light" from the receiver.
6. Connect the blue wire from the fan to the blue wire marked "for light" from the receiver.

Receiver to house supply wires electrical connections: (FIG. 13)

1. Connect the black (hot) wire from the ceiling to the black wire marked "AC in L" from the receiver.
2. Connect the white (neutral) from the ceiling to the white wire marked "AC in N" from the receiver.

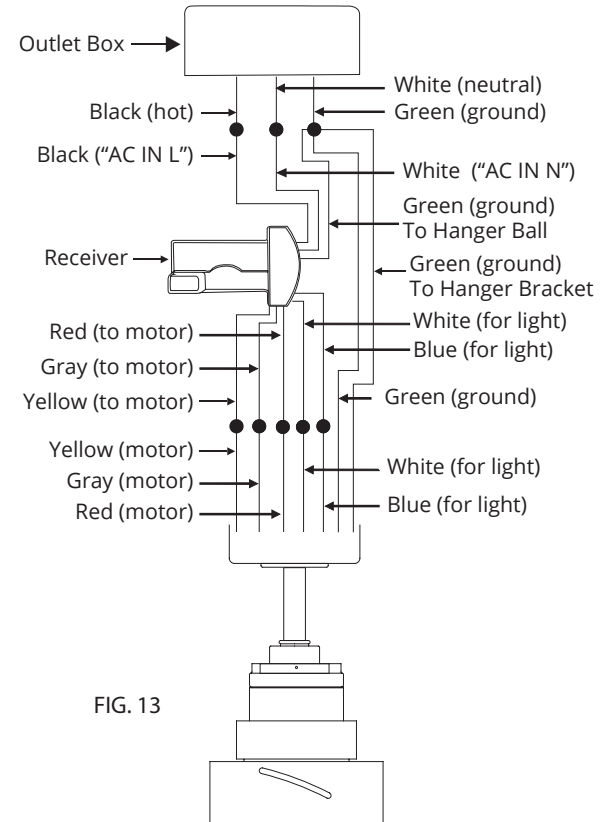


FIG. 13

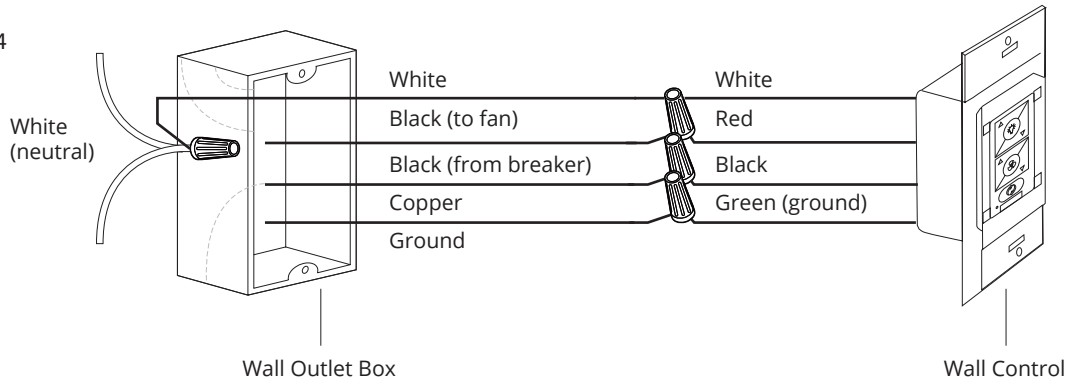
## 8. Installing the Wall Control

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.

FIG.14



## 8. Installing the Wall Control (cont.)

1. 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: A maximum of 2 fans can operate on a circuit through the wall control.

A 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).

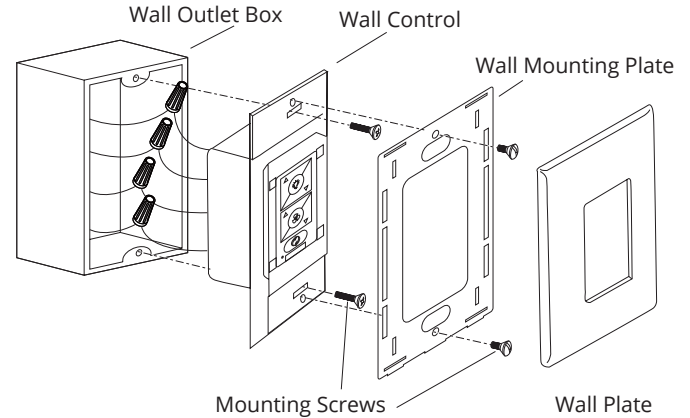


FIG. 15

## 9. Finishing the Installation

1. Secure all wire connections with supplied wire ties to assist in canopy installation.
2. Tuck connections neatly into ceiling outlet box.
3. Slide the canopy up to hanger bracket and place the key hole on the canopy over the screw on the hanger bracket. Turn canopy until it locks in place at the narrow section of the key holes (FIG. 16).
4. Align the circular hole on canopy with the remaining hole on the hanger bracket. Secure by tightening the one screw previously loosened and the one previously removed.
5. Adjust the canopy screws as necessary until the canopy and canopy cover are snug.

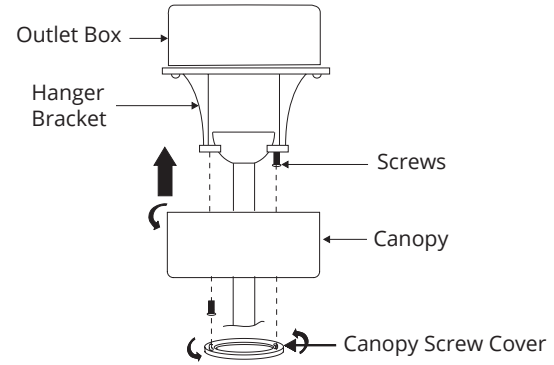
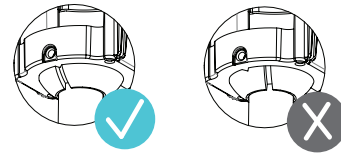


FIG. 16

**WARNING:** Make sure tab at bottom of hanger bracket is properly seated in groove of hanger ball before attaching canopy to bracket. Failure to properly seat tab in groove could cause damage to electrical wiring.





## 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 blade attachment screw with rubber washers (FIG. 17).
2. Repeat this procedure with the remaining blades.

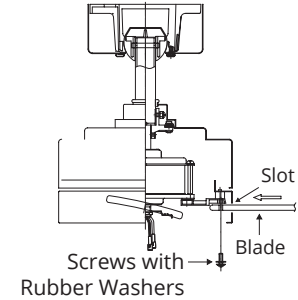


FIG. 17

## 11. Installing the Adapter Plate

1. Remove one of the three mounting plate screws from the mounting ring and loosen the other two screws (do not remove).
2. Place the key holes in the mounting plate over the two screws previously loosened from the mounting ring. Turn the mounting plate until the adapter plate locks in place at the narrow section of the key holes (FIG. 18).
3. Tighten the two mounting ring screws previously loosened and the one previously removed to secure adapter plate.

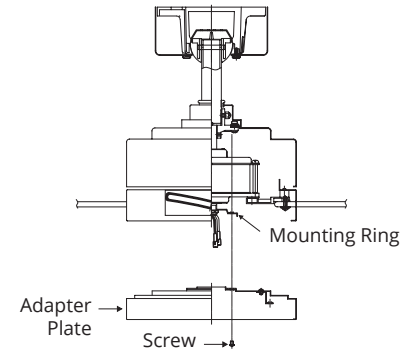


FIG. 18

## 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.

1. 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).
2. Raise and hold the LED luminaire module close to the mounting 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. 19).
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. 19).
4. Raise acrylic shade up against the luminaire module, and secure it to fan by turning glass clockwise until snug. Do not over-tighten.

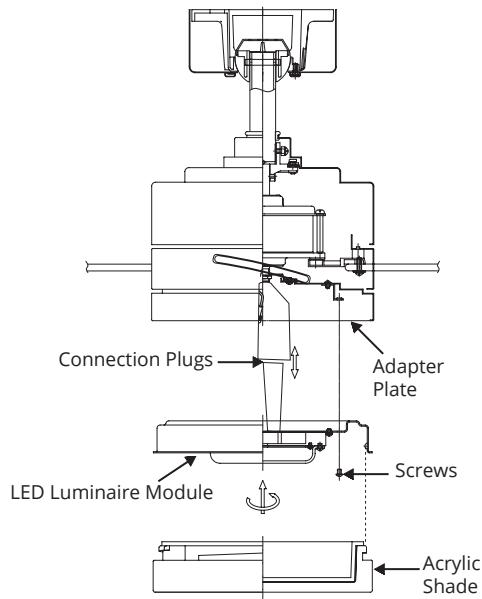


FIG. 19

## 12. Installing the LED Luminaire Module (cont.)

5. If installing the optional metal light cover, make sure it is securely tightened (FIG. 20).

NOTE: Add metal light cover if you do not need lighting function or prefer a different aesthetic (FIG. 20).

NOTE: Do not connect the LED connector wires if you are using the metal light cover.

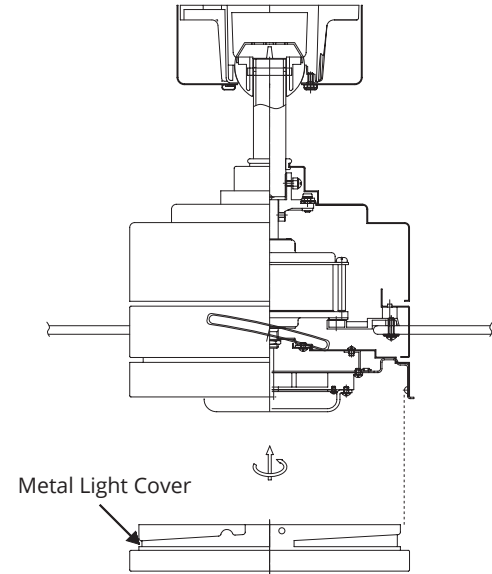


FIG. 20

## 13. Wall Control Operating Instructions




Restore power to ceiling fan and test 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.

**NOTE:** For pairing instructions please skip to the "Pairing" section.

### Wall Control Button Functions

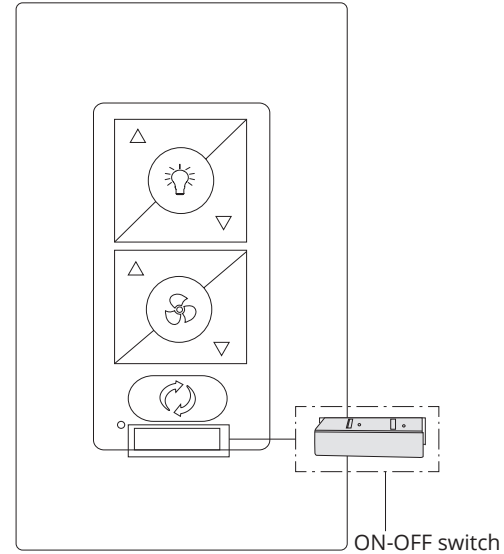
 button: Turns the light ON or OFF.  
Press or hold  to increase the light level.  
Press or hold  to decrease the light level.

 button: Turns the fan ON or OFF.  
Press or hold the  button to increase fan speed.  
Press or hold the  button to decrease fan speed.

**NOTE:** Your fan features 6 speeds. An audible tone will indicate when the speed is increased or decreased. When the fan has reached the minimum/maximum speed level the audible indication will stop.

 button: Switch between Summer Mode and Winter Mode.

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



### 13. Wall Control Operating Instructions (cont.)

#### Summer Mode

(counter-clockwise): A downward airflow creates a cooling effect (FIG. 21). This allows you to set your air conditioner on a warmer setting without affecting your comfort.

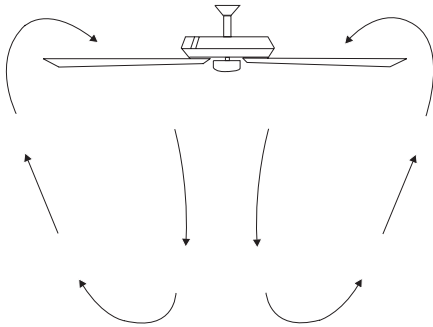



FIG. 21

#### 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. This should allow for savings on heating costs (FIG. 22).

NOTE: To operate the reverse button on your fan, press the  button while the fan is running.

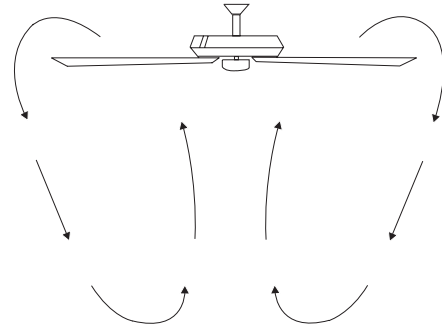




FIG. 22

## 13. Wall Control Operating Instructions (cont.)





### Pairing

If you need to re-pair your fan or you want to pair a second wall control:

1. Power cycle your fan by turning off the power at the circuit breaker.
2. Press and hold  and  buttons on wall control for 10-15 seconds.
3. The LED will blink green then remain solid green.
4. The green LED along with audible beeps will indicate that pairing is successful.
5. Test wall control for functionality.

### Unpairing

NOTE: Unpairing must be completed within 3 minutes of turning the power on to the fan receiver.

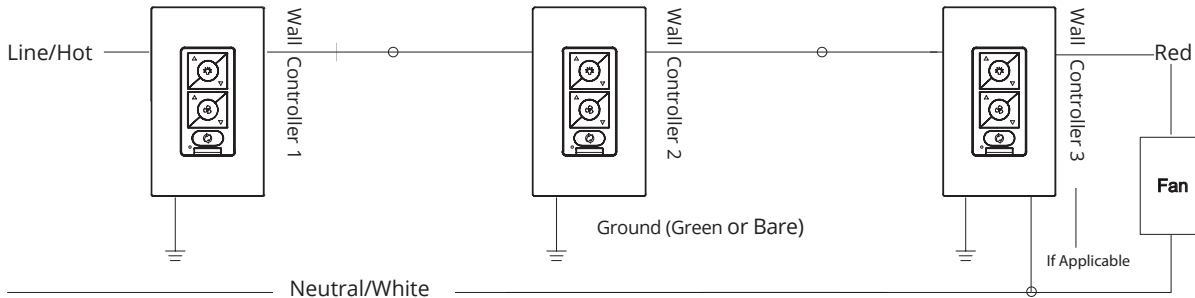
1. When you re-engage power to the fans you want to unpairing, press and hold the   and   buttons for 4 seconds.
2. The LED will alternate red/green, blink green, and the receiver will beep to indicate that unpairing is successful.

### Multi Location Wiring

1. Install the wall control using the wiring diagram below.
2. Individually pair each of the wall controls with the fan receiver using the pairing instructions in the previous section.

NOTE: Pairing must be completed within 3 minutes of turning the power on to the fan/receiver.




FIG.23



## 13. Wall Control Operating Instructions (cont.)

### Factory Reset

NOTE: This will remove wall control and app connections.

Press and hold the ,  and  buttons for 10 seconds.

1. The LED will blink red and return to solid red, and the receiver will beep to indicate that the factory reset is successful.

### Receiver Button Factory Reset

1. Press the button on the receiver until the receiver beeps (FIG. 26).

NOTE: This will remove wall control and Modern Forms app connections.

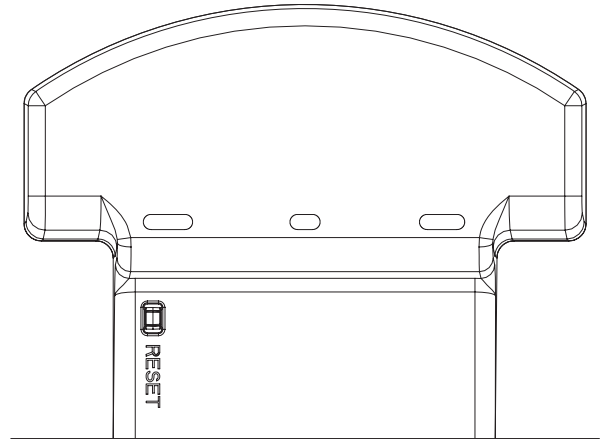
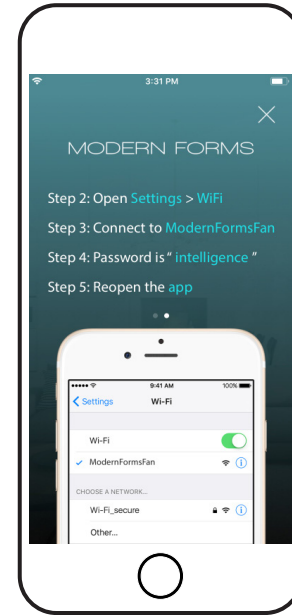


FIG.24


## 14. Application

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

1. To use this app, download it for free from the App Store or Google Play.
2. Open the app to create your account. You can also log in using your Facebook or Google account.
3. Next, set up a Wi-Fi connection. You'll need the SSID and Wi-Fi password for the network you wish to connect to.
4. You'll receive a prompt to name your fan device and upload an optional picture of it if you choose.



App Instructions and Smart Home Device Integration

 [modernforms.com/mfappins](https://modernforms.com/mfappins)



5. The Modern Forms app will walk you through the main screen and show you how to create schedules, change fan speeds, dim the light, switch between Summer and Winter Modes, invite users, create groups and much more. Please refer to the Modern Forms app instructions for more details.

NOTE: A maximum of 2 fans can operate on a circuit through the wall control.

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



## 15. Troubleshooting

Problem	Solution
Fan will not start.	<ol style="list-style-type: none"><li data-bbox="399 217 1029 238">1. Check all electrical connections and ensure proper contact. <b>WARNING:</b> Before checking any electrical connections, ensure electricity has been turned off at the circuit breaker before beginning.</li><li data-bbox="399 323 1442 451">2. Check wall control LED indicator light. If LED indicator light is not illuminated when pushing a button, it is not transmitting a signal. Turn off power from the circuit breaker, then loosen the canopy and check all electrical connections according to the wiring diagram in the Making the Electrical Connections section.</li><li data-bbox="399 461 1341 557">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 switch or a breaker if utilizing the Modern Forms app (without the wall control in the circuit).</li><li data-bbox="399 568 1192 589">4. Assure that the fan is within range of the Wi-Fi (150 ft) or wall control (30 ft).</li><li data-bbox="399 600 808 621">5. Make sure the fan blades spin freely.</li><li data-bbox="399 632 1393 693">6. Make sure the black antenna on the receiver is not tangled with any other electrical wires and is extended around the inside of the canopy.</li></ol>

## Problem

## Solution

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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 blades to the fan are securely fastened.
4. Make sure the screws securing the LED luminaire module are securely fastened.
5. Make sure that wire nut connections are not rubbing against each other or the interior wall of the canopy.

Fan wobbles.

1. Check that all fan blade and blade arm screws are securely fastened.
2. Ensure that all fan blades are installed correctly and that the tops of the blades are facing the ceiling.
3. If blade wobble is still noticeable, interchanging two adjacent (side by side) fan blades can redistribute the weight and possibly result in smoother operation.

## 16. Accessories

Product	Model	Description	Finish
Wi-Fi Touch Panel Wall Control 	F-TS	Full app control Wi-Fi range: Up to 150ft from router Sold separately	BK, WT
RF Wall Control 	F-WC	Included with each fan 6 Fan speeds Dims light to 1% Wall control range: Up to 30ft from fan Works in conjunction with Modern Forms Fan Receiver (not included)	WT
Coupler 	XF-I	Connects two downrods	AS, BZ, CFI, DW, GB, GH, GW, LN, MB, MW, OB, SS, TT
Slope Ceiling Kit 	XF-SCK	Designed to accommodate buildings with steeper sloped ceilings up to 45° or 12/12 pitch	AS, CFI, LN, SS BZ, DW, GB, GH, GW, MB, MW, OB, TT

Product

Model

Description

Finish

Downrod



XF-12 12" in downrod

AS, CFI, LN, SS, BZ,  
DW, GB, GH, GW, MB,  
MW, OB, TT

XF-18 18" in downrod

AS, CFI, LN, SS, BZ,  
DW, GB, GH, GW, MB,  
MW, OB, TT

XF-24 24" in downrod

AS, CFI, LN, SS, BZ,  
DW, GB, GH, GW, MB,  
MW, OB, TT

XF-36 36" in downrod

All our downrods are 1"O.D. and are threaded on the motor end to create an extra layer of security to allow for adjustments in the field.

AS, CFI, LN, SS, BZ,  
DW, GB, GH, GW, MB,  
MW, OB, TT

XF-48 48" in downrod

AS, LN, SS, BZ, DW,  
GB, GH, GW, MB, MW,  
OB, TT

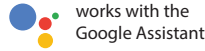
XF-60 60" in downrod

AS, LN, SS, BZ, DW,  
GB, GH, GW, MB, MW,  
OB, TT

XF-72 72" in downrod

AS, LN, SS  
BZ, DW, GB, GH, GW,  
MB, MW, OB, TT

# Get Smart

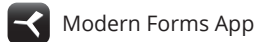


The Modern Forms app synchronizes seamlessly with smart home devices you already own.  
To learn more go to [modernforms.com/mfappins](https://modernforms.com/mfappins)



## 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.



# 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](http://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-francais](http://www.modernforms.com/fan-instructions-francais)



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