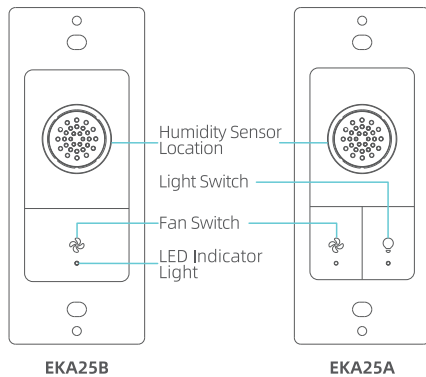


Humidity Sensor Switch

EKA25A/EKA25B
120V/277V AC 50/60HZ

Product Introduction



Warnings And Cautions



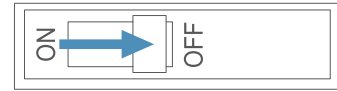
WARNINGS: TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING!

AVERTISSEMENTS: POUR ÉVITER TOUT INCENDIE, TOUT CHOC OU LA MORT, COUPEZ LE DISJONCTEUR OU LE FUSIBLE ET TESTEZ QUE L'ALIMENTATION EST COUPÉE AVANT LE CÂBLAGE !

Features

- **All-in-One Fan and Light Control**, Replaces a single-pole switch to control a ventilation fan, a fan/light combo, or separate fan and lighting circuits – ideal for bathrooms and utility areas.
- **Wide Compatibility**, Supports ventilation fans up to 1/4 HP and works with LED, CFL, incandescent, halogen, MLV, and ELV lighting loads.
- **Smart Humidity Sensing**, Advanced digital sensor with microprocessor control detects humidity and occupancy for precise activation – reduces false triggers and enhances comfort.
- **Multiple Operating Modes**, Includes Bath Fan Mode, Humidistat Mode, and Air Cycle Mode to meet a variety of ventilation needs.
- **Tool-Free Programming**, Easily adjust settings using the built-in toggle switch – no need to remove the faceplate or use tools.
- **Test Mode for Easy Setup**, Built-in test mode ensures proper placement and optimal sensor calibration during installation.
- **UL & Title 24 Compliant**, Meets UL 60730, C22.2 No. 60730, ASHRAE 62.2, and supports compliance with California Title 24 (2019 & 2022) and CALGreen Part II indoor air quality standards.
- **Ground Connection Required**, Must be connected to Earth ground in the wall box for proper operation and safety.

1 Turn Power OFF At Circuit Breaker



WARNING: SHOCK HAZARD.

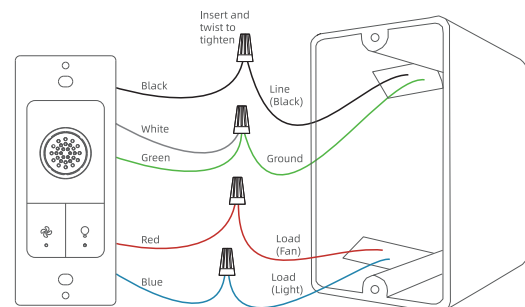
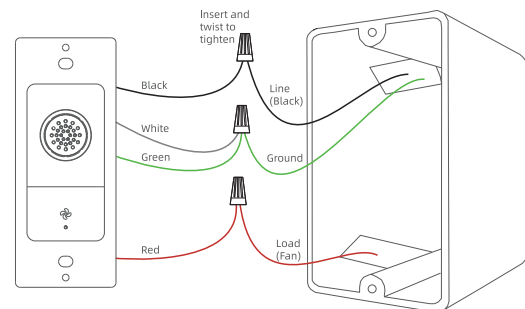
May cause serious injury or death. Turn off power at circuit breaker or fuse before installation.

2 Ensure Ground Wire Or Neutral Wire Is Available

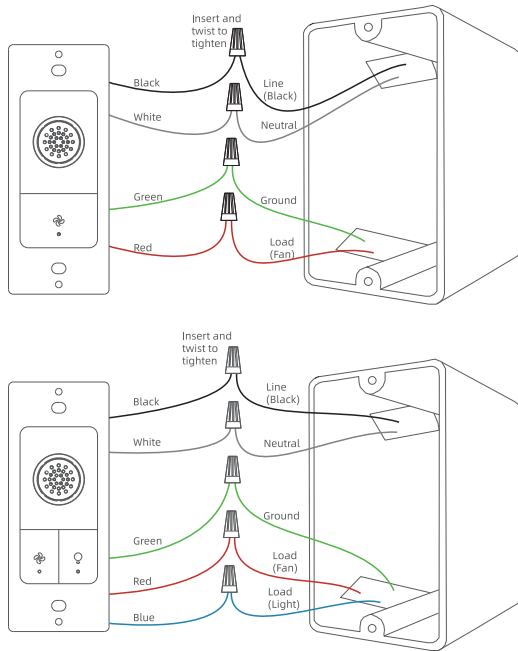
- If no neutral wire is available: Connect both the white wire and the green wire from the device to the ground wire in the box.
- If a neutral wire is present: Connect the white wire from the device to the neutral wire in the box.
- If neither a neutral nor a ground wire is available: Stop and consult a licensed electrician.
- The device will not work unless it is properly connected to either a neutral or a ground.

3 Connect Sensor Switch

A. Neutral is not present.

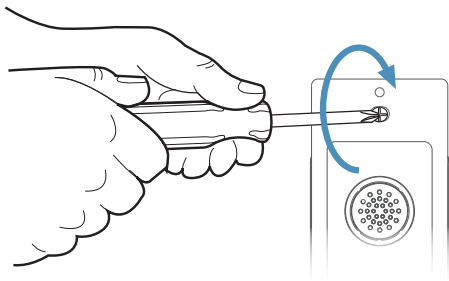


B. Neutral is present.



Note: Actual wire colors in the electrical box may not match the examples provided.

4 Mount The Switch Using Supplied Screws



5 Turn Power ON At Circuit Breaker To Start Work

Custom Settings (Optional)

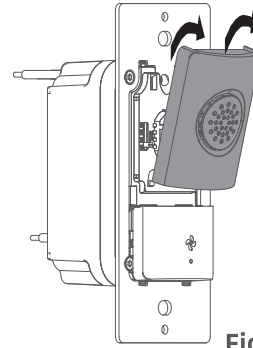


Figure A

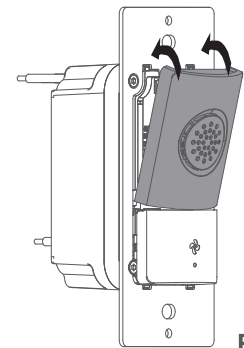


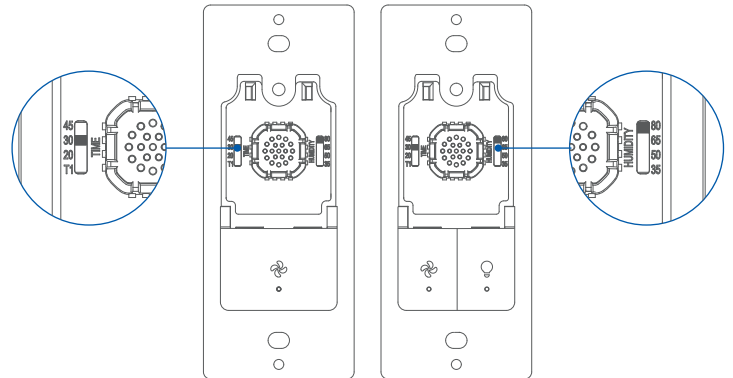
Figure B

Top Cover Removal (Figure A)

Pull the top peg of top cover and remove the top cover. (See Figure A)

Top Cover Mount (Figure B)

Place the bottom peg in each side first and then snap top peg at a time when the setting is complete. (See Figure B)

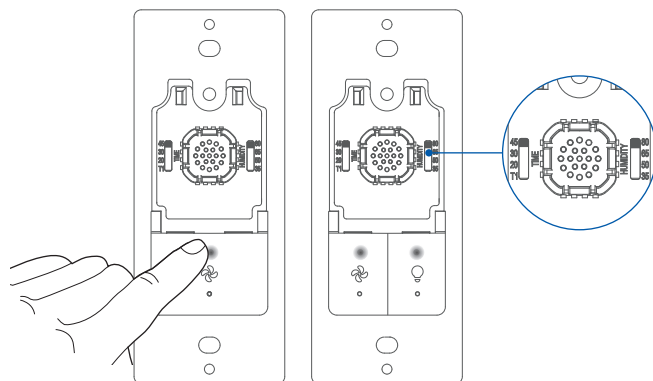


A.Run-time/ Humidity threshold settings

Use the slide toggle switch to set the fan run-time and select the humidity threshold at which the fan will automatically turn on.

Fan stay on Time	1 min	20 min	30 min	45 min
Humidity AUTO-ON level	35 %RH	50 %RH	65 %RH	80 %RH

ELEGRP INSTALLATION INSTRUCTIONS



B. Humidity Sensitivity Settings

Slide the toggle switch to **45Min** and **80% RH**.

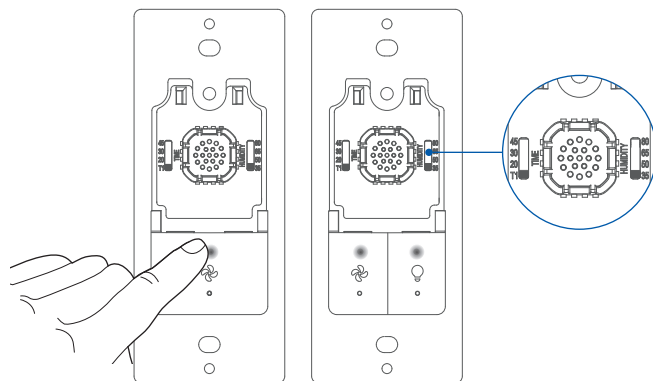
To enter **Sensitivity Mode**,

- For **EKA250A**: press and hold the **Fan** and **Light** buttons **together**.
- For **EKA250B**: press and hold the **Fan** button.
- The **LED indicator** changes color to show each sensitivity level.

After selecting the desired mode,

- For **EKA250A**: press and hold the **Fan** and **Light** buttons **together** again to **save and exit**.
- For **EKA250B**: press and hold the **Fan** button again to **save and exit**.

LED Indicator Color	Green	Red	Orange
Sensitivity Mode	Low	Medium	High



C. Working Mode Settings

Slide the toggle switch to **T1** and **35% RH**.

To enter **Mode Switching**,

- For **EKA250A**: press and hold the **Fan** and **Light** buttons **together**.

- For **EKA250B**: press and hold the **Fan** button.
- The **LED indicator** changes color to show each mode.

After selecting the desired mode,

- For **EKA250A**: press and hold the **Fan** and **Light** buttons **together** again to **save and exit**.
- For **EKA250B**: press and hold the **Fan** button again to **save and exit**.

LED Indicator Color	Green	Red	Orange
Working Mode	Bath Fan Mode	Air Cycle Mode	Humidistat Mode

Bath Fan Mode

Mode	Use Case	Fan Operation
Auto	For areas where humidity may fluctuate significantly.	The fan turns on automatically when humidity exceeds the set sensitivity level and runs for the preset time. If humidity remains high after shutoff, the fan restarts and runs for another cycle.
Manual	Use at any time when manual control is preferred.	The fan runs for the preset time. After the countdown ends, it stays off for at least 2 minutes before returning to Auto mode.
Bypass (Hold the Fan button for 5 seconds)	Temporarily disables the sensor's auto-on feature.	The fan will not turn on automatically. Hold the fan button for 5 seconds to exit Bypass mode.

Air Cycle Mode

Mode	Use Case	Fan Operation
Auto	Ideal for basements, bathrooms, or other areas requiring regular ventilation.	The fan runs once per hour for the preset duration within the active time period.
Manual	Use at any time to start or stop ventilation manually.	Turning the fan on manually starts a new one-hour cycle. Turning it off manually places the device in a lock-out state for the remainder of that cycle.
Bypass (Hold the Fan button for 5 seconds)	Temporarily disables automatic air circulation.	The fan will not operate on a scheduled cycle. Hold the fan button for 5 seconds to exit Bypass mode.

Humidistat Mode

Mode	Use Case	Fan Operation
Auto	Ideal for basements, bathrooms, or other areas prone to high humidity.	When the relative humidity exceeds the set value, the fan turns on for the preset duration. After the countdown ends, the fan remains off for the rest of the cycle.
Manual	Use at any time to start or stop ventilation manually.	Turning the fan on manually starts a new one-hour cycle. Turning it off manually places the device in a lock-out state for the remainder of that cycle.
Bypass (Hold the Fan button for 5 seconds)	Temporarily disables the humidity sensor.	The fan will not turn on automatically. Hold the fan button for 5 seconds to exit Bypass mode.

Troubleshooting

Symptom	Possible Cause	Solution
Indicator light does not flash after installation.	1. Main power is off or the circuit breaker has tripped.	Reset the circuit breaker if tripped.
	2. Incorrect wiring connection.	Verify and reconnect the wires according to the wiring diagram in the manual.
Exhaust fan does not operate.	1. Relay is in the OFF state.	Manually open the cover and adjust the humidity level using the toggle switch.
	2. Insufficient power-on time.	Wait at least 15 seconds after power is applied before operating the device.
Light does not turn on.	1. Incorrect wiring connection.	Verify and reconnect the wires according to the wiring diagram in the manual.

One Year Limited Warranty

The warranty gives you specific rights and you may also have other rights, which vary in different states and countries. Our company warrants to the original consumer purchaser that this product is free of defects in materials and workmanship for 1 year from the purchase date. **This warranty does not cover labor for removal or reinstallation of the product and is void on any product installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner.** Our company excludes incidental or consequential damages for breach of any warranty on this product. Some jurisdictions may not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you.

Help

AT YOUR SERVICE

Feel free to contact us with any questions or concerns. Our customer service team will work hard to put a smile back on your face.



Here's how we can contact:

Email: support@elegrp.com
Call us on: 866-267-3272

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OUR POLICY

If your purchase does not fully meet your expectations, you have 30 days to request a replacement or return.



How to return/replace:

01. Log into your purchased platform.
02. Go to 'Orders' section.
03. Request return or replacement.

ELE (GROUP) CO., LTD

NO.158 CHUANGYUAN ROAD, SIP
SUZHOU, JIANGSU, CHINA 215125