PROGRESSIVE
AUTOMATIONS
FORWARD THINKING

PW-RS1

User Manual

V1.0

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SAFETY PRECAUTIONS

When installing and using your Progressive Automations Motorized Roller Blind Retrofit Kit, basic safety precautions should always be followed. Please read all safety precautions thoroughly and be familiar with all functions of the product before use. Apply all other relevant precautions when operating electrical and moving mechanical devices.

⚠ DANGER

To reduce the risk of electrical shock and injuries:

- Do not attempt to modify or repair the motor.
- Avoid using the motor in environments with explosive gases or flammable materials.

⚠ WARNING

To reduce personal harm and injury:

- Follow recommended load ratings and specifications for the motor.
- Avoid operating the motor in areas with high levels of airborne contaminants, such as dust, smoke, or chemical vapors.
- Ensure a clear path for full extension and retraction of the roller shade.
- Keep hands and body parts clear of the roller shade while it is in motion.
- Exercise caution around pinch points and moving components during the roller shade's operation.
- Keep all loose clothing, jewelry, and personal items away from the motor's moving parts.

OPERATING NOTES

Warranty

Any attempts to disassemble or tamper with the motor's internal components or operation outside of the advertised usage limitations will result in voiding the product's warranty. For more information on our warranty terms, visit: https://www.progressiveautomations.com/pages/warranty-terms

Force Restrictions

The motor must be used within the specified force rating outlined in this documentation. The load must be evenly distributed. Exceeding the recommended force rating may result in failure of the motor. It may also damage the product and void the warranty. Please note that the weight of the load does not always equal the total force due to mechanical advantage, wherein the force may increase or decrease depending on the application.

Operation Time

The motor must be operated within the specified operation time and frequency. Exceeding the duty cycle rating can significantly reduce the motor's expected lifespan and will void the warranty.

SPECIFICATIONS

Compatibility	Roller Shades with Inner Tube Diameter of 1″ to 1 7/8″
Kit Includes	1x Motor 2x Roller Shade Brackets 1x Solar Panel 2x Solar Panel Brackets 1x Wireless Remote 13x Adapters 1x End Plug
Solar Panel Dimensions	20″ x 2.5″
Solar Panel Installation	Brackets or 3M Adhesive
Motor Battery Type	Rechargeable Lithium-Ion, 2500mAh
Power Input	5V DC, 2A (USB-C)
Motor Power Output	18 W
Motor Torque	2.0 Nm
Motor Speed	3 Speed Options: 20, 24 or 28 RPM
Weight Capacity	20 lbs
Noise Level	≤ 32 dBA
Minimum Tube Length	22″
Overload Protection	None
Operational Temperature	14°F to 131°F (-10°C to 55°C)
Remote Control	Wireless Remote, Range up to 100 ft., Included Battery: CR2450, 3V
Connectivity	Matter-Compatible (Alexa, Google Home, Apple HomeKit)
Connectivity Features	Schedules, Memory Positions, App Control, Voice Control
Operational Environment	Indoor Use Only

KEY FEATURES

Matter Connectivity	Seamless integration with major smart home platforms
Wireless Remote	Control your shades with ease
Solar Charging	Energy-efficient power source
Adjustable Speed and Limits	Customize movement to your preference
Quiet Operation	Smooth and near-silent motor performance

COMPONENTS

TOOLS YOU WILL NEED
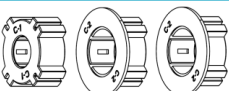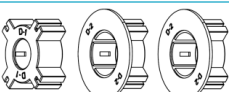
Drill   Screwdriver   Tape Measure   Pencil

No.	Part	Qty	No.	Part	Qty
Motor		1	Solar Panel		1
Bracket (Motor side)		1	Solar Panel Brackets		2
Bracket (End Plug side)		1	3M Adhesive		4
End Plug		1	Wireless Remote + Wall Bracket		1
Adapter Set Zero		1	Remote Battery		1
Adapter Set A		1	Remote Bracket Screws		2
Adapter Set B		1	Bracket Screws		8
Adapter Set C		1	Wall Anchors		8
Adapter Set D		1			

BUTTON IDENTIFICATION

Motor Head Button(H)
LED
USB Charging port

	Description
Motor Head Button (H)	Used for pairing the motor with the remote, performing initial setup functions, and resetting the motor.
LED	Blue and Orange LED indicator.
USB Charging Port	Plug in the Solar Panel cord or use a USB-C charging cable (not included).
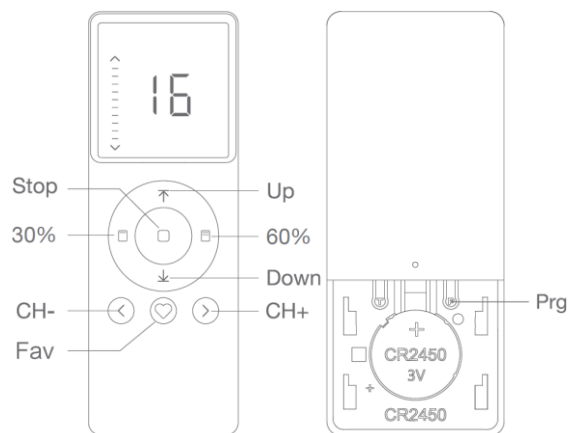
	Symbol	Description
Up		Rolls the roller shade up. If upper and lower limits are set, the shade moves to the top position.
Down		Rolls the roller shade down. If the upper and lower limits are set, the shade moves to the bottom position.
Stop		Stops the roller shade while it is moving.
30%		Moves the roller shade to cover 30% of the window if position limits are set.
60%		Moves the roller shade to cover 60% of the window if position limits are set.
CH-		Switches to a lower channel number (1-16), allowing control of a different roller shade.
CH+		Switches to a higher channel number (1-16), allowing control of a different roller shade.
Fav		Moves the roller shade to the preset favorite position.
Prg		Used to pair the remote with the motor and perform initial setup functions.

INSTALLATION STEPS

STEP 1 – PAIR THE MOTOR TO THE WIRELESS REMOTE

For the first-time setup, press the H button on the motor head three times to power on the motor. Then, follow the steps below to pair the motor with the wireless remote.
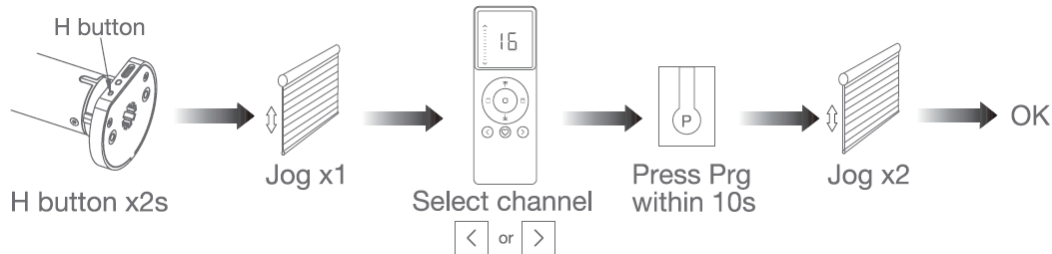
STEP 2 – SELECT THE CORRECT ADAPTER SET

Roll up your existing roller shade and carefully remove it from its brackets. Then, use the table below to find the adapter set that best matches the inner diameter of your roller shade tube.

The included adapters are designed to fit most standard tube sizes. If needed, you can carefully trim or sand the adapters for a more precise fit.
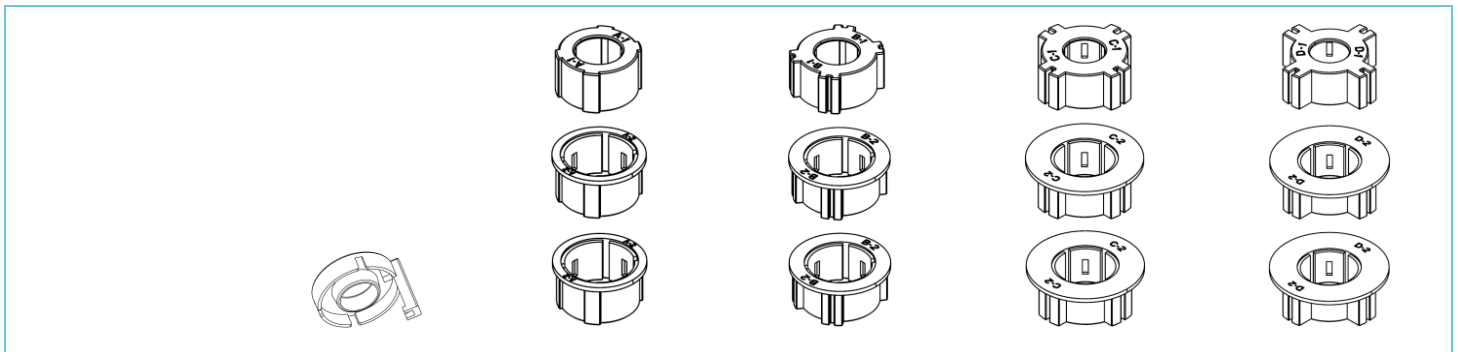
Set	Set Zero	Set A	Set B	Set C	Set D
Parts	Zero Adapter	A-1, A-2	B-1, B-2	C-1, C-2	D-1, D-2
Compatible Inner Tube Diameter	1″ (25.4 mm)	1.18″ (30.0 mm)	1.37″ (34.8 mm)	1.69″ (42.8 mm)	1.83″ (46.5 mm)
Number of Parts	1	3	3	3	3

STEP 3 – INSTALL THE ADAPTERS

Depending on your selected adapter set, follow the instructions below to install the adapters onto the Motor and the End Plug.

Option 1: Install Set Zero Adapter

1. Align the Zero Adapter with the motor drive adapter.
2. Ensure it is seated correctly, as shown below.

Option 2: Install Set A, B, C, or D Adapters

1. Align the flanged end of the selected Crown Adapter (A-2, B-2, C-2, or D-2) with the motor drive adapter. Slide the Crown Adapter past the motor drive adapter all the way to the motor end, as seen below.

2. Slide the Drive Adapter (A-1, B-1, C-1, or D-1) onto the motor head until it is fully seated, as seen below.

3. Slide the second Crown Adapter (A-2, B-2, C-2, or D-2) onto the End Plug, as seen below.

STEP 4 – ASSEMBLE THE MOTOR AND END PLUG

1. Insert the Motor into one end of the roller shade tube, ensuring it is securely positioned.
2. Insert the End Plug into the opposite end of the tube, making sure it is fully seated.

STEP 5 – INSTALL THE BRACKETS

Before installing the brackets, remove any existing roller shade brackets from your window.

1. Determine your Mounting Style
   Choose the installation method that best suits your window and desired look.

   a. Inside mount – Shade fits within the window frame.

   b. Outside mount – Shade extends beyond the window frame.

   c. Ceiling mount – Shade attaches to the ceiling or top surface of the window frame.

2. Mark the Bracket Locations

    a. Hold each bracket in place where you plan to install it.

    b. Use a pencil to mark the screw holes.

    c. Ensure the brackets are level and aligned so the shade will operate smoothly.

3. Prepare for Surface

    a. Use the included screws and wall anchors for standard drywall installation. If you're mounting into a stud, you can screw directly into the wood without anchors. For concrete or masonry surfaces, use appropriate masonry anchors and screws (not included). Make sure all fasteners are suitable for your mounting surface and can support the weight of the shade.

4. Adjust the Bracket Hook

    a. If needed, reposition the hook so the opening faces upward in your chosen mounting orientation.

    b. To adjust:

        i. Remove the screws holding the hook.

        ii. Move the hook to the alternative holes.

        iii. Reattach the screws tightly.

5. Install the Brackets

    a. Secure the brackets using the provided screws.

   b. Double-check that they are firmly attached and aligned.

STEP 6 – INSTALL THE ROLLER SHADE

Align and insert the motor end of the roller shade with the Bracket (Motor side). Then, hook the End Plug onto the Bracket (End Plug side).

STEP 7 – SET THE CORRECT MOTOR DIRECTION

Check motor direction by short-pressing the Up button on the wireless remote. If the roller shade moves up, skip to Step 8. If the roller shade moves down, see the instructions below for reversing the motor direction.

1. Press the Fav & Stop buttons for 2 seconds until the motor jogs once, indicating the direction has been reversed.

Fav & Stop x2s   Jog x1   Direction reversed
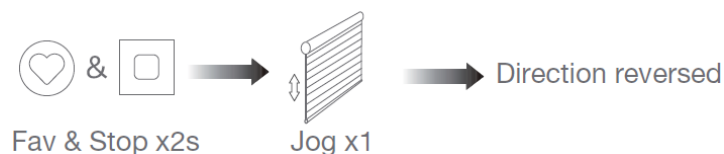
STEP 8 – SET THE MOTOR LIMITS

WARNING: Set Limits Carefully

When setting the upper and lower limits, ensure the roller shade stops at the desired positions. Do not allow the fabric to roll above the motor or beyond its full length, as this may cause damage or improper operation.

1. Set the Upper Limit

    a. Move the shade to the desired highest stop position.

    b. Press the Up & Fav buttons for 2 seconds. The motor will jog twice.

    c. The upper limit is now set.

Up or Down → Fix upper point → Up & Fav x2s → Jog x2 → Upper limit set

2. Set the Lower Limit

    a. Move the shade to the desired lowest stop position.

    b. Press the Down & Fav buttons for 2 seconds. The motor will jog twice.

    c. The lower limit is now set.

Up or Down → Fix lower point → Down & Fav x2s → Jog x2 → Lower limit set

[OPTIONAL] STEP 9 – INSTALL THE SOLAR PANEL

Position the solar panel for optimal sunlight exposure by using the included solar panel brackets or 3M adhesive tape. Install the brackets with the included hardware or apply the 3M adhesive to the sides of the solar panel and stick it to the window. Connect the solar panel cable to the USB-C port on the motor head.
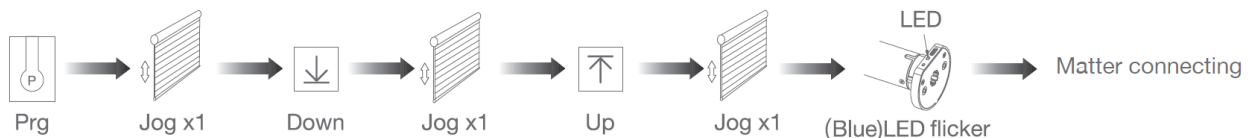
Note: If you experience a wide range of outdoor temperature differences and have single pane glass, brackets are recommended.

[OPTIONAL] STEP 10 – PAIR THE MOTOR WITH A SMART HUB

1. Put the motor in pairing mode by pressing and holding the pairing button on the motor or remote instructed below; the blue LED light will start to blink.

    a. OPTION 1 – using motor head button:

Hx6s → Jog x2 → (Orange)LED flickerx2 → (Blue)LED flicker → Matter connecting
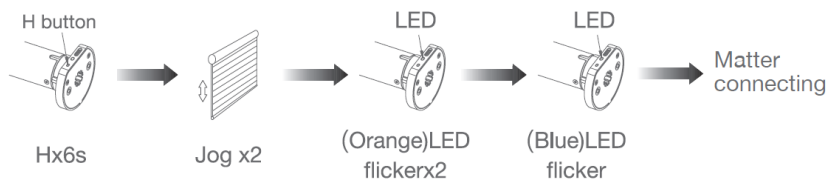
    b. OPTION 2 – using paired remote:

Prg → Jog x1 → Down → Jog x1 → Up → Jog x1 → (Blue)LED flicker → Matter connecting

2. Open your Alexa, Google Home, or Apple Home app.

3. Navigate to "Add Device" and select "Matter-Compatible Device" (or similar).

4. Scan the QR code on the motor. Then, follow the on-screen instructions to complete the setup and assign the shades to a room.

    a. After the motor device is added successfully, the blue LED on the motor head will be on for 10 seconds.

5. Test voice commands (e.g., "Alexa, open the shades") to confirm connectivity.

OPERATIONS

ONE-TOUCH OR CONSTANT-TOUCH MODE

Toggle between one-touch and constant-touch mode by following the instructions below.

Note: When the motor is in one-touch mode, holding the Up or Down button for 2 seconds will enable constant-touch mode.

Prg → Jog x1 → Stop → Jog x1 → Stop → Jog x1 → OK
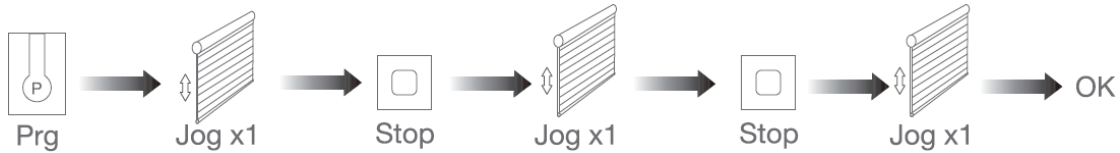
SET FAVOURITE HEIGHT POSITION

Note: The favorite position can only be set if upper and lower limits are set.

Move the roller shade to favorite height position by pressing the Fav button.
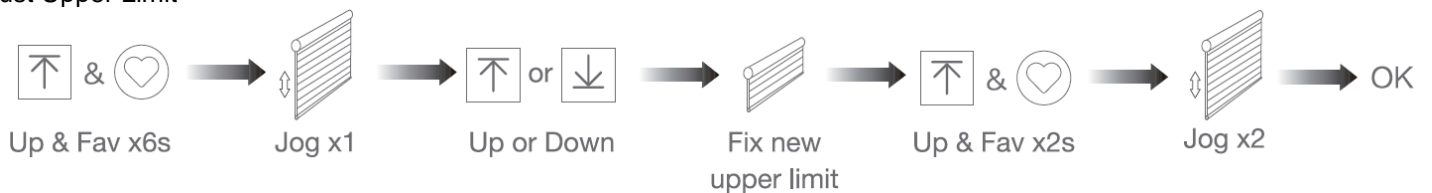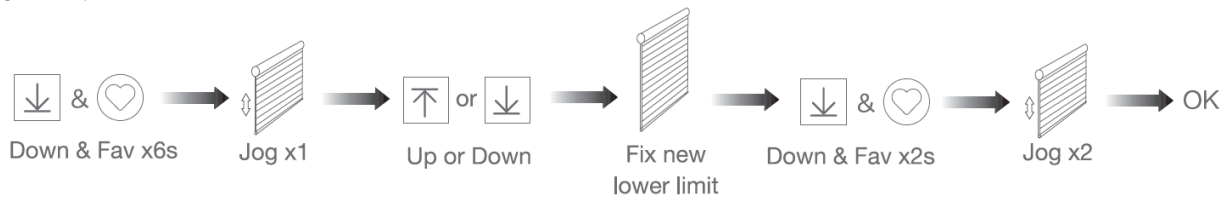

Fav

Set favorite height position:

Up or Down → Fix Fav. position → Fav & Stop x2s → Jog x2 → Fav. position set

Remove favorite height position:

Shade is at Fav. position → Fav & Stop x2s → Jog x1 → Fav. position Cancel

ADJUSTING MOTOR LIMITS

Adjust Upper Limit

Up & Fav x6s → Jog x1 → Up or Down → Fix new upper limit → Up & Fav x2s → Jog x2 → OK

Adjust Lower Limit

Down & Fav x6s → Jog x1 → Up or Down → Fix new lower limit → Down & Fav x2s → Jog x2 → OK
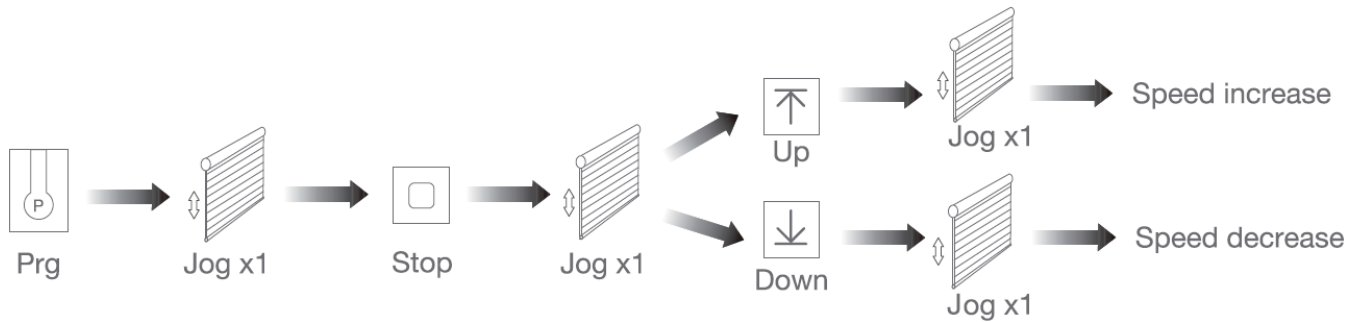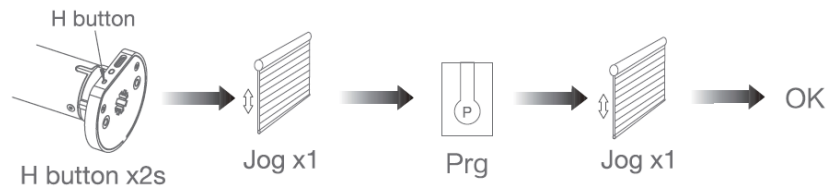
ADJUSTING MOTOR SPEED

The motor has 3 speed options - 20, 24 (default), or 28 RPM. Adjust the speed by following the instructions below.

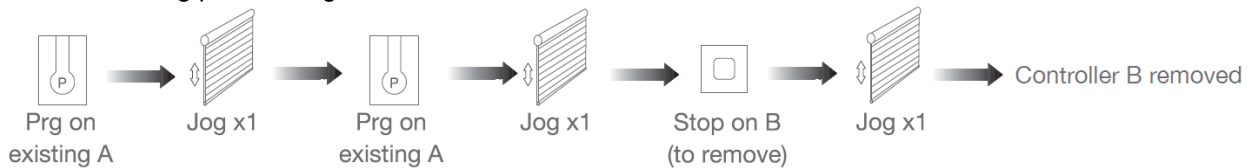Prg → Jog x1 → Stop → Jog x1 →
Up → Jog x1 → Speed increase
Down → Jog x1 → Speed decrease

REMOVING WIRELESS REMOTES

Remove a single remote.

H button
H button x2s → Jog x1 → Prg → Jog x1 → OK

Remove remote B using pre-existing remote A.

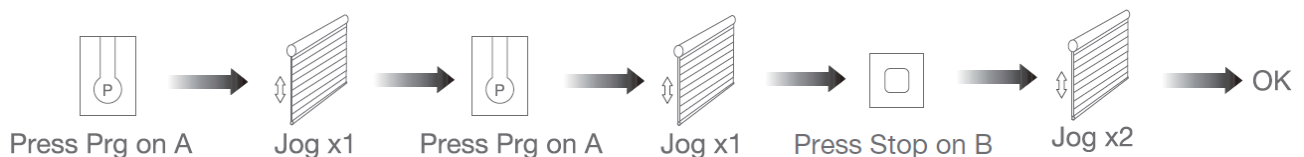Prg on existing A → Jog x1 → Prg on existing A → Jog x1 → Stop on B (to remove) → Jog x1 → Controller B removed

PAIR MOTOR TO NEW REMOTE USING AN EXISTING REMOTE

Add remote B using pre-existing remote A. **Note:** Pairing can not be done under group channel or 0 channel.

Press Prg on A → Jog x1 → Press Prg on A → Jog x1 → Press Stop on B → Jog x2 → OK

TROUBLESHOOTING

Problem	Possible Cause(s)	Corrective Action
Motor does not function	1. Controller not paired 2. Motor not powered on 3. Lower battery	1. Add controller 2. Press the motor button 3 times to wake up 3. Charge motor using 5V USB-C adapter (2A or higher)
Motor stops suddenly	1. Motor limits are set incorrectly 2. Roller shade exceeds the rated load 3. Low battery	1. Reset motor limits 2. Adjust load 3. Charge motor using 5V USB-C adapter (2A or higher)
LED on the motor head flashes 8 times when the motor starts	Low battery	Charge motor using 5V USB-C adapter (2A or higher)
Remote not working	Low battery	Replace the battery (CR2450, 3V)
Roller shade moves in the wrong direction	Motor direction is reversed	See Step 7 – Set Motor Direction
Uneven shade movement	Misaligned mounting brackets or motor obstruction	Ensure there are no obstructions and check mounting alignment with a level