Upgrade to the industry's most advanced Motor Program:

Motorization features 2-way technology with superior value and innovation paired with a smart, seemless user interface.



**RF 2W** 15 Channel Remote Control Programming Guide

# Specifications

- Up to 15 channels with 3V (CR2450) battery, magnetic holder included
- Channel 0 controls all shades assigned to remote; ability to hide extra channels
- Favorite position activated by quick touch of a button
- Locking feature prevent unwanted configuration changes

# ™ Motorization Table of Contents

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#### **Declarations**

#### **U.S. Radio Frequency FCC Compliance**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **ISED RSS Warning:**

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

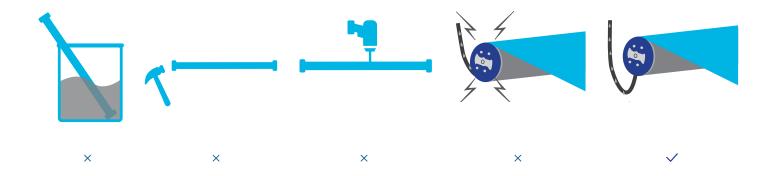
## **Safety Instructions**

#### **Attention**

Never drop, knock, drill or submerge the motor. Keep the power cable in the proper position as shown below.

Read all safety instructions before installation.

Incorrect installation can lead to serious injury and will void manufacturer's liability and warranty.



#### **Important Safety Instructions**

- 1. Do not expose motor to humid, damp, or extreme temperature conditions.
- 2. Do not drill into motor.
- 3. Do not cut the antenna. Keep it clear from metal objects.
- 4. Do not allow children to play with this device.
- 5. If the power cable or connector is damaged, do not use.
- 6. Ensure the correct crown and drive adaptor are used.
- 7. Ensure the power cable and aerial is clear and protected from moving parts.
- 8. Cable routed through walls should be properly isolated.
- 9. Motor is to be mounted in horizontal position only.
- 10. Before installation, remove unnecessary cords and disable equipment not needed for powered operation.
- 11. Installation and programming should be performed by a qualified professional. Use or modification outside the scope of these instructions may void warranty.

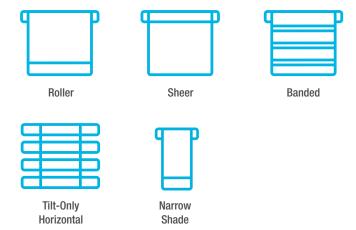


Do not dispose of in general waste.

Please recycle batteries and damaged electrical products appropriately.

# **™ Remote Overview**

## 1. Fields of Application





Roman

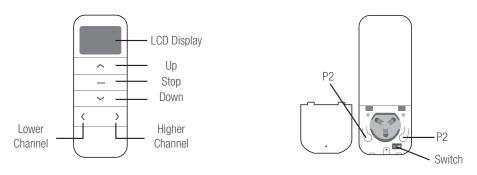


Cellular/Honeycomb Skylight

## 2. Specification

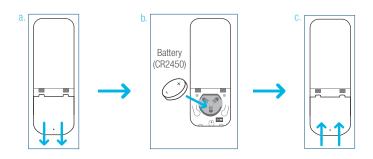
Voltage	3V (CR2450)
Radio Frequency	433.92 MHz Bi-directional
Transmitting Power	10 milliwatt
Operating Temperature	14°F to 122°F (-10°C to 50°C)
RF Modulation	FSK
Lock Function	Yes
IP Rating	IP20
Transmission Distance	up to 200m (outdoor)

#### 3. Remote Button Instructions



#### 4. Replace/Install CR2450 Battery

- a. Unscrew with the screwdriver then gently press down the cover.
- b. Install battery (CR2450) with positive (+) side facing up.
- c. Gently assemble the cover back and replace screw with screwdriver.



#### **Remote Function**

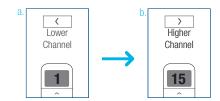
#### 1. Channel Options

#### Select A Channel

- a. Press "<" button on the remote to select a lower channel.
- b. Press ">" button on the remote to select a higher channel.

Action on Remote Control

Remote Response



#### **Hide Unused Channels**

- a. Press and Hold (about 3 sec) "<" and ">" buttons simultaneously until remote control displays "C" (channel).
- b. Press "<" or ">" button to select required quantity of channel (between 1 to 15).
- c. Press "Stop" button to confirm selection (the example shows a 5-channel selection). The LED will display "O" (OK) once to confirm selection.

Action on Remote Control

Remote Response

Action on Remote Control

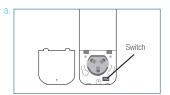
Remote Response

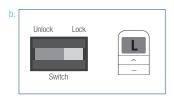


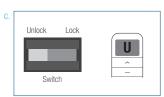


#### 2. Advanced Setting - Disable Limit Setting

- **a.** Remove the cover from the backside of remote, the lock switch is in the right corner.
- b. Move the switch to the "Lock" position to disable the following commands, remote will show "L" (lock):
  - Change Motor Direction
  - Setting the Upper and Lower Limit
  - Adjust Limit
  - Roller Mode or Sheer Mode
- c. Move the switch to "Unlock" position to assess all remote functions, remote will show "U" (unlock).
- \*This advanced feature is intended to be used after all shade programming is completed. User Mode will prevent accidental or unintended changing of limits.

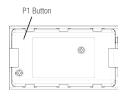




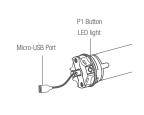


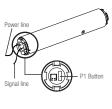
#### **P1 Button Instructions**

#### 2. P1 Button Location









TILT

25B / 28B / 25BDC

35B

CEL

#### 2. P1 Button Instruction

#### **CEL and TILT motors DO NOT BEEP**



Happening as you press for 1 second



when released

Motor Response: Wakes & Runs

# Activate Pairing Mode

Happening as you press for 2 seconds







when released



# Sleep Mode

Happening as you press for 6 seconds



Press P1 Approx. 6 sec.





when released



# **4** Reverse Direction

Happening as you press for 10 seconds



Press P1 Approx. 10 sec.

Until Shade:



к3 Motor

#### when released

Motor Response: Beep x

# (5) Reset To Factory Settings

Happening as you press for 14 seconds



Press P1 Approx. 14 sec.

Until Shade:



#### when released

Motor Response: | | | | Beep x4

#### **Initial Set-up**

#### 1. Pair / Unpair Remote Control

- a. Press "P1" button (about 2 sec) on the motor head until motor jog x1 and beep x1.
- b. In the next 10 secs, press and hold "Stop" button on the remote control until motor jog x2 and beep x3.
- \* Repeat the same procedure to unpair remote control.

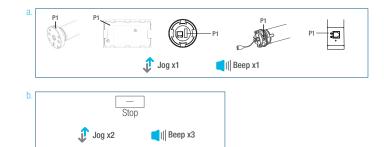
#### **CEL and TILT motors DO NOT BEEP**

Action on Motor

Motor Response

Action on Remote Control

Motor Response



#### 2. Change Motor Direction (if necessary)

Press "Up" or "Down" button to check if the shade moves in the desired direction.

If you need to reverse the direction, press and hold (about 2 sec) " $\mathbf{Up}$ " and " $\mathbf{Down}$ " buttons simultaneously until motor jog x1 and beep x1.

\*The operation is only valid when there are no limits. If the motor has already set the upper and lower limit, then you can only switch direction by pressing P1 button (See P1 button instructions).

Action on Remote Control

Motor Response



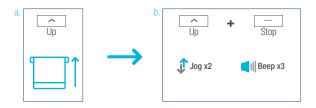
### 3. Setting the Upper and Lower Limits

#### **Set Upper Limit**

- a. Press "Up" button to raise the shade, then press "Stop" button when it is in the desired upper limit.
- b. Press and hold (about 5 sec) **"Up" and "Stop"** buttons simultaneously until motor jog x2 and beep x3.

Action on Remote Control

Motor Response



#### **Set Lower Limit**

- a. Press "Down" button to lower the shade, then press "Stop" button when it is in the desired lower limit.
- b. Press and hold (about 5 sec) "Down" and "Stop" buttons simultaneously until motor jog x2 and beep x3.

\*If you exit the limit setting status before you finish the limit settings, the motor will take the previous existing limits.

Action on Remote Control



# **Adjust Limits**

#### 1. Adjust the Upper Limit

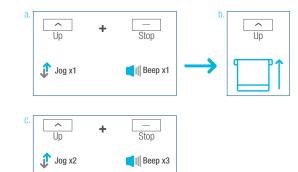
- a. Press and hold (about 5 sec) "Up" and "Stop" buttons simultaneously until motor jog x1 and beep x1.
- b. Use "Up" button to raise the shade to the desired highest position, and use "Up" or "Down" button to do the final adjustment if necessary.
- c. Press and hold (about 5 sec) **"Up" and "Stop"** buttons simultaneously until motor jog x2 and beep x3.

Action on Remote Control

Motor Response

Action on Remote Control

Motor Response



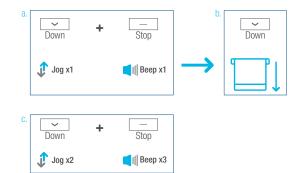
#### 2. Adjust the Lower Limit

- a. Press and hold (about 5 sec) "Down" and "Stop" buttons simultaneously until motor jog x1 and beep x1.
- b. Use "Down" button to lower the shade to the desired lowest position, and use "Up" or "Down" button to do the final adjustment if necessary.
- c. Press and hold (about 5 sec) "**Down" and "Stop"** buttons simultaneously until motor jog x2 and beep x3.

Action on Remote Control

Motor Response

Action on Remote Control



#### **Favorite Position**

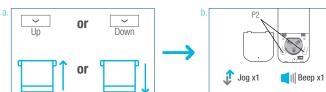
#### 1. Set Favorite Position

- a. Use "Up" or "Down" button to move the shade to desired Favorite position.
- b. Press one "P2" button on the back of remote control until motor jog x1 and beep x1.
- c. Press "Stop" button until motor jog x1 and beep x1.
- d. Once more, press "Stop" button until motor jog x2 and beep x3.

Action on Remote Control

Motor Response





Action on Remote Control



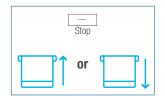


#### 2. Send Shade to Favorite Position

Press and hold (about 2 sec) "Stop" button, motor will move to Favorite position.

Action on Remote Control

Shade Response



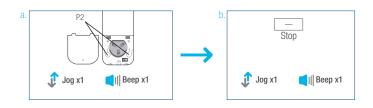
#### 3. Delete Favorite Position

- a. Press one "P2" button until motor jog and beep x1.
- b. Press "Stop" button until motor jog and beep x1.
- c. Once more, press "Stop" button until motor jog x1 and long beep x1.

Action on Remote Control



Action on Remote Control





# **Add or Remove Additional Remote**

#### 1. Using Current Remote Control

- a. On the **current** remote control, press one "P2" button until motor jog x1 and beep x1.
- b. Once more, on the **current** remote control, press one "**P2**" button until motor jog x1 and beep x1.
- c. On the **New** remote control, press one "**P2**" button until motor jog x2 and beep x3.

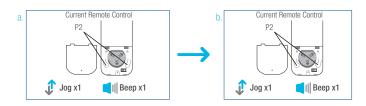
\*Repeat the same procedure to remove additional remote control.

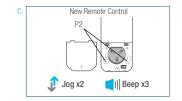
Action on Remote Control

Motor Response

Action on Remote Control

Motor Response





#### 2. New Remote Control

Follow instructions on page 8 under the section **Pair / Unpair Remote Control** 

# **Adjust Motor Speed**

#### 1. Acceleration Speed

- a. Press one "P2" button until motor jog x1 and beep x1.
- b. Press "Up" button until motor jog x1 and beep x1.
- c. Once more, press " $\mathbf{Up}$ " button until motor jog x2 and beep x1.

Action on Remote Control

Action on Remote Control

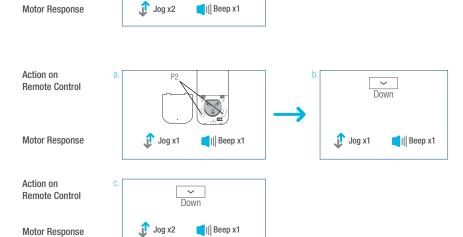
C. Qp

Dog x1

Dog

#### 2. Deceleration Speed

- a. Press one "P2" button until motor jog x1 and beep x1.
- b. Press "Down" button until motor jog x1 and beep x1.
- c. Once more, press "Down" button until motor jog x2 and beep x1.
- \*If the motor has no response, it already has a Maximum or Minimum speed.



## **Roller or Sheer Mode**

# 1. Roller Shade Mode - continue movement after a short press - Default Mode

- a. Press and hold (about 5 sec) "Up" and "Down" buttons simultaneously until motor jog x1.
- b. Press and hold (about 2 sec) "Stop" button until motor jog x2 and beep x3.

Action on Remote Control

Motor Response



Action on Remote Control

Motor Response



# 2. Sheer Shade Mode - jog movement after a short press (continue movement after a long press)

- a. Press and hold (about 5 sec) "Up" and "Down" buttons simultaneously until motor jog x1.
- b. Press and hold (about 2 sec) "Stop" button until motor jog x1 and beep x1.

Action on Remote Control

Motor Response



Action on Remote Control



# **Quick Index**

	Settings	Steps	
1	Pairing	P1 (hold down for 2s) > Stop (hold down for 2s)	
2	Switch Rotating Direction	Up + Down (hold down for 2s)	
3	Setting Upper & Lower Limits	Upper Limit: Up (hold down for 2s) > Up + Stop (hold down for 2s)  Lower Limit: Down (hold down for 2s) > Down + Stop (hold down for 2s)	
4	Add / Remove Favorite Position	P2 > Stop > Stop	
5	Roller Mode & Sheer Mode Switch	Up + Down (hold down for 5s) > Stop	
6	Adjust Limits	Upper Limit: Up + Stop (hold down for 5s) $>$ Up or Down $>$ Up + Stop (hold down for 2s) Lower Limit: Down + Stop (hold down for 5s) $>$ Up or Down $>$ Down + Stop (hold down for 2s)	
7	Pair / Unpair Additional Emitter	P2 (existing) > P2 (existing) > P2 (new)	
8	Speed Regulation	Acceleration: P2 > Up > Up Deceleration: P2 > Down > Down	

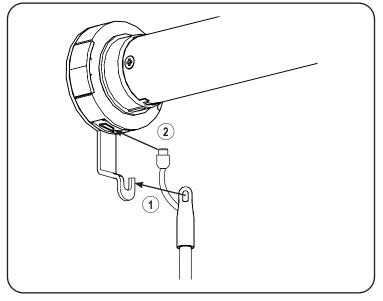
# Troubleshooting

Issues	Possible Causes	Solution
	Battery in motor is depleted	Recharge with compatible AC adaptor and check connection and positioning of solar PV panel
	Insufficient charging from Solar PV Panel	Check connection and orientation of solar PV panel
	Remote control battery is discharged	Replace battery
Battery is inserted incorrectly into remo		Check battery polarity
The motor has no response	Radio interference / shielding	Ensure remote control and the antenna on the motor are positioned away from metal objects
	Receiver distance is too far from Remote Control	Move remote control to a closer position
	Power failure	Check power supply to motor is connected and active
	Incorrect wiring	Check that wiring is connected correctly (refer to motor installation instructions)
Motor beeps 10 times when in use	Battery voltage is low / PV (solar panel issue)  Recharge with AC adapter or check connection and positioning of solar PV panel	
		Always reserve an individual channel for programming functions
Cannot program a single motor (multiple motors	Multiple motors are paired to the same channel.	SYSTEM BEST PRACTICE - Provide an extra 15 channel remote in your multi-motor projects that provides individual control for each motor for programming purposes
respond)		Place all other motors into sleep mode (ref to P1 button instructions)

## **POWERWAND**<sup>TM</sup>

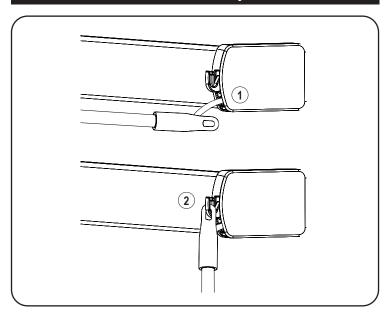
Honeycomb Shades | Dual Shades | Roller Shades Sheer Shadings | Natural Woven Shades

## 1a. Attach the Wand — Sheer Shadings, Dual & Roller Shades



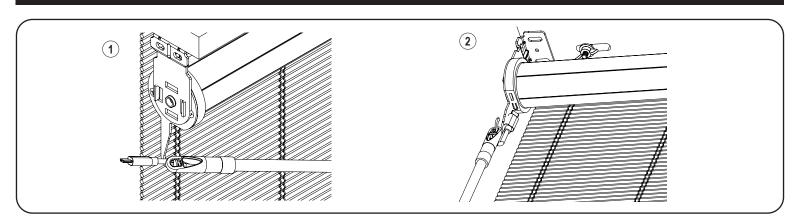
On Dual Shades, Roller Shades and Sheer Shadings, with the wand control buttons facing you, attach the top of the wand on the metal hook support (1) on the motor control side, then connect the cable into the motor head (2). **Note:** On Sheer Shadings ordered with Powerwand on the right side, the cable may be wrapped around the hook. This is normal. You may unwrap, if you desire, as this does not affect functionality. You still need to connect the cable into the motor head.

## 1b. Attach the Wand — Honeycomb Shades



On Honeycomb shades, the wand will be already connected to the shade (1). With the wand control buttons facing you, attach the top of the wand into the plastic hook support on the motor control side (2).

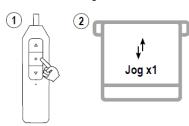
#### 1c. Attach the Wand — Natural Woven Shades



On Natural Woven Shades, with the wand control buttons facing you (1) approach the hook with the wand parallel to the headrail. (2) Gently twist the wand to attach it to the hook. Connect the cable into the motor.

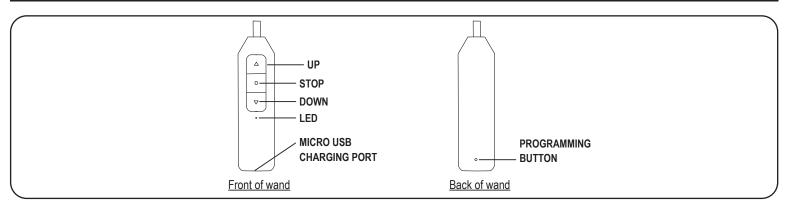
**Important:** Before starting the programing, install the shade following the installation instructions provided. Honeycomb shades are shipped with the motor in sleep mode to avoid activation during transit.

**For Honeycomb Shades,** To wake up the motor prior to operating the shade: Press the STOP button 5 times (1) - the first 4 times press quickly and the 5th time PRESS and HOLD the stop button until the motor jog (2).



1

## 2. Operate the Wand



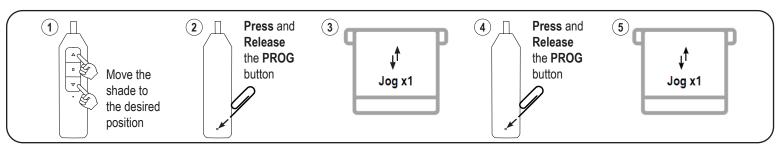
#### Roller and Honeycomb Mode:

• Press the DOWN or UP button to lower or raise the shade. Press the STOP to stop the shade at the desired position.

#### Sheer Shadings and Dual Shades Mode:

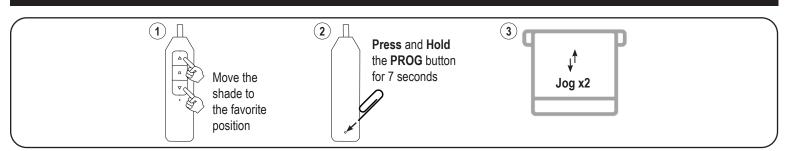
- Tapping the **UP** or **DOWN** button for less than 2 seconds will move the shade in short steps.
- Holding the UP or DOWN button down for more than 2 seconds before releasing will operate the shade at the standard speed.
- Press the **STOP** button to stop the shade at the desired position.

#### 3. Set a Favorite Position



IMPORTANT: Once the favorite position is set, the shade will always stop at the designed favorite position when passing by it. Click 2 x Up or Down button, the shade will go to set Top or Bottom Limit.

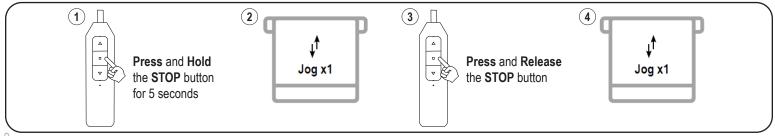
#### 4. Remove a Favorite Position



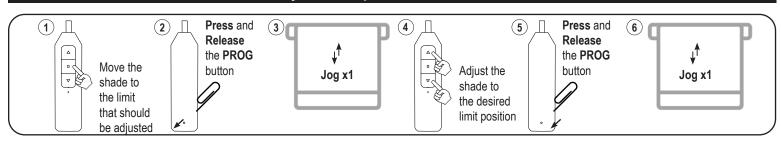
## 5. Advanced Programming

IMPORTANT: Damage to shade may occur when operating the motor prior to setting limits. Attention should be given.

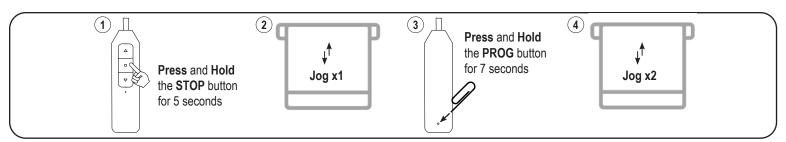
## Switch between Roller and Sheer Shadings Mode



# Adjust the Top and/or Bottom Limit

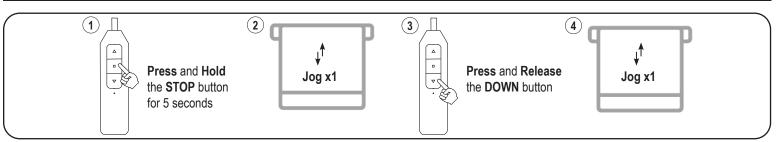


# **Factory Motor Reset**

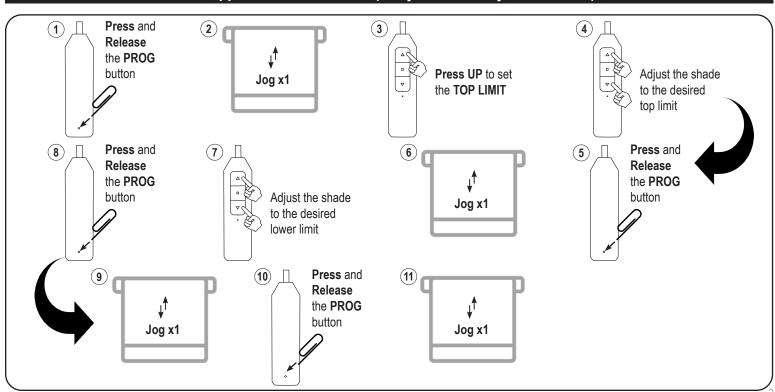


IMPORTANT: All limits will be erased. The motor direction will return to default and may need to be adjusted.

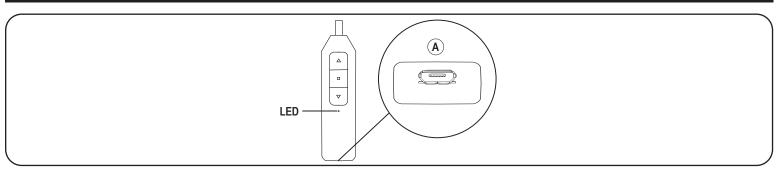
# Reverse UP and DOWN Commands (Only if necessary)



# Set Upper and Lower Limits (Only after Factory Motor Reset)



# 6. Charge the Battery



When the shade begins to operate slower than normal or only beeps when you attempt to operate, it is time to charge the battery.

To Charge, connect a standard micro USB cable into the bottom of the wand (A) and into USB 5V/2A (max) power supply. A red LED on the wand indicates that the battery is charging. To fully charge the batteries, allow the batteries to charge for at least 1 hour after the LED on the wand turns green.

Note: A typical charge cycle can take between 4-6 hours.

# **Troubleshooting**

Issues	Possible Causes	Solution
The shade is not responding	Built in battery is depleted	Recharge with compatible USB 5V/2A (max) adapter and a micro USB cable. Details under "6. Charge the Battery"
	Wand is not fully connected to the motor	Check the connection between the wand and the motor
The shade moves the opposite direction on the control buttons	The motor direction is reversed	See details under "Reverse Up and Down Commands"
The shade stops by itself before it reaches the top or bottom limit	A favorite position was set	See details under "4. Remove a Favorite Position"
The shade only moves in small steps after pressing the button	The shade is operating on Sheer Shadings/ Dual Shades mode	Switch to Roller/Honeycomb mode by following the steps under "Switch between Roller and Sheer Shadings Mode"
pressing the button	The shade has no limit set	See details under "Set Upper and Lower Limits"

# **Child Safety**

