Upgrade to the industry's most advanced Motor Program: **AMP™ Motorization** features 2-way technology with superior value and innovation paired with a smart, seemless user interface.

AMPTILT-0.6/12

Programming Guide

Specifications

- 0.6Nm DC motor with tilt only function for Horizontal Blinds
- Compatible with AMP™ external battery pack
- Approximately 500 tilting cycles per each full charge
- 3 motor speed settings: 12, 15 or 20rpm
- Sound level ~50dB
- 5 year warranty

AMP™ Motorization Table of Contents

Please scan QR code to watch videos
for product programming

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.

Coin Battery Warning

⚠WARNING	
• **INGESTION HAZARD:** This product contains a button cell or coin battery. • **DEATH** or serious injury can occur if ingested. • A swallowed button cell or coin cell battery can cause **Internal Chemical Burns** in as little as **2 hours.** • **KEEP** new and used batteries **OUT OF REACH OF CHILDREN.** • **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside of the body. • CR 2450, 3V	⚠

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children.
- Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- CR2450 is the compatible battery type.
- The nominal battery voltage is 3.0V.
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above 50°C / 122°F or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- Ensure the batteries are installed correctly according to polarity (+ and -).
- Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.
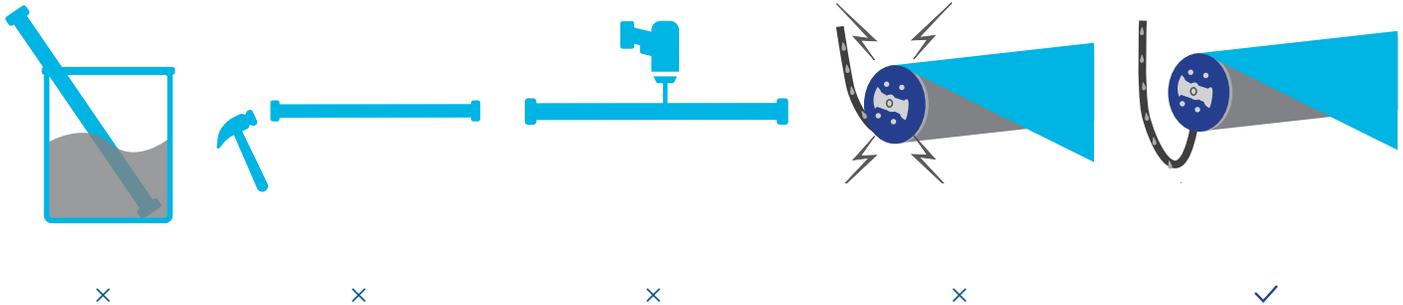
Safety Instructions

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.
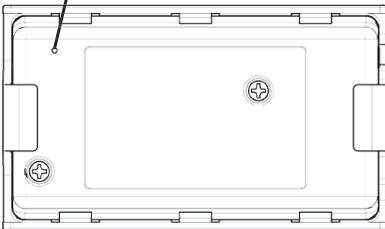Please recycle batteries and damaged electrical products appropriately.

AMPTILT-0.6/12 Overview

1. Fields of Application
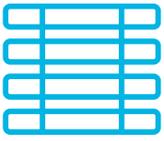
Tilt-Only
Horizontal

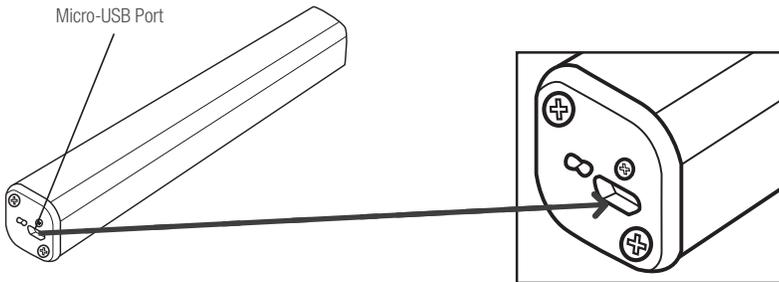## 2. Motor Head Button Instructions

P1 Button

3. Charging Instructions

This motor has a built in Li-ion battery pack with integrated charge management.

Max power input for recharging: 5V 2A.

Micro-USB Port

- Before first use please charge motor for 6 hours using a 5V charger.
- During operation, if the voltage is detected to be too low, the battery stops running and needs to be recharged.

Rechargable Battery Status Indicator

Solid Red:
Charging in process

Solid Green:
Battery has finished
charging

1 Test Motor

Happening as you press for 1 second

Press P1
Less than 1 sec.

2 Activate Pairing Mode

Happening as you press for 2 seconds

Press P1
Approx. 2 sec.   Until Shade: Jog x1

3 Sleep Mode

Happening as you press for 6 seconds

Press P1
Approx. 6 sec.   Until Shade: Jog x2

4 Reverse Direction

Happening as you press for 10 seconds

Press P1
Approx. 10 sec.   Until Shade: Jog x3

5 Reset To Factory Settings
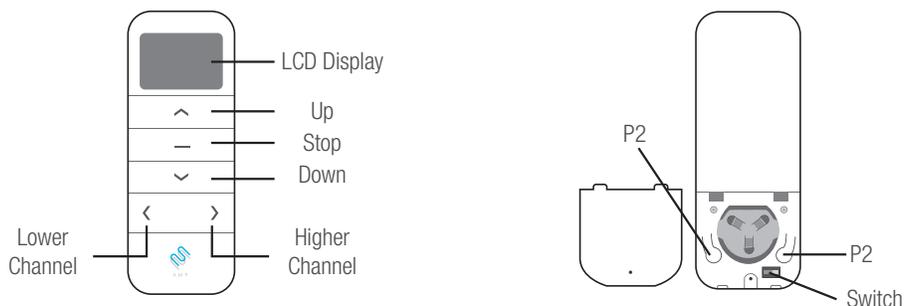
Happening as you press for 14 seconds

Press P1
Approx. 14 sec.   Until Shade: Jog x4

AMP™ Remote Function

1. Remote Button Instructions

LCD Display

Up

Stop

Down

Lower Channel

Higher Channel

P2

P2

Switch

2. Replace/Install CR2450 Battery

a. Gently insert the included ejector tool into the small pinhole opening and apply a small amount of pressure to the cover and slide the cover off.

b. Install battery (CR2450) with positive (+) side facing up.

c. Gently slide the cover back on until a "click" sound is heard.

a.

b.

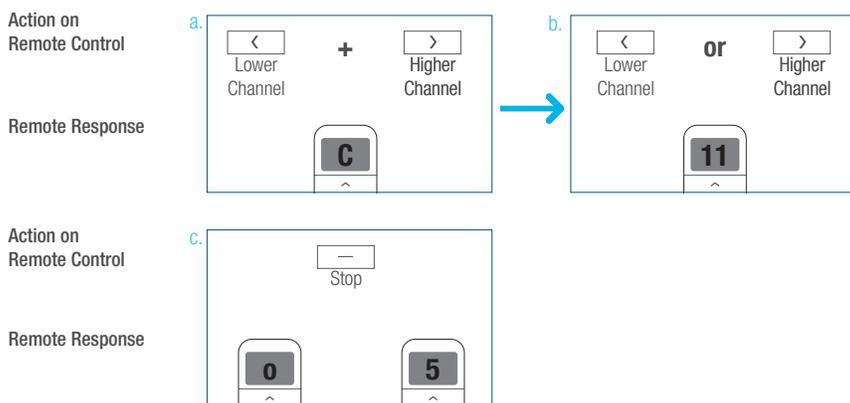Battery (CR2450)

c.

click
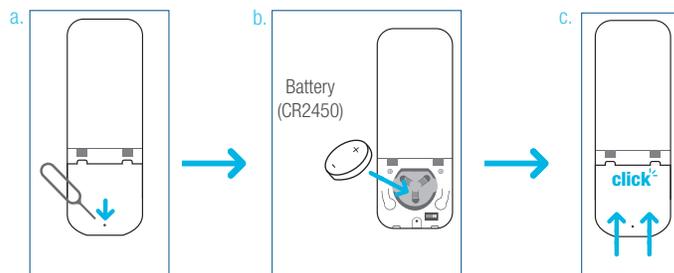
3. Channel Options

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

a.
⟨
Lower Channel

1

b.
⟩
Higher Channel

15
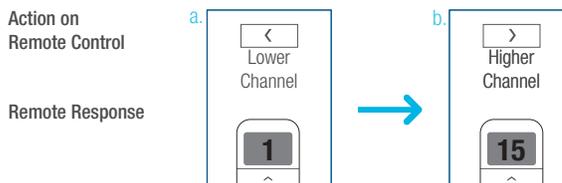
Hide Unused Channels

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

a.
⟨
Lower Channel
+
⟩
Higher Channel

C

b.
⟨
Lower Channel
or
⟩
Higher Channel

11

Action on Remote Control

Remote Response

c.
—
Stop

0

5

## 4. 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.
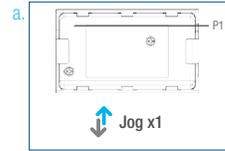
a.

Switch

b.

Unlock   Lock

L

Switch

c.

Unlock   Lock

U

Switch
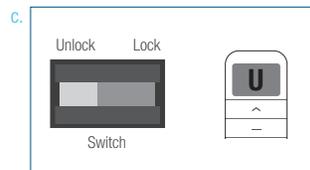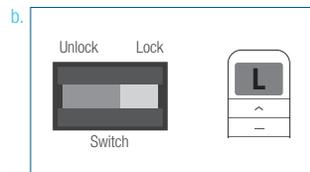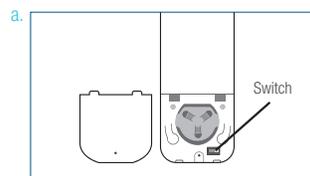
Initial Set-up

1. Pair / Unpair Remote Control

a. Press **"P1" button** (about 2 sec) on the motor head until motor jog x1.

b. In the next 10 secs, press and hold **"Stop"** button on the remote control until motor jog x2.

* Repeat the same procedure to unpair remote control.

Action on Motor

a.

Motor Response

↕ Jog x1

Action on Remote Control

b.

Stop

Motor Response

↕ Jog x2

2. Change Motor Direction (if necessary)

Press **"Up"** or **"Down"** button to check if the shade moves in the desired direction.
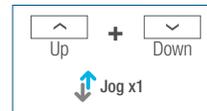
If you need to reverse the direction, press and hold (about 2 sec) **"Up"** and **"Down"** buttons simultaneously until motor jog x1.

*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

Up **+** Down

Motor Response

↕ Jog x1

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 2 sec) **"Up" and "Stop"** buttons simultaneously until motor jog x2.
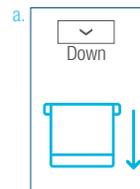
Action on Remote Control

a. Up

Motor Response

→

b. Up **+** Stop
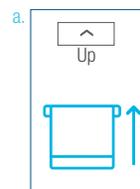
↕ Jog x2

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 2 sec) **"Down" and "Stop"** buttons simultaneously until motor jog x2.

*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

a. Down

Motor Response

→

b. Down **+** Stop

↕ Jog x2

Adjust Limits

1. Adjust the Upper Limit

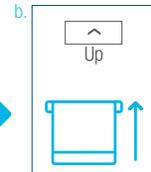a. Press and hold (about 5 sec) **"Up" and "Stop"** buttons simultaneously until motor jog x1.

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 2 sec) **"Up" and "Stop"** buttons simultaneously until motor jog x2.

Action on Remote Control

a.

| ⌃ Up | **+** | — Stop |

Motor Response

Jog x1

b.

| ⌃ Up |

Action on Remote Control

c.

| ⌃ Up | **+** | — Stop |

Motor Response

Jog x2

2. Adjust the Lower Limit

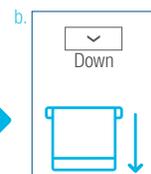a. Press and hold (about 5 sec) **"Down" and "Stop"** buttons simultaneously until motor jog x1.

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 2 sec) **"Down" and "Stop"** buttons simultaneously until motor jog x2.

Action on Remote Control

a.

| ⌄ Down | **+** | — Stop |

Motor Response

Jog x1

b.

| ⌄ Down |

Action on Remote Control

c.

| ⌄ Down | **+** | — Stop |

Motor Response

Jog x2

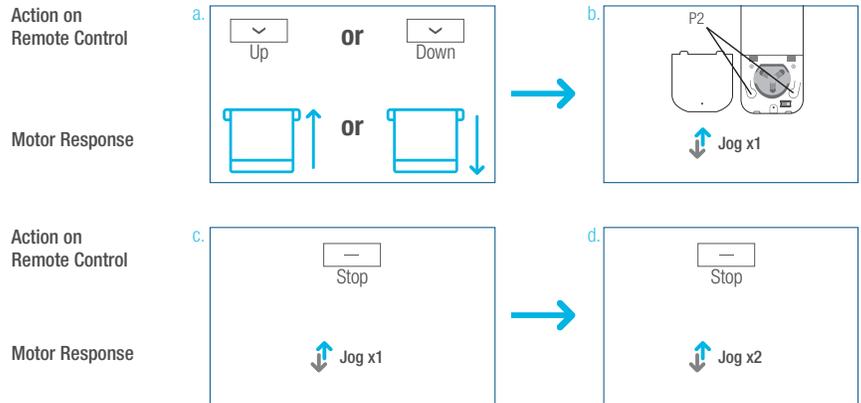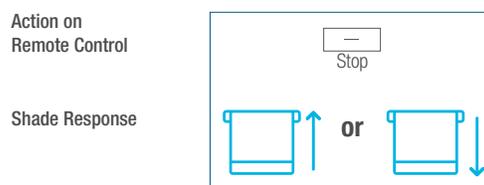## Favorite Position

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.

c. Press **"Stop"** button until motor jog x1.
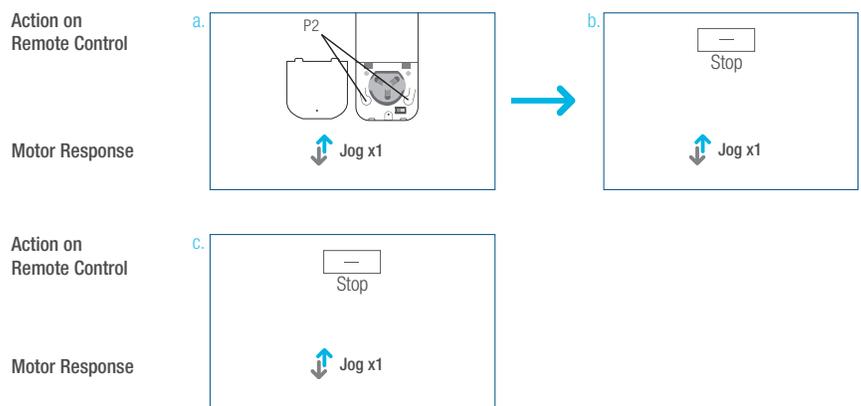
d. Once more, press **"Stop"** button until motor jog x2.

Action on Remote Control

a.

Up **or** Down

Motor Response

b.

P2

Jog x1

Action on Remote Control

c.

Stop

d.

Stop

Motor Response

Jog x1

Jog x2

2. Send Shade to Favorite Position

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

Action on Remote Control

Stop

Shade Response

or

3. Delete Favorite Position

a. Press one **"P2"** button until motor jog.

b. Press **"Stop"** button until motor jog.

c. Once more, press **"Stop"** button until motor jog x1.

Action on Remote Control

a.

P2

Motor Response

Jog x1

b.

Stop

Jog x1

Action on Remote Control

c.

Stop

Motor Response

Jog x1

## Add or Remove Additional Remote

1. Using Current Remote Control

a. On the **current** remote control, press one **"P2"** button until motor jog x1.

b. Once more, on the **current** remote control, press one **"P2"** button until motor jog x1.

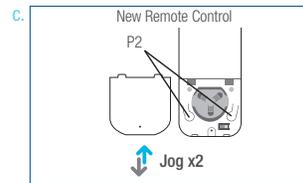c. On the **New** remote control, press one **"P2"** button until motor jog x2.

*Repeat the same procedure to remove additional remote control.

Action on Remote Control

a.
Current Remote Control
P2

b.
Current Remote Control
P2

Motor Response

Jog x1

Jog x1

Action on Remote Control
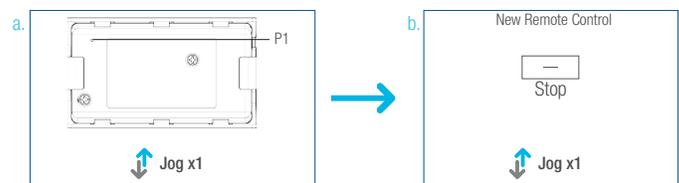
c.
New Remote Control
P2
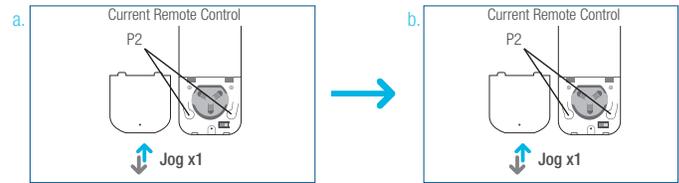
Motor Response

Jog x2

2. Use Motor P1 Button

a. Hold **"P1"** button on motor head until motor jog x1.

b. On **New** remote control, press and hold (about 2 sec) **"Stop"** button until motor jog x2.
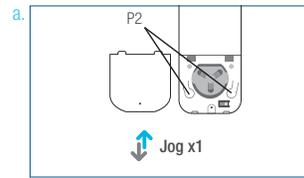
Action on Motor and Remote

a.
P1

b.
New Remote Control
Stop

Motor Response

Jog x1

Jog x1

Adjust Motor Speed

1. Acceleration Speed

a. Press one **"P2"** button until motor jog x1.

b. Press **"Up"** button until motor jog x1.

c. Once more, press **"Up"** button until motor jog x2.

Action on Remote Control	a. P2	b. Up
Motor Response	Jog x1	Jog x1
Action on Remote Control	c. Up	
Motor Response	Jog x2	

2. Deceleration Speed

a. Press one **"P2"** button until motor jog x1.

b. Press **"Down"** button until motor jog x1.

c. Once more, press **"Down"** button until motor jog x2.
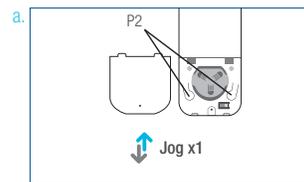
*If the motor has no response, it already has a Maximum or Minimum speed.

Action on Remote Control	a. P2	b. Down
Motor Response	Jog x1	Jog x1
Action on Remote Control	c. Down	
Motor Response	Jog x2	

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.

Action on Remote Control

a.

| Up | + | Down |

Motor Response

Jog x1

Action on Remote Control

b.

Stop

Motor Response

Jog x2

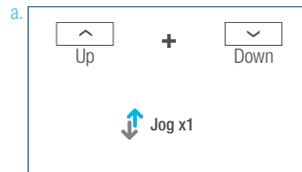### 2. Sheer Shade Mode - jog movement after a short press (continue movement after a long press)

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.

Action on Remote Control

a.

| Up | + | Down |

Motor Response

Jog x1

Action on Remote Control

b.

Stop

Motor Response

Jog x1

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
The motor has no response	External battery pack 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 remote control	Check battery polarity
	Radio interference / shielding	Ensure remote control and the antenna on the motor are positioned away from metal objects
	Receiver is far away 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)
Cannot program a single motor (multiple motors respond)	Multiple motors are paired to the same channel.	Always reserve an individual channel for programming functions
		SYSTEM BEST PRACTICE - Provide an extra 15 channel remote in your multi-motor projects that provides individual control for each motor for programming purposes
		Place all other motors into sleep mode (ref to **P1** button instructions)

Turnils Contact Information

Turnils North America
1750 Satellite Blvd, Suite 100
Buford, GA 30518
1.800.341.3600
Amp@Turnils.com

Turnils Canada
2908 Portland Drive
Oakville, Ontario L6H 5W8
1.800.341.3600
Amp@Turnils.com