1. TECHNICAL SPECIFICATIONS

Power: Rechargeable Lithium battery DC12V
Protection Class: IP44
Received frequency: 433.92MHz

Working Temperature: -10°C to 65°C
Motor can be assigned with up to 15 compatible remotes
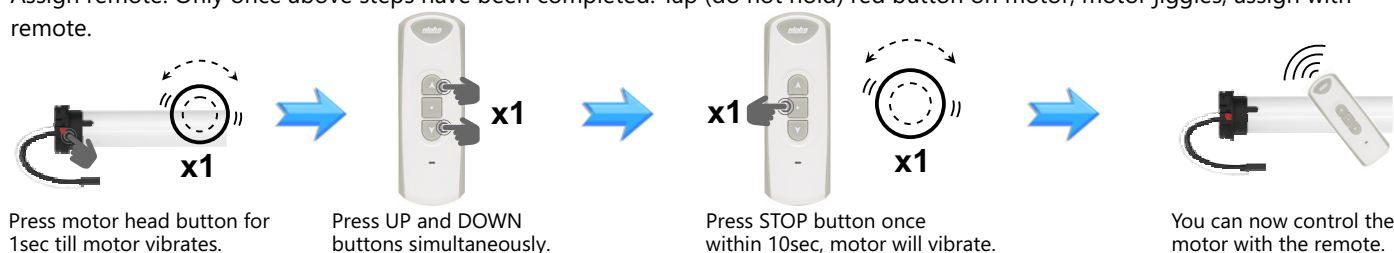Motor has overload, low battery/charging protection

2. WIRE CONNECTION

Fully charge the motor before use.
Time to fully charge depending on charger used:
1amp=28 hours   1.5amp=21 hours   2amp=18 hours
Motor should be fully charged with a charger before a solar panel is connected.

UP
STOP
DOWN

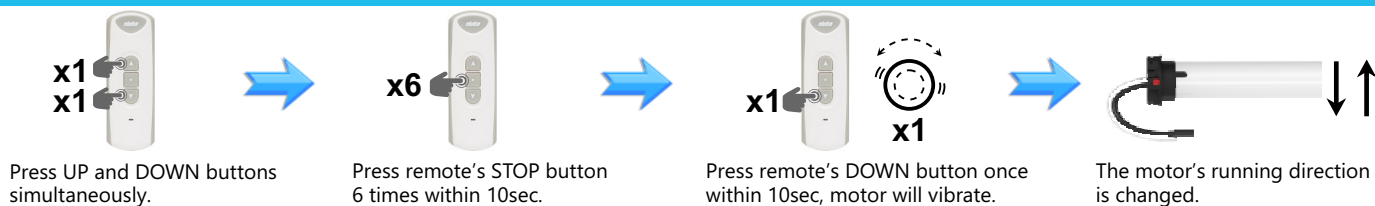ALDC 5V Charger   TYB004-U Solar Panel

3. WAKE MOTOR UP AND ASSIGNING REMOTE

Motor is in sleep mode/storage mode. Wake motor up by: (a) Plug in 5V charger for a few seconds till motor vibrates. (b) Hold motor button down for 3 seconds till motor vibrates.
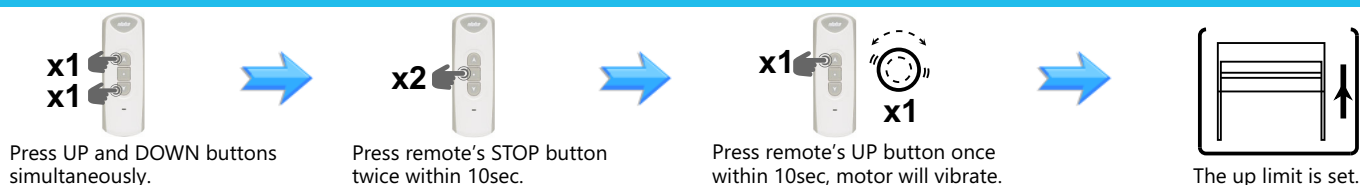
Assign remote: Only once above steps have been completed. Tap (do not hold) red button on motor, motor jiggles, assign with remote.
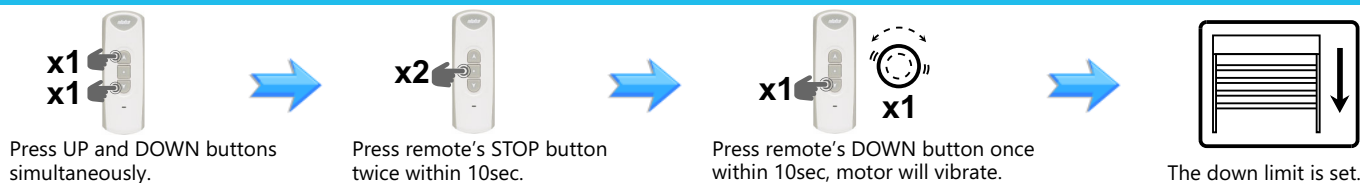
x1

x1

x1 x1

Press motor head button for 1sec till motor vibrates.

Press UP and DOWN buttons simultaneously.

Press STOP button once within 10sec, motor will vibrate.

You can now control the motor with the remote.

4. CHANGE DIRECTION

x1
x1

x6

x1 x1

↓↑

Press UP and DOWN buttons simultaneously.

Press remote's STOP button 6 times within 10sec.

Press remote's DOWN button once within 10sec, motor will vibrate.

The motor's running direction is changed.

5. SET TOP LIMIT

x1
x1

x2

x1 x1

Press UP and DOWN buttons simultaneously.

Press remote's STOP button twice within 10sec.

Press remote's UP button once within 10sec, motor will vibrate.

The up limit is set.

6. SET BOTTOM LIMIT

x1
x1

x2

x1 x1

Press UP and DOWN buttons simultaneously.

Press remote's STOP button twice within 10sec.

Press remote's DOWN button once within 10sec, motor will vibrate.

The down limit is set.

7. SWITCH OD FUNCTION ON - 20/12 OD VERSION ONLY

x1
x1

x3

x1 x1

Press UP and DOWN buttons simultaneously.

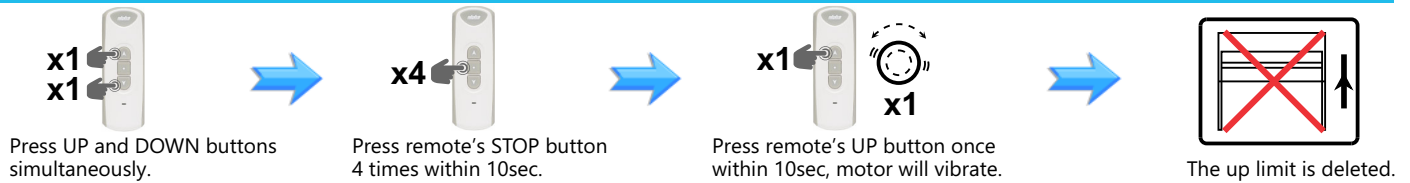Press remote's STOP button 3 times within 10sec.

Press UP.

PLEASE NOTE:
FOR 20/12 OD VERSION ONLY

Both limits need to be set for OD function to work. OD function will switch on automatically once the limits are set.

Should you wish to switch the OD function off, please press up & down together, STOP three times, then down.

8. SWITCH OD FUNCTION OFF 20/12 OD VERSION ONLY

x1
x1

x3

x1 x1

Press UP and DOWN buttons simultaneously.

Press remote's STOP button 3 times within 10sec.

Press remote's DOWN button.

9. DELETE TOP LIMIT

x1 x1 Press UP and DOWN buttons simultaneously.

x4 Press remote's STOP button 4 times within 10sec.

x1 x1 Press remote's UP button once within 10sec, motor will vibrate.

The up limit is deleted.

10. DELETE BOTTOM LIMIT

x1 x1 Press UP and DOWN buttons simultaneously.

x4 Press remote's STOP button 4 times within 10sec.

x1 x1 Press remote's DOWN button once within 10sec, motor will vibrate.

The down limit is deleted.
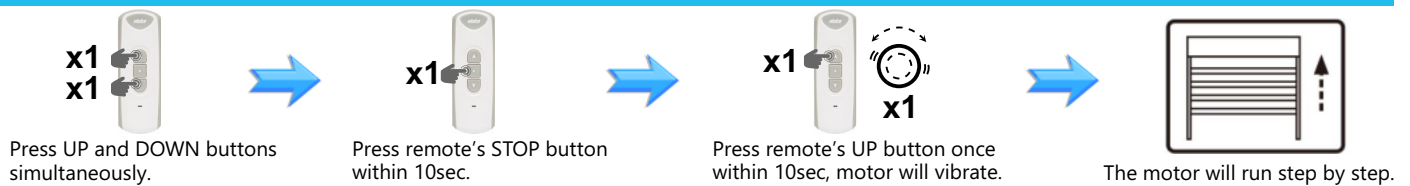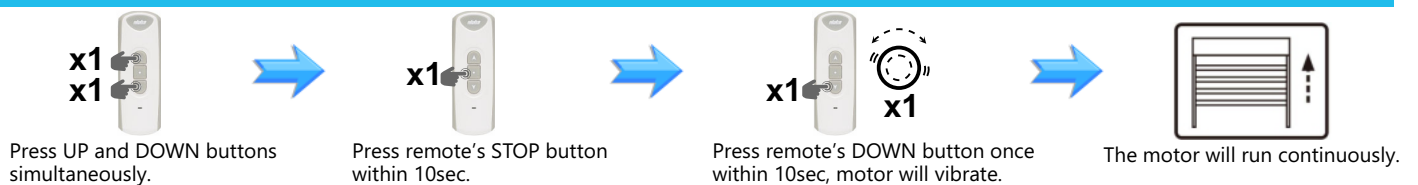
11. STEP BY STEP FUNCTION
If motor is in "Step by Step" function, press and hold UP or DOWN button for the motor to run continuously.

x1 x1 Press UP and DOWN buttons simultaneously.

x1 Press remote's STOP button within 10sec.

x1 x1 Press remote's UP button once within 10sec, motor will vibrate.

The motor will run step by step.

12. DELETE STEP BY STEP FUNCTION
If motor is in "Step by Step" function, press and hold UP or DOWN button for 3sec the motor to run continuously.

x1 x1 Press UP and DOWN buttons simultaneously.

x1 Press remote's STOP button within 10sec.

x1 x1 Press remote's DOWN button once within 10sec, motor will vibrate.

The motor will run continuously.

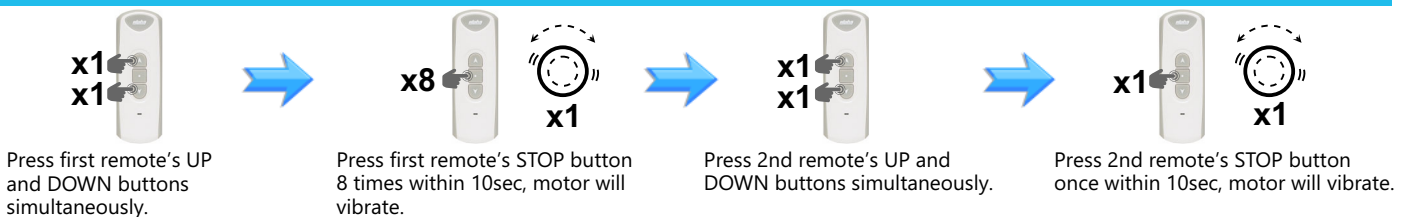## 13. CHANGE MOTOR SPEED

To make motor run faster
Press UP and DOWN together.
Press STOP 5 times, press UP to make motor faster.
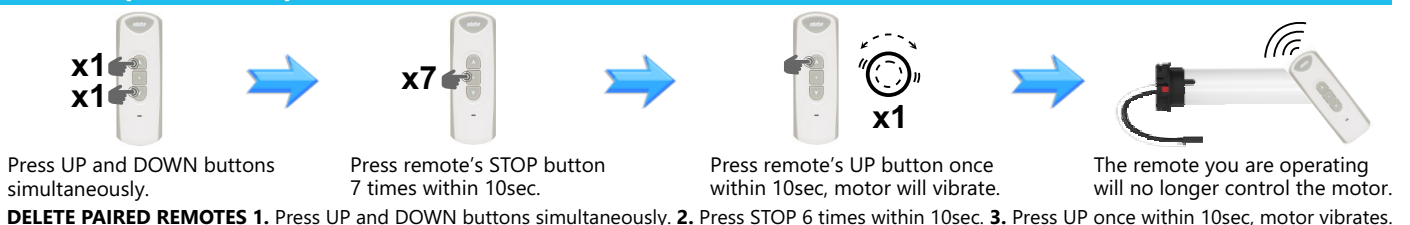Repeat this process to go faster.

x1 x1 → **x5**
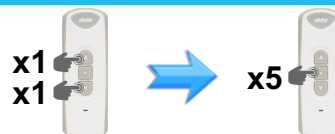
To slow motor down
Press UP and DOWN together.
Press STOP 5 times and then press DOWN.
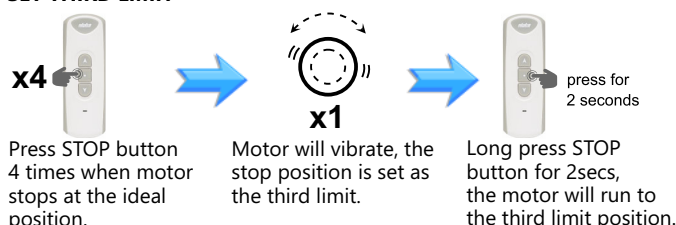Repeat this process to make the motor slower.

14. COPY NEW REMOTE CHANNEL

x1 x1 Press first remote's UP and DOWN buttons simultaneously.

x8 x1 Press first remote's STOP button 8 times within 10sec, motor will vibrate.

x1 x1 Press 2nd remote's UP and DOWN buttons simultaneously.

x1 x1 Press 2nd remote's STOP button once within 10sec, motor will vibrate.

15. CODE (CHANNEL) DELETING

x1 x1 Press UP and DOWN buttons simultaneously.

x7 Press remote's STOP button 7 times within 10sec.

x1 Press remote's UP button once within 10sec, motor will vibrate.

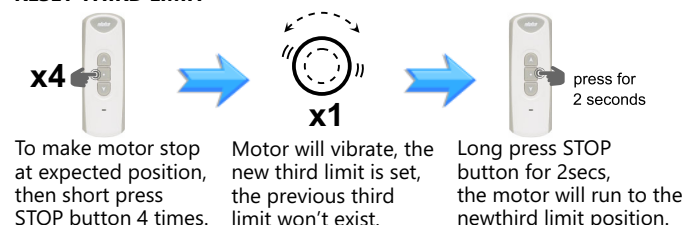The remote you are operating will no longer control the motor.

DELETE PAIRED REMOTES 1. Press UP and DOWN buttons simultaneously. **2.** Press STOP 6 times within 10sec. **3.** Press UP once within 10sec, motor vibrates.

16. SET THIRD LIMIT

SET THIRD LIMIT

x4 Press STOP button 4 times when motor stops at the ideal position.

x1 Motor will vibrate, the stop position is set as the third limit.

press for 2 seconds
Long press STOP button for 2secs, the motor will run to the third limit position.

RESET THIRD LIMIT

x4 To make motor stop at expected position, then short press STOP button 4 times.

x1 Motor will vibrate, the new third limit is set, the previous third limit won't exist.

press for 2 seconds
Long press STOP button for 2secs, the motor will run to the newthird limit position.

Please note: The third limit is also named as the intermediate limit, it is available at any position between up and down limit. The third limit will be deleted automatically if the up/down limit is deleted.

17. DELETING LIMIT VIA MOTOR HEAD BUTTON

Press and hold the red button on the motor head for 5 seconds, the motor will vibrate, all of the set limits (up, down and third) are deleted.

18. FULL RESET OF MOTOR

Press and hold the red button on the motor head for 10 seconds, motor will vibrate once at 5th second, and vibrate twice at 10th second. Release the button and motor is reset to factory mode. (All remotes and limits are erased)

19. LOW VOLTAGE WARNING

When battery voltage is low, press any button on remote, the motor will vibrate instead of running continuously. It will repeat a maximum of 10 times. This is to remind you to recharge the motor immediately.

20. STORAGE MODE

Press and hold red button for 15 seconds, motor will vibrate once at 5th second and twice at 10th second, then vibrate 3 times at 15th second, release button, motor is set to storage mode and won't respond to remote. (Existing remote and limits are still active in motor).

At Alpha Tubular Motors, your safety and the effective operation of our tubular motors with lithium-ion batteries are our top priorities. We kindly ask you to follow these important safety guidelines:

Avoid Overcharging

Please disconnect the motor from the charger as soon as the green light indicates a full charge. Overcharging can lead to overheating and may pose a fire risk.

Prevent Overheating

To help prevent overheating, ensure the motor is not exposed to high temperatures or direct sunlight for extended periods.

Immediate Action

If you notice any unusual warmth, discolouration, or odours coming from the motor, please disconnect it from the power source and stop using it right away.

Proper Storage

Store the motor in a cool, dry place, away from flammable materials. For best results, keep it within a temperature range of -20°C to 65°C

Use Approved Chargers

Always use the charger that comes with the motor or an approved replacement. Using incompatible chargers can create safety hazards.

Disposal

Please dispose of lithium-ion batteries according to local regulations. Avoid incinerating or submerging them in water, as this can lead to dangerous reactions.

Additional Notes

To keep your motor in top shape, charge it every six months.
For safety, please ensure that children do not play with the remote or motor.

Liability Disclaimer

While we at Alpha Tubular Motors strive to provide safe and reliable products, we cannot accept liability for any damage or personal injury resulting from improper use, charging, storage, or handling of our motors or their lithium-ion batteries. By using our products, you acknowledge that you have read, understood, and agree to follow these safety guidelines.