

Wirefree Tubular Motors RTML25, RTMLQ28, RTML35



Wirefree Tubular Motors - Li-ion battery powered motorized shades are a perfect retro fit for existing homes or small commercial projects.

Available in three motor sizes, Li-ion powered motors require no electrical wiring, no external battery pack and no complicated installation.

The Leveling Control feature allows for precise positioning of multiple window treatments, ensuring perfect alignment.

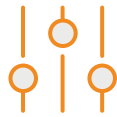
FEATURES



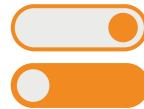
2-Way RF
Communication



Adjustable
Speed



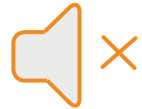
Leveling
Control



Preferred
Upper / Lower
Limit Settings



Favorite
Position



Quiet
Operation

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COMPLIANCE STATEMENT

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

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

TECHNICAL DATA / PACK CONTENTS

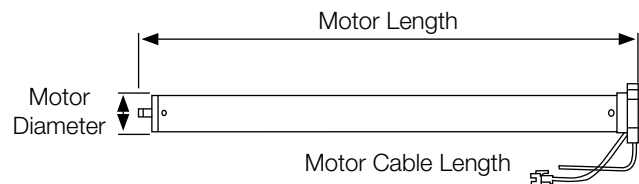
PRODUCT SPECIFICATIONS

Parameters	Value for 25 mm	Value for 28 mm	Value for 35 mm
Voltage	12 V DC		
Torque	1.1 Nm	2.0 Nm	3.0 Nm
Max. Run Time	10 min.		
Speed	40 RPM (Adj. to 30 or 20)	28 RPM (Adj. to 24 or 20)	28 RPM (Adj. to 24 or 20)
Radio Frequency	433.92 MHz		
Amps	0.83 A	1.25 A	2.2 A
Sound Level	~46 DB	~44 DB	~53 DB
Limit Switch Type	Electronic		
Temperature Working Range	32° F - 140° F (0° C - 60° C)		

PACK CONTENTS

1. Wirefree Tubular Motor
2. Instruction Manual

	Motor Size	Motor Length	Motor Dia.	Motor Cable Length
RTML25	25 mm	17.625"	0.98"	4.25"
RTMLQ28	28 mm	25.60"	1.13"	5"
RTML35	35 mm	33.41"	1.38"	2.36"



INSTALLATION

Installation Instructions:

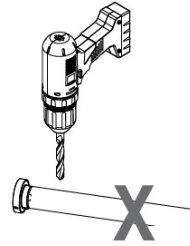
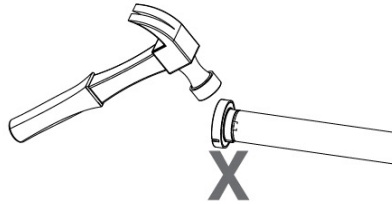
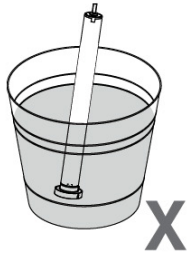


SAFETY



WARNING

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



CAUTION

- Do not expose to moisture or extreme temperatures.
- Do not allow children to play with this device.
- Use or modification outside the scope of this instruction manual will void warranty.
- Installation and programming to be performed by a suitably qualified installer.
- For use within tubular shades.
- Ensure correct crown and drive adapters are used for the intended system.
- Keep antenna straight and clear from metal objects.
- Do not cut the antenna.
- Use only R-TEC Automation® hardware.
- Before installation, remove any unnecessary cords and disable any equipment not needed for powered operation.
- Ensure torque and operating time is compatible with end application.
- Do not expose the motor to water or install in humid or damp environments.
- Motor is to be installed in horizontal application only.
- Do not drill into motor body.
- The routing of cable through walls shall be protected by isolating bushes or grommets.
- Ensure power cable and antenna are clear and protected from moving parts.
- If cable or power connector is damaged, do not use.

IMPORTANT SAFETY INSTRUCTIONS TO BE READ PRIOR TO OPERATION

- It is important for the safety of persons to follow the enclosed instructions. Save these instructions for future reference.
- Persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge should not be allowed to use this product.
- Keep remote controls away from children.
- Frequently inspect for improper operation. Do not use if repair or adjustment is necessary.
- Keep motor away from acid and alkali.
- Do not force the motor drive.
- Keep clear when in operation.



Li-ion



Do not dispose of in general waste.

Please recycle batteries and damaged electrical products appropriately.



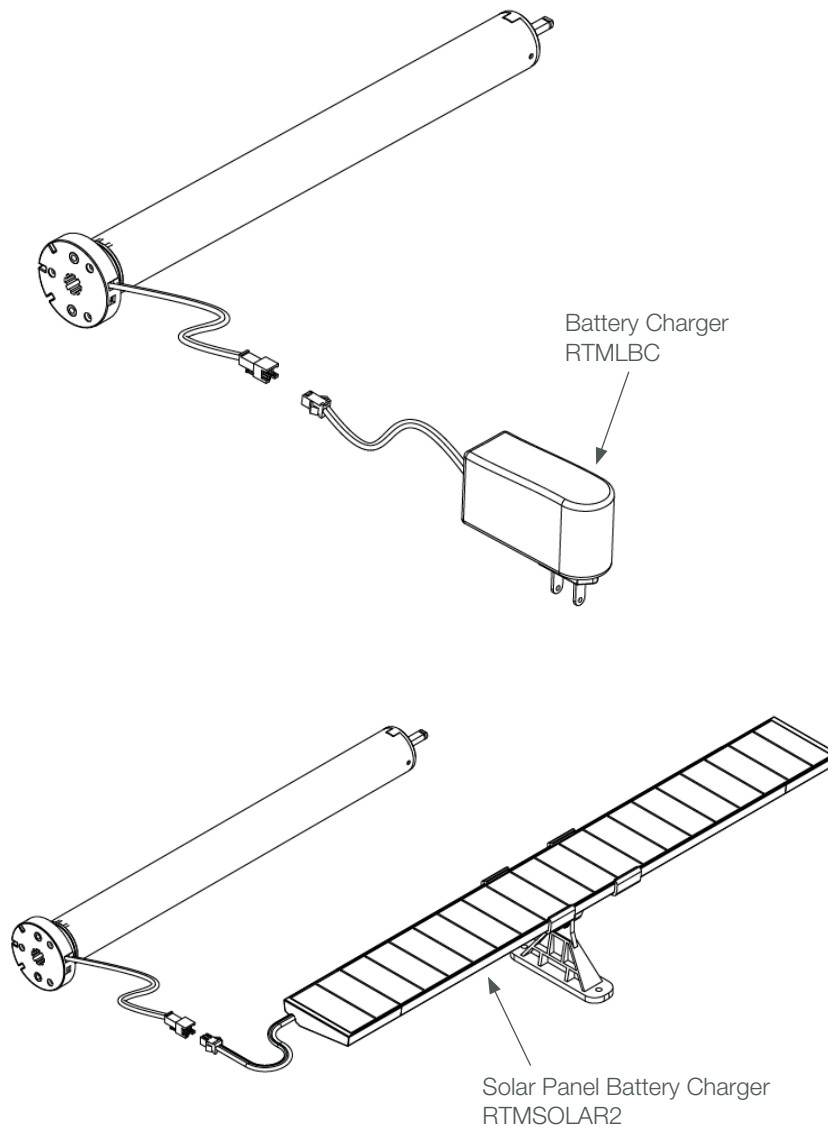
WIRING

CHARGING OPTIONS

This motor has a 12V built in Li-ion Battery Pack with integrated charge management.

Maximum power input for recharging is 12.6V / 1000mAh.

- Before first use, please charge motor for 6 hours using the recommended Battery Charger RTMLBC. Option to use Solar Panel Battery Charger RTMSOLAR2.
- During operation, if the voltage drops to less than 10V, the motor will beep 10 times to prompt it needs to be charged.
- Motor will stop running when the voltage is lower than 7V, and it will resume again when the voltage is greater than 7.5V.



IMPORTANT

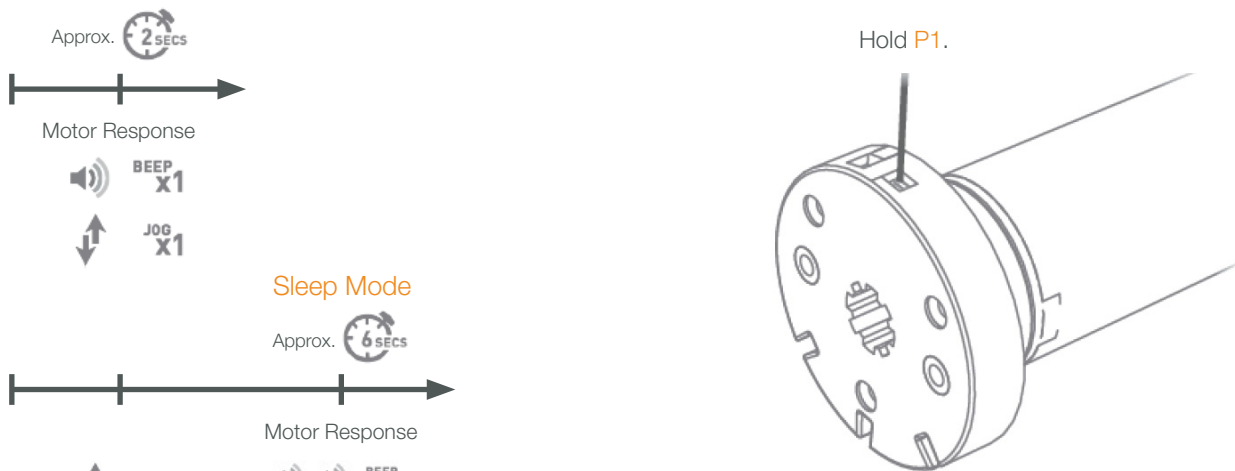
Ensure cable is kept clear of fabric. Ensure antenna is kept straight and away from metal objects.

FUNCTIONAL OVERVIEW

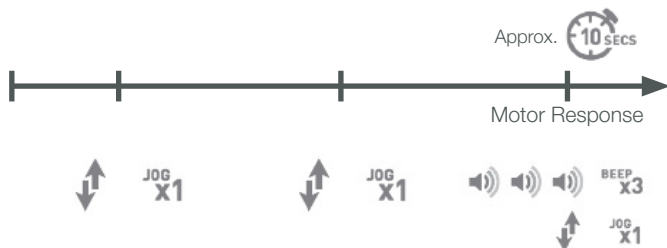
P1 BUTTON

P1 Press	Condition	Function Achieved	Visual Feedback	Audible Feedback	Function Described
Short Press	If limit is NOT set	None	No Action	None	No Action
	If limits are set	Operational control of motor, run to limit. Stop if running	Motor runs	None	Operational control of motor after pairing and limit setting is completed first time
	If motor is in "Sleep Mode" & limits are set	Wake and control	Motor wakes and runs in a direction	None	Motor is restored from Sleep Mode and RF control is active

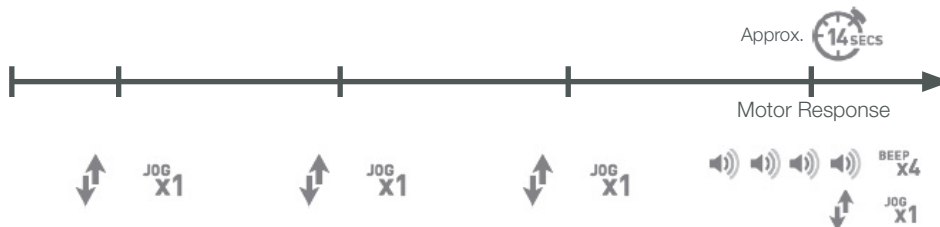
Activate Pairing Mode



Reverse Direction



Reset to Factory Settings



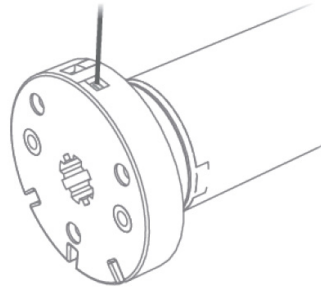
PROGRAMMING / INITIAL SET UP

PAIR MOTOR WITH CONTROLLER

Select a channel (15) on the controller.



Hold **P1** button on motor head.



Hold **STOP** on switch.



IMPORTANT

Consult your user manual for information on selecting channel.

Motor Response



Motor Response



IMPORTANT

Motor is now in step mode and ready for setting limits.

CHECK MOTOR DIRECTION

To check travel direction, press **UP** or **DOWN** on controller.



To reverse travel direction, hold both **UP** and **DOWN** on controller.



Quick Press = Step

Long Press = Continuous Travel

Motor Response



IMPORTANT

Damage to window treatment may occur when operating motor prior to setting limits. Attention should be given.



IMPORTANT

Reversing motor direction using this method is only possible during initial set up.

SET LIMITS

Move shade to the desired highest or lowest position by pressing the **UP** or **DOWN** on the controller.

To save upper limit, hold **UP** and **STOP**.

To save lower limit, hold **DOWN** and **STOP**.

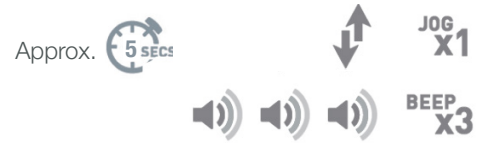


IMPORTANT

Cycle shade up and down prior to setting limits to settle fabric

Initial set up is now complete.

Motor Response



IMPORTANT

After setting limits, motor will automatically exit from initial set up mode.

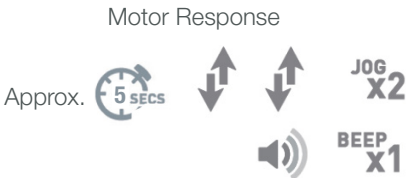
ADJUSTING LIMITS

ADJUST UPPER LIMIT

Hold **UP** and **STOP** on the controller.

Move shade to the desired highest position by pressing the **UP** button.

To save upper limit, hold **UP** and **STOP**.

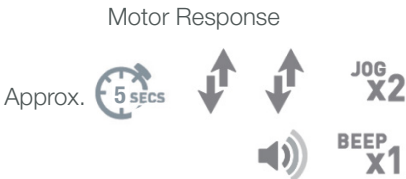


ADJUST LOWER LIMIT

Hold **DOWN** and **STOP** on the controller.

Move shade to the desired lowest position by pressing the **DOWN** button.

To save lower limit, hold **DOWN** and **STOP**.

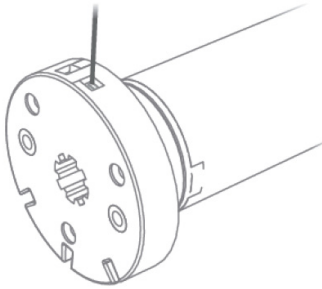


ADDING OR REMOVING CONTROLLERS & CREATING GROUP CHANNELS

USING MOTOR P1 BUTTON

Hold **P1** button on motor head.

Hold **STOP** on switch.



Motor Response



Motor Response



USING PRE-EXISTING CONTROLLER

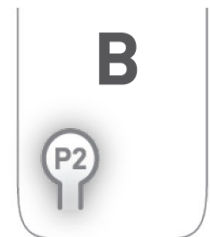
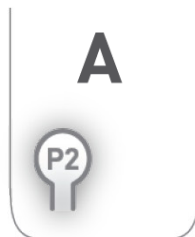
A = Existing switch or channel (to keep).

B = Switch or channel to add or remove.

Press **P2** on existing switch.

Press **P2** a second time on existing switch.

Press **P2** on new switch or remote controller.



Motor Response



Motor Response



Motor Response



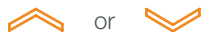
IMPORTANT

Consult your user manual for your controller or sensor.

FAVORITE POSITIONING

SET A FAVORITE POSITION

Move shade to the desired position by pressing the **UP** or **DOWN** button on the controller.



Press **P2** on controller.

Press **STOP** on controller.

Press **STOP** on controller.



Motor Response



Motor Response



Motor Response



SEND SHADE TO FAVORITE POSITION

Press **STOP** on controller for 2 seconds.



DELETE A FAVORITE POSITION

Press **P2** on controller.

Press **STOP** on controller.

Press **STOP** on controller.



Motor Response



Motor Response



Motor Response



STEP & ROLLER MODE



IMPORTANT

Note, Step Mode allows you to precisely set stop locations of a shade during the 'Favorite Position' step on [page 11](#).

ENTER STEP MODE

Hold **UP** and **DOWN** on the controller.



Motor Response



Press **STOP**.



Motor Response



ENTER ROLLER MODE (DEFAULT)

Hold **UP** and **DOWN** on the controller.



Motor Response



Press **STOP**.



Motor Response



ADJUSTING MOTOR SPEED

INCREASE MOTOR SPEED

Press **P2** on controller.



Press **UP** on controller.



Press **UP** on controller.



Motor Response



Motor Response



Motor Response



IMPORTANT

If motor does not react to speed adjustment, the maximum speed has already been reached.

DECREASE MOTOR SPEED

Press **P2** on controller.



Press **DOWN** on controller.



Press **DOWN** on controller.



Motor Response



Motor Response



Motor Response



IMPORTANT

If motor does not react to speed adjustment, the minimum speed has already been reached.

TROUBLESHOOTING

Problem	Cause	Remedy
Motor is not responding	Battery in motor is depleted	Recharge with compatible AC adapter and check connection and positioning of PV panel.
	Insufficient charging from Solar (PV) Panel	Check connection and orientation of PV panel.
	Transmitter battery is discharged	Replace battery.
	Battery is inserted incorrectly into transmitter	Check battery polarity.
	Radio interference / Shielding	Ensure transmitter is positioned away from metal objects and that antenna on motor or receiver is kept straight and away from metal.
	Receiver distance is too far from transmitter	Move transmitter to a closer position.
	Power failure	Check power supply to motor is connected and active.
	Incorrect wiring	Check 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 PV panel.
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 (see page 6)

Any Questions?

Contact our R-TEC Automation® in-house experts at 866.985.3423. Email us at RTECAutomation@RowleyCompany.com. Please use the [Custom Solutions Form](#) when ordering a Custom Solution.