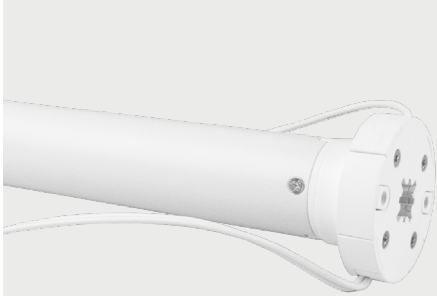


DC Tubular Motors

RTMDC25, RTMDCQ28, RTMDC35



DC Tubular Motors - DC motorized shades are ideal when designing a new home, motorizing an existing home or planning a commercial project.

Available in three motor sizes, DC wired shades are maintenance free and the AC power supply adapter keeps installation costs to a minimum.

They offer a low voltage, easy-to-use and program solution to suit a large range of applications, including narrow applications, setting this tubular motor apart from other options.

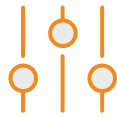
FEATURES



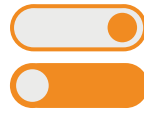
2-Way RF
Communication



Adjustable
Speed



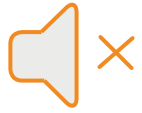
Leveling
Control



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

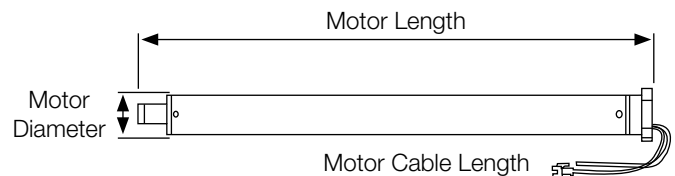
PRODUCT SPECIFICATIONS

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	1.67 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. DC Tubular Motor
2. Instruction Manual

	Motor Size	Motor Length	Motor Dia.	Motor Cable Length
RTMDC25	25 mm	11.77"	0.98"	6.25"
RTMDCQ28	28 mm	17.41"	1.13"	6.25"
RTMDC35	35 mm	18.07"	1.38"	6"



INSTALLATION

Installation Instructions:

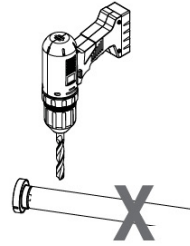
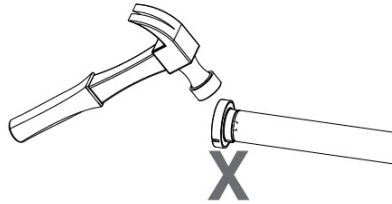
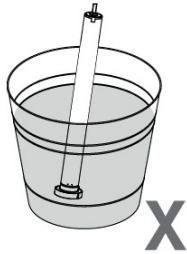


SAFETY



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.



Do not dispose of in general waste.

Please recycle batteries and damaged electrical products appropriately.

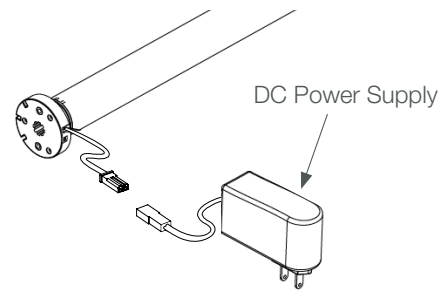
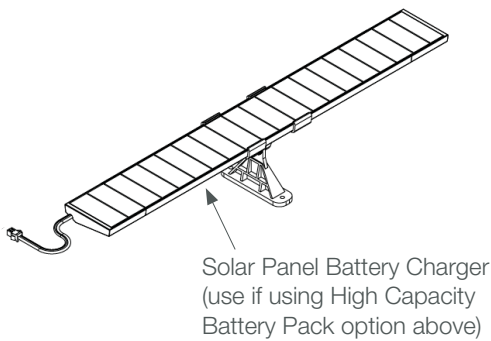
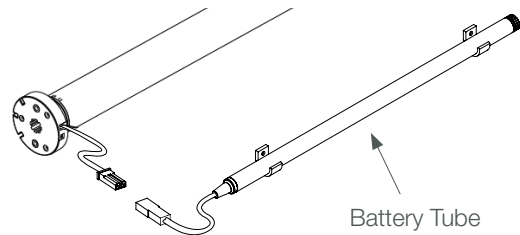
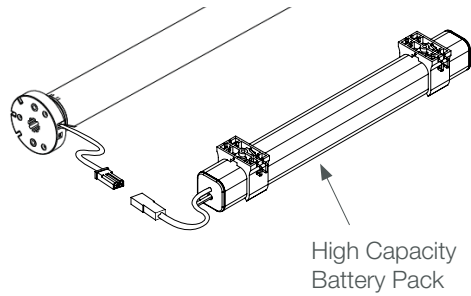


WIRING

POWER OPTIONS

DC motors are powered from a 12V DC power source. Rechargeable Battery Pack, Battery Tube or Power Supplies are available, with a variety of quick connect extension cords. For centralized installations, power supply range can be extended with 18/2 wire (not available through R-TEC Automation®).

- During operation, if the voltage drops to less than 10V, the motor will beep 10 times to indicate a power supply issue.
- Motor will stop running when the voltage is lower than 7V, and it will resume again when the voltage is greater than 7.5V.



Item #	Power Option	Extension Cables	Motor
RTMDCHCBP	High Capacity Battery Pack for 25/28 mm Motors (requires Battery Charger RTMLBC 12', .4 Amp, 12V)	RTMLCXT48 48" RTMLCXT96 96"	RTMDC25 RTMDCQ28
RTMDCBT	Battery Tube for 25 mm DC Motors (requires 8 AA Li-ion Batteries - not included)		RTMDC25
RTMSOLAR2	Solar Panel Battery Charger (use if using High Capacity Battery Pack option above)		RTMDC25 RTMDCQ28
RTMDC18/25	Power Supply for 25 mm DC Motors 5'	RTMDCXT48 48"	RTMDC25
RTMDC28/35	Power Supply for 28/35mm DC Motors 10 ½'	RTMDCXT48 48"	RTMDCQ28 RTMDC35



IMPORTANT

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

FUNCTIONAL OVERVIEW

P1 BUTTON

Motor State Test:

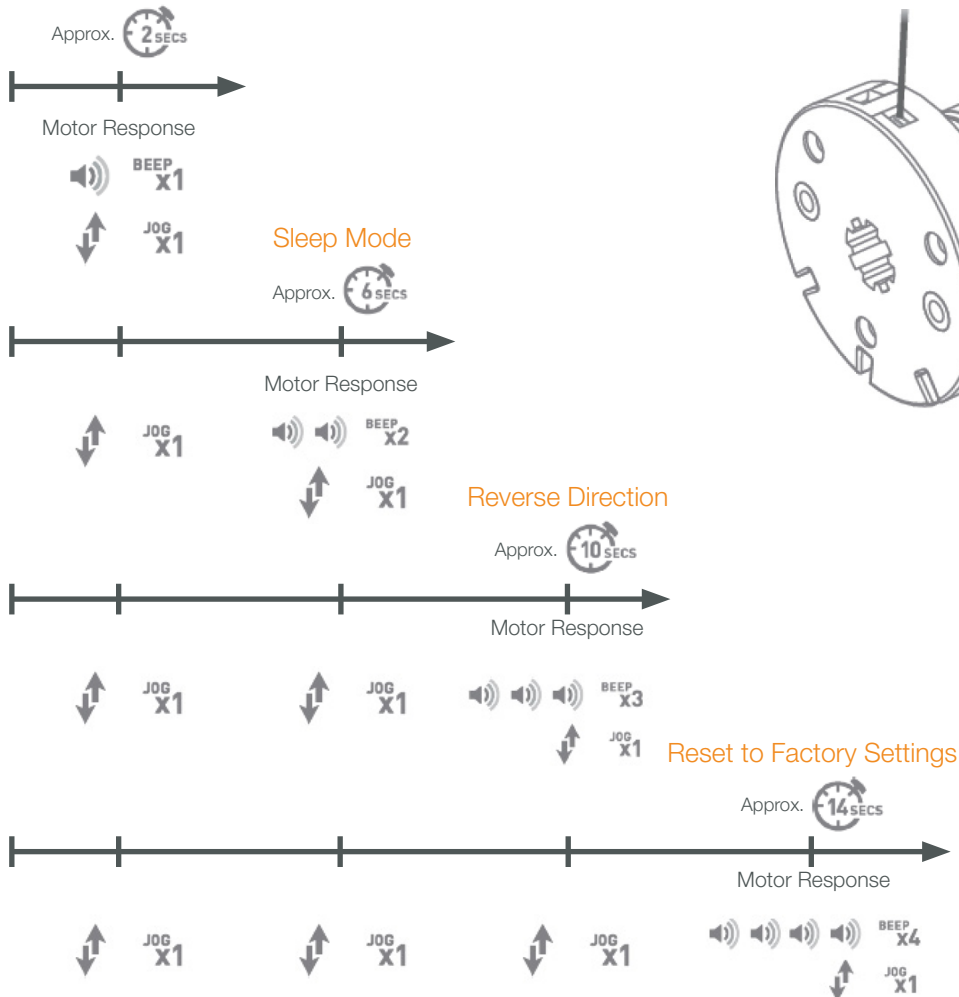
This table describes the function of a short P1 button press/release (<2 seconds) depending on current motor configuration.

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

Motor Configuration Options:

The P1 button is utilized to administer motor configuration as described below and beginning on [page 7](#).

Activate Pairing Mode



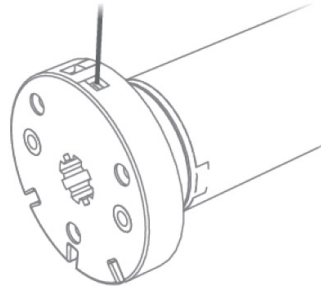
PROGRAMMING / INITIAL SET UP

PAIR MOTOR WITH CONTROLLER

Select a channel (15) on the controller.



Hold P1 button on motor head.



Hold STOP on switch.



Disregard if using 1 channel controller.



IMPORTANT

Consult your user manual for information on selecting channel.

Motor Response



Motor Response



IMPORTANT

Motor is now in set up 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**.

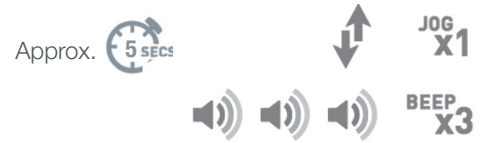


IMPORTANT

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**.



Motor Response



Motor Response



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**.



Motor Response



Motor Response

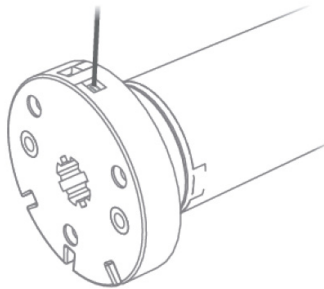


ADDING OR REMOVING CONTROLLERS & CREATING GROUP CHANNELS

USING MOTOR P1 BUTTON

Hold **P1** button on motor head.

Hold **STOP** on switch.



Motor Response



Motor Response



USING PRE-EXISTING CONTROLLER

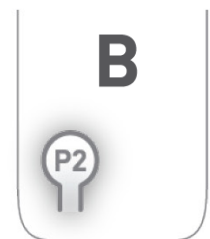
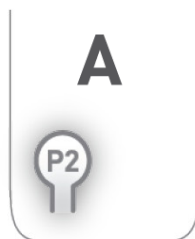
A = Existing switch or channel (to keep).

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



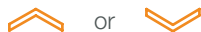
IMPORTANT

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



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.

STEP & ROLLER MODE

ENTER STEP MODE

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



Press **STOP**.



Motor Response



Motor Response



ENTER ROLLER MODE (DEFAULT)

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



Press **STOP**.



Motor Response



Motor Response

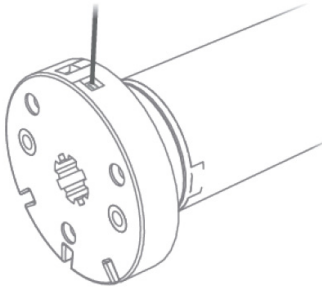


SLEEP MODE

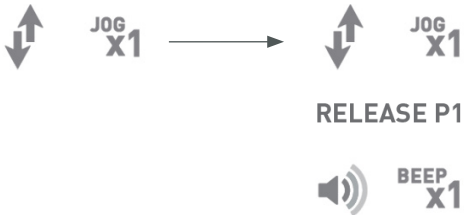
ENTER SLEEP MODE

Sleep mode is utilized to prevent a motor from moving during shipping of a fabricated shade.

Hold **P1** button on motor head.



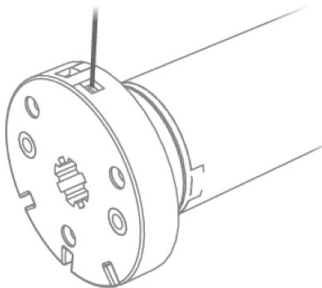
Motor Response



EXIT SLEEP MODE

Exit sleep mode once the shade is installed.

Hold **P1** button on motor head.



Motor Response



TROUBLESHOOTING

Problem	Cause	Remedy
Motor is not responding	Battery Pack or Tube is depleted	Recharge Battery Pack with compatible AC adapter and check connection and positioning of PV panel. Replace 8 AA Li-ion Batteries in Battery Tube.
	Insufficient charging from Solar (PV) Panel	Check connection and orientation of PV panel.
	AC Power Supply not plugged in	Check motor to power cable connection and AC plug.
	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 14).

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.