Core and Tilt Motor





Electronic Limit



Adjustable Speed



433 Mhz Bi-Directional



Favorite Position



Solar Option



Precise Tilt Control



Impact Detection



Soft Stop

Use this document with the following motors:

Part Number	Description
MT01-4001-xxx002	12V Core Tilt Motor Kit
MT01-4001-069003	AUTOMATE VT TILT [12V/0.6Nm/11rpm]

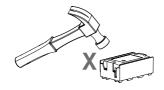
INSTR_TILT_PRGM_v2.1_SEP_2023

Safety Instructions

WARNING: Important safety instructions to be read before installation.

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







WARNING: It is important for the safety of persons to follow the enclosed instructions. Save these instructions for future reference.

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

- Read and follow all installation and safety instructions.
- · This manual is also available on the website.
- Do not expose to water, moisture, humid and damp environments or extreme temperatures.
- Use or modification outside the scope of this instruction manual will void warranty.
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children should not play with the appliance. Cleaning and user maintenance should not be performed by children without supervision.
- Do not allow children to play with fixed controls. Keep appliance and remote controls away from children.
- Assembly, installation and programming must be performed by a suitably qualified installer.
- For use with motorized shading devices.
- Frequently inspect the installation for improper operation, signs of wear, imbalance or damage to cables or springs. Do not use if repair or adjustment is necessary.
- The appliance must be disconnected from its power source during cleaning, maintenance or when replacing parts. Maintenance and parts replacement should be performed by a suitably qualified installer/ technician.
- The A-weighted emission sound pressure level of the appliance is less than or equal to 70dB(A).

- · The appliance is for indoor use only.
- Disconnect the appliance from power or switch off automatic controls when maintenance, such as window cleaning, is being carried out in the vicinity.
- The appliance must be supplied only the safe, extralow voltage corresponding to the marking on the appliance.
- · Keep clear of the appliance when in operation.
- There are no user serviceable parts or batteries inside the appliance.
- Remote batteries should be replaced with the correctly specified type only.
- The mass and dimensions of the driven part must be compatible with the rated torque and rated operating time of the appliance.
- The driven part must be compatible with the rated torque and operating time of the appliance as follows:

For 0.6Nm motor series (MT01-4001-069003 and similar): Rated torque of 0.6Nm, rated operating time of 12 minutes

- Fixed controls have to be clearly visible after installation.
- The appliance is intended to be installed at a height of at least 2.5m above the floor or any other accessible level surface.
- Before installing the appliance, remove any unnecessary cords or components and disable any equipment not needed for powered operation.

Safety Instructions

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 to 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 license-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 exemps 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, méme si le brouillage est susceptible d'en compromettre le fonctionnement.

Compliance Statement

- This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). 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.
- · Le présent appareil est conforme aux CNR d'Industrie Canada 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 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.
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- · 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.
- To satisfy FCC / IC RF exposure requirements, a separation distance of 20 cm or more should be maintained
- between the antenna of this device and persons during device operation.
- To ensure compliance, operations at closer than this distance is not recommended.
- Les antennes installées doivent être situées de facon à ce que la population ne puisse y être exposée à une distance de moin de 20 cm. Installer les antennes de facon à ce que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l'antenne.
- · La FCC des éltats-unis stipule que cet appareil doit être en tout temps éloigné d'au moins 20 cm des personnes pendant son functionnement.



Do not dispose of in general waste. Please recycle batteries and damaged electrical products appropriately.

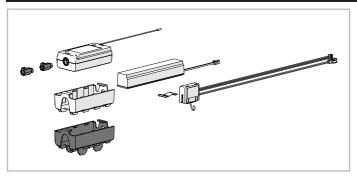


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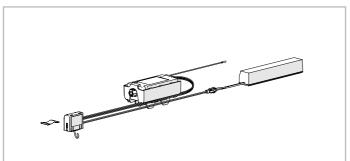
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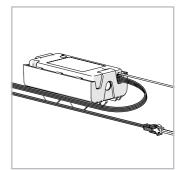
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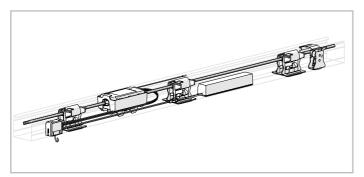
1 Core Tilt Motor Assembly

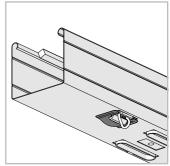


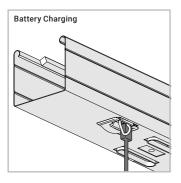
- Assemble correct configuration as required
- Disassemble existing venetian manual control assembly
- Insert motor assembly into existing venetian head rail assembly
- Re-insert tilt rod through the motor assembly & spools
- · Attach switch control cover

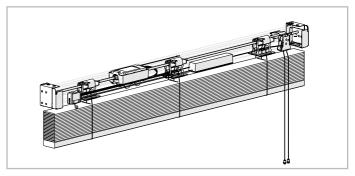








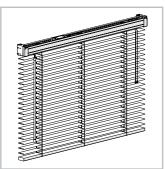


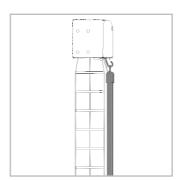


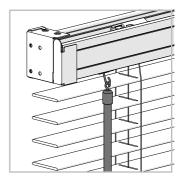
2 Core Tilt Motor Wand Operation



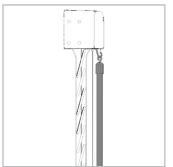
Optional Control Wand

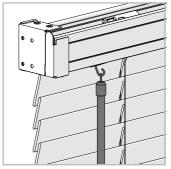




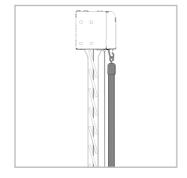


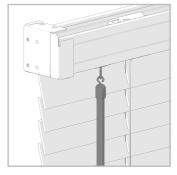




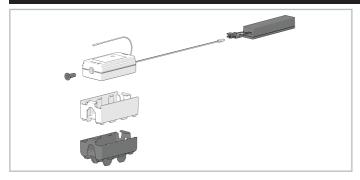




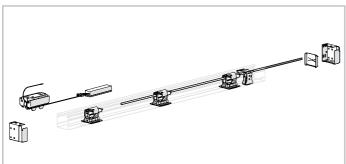


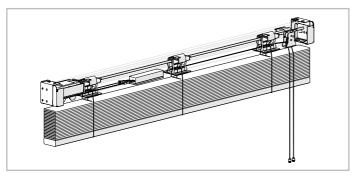


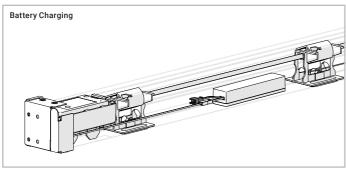
3 Tilt Motor Assembly



- Assemble correct configuration as required
- Insert motor assembly into venetian head rail assembly
- Ensure tilt rod is engaged with the motor
- Minimum tilt rod insertion with motor is 1/2"
- Maximum tilt rod insertion with motor is 3/4"







4 Wiring

4.1 Power Options

Automate DC TILT Motor is powered from a 12V DC power source. AA Battery wands, re-chargeable battery packs and A/C 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 Rollease Acmeda).

- During operation, if 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.

NOTE:

• Passthrough Tilt Motor MT01-4001-xxx002 comes supplied with a rechargeable battery pack.

Power Supply	Compatible Motors	
MTBWAND18-25 Battery Tube for 18/25mm DCRF (no Battery) Mtrs (inc Mt clips)		
MTDCPS-18-25 Power Supply for 18/25-CL/Tilt DCRF (no Bttry) Mtr	MT01-4001-069003	
MTBPCKR-28 Rechargeable Wand		
MT03-0301-069011 USB Wall Charger - 5V, 2A (AU ONLY)	MT01-4001-xxx002	
MT03-0301-069008 USB Wall Charger - 5V, 2A (US ONLY)		
MT03-0301-069007 4M (13ft) USB Micro Cable		
MT03-0302-067001 Solar Panel Gen2		

Extension Cables	Compatible with	
MTDC-CBLXT6 DC Battery Motor Cable extender 6" / 155mm		
MTDC-CBLXT48 DC Battery Motor Cable extender 48" / 1220mm	MT01-4001-069003	
MTDC-CBLXT96 DC Battery Motor Cable extender 96" / 2440mm		
MT03-0301-069013 48"/1200mm 5V Cable Extender		
MT03-0301-069014 8"/210mm 5V Cable Extender	MT01-4001-xxx002	
MT03-0301-069		



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

P1 Button Functions 5

5.1 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
	If limit is NOT set	None	No Action	None	No Action
Short Press	If limits are set	Operational control of motor, run to lim- it. 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 5.2

The P1 Button is utilized to administer motor configurations as described below.

Hold P1 button on motor head.

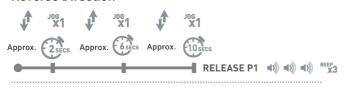
Activate Pairing Mode



Sleep Mode

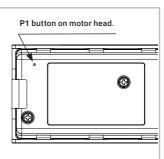


Reverse Direction



Reset To Factory Settings







IMPORTANT

Only the passthrough motor emits a beeping noise. lanore this icon when programming mt01-4001-069003.

All other prompts are the same for both motors.

Initial Set Up

Pair motor with controller 6.1

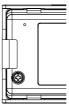
Select channel on controller.





Consult user manual for your controller for information on selecting channel.

Hold P1 button on motor head.



Motor Response*

Hold STOP on controller.







Motor Response*



















Motor is now in step mode and ready for setting limits

Check motor direction

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





Quick Press = Step Long Press = Continuous Travel To reverse shade direction, hold both UP and DOWN. Until the motor responds.







Motor Response*









IMPORTANT

Damage to shade 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

NOTE: * Only The Pass-through Motor Beeps

6.3 **Set Limits**



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

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



To save upper limit, hold UP and STOP.







Motor Response*









Move shade to the desired highest or lowest position by pressing the UP or

DOWN buttons on controller.





To save lower limit, hold DOWN and STOP.



Motor Response*





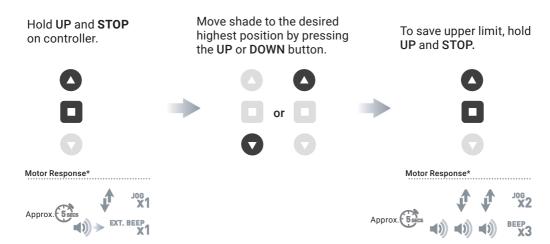




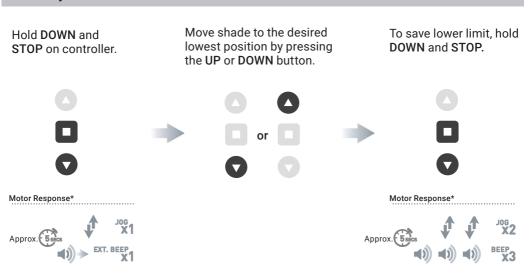
After setting limits, motor will automatically exit from initial set-up mode.

7 Adjusting Limits

7.1 Adjust upper limit



7.2 Adjust lower limit



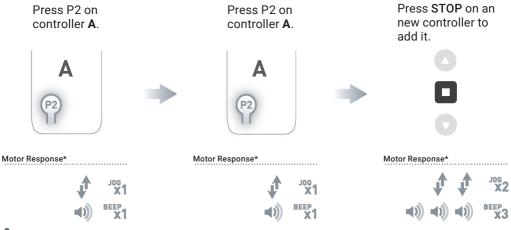


The bottom limit should be set ~ 1.38 in. (35mm) below the Ultra-Lock to disengage the auto lock mechanism when the shade is raised.

8.1 Using P2 Button on existing controller to add a new controller or channel

A = Existing controller or channel (to keep)

B = Controller or channel to add or remove



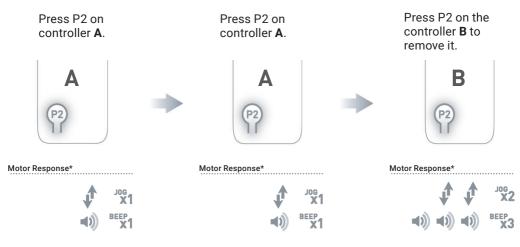


IMPORTANT Consult user manual for your controller or sensor

8.2 Using a pre-existing controller to add or delete a controller or channel

A = Existing controller or channel (to keep)

B = Controller or channel to add or remove





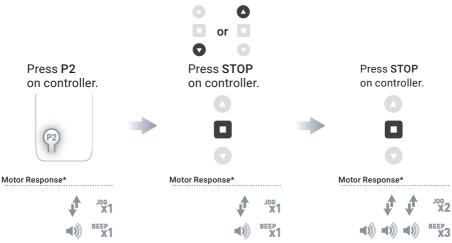
IMPORTANT Consult user manual for your controller or senso

NOTE: * ONLY THE PASSTHROUGH MOTOR BEEPS

Favorite Positioning 9

Set a favorite position 9.1

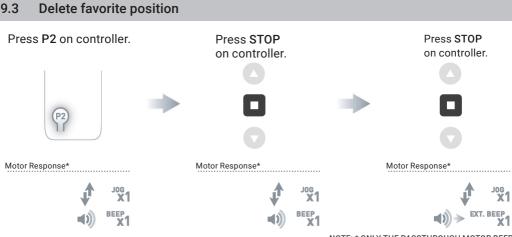
Move shade to the desired position by pressing the UP or DOWN button on the controller.



Send shade to favorite position 9.2



Delete favorite position 9.3



10 Adjusting Speed

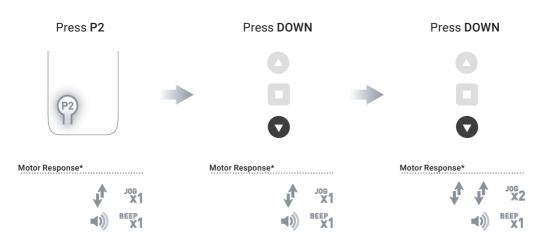
10.1 Increase Motor Speed

NOTE: Repeating this step when at the fastest speed ENTERS Soft Stop Mode in MT01-4001-069001.



10.2 Decrease Motor Speed

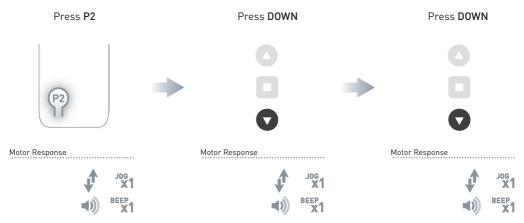
NOTE: Repeating this step when at the slowest speed EXITS Soft Stop Mode in MT01-4001-069001.



11 SOFT STOP CONFIGURATION

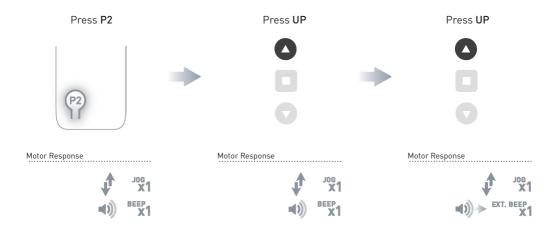
11.1 Turn Soft Stop OFF

Motor must be in slowest speed to turn Soft Stop OFF.



11.2 Turn Soft Stop ON

Motor must be in fastest speed to turn Soft Stop ON.



12 Sleep mode

If multiple motors are grouped on a single channel, Sleep Mode may be used to put all but 1 motor to sleep, allowing programming of just the one motor that remains "Awake". See page 6 for detailed P1 functions.

Enter Sleep Mode

Sleep mode is utilized to prevent a motor from incorrect configuration during other motor setup. Hold P1 button on the motor head Exit Sleep Mode: Method 1

Exit sleep mode once the shade is ready.
Press and release P1 button on the motor head

Exit Sleep Mode: Method 2

Remove power and then re-power the motor.

Motor Response*





RELEASE P1



NOTE: * ONLY THE PASSTHROUGH MOTOR BEEPS

13 Trouble shooting

Problem	Cause	Remedy
Motor is not responding	Battery in motor is depleted	Recharge with a compatible charger
	Insufficient charging from solar PV panel	Check connection and orientation of PV panel
	Controller battery is discharged	Replace battery
	Battery is inserted incorrectly into controller	Check battery polarity
	Radio interference/shielding	Ensure transmitter is positioned away from metal objects and the aerial on motor or receiver is kept straight and away from metal
	Receiver distance is too far from transmitter	Move transmitter to a closer position
	Charging failure	Check power supply to motor is connected and active
Motor beeps x10 when in use	Battery voltage is low	Recharge with a compatible charger
Cannot program a single motor (multiple motors respond)	Multiple motors are paired to the same channel	Always reserve an individual channel for programming functions. Use Sleep Mode to program individual motors.