

SAFETY NOTE

1. This appliance can be used by children aged from 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 use of the appliance in a safe way and understand the hazards involved.
2. Children shall not play with the appliance.
3. Cleaning and user maintenance shall not be made by children without supervision.
4. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
5. **WARNING:** the drive shall be disconnected from its power source during cleaning, maintenance and when replacing parts.
6. The instructions shall status that the A-weighted emission sound pressure level of the drive is equal to or less than 70 dB(A), e.g. by writing $L_{pA} \leq 70 \text{ dB(A)}$.
7. The mass and the dimension of the driven part shall be compatible with the rated torque and rated operating time.
8. The type of driven part the drive is intended for.
9. **WARNING:** Important safety instructions. It is important for the safety of persons to follow these instructions. Save these instructions.
10. Do not allow children to play with fixed controls. Keep remote controls away from children.
11. Frequently examine the installation for imbalance and signs of wear or damage to cables and springs. Do not use if repair or adjustment is necessary.
12. Watch the moving shutter and keep people away until the shutter is completely closed.
13. **WARNING:** Important safety instructions. Follow all instructions, since incorrect installation can lead to severe injury.
14. Before installing the drive, remove any unnecessary cords and disable any equipment not needed for powered operation.
15. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
16. Children should be supervised to ensure that they do not play with the appliance.
17. Disconnect the drive from the supply or switch off the automatic controls when maintenance, such as window cleaning, is being carried out in the vicinity.



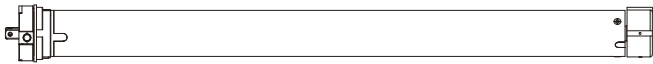
Li-ion



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

DM45LE/S

Instruction | A-10



Features

- Built-in Receiver
- Jog & Tilt
- Built-in Lithium Battery
- Scan and Program
- Solar Charging
- Switch Direction
- Stall Protection
- Program Button
- Reset to Factory Mode
- Status Feedback
- Electronic Limit
- Preferred Stop Position
- Speed Regulation
- Scene Control
- Memorized Setting

Fields of Application



For motorized roller shutter.

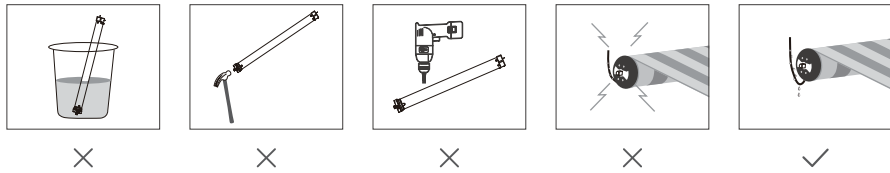
Specifications

Working Temperature: -10°C ~ +60°C	Radio Frequency: 433.92MHz
Rated Voltage: 12VDC	Max. Single Running Time: 6min

* For more motor models and specific torque, please refer to the nameplate.

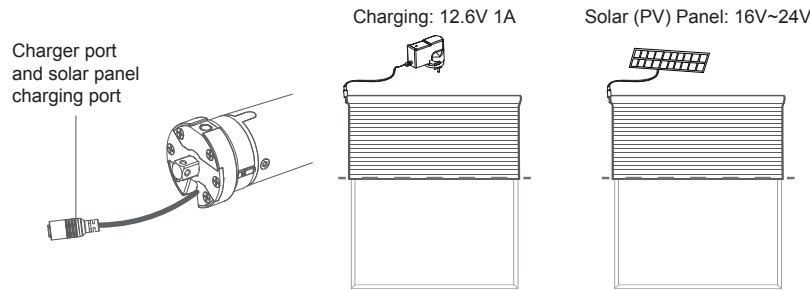
Attention

Never drop, knock, drill or submerge the motor. Keep the power cable in right position as following.
Important safety instructions to be read before installation.
Incorrect installation can lead to serious injury and will void manufacturer's liability and warranty.



Radio+

Charging Instructions



This motor has a 12V built in Li-ion battery pack.

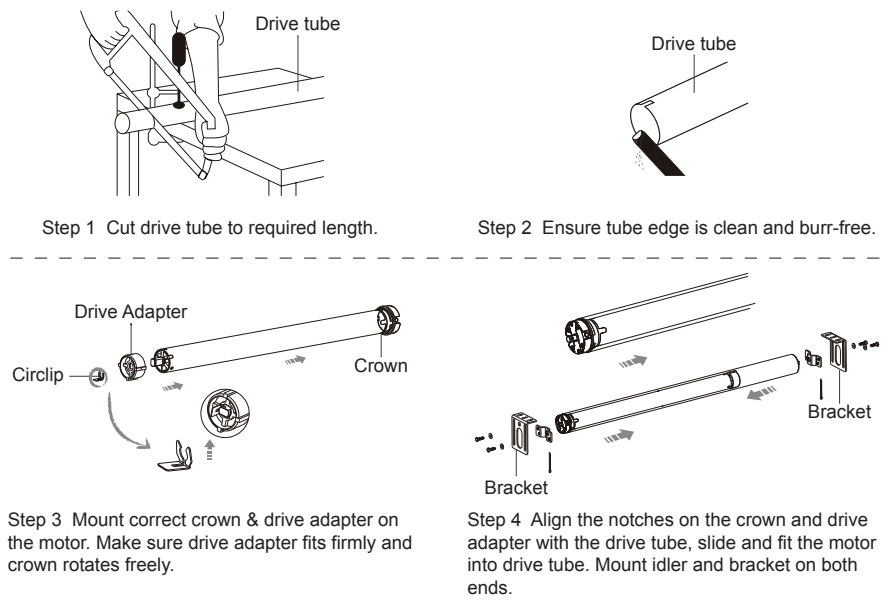
Maximum charging input: 12.6V 1A.

Before first use please charge motor for 6 hours.

During operation, when the motor is activated, it will beeps 10 times to indicate a low voltage alarm, which means charging is required.

During operation, low voltage when will be detected when the battery is nearly run out. The battery stops operating and requires charging.

Motor Installation



Caution

1. Do not expose motor to humid or extreme temperature conditions.
2. Do not drill into motor.
3. Do not cut the antenna and keep it clear from metal objects.
4. Do not allow children to play with this device.
5. If power cable or connector is damaged, do not use.
6. Ensure correct crown and drive adaptor are used.
7. Ensure power cable and aerial is clear and protected from moving parts.
8. Cable routed through walls shall 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 to be performed by a qualified professional, use or modification outside the scope of this instruction may void warranty.



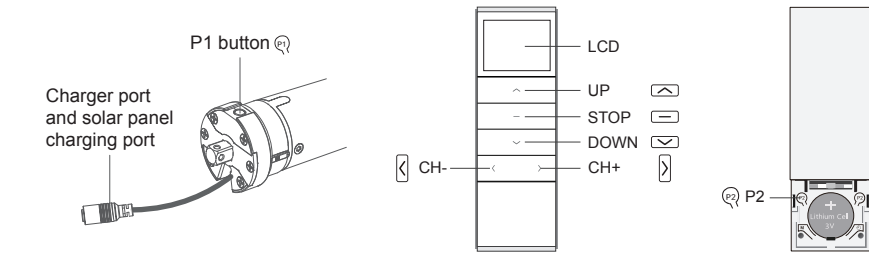
Important Safety Instructions To Be Read Prior To Operation.

Setting Notice

Please read following points of attention carefully before setting.

1. Don't operate motors when low voltage alarms.
2. Operating:
 - ①The emitter will exit the setting if there is no operation within 10S.
 - ②There will be jogs and beeps as prompts. Please proceed to the next steps after the prompts.
3. Set limit position:
 - ①It can only be used after setting the upper and lower limit position, and the upper and lower limit position can't be in the same position.
 - ②After limit setting, the motor is with power off and memory function.
 - ③Deleting limits will clear all limit memory.
 - ④If there is no operation within 2 minutes, it will automatically exit the limit setting mode. If you want to continue, please re-enter the limit setting operation.
4. If the emitter is lost, please pair again with new emitter.
5. One motor can store maximum 10 channels; after fully stored, when pairing new channels, only the last one will be covered circularly.

Button Instructions



Functions of P1 button

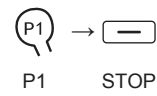
1. **Cyclic operation:** Press P1 button once, the motor will run UP → STOP → DOWN... in cycles.
2. **Pairing or Pairing Additional Emitter or Deleting Emitter:** Press and hold P1 button for 2S, the motor jogs once, release button, motor long beeps once, motor is ready for pairing / pairing additional emitter / deleting emitter.
3. **Radio Lock:** Press and hold P1 button for 6S, the motor jogs twice, release button, motor beeps twice, the motor enters radio lock status, the motor won't receive any signal; press P1 button once to disable Radio Lock.
4. **Switch Direction:** Press and hold P1 button for 10S, the motor jogs 3 times, release button, motor beeps 3 times, the motor direction has been switched successfully.
5. **Reset to Factory Mode:** Press and hold P1 button for 14S, the motor jogs 4 times, release button, motor beeps 4 times, the motor has been reset to factory mode. At this point, the motor will enter deep sleep. Once in deep sleep, the motor cannot be controlled to operate. To exit deep sleep, press the P1 button for 2S until the motor jogs as a prompt.



Essential Settings
The steps in factory mode must be completed to ensure proper operation.

Factory Mode

1 Pairing

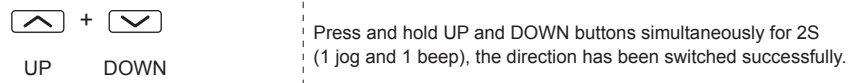


Press P1 button for 2S (1 jog), release button and the motor long beeps once, within 10S, press STOP for 2S (2 jogs and 3 beeps), the motor has been paired successfully.

* If within 10S, the motor doesn't receive STOP signal from the any emitter, it will exit the paring mode automatically.

2 Switch Rotating Direction (Optional)

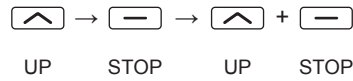
If press UP, the motor runs downward, try below to switch direction



* The operation is only valid when there is no limits. If the motor has already set the upper and lower limit, then you can only switch direction by P1 button.

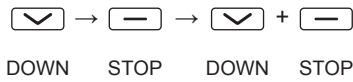
3 Upper and Lower Limits Setting

1 Set upper limit



Press UP for 2S, operate the motor to the desired upper limit position, press STOP, the motor stops running. Press and hold UP and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), upper limit is set.

2 Set lower limit



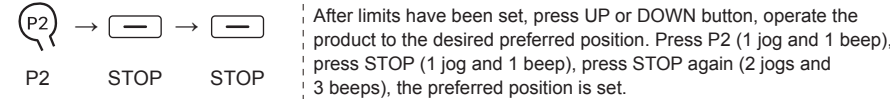
Press DOWN for 2S, operate the motor to the desired lower limit position, press STOP, the motor stops running. Press and hold DOWN and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), lower limit is set.

* If the limit setting mode is exited before completing the limit settings, the previously set limit position (if any) will be retained and used. After completing the limit settings, the motor will automatically enter user mode.

User Mode

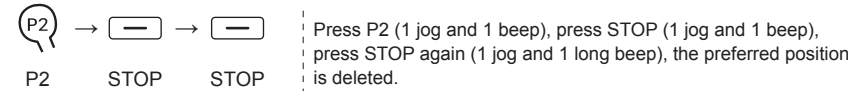
1 Add A Preferred Position

1 Set preferred position

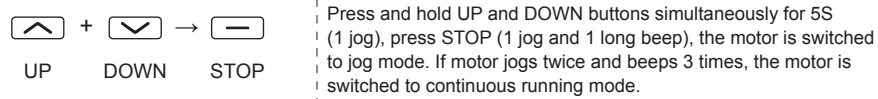


* After the preferred position is set, if the motor is not at the preferred position, press STOP button for 2S, the motor will automatically run to the preferred position.
Roller systems: When the motor is in continuous operation mode, long press STOP button, the motor will run directly from the current position to the preferred position.
Venetian blind system: When the motor is in the jog mode, long press STOP button, the motor will first run from the current position to the lower limit position, and then from the lower limit position to the preferred position.

2 Delete preferred position



2 Switch Between Jog Mode & Continuous Running Mode



* When in jog mode, press UP or DOWN once, the motor will be jog running, if press more than 2S, the motor will be continuously running.

3 Adjust Limits

1 Adjusting the upper limit



Press and hold UP and STOP buttons simultaneously for 5S (1 jog and 1 long beep), press UP or DOWN button, operate the product to the desired new upper limit position, press and hold UP and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), the new upper limit is set.

2 Adjusting the lower limit

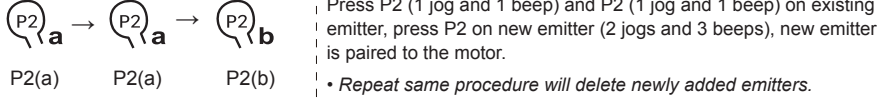


Press and hold DOWN and STOP buttons simultaneously for 5S (1 jog and 1 long beep), press UP or DOWN button, operate the product to the desired new lower limit position, press and hold DOWN and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), the new lower limit is set.

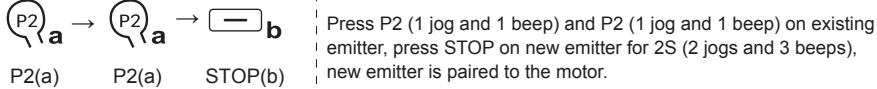
* After the new limits is set, the original preferred position will not be deleted. If there is no operation in the limit adjusting mode, the motor will stop for 2 minutes, and then it will jog once, and then it will automatically return to the user mode.

4 Pairing / Deleting Additional Emitter

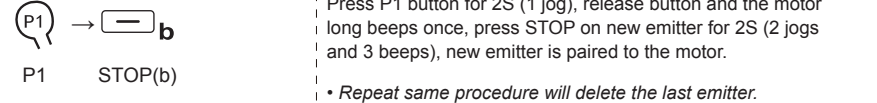
Method one



Method two



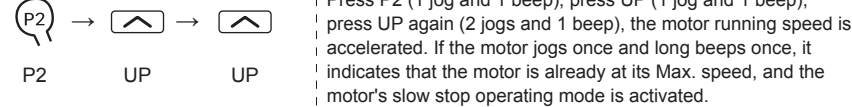
Method three



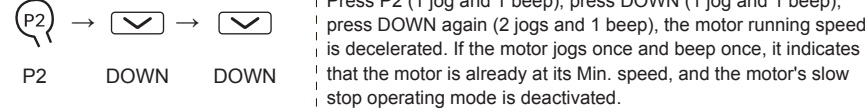
* (a) as existing emitter, (b) as new emitter to pair/delete. All the setting of the motor will be kept after adding the new emitter.

5 Speed Regulation

1 Speed+ setting



2 Speed- setting



N.M/RPM	Max. speed (r/min)	Med. speed (r/min)	Min. speed (r/min)
3/18	18	15	12
6/24	24	20	16
13/11	11	8	5
13/13	13	10	7

* The factory default is slow stop mode (only works after the limits setting). Motors which are above 20N do not have speed regulation and slow stop functions.

6 Activate / Deactivate Motor Slow Stop Operation Mode

1 Activate the motor slow stop operation mode



Press and hold UP and DOWN buttons simultaneously for 5S (1 jog), press P2 (1 jog), press UP (1 jog and 1 long beep), the motor slow stop operation mode is activated.

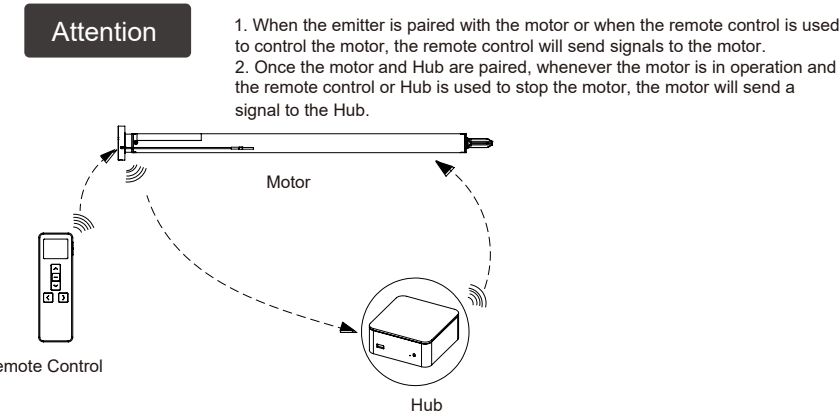
2 Deactivate the motor slow stop operation mode



Press and hold UP and DOWN buttons simultaneously for 5S (1 jog), press P2 (1 jog), press DOWN (1 jog and 1 beep), the motor slow stop operation mode is deactivated.

Quick Index

Settings	Steps
1 Pairing	P1 (hold down 2s) → Stop (hold down 2s)
2 Switch Rotating Direction	Up + Down (hold down 2s)
3 Upper and Lower Limits Setting	1 Set upper limit Up (hold down 2s) → Stop → Up + Stop (hold down 2s) 2 Set lower limit Down (hold down 2s) → Stop → Down + Stop (hold down 2s)
4 Add / Delete Preferred Position	P2 → Stop → Stop
5 Switch Between Jog Mode & Continuous Running Mode	Up + Down (hold down 5s) → Stop
6 Adjust Limits	1 Adjusting the upper limit Up + Stop (hold down 5s) → Up / Down → Up + Stop (hold down 2s) 2 Adjusting the lower limit Down + Stop (hold down 5s) → Up / Down → Down + Stop (hold down 2s)
7 Pairing / Deleting Additional Emitter	1 Pairing / deleting additional emitter P2(a) → P2 (a) → P2(b) 2 Pairing additional emitter P2(a) → P2 (a) → Stop(b) (hold down 2s) 3 Pairing / deleting additional emitter P1 (hold down 2s) → Stop(b) (hold down 2s)
8 Speed Regulation	1 Speed+ setting P2 → Up → Up 2 Speed- setting P2 → Down → Down
9 Activate / Deactivate Motor Slow Stop Operation Mode	1 Activate the motor slow stop operation mode Up + Down (hold down 5s) → P2 → Up 2 Deactivate the motor slow stop operation mode Up + Down (hold down 5s) → P2 → Down



Troubleshooting

Issues	Possible causes	Solution
The motor has no response	Battery in motor is depleted	Recharge with compatible AC adaptor
	Power failure or incorrect connection	Double check power and cable connections, follow wiring instructions.
	Emitter battery is low capacity	Replace battery
	Radio interference / shielding	Check antenna on motor is intact and exposed. Check for possible source of radio interference.
The emitter can't control single motor	Multiple motors are paired to the same channel.	Pair single motor with emitter correctly
		Try to use multi-channel emitters to control multi-motor projects, ensure each channel to control one single motor
The motor doesn't run or starts too slowly or make loud noise	Connections are incorrect.	Check connections
	Installation is improper or overload	Check installation or overload
The motor stops during the up and down running	The motor has reached the lower limit	Adjust the new lower limit
	The running time more than 6min	Let the motor cool down for about 20 minutes

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.

Note: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.