

SAFETY NOTE

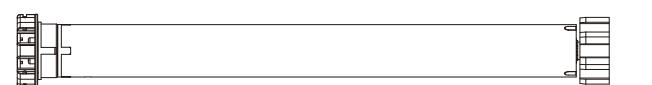
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- 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.
- WARNING:** the drive shall be disconnected from its power source during cleaning, maintenance and when replacing parts.
- 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 $L_p \leq 70 \text{ dB(A)}$.
- The mass and the dimension of the driven part shall be compatible with the rated torque and rated operating time.
- The type of driven part the drive is intended for.
- WARNING:** Important safety instructions. It is important for the safety of persons to follow these instructions. Save these instructions.
- Do not allow children to play with fixed controls. Keep remote controls away from children.
- 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.
- Watch the moving shutter and keep people away until the shutter is completely closed.
- WARNING:** Important safety instructions. Follow all instructions, since incorrect installation can lead to severe injury.
- Before installing the drive, remove any unnecessary cords and disable any equipment not needed for powered operation.
- 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.
- Children should be supervised to ensure that they do not play with the appliance.
- 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.



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

DM45LEAF/S

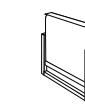
Instruction | A-01



Features

• Built-In Receiver	• Switch Direction	• Electronic Limit
• Jog Mode	• Stall Protection	• Preferred Stop Position
• Built-In Lithium Battery	• Switchable Motor Mode	• Manual/Auto Curtain Tightening
• Sensor Compatible	• Radio Lock	• Reset to Factory Mode

Fields of Application



For motorized zip screen.

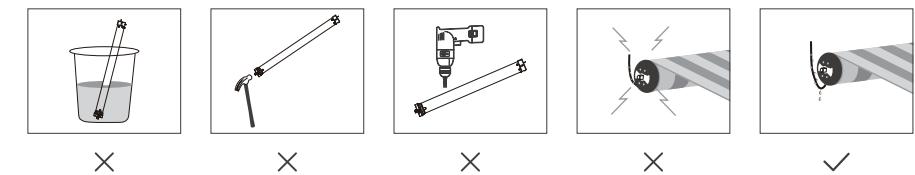
Specifications

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

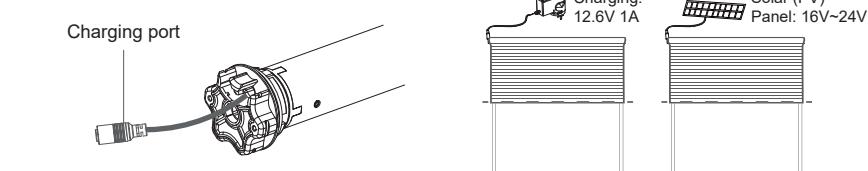
* For more motor models and specific torque, please refer to the nameplate.

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.



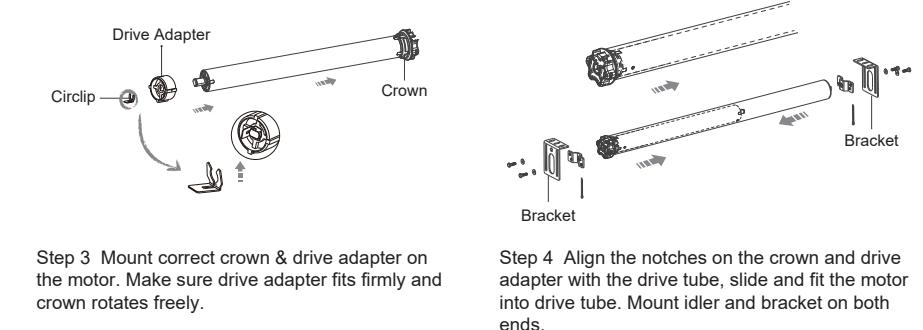
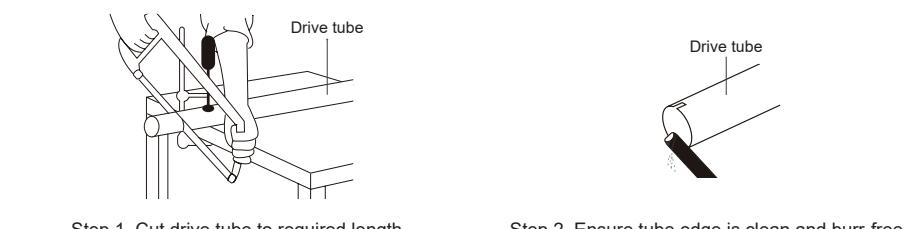
Charging Instructions



- This motor has a 12V built in Li-ion battery pack with integrated charge management.
- Maximum charger charging input: 12.6V 1A.
- Before first use please charge motor for 6 hours.
- When the motor is below a certain voltage, it will beep 10 times during continuous operation, it means low voltage alarm and need recharging.

Radio+

Motor Installation



Caution

- Do not expose motor to humid or extreme temperature conditions.
- Do not drill into motor.
- Do not cut the antenna and keep it clear from metal objects.
- Do not allow children to play with this device.
- If power cable or connector is damaged, do not use.
- Ensure correct crown and drive adaptor are used.
- Ensure power cable and aerial is clear and protected from moving parts.
- Cable routed through walls shall be properly isolated.
- Motor is to be mounted in horizontal position only.
- Before installation, remove unnecessary cords and disable equipment not needed for powered operation.
- Installation and programming to be performed by a qualified professional, use or modification outside the scope of this instruction may void warranty.



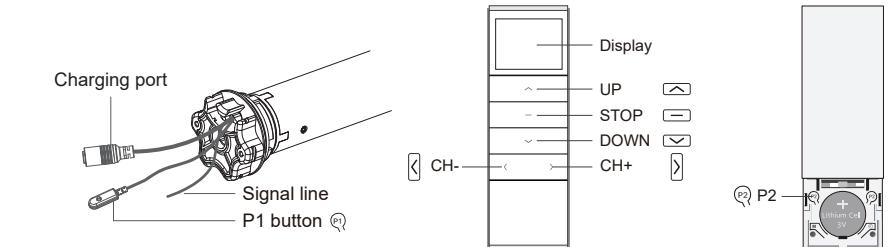
Important Safety Instructions To Be Read Prior To Operation.

Setting Notice

Please read following points of attention carefully before setting.

- Don't operate motors when low voltage alarm.
- Operation:
 - The valid interval time of the buttons is within 10S, if there is no operation within 10S, the emitter will exit the present setting.
 - The motor will jog and beep as hint, please do the next step after the hint.
- Set the limit position:
 - After the upper / lower limit setting, and the upper / lower limit position can't be at the same position.
 - After the limit setting, with power off and memory function.
 - Limit delete will clear all limit memory.
 - It will exit limit setting when program there is no operation for 2 minutes.
- If the emitter lost, please pairing again with the new emitter.
- One motor can store maximum 10 channels; after fully stored, if pair new channels, only the last one will be covered circularly.

Button Instructions



Functions of P1 button

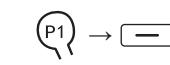
- Cyclic operation:** Press P1 button once, the motor will run UP → STOP → DOWN ... in cycles.
- Pairing or Pair / Delete Additional Emitter / Delete Emitter:** Press P1 button for 2S, motor jogs once, release button and the motor long beeps once. In factory mode, motor is ready for pairing. In user mode, motor is ready for pairing additional emitter or deleting emitter.
- Radio Lock:** Press and hold P1 button for 6S, motor jogs twice, release button and the motor beeps twice, the motor enters radio lock status, the motor won't receive any signal; press P1 button once to disable Radio Lock.
- Switch Direction:** Press and hold P1 button for 10S, motor jogs 3 times, release button and the motor beeps 3 times, the running direction of the motor has been changed.
- Reset to Factory Mode:** Press and hold P1 button for 14S, motor jogs 4 times and beeps 4 times, the motor has been reset to factory mode, all the previous settings and emitters have been deleted. At this point the motor will go into deep sleep. After entering deep sleep, the motor can't be controlled. At this time, you need to press P1 button for 2S and then the motor jogs to prompt to exit deep sleep.

Essential Settings

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

Factory mode

1 Pairing



The motor re-power (1 jog and 1 long beep), or press and hold 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. After power off and power on again, if the motor has saved the emitter, there will be no jog and beep for hint, and it will not automatically enter the pairing status at this time.

2 Switch Rotating Direction (Optional)

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

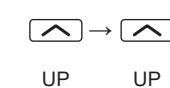


Press and hold UP and DOWN simultaneously for 2S (1 jog), the direction has been switched successfully.

* This operation is only valid when there is no limits. If the motor has already set the upper and lower limit, then you can 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 and hold UP and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), upper limit is set.

2 Set lower limit

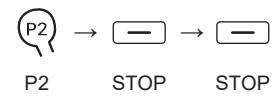
 Press DOWN for 2S, operate the motor to the desired lower limit position, press and hold DOWN and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), lower limit is set.

* The upper limit position and lower limit position cannot be set at the same position. After the limits have been set successfully, the motor will enter the user mode.

User mode

1 Add A Preferred Position

1 Set preferred position

 After limits have been set, press UP or DOWN, operate the product to the desired preferred position. Press P2 (1 jog and 1 beep), press STOP (1 jog and 1 beep), press STOP again (2 jogs and 3 beeps), the preferred position is set.

* Press STOP button for 2S, the motor will automatically run to the preferred position.

2 Delete preferred position

 Press P2 (1 jog and 1 beep), press STOP (1 jog and 1 beep), press STOP again (1 jog and 1 long beep), the preferred position is deleted.

2 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, 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, 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.

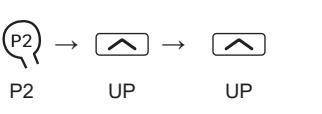
* After the new limits is set, the original preferred position will not be deleted; If there is no operation in the limit adjusting mode, the motor will stop for 2 minutes, and then it will jog once and beep once, and then it will automatically returns to the user mode. Press and hold P1 button for more than 2S to exit the limit adjusting mode.

3 Switch Between Jog Mode & Continuous Running Mode

 Press and hold UP and DOWN buttons simultaneously for 5S (1 jog), press STOP (1 jog and 1 long beep), the motor is switched to jog mode. If motor jogs twice and beeps 3 times, the motor is switched to running mode.

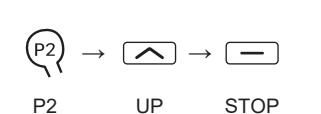
* When in jog mode, press UP or DOWN once, the motor will be jog running, if press more than 2S, the motor will be continuously running.

4 Operation Switch Between Blind Mode and Zip Screen Mode

 Press P2 (1 jog and 1 beep), press UP (1 jog and 1 beep), and press UP again (1 jog and 1 long beep), the motor is switched to blind mode; if the motor jogs twice and beeps 3 times, the motor is switched to zip screen mode.

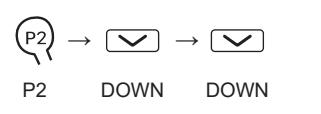
* The factory default is zip screen mode. If the motor is in the lower limit position, switch to the zip screen mode, press UP button, and the motor will first run downward to unlock and then run upward.

7 Enable / Disable Sensor Detection

 Press P2 (1 jog and 1 beep), press UP (1 jog and 1 long beep), press STOP (1 jog and 1 long beep), sensor detection is disabled. If motor jogs twice and beeps 3 times, sensor detection is enabled.

* The factory default mode is ON.

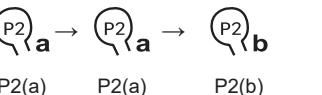
12 Downward Stall Detection Rollback Function (Sensitive stall detection)

 Press P2 (1 jog and 1 beep), press DOWN (1 jog and 1 beep), press DOWN again (2 jogs and 3 beeps), sensitive stall detection function is enabled; If motor jogs once and long beeps once, sensitive stall detection function is disabled.

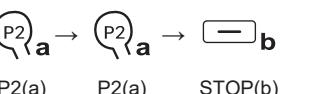
* The sensitive stall detection function is enabled, when encountering obstruction for the first time during the downward process, the motor will run upwards for half a turn, then run downwards again. If it encounters obstruction twice at the same position, the motor will stop running.

5 Pairing / Deleting Additional Emitter

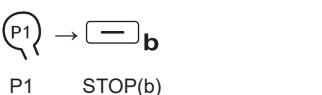
Method one

 Press P2 (1 jog and 1 beep) and P2 (1 jog and 1 beep) on existing emitter, press P2 on new emitter (2 jogs and 3 beeps), new emitter is paired to the motor.

Method two

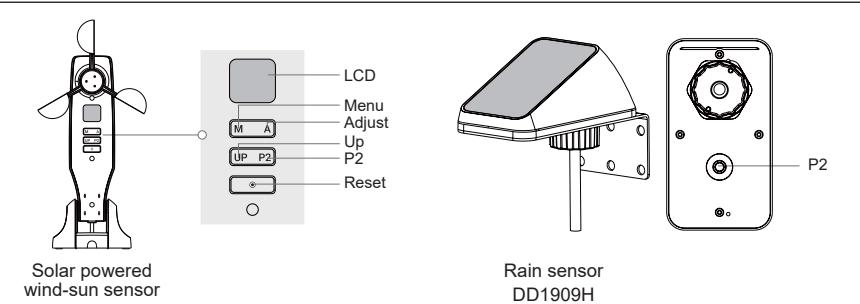
 Press P2 (1 jog and 1 beep) and P2 (1 jog and 1 beep) on existing emitter, press STOP on new emitter for 2S (2 jogs and 3 beeps), new emitter is paired to the motor.

Method three

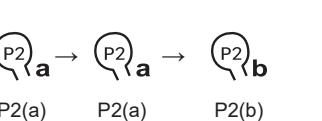
 Press P1 button for 2S (1 jog), release button and the motor long beeps once, press STOP on new emitter for 2S (2 jogs and 3 beeps), new emitter is paired to the motor.

* (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.

Pair With Wind-Sun Sensors and Rain Sensors

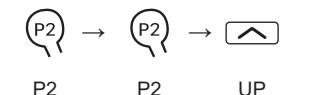


6 Pairing / Deleting Sensor

 Press P2 (1 jog and 1 beep) and P2 (1 jog and 1 beep) on existing emitter, press P2 on new sensor (2 jogs and 3 beeps), sensor is paired to the motor.

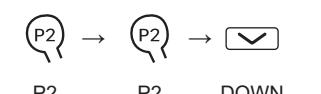
* (a) as existing emitter, (b) as new sensor to pair/delete; Add multiple sensors only currently valid, other are covered.

8 Enable / Disable Sun Detection

 Press P2 (1 jog and 1 beep), press P2 again (1 jog and 1 beep), press UP (1 jog and 1 long beep), Sun detection is disabled. If motor jogs twice and beeps 3 times, Sun detection is enabled.

* The factory default mode is ON.

9 Enable / Disable Rain Detection

 Press P2 (1 jog and 1 beep), press P2 again (1 jog and 1 beep), press DOWN (1 jog and 1 long beep), Rain detection is disabled. If motor jogs twice and beeps 3 times, Rain detection is enabled.

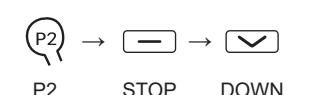
* The factory default mode is ON.

10 Enable / Disable Fault Detection Function of Wind-sun Sensor

 Press and hold UP, STOP and DOWN buttons simultaneously (2 jogs and 3 beeps), the fault detection function is disabled; If the motor jogs once and long beeps once, the fault detection function is enabled.

* The factory default mode is ON. If with limits, the motor starts detecting the status of the wind-sun sensor after receiving the detection signal. If it does not receive the detection signal from the wind-sun sensor again within 30 minutes, it will automatically run to the upper limit position and enter the jog status.

11 Manual/Auto Tightening Function (In zip screen mode)

 Press P2 (1 jog and 1 beep), press STOP (1 jog and 1 beep), press DOWN (2 jogs and 3 beeps), the motor is switched to manual tightening mode. If motor jogs once and long beeps once, the motor is switched to auto tightening mode.

* The factory default is auto tightening mode. This function is to run the motor in the opposite direction for a certain distance to tighten the curtain fabric after setting the limit and reaching the lower limit position.
 a. In auto tightening mode, the motor automatically runs in the opposite direction after reaching the lower limit position, and when encountering resistance, it tightens the curtain fabric.
 b. In manual tightening mode, after the motor reaches the lower limit position, it is necessary to press the UP button of the emitter. The motor will run in the opposite direction and encounter resistance to tighten the curtain fabric. If the motor runs upwards in auto tightening mode, only by pressing the DOWN button of the emitter, the motor will first run downwards to the unlocking position, then run upwards after unlocking.
 If the motor runs upwards in manual tightening mode, only by pressing the DOWN button of the emitter can the motor run to the unlocking position and then press the UP button of the emitter to run upwards.

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 2 Set lower limit
4 Add / Delete Preferred Position	P2 → Stop → Stop
5 Adjust Limits	1 Adjusting the upper limit 2 Adjusting the lower limit
6 Switch Between Jog Mode & Continuous Running Mode	Up + Down (hold down 5S) → Stop
7 Operation Switch Between Blind Mode and Zip Screen Mode	P2 → Up → Up
8 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)
9 Pairing / Deleting Sensor	P2(a) → P2 (a) → P2(b) (wind-sun-rain sensor)
10 Enable / Disable Sensor Detection	P2 → Up → Stop
11 Enable / Disable Sun Detection	P2 → P2 → Up
12 Enable / Disable Rain Detection	P2 → P2 → Down
13 Enable / Disable Fault Detection Function of Wind-sun Sensor	Up + Stop + Down
14 Manual/Auto Tightening Function (In zip screen mode)	P2 → Stop → Down
15 Downward Stall Detection Rollback Function (Sensitive stall detection)	P2 → Down → Down

Troubleshooting

Issues	Possible causes	Solution
Motor is not responding	The battery inside the motor is dead Emitter battery is low capacity Radio interference / shielding Out of radio control range	Charging with a phone charger Replace battery Check antenna on motor is intact and exposed. Check for possible source of radio interference. Try control within closer range
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. Incorrect installation or overload	Check connections Check installation or overload
The motor stops during the going up or going down.	The motor has reached the lower limit Running time exceeds 6 min	Adjust the new lower limit Let the motor cool for about 20 min

1 RF exposure statement

This equipment complies with the FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2 FCC Warning

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.