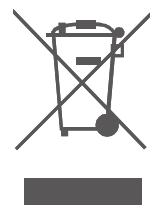


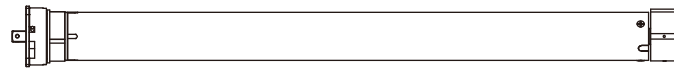
## SAFETY NOTE

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 state that the A-weighted emission sound pressure level of the drive is equal to or less than 70 dB(A), e.g. by writing  $LpA \leq 70$  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.



# DM45EAF/S

## Instruction | A-01



### Features

- Built-in Receiver
- Precise Limit Setting
- Jog & Tilt
- Limit Fine Adjustment
- Motor Mode Switching
- Switch Direction
- Stall Protection
- Program Button
- Reset to Factory Mode
- Signal Repeater Function
- Electronic Limit
- Preferred Stop Position
- Auto Limit Setting
- Sensitive Stall Detection

### Fields of Application



The motor is suitable for motorization of zip screen.

### Specifications

Working Temperature: -10°C ~ +65°C	Radio Frequency: 433.92MHz
Rated Voltage: 230V/50Hz	Thermal Protection time: > 4 minutes

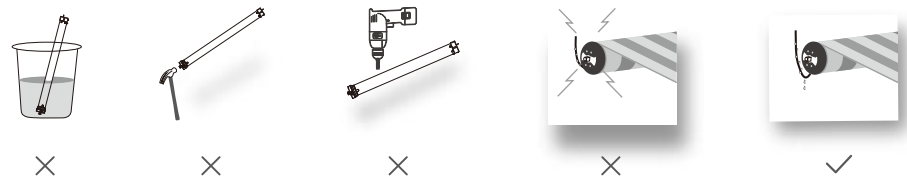
Following data for reference

Model	Rated Torque (N.m)	Rated Speed (rpm)	Rated Current (A)
DM45EAF/S-10/15	10	15	0.48
DM45EAF/S-10/26	10	26	0.69
DM45EAF/S-20/15	20	15	0.69
DM45EAF/S-20/26	20	26	0.9
DM45EAF/S-30/15	30	15	0.87
DM45EAF/S-40/15	40	15	0.99
DM45EAF/S-50/12	50	12	0.99

\* For reference only.

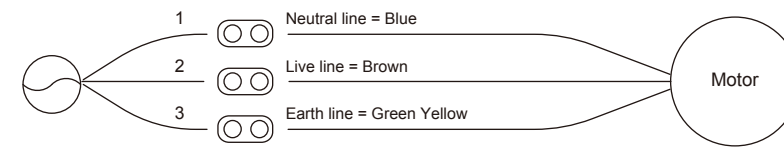
### Attention

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.

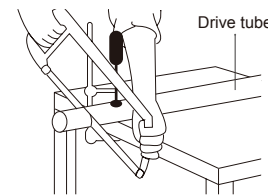


### Wiring

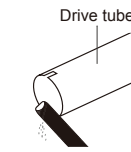
Three wires: 230V/50Hz



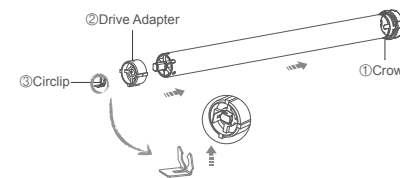
### Motor Installation



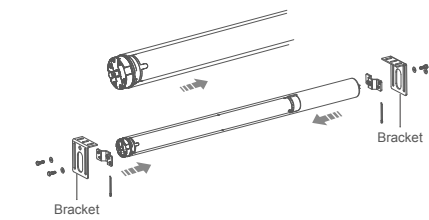
Step 1 Cut drive tube to required length.



Step 2 Ensure tube edge is clean and burr-free.



Step 3 Mount correct crown & drive adapter on the motor. Make sure drive adapter fits firmly and crown rotates freely.



Step 4 Align the notches on the crown and drive adapter with the drive tube, slide and fit the motor into drive tube. Mount idler and bracket on both ends.

### Caution

1. Do not expose motor to humid, damp 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.



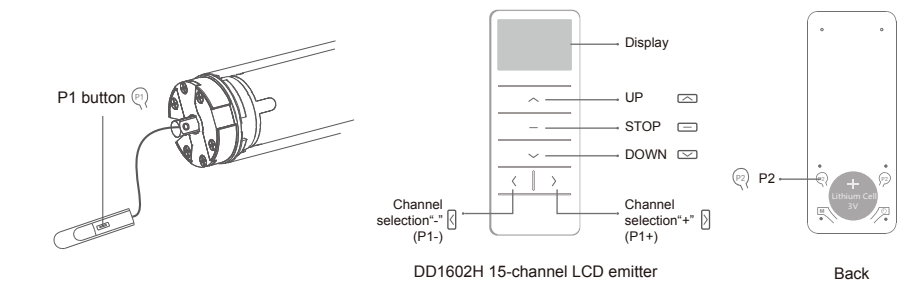
Important Safety Instructions To Be Read Prior To Operation.

### Setting Notice

Please read following points of attention carefully before setting.

1. Pls take the wire connector to protect the extra free wires.
2. Operation:
  - ① The valid interval time of the buttons is within 6S, if there is no operation within 6S, the emitter will exit the present setting.
  - ② The motor will jog and beep as hint, pls operate after the jog and beep.
3. Set limit position:
  - ① After the upper/lower limit setting, and the upper/lower limit position can't at the same position.
  - ② After limit setting, with power off and memory function.
  - ③ Limit delete will clear all limit memory.
  - ④ It will exit limit setting when program there is no operation for 2 minutes.
4. If the emitter lost, please setting up again with new emitter.
5. 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

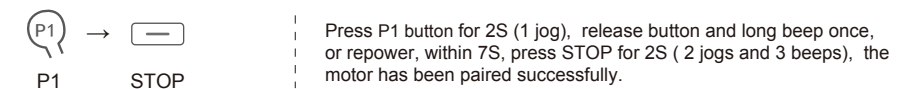
1. Cycle Operation: Press P1 button once and every press the motor will run upward → stop → downward → stop circularly.
2. Pairing or Pair Additional Emitter: Press P1 button for 2S, motor jog once, release button and long beep once, motor is ready for pairing or pair additional emitter.
3. Radio Lock: Press and hold P1 button for 6S, motor jog once, release button and beep twice, the motor enters radio lock status, the motor won't receive any signal; press P1 button once or the motor is powered off to disable Radio Lock.
4. Switch Direction: Press and hold P1 button for 10S, motor jog once, release button and beep 3 times, the running direction of the motor has been changed.
5. Reset to Factory Mode: Press and hold P1 button for 14S, motor jog once, release button and beep 4 times, the motor has been reset to factory mode.



### Essential Settings

Step 1 to 3 must be completed to ensure proper operation.

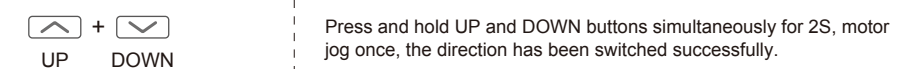
### 1 Pairing



\*If no limits, this operation will be pairing; if with limits, this operation will be pairing additional emitter.

### 2 Switch Rotating Direction (Optional)

Press UP and motor runs downwards, try below to switch direction.



\*The motor needs to be in the reversing operation without limit.

### 3 Setting Upper and Lower Limits

#### 1 Manually set upper limit



UP UP STOP

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

#### 2 Manually set lower limit



DOWN DOWN STOP

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

#### 3 Automatic limits setting



UP

Press UP for 2S, the motor will run upward and stop after detecting obstacle, the stop position is the upper limit; then the motor will run downward automatically and stop after detecting the obstacle, the curtain is pulled in reverse according to the weight of the bottom beam, after the tension is applied, the motor stops here and is the lower limit.

#### 4 Automatically set upper limit, manually set lower limit



UP DOWN STOP

Press UP for 2S, the motor will run upward and stop after detecting the obstacle, the stop position is the upper limit; then the motor will run downward automatically to the desired lower position, press and hold DOWN and STOP buttons simultaneously for 2S (2 jogs and 3 beeps), the lower limits has been set.

\*The automatic setting of the limit function must be performed in mode 1; It's freely to set the upper limit or lower limit firstly; If there is no limits, the motor will be jog running, or press UP or DOWN button 2S, then the motor will be continuous running; After the limits have been set, the motor will be continuously running.

### 4 Add A Preferred Position

#### 1 Set preferred position



P2 STOP STOP

Check both upper and lower limits are set. Operate the product to desired preferred position. Press P2 (1 jog and 1 beep), press STOP (1 jog and 1 beep), STOP again (2 jogs and 3 beeps), the preferred position is set.

#### 2 Remove preferred position



P2 STOP STOP

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

\*Press STOP for 2S, the motor moves to preferred position automatically; In the automatic return function state, at the return limit position of the lower limit position, want to press STOP to run to preferred position, the motor will first run to the lower limit position, this action is to release of the curtain, and then run to preferred position.

### 5 Adjust Limits

#### 1 Adjusting the upper limit position



Press and hold UP and STOP buttons simultaneously for 5S (1 jog and long beep once), operate the product to 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 programmed successfully.

#### 2 Adjusting the lower limit position



Press and hold DOWN and STOP buttons simultaneously for 5S (1 jog and long beep once), operate the product to 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 programmed successfully.

\*This must be done in mode 1; after entering the limit fine adjusting status 2MIN, if no new limits are set, then the motor will exit the limit fine adjusting status and remain the old limits.

### 6 Activate / Deactivate Jog / Tilt Mode



UP DOWN STOP

Press and hold UP and DOWN buttons simultaneously for 5S (1 jog), press STOP (1 jog and long beep once), Jog / tilt mode is activated. If motor jogs twice and beeps 3 times, Jog / tilt mode is deactivate.

\*It must be done after setting the upper limit and the lower limit.

### 7 Pair / Unpair Additional Emitter

#### Method one



P2(a) P2(a) P2(b)

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

• Repeat same procedure will unpair additional emitter.

#### Method two



P2(a) P2(a) STOP(b)

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

#### Method three



P1 STOP(b)

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

\*(a) as existing emitter, (b) as new emitter to pair/unpair.

### 8 Remove All Emitters



P2 STOP P2

Press P2 (1 jog and 1 beep), STOP (1 jog and 1 beep), and P2 (2 jogs and 3 beeps), all emitters are deleted.

\*After deleting all emitters, keep the original limit information.

### 9 Deleting All Limits



P2 DOWN P2

Press P2 (1 jog and 1 beep), DOWN (1 jog and 1 beep), and P2 (2 jogs and 3 beeps), all limits are removed.

\*This operation is deleted along with the preferred position.

### 10 Motor Mode Switching



P2 UP UP

Press P2 (1 jog and 1 beep), UP (1 jog and 1 beep), UP again (1 jog and long beep once), switch to mode 1 motor. If motor jogs twice and beeps 3 times, switch to mode 2 motor.

\*Factory default mode 1 motor; Mode 1 motor is applied to the zib screen motor with no self-locking structure, can automatically set the limit and automatically adjust the limit 50 times, without the automatic return function of the lower limit; Mode 2 motor is equipped with zib screen motor with self-locking structure, and automatic return function for lower limit (automatic locking and unlocking).

### 11 Motor Lower Limit Return Function



P2 STOP DOWN

Press P2 (1 jog and 1 beep), STOP (1 jog and 1 beep), and DOWN (1 jog and long beep once), motor turns on automatic debugging and return function. If motor jogs twice and beeps 3 times, motor turns on manual debugging and return function.

\*It can only be done when the motor is under mode 2; The factory default motor turns on automatic debugging and return function.

### 12 Signal Repeater Function



P2

Press P2 button once (1 jog and 1 beep), press and hold P2 button 5S (2 jogs and 3 beeps), the signal repeater function has been activated. If motor (1 jog and long beep once), the signal repeater function has been deactivated.

\*The factory default mode is OFF. Signal repeater function off is the factory default mode and only the motor has the limits, the signal repeater function can be activated. The motor doesn't repeat the signal from the paired address.

### 13 Enable / Disable Sensitive Stall Detection Function



P2 DOWN DOWN

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

\*The factory default mode is ON.

### 14 Resisting / Sensitive Stall Detection Fallback Function

If there is a limit, the motor is in the upward direction, it will be repelled and protected. After rebounding for a certain distance, it will continue to run upwards. If it encounters resistance at the same position twice, it will stop after the second resistance rebound. If there is no limit, the motor will run upward and stop after detecting obstacle.

If there is a limit, the motor is down, it will be repelled and protected. After rebounding for a certain distance, it will continue to run downward. If it encounters resistance at the same position twice, it will stop after the second encounter with the rebound. Light resistance does not work; the protection function does not work during the rebound.

### 15 50 Times Running Self-calibration Function

It can only be done when the motor is under mode 1; After the upper and lower limit is automatically set, the motor runs to the lower limit and then runs to the upper limit to run once. When it runs to 50 times, it automatically corrects the lower limit (resets the lower limit automatically), and stops if fine adjustment or changes the original limit. Automatically correct the count.

### 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	Manually set upper limit Up (hold down 2s) → Up + Stop (hold down 2s)
		Manually set lower limit Down (hold down 2s) → Down + Stop (hold down 2s)
		Automatic limits setting Up (hold down 2s)
	Automatically set upper limit, manually set lower limit Up (hold down 2s) → Down + Stop (hold down 2s)	
4	Add / Remove Preferred Position	P2 → Stop → Stop
5	Adjust Limits	Adjusting the upper limit Up + Stop (hold down 5s) → Up or Down → Up + Stop (hold down 2s)
		Adjusting the lower limit Down + Stop (hold down 5s) → Up or Down → Down + Stop (hold down 2s)
6	Activate / Deactivate Jog / Tilt Mode	Up + Down (hold down 5s) → Stop
7	Pair / Unpair Additional Emitter	P2(a) → P2 (a) → P2(b)
		P2(a) → P2 (a) → Stop (b) (hold down 2s) P1 (hold down 2s) → Stop (b) (hold down 2s)
8	Remove All Emitters	P2 → Stop → P2
9	Deleting All Limits	P2 → Down → P2
10	Motor Mode Switching	P2 → Up → Up
11	Motor Lower Limit Return Function	P2 → Stop → Down
12	Signal Repeater Function	P2 (hold down 5s)
13	Enable / Disable Sensitive Stall Detection Function	P2 → Down → Down

### Troubleshooting

Issues	Possible causes	Solution
The motor has no response	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.
	Out of radio control range	Try control within closer range
The emitter can't control single motor	Multiple motors are paired to the same channel.	Always reserve an individual correctly (refer to motor functions)
		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
	Incorrect installation or overload	Check installation or overload
The motor stops during the going up or going down.	The motor has reached the lower limit	Adjust the new lower limit
	Running time exceeds 4 min	Consult the sales for more information