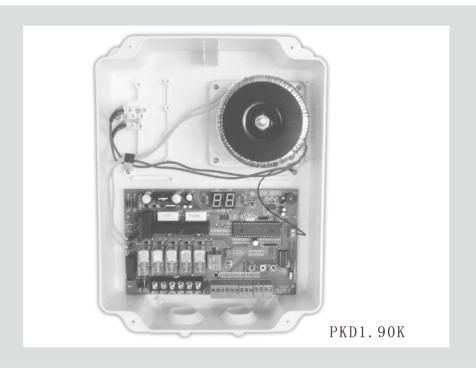
# 24VDC Swing Gate Operator CONTROLLER USER'S GUIDE



PLEASE READ THE MANUAL CAREFULLY BEFORE INSTALL AND USE

#### **WARNINGS:**

- Before starting any work on the controller(connections, maintenance, etc.), always cut off power.
- Before installing, read the instruction carefully. Incorrect installation or misuse of the product may cause serious harm on people.
- This product was designed and manufactured strictly for the use indicated in this instruction.
   Any other not expressly indicated use may damage the product and/or be a source of danger.
   Keep the instruction in a safe place for future reference
- Frequently examine the installation, in particular check cables, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced door may cause injury.
- This appliance is not intended for use by persons cincluding children with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instnution concerning use of the appliance by a person responsible for their safety.
- If the supply cord is damageed, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to owoid a hazard.
- Before installing the drive, check that the door is good mechanical conditioncorrectly balan ced and opens and closes properly.
- The drive cannot be used with a door incorporating a wicket door.
- Ensure that entrapment between the door and the surrounding fixed parts due to the opening movement of the door is avoided.
- Do not allow children to play with fixed controls. Keep remote controls away from children After installation, ensure that the mechanism is properly adjusted and that the protection system and manual release function correctly..
- The electrical cord plug must plug in indoor outlet or waterproof cover outlet

## 1. Technical Specifications:

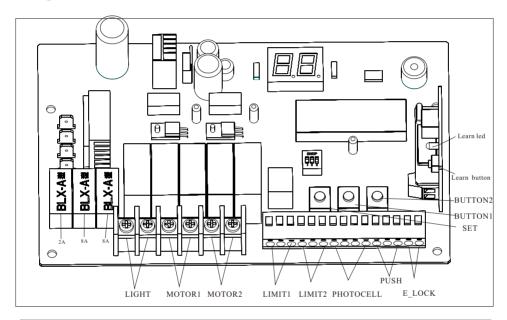
| Power supply            | ~220V(10%)50HZ               |  |
|-------------------------|------------------------------|--|
| Transformer             | ~220V/24V/120W               |  |
| Accessories max loaded  | 500mA                        |  |
| Environment temperature | -20 ℃~50 ℃                   |  |
| Protection fuse         | 8AX2                         |  |
| 24V out protect fuse    | 2A                           |  |
| Open/Close running time | Programmable(0~99)           |  |
| Auto close time delay   | ime delay Programmable(0~99) |  |
| Continual run time      | I run time 5min              |  |

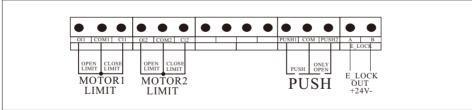
#### 2. Main function:

2.1 Opening/Closing Gate, the running time protection for motor can be programmed from 0 to 99s.

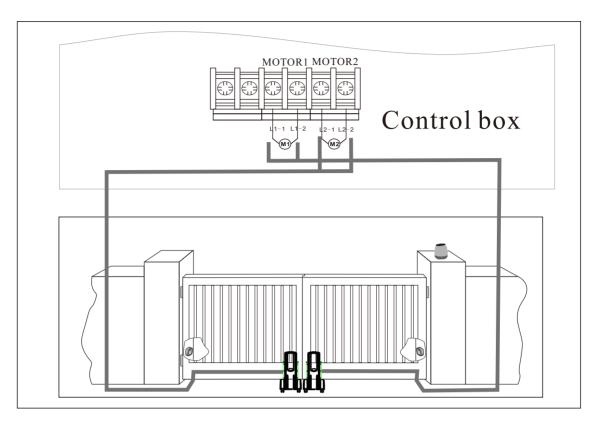
- 2.2 Auto-closing function can be selected. Time delay can be programmed from 0 to 99s. This function is pre-set off.
- 2.3 Auto stop when the running gate meet with resistance.
- 2.4 The force of motor can be programmed.
- 2.5 It is selectable to control single leaf or double-leaf.
- 2.6 It can be connected with 24V Back-up battery, Photocell, Flash Lamp, E-Lock, Push Button.

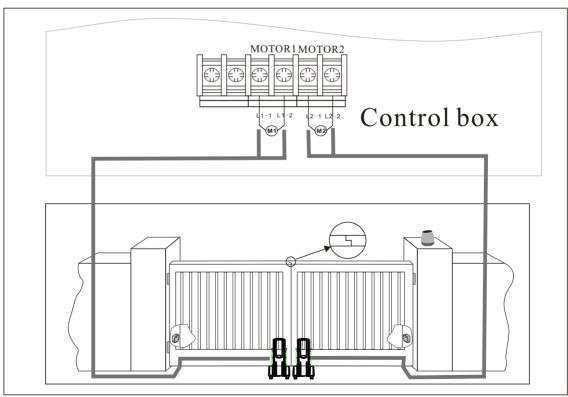
## 3. Diagram:



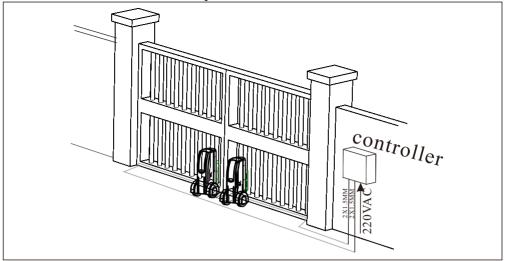


- (1) "LIGHT" for a Flash lamp,24VDC.
- (2) "MOTOR1", "MOTOR2" for 2 motors 24VDC.
- (3) "LIMIT1", "LIMIT2" for the magnetic limit switch on motor1, motor2. (It is useful only for the motors with magnetic limit switch.)
- (4) "PHOTOCELL" for infrared protect device.
- (5) "BUTTON" for wall switch. "PUSH1" control double-leaf gate, step-by-step "PUSH2" control single leaf gate which must be the priority of opening one step-by-step.
- (6) "E\_LOCK" for electronic lock, It can be convected with electronic lock which power is 24VDC.

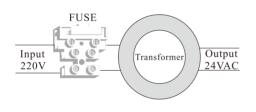




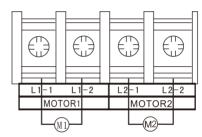
## 4. Standard installation layout



#### 4. 0 Connection of power



#### 4. 1 Connection of motors



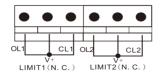
#### 4. 1. 1 Connection of motor for single-leaf:

If the gate is only 1 leaf, the motor must be connected with "Motor1", and the "dip 2" on "S5" must be "OFF".

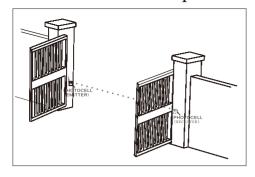
#### 4. 1. 2 Connection of motors for double-leaf:

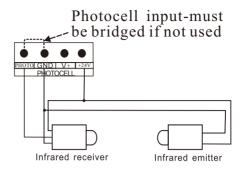
If the gate is 2 leaves, first, it must be confirmed which one leaf is the priority openning one. Then , the priority openning leaf must be connected with "MOTOR1", the other one is connected with "MOTOR2". And the "dip2" on "S5" must be "ON". See "Parameter setting".

#### 4. 2 Connection of Magnetic limit switch



## 4.3 Connection of photocell





## 5. Setting

## 5. 1 Dip-switch (S5) setting:

| ON<br>1 2 3<br>OFF | Single-leaf, No automatic closing function "PUSH1" control single-leaf gate, step-by-step, open-stop-close-stop. "PUSH2" control single-leaf gate "open"    |  |
|--------------------|---|--|
| ON                 | Single-leaf, with automatic closing function "PUSH1" control single-leaf gate, step-by-step, open-stop-close-stop. "PUSH2" control single-leaf gate "open"  |  |
| OFF                | Double-leaf, No automatic closing function "PUSH1" control double-leaf gate, step-by-step, open-stop-close-stop. "PUSH2" control double-leaf gate "open".   |  |
| ON<br>1 2 3<br>OFF | Double-leaf, with automatic closing function "PUSH1" control double-leaf gate, step-by-step, open-stop-close-stop. "PUSH2" control double-leaf gate "open". |  |
| ON<br>1 2 3<br>OFF | ELECTRO-LOCK function is available.   |  |
| ON<br>1 2 3<br>OFF | ELECTRO-LOCK function is canceled.  |  |

#### 5. 2 Parameter setting:

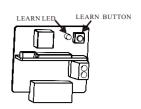
"BUTTON1": The numerical value displayed on LED will increase 1 every once push.
"BUTTON2": The numerical value displayed on LED will decrease 1 every one push.

#### 6.1 Setting transmitter code:

First, press "LEARN BUTTON" once, the "LEARN LED" light, then, press the button you choose on transmitter till the "LEARN LED" flash and go out, This button control double-leaf.

**Second**, press "LEARN BUTTON" twice, the "LEARN LED" light, then, press another button you choose on transmitter till the "LEARN LED" flash and go out, **This button control single-leaf**.

Now, the transmitter is coded, Other transmitters can be coded as this way.



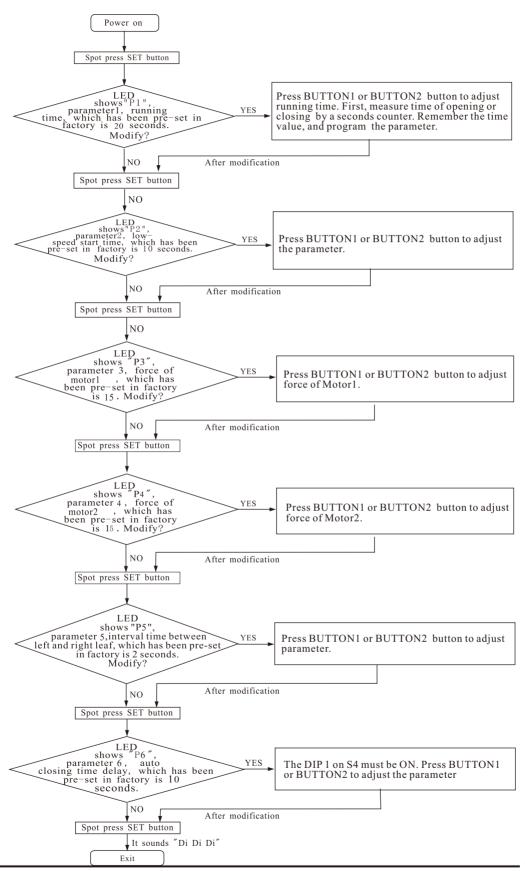
#### 6.2 Earsing transmitter codes:

Press"LEARN BUTTON" and hold on to make the "LEARN LED" light till go out. Now, all codes of transmitters which had been learnt are cleared.

## 7. Meaning of display:

|    | Normal display   |  |
|----|--|--|
|    | ELECTRIC-LOCK working  |  |
|    | Opening  |  |
|    | Closing  |  |
|    | Photocell is not connected properly.     Photocell team is block off.     Photocell is broken. |  |
| 80 | Auto-close timing  |  |

|    | Running time                          |  |
|----|---------------------------------------|--|
| 88 | Slow speed start time of motor        |  |
| 88 | Force of motor 1                      |  |
| 88 | Force of motor 2                      |  |
| 85 | Delay time between 2 motors operating |  |
| 88 | Auto-close time                       |  |



# 8. Trouble Shooting

| Number | Trouble  | Cause  | Shooting   |
|--------|--|--|--|
| 1      | motor can not work   | *No power supply *Break fuse *Motor is damaged   | *Check power supply *Change fuse *Change the motor                                     |
| 2      | Can open<br>but can not close  | *Photocell is not connected<br>properly<br>*Photocell team is block<br>off.<br>*Photocell is broken.           | *Connect the photocell<br>properly<br>*Clear out obstacle<br>*Change a new device      |
| 3      | Can open (close)<br>but can not close (open)                           | *Position of limit switch<br>is not correct<br>*Limit switch is damaged  | *Adjust position *Change limit switch  |
| 4      | can not locate accurately  | *Distance of limit switch<br>is too large<br>*Limit switch is wrong<br>*Magnetic- steel's position<br>is wrong | *Adjust position of limit<br>switch<br>*Change limit switch<br>*Re-adjust the position |
| 5      | Release device   | *Operating handle is<br>broken<br>*Worm gears are jammed   | *Change the handle<br>*Rotate the pinion   |
| 6      | Led view "OP", but the gate close, or Led view "CL", but the gate open | *Whether "+MOTOR-"<br>wires are connected<br>wrong   | *Connect correctly<br>according to wiring<br>diagram                                   |
| 7      | Motor can turn but<br>can not work                                     | *Clutch is released  | * Use the key to couple the clutch   |