

YET845A Motor Controller

---- RF version- V4.0 ----

User Manual

➤ Features:

YET845A-V4.0 is a controller dedicated to electric door control, with functions such as setting stroke, automatic door closing with delay, bounce upon resistance, over-current detection, limit switch and other functions. It is widely used in garage doors, supermarkets and other places.

Supporting various remote control on the market, including fixed code (2262、2260、2264、5326,etc)、learning code (1527、2240、6P20B、6P20D ,etc)、rolling code (HCS301、HCS300、HCS200、HCS201、HCS100、HCS101,etc)

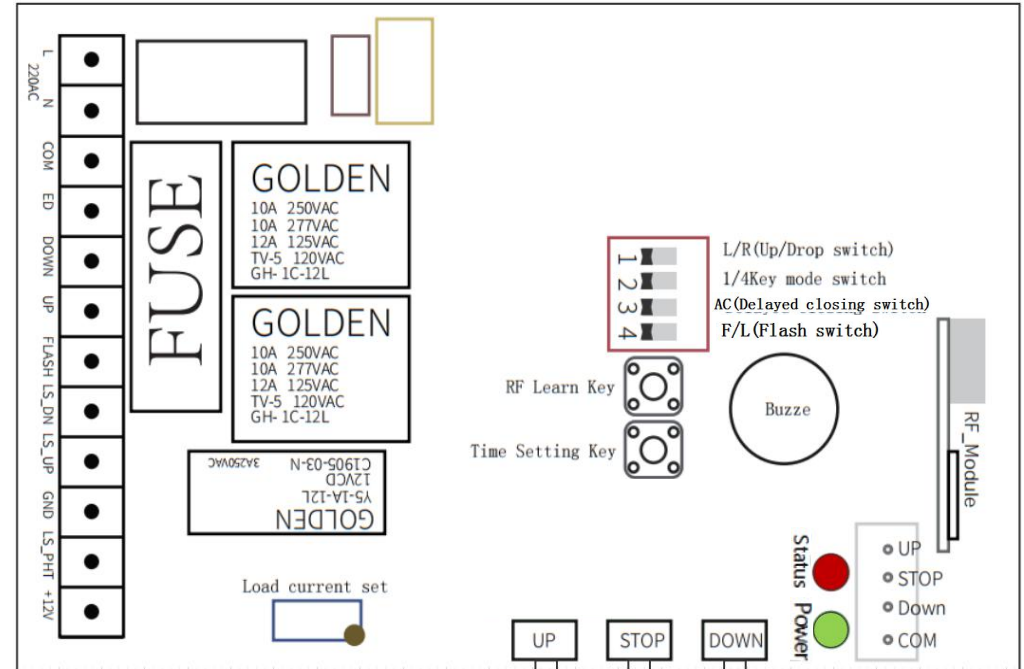
High security, stable performance, low power consumption and easy installation: plug and play, easy to use, safe and reliable;

➤ Product specifications

Input voltage	100VAC~220VAC
Relay contact current	10A@250VAC / 10A@277VAC / 12A@120VAC
Control output	0.5A-5A(Adjust by adjustable resistor)
Standby power consumption	<2.2W (stand-by current: ≤10mA@220VAC)
Maximum runing time	4 minutes
Minimum running time	10 seconds
Working frequency	433.92MHZ (315MHZ for optional)
Receiving sensitivy	-112 dbm (Open space distance≥50m)
RF decoding format	Open code
Remote control capacity	400pcs buttons (equivalent to 100 pcs 4-button remote)
Working environment	Temperature: -20℃~+60℃ Humidity: 20%~93%
Storage environment	Temperature: -30℃~+80℃ Humidity :20%~93%
Size	122*77*40mm

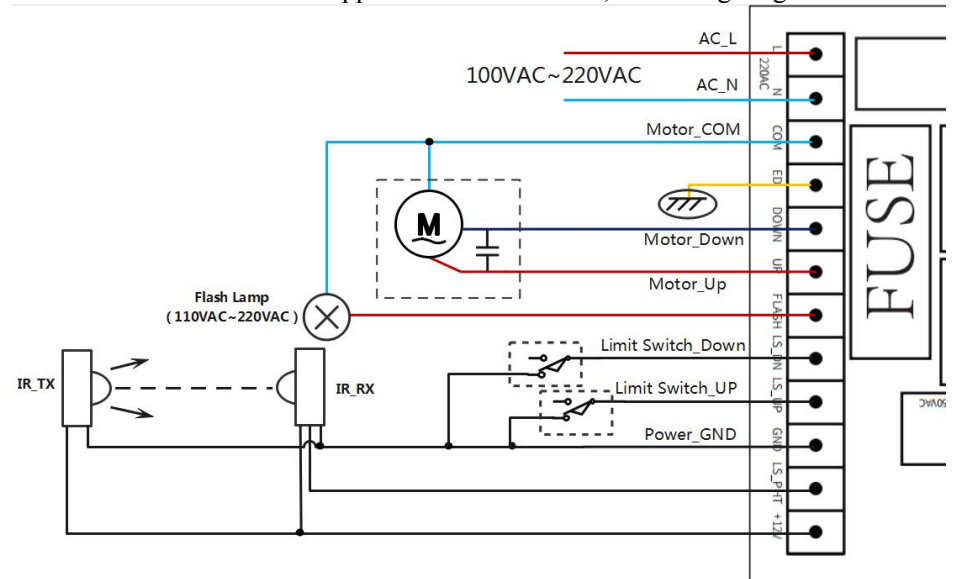
➤ Installation diagram

◆ Simplified diagram of the PCB of controller:



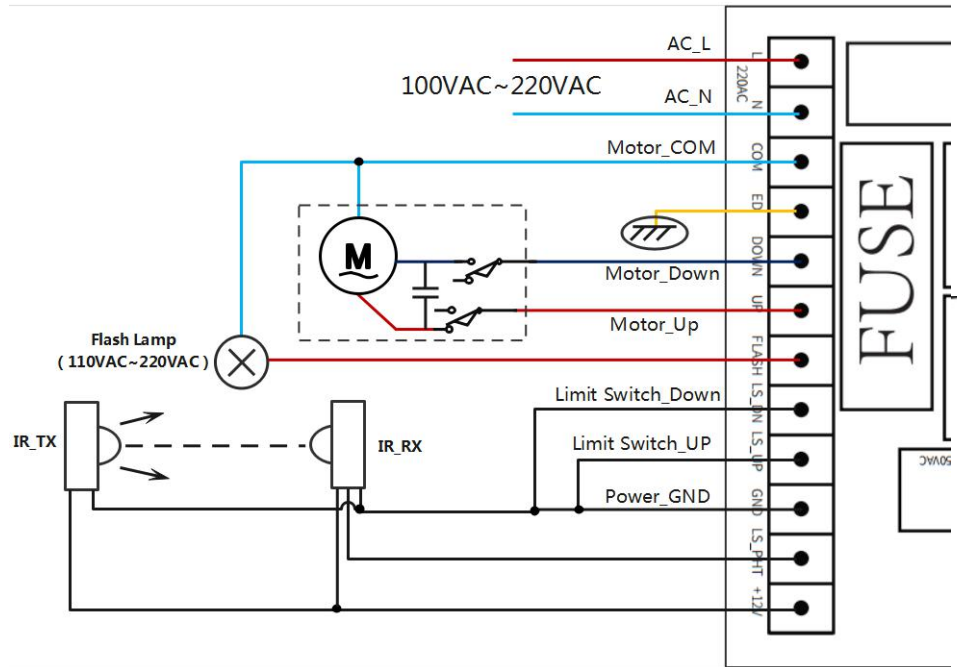
◆ Wiring diagram (一) :

When the user's motor has no upper/lower limit switch, the wiring diagram is as follows:



◆ **Wiring diagram (二) :**

When the user's motor is equipped with upper/lower limit switches, the wiring diagram is as follows:



➤ **Product function description**

◆ **Methods and steps for learning and clearing code**

✓ Learning:

- 1) Press RF Learn button once, LED light turns on. At this time, the key of the learning remote control is defined as the "up" key;
- 2) Press RF Learn button twice, LED light turns on. At this time, the key of the learning remote control is defined as the "down" key;
- 3) Press RF Learn button three times, LED light turns on. At this time, the key of the learning remote control is defined as the "stop/unlock" key;
- 4) Press RF Learn button four times, LED light turns on. At this time, the key of the learning remote control is defined as the "lock" key.

✓ Clearing code (Reset) :

Long press the RF Learn button on the controller (learning button) more than 8S, release the RF Learn button when the red LED light off, The red LED light flashes 5

times, at this time the controller related information is deleted and restored to the factory settings.

◆ **Working time setting:**

Position the engine at the end of travel end.

Press the "TIME" time programming button on the receiver, the red led will light up. Press the A (UP) button on the remote control until the motor reaches the end of the run-up (the led will blink), then press the B (Down) button on the remote control until the motor reaches the end of the run-down (the led will flash) . When the led goes off the working time is programmed. (the minimum time is 10S, the maximum is 4 minutes).

◆ **Automatic close time setting :**

Press the "TIME" time programming button on the receiver, the red led will light up.

Press the 3 key, the led will begin to flash and the automatic closing time will be stored. Press the 3 button on the remote control when you want to end the automatic closing time (the time is valid above 5S).

◆ **Controller system mode setting (dip switch setting):**

Dip switch	position	
	ON	OFF
1	Reverse direction of rotation	direction of rotation
2	Single button operation	4 keys operation.
3	Auto lock function activated	Auto shut-off function disabled
4	Indicator Light	Flash light

The user sets the relevant modes according to the actual application, and their functions are explained as follows:

- ✓ Direction switching: refers to the setting of the motor running direction. When installing and debugging this product, when the control direction is inconsistent with the running direction of the electric door, the direction can be switched by changing the DIP switch;
- ✓ Four-button independent function: the four buttons of remote control on, off, pause and lock indicate the corresponding functions;
- ✓ Single key cycle: every time you press the remote control "door open key (up key)", the

controller state switches back and forth between open, stop, close, stop, and open;

- ✓ Auto delayed door closing: When this function is enabled, when the door is opened, the controller will automatically close the door after the set delayed door closing time;
- ✓ Flashing light on: When the electric door is closed, the flashing light flashes quickly, and the flashing light flashes slowly when the door is opened;
- ✓ Flashing light off: When the electric door is running, the flashing light is always on.

◆ **Load overcurrent detection setting:**

When the user actually installs the controller, must understand the actual power of the motor, and adjust the resistance of the adjustable resistance to adjust the load current of the motor (0.5A-5A adjustable) to suit the user's motor drive [recommended from the maximum load Adjust the current].

◆ **Limit detection function:**

- ✓ Upward limit: The external limit switch must be normally closed (refer to the wiring diagram). When the controller controls the electric door to go up (open the door) and triggers the upward limit switch, the controller stops opening the door. At this time, the electric door moves up (opens the door) to the maximum position.
- ✓ Downward limit: The external limit switch must be normally closed (refer to the wiring diagram). When the controller controls the electric door to go down (close the door) and trigger the downward limit switch, the controller stops closing the door. At this time, the electric door goes down (door closed) to the maximum position.

◆ **Rebound function in case of resistance:**

The input of the resistance switch must be normally closed (that is, the low level is effective).

When the controller controls the electric door to fall, if the resistance switch is triggered, the controller will bounce when it encounters resistance.

◆ **Lighting function of the controller:**

This product can use the FLASH flashing light as the lighting function, which can meet the user's lighting application. The specific setting method is as follows:
Turn DIP switch 4 (F/L) to ON state.

➤ **Operating instructions**

After the system is powered on, it is in the open (uplink) stop state, waiting to receive a valid

remote control signal, and execute the corresponding action after receiving the valid remote control signal, as described in detail below:

◆ **4KEY (four-key independent) mode:**

- ✓ In this mode, press the "A (door open/up), B (close/down), C (stop/unlock)" three buttons on the learned remote control to realize the functions of opening, closing and stopping the electric door .

- ✓ Open door (upward) operation:

When the door is not fully open or not in the process of opening (up), you can press "A (door open/up)" on the remote control to control the system's door opening (up) action to realize the electric door opening (up) functions.;

- ✓ Close door (downward) operation:

When the door is not fully closed or not in down mode, you can press "B (close door/down)" on the remote control to control the system's door closing (down) action, and realize the function of electric door closing (down);

- ✓ Pause operation:

When opening the door (upward) or closing the door (downward), you can press the "stop button" on the remote control to control the system to pause and realize the function of stopping the electric door;

◆ **1KEY (one key) mode:**

In this mode, press the "A (door open/up)" control system on the learned remote control and realize the functions of opening (up), stop, closing (down), stop, and opening (up) of the electric door.

◆ **Lock/unlock mode:**

The lock function can effectively prevent misoperation of the remote control. When the lock function is executed, short pressing any button on the remote control is invalid and the controller is locked.

- ✓ Lock the controller:

Long press the "C (stop/unlock)" button for 3S, the controller status red LED and FLASH flashing light will act once (the flashing light needs to be turned on), the controller is

locked, short pressing any button on the remote control is invalid;

✓ Unlock the controller:

Long press the "D (lock)" button of the learned remote control for more than 3S, the red LED and FLASH of the controller will flash twice (the flash must be turned on), the controller will be unlocked, press the button on the remote control to operate the door opening (upward) and closing (downward) of the electric door normally.

◆ **FLASH lighting operation**

Short press the "D (lock)" button of the learned remote control to switch the flash on/off state (when the flash function is off, that is, the dial 4 is valid in the ON state); after 5 minutes, if it is not closed, it will be closed automatically.

(During the lighting FLASH is on, if you press the off and stop actions, the delay time will be cleared and the delay time will be 5 minutes again).

➤ **Note:**

- 1) When the electric door is closing (down), if the user switches to open (up) or stop, the maximum running time will be reset; if the electric door encounters an obstacle, the system will delay 0.5S before starting control The electric door opens (upward) action.
- 2) During the door opening (upward) process of the electric door, if the user switches to closing the door (downward) or stops, the maximum running time will be reset.
- 3) When using the AC auto-delayed door closing function, the system starts timing and automatically closes the door; if the user presses the "C (stop/unlock)" button on the remote control during timing, the system timer will be cleared and restarted.
- 4) Status indicator description:
The controller power-on default status indicator flashes at a frequency of 1S, and flashes quickly at a frequency of 250MS during the shutdown process, and restores to the default state after the shutdown is completed; flashes at a frequency of 600MS during the startup process, and restores the default state after the shutdown is completed (When the FLASH flashing light is turned on, it is synchronized with the status indication).
- 5) When learning the remote control, the motor must be stopped; the effective time interval of continuously pressing the learning button is 1 second, and the controller will execute the corresponding function if the time interval is exceeded.