

## HX-SZ100-WP86-DIM

### LED Sync Dimmer with RF button remote

HX-SZ100-WP86-DIM adopts the most advanced PWM (Pulse Width Modulation) digital dimming technology, especially design for single color led strip. For instance, point source of light, flexible light strip, led modules, led strings and so on. Belong to low-voltage DC power input and output with two interfaces, including V+ is the positive interfaces, the other three for the negative interface. Meanwhile, you can turn on/off, adjust brightness for different lighting effects through full-touch wall panel remote control. In addition, It is convenient to use RJ45 connector to connect the multiple controllers together, and achieve the synchronization function of thousands meters led strips. In theory, they can be connected numerous.



### Product Feature

- Designed for single color constant voltage LED lights, Working voltage DC12-24V.
- Three channels output, Max. load current: 3CH\*8A; Max. load power: 300W/12V.
- Adopts full-touch wall panel remote control with fashion appearance, no need line-of-sight. Control range up to 20 meters. The working voltage of wall-panel is AC90-265V.
- Structure/dimension/installation of the wall panel according to the 86-type European standards.
- Memory function, each time power-on reserve the mode which stop in the last power-down.
- Long-press the brightness and speed key can get the fast adjustment, convenient for operation.
- Multiple controllers can work synchronically when connected by network cable through the RJ45 connector, the network cable between 2 ports up to 80 meters.
- Warranty of this product is three years, exclude the artificial situation of damaged or overload working.

## Technical Parameters

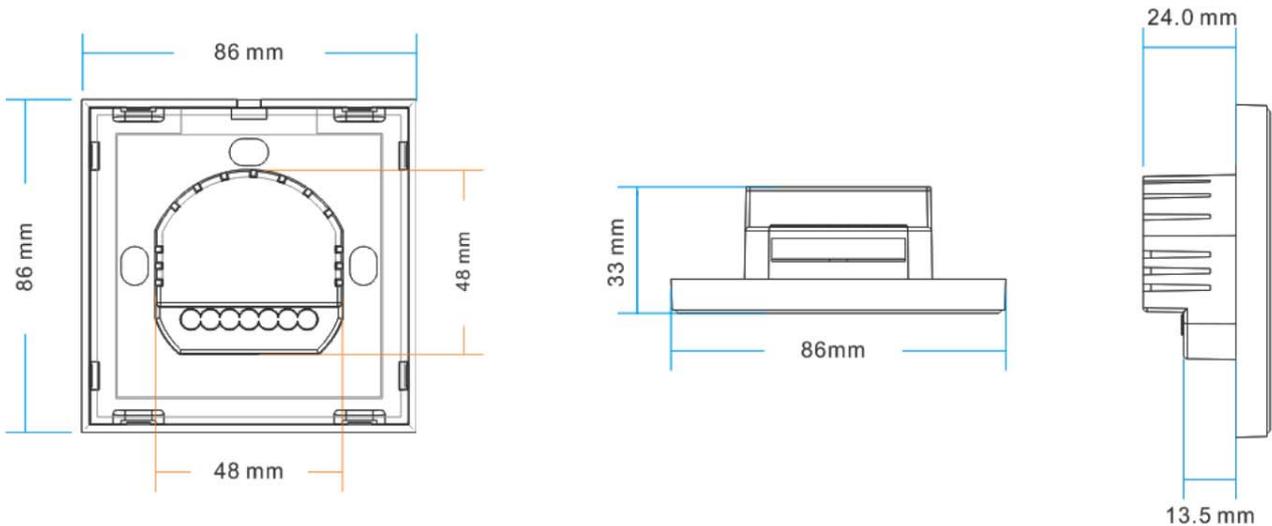
### Controller

Working temperature	-20-60℃	Supply voltage	DC12V-24V
Static power consumption	<1W	PWM frequency	1.95KHz
Grayscale	256 levels	Speed stage	100 grade
External dimension	L127*W41*H32 (mm)	Packing size	L138*W131*H35 (mm)
Net weight	160g	Gross weight	185g
Output	1 channel	Max. Output current	25A
Mode	3	RF distance	≤20m
RF frequency	433.92Mhz	Memory function	support
		Output power	12V/300W 24V/300W

### Remote control

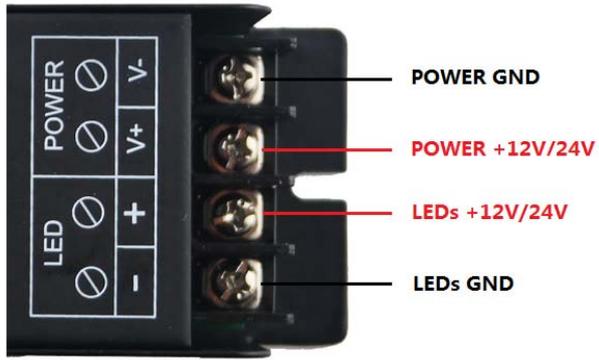
Ambient temperature	0-45℃	Working voltage	AC90-265V(50/60Hz)
Standby power	0.2W	Working power	2W
Net weight	130g	RF frequency	433.92MHz
Dimension	86*86*34mm	RF distance	≤20m
Structure	86-type European standard		

### External Dimension

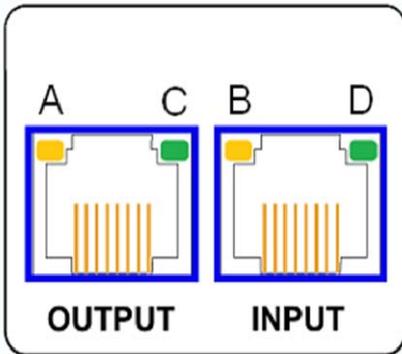


### Interface Specifications

#### 1.Power and load interface

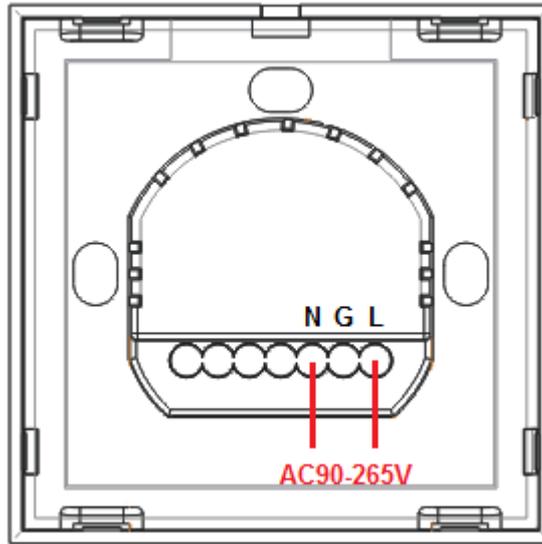


## 2.RJ45 synchronization interface

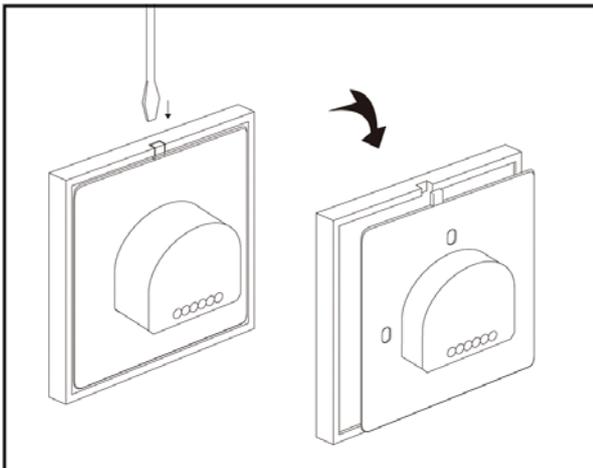


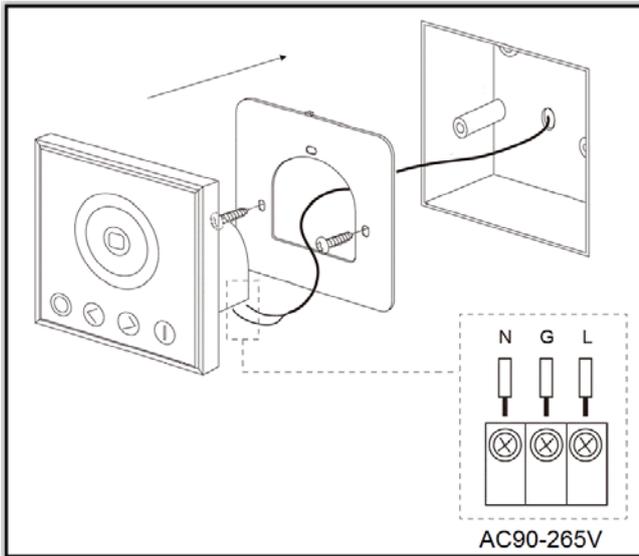
Indicator	Mark	Light on	Light flash	Light off
Yellow (A)	MCU/RF	MCU/software is clear	Receive the RF signal from remote	MCU/software error
Yellow (B)	Power	Clear	\	Power input error
Green (C)	SYNC-signal out	Clear	Signal error: 1)Insert he crystal tightly; or 2) the cable with problem need to replace.	
Green (D)	SYNC-signal in	Clear	Signal error: 1)Insert he crystal tightly; or 2) the cable with problem need to replace.	

## 3.full-touch wall panel remote interface



### Wall-panel Installation instruction





### Direction for use

- Connect the load wire at first, followed by the power wire; Please ensure short circuit can not occur between wires before turning on the power;
- Adopts RF full touch wall-panel remote control, with one dimming ring and 5 function buttons.
- The signal light flash-- represents the signal has been sent well;

The function of buttons are shown as below:



### The function of each button as below:

Name of key	Instruction	Remarks
ON	ON in any time	
OFF	OFF in any time	
Mode	The mode will move to next, when touch the key each time	3 modes in total.
Speed/Brightness +	The Speed/Brightness will +1, when touch the key each time	Speed for dynamic modes, Brightness for static modes. Long-press can get fast adjusting.
Speed/Brightness -	The Speed/Brightness will -1, when touch the key each time	Speed for dynamic modes, Brightness for static modes. Long-press can get fast adjusting.
Dimming Ring	Touch any brightness value which you want	

3 modes in total as below:

NO	Patterns	Remarks
1	Static 100% light	Brightness is adjustable
2	flash	Speed is adjustable
3	fade	

**Tips:** Receiver can be controlled by any one the same remote as factory default; the wall-panel remote control delivered with unique RF code as factory default; if unique-control is needed, please matching the code before installation and using.

### Matching code operation

If unique-control or new-coded-remote is needed, pairing the remote and the receiver as below operation instruction before using:

- Step 1:** Pressing key “**mode**” and hold on, power on the controller, the load LEDs will be 50% brightness white as responding.
- Step 2:** Continuously to press the key “**ON**” for 3 times within 5 seconds after step 1 ,the brightness of LEDs will change from 25% -10% as responding.
- Code learning successfully, the LEDs will be back to the status before the power off, and the receiver only can be control by the remote.
- If not, please re-operate from step 1 to 2.

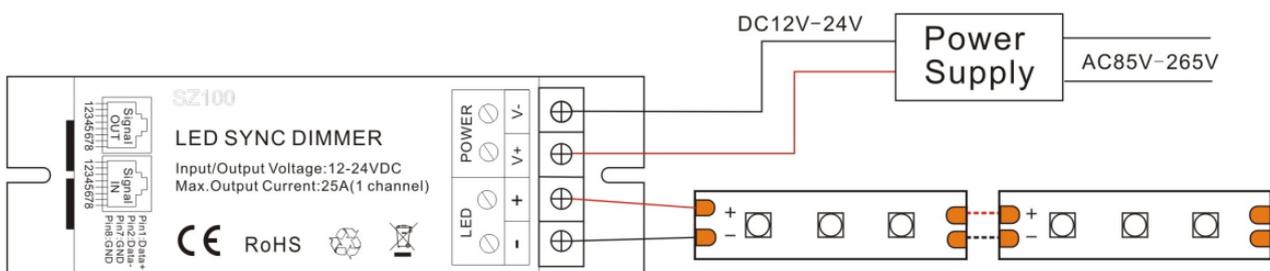
### Clear code operation

Back to factory default, wall-panel can be controlled by any one the same remote control.

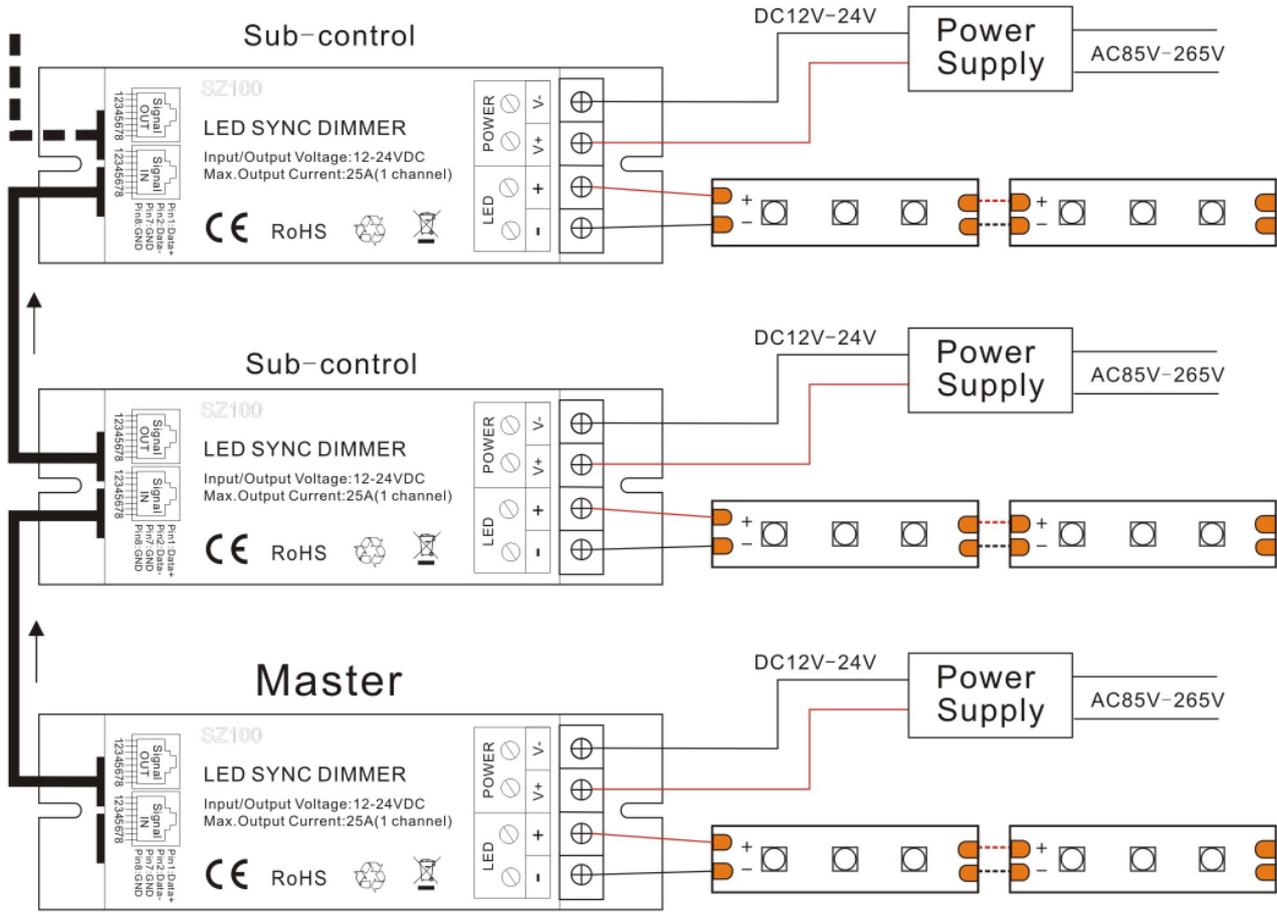
- Step 1:** Pressing key “**Mode**” and hold on, power on the controller, the load LEDs will be 50% brightness white as responding.
- Step 2:** Continuously to press “**Speed/Brightness** -“ 3 times within 5 seconds after step 1 ,the brightness of LEDs will change from 25% -10% as responding.
- Code clearing successfully, the LEDs will be back to the status before the power off, and the receiver can be controlled by any remote control(any one the same remote control can be used to clear the code).
- If not, please re-operate from step 1 to 2.

## Typical Applications

### Application Circuit1:



**Application Circuit2: ( Synchronization function with network Line )**



**Warning**

1. Supply voltage of this product is DC12-24V, never connect to other voltage.
2. Before power on, please make sure the wires are connected correctly according to connecting diagram.  
Or (like: short-circuit connection, positive-negative reverse) will damage the device.
3. Warranty of this product is three years, but exclude the artificial situation of damaged or overload working.