HX-RFBT001-DIM

LED Sync Dimmer with RF button remote

HX-RFBT001-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 one for the negative interface. Meanwhile, you can turn on/off, adjust brightness for different lighting effects through RF 14keys 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.
- High watt output design, up to 1*25A/ 600W.
- Memory function, each time power-on reserve the mode which stop in the last power-down.
- Easy connection to achieve multiple dimmers sync-work by RJ45 terminal.
- Adopts RF 14keys remote control with fashion appearance, no need line-of-sight. Control range up to 20 meters.
- Long-press the brightness and speed key can get the fast adjustment, convenient for operation.
- 3-year warranty.

Technical Parameters

Controller

Working temperature	-20-60℃	Supply voltage	DC12V-24V
Static power consumption	<1W	Mode	3
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
Output power	300W/12V,600W/24V	RF distance	≤20m
RF frequency	433.92Mhz	Memory function	support

Remote control

Working temperature	-20℃~60℃	Supply voltage	DC3V（AAA*2）
Standby current	<18uA	Working current	<25mA
Standby power	54uW	Working power	75mW
Net weight	65g	RF frequency	433.92Mhz
External dimension	L150*W40*H20 mm	RF distance	≤20m

Interface Specifications


Port for sync-work signal
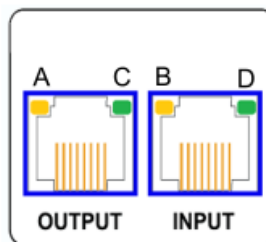
• Diagnostic indicator, convenient for installation/maintenance.

Indicator	Mark	Light on	Light flash	Light off
Yellow (A)	MCU/RF	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.	

POWER GND

POWER +12V/24V

LEDs +12V/24V

LEDs GND
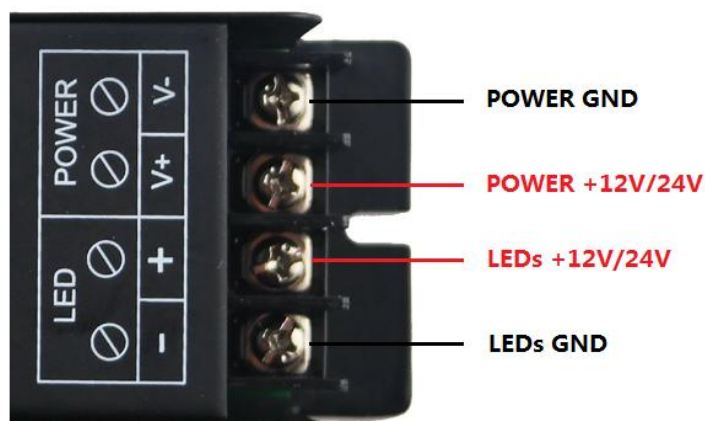
Direction for use

- 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 remote technology, 14 buttons in total.

The function of buttons are shown as below:

Name	Description
Set button	For setting the night light and matching code with receiver. Under night light mode, press "Set button" and hold on for 10 seconds will go into the night light setting. Press the set button again to save the setting and quit out.
ON	Turn on
OFF	Turn off
Brightness +	The brightness will add 1 level after each time press. Long-press can get fast adjusting.
Brightness -	The brightness will reduce 1 level after each time press. Long-press can get fast adjusting.
Hot brightness key +	4 levels brightness (10%、30%、70%、100%) hot selection key, lights will go to next one after each pressing.
Hot brightness key -	4 levels brightness (10%、30%、70%、100%) hot selection key, lights will go to last one after each pressing.
Mode key	3 modes in total: 100% static, flash, breathe
Night light	Press the button go to night light mode（night light **Setting**：Under night light mode, press "Set button" and hold on for 10 seconds will go into the night light setting, press the left button to down the brightness, press the right button to up the brightness. Adjustable range: 1%-10%.）
Speed +	Add the speed of dynamic mode. Long-press can get fast adjusting.
Speed -	Reduce the speed of dynamic mode. Long-press can get fast adjusting.
Delay button	The light will be delay off in 30 seconds.

Tips: Receiver can be controlled by any one the same remote as factory default; RF BT 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:

1. **Step 1**: Pressing key "set" and hold on, power on the controller, the load LEDs will be 50% brightness white as responding.
2. **Step 2**: Continuously to press the key **"Mode key"** for 3 times within 5 seconds after step 1 ,the brightness of LEDs will change from 25% -10% as responding.
3. 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.
4. If not, please re-operate from step 1 to 2.

Clear code operation

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

1. **Step 1**: Pressing key "set" and hold on, power on the controller, the load LEDs will be 50% brightness white as responding.
2. **Step 2**: Continuously to press **"Delay button"** 3 times within 5 seconds after step 1 ,the brightness of LEDs will change from 25% -10% as responding.
3. 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).
4. If not, please re-operate from step 1 to 2.

Typical Applications

Conjunction Diagram:
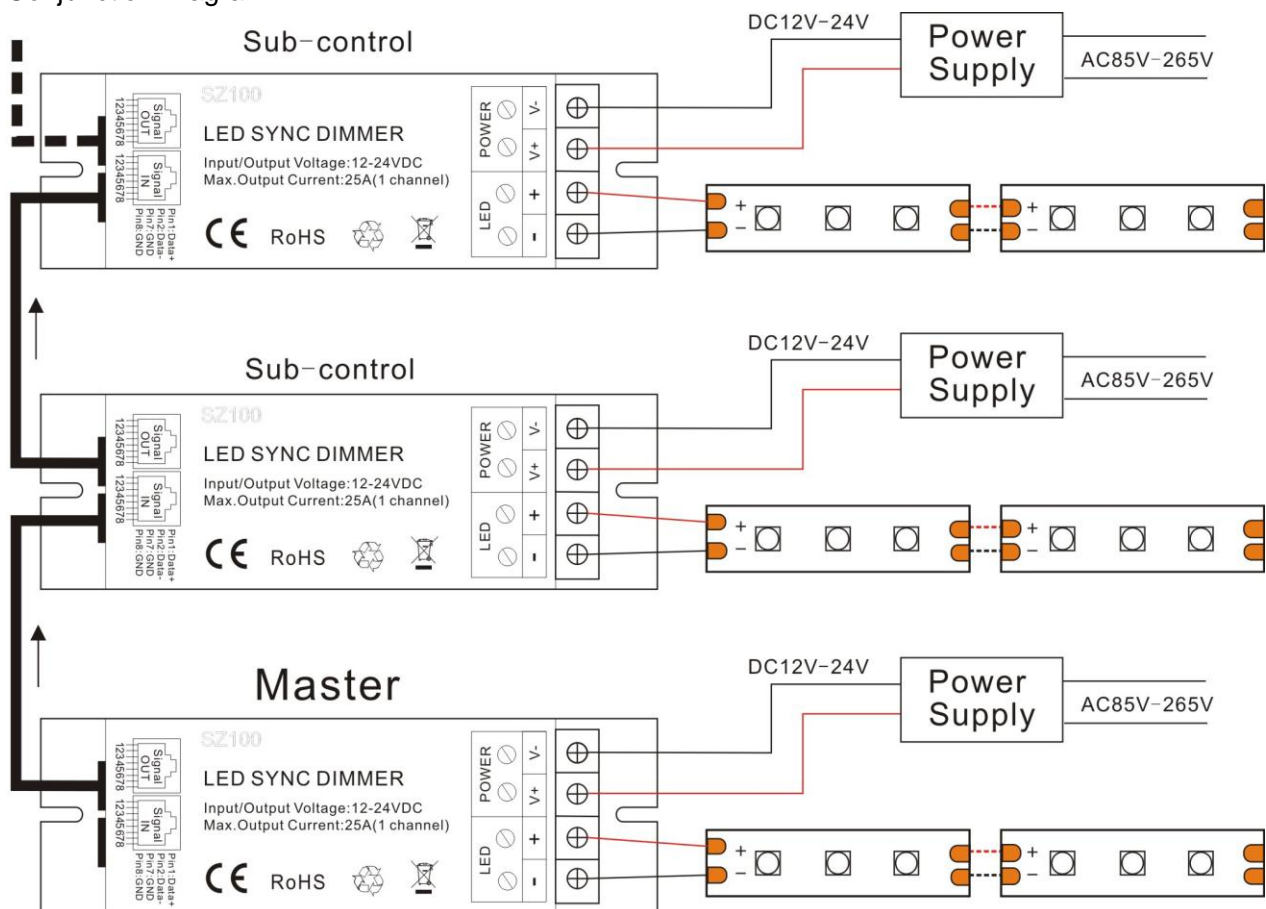
Application Diagram:
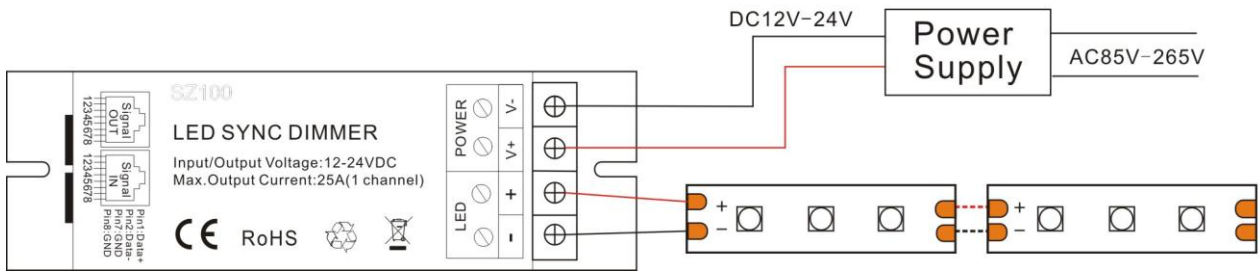
Product information for placing order

Product name	Item number
RF BT remote controller-DIM	HX-RFBT001-DIM