

SKYDANCE V1-T Single Color LED Controller Instruction Manual

Home » SKYDANCE » SKYDANCE V1-T Single Color LED Controller Instruction Manual



Contents

- 1 SKYDANCE V1-T Single Color LED
- Controller
- 2 Features
- **3 Technical Parameters**
- 4 Mechanical Structures and Installations
- 5 Light on/off fade time
- **6 Wiring Diagram**
- 7 0/1-10V Dimming
- **8 Push Dim Function**
- 9 Dimming Curve
- **10 Installation Precautions**
- 11 Malfunctions Analysis & Troubleshooting
- 12 Documents / Resources
- 13 Related Posts



SKYDANCE V1-T Single Color LED Controller



Features

- RF remote, 0/1-10V, Push Dim (3-in-1) dimming.
- 4096 levels 0-100% dimming smoothly without any flash.
- Match with RF 2.4G single zone or multiple zone dimming remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 15m control
 distance.
- Synchronize on multiple number of controllers.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Light on/off fade time 3s selectable.
- Over-heat / Over-load / Short circuit protection, recover automatically.

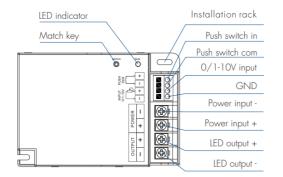
Technical Parameters

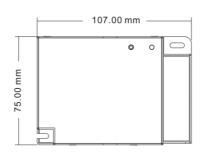
Input and Output		
Input voltage	12-24VDC	
Input current	20.5A	
Output voltage	12-24VDC	
Output current	1CH,20A	
Output power	240W/480W(12V/24V)	
Output type	Constant voltage	
Environment		
Operation temperature	Ta: -30 OC ~ +55 OC	
Case temperature (Max.)	T c: +85OC	

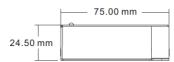
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4	
Safety standard(LVD)	EN 62368-1:2020+A11:2020	
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2	
Certifcation	CE,EMC,LVD,RED	
Package		
Size	L120 x W80 x H34mm	
Gross weight	0.254kg	

Dimming data		
Input signal	RF 2.4GHz 0/1-10V Push Dim	
Control distance	15m(Barrier-free space)	
Dimming gray scale	4096 (2^12) levels	
Dimming range	0 -100%	
Dimming curve	Logarithmic	
PWM Frequency	2000Hz (default)	
Warranty		
Warranty	5 years	

Mechanical Structures and Installations







Use the controller's Match key

· Match:

- Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.
- The LED indicator fast flash a few times means match is successful.

· Delete:

- Press and hold match key for 5s to delete all match,
- The LED indicator fast flash a few times means all matched remotes were deleted.

Use Power Restart

· Match:

- Switch off the power, then switch on power, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times quickly.
- The light blinks 3 times means match is successful.

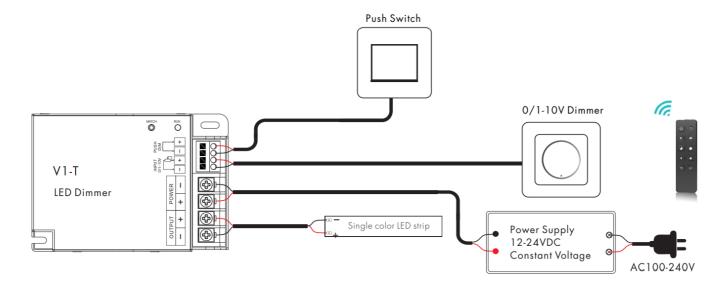
Delete:

- Switch off the power, then switch on power, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times quickly.
- The light blinks 5 times means all matched remotes were deleted.

Light on/off fade time

- Long press match key 5s, then short press match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.
- Long press match key 10s, restore factory default parameter, the light on/off time also restore to 0.5s.

Wiring Diagram



Note: The RF remote, 0/1-10V dimmer or Push switch can be connected at the same time, which makes the product more user-friendly and more options to fit for some extra-ordinary demands.

0/1-10V Dimming

- The 0/1-10V input is operable via commercially available simple rotary wall switchs designed for 0/1-10V dimming equipment or from decicated system central dimming controllers.
- Compliant with 0-10V, 1-10V, 10V PWM, RX(4 in 1).
- We recommend the number of LED drivers connected to 0/1-10V dimmer does not exceed 50 pieces,
 The maximum length of the wires from dimmer to LED driver should be no more than 50 meters.
- If the controller be used with the RF remote or Push-Dim interface prior to using the 0/1-10V interface, the 0/1-10 V signal should change over 10% to return 0/1-10 V control.

Push Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching(momentary) wall switchs.

· Short press:

Turn on or off light.

• Long press (1-6s):

Press and hold to step-less dimming, With every other long press, the light level goes to the opposite direction.

• Dimming memory:

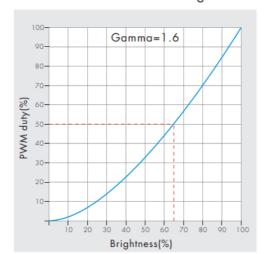
Light returns to the previous dimming level when switched off and on again, even at power failure.

· Synchronization:

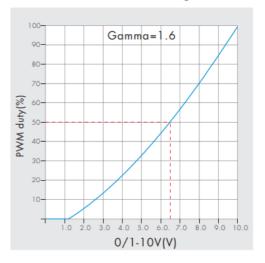
- If more than one controller are connected to the same push switch, do a long press for more than 10s,
 then the system is synchronized and all lights in the group dim up to 100%.
- This means there is no need for any additional synchrony wire in larger installations.
- We recommend the number of controllers connected to a push switch does not exceed 25 pieces, The maximum length of the wires from push to controller should be no more than 20 meters.

Dimming Curve

RF and Push dimming



0/1-10V dimming



Installation Precautions

- 1. The products shall not be stacked, the distance should be ≥ 20cm, so as not to affect lifespan of the products due to poor heat dissipation.
- 2. The product shall not be installed close to the switching power supply with an interval of ≥ 20cm to avoid the radiation interference of the switching power supply.
- 3. The installation height shall be ≥ 1m from the floor to avoid shortening the remote control distance due to too weak reception signal.
- 4. The products are not allowed to be close to or covered by metal objects, with an interval of ≥ 20cm to avoid signal attenuation and shorten the remote control distance.
- 5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.

Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	 No power. Wrong connection or insecure. 	 Check the power. Check the connection.
Uneven intensity between f ront and rear, with voltage d rop	 Output cable is too long. Wire diameter is too small. Overload beyond power supply capability. Overload beyond controller capability. 	 Reduce cable or loop supply. Change wider wire. Replace higher power supply. Add power repeater.
No response from the remo te	 The battery has no power. Beyond controllable distance. The controller did not match the remote. 	 Replace battery. Reduce remote distance. Re-match the remote.

Documents / Resources



<u>SKYDANCE V1-T Single Color LED Controller</u> [pdf] Instruction Manual

V1-T Single Color LED Controller, V1-T, Single Color LED Controller, Color LED Controller, LED Controller, Controller

Manuals+,