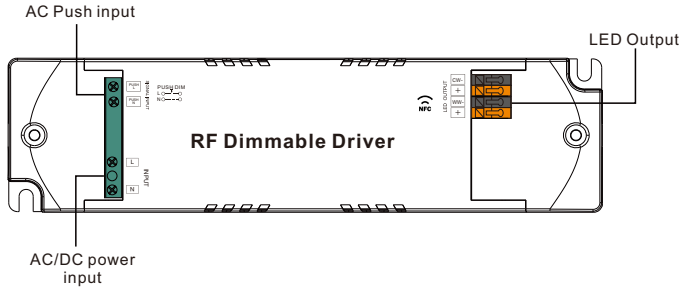
12W RF NFC Enabled LED Driver(Constant Current)

Important: *Read All Instructions Prior to Installation*

Function introduction



Product Data

Output	LED Channel	2
	DC Voltage	6-42V, Max. 50V
	Current	100-700mA via NFC tool; Min.current gear lower to 0.1mA, default 300mA
	Current Accuracy	±3%(±1%@Certain full load) @ full load
	Rated Power	Max. 12W
Input	Voltage Range	220-240VAC/220-240VDC
	Absolute Voltage Range	196-264VAC/196-264VDC
	Frequency Range	0/50/60Hz
	Power Factor (Typ.)	> 0.95 @ 230VAC Full load
	Total Harmonic Distortion	THD ≤ 15% (@ full load / 230VAC)
	Efficiency (Typ.)	> 75% @ 230VAC full load
	AC Current (Typ.)	0.1A Max.
	Inrush Current (Typ.)	Max. 3.96A at 230VAC; 80μs duration
	Leakage Current	< 5mA /230VAC
	Anti Surge	L-N:2KV
Control	Dimming Interface	RF (Sub-G)
	Dimming Range	0.01%-100%@ Max current
	Dimming Method	Amplitude/CCR dimming
	Dimming Curve	Linear/ Logarithmic optional
Protection	Short Circuit	Yes, remove the fault conditions and re-power the device.
	Over Current	Yes, remove the fault conditions and re-power the device.
	Over Temperature	Yes, remove the fault conditions and re-power the device.
Environment	Working Temp.	-25℃ ~ +45℃
	Max. Case Temp.	Tc=85℃
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40℃ ~ +80℃, 10% ~ 95% RH
Safety & EMC	Safety Standards	EN61347-1, EN61347-2-13, GB/T 19510.1-2023, GB/T 19510.213-2023
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3, GB 17625.1-2022, GB/T 17743-2021
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11
Others	MTBF	191350H, MIL-HDBK-217F @ 230VAC full load and 25°C ambient temperature
	Dimension	135x35x20mm (L*W*H)
	Warranty	5 Years

- Dimmable LED driver. Max. output power 15W
- 100-700mA current selectable via NFC program tool. Min.current gear lower to 0.1mA
- Dimming curves/Target current/Power-on behavior settings via NFC program tool
- Class Ⅱ power supply, full isolated plastic case
- High power factor and efficiency
- Radio Frequency : **Default 869.5/916.5(1009 Version)** ,Available 868/434mhz(2504 Version)
- To switch and dim Tunable White LED lighting fixtures
- Amplitude/CCR dimming, smooth and deep dimming
- Compatible with a variety of RF remotes
- IP20 rating, suitable for indoor LED lighting applications
- 5 years warranty

Safety & Warnings

- DO NOT install with power applied to the device.
- DO NOT expose the device to moisture.

Pairing devices with RF remote

1.Do wiring according to connection diagram.

2.Pair RF Driver with RF remote: please refer to the instruction of the remote that you would like to pair with.

With NFC Programming devices

Note

1) Do wiring according to the wiring diagram.

2) Recommend setting parameters without power-on the RF devices .

2) Please make sure your mobile phone has NFC function and enable it .

Working with “SR NFC Tool” APP

Step 1: Download the APP (searching “SR NFC Tool” from App Store and Google Play) . Then open the APP .

Note: 1. Please Make sure that you have enabled NFC function with your mobile phone/ tablet .

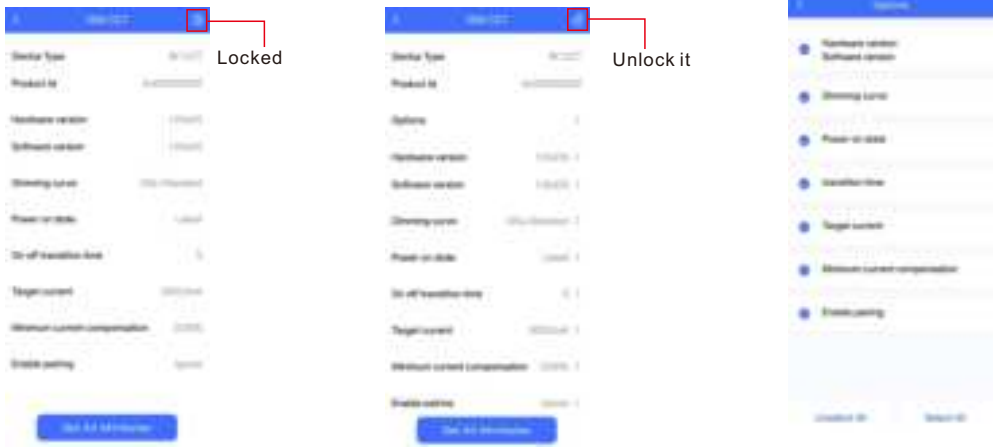
2. Please Make sure that the “NFC position” is matched.

3. Please do not power on the device before setting.

4. If you can’t download “SR NFC Tool”. Please contact with us.

Step 2: Add device, and name it as you wish.

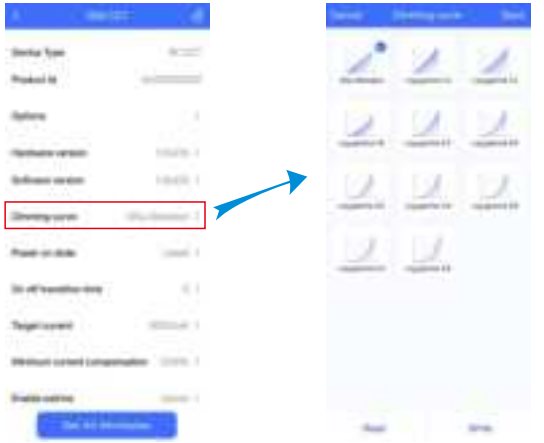
Step 3: Unlock device, enter parameters configuring page.



Note: 1. You have to unlock the device then do some settings

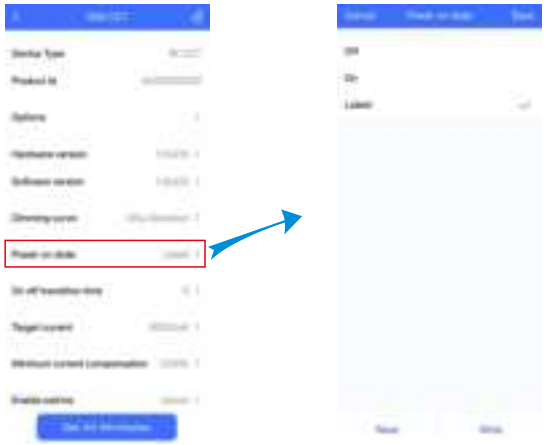
2. Only when the corresponding function is selected, the function interface will be displayed.

Step 4: Few parameter interface, you can choose the setting based on your requirements.



1) We bring well-praised “DALI” dimming curve to this product, to ensure you have the smooth dimming performance in RF NFC drivers.

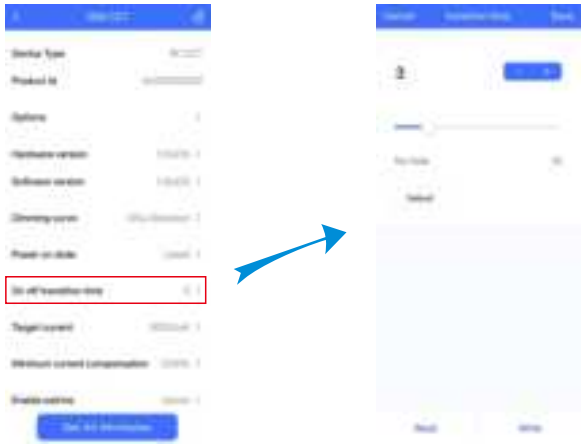
2) Besides that, we have the other dimming curves available with intutive graphs, enables you shall find your ideal one.



1) Off: Always Off after power on.

2) On: Always On after power on

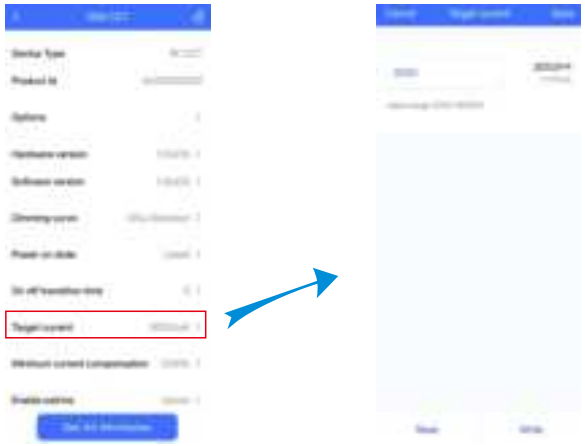
3) **Latest: Restore to last light level after power on**



1) 0(No fade): Fatest transition

2) 15: Longest transition

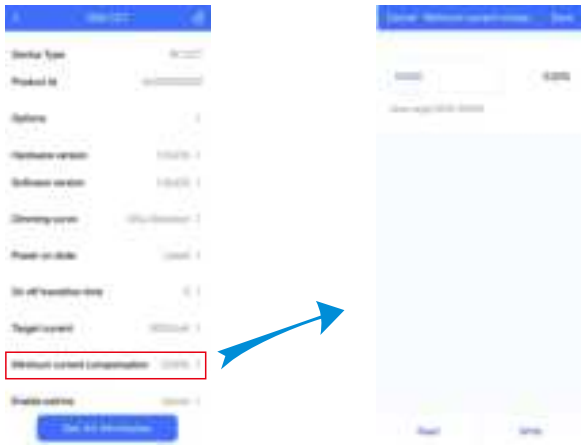
3) **3(Default): Soft transition**



Input the working current of the LED.

Min.0.1mA per gear as a option.

Which massively free the options among different luminaries specification



Current compensation setting:

Enables you achieve the best dimming performance per different current gear.

But still we gave the options to customers which enable customized setting.

1) Enable Pairing: The driver will enter the pairing mode and work with RF remote

2) Clear all paired devices: Cleaning paired devices (Seldom use)

3) Ignore: When you about to set other parameter please select this, otherwise the devices statues shall be re-write which is not your willing.

Tips

1. NFC function doesn't require any power driver.

2. Many functions can be configured by NFC. Kindly check your desired functions.

3. All of our RF NFC drivers are in the best performance within OUR Remotes.

4.This is a 2-channel output product, so we recommend ensuring that both loads are connected and have the same loads for each channel at the same time during testing.

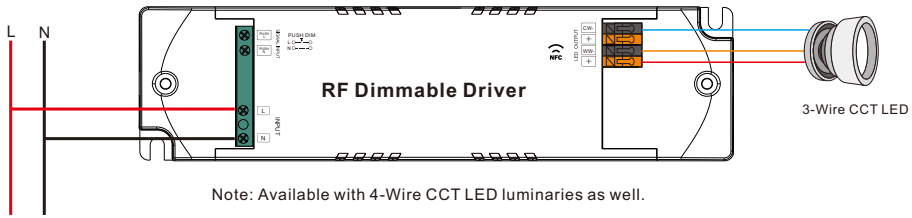
5. For 1 channel fixtures, please make sure you have our 1 channel drivers connected.

6: Read before you Move.

Wiring Diagram

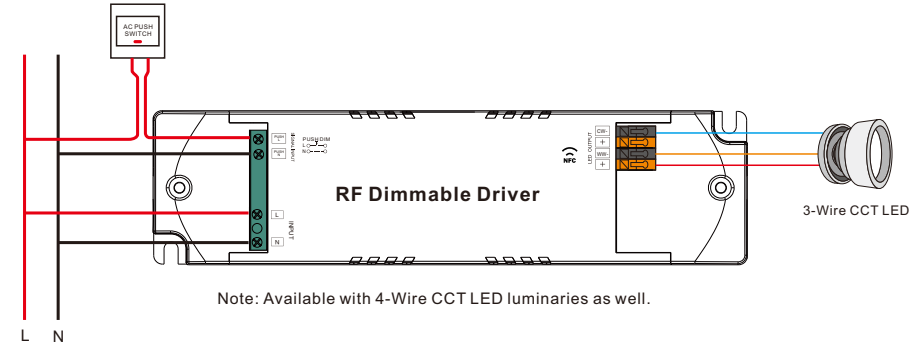
1. **Work as Pure RF driver**

1.1 With 3-wire CCT LED luminarie



Note: Available with 4-Wire CCT LED luminaries as well.

2. Work with Pure RF driver and AC PUSH function



Note: Available with 4-Wire CCT LED luminaries as well.

AC Push Function

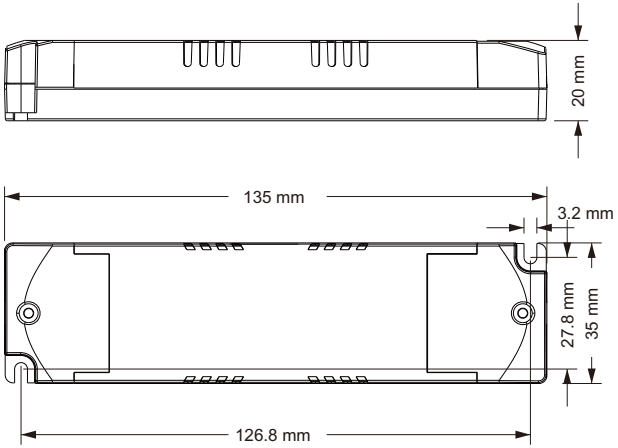
1) Click the button to switch ON/OFF

2) Press and hold down the button to increase or decrease light intensity to desired level and release it, then repeat the operation to adjust light intensity to opposite direction. The dimming range is from 1% to 100%.

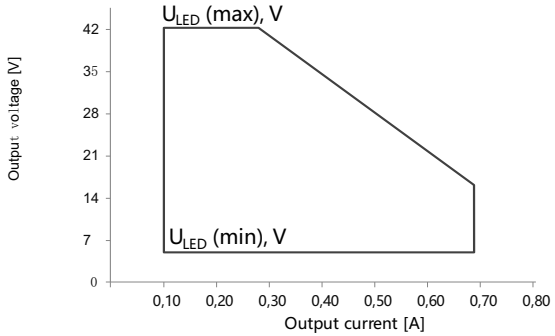
3) Double click the button to switch between brightness mode and color temperature mode.

4) Press and hold down the button to change color temperature under color temperature mode.

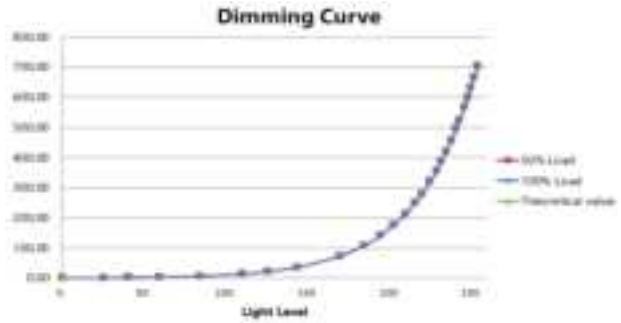
Product Dimension



Operating window



Dimming Curve



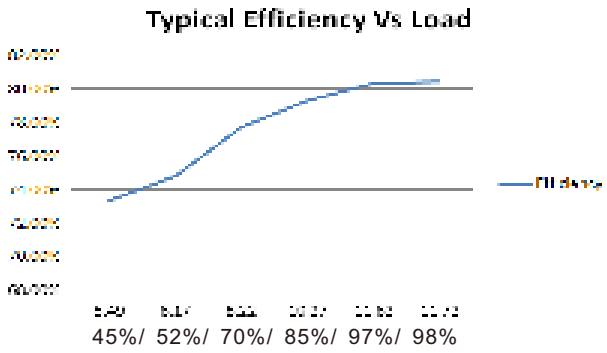
Note: Test data under 700mA gear

Driver Performance

45%/ 52%/ 70%/ 85%/ 97%/ 98%

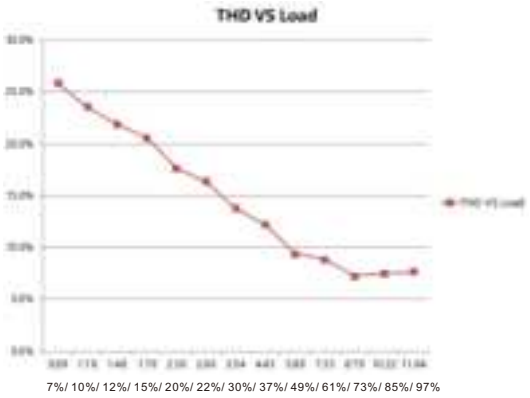
Note: Test data under 700mA gear

Driver Performance



Note: Test data under 700mA gear

Driver Performance



Note: Test data under 700mA gear

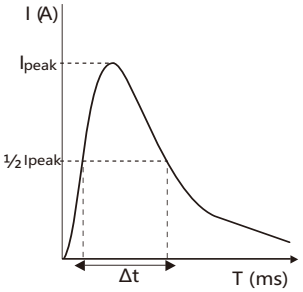
Expected Lifetime

Module Number	Output current	Ta	30 °C	40 °C	45 °C	•••	
SRP-1009N-12CC100-700 SRP-2504N-12CC100-700	100 – 700 mA	Tc	50 °C	60 °C	65 °C	•••	85 °C
SRP-1009N-12CCT100-700 SRP-2504N-12CCT100-700	100 – 700 mA	Lifetime	> 100,000 h	> 100,000 h	> 100,000 h		> 40,000 h

The LED driver is designed for a lifetime stated above under reference conditions.
The relation of tc to ta temperature depends also on the luminaire design.

MCB Load Quantity

Module Number	Ipeak	Twidth	Max.quantity of LED Driver per MCB													
			B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRP-1009N-12CC100-700 SRP-2504N-12CC100-700	3.96A	90μs	37	49	60	75	94	63	81	100	125	156	80	104	128	160	200
SRP-1009N-12CCT100-700 SRP-2504N-12CCT100-700	3.96A	90μs	37	49	60	75	94	63	81	100	125	156	80	104	128	160	200



Note:

1.Those MCB parameters are based on ABB S200 series circuit breakers.

2.For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.

3.Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.

4.When the installation environment temperature of MCBs exceeds 30℃ or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.

5.Type C MCB's are strongly recommended to use with LED lighting

Update log

Date	Version	Update content	Update by
2024-7-26	V1.0	Initial Version	Romeo

Note: Subject to change without notice. Please contact us if you have any questions.