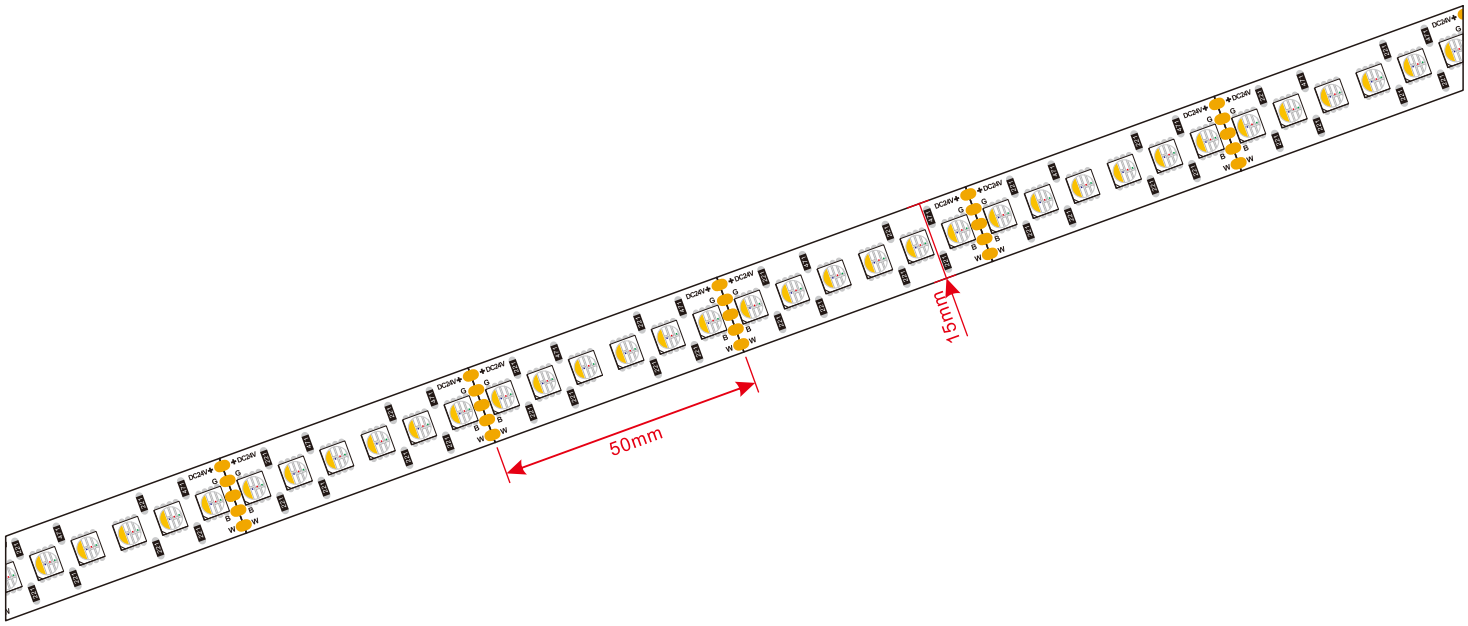
BERNALED | DATASHEET 2021

BF5050120 RGBW

BF5050120

SMD5050 120-LED/m 24V DC

LED FLEXIBLE STRIPS



This product is based on our most popular High Quality SAN'AN 5050 SMD LED (4 chips in 1 led). This version offers an excellent combination of high light output with a strong colour to provide outstanding results. Available in all colours to cover most requirements. Supplied in 24V DC as standard for more accurate cut lengths. Bin control for led color to ensure consistent color throughout all of your orders.

PRODUCT FEATURE & BENEIFTS

- Always using double-layer FPCB, mounted with high quality led Chips
- Low power requirement & Energy Efficient
- High color rendering RA > 80
- High-performance FPCB & LED for extremely long life
- Available in IP20 rating
- Great design freedom thanks to flexibility and cuttability of module
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back

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BF5050120 SMD5050 120-LED/m 24V DC

LED FLEXIBLE STRIPS

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BF	5050	120	L2	80	S	V	3	R6	20
	5050 - SMD5050 LED	**120** - 60 LEDs/m	**L2** - 24V DC	**80** - RA>80	**S** - SAN'AN LED	**V** - PCB Width 15mm	**3** - PCB 3OZ	**R6** - RGBW(6000K) **R4** - RGBW(4000K) **R3** - RGBW(3000K)	**20** - IP20

TECHNICAL DATA

LED Brand	**SAN'AN LED**
Normal Voltage	24V DC
Normal Current per Meter	1.2A/m
Rated Wattage per Meter	28.8W/m
Type of Current	Direct Current / Constant Voltage
Light Color	See Form 1
Luninous Flux per Meter	R:170lm / G:432lm / B:94lm / W:702lm
Luminous Efficacy	/
Color Rendering Index / RA	RA > 80
Length per Smallest Cutting Unit	50 mm
LED Number per Smallest Cutting Unit	6 LEDs
Length per roll for package	5 meters
Width of Printed Circuit Board	15 mm
Color of Printed Circuit Board	White / Black
Thickness of Printed Circuit Board	3 OZ
Double Side Adhesive Tape	3M
Temperature Range in Operation	-20℃ ···· 70℃
Temperature Range at Storage	-20℃ ···· 50℃
Dimmable	Yes
Type of Protection	IP20
Life Span	> 50000 Hours

* Testing environment temperature: 25±2℃
* The actual data of each single product may differ from above typical data which are subject to change without prior notice.

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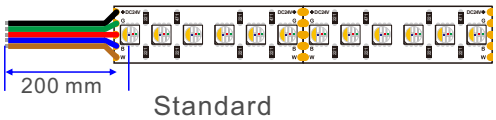
LIGHT COLOR

Form 1

LED Color	SAN'AN LED
White Color 7500K (75)	
White Color 6500K (65)	
White Color 5700K (57)	
White Color 5000K (50)	
White Color 4000K (40)	
White Color 3000K (30)	
White Color 2700K (27)	
White Color 2400K (24)	
White Color 2000K (20)	
Red Color (RE)	
Green Color (GR)	
Blue Color (BL)	
Yellow Color (YE)	
RGBW(RGB+6000K)(R6)	✓
RGBW(RGB+4000K)(R4)	✓
RGBW(RGB+3000K)(R3)	✓

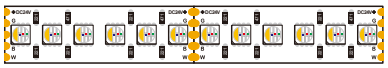
PRODUCT START/END OPTIONS

Soldered Wire

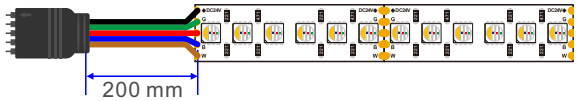


Standard

No Wire or connector



Soldered Male Connector



Soldered Female Connector

◆ The standard products are with soldered wire on both start and end section. For other options, please let us know before placing orders.

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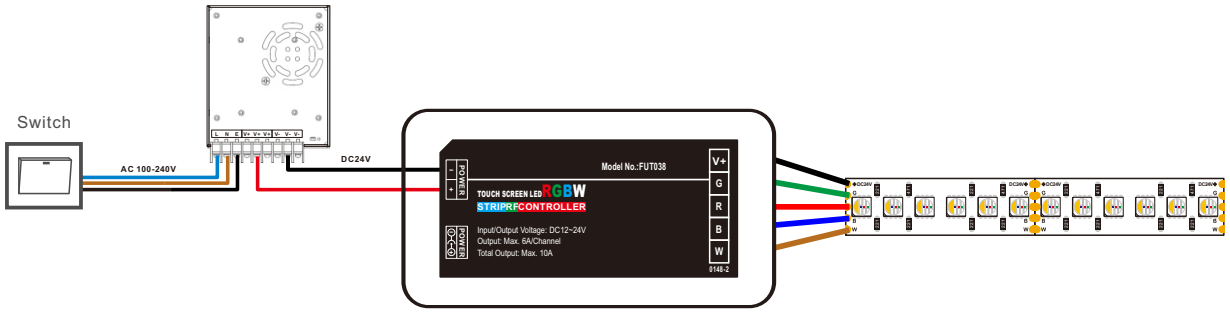
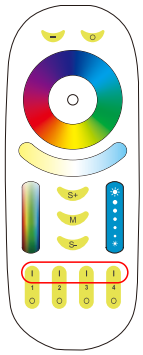
CONNECTIONS

1. Linking remote and controller

Step 1: Connecting the strip and controller



Step 2: Switch off the light, after 10 seconds, switch on again.



Step 3: When the light on, short press any zone of "" **3 times** within 3 seconds.

Note: The light blinks 3 times slowly means the linking is done successfully.

The remote can link several controllers in this way. Once the linking is done, the remote can control all the controllers at the same time.

CAUTION - If the light does not blink slowly, the linking is failed. Please switch off the light and follow the above steps again.

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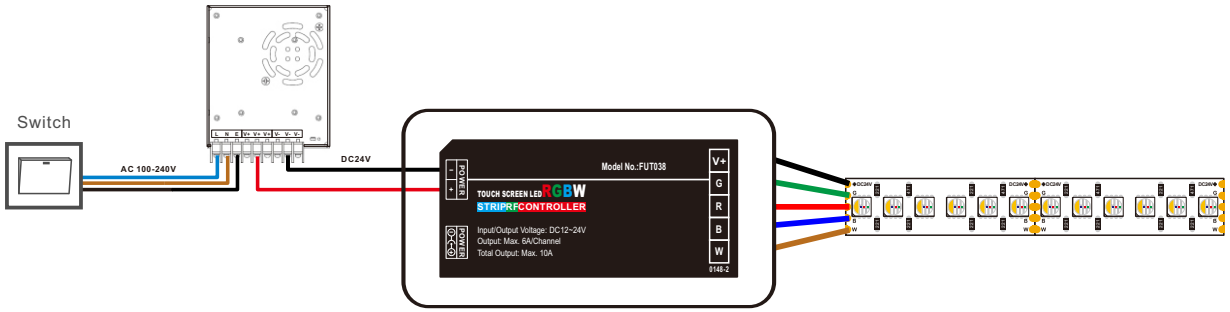
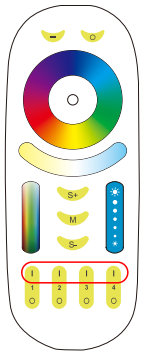
2. Unlinking remote and controller

Step 1: Connecting the strips and controller



Step 2: Switch off the light, after 10 seconds, switch on again.



Step 3: When the light on, short press any zone of "" **5 times** within 3 seconds.

Note: -Unlinking **MUST BE** the same zone with the linking.
-The light blinks 10 times quickly means the unlinking is done successfully.

CAUTION - If the light does not blink quickly, the unlinking is failed. Please switch off the light and follow the above steps again.

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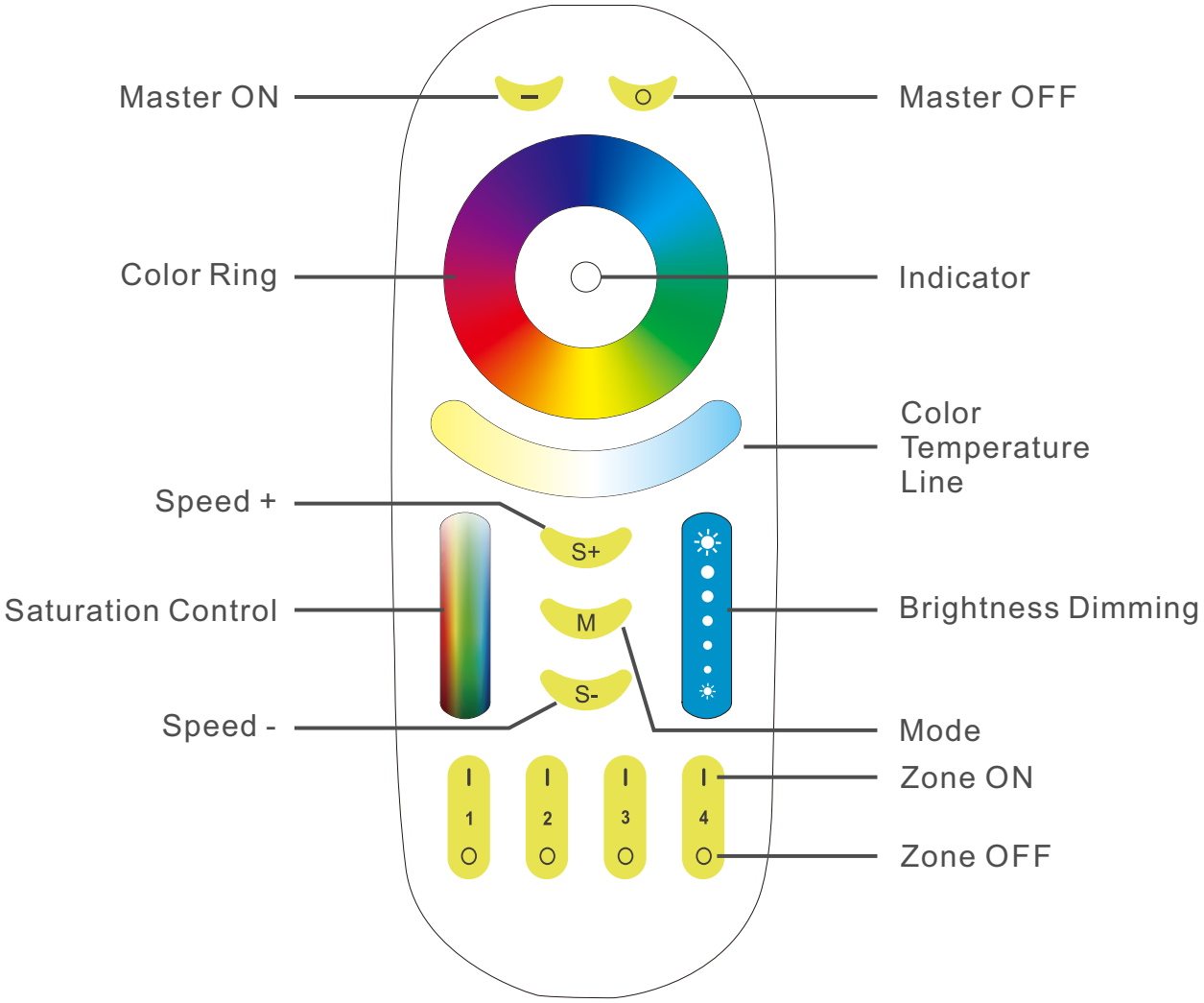
3. Function of remote control



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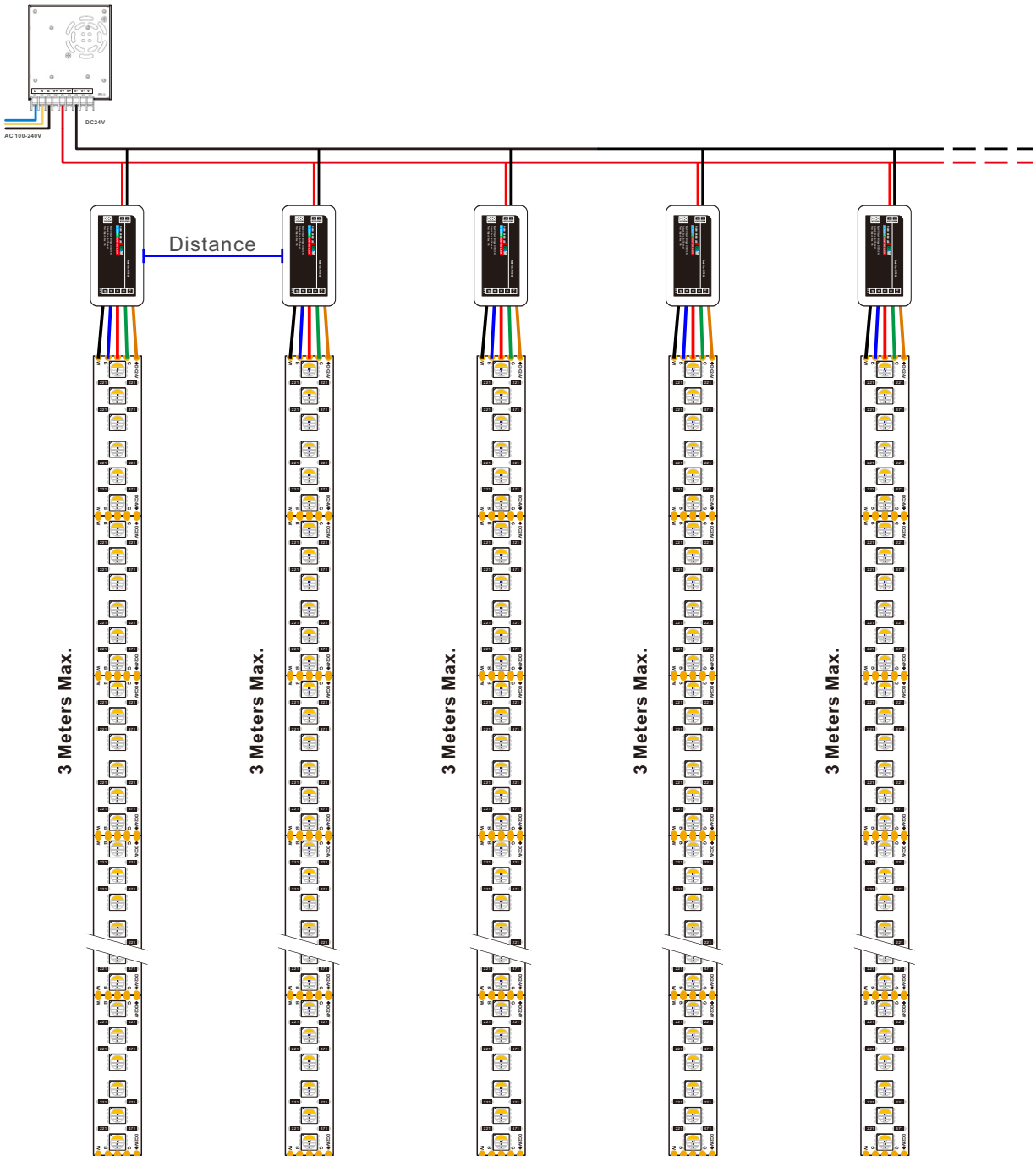
4. Typical configuration of connection



ATTENTION: The distance between controllers should be less than 20 meters, otherwise, the controller may be not able to run the same program as others.

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INSTALLATION INSTRUCTIONS

1. The mounting surface must be clean, dry and free from dust or grease.
2. Release the LED strip from the package and unreel.
3. Measure and cut the LED strip to the required length (only cut at the cut marks with power OFF).
4. Remove the 3M self-adhesive backing tape from the strip gradually during installation.
DO NOT remove it all at once to avoid the strip becoming entangled and sticking to itself.
5. Stick the LED strip to the mounting surface by pressing on the strip in between components only.
DO NOT press on the LEDs or other components on the strip.
6. You can use optional mounting clips to secure the strips at intervals.
7. Once the strip is affixed, it is then ready to be wired.

CAUTION - Twisting, pressing on LEDs, over-bending the strip, cutting at non-cut points, incorrectly powering the strip or exposing a standard strip (IP20) to water, particles or direct sunlight will invalidate the warranty.

SAFTY

1. Installation must be in accordance with local and national electrical code regulations.
2. To ensure safety and correct installation, our strips are intended to be installed by a licensed electrician.
3. Only install with a Constant Voltage LED driver.
4. Each maximum run requires a dedicated power feed from the driver.
DO NOT extend beyond the recommended maximum run length.
5. Make sure the appropriate gauge wire is installed between driver, LEDs, and any dimmers. When choosing wire, calculate voltage drop, maximum amperage rating, and the location ratings on the wire. Improper wire selection and installation could overheat wires and cause fire.
7. DO NOT modify product beyond instructions or warranty will be void.

Questions? Please contact us via info@bernal-led.com

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