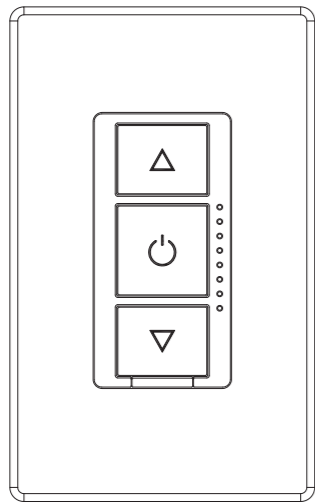


Installation Instructions for Smart LED Dimmer Switch

Works with DIMMABLE LED, CFL, Incandescent and halogen bulbs

Part#: M520140

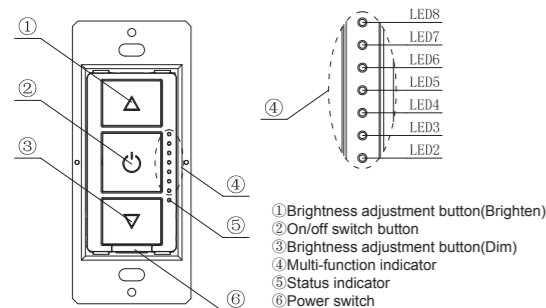


Model No.	DNA052M2B-300
Rated Voltage	120V,60Hz
Rated Wattage	LED:300W INCAN.:15W-300W
Load Range	LED:3W-300W INCAN.:15W-300W
Dimming Mode	Phase cut
Compatible Loads	1.Dimmable LED lamp 2.Dimmable LED lamp with electronic transformer 3.Incandescent or medium voltage halogen lamp 4.Low voltage halogen lamp with electronic transformer
Working Temperature	-10 C ~40 C
Operation Humidity	10% R.H.-90% R.H.

⚠ WARNINGS AND CAUTIONS

- Risk of fire and electrical shock, products should be installed in accordance with appropriate electrical codes and regulations.
- The product shall be used together with an upstream air-gap switch.
- Turn power off at circuit breaker or fuse and test that power is off before installing.
- After installed the dimmer, it is recommended to set the minimum brightness level to make bulbs turn on immediately and the dimmer with maximum dimming range.
- If you are unsure about any part of these instructions, consult a licensed electrician.
- To reduce the risk of overheating and possible damage to other equipment, do not install to control a receptacle, a motor-operated appliance or a transformer-supplied appliance.
- Use with compatible dimmable LED, CFL bulbs, Incandescent or halogen bulbs only.
- When multiple bulbs are used with one dimmer DO NOT mix bulb types. All bulbs shall be either LED, CFL or incandescent. Using the same model of each bulb will enhance dimmer performance.

Functional parts instructions



Status indicator

- Indicator lights red : The load light is OFF
- Indicator lights yellow : The load light is ON

Short press: within 0.5s;
Long press: over 0.5s;
Continuous short press: each interval of short press should within 1s.

On/off switch button

- Turn on the light : Short press the button once when the light is off.
- Turn off the light : Short press the button once when the light is on.
- Quick to the Max. brightness: Continuous short press the button twice.
- Set the Min. brightness : Turn on the light and dimming to the Min. brightness you desire, continuous short press the button 6 times then finished the Min. brightness setting.
- Recover to the factory default Min. brightness: Continuous short press the button 9 times when the light is on.
- Switching wire circuit connection way: Continuous short press the button 8 times, the load light flash twice, switching to Single-Pole/3-way; the load light flash 3 times, switching to Multi-way.
- Recover to factory default: Continuous short press the button 10 times when the light is on, the load light flash once (1. Turn on the light will at Max. brightness; 2. the min. brightness at 1%; 3. Single-pole/3-Way circuit connection way).
- Night light: Continuous short press the button 3 times, turn ON/OFF the night light. Finish the operation: Multi-function indicator flash once Turn off the night light, Multi-function indicator flash 3 times. Turn on the night light.

Brightness adjustment button

- Brightness increase: When the light is on, short press the up button to increase the brightness by one level;
- Brightness decrease: When the light is on, short press the down button once to decrease the brightness by one level;
- Brightness increases continuously: When the light is on, press and hold the up button to increase the brightness continuously until it is released or reaches the maximum brightness.
- Brightness decrease continuously: When the light is on, press and hold the down button to decrease the brightness continuously until it is released or reaches the minimum brightness.

Power switch

- Plug in the power switch to turn on the power;
- Pull out the power switch to turn off the power.

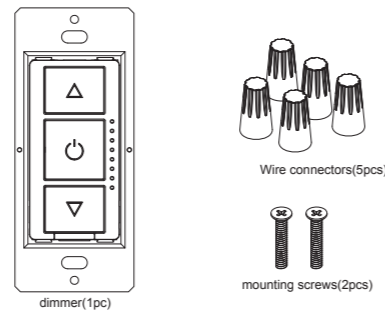
Multi-function indicator

- Function 1: night light;
- Function 2: brightness indicator of load light.

Table of the brightness indication

S/N	brightness level	online operation brightness interval	LED indicator
1	brightness level 1	When the brightness level is between two gears, the current brightness indication state is not changed.	LED2 brighting
2	brightness level 4		LED2~LED3 brighting
3	brightness level 7		LED2~LED4 brighting
4	brightness level 10		LED2~LED5 brighting
5	brightness level 13		LED2~LED6 brighting
6	brightness level 16		LED2~LED7 brighting
7	brightness level 19		LED2~LED8 brighting

Parts information



Tools needed to install your Dimmer

Φ5mm Philips Screwdriver	Electrical Tape	Cutters
Pliers	Test Pencil	Ruler

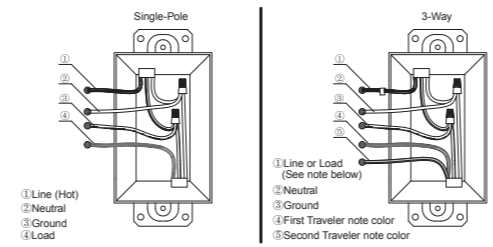
Installation and testing

Step 1 ⚠ **WARNING:** To avoid fire and electrical shock, TURN OFF POWER at circuit breaker or fuse and test that power is off before wiring.

Step 2 Removing existing switch: Remove existing wall plate and switch mounting screws. Carefully pull switch from wall box, identify and take out the wires attached to the switch, then remove the switch. DO NOT remove wires which are taken out from the switch at this time. (If new configuration is without this step)

Step 3 Identifying the type of circuit

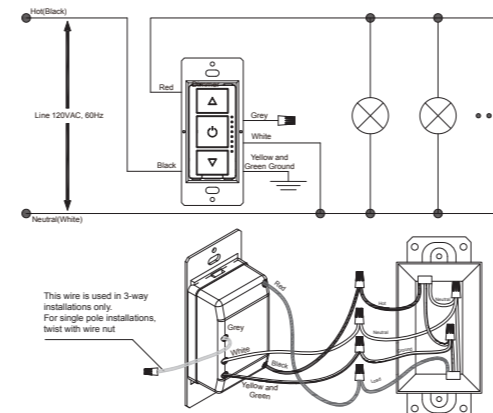
NOTE: If the wiring in the wall box does not resemble any of these configurations, consult an electrician.



IMPORTANT: For 3-Way applications, note that one of the screw terminals from the old switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as the common (Line or Load) in both the dimmer wall box and 3-way wall box.

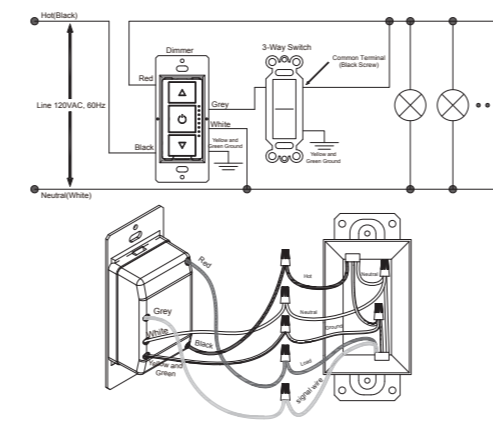
Step 4 Typical wiring connection way

Step 4a Single-Pole Wiring Application



- Connect the yellow and green dimmer wire to the green or bare copper ground wire in the wall-box, and twist them with wire connector.
- Connect the black dimmer wire to the hot input wire removed from the switch, and twist them with wire connector.
- Connect the white dimmer wire to the neutral wire, and twist them with wire connector.
- Connect the red dimmer wire to the load wire removed from the switch, and twist them with wire connector.
- Use remaining wire connector to cap the remaining grey wire of the dimmer.

Step 4b 3-Way Wiring Application:



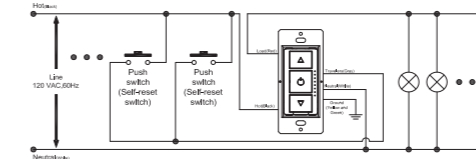
IMPORTANT: In a 3-way circuit, only one dimmer can be used.

- Connect the yellow and green dimmer wire to the green or bare copper ground wire in the wall-box, and twist them with wire nut.
- Connect the black dimmer wire to the hot input wire with tag removed from the switch, and twist them with wire nut.
- Connect the white dimmer wire to the neutral wire, and twist them with wire connector.
- Connect the red dimmer wire, gray dimmer wire to the remaining 3-way switch's two wires removed from the switch, and twist them with wire nuts. (Note: The red wire on the dimmer is connected to the load wire on the 3-way Switch.)

Step 4c Multi-Way Wiring Application:

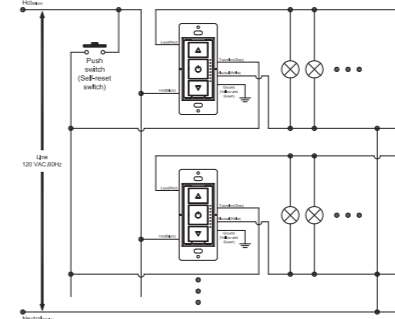
[Switching wire circuit connection way: Continuous short press the button 8 times]

Step 4c-1 Multiple self-reset switches control one dimmer wiring diagram



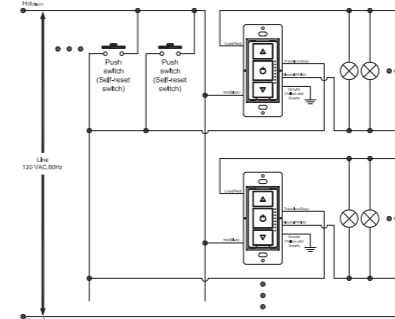
NOTE:
•Dimmer must always be connected to the side with electricity of the load to ensure normal work.
•Multi-way self-reset switch can control up to 20pcs of dimmer for UP/DOWN dim and ON/OFF at the same time.
•Two or more dimmers must not be connected in parallel or series to control the same load from two different locations.

Step 4c-2 One self-reset switch control Multiple dimmer wiring diagram

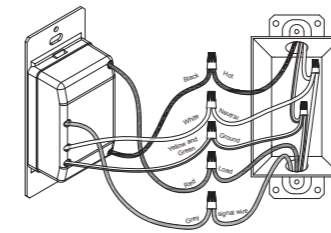


NOTE:
•One self-reset switch can control up to 20pcs of dimmer for UP/DOWN dim and ON/OFF at the same time.

Step 4c-3 Multiple self-reset switches control multi-way dimmers wiring diagram

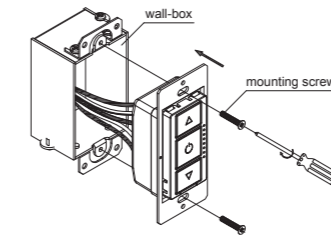


NOTE:
•Multi-way self-reset switch can control up to 20pcs of dimmer for UP/DOWN dim and ON/OFF at the same time.



- Connect the yellow and green dimmer wire to the green or bare copper ground wire in the wall-box, and twist them with wire nut.
- Connect the black dimmer wire to the hot input wire with tag removed from the switch, and twist them with wire nut.
- Connect the white dimmer wire to the neutral wire, and twist them with wire connector.
- Connect the red dimmer wire, gray dimmer wire to the remaining 3-way switch's two wires removed from the switch, and twist them with wire nuts. (Note: The red wire on the dimmer is connected to the load wire on the 3-way Switch.)

Step 5 Installing and fixing the dimmer

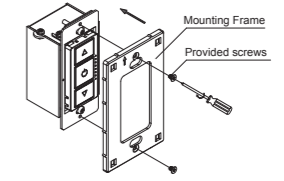


- Carefully position all wires inside the wall-box, leaving enough room to insert the dimmer housing. Put the dimmer inside the wall-box.
- Mount the dimmer securely inside the wall-box using the provided mounting screws.

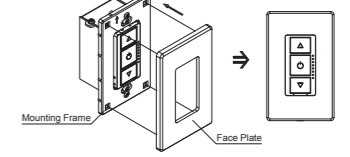
Step 6 Installing wall plate

Step 6a Separated plate

- Place the mounting frame over your installed dimmer and secure it using provided screws.

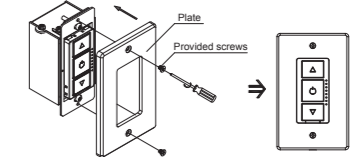


- Cover the face plate over the installed mounting frame and gently push it to ensure flush fit.



Step 6b Integrated plate

- Place the plate over your installed dimmer and secure it using provided screws.



Using Description

Function Description

Table of the function in Single-pole wiring

Wiring method	Function	Dimmer operation
Single-pole	Turn on/off the light	√
	Dimming	√
	Quick to the Max. brightness	√
	Set the Min. brightness	√
	Reset the default brightness	√
	Switching wiring method	√
	Reset to the factory default	√

Table of the function in 3-Way wiring

Wiring method	Function	Dimmer operation	On/off switch operation
3-Way	Turn on/off the light	√	√
	Dimming	√	x
	Quick to the Max. brightness	√	x
	Set the Min. brightness	√	x
	Reset the default brightness	√	x
	Switching wiring method	√	x
	Reset to the factory default	√	x
	Group control	x	√

Operation of On/off switch

- Turn on the light: Press to turn on the light when it is off;
- Turn off the light: Press to turn off the light when it is on;

Table of the function in Multi-Way wiring

Wiring method	Function	Dimmer operation	Self-reset switch operation
Multi-Way	Turn on/off the light	√	√
	Dimming	√	x
	Quick to the Max. brightness	√	x
	Set the Min. brightness	√	x
	Reset the default brightness	√	x
	Switching wiring method	√	x
	Reset to the factory default	√	x
	Group control	x	√

Operation of self-reset switch

- Turn on the light: Press once to turn on the light when it is off;
- Turn off the light: Press once to turn off the light when it is on;
- Dimming: Press and hold to adjust the brightness of the light, press and hold again to change the direction of the brightness after released.
- Quick to the maximum brightness: Press the switch twice to dimming the light to the maximum brightness.

Troubleshooting

Problem	Possible Cause	Solution
Lights flickering	Lamp has a bad connection One dimmer connect to multiple types bulb, incur interference and cause flicker	Reconnect and fix the wires Change bulbs to same type
LED and CFL flickers at low end of dimming range	Load compatibility is not good	Turn up lamp minimum brightness properly
Light does not turn on	Circuit breaker has tripped	Turn power on
	Fuse burn out	Change fuse
	Lamp burned out	Change lamp
	Lamp neutral connection is not wired	Reconnect the lamp neutral
	The wiring of the other switch is incorrect when using in a 3-way circuit	Reconnect the circuit