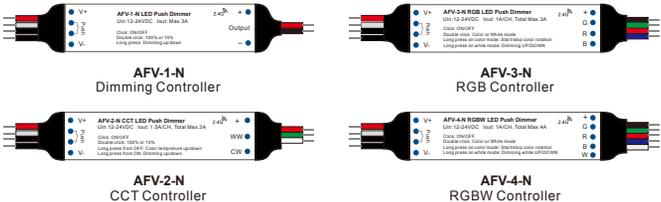# DIM/CCT/RGB/RGBW 1-4 Channel Mini LED Push Dimmer

Model No.: AFV-1-N, AFV-2-N, AFV-3-N, AFV-4-N

14 color/ Push Dim/ Max 75W / Step-less dimming/ Wireless remote control

AFV-1-N
Dimming Controller

AFV-3-N
RGB Controller

AFV-2-N
CCT Controller

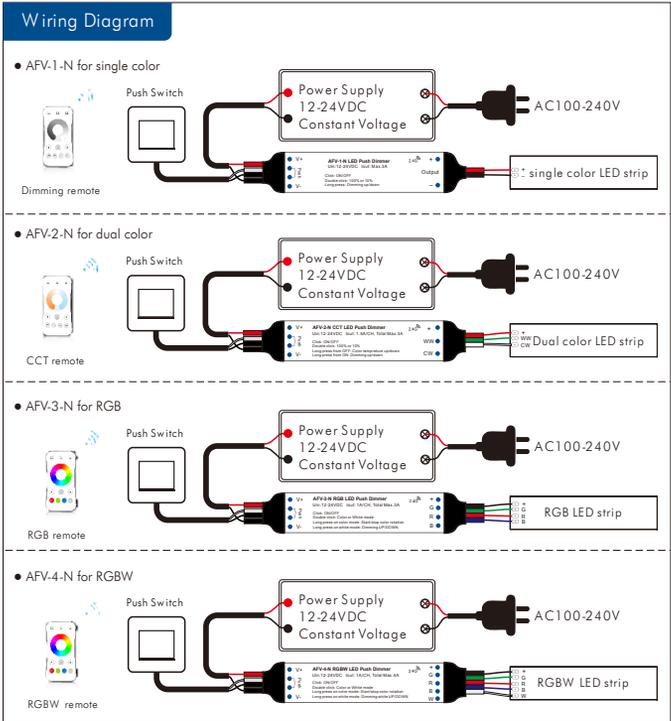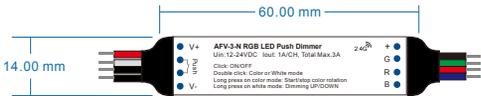**AFV-4-N**
RGBW Controller

FC Ⓕ ⓒ CE RoHS emc LVD RED

Features

● 14 channel constant voltage mini LED controller with push dimming function.

● Output connect with 5 meters LED strip, max output power 75W.

● Connect with external push switch to achieve on/off and dimming function.

● Match with Alfaled's 2.4G single color, dual color and RGB/RGBW remote control.

● One RF controller accept up to 10 remote control.

● When using with RGB/RGBW light, built in 10 dynamic mode, include jump or gradual change style.

● Synchronize on multiple number of controllers.

Technical Parameters

Input and Output

Input and Output	
Input voltage	12-24VDC
Output voltage	12-24VDC
Output power	Max. 75W
Output type	Constant voltage

Environment	
Operation temperature	Ta: -30℃ ~+55℃
Case temperature (Max.)	Tc: +85℃
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity

Dimming data	
Input signal	RF 2.4GHz +Push Dim
Control distance	30m
Dimming level	4096 levels
Dimming range	0 -100%
Dimming curve	Logarithmic
PWM Frequency	500Hz

Safety and EMC	
EMC standard (EMC)	EN301 489,EN 62479
Safety standard(LVD)	EN60950
Radio Equipment(RED)	EN300 328
Certification	CE,EMC,LVD,RED

Dimension

60.00 mm

14.00 mm

Wiring Diagram

● AFV-1-N for single color

Push Switch

Power Supply 12-24VDC Constant Voltage

AC100-240V

Dimming remote

single color LED strip

● AFV-2-N for dual color

Push Switch

Power Supply 12-24VDC Constant Voltage

AC100-240V

CCT remote

Dual color LED strip

● AFV-3-N for RGB

Push Switch

Power Supply 12-24VDC Constant Voltage

AC100-240V

RGB remote

RGB LED strip

● AFV-4-N for RGBW

Push Switch

Power Supply 12-24VDC Constant Voltage

AC100-240V

RGBW remote

RGBW LED strip

Push Dim

	Click	ON/ OFF
AFV-1-N	Double Click	Turn on at 100% or 10%(night light) and vice-versa
	Long press(>1s) from OFF	Dimming UP/ DOWN
	Long press(>1s) from ON	Dimming UP/ DOWN
AFV-2-N	Click	ON/ OFF
	Double Click	Turn on at 100% or 10%(night light) and vice-versa
	Long press(>1s) from OFF	Color temperature UP/ DOWN (turn off and turn on to return dimming)
	Long press(>1s) from ON	Dimming UP/ DOWN
AFV-3-N	Click	ON/ OFF
	Double Click	Change from color mode to white mode(RGB mixed) and vice-versa
	Long press(>1s) from OFF	If on color mode change rotation speed; If on white mode dimming UP/ DOWN
	Long press(>1s) from ON	If on color mode start/ stop color rotation; If on white mode dimming UP/ DOWN
AFV-4-N	Click	ON/ OFF
	Double Click	Change between color mode, white mode(W channel) and color+W mode
	Long press(>1s) from OFF	If on color mode change rotation speed; If on white mode or color+W mode, W dimming UP/ DOWN
	Long press(>1s) from ON	If on color mode start/ stop color rotation; If on white mode or color+W mode, W dimming UP/ DOWN

Color rotation:

We can select 4 rotation speed:
10 flash/ s means 6 seconds color rotation,   5 flash/ s means 30 seconds color rotation,
2 flash/ s means 1 minute color rotation,   1 flash/ s means 6 minutes color rotation.

Match Remote Control

Use Power Restart

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

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

Note:
Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range.
Strong signal sources such as WiFi routers and microwave ovens will affect the range.
We recommend for indoor applications that receiver placements should be no further apart than15m.

RGB/ RGBW Dynamic mode list

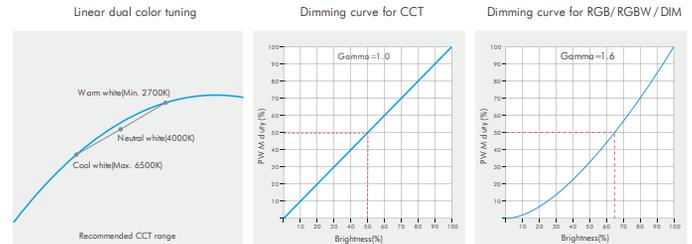| No.	Name	No.	Name
1	RGB jump	6	RGB fade in and out
2	RGB smooth	7	Red fade in and out
3	6 color jump	8	Green fade in and out
4	6 color smooth	9	Blue fade in and out
5	Yellow cyan purple smooth	10	White fade in and out

Dual color control

CH1 =Warm white LED
CH2 =Cool white LED
Each channel can supply up to 75W (@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1 =0W,CH2 =75W	CH1 =37W,CH2 =37W	CH1 =75W,CH2 =0W

Linear dual color tuning   Dimming curve for CCT   Dimming curve for RGB/ RGBW/ DIM

Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Wrong color	1. Wrong connection of R/ G/ B/ W wires.	1. Reconnect R/ G/ B/ W wires.
No response from the remote	1. The battery has no power. 2. Beyond controllable distance. 3. The controller did not match the remote.	1. Replace battery. 2. Reduce remote distance. 3. Re-match the remote.