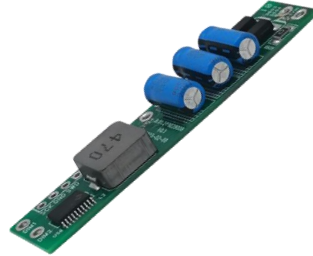


### Features

- Wide application: compact size
- 3-in-1 dimming function (0-10V/PWM/Rx)
- Smooth dimming
- 5-year warranty (please refer to the warranty condition)



### Applications

· Indoor office lighting · decorative lighting · commercial lighting · residential lighting

### Descriptions

LF-BBA016-0400-42 is a 16W constant current LED driver with 3-in-1 dimming function. Its input voltage is 48Vdc $\pm$ 5% and output current is up to 400mA. It features compact size, built-in design (inside the magnetic track box), high efficiency and smooth dimming.

### Product Model

LF - BBA 016 - 0400 - 42

- 42: maximum output voltage: 42V
- 0400: maximum output current: 400mA
- 016: rated power: 16W
- BBA: 3-in-1 dimming LED driver

### Lifud Technology Co., Ltd.

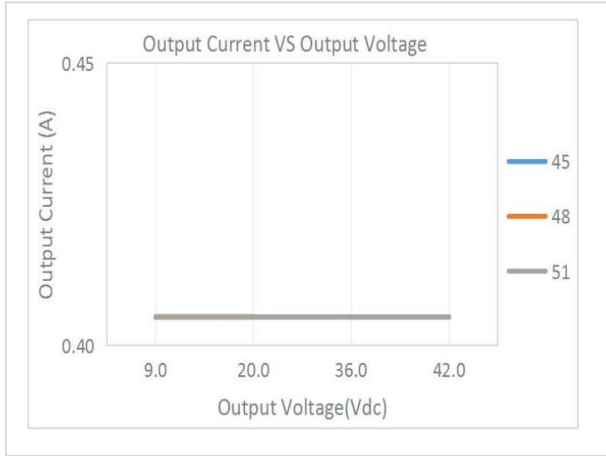
Production Base I (HQ): Building B, Kutto Industrial Park, No.26, Xinhe Road, Bao'an District, Shenzhen City, China.  
 Production Base II: No.4, Block 2, Tengfei Road, Shigao Economic Development Area, Meishan City, Sichuan, China.  
 Website: [www.lifud.com](http://www.lifud.com) Telephone: +86(0)755 8373 9299 Email: [sales@lifud.com](mailto:sales@lifud.com)

## ■ Electrical Characteristics

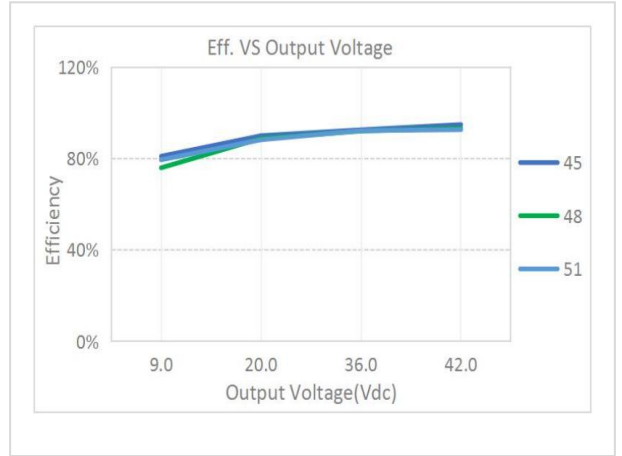
Model		LF-BBA016-0400-42
<b>Output</b>	Output Voltage	9-42V( $V_{in}-V_o \geq 7V$ )
	Output Current	400mA
	Output Power	16.8W max
	Flicker Index	IEC-Pst $\leq 1$ , CIE-SVM $\leq 0.4$ Complies with IEEE Std 1789-2015
	Current Tolerance	$\pm 6\%$
<b>Input</b>	Input Voltage	48Vdc (voltage input is neither positive nor negative)
	Input Current	0.4A max.
	Efficiency	$\geq 92\%$ (full load)
<b>Protections</b>	Short Circuit Protection	Auto-recovery
	Overload Protection	When the output voltage is exceeded, the output current drops, and the load is reduced to recover automatically.
	No Load Protection	No damage to driver (No-load voltage $\leq 59V$ )
	Reversing Protection	Normal output when input is reversed
<b>Environment Descriptions</b>	Operating Temperature	-20°C - +55°C
	Operating Humidity	20-90%RH (without condensation)
	Storage Temperature/ Humidity	-30°C - +80°C (6 months in Class I environment); 10-90%RH (without condensation)
	Atmospheric Pressure	86-106kPa
<b>Other Parameters</b>	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years
<b>Testing Equipment</b>	Digital power meter: CHROMA66202, oscilloscope: Tektronix DP03014, DC electronic load: IT8733, LED board, constant temperature and humidity chamber; Everfine EMS61000-5B; Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: SE7440, flicker tester (flicker-free coefficient test) LFA-3000, etc.	
<b>Testing Remark</b>	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac.	
<b>Additional Remarks</b>	<ol style="list-style-type: none"> <li>1. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.</li> <li>2. Pay attention to waterproof, moisture-proof and electrostatic proof during the usage.</li> <li>3. Pay attention to the insulation of between PCB boards and metal parts of the shell to avoid abnormalities.</li> </ol>	

**Product Characteristic Curves**

Output Current & Voltage Curve



Efficiency Curve

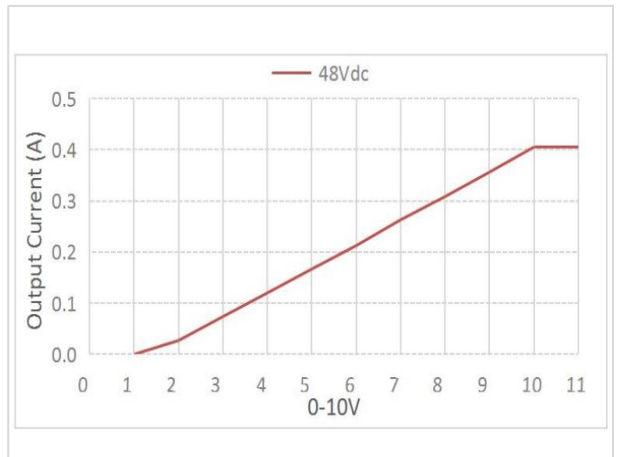


**Dimming Operation Instructions**

0-10V Dimming Operation

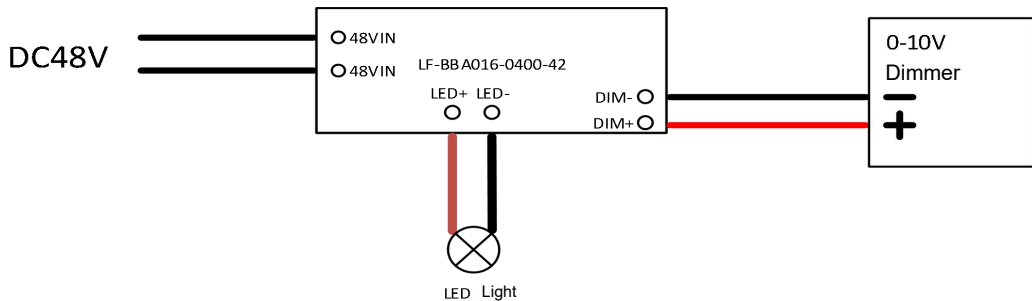
- Connect 0-10V signal to DIM terminal
- Smooth dimming
- Dim+/- (without signal connected): 100% rated current output

0-10V Dimming Curve



Remark: Input:48Vdc; output: 42VDC/400mA (This data is measured by Lifud 0-10V dimmer and the chart is for reference only)

Wiring Diagram of 0-10V Dimming



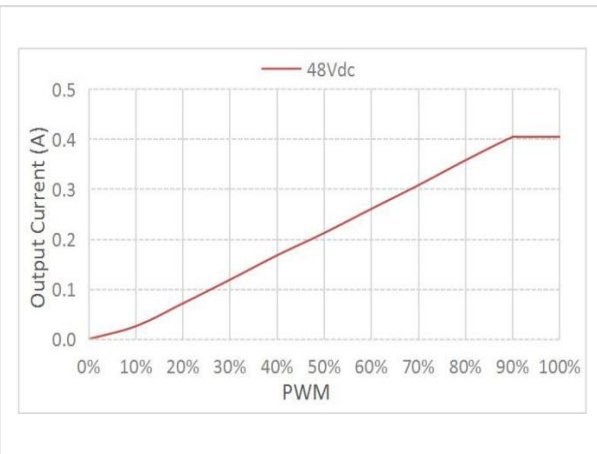
Remark: This is a wiring schematic, not a physical object, so specific to the actual wiring shall prevail.

**■ Dimming Operation Instructions**

**PWM Dimming Operation**

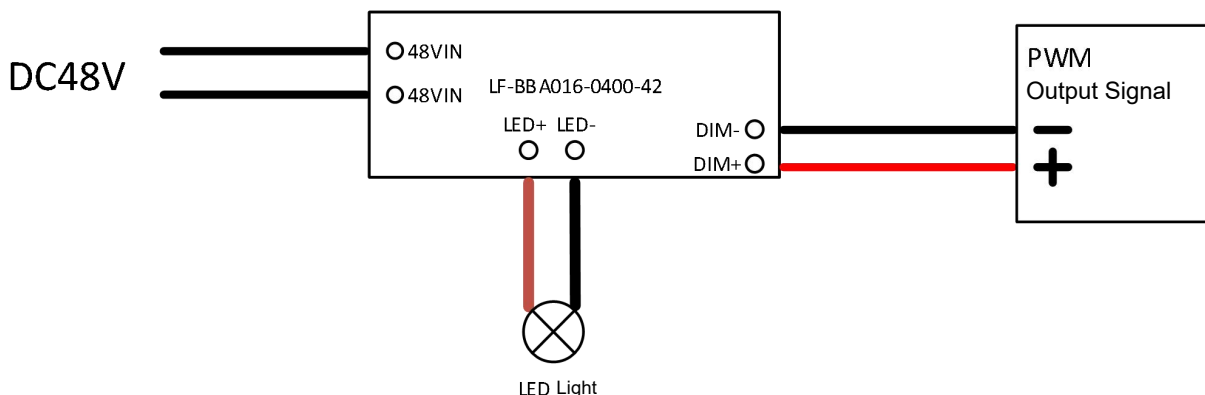
- Connect PWM signal to DIM terminal
- Compatible signal range: 400-4000HZ, amplitude (+10V)
- Dim+/- (without signal connected): 100% rated current output

**PWM Dimming Curve**



Remark: Input:48Vdc; output: 42VDC/400mA (This data is measured by Lifud PWM dimmer and the chart is for reference only)

**Wiring Diagram of PWM Dimming**

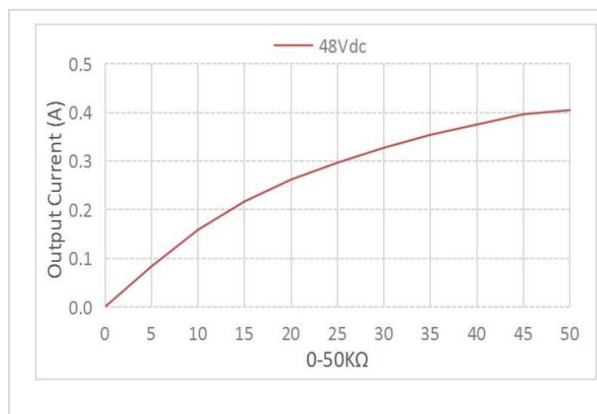


Remark: This is a wiring schematic, not a physical object, so specific to the actual wiring shall prevail.

**Rx Dimming Operation**

- Connect Rx signal to DIM terminal
- Dimming Range: 0-50K
- Dim+/- (without signal connected): 100% rated current output

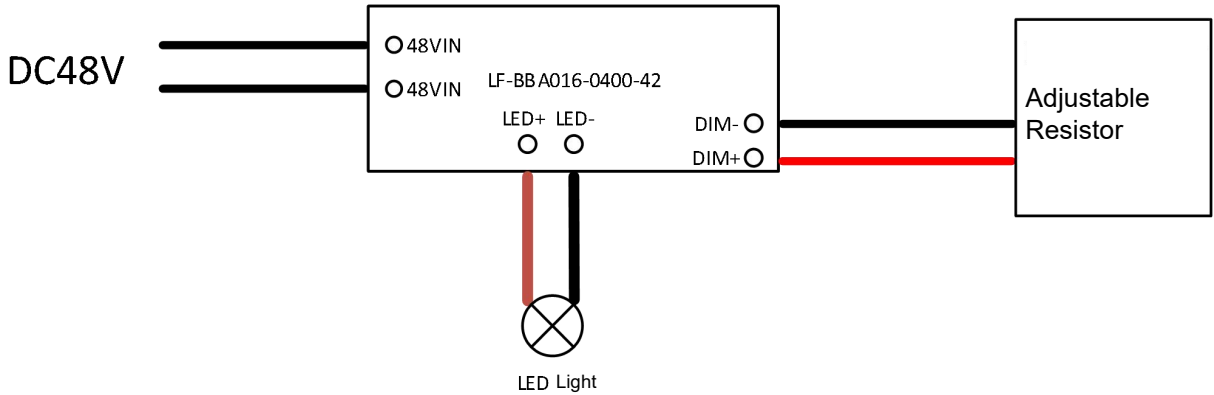
**Rx Dimming Curve**



Remark: Input:48Vdc; output: 42VDC/400mA (This data is measured by Lifud Rx dimmer and the chart is for reference only)

**■ Dimming Operation Instructions**

Wiring Diagram of Rx Dimming



Remark: This is a wiring schematic, not a physical object, so specific to the actual wiring shall prevail.

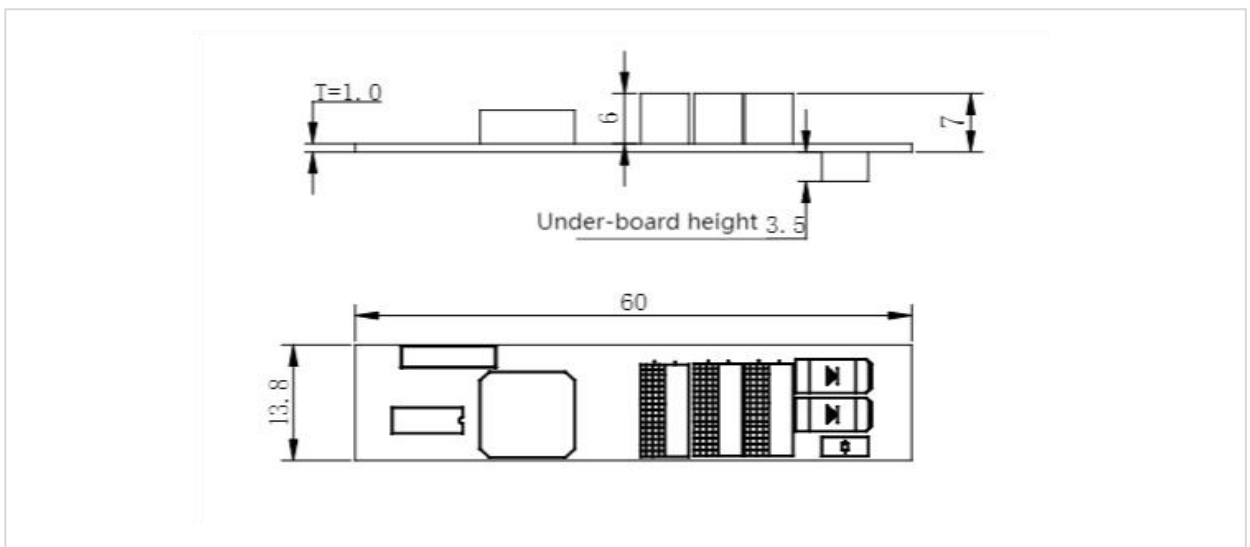
**■ Product Definitions**

INPUT	
48VIN	DC Input (Positive/negative electrode)
48VIN	DC Input (Positive/negative electrode)
DIM+	Positive electrode input of 3-in-1 dimming
DIM-	Negative electrode input of 3-in-1 dimming

OUTPUT	
LED+	Positive electrode output of LED driver
LED-	Negative electrode output of LED driver

**■ Structure and Dimensions (unit: mm)**

Appearance and dimensions



## ■ Packaging Specifications

Model	LF-BBA016-0400-42
Carton Size	385*285*210 mm (L*W*H)
Quantity	50 pcs/layer; 10 layers/ctn; 500 pcs/ctn
Weight	0.0062 kg/pc; 4.4 kg/ctn

## ■ Transportation and Storage

### 1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

### 2. Storage

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

## Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.