

LBT UC LED Drivers

Ultra-Compatible Deep Dimming LED Driver

Leading Edge (Triac), Trailing Edge (ELV) & 0-10V Dimmable



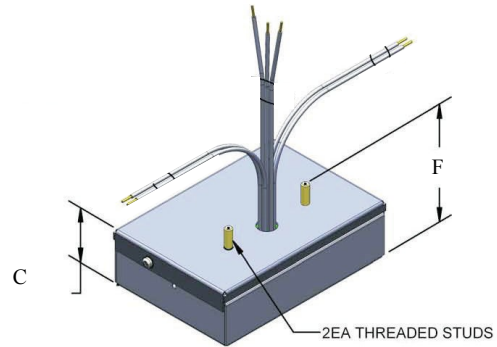
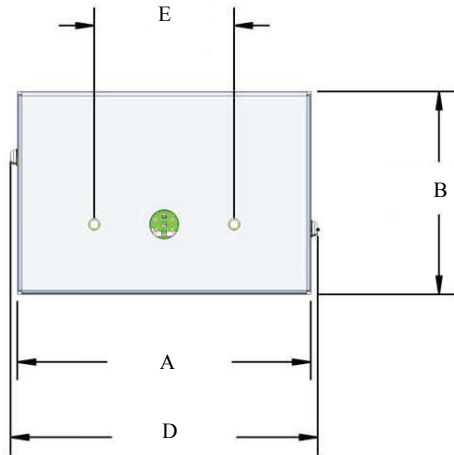
Features

DEEP DIMMING	Smooth, flicker-free dimming below 1%
COMPATIBILITY	Phase Cut (Leading Edge/Triac, Trailing Edge/ELV), and 0-10V dimmers
ADAPTIVE DIMMING	Automatically detects 0-10V or Phase Cut and adjusts to the range of the Phase Cut dimmer attached
ADJUSTABLE CURRENT	Select between 700mA and 1000mA current levels at the time of installation
EASE OF SELECTION	Current level is selected by clipping a wire on the exterior of the unit
TEMPERATURE CONTROL	Connection for temperature sensor to LED module available

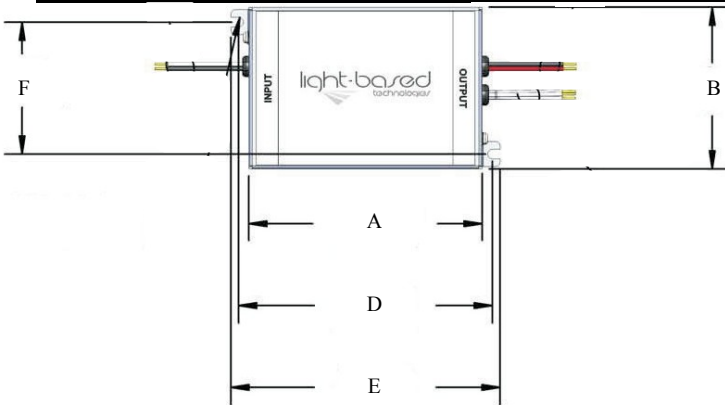
Specifications

Bottom feed Model no.		UC-1000-25W-120-B-DIM-1
Side lead Part no.		UC-1000-25W-120-S-DIM-1
INPUT	VOLTAGE RANGE (VAC)	90-132
	FREQUENCY	50 / 60 Hz
	POWER FACTOR	>0.9
	EFFICIENCY (Typ.)	82%
	MAX POWER (Watts)	32
	THD	<20%
	INRUSH CURRENT (Max.)	4A
OUTPUT	UNDIMMED VOLTAGE RANGE (DC)	12.5-36 (700mA mode) / 7.8-24 (1000mA mode)
	ADJUSTABLE CURRENT	700mA (orange wires disconnected) / 1000mA (orange wires connected)
	OUTPUT POWER (Watts)	25
	MAX 120 Hz RIPPLE	20%
	CURRENT REGULATION	+/-5%
PROTECTION	INPUT VOLTAGE SURGE	ANSI C62.41
	LED OVER TEMPERATURE	Current Derating and Shut down
	SHORT PROTECTION	YES
	OPEN PROTECTION	YES
ENVIRONMENT	AMBIENT TEMPERATURE	-30°C to +60°C
	CASE TEMPERATURE	80°C
	INGRESS PROTECTION	IP 20
	WORKING HUMIDITY	5-90% non condensing
	STORAGE TEMP.	-40°C to +85°C
STANDARDS	UL 1310 Class 2	YES
	UL 8750	YES
	FCC	Class B Compliant

Bottom Feed Dimensions UC-1000-25W-120-B-DIM-1	A	B	C	D	E	F
	105mm	60mm	32mm	110mm	50.8mm	43.2mm



Side Lead Dimensions UC-1000-25W-120-S-DIM-1	A	B	C	D	E	F
	105mm	60mm	32mm	114.4mm	121.4mm	46.4mm



Wiring	Input		Output		Control Wires			
	Black	White	Red	Blue	2 x Yellow	2x Orange	Grey	Violet
	Live	Neutral	LED Anode	LED Cathode	Temp. Sensing	Current Select	Common	0-10V Dimming
	18 AWG, 450mm	18 AWG, 450mm	24 AWG, 450mm	24 AWG, 450mm	24 AWG, 450mm	24 AWG, 50mm	24 AWG, 450mm	24 AWG, 450mm
All tin plated leads								

Temperature Control

The Ultra-Compatible Deep Dimming LED Driver detects the LED temperature by monitoring the resistance of an external NTC thermistor attached between the temperature control wires (yellow). If the thermistor resistance drops below 5.7kΩ the Driver will start to reduce the maximum LED current. If the temperature of the LED continues to increase, and the thermistor resistance drops below 1.9kΩ, the Driver will turn off the LED.

If the LED temperature reduces and the thermistor resistance increases above 6.6kΩ the Driver will increase the maximum output current until it reaches the normal operating maximum, or the temperature of the LED starts to increase again causing the thermistor resistance to drop back below 5.7kΩ.

The voltage limits are defined in the table below. If an external NTC thermistor of value 47KΩ, such as Vishay NTCALUG03A473H, is used these limits correspond to the LED temperatures indicated. For further information please refer to AN-003.

Temperature Protection Action	Thermistor Resistance (Temp Sensing Wires)	LED Temperature (using 47KΩ NTC)
Increase maximum LED current	>6686Ω	<80°C
Maintain maximum LED Current	5747Ω < X < 6686Ω	80°C < X < 85°C
Decrease maximum LED current	< 5747Ω	>85°C
Turn off LED	< 1937Ω	>125°C

Tested Dimmers

The LBT Ultra-Compatible Deep Dimming LED Driver has been designed to perform to specification with, and tested against, the following list of dimmers:

List of Tested Dimmers			
Manufactured by Cooper	Devine / DI06P	React / RI06P	Trace / TI06
Manufactured by Leviton	Illumatech / RPI06	Vizia / VPE06	Vizia / VZS15
	Sureslide / 6633-P	Sureslide / 6621	Sureslide / /6613-P
	Trimatron / 6602	Trimatron / 6631	
Manufactured by Lutron	Diva / DVELV-300P	Diva / DVLV-600P	NovaT / NTELV-600
	NovaT / NTLV-600	Skylark / SELVB-300P	Skylark / SLV-600P

For dimmers outside of this list please contact our technical team at support@lightbased.com