# **USER GUIDE** \_E42DP

### **2020 MODEL**



Multicurrent LED power supply dimmable by push button, DALI signal, 0/1-10V signal

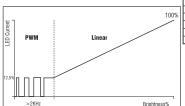
- Multicurrent LED driver with active PFC.
- Suitable for current powered LEDs.
- The function mode is selected by means of the DIP-SWITCH, which is below the terminal cover.
- Brightness adjustment through DALI signal, Push-button, 1-10V or 0-10V interface suitable for working both with potentiometers and active systems such as Gateway, Konnex Interfaces, Touch Screen, ecc.
- MASTER/SLAVE Function with standard cable.

Energy efficiency at full load (1050mA): 88% Stand-by power (Psb): 0,46W

#### **General Characteristics**

- Plastic case.
- Driver for independent mounting.
- Electric class protection II.
- Protection degree IP20.

- Type of "hybrid" dimming:
   LINEAR from 100% to 12.5%
- PWM from 12.5% to 0.5%.



L	OUTPUT SET			OUTPUT DIP-SWITCH					DIMMING SET	DIMMING DIP-SWITCH				
Potenza Power (w) 220V-240V		er (W)	<b>Uscita</b> Output	1	2	3	4	5	Dimming	1	2	3	4	5
Г	16,8		350   9-48V	-	-	-	-	-	ON/OFF	-	-	-	-	-
Г	19,2		400   9-48V	-	-	-	-	ON	Push Slow	ON	-	-	-	-
Г	21,6		450   9-48V	-	-	-	ON	-	Push Fast	-	ON		-	-
Г	24		500 I 9-48V	-	-	ON	-	-	Push Up/Down	ON	ON	-	-	-
Γ	26,4		550   9-48V		-	ON	-	ON	DALI	-		ON	-	-
Г	28,8		600   9-48V	-	-	ON	ON	-	1-10 passive	-	ON	ON	-	ON
Г	31,2		650   9-48V	-	-	ON	ON	ON	1-10 active	-	ON	ON	-	-
Г	33,6	CC	700 I 9-48V	-	ON	ON	-	-	0-10 active	ON		ON	-	
	36		750 I 9-48V	-	ON	ON	-	ON	0-10 passive	ON		ON	-	ON
Г	38,4		800   9-48V	-	ON	ON	ON	-	Slave	ON	ON	ON	-	-
ıC	40,8		850   9-48V	-	ON	ON	ON	ON						
	36		900 I 9-40V	ON	ON	-	ON	ON	MASTER				-	
ΙГ	38		950   9-40V	ON	ON	ON	-	ON	FAN	1			ON	
ΙГ	40		1000   9-40V	ON	ON	ON	ON	-						
ΙГ	42		1050   9-40V	ON	ON	ON	ON	ON						

LED	DIP SWITCH	SYNCRO by Cable	max 10 SLAVE	<b>EE</b> 88%		
DIM 0/1-10V	DIM Dali	DIM PUSH 230Vac	DIM POT 100KΩ	Psb 0,46W		



CODICE CODE	Tensione di ingresso Input voltage (Vac)	Frequenza di rete Input frequency (Hz)	Potenza di uscita Output power (W)	n° LED Min-Max Vled≅3V	Tensione di uscita Output voltage (Vdc)	Corrente di uscita Output current (mA)	PFC (λ)	CV	Peso Weight (g)
	220-240		17			350	0,93 0,94 - 0,95	-	
I E40DD			19,2	3-13		400			
LE42DP			21,6			450			
			24			500			
LEF W CE DALL			26,4			550			.
LE42DP		50÷60	28,8		9-48	600	0,96	CC	180
DIMMABLE LED POWER SUPPLY DALI/Push/010/110/Slave 5	NO N		31,2	3-12		650			
	Dimming DIP-S   S   Dimming DIP-S   C   DN/OTF   C   DN		33,6			700			
λ 0,85C-0,96 110-240mA SEC 350 - 1.050mA max. 43W			36			750			
U-OUT = 60V tc 75°C ta -25÷50°C			38,4			800			
tc 75°C ta -25+50°C SELV			41			850			
Short circuit protection			43			900			
NTC 115 OUTPUT SET SET SET	www.leflighting.it		38	3-10	9-40	950			
SEC HTG	ANOTH THE PROPERTY OF THE PROP		40			1000			
SEC ON ILED ON			42			1050			

WARNINGS: to maintain SELV insulation and to avoid driver damages, connect to 0..10 or 1..10 terminals only systems with reinforced insulation!

### **TECHNICAL FEATURES**

- Input voltage range 220-240Vac.
- Input frequency 50÷60Hz.
- Terminal block for up to 1 x 2,5 mmq.
- Strain relief for cables with diameter  $\emptyset = 3...8$  mm.
- Max input current: 0,24 A.

#### OUTPUT

- Constant output current 350÷1050mA (selection through dip-switch)
- SELV insulation on output.
- Terminal block for up to 1 x 0,5...1,5 mmq.
- Strain relief for cables with diameter  $\emptyset = 3...8$  mm.
- Selection of output current and voltage by DIP SWITCH (see table).
- Isolated Auxiliary Output 12V 100mA max for LED fan.
- At start-up the fan switches on with a delay of about 2
- Terminal block for external NTC signal for load current reduction: linear brightness decrease from 0,5V (100%) to 0,25V (10%).

#### OPERATING MODES

- There are 7 distinct modes of operation read on start-up (the settings have to be made by dip-switch before ignition):
- 1) ON/OFF
- 2) ON/OFF PUSH (no dimming), with on and off ramps.
- 3) PUSH (push-button) dimming SLOW profile, FAST profile, UP/DOWN profile
- 4) DALI
- 5) 1-10V Dimming, brightness decrease to a preset minimum value without switching off
- 6) 0-10V Dimming, brightness decrease until completely shut off 7) SLAVE
- 1-10V/0-10V and PUSH modes are alternatives to each other;
- Dimming time (0-100%; 100-0%):
- -SLOW profile for 10 seconds,
- -FAST profile for 5 seconds;
- The Low Level in PUSH is different from 0 to distinguish it from OFF. Restart after a power failure:
- in "no dimmer mode" (On/Off), it starts from the last data set;
- in "0-10V or 1-10V dimmer mode", the input value is read and the device switches ON according to the scheduling;
- in "PUSH dimmer mode", the device starts from the last data set.

#### Note about ON/OFF PUSH (no dimming)

- Briefly press the push-button ON/OFF (on and off ramps)

## **USER GUIDE** \_E42DP

Wiring diagrams

#### PUSH MODE (Setting by DIP-SWITCH)

- Short press the push-button for ON/OFF.
- Long press the push-button for dimmer.
- Memory of the last data dimming.
- At each ON, the driver starts from the last data set.
- Method of resynchronization (sometimes the system could be out of sync, i.e. some lamps will be on, others off, etc.): in OFF/ON position press the push-button for a long time (30 sec), the driver will be 100% and the system will now be resynchronised.
- Max length of PUSH cables: 15 m.
- Max number of drivers: 10.

#### SLOW PROFILE (SLOW) (Setting by DIP-SWITCH)

- Pressing the push-button, the dimming starts up to the maximum (or minimum) value and then reverses. Time from minimum to maximum 10sec

#### FAST PROFILE (FAST) (Setting by DIP-SWITCH)

- Pressing the push-button, the dimming starts up to the maximum (or minimum) value and then reverses. Time from minimum to maximum, 5sec.

#### UP/DOWN PROFILE (UP/DOWN) (Setting by **DIP-SWITCH)**

- Pressing the push-button, the dimming reverses its direction; once reached the minimum (or maximum) value, the staus is maintained. Time from minimum to maximum, 10sec.

#### **DALI MODE (Setting by DIP-SWITCH)**

-The dimming level is set by the value of the dali signal sent.

#### 1-10 V (0-10V) MODE

- It is possible to use commercial 1-10V (0-10V) dimmers. LED brightness varies proportionally to the signal sent to the terminal.
- It is possible to use 100KOhm potentiometers. LED brightness change is proportional or logarithmic depending on the potentiometer model (recommended logarithmic type).

#### MASTER MODE

- The MASTER function allows the synchronization of multiple drivers (max 10 drivers) that can be set as slaves (for example LE20DP).

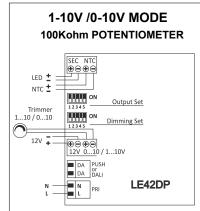
Note: In case of Dip-Switch wrong setting, at the start-up, the driver switches ON and the LED flashes 1s ON and 1s OFF.

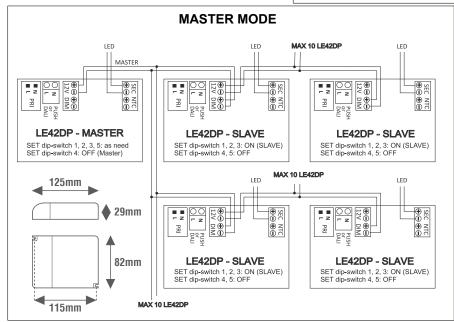
### SLAVE MODE (Setting by DIP-SWITCH)

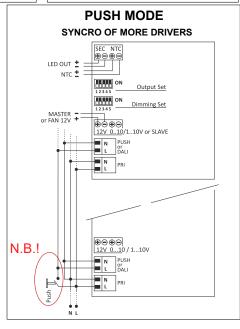
**2020 MODEL** 

- Its is possible to use LE42DP in SLAVE mode (max 10).
- -The terminal for the "DIM" input is used for the input of the master signal.

## **DALI MODE** LED ± NTC ± Output Set Dimming Set ⊕⊖⊕⊝ 12V 0...10 / 1...10V DA PUSH or DA DALI LE42DP







- Protection against overtemperature (OTP)

- Overload protection (OLP)

- Short circuit protection (SCP) - Open circuit Protection (OCP)

- Power factor correction (PFC) λ ≥ 0,96

Operating ambient temperature Ta -25°C ÷ +50°C

- Max case temperature on Tc 75°C



Power supply not suitable for no-load operation

EN55015 EN61000-3-2 EN61347-1 EN61347-2-13 EN61547 EN62384



Rev. v 8.

[AA]

















AEE Identification nr.IT18040000010321

PRODUCT TO BE DISPOSED DIFFERENTLY FROM URBAN WASTE











Reference Standards



Ø