

## EMERGENCY LIGHTING KIT FOR LED: INSTALLATION GUIDE

The electronic units for emergency lighting are suitable for power LED (current controlled) or LED modules (voltage controlled). They can be used indifferently for maintained (main, 220-240V, in combination with LED electronic driver), or emergency operation. All the models have sealed NiCd batteries able to guarantee high efficiency with high temperatures.

The **PAN** can be put on a false ceiling or on a ceiling lamp, module, channel, thus allowing any light spot to be qualified for emergency in a simple and quick way, where needed.

The **PAN** electronic devices are designed according to EN61347-2-13, EN61347-2-7, EN61547, EN55015, EN60598-2-22, EN61000-3-2, SELV.

**IMPORTANT:** always read the present instruction leaflet

- for the wiring please refer to enclosed wiring diagrams
- great attention must be paid to polarity during the installation of the battery
- keep batteries away from heat sources (away from electronic driver or LED source)
- in order to check the correct functionality we recommend a charging of about 30 hours
- this system is made to be powered only with the supplied batteries: do not connect any external battery charger.
- it is advisable to effect periodically (every 3 months) at least one discharge and charge cycle in order to assure the max efficiency
- replace the batteries every 4 years or after 500 charge/discharge cycles
- before every maintenance operation, disconnect all mains
- this product contains materials which could be toxic if improperly disposed in the environment
- keep this instruction leaflet for any further reference

**ATTENTION:** this unit should only be used for purposes for which it has been intended and should be installed using the instructions which are provided. The manufacturer cannot be held liable for damages to person, animals or objects as a result of improper, unreasonable and wrong usage.

### Technical characteristics:

- supply voltage: 220 ÷ 240V - 50/60Hz
- supply current: 20mA - cos φ0.6
- max case temperature: 70°C
- ambient temperature: 5 ÷ 50°C
- recharging time: 24h
- terminals max connection size: 1.5mm<sup>2</sup>
- Connected to power supplies 90V maximum output voltage 2A maximum output current
- charging device with supply is reinforced insulation able to recharge the battery normally after the test in clause 22.3 of the IEC 61347-2-7:2007

### 1h - Batt. NiCd 7,2V-1,6Ah

Dip-switch position	Emergency working voltage (VL)	Emergency output current (I)	Max power LED current controlled	LED modules voltage controlled
A	9 - 12V	350mA	$N_{LED}=12 / V_F$	12V-2A max
B	9 - 24V	350-160mA	$N_{LED}=24 / V_F$	24V-2A max
C	9 - 46V	350-80mA	$N_{LED}=45 / V_F$	-
D	9 - 58V	350-60mA	$N_{LED}=57 / V_F$	-

### 3h - Batt. NiCd 7,2V-4Ah

Dip-switch position	Emergency working voltage (VL)	Emergency output current (I)	Max power LED current controlled	LED modules voltage controlled
A	9 - 12V	350mA	$N_{LED}=12 / V_F$	12V-2A max
B	9 - 24V	350-160mA	$N_{LED}=24 / V_F$	24V-2A max
C	9 - 46V	350-80mA	$N_{LED}=45 / V_F$	-
D	9 - 58V	350-60mA	$N_{LED}=57 / V_F$	-

### Emergency Vmax dip-switch settings

	A	B	C	D
	12V	24V	45V	57V
1	ON	-	ON	-
2	ON	ON	-	-

### WIRING

#### 1) Direct line:

Connect the terminals 1 - 2 (L - N) to the mains that must never be disconnected (battery charge). When there is a decrease in mains voltage the emergency automatically starts working.

#### 2) Interrupted Line:

connect as shown in the wiring diagram EL Series or ELT Series.

#### 3) Led source out:

Connect LED source to the OUT terminal (always respect cable polarity).

#### 4) External driver LED connection:

Connect the terminal (+) and (-) PWR to external driver (always respect polarity).

#### 5) Battery:

Connect battery to BATT. terminal.

#### 6) Led indicator:

Shows the presence of mains and battery in charge. It must always remain connected to device in a visible place outside near the lamp qualified for the emergency.

### ATTENTION!

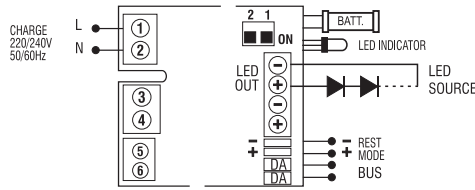
TO NOT CAUSE LED DAMAGE,  
PLEASE CONNECT FOLLOWING THIS ORDER:

- 1) LED SOURCE;
- 2) BATTERY CABLE;
- 3) MAINS CONNECTION

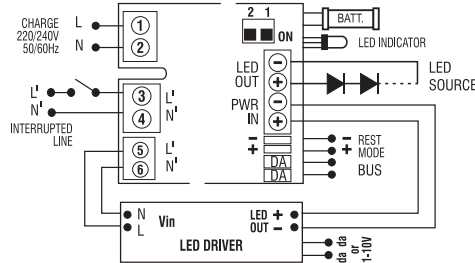
DO NOT DISCONNECT AND CONNECT THE LED SOURCE DURING EMERGENCY OPERATION

### WIRING DIAGRAMS

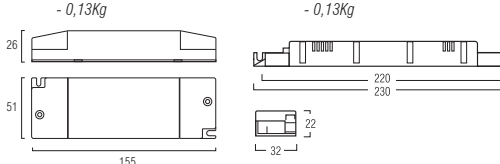
#### non-maintained (emergency only)



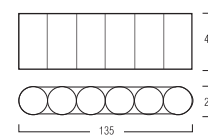
#### maintained with external electronic driver



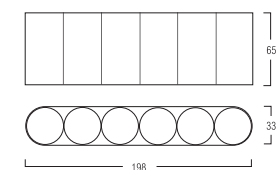
### DIMENSION AND WEIGTH



1h - 7,2V-1,6Ah | 0,30 Kg

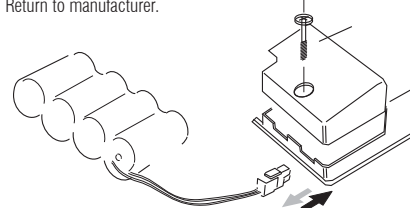


3h - 7,2V-4Ah | 0,75 Kg



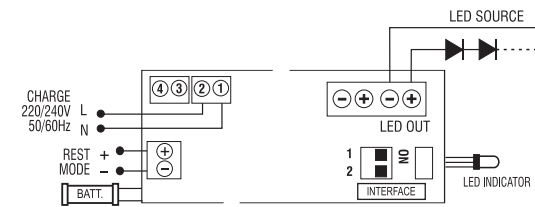
### BATTERY REPLACEMENT

Sealed NiCd batteries. To replace batteries follows the instructions. Use only original batteries provided by **PAN** do not discard in the environment. Return to manufacturer.

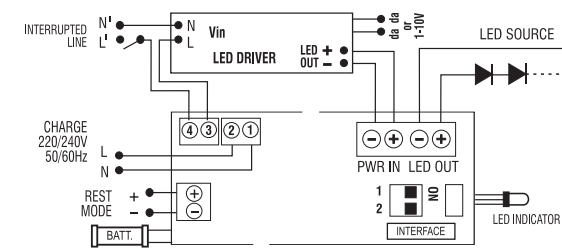


### WIRING DIAGRAMS

#### non-maintained (emergency only)



#### maintained with external electronic driver



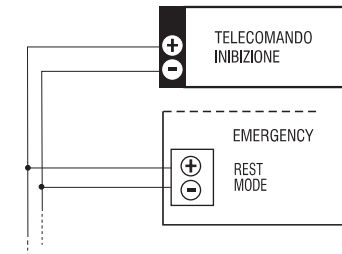
### ELECTRONIC CONTROL GEAR WITH REINFORCED INSULATION

#### INHIBITIONS WIRING DIAGRAMS

##### Rest mode facility

#### REMOTE CONTROL DEVICE

it allows both to switch off and switch on the emergency lamps during emergency mode. The rest mode is automatically resetted when mains voltage is restored. This remote control device can be installed so as to operate several emergency units at the same time.



#### PUSH BUTTON AND BATTERY

it allows only to switch to "rest mode" during emergency mode, using a remote push button and 9V battery. The rest mode, in accordance with Standards prescriptions, is automatically resetted when mains voltage is restored.

