

SERIE DES • FLASHERS & SYNCHRONISERS



The DES series are digital microcontroller based flashers, designed to be the most complete and versatile electronic flashers in the market.

They offer an infinite rhythm selection, output voltage regulation and selection, photocell control, synchronisation, and possibility to operate with lampchanger, dual-filament lamps and LED lanterns.

Features

- Microprocessor controlled.
- Stabilized and programmable output voltage.
- Output voltage regulation by PWM (Pulse Width Modulation).
- Epoxy-resin sealed watertight housing, providing excellent resistance to corrosion.
- High timing accuracy (Tolerance $\pm 0.05\%$).
- Low energy consumption.
- Lamp failure sensing.
- Switch-on / off by external photocell.
- Adjustable daylight degree and day-night hysteresis cycle.
- Temperature range: From -40 to $+75$ °C.
- Second output selection for lampchanger, dual-filament or LED diodes.
- Inverse-polarity and short-circuit protection.
- Protection against excess of temperature and temporary excess of voltage.
- “Watch Dog” automatic anti-blocking reset system.
- Stainless-steel screws. Colour coded terminals.
- Internal programming: Up to 256 predetermined rhythms, selected by microswitches.
- External programming by PC: Any rhythm and any lamp voltage.
- LED indicating alarms and incidences, located on its back side.

Options

- SYNC-GPS synchroniser.
- Remote control and monitoring.

Technical specifications

Technical specifications	DES33	DES10
Output	6.2; 10.3; 12 V, 24 V \pm 2%	for LEDs
Maximum lamp current	16 A	8 A
Input rate	4.5 a 35 V DC	4.5 a 20 V DC
Second output	- Adjusted for 12 V lampchanger. - PWM adjusted for dual filament. - PWM adjusted for LED.	8 A Solar charge regulator
Idle current	< 5 mA	
Selectable rhythms: Preprogrammed Configurable	252 4	
Timing accuracy	\pm 0.05%	
Temperature range	-40°C +75°C	
Weight	0.65 kg	
Watertightness degree	IP-67	
Electromagnetic compatibility	CE	
Connection to telecontrol	RS232	

