

AM-8 LED FLASH CONTROL UNIT

AM-8 is a robust, efficient, user-programmable LED flasher. It has 6 independent LED channels, which are all constantly monitored for LED shorts and opens. The electronics are enclosed in anodized aluminum housing for maximum protection. A large high quality dial switch with sealed stainless steel shaft provides easy access to flash codes and durable long-lasting service. Even though there are only 16 positions on the code switch, you are not limited to having only 16 flashing characters. With API's free APICalibrator II software, you can simply program the unit to run almost **ANY** flashing code. AM-8 retains your settings when it is disconnected from power.

For 255+1 flashing codes and seasonal control with 365-day timer, please check out AM-6.

Accurate Flash Timing:

AM-8's flash timing is very accurate, stable and consistent.

Efficiency and Reliability:

AM-8 incorporates API's TracSwitcher technology for superior energy efficiency. 80%-90% (over the full operating voltage range) of power taken from battery is delivered to the load (LED light source). Higher efficiency not only reduces the system cost by requiring less battery capacity, it reduces heat dissipation by the LED driver transistors as well, making it possible to use smaller surface mount parts and boost reliability.

Multi-channel LED Drive:

Testings confirm that the voltage across LED varies, even among the same colored ones, given the same drive current. Therefore a few LEDs paralleled together do not share current equally. The ones getting more current will be brighter than those with less current, which would render LED light's intensity pattern unacceptably low at certain angle and unnecessarily high at some other angles. What is worse, in high power applications, the sharing discrepancy would get so bad that may even cause some LEDs to be overdriven and result in much shorter service life. AM-8 has 6 independent closed-loop LED channels which ensure all LEDs get the correct current feed.



Protection:

- AM-8 is enclosed in (optionally grounded) anodized aluminum housing. All exposed terminals have surge protection devices.
- AM-8 implements a sophisticated monitoring and protection system. With API/Pharos Marines "1 by 4" or "3 by 4" LED arrays, AM-8 can detect any SHORT or OPEN condition caused by a single LED in the array and take appropriate action to protect itself, while sending out a failure signal, via data port or an open-drain FET switch rated for 30V 100mA.
- AM-8's power supply inputs are reverse polarity protected.
- AM-8 is tested to meet or exceed IEC/EN 61000-4-2 and IEC/EN 61000-4-5 requirement.

Connectivity:

AM-8 comes with both a RS232 and a RS485 port. With RS232, connecting to a PC or most radios is very easy. With RS485, you can build a large network of lights and other industrial devices extending up to 4000ft. RS485 is the international



standard for industrial control applications. When properly deployed, it is very suitable for noisy industrial environment.

User-Programmability:

Automatic Power provides a FREE windows software, APICalibrator-II. You can use this software to communicate with the AM-8 and program its features, either locally via a cable or remotely via a wireless radio. Programmable features include:

- User-set flashing code.
- User-set LED power level.
- Different intensity for secondary LED group.
- Photocell sensitivity.
- Solar Charging ON/OFF thresholds.
- Forced Turning-Off.

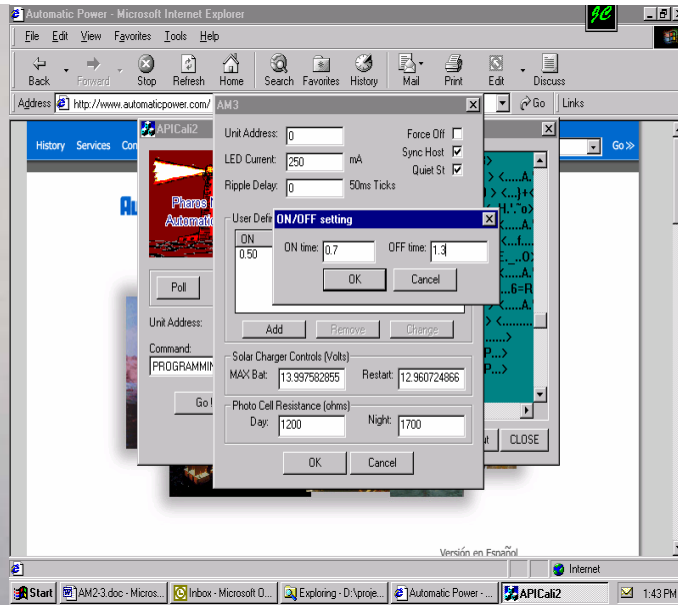
- Special synchronization effect, such as ripple, alternating.
- RS485 node address.

Specifications:

Supply Voltage: 10V-29VDC
Number of flashing Codes: 15+1
Number of LED power Levels: 15+1
Number of LED Channels: 6
LED Current Per Channel: 50-800mA
Max LED drive Current: 3A
LED current error: +/-5mA
Quiescent Current: 6mA
Solar Charger Capacity: max 7A
Operating temperature: -40 to +80°C
Protection: Conforms to IEC/EN 61000-4-2 and IEC/EN 61000-4-5



Inside look of AM-8 Flasher



APICalibrator-II software

