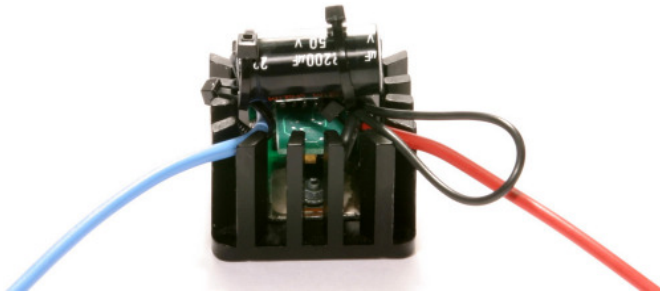


Two-Wire DC Beacon Flasher

Installs With Only Two Connections



Easy installation, same high reliability

The ZANE Two-Wire DC Beacon Flasher for incandescent features the same two-wire hookup as a mechanical flasher for fast and error-free installation ... yet retains the same legendary reliability of our Standard (four-wire) Flasher.

Two-wire hookup means this Beacon Flasher installs into a new application in about five minutes ... or replaces a less reliable mechanical flasher in a retrofit with zero wiring harness modification. Baseplate mounting holes, detailed installation instructions, and tagged power leads all speed the task. Leads can even be reverse connected without damage. In many instances, the unit can even be left hanging in the loom for fast field installation and improved cooling.

This Flasher is engineered for environmental extremes ranging from tropical to arctic. A heavy, cast aluminum heat sink absorbs system-generated heat leaving electronic components cool for long life. This heat sink also forms a protective, open frame circuit enclosure shielding delicate components from the shock and abrasion encountered in everyday use. Electrical connections are 100 percent soldered to practically eliminate even the possibility of an open circuit.

An extra-heavy MOSFET (the main stress-bearing electrical component) operates at a mere 6 percent of rated capacity as massive extra margin for meeting difficult conditions, delivering high efficiency (about 98 percent), and promoting long life.

State-of-the art control circuitry maintains a constant flash rate over normal battery voltage, while low battery (below 11V) triggers a decreased rate as a visible "low battery" indicator.

The standard 60 flashes/minute rate is hand trimmed for extra accuracy, while all custom rates (such as 50 or 55) are available. A premium-cost tantalum timing capacitor greatly enhances flash stability under temperature and age stress. Adjustment is never needed or even possible.

A conformal coating of electronic-grade silicon seal provides extra protection against moisture, corrosive fumes, and other contaminants. A remote activation wire is included for such purposes as radio controlled on/off for timed applications. Units for both 12V and 24V battery are available at the same price.

Features

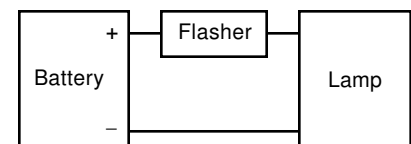
- Two-wire hookup for fast installation in new and retrofit applications
- Stable, accurate flash rate. No adjustment needed -- ever
- Powers incandescent lighting
- Extra-heavy components, open frame circuit construction, 100% soldered connections, silicone sealed
- Conversion efficiency about 98%. 12V and 24V versions.
- Can be reverse connected without damage

Applications

- Highway beacons
- Marine buoys
- Continuous-duty flasher for mobile applications
- Signage
- Towers

Protected under US Patent 5,237,263
Pat Pend
Made in USA
web: www.zaneinc.com

Wiring Diagram



Technical Specifications

Mode of Operation

Pulse width modulation with 50%/50% flash duty cycle. Storage capacitor retains electrical charge during "on" cycle.

Flash Rate

Standard flash rate is 60 flashes/minute, Custom rates such as 50, 55 flashes/minute available

Flash Accuracy and Stability

Accuracy and stability are each about +/- 1 flash/minute typical

Supply Voltage

12V Version: 7 to 17 vdc working, up to 24 vdc momentary.
24V Version: 19 to 30 vdc working, up to 42 vdc momentary
Battery or filtered dc only. Fuse or breaker in electrical box

Continuous Output Current

Full 4A rated current up to 125 F (52 C) ambient, 3A up to 150 F (66 C)

Ambient Temperature Range

- 40 F (- 40 C) to 150 F (66 C) with restrictions noted

DC-DC Conversion Efficiency

About 98% at full rated load, somewhat higher under partial loading

Reverse Polarity Protection

Input leads can be reverse connected without damage

Transient Protection

Double resistive/capacitive filtering, zener diode clamping, diode reverse-connection protection

Size

About a 1.8" (42 mm) cube

Weight

About 3.5 oz (98 gm)

Installation

Installs on a panel through 1/8" holes drilled in a 1 1/2" square pattern. In some cases may be left hanging on the loom for fast field installation and improved cooling.

Power Dissipation of Drive Circuitry

Less than 0.038W

Load Types

Incandescent only

Heat Sink

Heat sink is electrically isolated from voltage and acts as a protective, open frame circuit enclosure. Maximum temperature rise under load is about 15 F (8.5 C) above ambient

Accessories Included

Detailed installation instructions

Warranty and Disclaimer:

Although Manufacturer warrants the goods, so far as the same are of its manufacturer, against defects in materials and workmanship under normal use and service for which they were designed for a period of 90 days after invoice date, Manufacturer's obligation under this warranty are limited, at its option, to the replacement of the part or parts determined to be defective or to the refund of the purchase price.

Claims made in this data sheet are based on extensive testing and are believed to be true. Manufacturer shall under no circumstances be liable for any special, indirect, incidental, or consequential damages owing to failure of the goods. Manufacturer makes no warranty of fitness for a particular purpose or merchantability or any other warranty, oral or written, expressed or implied, except as specifically set forth herein. Do not use ZANE products as critical components in life support devices or systems, aircraft, or other hazardous applications. Quotation, order acknowledgment, purchase, etc. does not grant or imply a license under any present or future patents owned by seller except to extent purchases are made from seller.

Any goods returned under warranty must be returned freight prepaid to ZANE International Inc., Minden, NV.

Two-Wire DC Beacon Flasher

Part #	UPC Number	Input Voltage	Maximum Current
AF2-48R-TSFR-12V	31385	12V	4A
AF2-48R-TSFR-24V	31485	24V	4A