FS-3
DC Flasher
User Manual

www.ELTECCORP.com
Part No. 0FS3
Rev. 1216A
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The FS-3 is microcontroller-based which gives it tremendous versatility and low power consumption. The FS-3 is intended for use in solar power applications or in any application where there is a ready source of 11.4 VDC-30 VDC.

**SPECIFICATIONS**
The FS-3 is a highly versatile programmable DC flasher.

**ELECTRICAL SPECIFICATIONS**
- Input voltage range ...... 11.4 VDC to 30 VDC
- Max load power .......... 40 Watts per output circuit at 11.4 to 30 VDC
- Operating temp .......... -20°C to +74°C

**PHYSICAL SPECIFICATIONS**
- Length ....................... 5.5”
- Width ......................... 2.625”
- Height ....................... 1.64”

**FUNCTIONAL SPECIFICATIONS**
Flash Patterns Via Dip Switch:
1. Standard Wig-Wag (Dual Beacon): 55 cycles/minute (50%ON,50%OFF)
2. Standard Wig-Wag (Single Beacon): 55 cycles/minute (40%ON,60%OFF)
3. Rapid Flash Pattern 1: 2/4-1  ref: FHWA 4(09) (I):
4. Rapid Flash Pattern 2: WW+S  ref: FHWA 4(09)-41 (I)

Alternate Modes Via Dip Switch:
- Slow Flash Mode — for visualizing Rapid Flash patterns
- Night Dimming — automatic via Photocell (may be disabled)
- Night Run Only — automatic via Photocell

Operation Modes — jumper position determines control options:
1. 24-hour flash
2. Flash when control input grounded (ON GND)
3. Flash when voltage is applied to control input (5-12VDC)
CONFIGURING THE FLASHER
To configure the FS-3 first remove the case cover. With a Phillips screwdriver, remove the two cover retaining screws. The cover should easily slide off.

User configurable features are accessed through:
1. DIP switch for flash-related options and
2. A 5-pin header for control options.

CONTROL OPTIONS
The 2-pin jumper provided should be positioned on the header for the desired mode of operation. The three modes of operation are:
1. Continuous flash or ON 24-HR. The jumper is shown in this position in image above.
2. Flash when input wire (yellow) is grounded—see ON GND.
3. Flash when voltage (5-12VDC) is applied to input wire (yellow). See ON 5-12V.

NOTE: JUMPER IS CONFIGURED AT ELTEC PRIOR TO SHIPPING IF PART OF A WARNING SYSTEM.
FLASH OPTIONS

Slow Mode — Switch 1 ON (Must power cycle after switching pin)
Night Only Mode — Switch 2 ON
2/4-1 Pattern — Switch 3 ON
WW+S Pattern — Switch 4 ON
WW+S Pattern — Switch 3 and 4 ON
Wig Wag (Dual Beacon) — Switch 3 and 4 OFF
Wig Wag (Single Beacon) — Switch 5 ON
Dimming Enabled — Switch 6 ON
Dimming Disabled — Switch 6 OFF

WIRE/CONNECTOR PIN OUT

<table>
<thead>
<tr>
<th>PIN</th>
<th>COLOR</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blue</td>
<td>Flash 1 Output (for LED1 negative)</td>
</tr>
<tr>
<td>2</td>
<td>Orange</td>
<td>Flash 2 Output (for LED2 negative)</td>
</tr>
<tr>
<td>3</td>
<td>White/Red</td>
<td>Photocell</td>
</tr>
<tr>
<td>4</td>
<td>White/Black</td>
<td>Photocell</td>
</tr>
<tr>
<td>5</td>
<td>Red</td>
<td>+11.4 VDC to 30 VDC (power fro FS-3 and LEDs)</td>
</tr>
<tr>
<td>6</td>
<td>Black</td>
<td>DC Ground</td>
</tr>
<tr>
<td>7</td>
<td>Yellow</td>
<td>Control Input</td>
</tr>
<tr>
<td>9</td>
<td>White/Yellow</td>
<td>Control Ground*</td>
</tr>
</tbody>
</table>

*Available for ON GND control mode with external dry contact (Yellow–N.O., White/Yellow–Com).
LIMITED WARRANTY

Electrotechnics Corporation (d.b.a ELTEC) warrants devices manufactured by ELTEC to be free of defects in material and workmanship for a period of 25 months from the date of purchase.

To determine if the FS-3 is within warranty, locate the serial number (SN) on the white decal. The letter determines the month (A–L = January through December) it was manufactured followed by the year. Example: L16xxxxx = December ‘16.

ELTEC will repair or replace any FS-3 flasher returned prepaid within the warranty period as long as there is no evidence that the unit has been misused, abused, damaged by input over-voltage, output overloads, lightning or water or altered in any manner without the express written permission of ELTEC. ELTEC disclaims any warranties expressed or implied, including warranties of merchantability and/or fitness for a particular purpose.

In no event shall ELTEC be held liable for incidental or consequential damages. Warranty repairs are handled during normal business hours. Ship flasher to:

ELTEC
1310 Commerce St.
Marshall, TX  75672
U. S. A.

Products requiring warranty service must have a RETURN MATERIAL AUTHORIZATION (RMA) number

1) Before returning any flasher, contact ELTEC’s Technical Support Staff at 903-938-1901 / 800-227-1734 or company@elteccorp.com to receive an RMA number.

2) Fill out the Return Material Authorization form in its entirety. The form is available at www.ELTECCORP.com under the Tech Support tab.

3) Place the RMA form in the box with the item(s).

4) Return the authorized item(s) per shipping instructions seen below.

Shipping instructions:

1) Make sure you include all item(s).

2) Pack item(s) carefully to avoid damage in transit.

3) Place the RMA sheet in box; (we recommend you make a copy for your records).

4) Label each box with the valid RMA # on the outside. It must be recognizable.