



Traffic Products and Warning Systems

# FS-2B

## DC Flasher for RRFB Systems User Manual

[www.ELTECCORP.com](http://www.ELTECCORP.com)

Part No. 0FS2B

Rev. 0515A



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# **SPECIFICATIONS**

The FS-2B 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 VDC to 30 VDC
- Operating temp..... -20°C to +74°C

## **PHYSICAL SPECIFICATIONS**

- Length..... 5.5”
- Width ..... 2.625”
- Height ..... 1.64”

## **FUNCTIONAL SPECIFICATIONS**

Three Flash Patterns:

1. Standard Wig-Wag: 75 cycles/minute
2. Rapid Flash Pattern 1: (2/4-1) ref: FHWA 4(09) (I)
3. Rapid Flash Pattern 2: (WW+S) ref: FHWA 4(09)-41 (I)

Slow Flash Mode – for visualizing Rapid Flash patterns

Night Dimming – Automatic via Photocell (may be disabled)

Operation Modes:

1. 24-hour flash
2. Flash when control input line taken high (5-12 VDC)
3. Flash when control input grounded

The FS-2B is microcontroller-based which gives it tremendous versatility and low power consumption. The FS-2B is intended for use in solar power applications, or in any application where there is a ready source of 11.4 VDC to 30 VDC.

# CONFIGURING THE FLASHER

To configure the FS-2B 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.

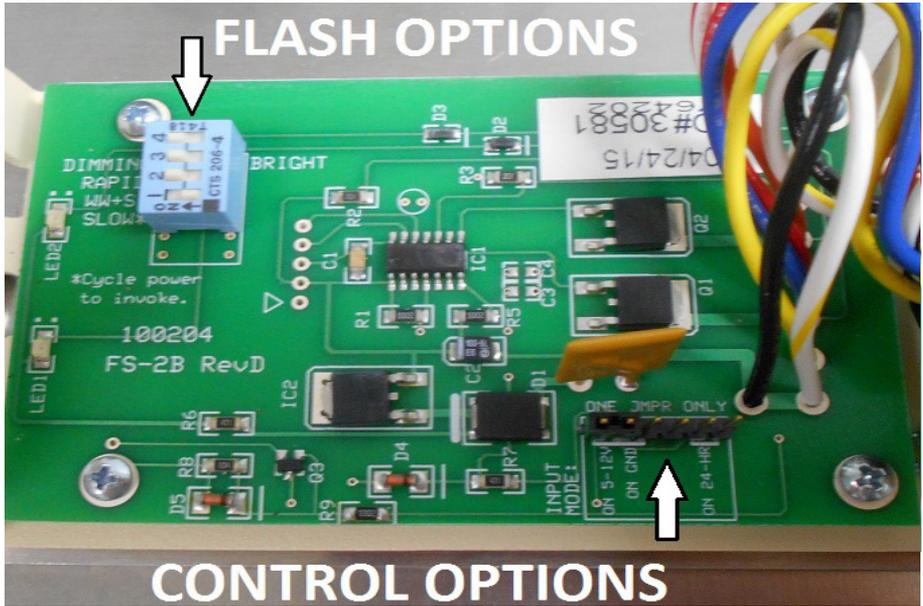


Figure 1

## 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:

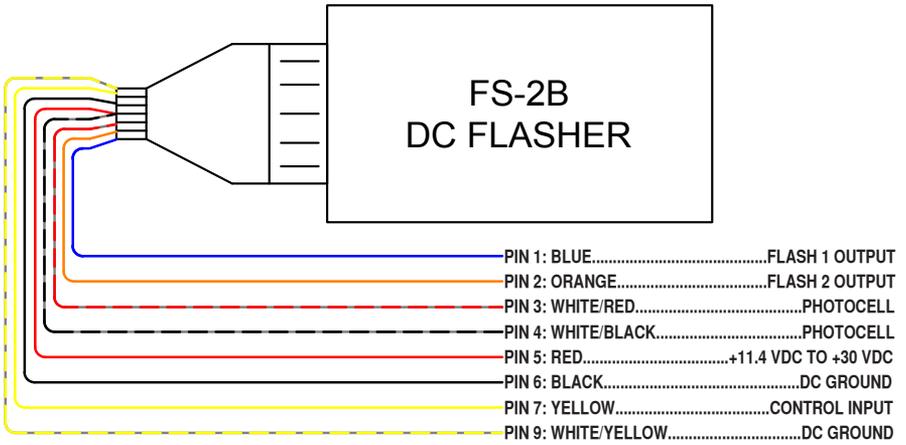
1. Continuous flash or **ON 24-HR**. The jumper selection is shown in Fig. 1 above.
2. Flash when control input wire (yellow) is grounded – see **ON GND** in Fig. 1.
3. Flash when control input wire brought high (5-12 VDC) – see **ON 5-12V** in Fig. 1.

## FLASH OPTIONS

The 4-position DIP switch is used to configure flash-related options as follows:

SWITCH	ON	OFF
1	Quarter Speed	Full Speed
2	Wig-Wag+Sync (WW+S) Rapid Pattern	Pattern Set via Switch 3
3	Standard (2/4-1) Rapid Flash Pattern	Wig-Wag
4	Night Time Dimming Enabled	Full-Time Bright

# WIRE / CONNECTOR PIN OUTS



**Figure 2**

# 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-2B 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: C12xxxxx = March '12.

ELTEC will repair or replace any FS-2B 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](mailto: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](http://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.

