

FS2200-S Solid State Flasher MODULE

Installation/Operations Manual



The *FS2200-S Flasher Module* is a compact state of the art, solid state, universal flasher. It is designed to flash headlamps and other tungsten or halogen lights.

Features and Specifications:

Outputs 1 & 2;

- a) Will deliver + Battery output to power lamps with 10A MAX per OUTPUT.
- b) Each individual outputs are short circuit current protected
- c) Connections are via a screw terminal block

Input Power and Control;

- 1) Power is applied to the +12V BATT. Terminal screw, via a 20 A inline fuse.
- 2) Ground is applied to the GROUND terminal
- 3) FLASHER ON/OFF SWITCH - +12Vdc at this input enables the flasher

Warning

- 1. Any device used inside a vehicle, may cause severe personal injury if not properly mounted and secured. Objects used in the vehicle may become airborne during a collision or other sudden changes in vehicle speed or direction, such as braking, acceleration or turns.
- 2. Be sure to mount unit through the steel of the vehicle. Avoid mounting through plastic or other non-structural materials.
- 3. **POINT OF INSTALLATION MUST NOT INTERFERE WITH DEPLOYMENT OF VEHICLE AIR BAGS.**
- 4. **D&R Electronics recommends this or any of our products be installed by qualified professionals.**

- 4) HIGH BEAM CONTROL - Applying +12Vdc to this input will turn on the high beams (if off) and override the Flashing mode to keep the Lamps ON “steady burn”.
- 5) Input from and Output to the factory DRL module, this is a N.C. (Normally Closed) relay contact.
- 6) +12V IGNITION - control input
- 7) DRL DEFEAT - +12V to this input will defeat the DRL function, external switch required.
- 8) Flasher ON/OFF control, +12V to this input will turn the flasher ON.

Mounting the FS2200-S Flasher Module

The *FS2200-S* may be mounted anywhere inside the vehicle, or any convenient location that is determined by proper planning and installation techniques.

Proceed as follows:

1. Determine an appropriate mounting location
2. Confirm there is adequate access and clearance for the wiring and its connections.
3. Secure the *FS2200-S* with 2 self tapping mounting screws (not supplied).

Troubleshooting

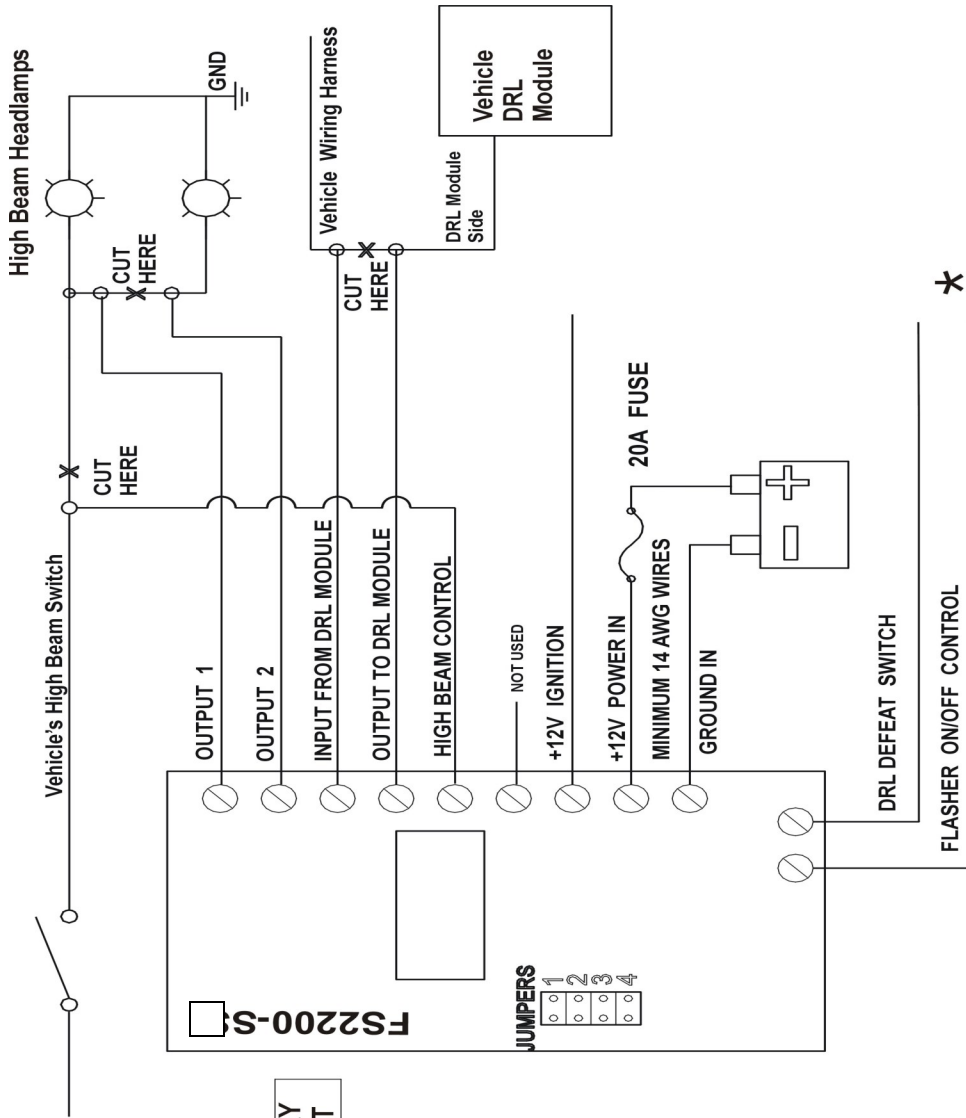
PROBLEM	POSSIBLE CAUSE	SOLUTION
No power at the Lamp outputs	Bad connection to <u>“12V & GND INPUT”</u> Faulty/Incorrect Ignition connection to LED modules Faulty ground Faulty Unit	Check 12V & GND INPUT connections for loose or missing wires. Check installed fuse, if this is faulty replace it. Check if Ignition wire has constant +12V output when vehicle is running. Check Vehicle Chassis “Ground” connection Return Unit for replacement
Input power OK- No output to connected Lamps Lamps not on “STEADY BURN”	Faulty connection from Flasher module (FS2200-S) terminal block to Lamps. Faulty connection to STEADY BURN input terminal on Flasher module. Faulty Unit	Ensure that these wires are firmly secured with the terminal screw and does not pull out when tugged. Verify that all Input and Output wires are properly connected and firmly secured by the terminal screw. Return Unit for replacement
Partial output from Flasher module; connections check out, connected Lamps check out, one or more outputs dead.	Faulty Unit	Return for replacement

JUMPER SETTINGS

1	2	3	4		FACTORY DEFAULT
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Single flash pattern/DRL off in flash mode S1 & S2 are ON - OFF (maintained contact)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Single flash pattern(30%) DRL off in flash mode S1 & S2 are ON - OFF (maintained contact)
				<input type="radio"/>	Double flash pattern/DRL off in flash mode S1 & S2 are ON - OFF (maintained contact)
			<input type="radio"/>		Multiple flash pattern/DRL off in flash mode S1 & S2 are ON - OFF (maintained contact)
		<input type="radio"/>			Single flash pattern/DRL off in flash mode S1 & S2 are ON - OFF (maintained contact)
			<input type="radio"/>		Single flash pattern(30%) DRL off in flash mode S1 & S2 are momentary
		<input type="radio"/>			Double flash pattern/DRL off in flash mode S1 & S2 are momentary
			<input type="radio"/>		Multiple flash pattern/DRL off in flash mode S1 & S2 are momentary
<input type="radio"/>					Single flash pattern(30%) DRL on in flash mode S1 & S2 are ON - OFF (maintained contact)
<input type="radio"/>				<input type="radio"/>	Double flash pattern/DRL on in flash mode S1 & S2 are ON - OFF (maintained contact)
<input type="radio"/>		<input type="radio"/>			Multiple flash pattern/DRL on in flash mode S1 & S2 are ON - OFF (maintained contact)
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<input type="radio"/>				<input type="radio"/>	Double flash pattern/DRL on in flash mode S1 & S2 are momentary
<input type="radio"/>		<input type="radio"/>			Multiple flash pattern/DRL on in flash mode S1 & S2 are momentary
<input type="radio"/>			<input type="radio"/>		Single flash pattern/DRL on in flash mode S1 & S2 are momentary

NO JUMPER

INDICATES THAT
JUMPER IS ON



★ NOTE:

When configuring the type of input switch (momentary or toggle ON/OFF), both of these control lines will be identically controlled.

You can not use a momentary switch on one line and a toggle on the other.

WARRANTY

D & R Electronics warrants its new products to be free from defects in material and workmanship, under normal use and service for a period of one year on parts replacement.

This warranty applies only to original purchasers acquiring the product directly from D&R Electronics, or its authorized dealers. Warranty will not be recognized without proof of purchase or bill of sale.

This warranty is not transferable.

The warranty begins on the date of delivery to the first user/purchaser.

This warranty shall not apply to products which must be repaired due to normal wear and tear, negligence, improper installation, abuse, misuse, or which have been altered or modified at a facility other than D & R Electronics, or its authorized depot centers.

Units proved to be defective within the warranty period, based on an examination by D&R Electronics, will be replaced or repaired at D & R Electronics' option. This warranty does not cover travel expenses or labor charges for removal or installation.

Lamps, flash tubes, batteries or other items considered consumables are not covered under warranty.

This warranty is in lieu of all other express warranties. D&R Electronics makes no warranties, expressed or implied, other than the express warranties contained herein.

PRODUCT RETURN POLICY

In order to provide you with faster service, product returns for repair or replacement, must have a **Return Goods Authorization Number (RGA number)**. Please contact our company to obtain a RGA number before you return the product to D & R ELECTRONICS. Write the RGA number clearly on the package. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

D & R ELECTRONICS assumes no responsibility or liability for expenses incurred for the removal and/or the installation of products requiring service and/or repair. Repairing or replacing product is at the discretion of D & R ELECTRONICS.

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