

# Voswitch JL300 6-Switch Programmable Switch Panel Power System

## Read before installing!

1. Connect the black ground wire directly to the Negative terminal of the battery. DO NOT connect to frame ground studs or ground distribution studs.
2. Do not connect any other power feeds to the power module's power stud.
3. Do not use the JL300 to control a winch. Use the winch manufacturer's supplied device. Installation should be performed by a qualified technician, to avoid damage to the system or output accessories.

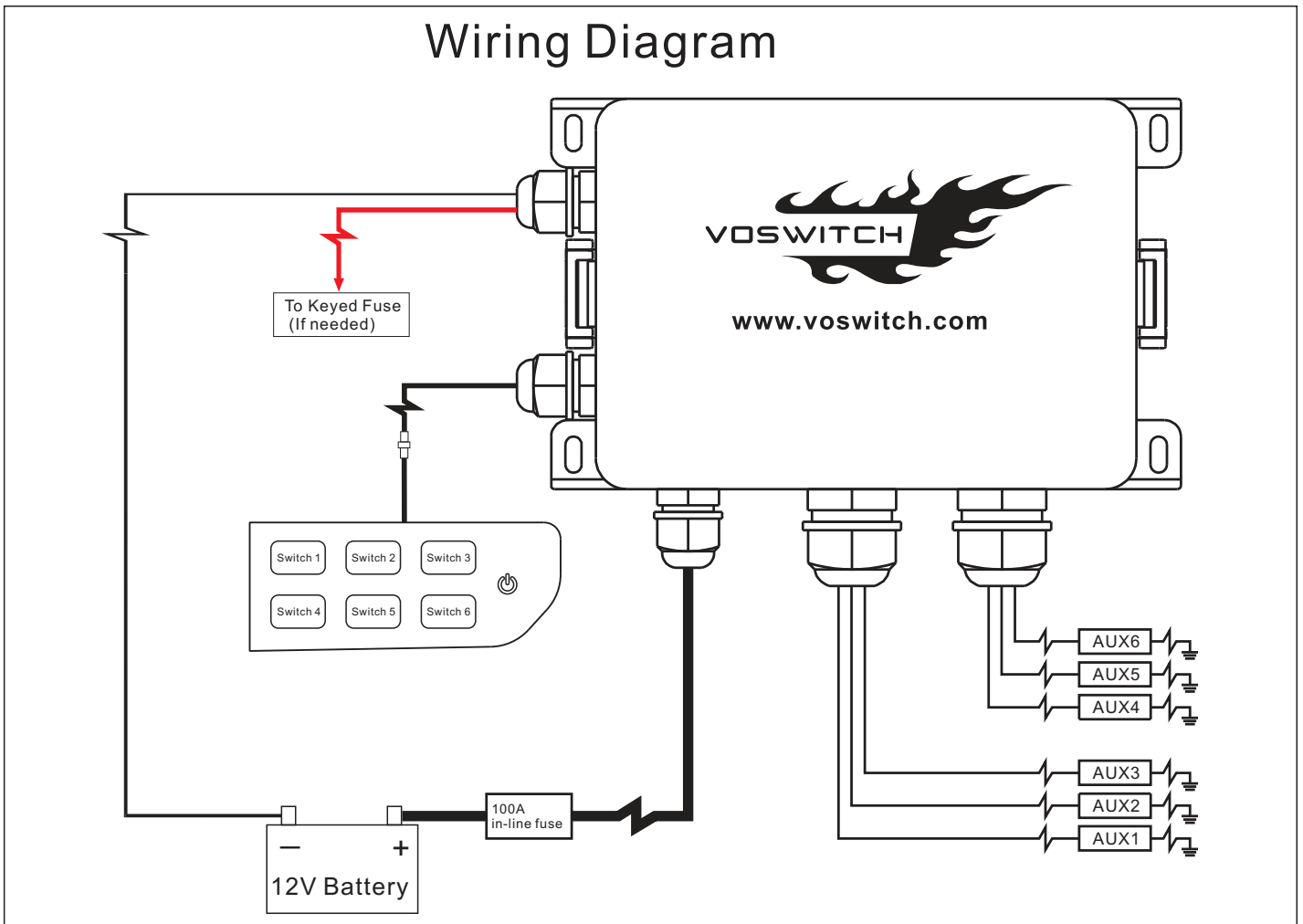
## Overview

The JL300 switch panel power system is fully programmable .

The switch panel has 6 switches and one programming/on-off switch. amber LEDs indicate when the switch is turned on.

The power module has 6 outputs, switches 1 – 6 are rated at 30A.

The power module also has 1 input as trigger, you can hook the small red wire to ignition or ACC or headlight through the add-a-circuit fuse tap supplied.



## Installation

Disconnect the negative battery lead from the vehicle's battery before proceeding with installation, and to avoid damage to the electrical system!

**Tools needed:** Dash trim removal tool , Philips screw driver , 8mm Wrench/socket , 10mm Wrench/socket, 27mm Wrench

### 1. Installing the Power Module on 2.0L /3.6L Engine Jeep JL or Gladiator

The power module should be mounted onto the top of the left fender.

the power module is manufactured with automotive rated electronic parts, with a temp rating of -40 C to 125 C. remove the factory bolt from the top of fender, sit the bracket on the fender top, put the factory bolt and a M6 bolt supplied back into the holes and tighten the 2 bolts. (See Figure 1-2)



Figure 1



Figure 2

## 2. Installing the Power Module on EcoDiesel 3.0L Engine Jeep JL or Gladiator

2.1 The power module should be mounted onto the top of the left fender. the AC service port will be in conflict with the cable glands, you need to remove the relay box from the bracket and rotate it 180 degrees then install it back on the bracket. (see Figure 3-4)

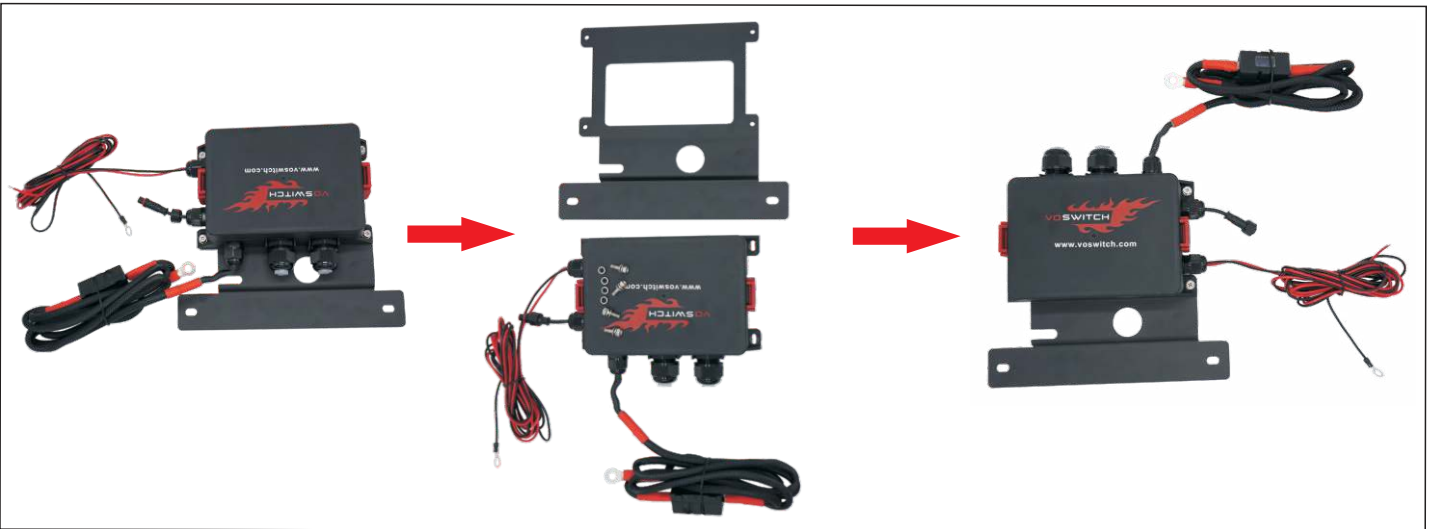


Figure 3

2.2 Remove the factory bolt from the top of fender, sit the bracket on the fender top, put the factory bolt and a M6 bolt supplied back into the holes and tighten the 2 bolts. (See Figure 4-5)



Figure 4



Figure 5

### 3. Installing the Control Wire

The windshield left bottom is a better place to feed the control wire to cab. Remove the left A-pillar hood corner cover using the Torx 40 wrench comes with Jeep. Fold down the windshield 15 degree per the instruction that comes with the factory tool kit. ( NOTE: Fully folding down windshield will damage the wipers.) Hold on the windshield then feed the control wire across the corner from cab to outside. cover the windshield. connect the control wire to power module. you can draw more control wire out from the corner if it is not enough long. Feed the wire to lower dash. (See Figure 6-8)

Another position to feed the wire to cab is the gromet on the lower fire wall at driver side.



Figure 6



Figure 7



Figure 8

### 4. Installing the Switch Panel in the Lower Dash

3.1 select the appropriate legends from the switch legends sheet, and affix them to the panel. Center each legend inside the grey border of each switch. Should you need to remove a legend, we suggest you use a straight pin and lift at a corner until you can grasp it with your fingers. DO NOT dig at the graphic overlay, as the membrane could be damaged.

3.2 Remove the 2 dash panels. Pry the trim edge with the trim removal tool then pull the upper panel out loosening a screw to allow you remove the lower dash panel with trim removal tool. (See Figure 9-10)

3.3 Remove the factory storage box, install the small cubby and switch panel. Note: Don't need to install the small cubby on a Jeep JL Rubicon. (See Figure 11)

3.4 Feed the control wire to the low dash along the trim gap. hide the wire behind the trim. connect wire to switch panel. (See Figure 12)

3.5 Install the 2 factory dash panels back.



Figure 9



Figure 10



Figure 11



Figure 12

### 5. Installing the Battery Cable

Connect the battery cable to battery positive. Connect the ground wire to battery negative.

### 6. Connecting Accessories

Identify which accessories you will be powering with your Switch Panel Power System. Remember that Switches 1-6 are limited to 30 amps. If your accessory current draw is very small, such as 10 A or 15 A, the original 30 A fuse is too large to protect your accessory, so just change the 30 A fuse to 10 A or 15 A to match your accessory fuse rating.

Connect the accessory directly to the output sockets of the power module . The power module is waterproof and dustproof . Loosen the lock nut of the cable glands to take down the waterproof plug , to run positive wire of accessory to the inside through the hole , crimp the Y-shape terminal ( supplied) on the end of the wire, loosen the Philips screw on the socket to allow the terminal to slide in, tighten the screw until the terminal is snug , screw the lock nut to lock the wire to prevent water in. Do not over tighten it. (See Figure 13)  
 The JL300 switches 12V to the accessory . Connect the power module output wire to the positive wire of the accessory. Connect the ground wire of the accessory directly to ground, either a ground stud on the vehicle's frame or to the negative terminal of the battery.

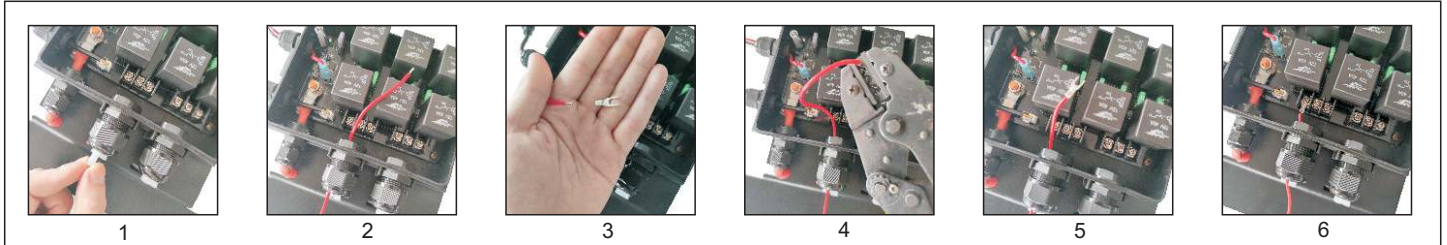


Figure 13

### 7. Installing the trigger wire( If needed)

Installing the trigger wire to a keyed fuse or wire .The control system will be controlled by ignition. The switch panel will turn off when ignition is off.

Default and factory setting is trigger control disabled and LVCO enabled , Dip switch 1 is for Low Voltage Cut Off and the dip switch 2 is for trigger control .at default setting the accessories hooked can be turned on no matter your vehicle is on or off ,you need to press the on/off switch to turn the switch panel off.

#### Install the trigger wire to enable the ignition control

Toggle the dip switch 2 to ON position,( See Figure 14) .Connect the trigger wire to ACC power or a Keyed wire/fuse to allow the control system only works when the vehicle is on. In general, ACC or CIGAR LTR fuse is better for use. locate the fuse F52 that is for CIGAR LTR in factory fuse box . using the supplied piggyback fuse holder to connect to your factory fuse panel. Remove the fuse M6 from the panel and place it into the lower slot of the piggyback fuse holder then plug it into the slot you removed the factory fuse from. of course , you can select other fuse to tap. for example, if you want the switch panel to work when the headlights light up, you can select the fuse for headlights to tap. **Note: Don't Forget to place the factory fuse you select for tapping in the lower slot of the piggyback fuse holder.**(See Figure 15-16)

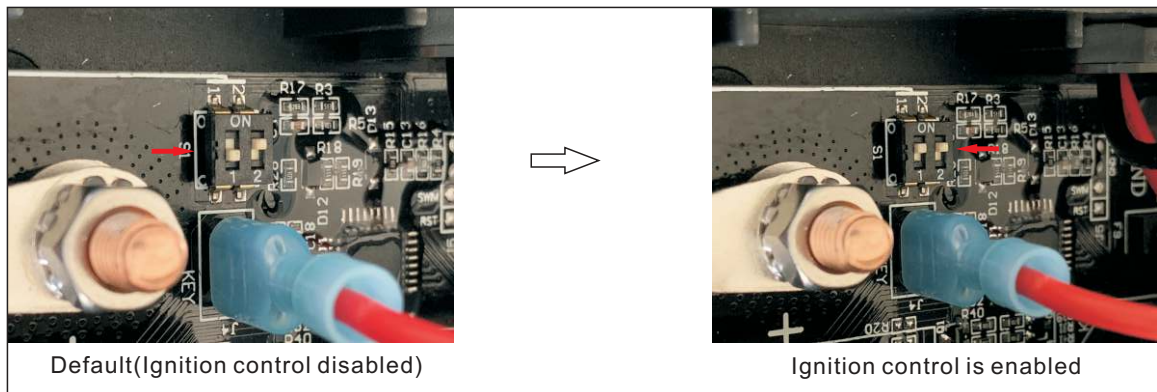


Figure 14

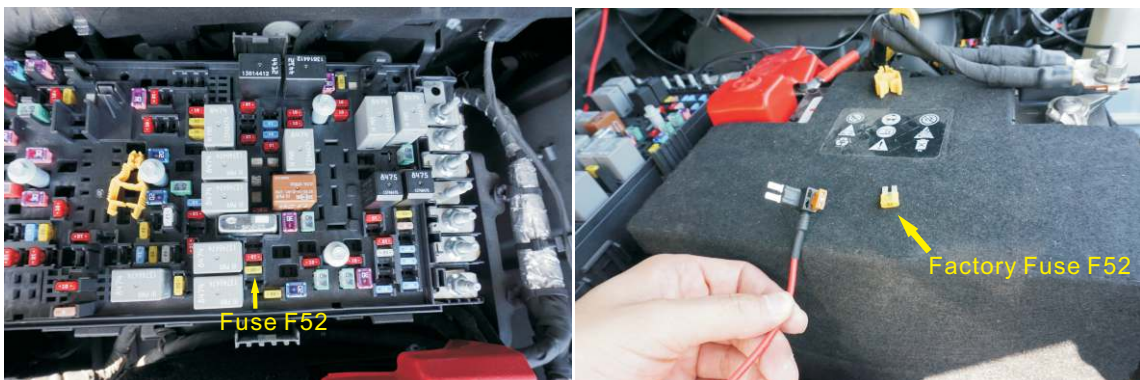


Figure 15



Figure 16

## 8. Programming your JL300

Programming the JL300 through the switch panel. there are 3 different programmable features for each button. 1.ON/OFF 2.Momentary 3.Flash 4.Strobe ( **Note: Function 3 and 4 have double function. Single Press turns on solid and double press will do flash or strobe.** )

### How to set the switch function

Ensure the switch panel is turned on. Press and hold the on/off switch for 3 seconds to activate programming mode. select a switch to set, Each click of switch will scroll through functions. (Default for all switches is Steady on) the amber indicator of the switch will show the function you select, The amber indicator LED will flash to the appropriate function each time you click the switch through the 4 functions. Especially the indicator only flashes once to show the Momentary function. To save your selected functions when complete, press the On/Off Switch and hold on for 3 seconds to exit Programming Mode and your setting is saved. **if one switch is set to flash or strobe, single Press turns on solid and double press will do flash or strobe.**

## 9.How to disable the Low Voltage Cut Off function ( if dual batteries installed)

Toggle the dip switch 1 to off position next to the label "1"( default is LVCO Enabled ) .(See Figure 17)

**Note : Accidentally an accessory that is left on will drain the battery overnight if the Low Voltage Cut Off is disabled .**

## 10.How to reset the system

Plug off the negative terminal then plug it in. the system will be reset .(See Figure 18)



Figure 17

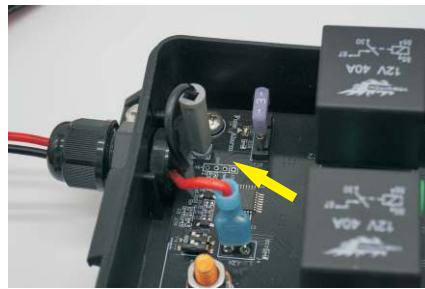


Figure 18

## 11.Maintain the Power Module

It is always good practice to have backup relay and fuse if you need to replace them. fuse and relay are universal and standard. You can find in any auto parts store or online.

## 12. Trouble Shooting

Scenario 1. if switch panel doesn't light up, please check the fuse alarm light (See Figure 16). you need to replace the 3amp fuse if the alarm light lights up.

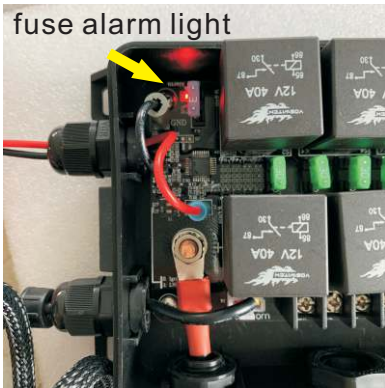


Figure 19

Scenario 2. switch panel doesn't light up with ignition control wire installed to Fuse F52 please check the fuse tap, ensure factory fuse F52 is installed on the fuse tap (See Figure 16)

Scenario 3. switch panel will turn on with ignition control wire installed to Fuse F52 when the engine is off. please check the DIP switch 2, the switch 2 should be at the on position.

Scenario 4. the switch panel won't turn on with everything are intact, please test the 4 pin control wire continuity.

Scenario 5. switch panel always flashes and doesn't work. it says the battery voltage is less than 11.3V. please charge your battery to have a try.

if you can't shoot the trouble, please contact the manufacturer at the website below.

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