Voswitch JL800 Switch Panel Power System

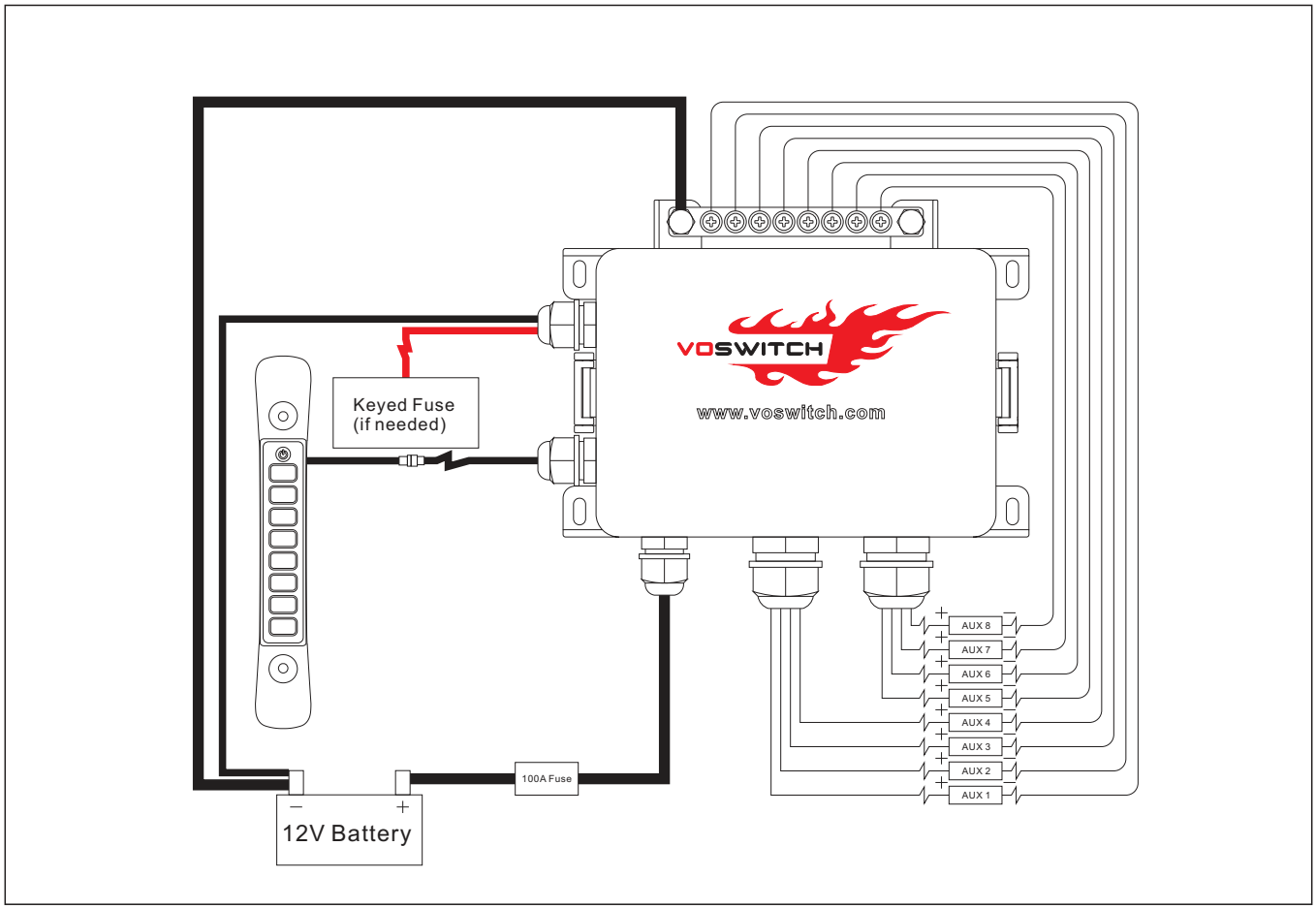
Read before installing!

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 JL800 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.
4. When connecting Air Compressors always switch the compressors supplied relay. Main power for the air compressor should be connected to the battery. For example, the ARB Twin Air will max out at 60A under full load. That is too much current even for the 35A circuit. Any 15A, 30A or 35A circuit can be used to switch the relay since small relays like the Bosch type draw less than 1 Amp.
5. Outputs 1-8 are rated at 30A,you can change the 30A fuse to 5A/10A/15A/20A to match your accessory amp rating. but you can't change fuse to more than 30A

Overview

1. The switch panel has 8 switches. amber LEDs indicate when the switch is turned on.
2. 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.
3. Switch panel backlight can be set to red,blue,green or white. backlight brightness is dimmable.
4. There are 6 different features for each button. 1.ON/OFF 2.Momentary 3.Flash 4.Quick Flash 5. Flash & Strobe Combo 6. Strobe . Note: Function 3 to 6 have double function. Single Press turns on solid and double press will do flash or strobe.
5. Any two of 8 switches can be set SPDT (Single Pole Double Throw) function. this can be used for high/low beam or DRL/Driving light.
6. Any one of 8 switch can be set as mater switch to link other several switches. one press on Master switch will turn on/off the switches that linked to it. the linked switches still can turn on/off individually.

Wiring Diagram



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 , 10mm Wrench/socket, Torx T30 Long Bit, 27mm Wrench

1. Installing the Power Module

The power module is supposed to be mounted on right fender top. it also can be installed on driver side, you will need to extend the 8 gauge power cable by yourself.

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 Control Wire

The windshield lower left corner is a better place to feed the control wire to cab. Remove the left A-pillar hood corner trim using the Torx 40 comes with Jeep .Fold down the windshield 15 degrees per the instruction that comes with the factory tool kit. (NOTE: Fully folding down windshield will damage the wipers.) Hold on the windshield then route control wire along the fire wall top to windshield corner. feed control wire to cab through windshield corner . (See Figure 3)

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



Figure 3

3. Installing the Switch Panel in the Grab Handle

3.1 Remove 2 plastic trim to allow you can access the mounting bolts in grab handle.

3.2 Drill a 20mm hole for control wire, then remove 2 bolts with 10mm socket.

3.3 Pull the upper part of grab handle out as . feed control wire to the grab handle.

3.4 Put the panel connector in the hole then connect it to control wire. hide control wire behind the grab handle. install the grab handle back. put switch panel into the location the factory small plastic was removed from. (See Figure 4)



Figure 4

4.Installing the Battery Cable

Connect power cable to battery positive terminal, connect the 2 ground terminals to battery negative.

5.Connecting Accessories

Identify which accessories you will be powering with your Switch Panel Power System. Remember that Switches 1-8 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 positive wire directly to the outlet sockets of the power module . The power module is waterproof and dustproof . Loosen the lock nut of the cable glands to take down the white waterproof plug , to run positive and negative wires of accessory to the inside through the holes , 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 sung , screw the lock nut to lock the wire to prevent water in. Do not over tighten it. (See Figure 5)

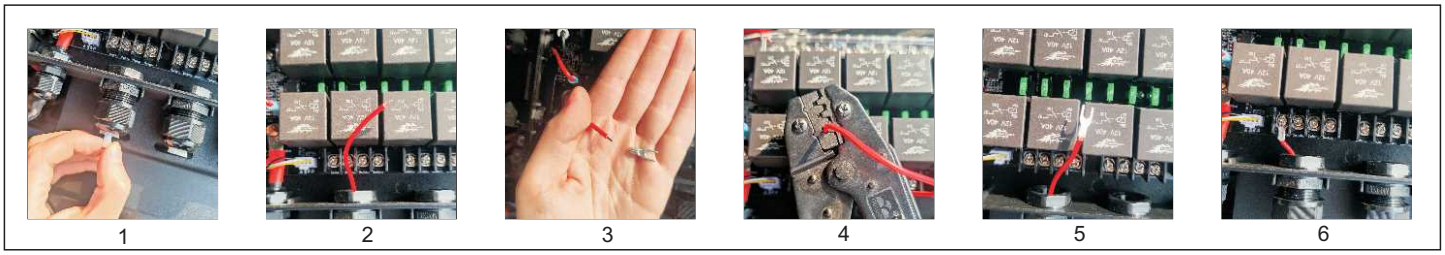


Figure 5

Ground accessory to the ground bus bar. (See Figure 6)

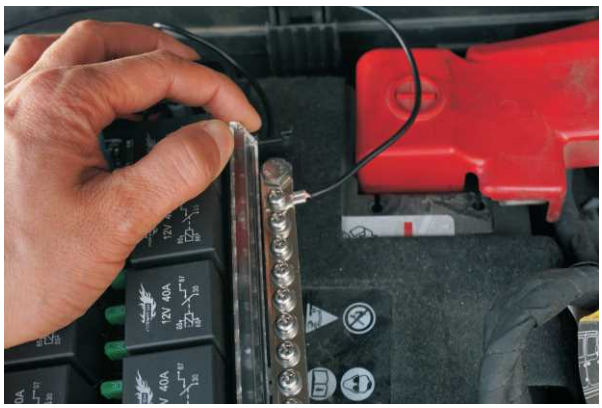


Figure 6



Figure 7

6.Setting Backlight Color and Brightness

Keypad backlight can be set to red,blue,green or white. backlight brightness is dimmable.

Press the on/off button to turn off the panel, then press the on/off switch and hold on for 3 seconds to activate setting mode.

switch panel will lights up, press the power switch once to set the color of backlight, It will switch between red, green, blue, white and repeat. To increase the backlight brightness press switch 6, to decrease backlight brightness press switch 8 .(See Figure 7) When complete, press the On/Off Switch for 3 seconds to save.

7.Setting Switch Function

How to set the switch momentary / strobe function

Ensure the switch panel is turned on. Press and hold the on/off switch for 3 seconds to activate setting mode. select a switch to set, Each click of switch will scroll through functions. (Default for all switches is Steady on) The amber LED will flash to the appropriate function each time you click the switch through the 6 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. **Note: if some switch is set to flash or strobe, single Press turns on solid and double press will do flash or strobe.**

How to set the SPDT (Single Pole Double Throw)
For Example, you intent switch 3 and switch 4 to be SPDT. turn off the panel, press and hold switch 1 for more than 3 seconds, it will go into setting mode, press and hold both switch 3 and switch 4 at the same time for more than 3 seconds. the 2 switches will light orange, press and hold power button for 3 seconds to save your setting. (See Figure 8) Note: if some switch is set to master switch or linked switch, it can't be set high/low,and vice versa. **Note: any switch is set to momentary , it can't be set to master switch or linked switch.**



Figure 8



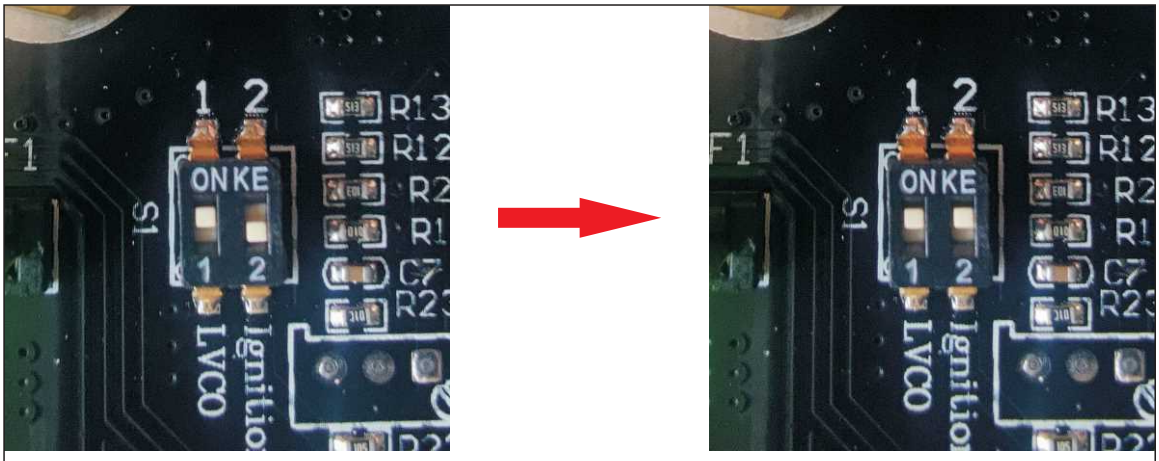
Figure 9

How to set Master Switch
For example, you intend to set the switch 1 as master switch that links switch 2 and switch 5.
turn off the panel, press and hold switch 2 for more than 3 seconds. it will go into setting mode, press and hold switch 1 for more than 3 seconds, it will light orange. then press switch 2 and 5 one by one .the 2 switches will light up and blink. it means the switch 1 is the master and switch 2 and 5 are linked to switch 1. press and hold power button for 3 seconds to save your setting. (See Figure 9) Note: if some switch is set to high/low, it can't be set master switch or linked switch, and vice versa. **Note: any switch is set to momentary , it can't be set to master switch or linked switch.**

How to reset Switch Panel
Turn off the panel, press and hold switch 6 and 8 for 3 seconds, it will be reset.

7.Installing ignition control with 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.

Install the trigger wire to keyed fuse
Toggle the dip switch 2 to ON position,(See Figure 10) .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 11)



Default(Ignition control disabled)
Ignition control is enabled
Figure 10



Figure 11

8.How to disable the Low Voltage Cut Off function(If needed)

Toggle the dip switch 1 to off position next to the label "1"(default is LVCO Enabled) .(See Figure 12)

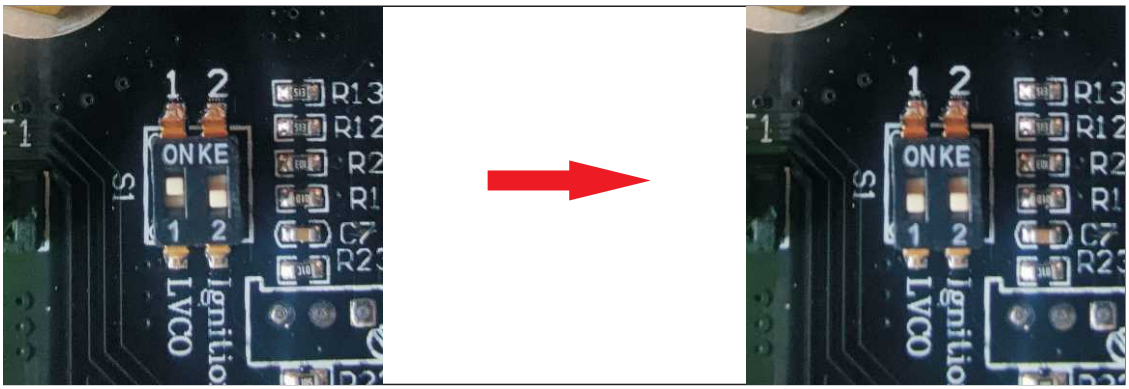


Figure 12

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

11.Trouble Shooting

Scenario 1. If switch panel doesn't light up, please check the fuse alarm light (See Figure 13).
you need to replace the 3 amp fuse if the alarm light lights up.



Figure 13

Scenario 2.switch panel always blinks and you can't do anything on the panel. Low voltage cut off function will be activated when battery voltage is less than 11V to allow you can start your engine next time. at the same time switch panel will blink to give you alarm. LVCO will cut back when battery voltage is more than 12.5V.so just charge your battery to make it work.

Scenario 3.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 4. 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 5.the switch panel won't turn on with everything is intact, please test the 4 pin control wire continuity.

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

www.voswitch.com