VOSWITCH JL400 Switch Panel Power System Installation Guide

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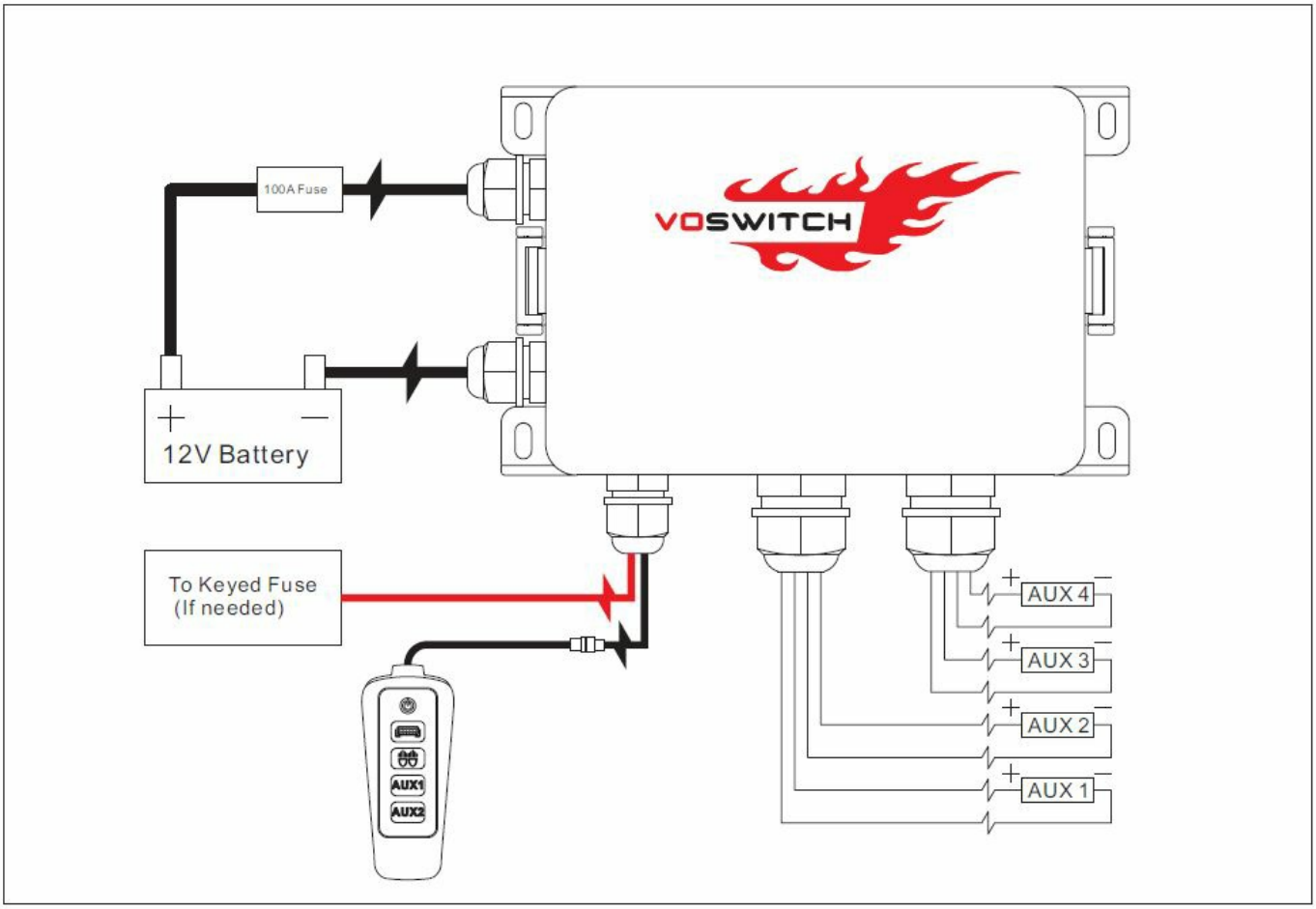
Read before installing

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 JL400 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 switch panel has 4 switches. Amber LEDs indicate when the switch is turned on.
- The power module has 4 outputs and switches 1 – 4 are rated at 30A.
- The power module also has 1 input as a trigger, you can hook the small red wire to the ignition ACC or headlight through the add-a-circuit fuse tap supplied.

Wiring Diagram



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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 screwdriver, 8mm Wrench/socket, 10mm Wrench/socket, 27mm Wrench.

Installing the Power Module
The power module should be mounted on the right fender top. 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 the 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

Installing the Control Wire

The windshield's lower left corner is a better place to feed the control wire to a cab. Remove the left A-pillar hood corner trim using the Torx 40 that comes with Jeep. Fold down the windshield 15 degrees per the instruction that comes with the factory tool kit.

Hold on to the windshield then route the control wire along the firewall top to the windshield corner. feed control wire to cab through windshield corner . (See Figure 3)

(**NOTE:** Fully folding down the windshield will damage the wipers.) Another position to feed the wire to the cab is the grommet on the lower firewall at the driver's side.

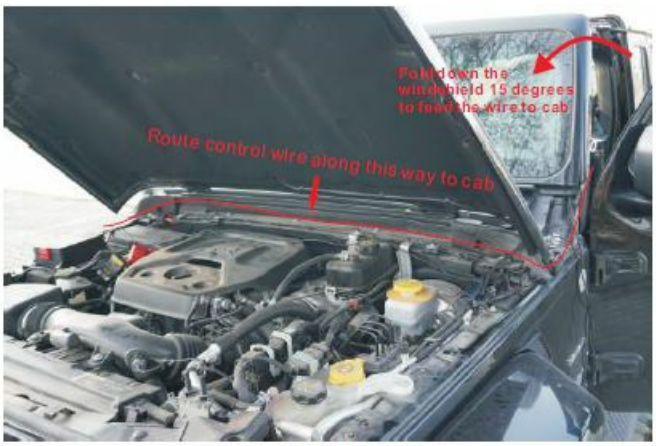

Figure 3

Installing the Switch Panel in the Grab Handle

1. Remove 2 plastic trims to allow you can access the mounting bolts in the grab handle,
2. Drill a 20mm hole for the control wire, then remove 2 bolts with a 10mm socket.
3. Pull the upper part of the grab handle out as the Figure 5. feed control wire to the grab handle.
4. Put the panel connector in the hole then connect it to the control wire. hide the control wire behind the grab handle.

   install the grab handle back. push the switch panel into the location the factory small plastic was removed from.

   install the lower small plastic trim back. (See Figure 4)

Figure 4

Installing the Battery Cable

- Connect 2 power cables accordingly to battery terminals.

Connecting Accessories

- Identify which accessories you will be powering with your Switch Panel Power System. Remember that Switches 1-12 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 and ground 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, 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)

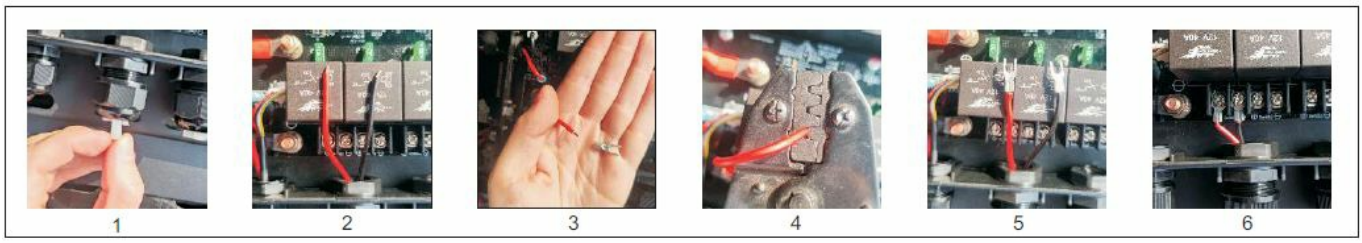

Figure 5

Setting Backlight Color and Brightness

- The Keypad backlight can be set to red, blue, green or white. backlight brightness is dimmable.
- Ensure the switch panel is turned off Press the on/off switch and hold on for 3 seconds to activate setting mode. switch panel will light up, press the power switch once to set the colour of the backlight, It will switch between red, green, blue, white and repeat. To increase the backlight brightness press switch 1, to decrease the backlight brightness press switch 4 (See Figure 6) When complete, press the On/Off Switch for 3 seconds to save.

Figure 6

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 the ignition is off.
- The default and factory setting is trigger control disabled and Low Voltage cut-off enabled, Dip switch 1 is for Low Voltage Cut Off and dip switch 2 is for ignition control default setting DIP switch 1 at on position and DIP switch 2 at off position, 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 the keyed fuse

- Toggle the dip switch 2 to ON position,(See Figure 7) . 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 the factory fuse box. Use 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 another fuse to tap.
- for example, if you want the switch panel to work when the headlights light up, you can select the fuse for the 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 8-9)

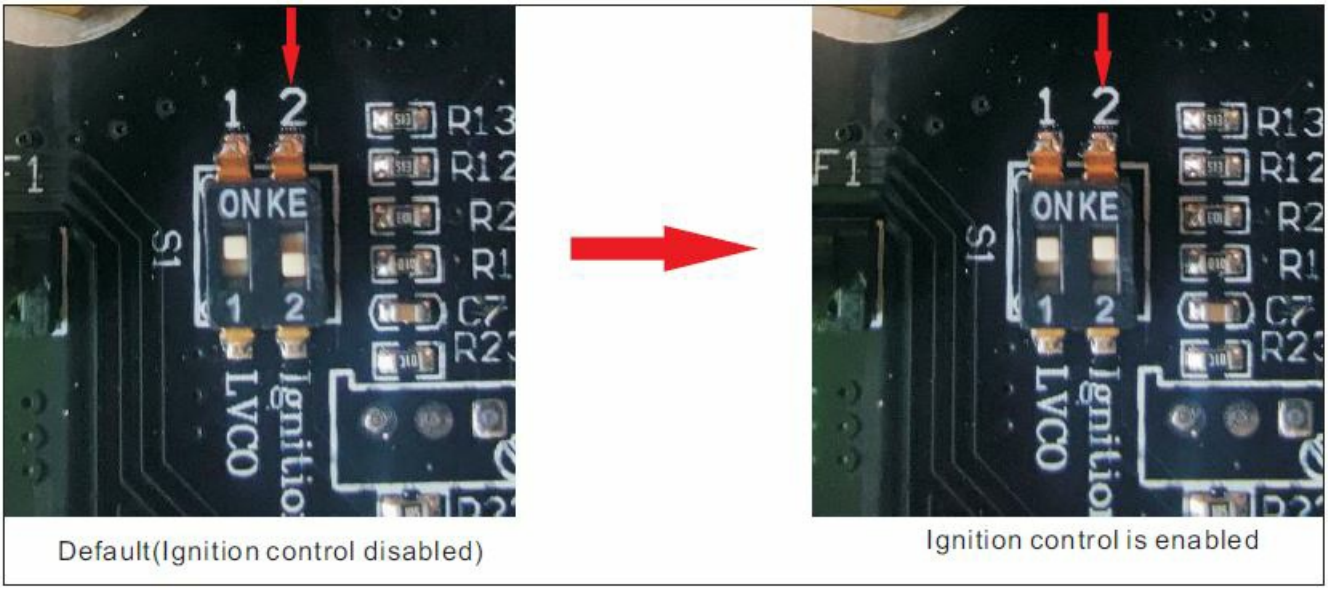

Figure 8

Figure 9

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

Toggle the dip switch 1 to the off position next to the label “1″(default is LVCO Enabled).(See Figure 10)

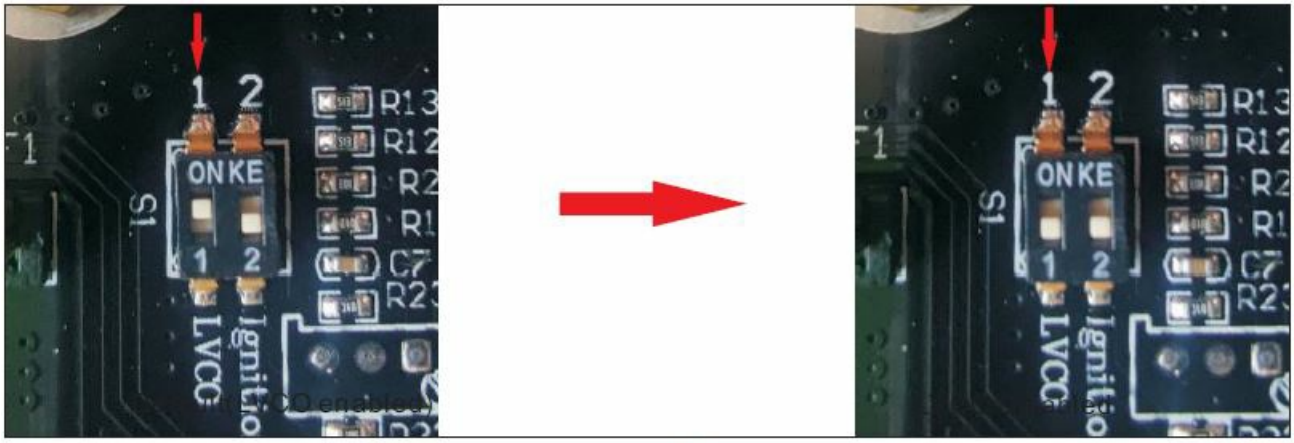

Figure 10

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

Trouble Shooting

- Scenario 1. If the switch panel doesn't light up, please check the fuse alarm light (See Figure 11).
- you need to replace the 3 amp fuse if the alarm light lights up.
- Scenario 2. The switch panel always blinks and you can't do anything on the panel. The low voltage cut-off function will be activated when the 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 an alarm. LVCO will cut back when the battery voltage is more than 12.5V.so just charge your battery to make it work.

Figure 11

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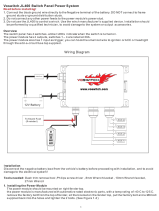
Documents / Resources

	**VOSWITCH JL400 Switch Panel Power System** [pdf] Installation Guide JL400, JL400 Switch Panel Power System, Switch Panel Power System, Panel Power System, Power System

References

- **A original switch control system manufacturer. we made switch panel for Jeep, truck, boat and UTV.**