



Specialty Wiring and Instructional Guide for:

A Boat's Navigation and Anchor Lights

Applicable to the following switches:

VJD2-U66B VJD2-UXXB VJD2-UCCB

This guide provides instructions, rocker switch wiring diagrams and information for multiple carling V-series rocker switches with 10 terminals, and two independent lights.

Use this guide when you want an ON-OFF-ON rocker switch to provide power to two loads when in the UP position, and only one of those (same) loads when in the DOWN position.

This is commonly used to power a boat's navigation and anchor lights, where both lights are required to be on at night, when the boat is moving but only the anchor light is required when the boat is at anchor.

For the purposes of this guide, both your red and green lights will be considered "Nav" lights, and the white stern or hardtop light will be considered the "Anc" light.

This information is provided as a convenience for our customers and is believed to be accurate at the time of publication. RockerSwitchPros offers no guarantee the information contained in this instructional workbook is complete or accurate.

Always use caution when working with electrical systems.

Always disconnect your battery before performing work on your electrical system.

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ON-OFF-ON



TERMINALS

IND LAMP 1 (+) **§**

1

POSITIVE 1 (OUT) [SWITCH DOWN]

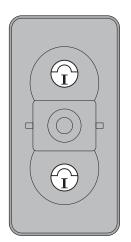
POSITIVE 1 (IN) 2

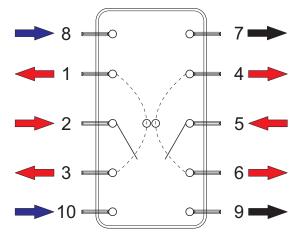
POSITIVE 1 (OUT) 3 [SWITCH UP] IND LAMP 2 (+) 10



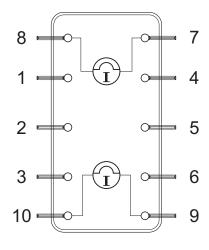
- 7 NEGATIVE
- 4 POSITIVE 2 (OUT)
 [SWITCH DOWN]
- 5 POSITIVE 2 (IN)
- 6 POSITIVE 2 (OUT)
 [SWITCH UP]
- 9 NEGATIVE

LAMPS





CIRCUIT DIAGRAM



LAMP DIAGRAM

<u>KEY</u>



■ LOAD CURRENT IN/OUT

■ INDEPENDENT LAMP TRIGGER

→ NEGATIVE RETURN CURRENT

(ON) MOMENTARY CIRCUIT



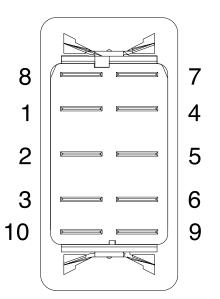
MOMENTARY CIRCUIT



ON-OFF-ON



WIRING TO SUPPLY (2) LOADS IN THE UP POSITION AND ONLY (1) LOAD IN THE DOWN POSITION (TOP LIGHT RESERVED FOR BACKLIGHTS)



INSTALL JUMPERS BETWEEN:

1) 7 - 9 [USED TO GANG NEGATIVES TOGETHER]

2) 2 - 5 [PROVIDES POWER TO BOTH SIDES OF DPDT SWITCH]

3) 1-4-6-10 [MAKES ANC LIGHT COME ON IN BOTH POSITIONS AND BOTTOM LIGHT INDICATE]

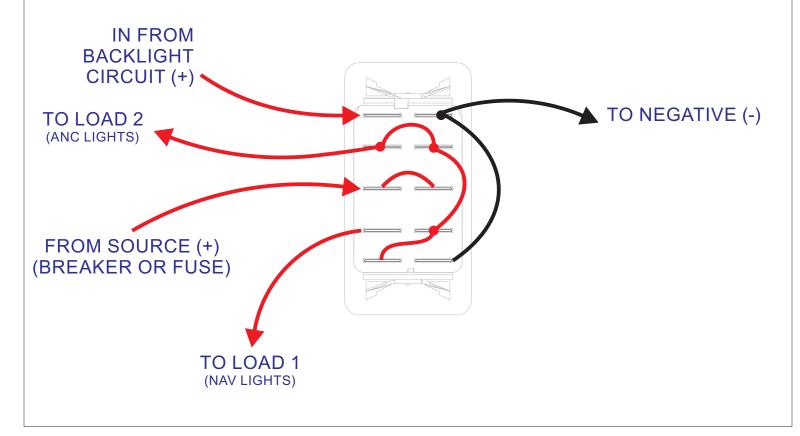
EXTERNAL INTERFACES:

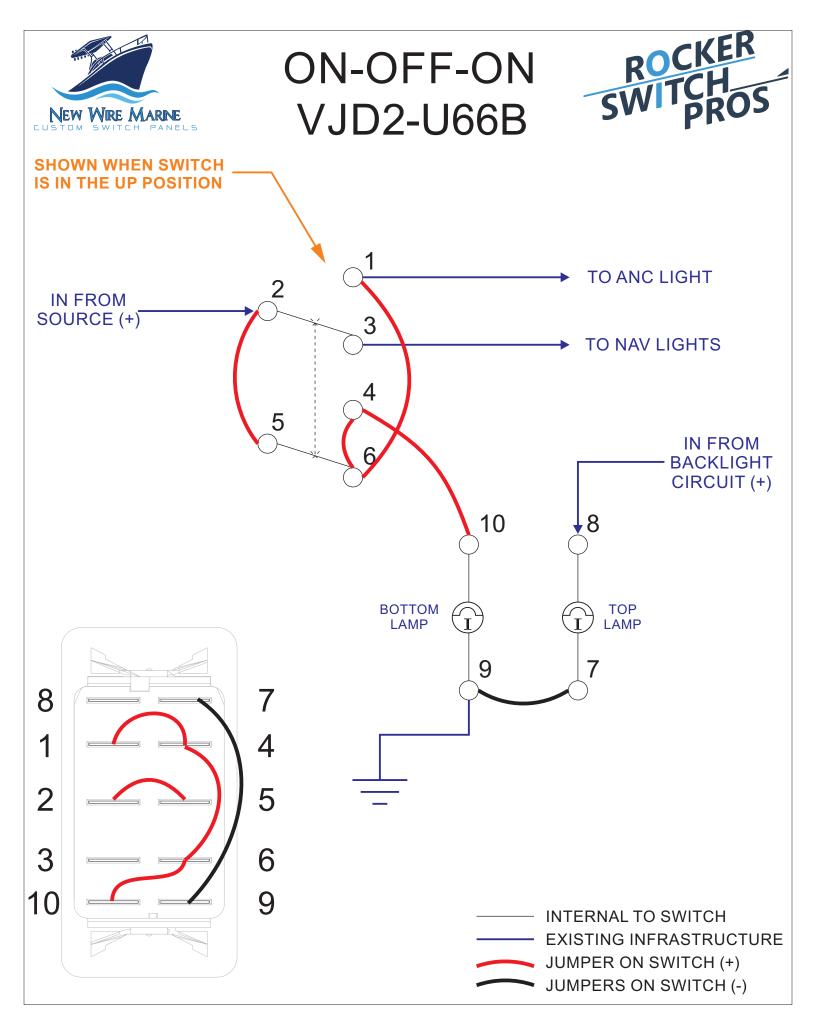
PIN 8 BACKLIGHT CIRCUIT IN

PIN 2 POWER IN (GOING TO LOADS)

PIN 3 NAV LIGHT POWER (SWITCH UP)

PIN 1 ANC LIGHT POWER (SWITCH UP OR DOWN)

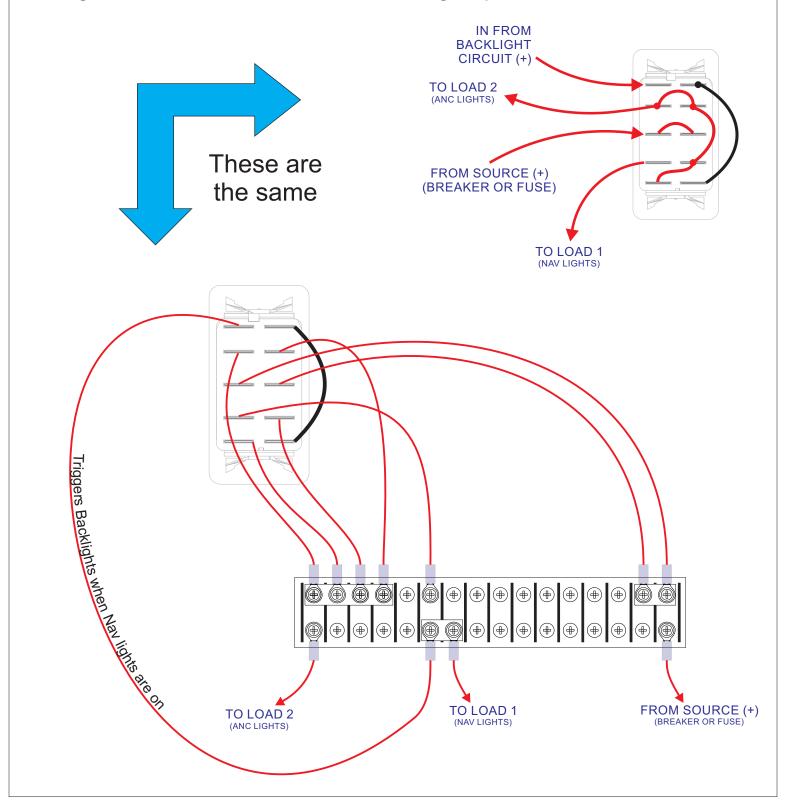




If you're neck deep in wiring, then you already know a 10 terminal switch can get very crowded, very quickly.



To make wiring easier, note that any connection point shown does not have to be made on the back of the switch itself. A simple terminal block with jumpers can make wiring easier, by moving some of the connections out of the tight space of a rocker switch.



If you're using the Nav/Anc switch to power the backlights on other switches (which is very common), then you'll want to send the output for the nav lights into the backlight "bus" for all the other switches. It can enter the bus at any convenient location on any switch. It does not have to enter the buss at terminal 8 of the Nav/Anc switch.



