

Other CruzPro Products

- Depthsounders & Speed/Temperature/Log
- DC Volts/Amps/Amp-Hour Monitor
- AC Volts/Amps/Freq/kW Monitor
- LPG/Petrol Gas Detectors/Alarms
- Bilge Water Alarms & Bilge Pump Controllers
- Windlass Controller/Chain Counter
- Digital Fuel Gauges & Fuel Consumption Calculator
- Digital Gauges for 1 & 3 Tanks /w Separate Alarms
- Smart and Manual Alternator Regulators
- Marine Security System
- RPM/Engine Hours/Elapsed Time Gauge
- Digital Oil Pressure Gauge/Alarm
- Digital Water Temperature Gauge/Alarm
- One and Three Bank Digital Volts Gauges
- Digital Amps Gauge
- Digital Clock/Watch/Race Timers/Alarms
- 8 and 16 Amp Light Dimmers / Motor Speed Controller
- Solar Panel Charge Controllers 6/8/9 & 20 Amps
- 4 & 8 Channel NMEA Combiners/RS-232 Convertors
- Engine/Exhaust Temp. Monitor & Digital Pyrometer
- Remote Digital NMEA 0183 Data Repeater
- NMEA 0183 to Bluetooth Radio Converter

CruzPro® MS-60



Digital Multi-Switch

Notes

Introduction

The MS-60 Digital Multi-Switch Gauge provides for switching three lighting circuits for sail boats and power boats. Running lights, mast-head light and anchor light can be quickly turned ON/OFF.

An extra spare fourth circuit can be turned ON and OFF with the press of a single button and can be used for things such as switching a light in the nav station or cockpit reading light.

Five levels of backlighting can be selected and all setup data are saved in a nonvolatile memory.

The MS-60 can be operated in two modes. Mode 1 tells you what lights are on in numerical fashion while Mode 2 tell you what lights are on with text display.

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Notes

Specifications

Power supply: 9.5 to 33.0 VDC, .035 amps nom.
16 amps maximum.

Operating temperature: 32 to 122 F (0 to 50 C)

Size: 2.5" dia X 4.1" deep (61mm x 104 mm)

Max Current: 4 amps per circuit

Circuits: 4

Display: 4 digits. Five levels of backlighting.

Notes

Switching Modes

To switch between Mode 1 and Mode 2 press and hold both the ▼ and ▲ keys for 2 seconds.

In Mode 1 the display will be blank when no lights are switched on. If lights are on then the light number will be displayed with the number "1" for running lights without mast-head light, "1" and "2" if the masthead light is also on and "3" if only the anchor light is on. Optionally "4" will also be displayed if the spare 4th circuit is on.

In Mode 2 text characters will scroll across the display telling you what lights are on.

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Installation

Before starting the installation, please read this entire section first. Be sure to install the bulkhead gasket before you install the instrument. Finger tighten the screws that mount the instrument bracket - do not use tools.

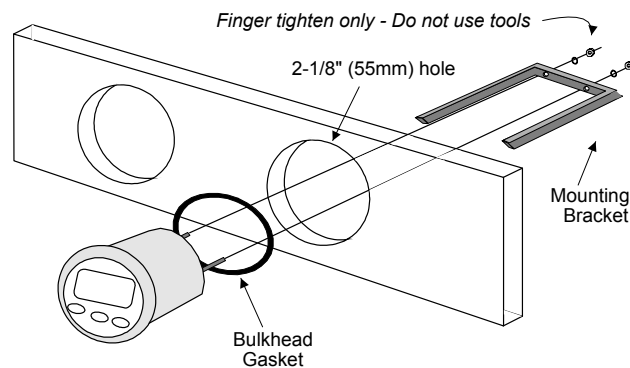


Figure 1

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Mode 1

There are two modes of operation. In Mode 1 the circuits that are ON will be displayed numerically like this:

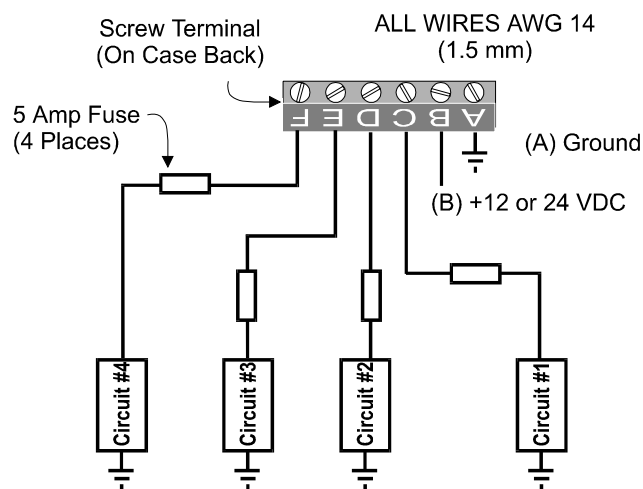
1
1 2
3

with circuit 4 optionally also being displayed.

Circuit 1 is the normal running lights on without the masthead light. Circuit 1 *and* 2 is for power boats or sailboats running under engine and the masthead light is

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Figure 2



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Mounting and Wiring

- Drill a 2-1/8" (55mm) mounting hole where you desire to mount the instrument (Figure 1).
- Bring the lighting wires, ground, and power lines out of the mounting hole and use a small flat screwdriver to make the connections to the screw terminal on the instrument case back as shown in figure 2.
- Carefully check all your wiring against those shown in figure 2. If everything is wired correctly you can mount the MS-60 in the instrument hole. Be sure the bulkhead gasket is in place and use only finger tension to tighten the bracket hold-down nuts *Do not overtighten the bracket or you may damage the case - do not use tools to tighten the nuts.*


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Operation

Key Functions

The    keys are used to select backlight levels and switch lighting circuits ON or OFF and set the display mode. After changes are made, the new information is automatically saved to memory.

Backlight Intensity

Press the  key for 1/2 second to adjust the backlight level for nighttime viewing. Each time you press the "+" key for 1/2 second, the backlight level will change: 1, 2, 3, 4, OFF, 1, 2, ... etc.

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also on..

Circuit 3 is when only the anchor light is on.

Mode 2

In mode 2 the circuits that are on are displayed with scrolling text characters such as:

SAILING
Engine running
Anchored
OFF
All OFF

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Switching Circuits On/OFF

Quick press the "+" key to turn on the navigation lights for sailing at night. Pressing the "+" key once more will also turn on the masthead light for sailboats running under engine and power boats.

Quick press the "+" key again to turn off all the navigation lights and turn on the anchor light.

Spare Circuit On/Off

Quick press the ▲ or ▼ key to turn ON or OFF the spare fourth circuit.

Figure 1

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