Setting 12 Deviation Angles

Press and hold the ： key for 2-1/2 seconds. The number 1 will flash indicating 0-30 degree deviation angle. Quick press the s or t keys to change the deviation angle value by one degree. Pressing the s or t keys for 1/2 second will increase or decrease the deviatin angle by 10 degrees. Press the ：key for 1/2 second to save your entry to the nonvolatile memory. The number 2 will then flash and you enter the deviaton angle for 30-60 degrees, etc.

NMEA 0183 Serial Data Output

The CO60 outputs the NMEA 0183 $IIHDG sentence of Compass Heading, Compass Variation and Compass Deviation (at that heading angle).

e.g. $IIHDG,130.0,23.0,W,03.0,W*49

CruzPro®

CE

CO60

Digital Electronic Compass

Press the ：key for 1/2 second to save your entry to the nonvolatile memory.

Setting a Compass Offset

Turn OFF the power to the CO60. Press and hold the t key on power up to set a negative compass offset angle or s key to set a positive compass offset angle.

Quick press the s or t keys to change the offset value by one degree. Pressing the s or t keys for 1/2 second will increase or decrease the offset value by 10 degrees. Press the ：key for 1/2 second to save your entry to the nonvolatile memory.

Introduction

The CO60 digital electronic compass provides an accurate display of compass heading.

Compass heading is displayed with a resolution of 1 degree.

A compass offset angle of up to -255 to +255 degrees can be entered. A compass local variation can be entered and 12 deviation angles can be entered (every 30 degrees).

A damping value can be entered to prevent rapid changing of the displayed results.

Five levels of backlighting can be selected and all setup values, etc. are saved in a non-volatile memory.

The CO60 outputs NMEA 0183 serial data.

Table of Contents

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Specifications

Power supply: 9.5 to 33.0 VDC, 0.022 amps no backlight, 0.037 amps full backlight.

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

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

Accuracy: 1 Degree

Compass: Internal Electronic Compass Sensor

Display: 4 digits, Five levels of backlighting.

Output: NMEA 0183 4800 baud serial output of compass heading, local variation and deviation for that heading angle.

e.g. $IIHDG,130.0,23.0,W,03.0,W*49

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.

Setting Local Compass Variation Angle

Press the t key for 2-1/2 seconds to enter a negative/ Easterly compass vairation angle. Quick press the t key to change the angle by one degree. Press the t key for 1/2 second to change the angle by ten degrees.

Press the s key for 2-1/2 seconds to enter a positive/ Westerly compass vairation angle. Quick press the t key to change the angle by one degree. Press the t key for 1/2 second to change the angle by ten degrees.

Setting a Damping Value

Turn OFF the power to the CO60. Press and hold the ： key while turning ON the power to view/set the damping value.

Quick press the s or t keys to change the damping value by one. Holding the s or t keys will increase or decrease the damping value quicker. Press the ： key for 1/2 second to save your entry to the nonvolatile memory.

Operation

Key Functions

The t , : , and s keys are used to select backlight levels, display compass heading, adjust the damping value, add/subtract a compass offset, enter a local variation and enter 12 deviation angles (one every 30 degrees). After changes are made, the new information is automatically saved to a nonvolatile memory.

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.

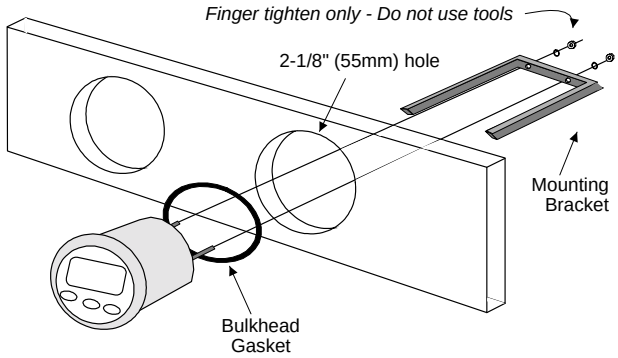

Figure 1

Mounting and Wiring

l Drill a 2-1/8" (55mm) mounting hole where you desire to mount the instrument (Figure 1).

l Bring the 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.

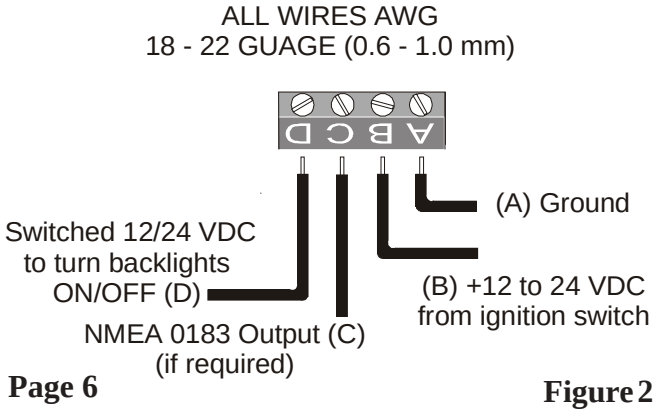

Figure 2

l Carefully check all your wiring against those shown in figure 2. If everything is wired correctly you can mount the CO60 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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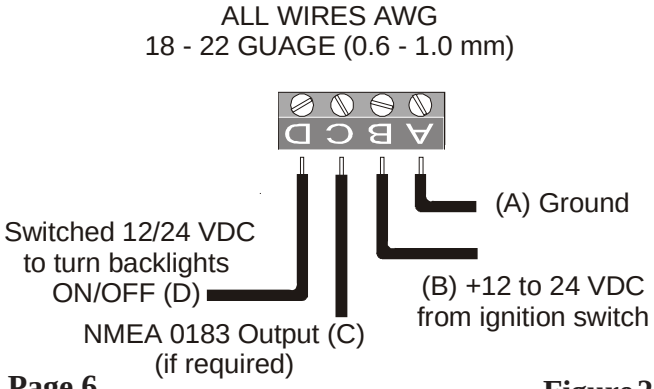

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Operation

Key Functions

The t , : , and s keys are used to select backlight levels, display compass heading, adjust the damping value, add/subtract a compass offset and other functions. After changes are made, the new information is automatically saved to a nonvolatile memory.

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.

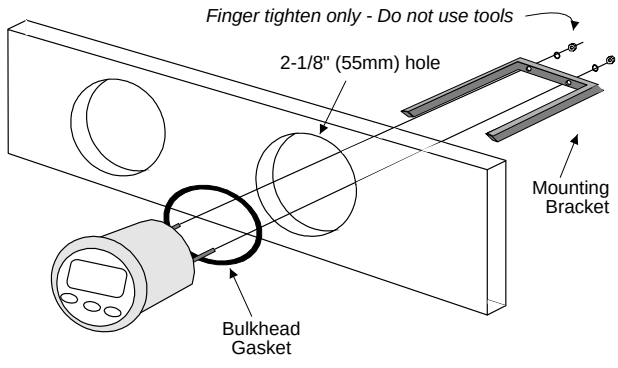

Figure 1