

Warranty

Each unit is carefully tested and adjusted at the factory before shipping and is warranted for one full year against original defects in materials or workmanship. This warranty does not include damage to the product resulting from accident or misuse.

If the product should become defective within the warranty period, we will repair or replace it free of charge, including free return transportation, provided it is delivered prepaid to the dealer from whom it is originally purchased.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, or country to country.

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Handbook

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Handbook

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 Gauge & Fuel Consumption Calculator
- Digital Gauge for Three 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
- Digital Clock with four 4 amp electronic timer switches

See full details at <http://www.cruzpro.com>
Email to: info@cruzpro.com

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Specifications

circuit approximately twice per second to draw attention to your boat. The "O" output terminal can supply a maximum of 8 amps. A side effect of connecting the "O" output to your light circuit is that the alarm will sound briefly every time you turn on the light manually, unless power is always supplied to the LA-20.

After connecting the signal lines, connect the ground wire to a common ground point and the +12 VDC wire to your +12 VDC distribution point as shown in Figure 1. As soon as you connect power to the LA-20B, it will sound the alarm for two or three seconds. It will be very loud so be prepared.

Re-install the cover on the case back. *Do not overtighten the case front screws.*

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Operating Voltage: 9.5 to 18 VDC, 0.020 ampere nominal (0.35 amps maximum when activated).

Operating temperature: 0 to 50 deg Celsius (32 to 122 deg Fahrenheit)

Size: 100 x 60 x 30 mm (4 x 2.4 x 1.2 inch).

Alarms: Built-in 105 dB audible alarm. Output connection to flash spreader, anchor or running lights (8 amps maximum).

Reset Button: Silences the alarm for 4 out of the 5 inputs. Re-arms automatically when inputs clear.

Inputs: Five inputs on screw terminals. Three activate the alarm if they are grounded or go low (below 5 VDC). Two activate the alarm if they go high (+2 to +33 VDC). One of the latter bypasses the RESET button and cannot be turned off at the LA-20 (it must be turned off at the source).

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Introduction

The LA-20B External Multi Alarm with 8 amp light flashing circuit has five alarm input terminals and connects up to five instruments to provide an amazing loud 105 dB alarm volume that can be seen and heard for 1/4 mile or more.

All connections are to screw terminals simplifying installation and requires only a screwdriver. Four of the five alarms can be turned off by pressing the RESET button, one purposely bypasses the RESET button and must be turned off at the source.

Two different types of inputs are provided. Three inputs activate the alarm if any one of them go below 5 VDC. The other two inputs activate the alarm if one of them goes high (+2 to +33 VDC). One of the latter bypasses the RESET button (cannot be turned OFF at the LA-20B).

If the LA-20B is silenced by pressing the RESET button, it automatically re-arms itself when all the inputs are in a clear state.

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CruzPro Instrument Connection Table

The following CruzPro instruments are designed to connect to the LA-20 as shown below:

Instrument	LA-20 Terminal
CC-20 8 Amp Charge Controller	L
CC-30 20 Amp Charge Controller	L
GD-20 LPG/CO Gas Vapor Alarm	H
SA-20 Security System/Alarm	HB
EFS-20 Dual Bilge Pump Controller	L
EFS-10 Bilge Pump Controller	L
BBA-20 Three Bank Battery Monitor	L
AC-20 Manual Alternator Controller	L
ETM-20 Engine Temperature Monitor	L
BWA-20 Bilge Water Alarm	L
DT-20 Dual Electronic Timer/Switch	H
NC-20 NMEA Combiner	H
RH30 Digital RPM Gauge	H
OP30 Digital Oil Pressure Gauge	H
VAH35 3 Bank Volts/Amps/A-H Monitor	H
V30 3 Bank Digital Volts Gauge	H
A30 Digital Amps Gauge	H

A maximum of six CruzPro instruments can be connected to one LA-20.

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Installation

Remove the case front and align the case back onto any suitable surface. The case is not waterproof and should be mounted in a dry place. Use the case back as a drill guide, mark the location of the two holes with a pencil. Drill two 2mm (3/32 inch) holes and mount the case back using the screws provided. *To hide the wires, use the rear exit with the enclosed spare rubber grommet.*

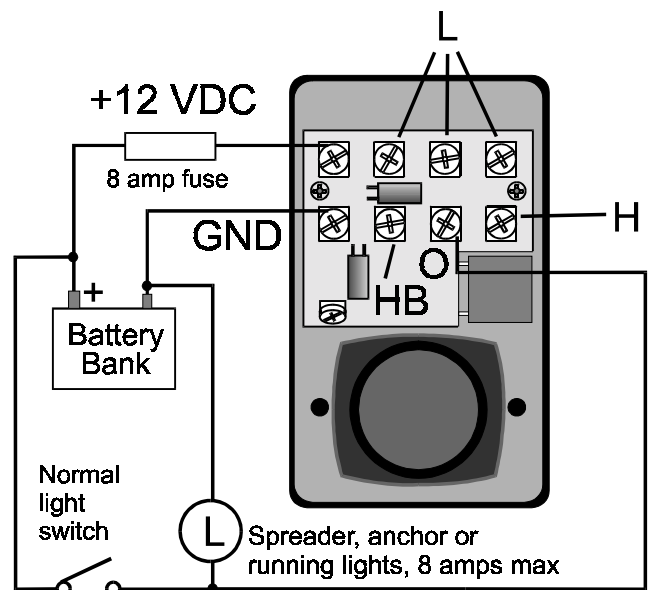
Thread two 16 gauge wires through the rubber grommet on the case front (or rear) and connect to the terminals marked "+12V" and "GND" in Figure 1. Connect the alarm inputs using 22 gauge (or larger) wire. Signals connected to the terminals marked "L" in Figure 1 will activate the alarm if they go low (below 5 VDC). Signals connected to terminals marked "H" in Figure 1 activate the alarm if they go high (+2 to +33 VDC). The signal connected to terminal "HB" activates the alarm if it goes high (+2 to +33 VDC), bypasses the RESET button and cannot be silenced at the LA-20. See the chart on page 9 for the correct connection points

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for CruzPro instruments.

If desired, connect a 16 gauge wire from terminal "O" to your spreader, anchor, or running light circuit. When the LA-20B alarm sounds, The "O" output terminal switches +12VDC to your light

Figure 1 - Connection Diagram



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