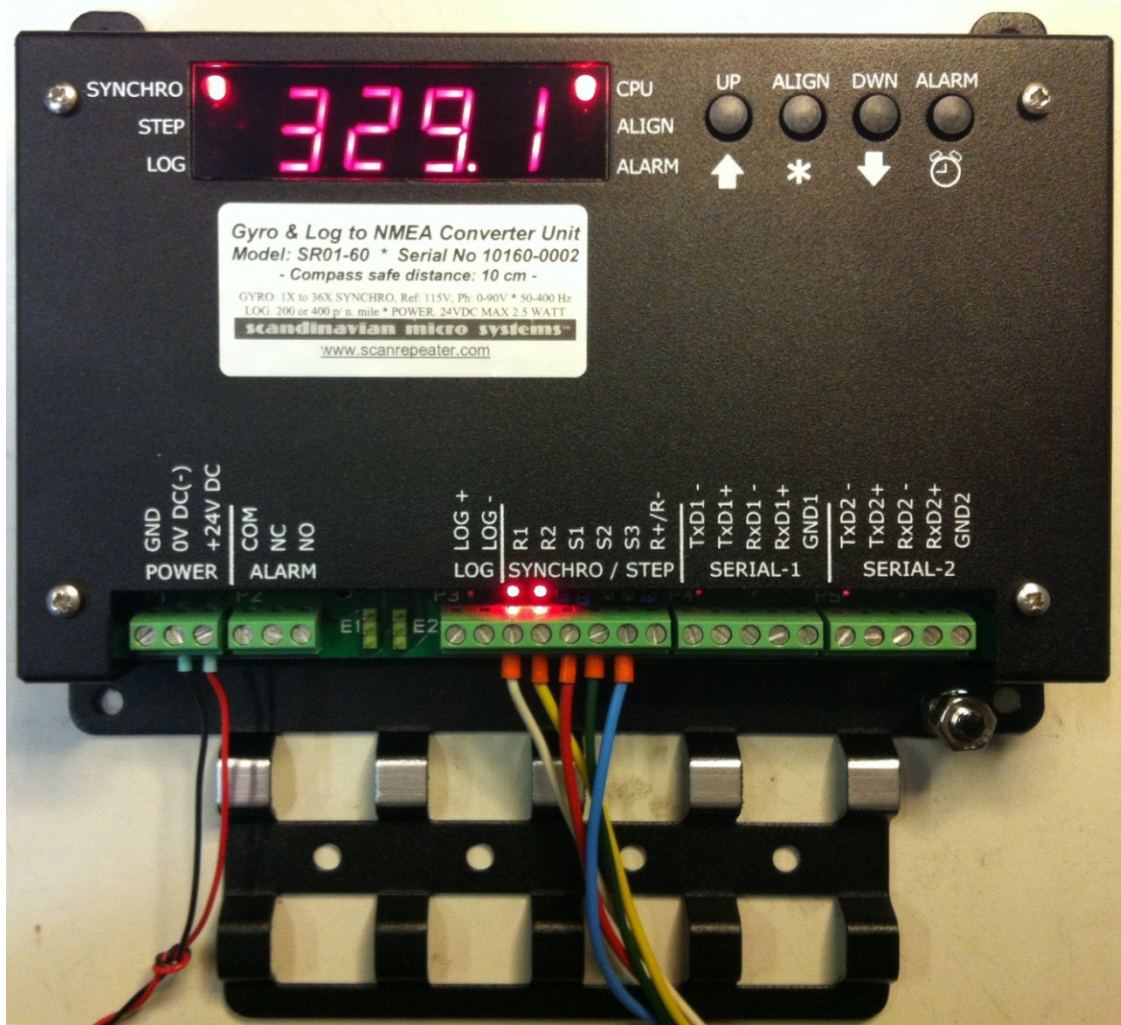


Gyro & LOG to NMEA Converter



Models SR01-60H or SR01-60L (3rd generation "Lehmkuhl Repeater")

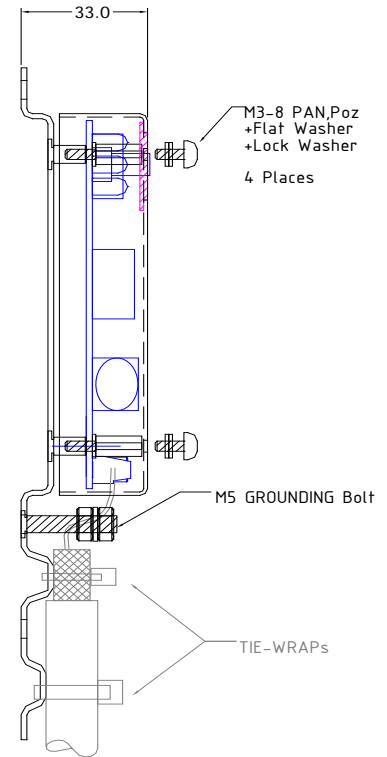
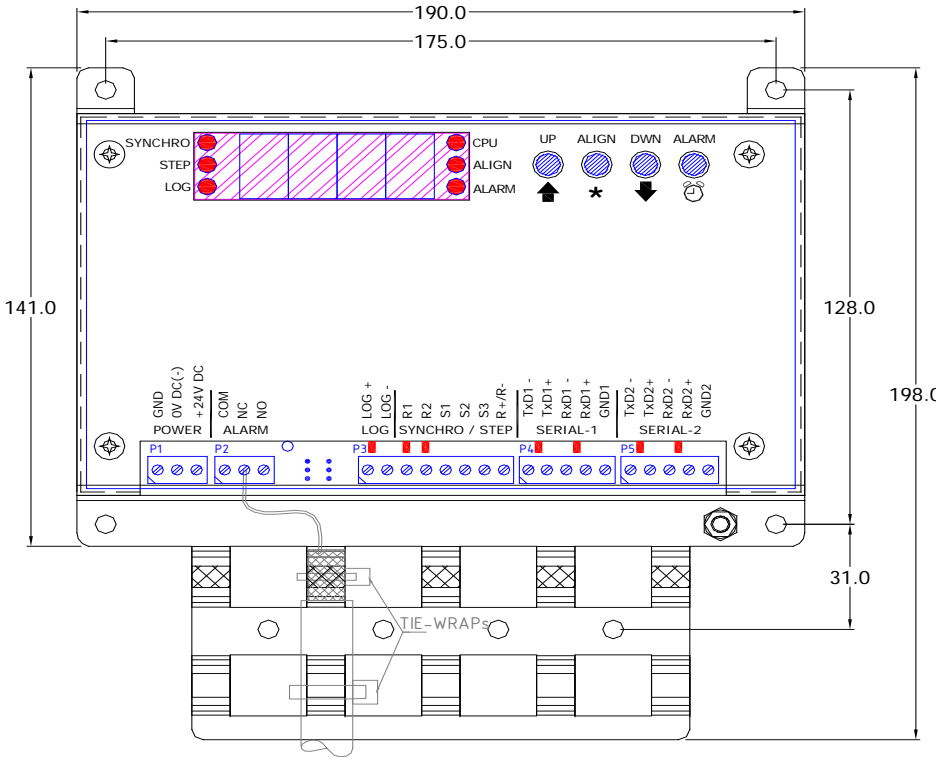
- **SYNCHRO Signal Converter "LR60"**
... converts SYNCHRO type Gyro signals; 1X, 2X, 11X, 36X (selectable). Available for "H" level or "L" level Synchro signals.
- **HEADING OUTPUT - NMEA**
... HEADING data output as NMEA, Course Bus, Tokimek, Yokogawa, "Lehmkuhl" LR22/40/60 formats, Robertson SKR80/82 format.
- **Speed LOG to NMEA Converter**
... converts 200 or 400 pulses per n. mile to NMEA Speed sentence.
- **ALARM Signals**
... ALARM Relay Output; Normally Open (NO) and Normally Closed (NC). Option for NMEA alarm communication.

**SR01-60 can drive several
SR01-02 Digital Heading & ROT Display units**

scandinavian micro systems™

www.ScanRepeater.com E-Mail: sales@ScanRepeater.com

Fort Lauderdale, FL - USA * Kolbotn (Oslo) – Norway * London - UK



MAINS POWER

24V DC +30%, - 20% * Max 2 Watt
The SR01-60 has no ON/OFF switch.

PHYSICAL SECIFICATION

Temp. (operational): -15 deg C / +55 deg C
Physical Protection: IP22

GENERAL DESCRIPTION

The SR01-60 is a low cost, high quality unit for converting 1X, 2X, 11, and 36X Synchro type Gyrocompass and Speed LOG signals to NMEA.

SR01-60 also computes Rate of Turn (ROT) and you can elect to output the NMEA ROT sentence in addition to the NMEA HEADING sentence

The SR01-60 can also be used as a PROTOCOL and BAUD RATE CONVERTER.

HEADING / LOG DISPLAY

The display shows the Gyro Heading or the LOG speed as read exported on NMEA by the SR01-60.

NOTE that the SR01-60 must be Aligned to the Gyro Compass Heading.

OPERATION CONTROL

UP (↑) and DOWN (↓)

These are used for Brilliance Control and for Aligning the Heading Display value

BRILLIANCE CONTROL:

Press the UP ARROW (↑) to increase brilliance or the DOWN ARROW (↓) to decrease brilliance.

ALIGN BUTTON

A separate Button is provided to put the unit in ALIGN Mode. Then each digit can be adjusted up or down by the arrow buttons. Align Button and the UP ARROW (↑) and the DOWN ARROW (↓).

ALARM BUTTON

SR01-60 has a dedicated ALARM REST button for acknowledging and re-setting any alarms

ALARMS

Alarms are displayed by activating the ALARM LED, the ALARMA RELAY and by Flashing an Alarm Code in main Display.

The ALARM Relay has one Normally Open Contact (NO) and one Normally Closed (NC) contact. NMEA ALARM communication is also available. SR01-60 has NO sound alarm.

SET-UP PROGRAMMING

Set-Up is done on 3 DIL Switches located under the lid. However as noted below, the SR01-60 will adjust automatically to the applied Gyro Compass Signal voltage levels and Frequencies.

GYRO COMPASS INPUT SIGNALS

Synchro Signals: Mainly for decoding Self-Aligning 1X Synchro signals.

Use SR01-60H for 115V 60 or 400Hz Reference signals (0-90V Phase signals).

Use SR01-60L for 26V 400Hz Reference signals (0-11.8V Phase signals).

Standard Gear Ratios selectable:

1X, 2X, 11X and 36X and can be selected in the DIL switches under the SR01-60 lid.

LOG INPUT

SR01-60 accepts 200 or 400 pulses per nautical mile and converts to NMEA Speed output.

DATA (NMEA) INPUT / OUTPUT

The SR01-60 has two independent Full Duplex Communication Channels. NOTE: Both data INPUT and OUTPUT are fully isolated.

NMEA PROTOCOLS supported

\$HETHS,xxx.x,a*hh<CR><LF>
\$HEHDT,xxx.x,a*hh<CR><LF>
\$HCHDT,xxx.x,a*hh<CR><LF>
\$--HDM,xxx.x,a*hh<CR><LF>
\$--HDG,xxx.x,x.x,a,x.x,a*hh<CR><LF>
\$--ROT,x.x,a*hh<CR><LF>

Speed protocol (Output):

\$--VBW,x.x.,A,,,,, *hh

Sperry Proprietary protocol:

\$PPLAN,,,,,,a*hh<CR><LF>.

Yokogawa old NMEA protocol:

\$HEHRCxxxxx,-xxx*hh<CR><LF>

Tokimec / Robertson RGC11 protocol
STX K xxx.x L xx.x ETX.

Anschütz, Course Bus Protocol

STX <b1><b2> .. <b11><b12> .. CS ETX

Lehmkuhl & Robertson Binary Protocols

LR22/40/60 and SKR80/82

APPROVALS

Type Approval will be provided later.

SCANDINAVIAN MICRO SYSTEMS Contact Page

Scandinavian Micro Systems provides a range of Navigation Instruments such as SR01-02 Digital Heading & ROT Repeater, SR01-40 and SR01-60 Step & Synchro to NMEA and SR03-01Mk2 Universal NMEA to analog Step or Synchro Drive unit.

SR01-60 is ideal for use with our New Heading & ROT Repeater;
SR01-02 (see picture below)

SR01-60



SR01-02



Location & Contact Name:	Phone / e-mail	Delivery Address
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