

SR04-SYS-LR-6X
SIX CHANNEL DIGITAL TO
SYNCHRO CONVERTER

HEADING - ROLL - PITCH Coarse & Fine Synchro Signals

# CONVERT DIGITAL INS DATA TO SYNCHRO SIGNALS

### - HEADING, ROLL & PITCH -

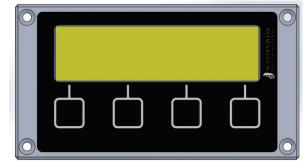
At Scandinavian Micro Systems we contribute to your safety at sea by developing and installing high-quality, precision navigation instruments for integration on board your vessel ... and we've been doing it for over 40 years.

This is our 2nd generation Digital to Synchro Converter System for Heading, Roll & Pitch, now also with **ETHERNET** connection

As the latest incarnation of the ScanRepeater™ range, this compact unit is known for its reliability, superior functionality and easy-to-read display in all conditions.

#### **KEY FEATURES**

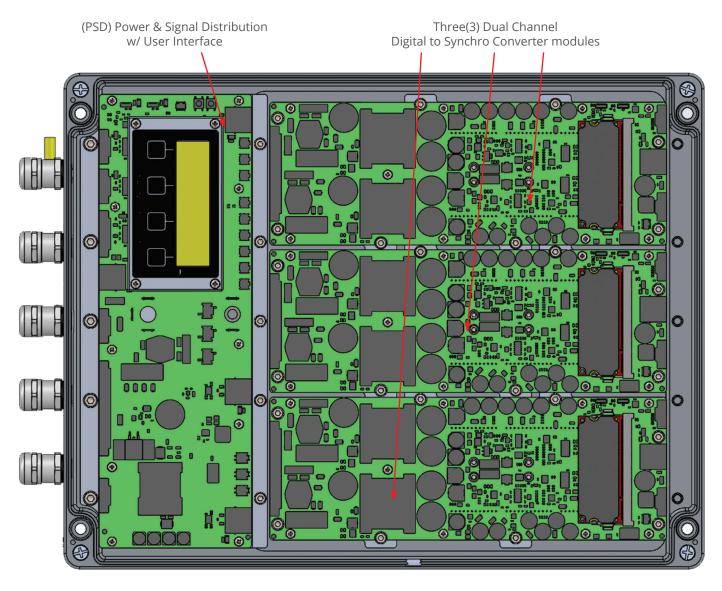
- SR04-SYS-LR-6x converts Inertial Navigation System (INS) data such as Heading, Roll & Pitch to Synchro signals.
- SR04-SYS-LR-6H: 115V 400Hz Reference signal and 0-90V Phase signals
- SR04-SYS-LR-6L: 26V 400Hz Reference signal and 0-11.8V Phase signals
- Six(6) independent and Isolated Synchro Output Channels
- Gear Ratio is individually programmable on each of the six channels. You can select 1X, 2X, .. 36X, etc.
- Analog Rate of Turn (ROT) output on each channel, for driving analog instruments (0 to +/- 10V)
- Accepts INS data on various Proprietary Protocols, from, iXblue., Kongsberg Seatex, Raytheon Anschütz, SAGEM, Sperry etc. Other protocols available on request.
- Power Drive: Nominal 2VA; Max 7VA on each of the 6 Channels
- Three (3) identical and interchangeable DUAL Digital to Synchro Converter (DSC) modules.
- High Accuracy: Better than 0.05 degrees on 1X
- User Interface with OLED Display and Keypad for system programming (set-up) and for showing "running" data such as Heading, Roll & Pitch angles, System Load, Currents, Voltages and inside Temperatures
- Web-browser connection for set-up is also available
- Rugged unit with EMI protected LEXAN window allowing users to observe system status in operation.
- Accepts High-Speed RS422 or ETHERNET connection.
- The New SR04-DSC-LR-xx modules are backward compatible with our older LR66 modules (SR04-01.3 and SR04-2.3)



USER Interface w/ OLED and KeyPad



WEB Browser Set-Up



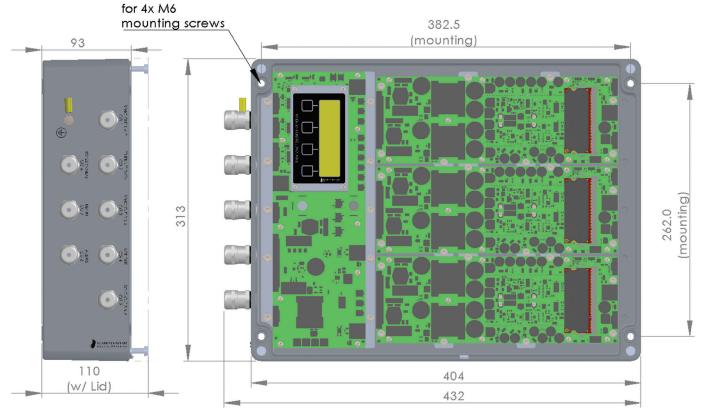
SR04-SYS-LR-6H Six Channel Digital to Synchro Converter

## TYPICAL SYNCHRO OUTPUT SIGNALS: HEADING (1X & 36X), ROLL (2X & 36X), PITCH (2X & 36X)



SR04-SYS-LR-6H Cable Inputs with EMC Cable Glands

#### **TECHNICAL SPECIFICATION**



MAIN Dimensions- shown without LID

TECHNICAL SPECIFICATION	
MAINS SUPPLY Use Ship's Synchro Reference Voltage	
Synchro Reference	115V rms, 400Hz, (Ship's Synchro Reference Supply)
Power / Current	Required Power: @ 2VA Load: 30W (0,26 A on 115V) / @7VA Load:50 W (0.44 A on 115V)
ENVIRONMENTAL	
Temperature Range	OPERATING: -25°C to +55°C / STOREAGE: -25°C to +70°C
	IPx6 (can be mounted outside /exposed)
Vibration & Shock	OPERATING: 0-33 Hz; 100mm/sec > 33 Hz constant @ 1.9 g / Shock: 10g
SYNCHRO OUTPUTS	
Synchro "Gear Ratios"	Freely Programmable: 1X (Course), 2X, 36X(Fine), etc.
	6 High level Synchro Channels: S1, S2, S3; 0-90V rms / Load per channel: 2VA (nom) / 7VA (max)
SR04-SYS-LR-6L	6 Low level Synchro Channels: S1, S2, S3; 0-11.8V rms / Load per channel: 2VA (nom) / 7VA (max)
DATA SIGNALS	
	IEC61162-450 ed2.0 2018-05
	IEC61162-1 ed 5.0 and IEC61162-2 ed 1.0
Baud Rates	Accepts: 4800, 9600, 19200, 38400 &115200 b/sec. (must be programmed during set-up)
Data Protocols	Accepts Standard NMEA protocols and various Proprietary Protocols such as: Kongsberg Seatex (MRU Binary), Raytheon Anschütz (\$PANZHRP), Sperry (\$PLLSR), Safran; (\$PRDIR & \$PCATT). iXblue (\$PRDID).
ALERTS	
Relay contacts	2A Relay Contacts NO/NC
NMEA / BAM	Full Duplex NMEA CAM or BAM Compliant signalling
TESTS	
IEC 60945	IEC 60945 (2002) incl. Corr.1 (2008)
IEC62288	Tested and approved according to IEC62288 (2014).
IP Rating	IPx6 (Approved for Bridge Wing installations)
Compass Safe distance	100 cm
MECHNICAL	
Material	Cast Aluminium / Powder Coated Gray
Dimension and Weight	432(w) x 313(h) x 110(d) mm; Net Weigt: 8.0 kg
Export Package	500(w) x 400(h) x 150(d) mm; Gross Weight: 10.3kg (Volume: xx dm3 (litre)

