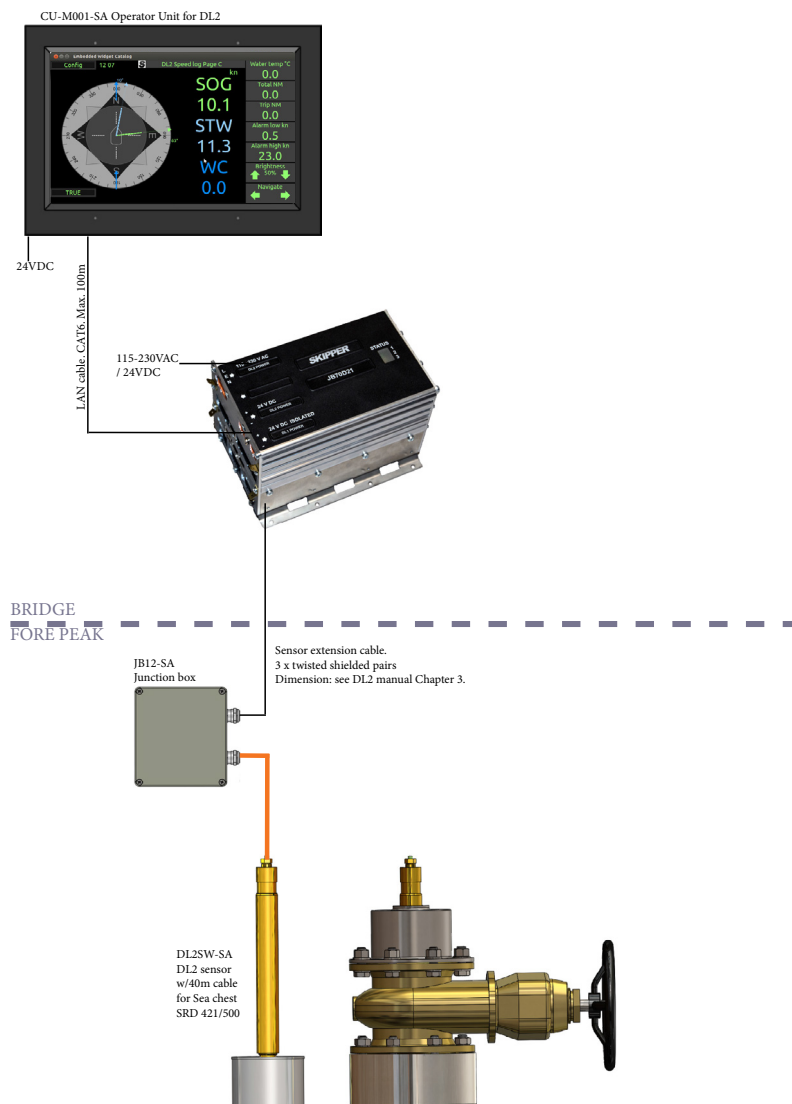


SKIPPER

Installation manual DL2 Doppler Speed log sensor SPERRY SRD 421 or SRD 500 Sea chest retrofit kit



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INTRODUCTION

The SKIPPER sensor for Sperry SRD 421/500 consist of:

- SKIPPER sensor 100mm diameter
- KIT-SRD-M1. Kit for Sperry SRD 421/500 Sea chest replacement

SKIPPER DL2 and DL850 sensors will both fit into the Sperry SRD 421/500 Sea chest.

When retrofit the Sperry SRD 421/500 you may choose a SKIPPER DL2 or a SKIPPER DL850 Doppler speed log.

In a retrofit installation there are normally 2 parts required to be reused:

- Existing Sperry SRD421/500 Sea chest
The SKIPPER DL2 or the DL850 sensor will both fit into existing Sperry SRD421/500 Sea chest.
- Existing cabling from bow to bridge.
The specified existing Sperry cable is minimum 3 shielded pairs but often we see a 4 pair cable is used.
SKIPPER DL2 requires a 3 shielded pair cable.
SKIPPER DL850 requires 4 shielded pair cable

This document describes how to retrofit install a SKIPPER DL2 system into an existing Sperry SRD 421 and SRD 500 Sea chest.

The retrofit will require new

- DL2 Display unit. CU-M001-SA
- Electronic unit. JB70D2-SA
- Sensor. DL2SW-SA

For Display unit and Electronic unit installation instruction, please see DL2 installation manual DM-M002.

DL2SW-SA. SKIPPER DL2 sensor with adaptor for Sperry SRD 421/500 consist of:

- DL2S-277-ZA Doppler sensor Moulded 40 m cable
- KIT-SRD-M1 Kit for Sperry SRD 421/500 Sea chest replacement
-

DL850S27W-SB Log sensor DL850 270kHz SPERRY SRD-500 Sea chest 40m cable consist of:

- DL850S27-SB Sensor moulded DL850 270kHz, 40m cable. No adaptor.
- KIT-SRD-M1 Kit for Sperry SRD 421/500 Sea chest replacement

PREPARE SPEED LOG REPLACEMENT

The DOLOG speed log to be replaced consist of the following main parts:

1: Master Display.

To be replaced by SKIPPER CU-M001-SA Display unit and SKIPPER JB70D2-SA Electronic unit

2: Cable from Master display to Electronics unit.

May be reused for DL2. Please read DL2 Installation manual for cable dimensions specs.

3: Electronic unit

May be replaced by a terminal box JB12.

4: Sensor cable

To be replaced by DL2SW-SA sensor with 40m cable.

Please note Sperry cable from Electronic unit to sensor may be up to 60m length. SKIPPER DL2 sensor is standard with 40m cable. The DL2 sensor cable may be extended or shortened. DL850 40m sensor cable can NOT be extended or shortened.

7: SRD 421/500 Sea chest

To be reused for installation of DL2S with SRD421/500 adaptor

8: Sperry transducer

To be replaced by DL2SW-SA sensor with 40m cable

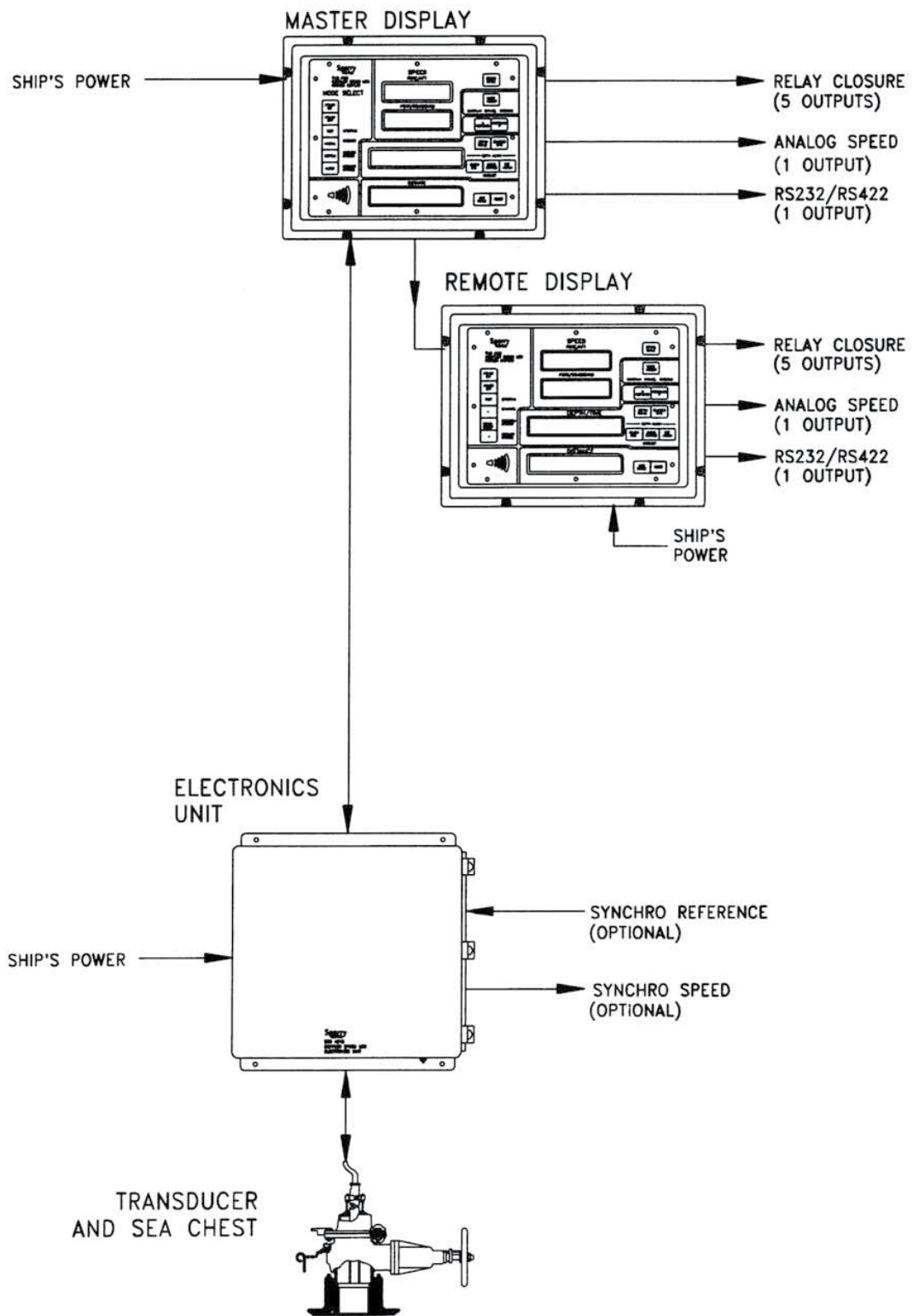
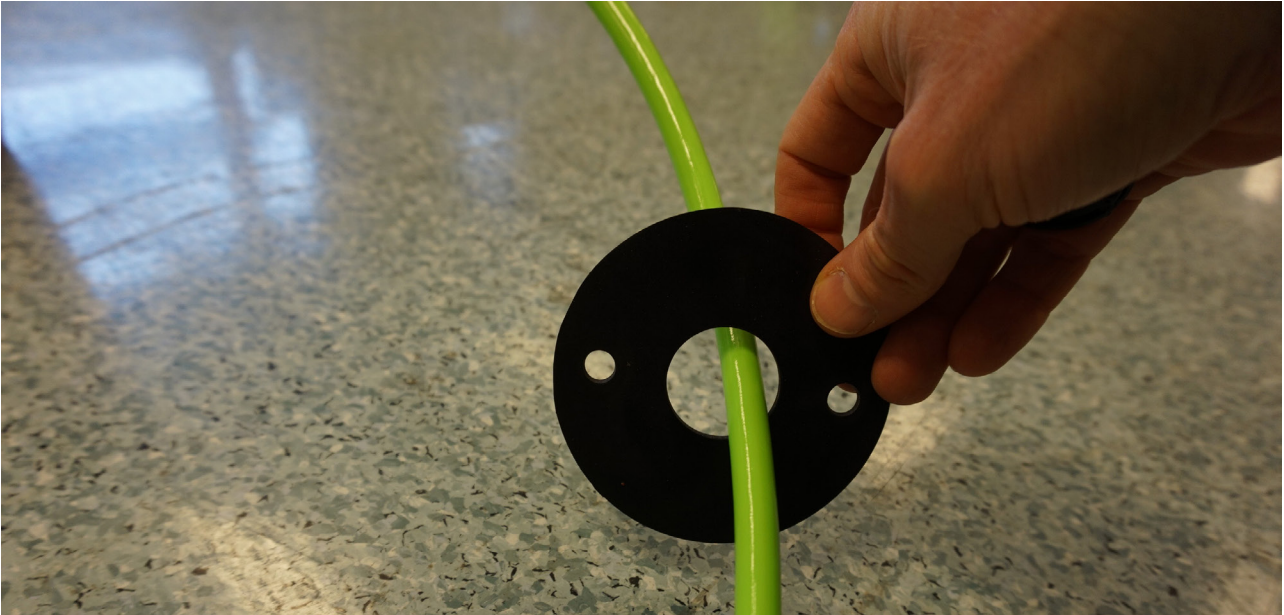


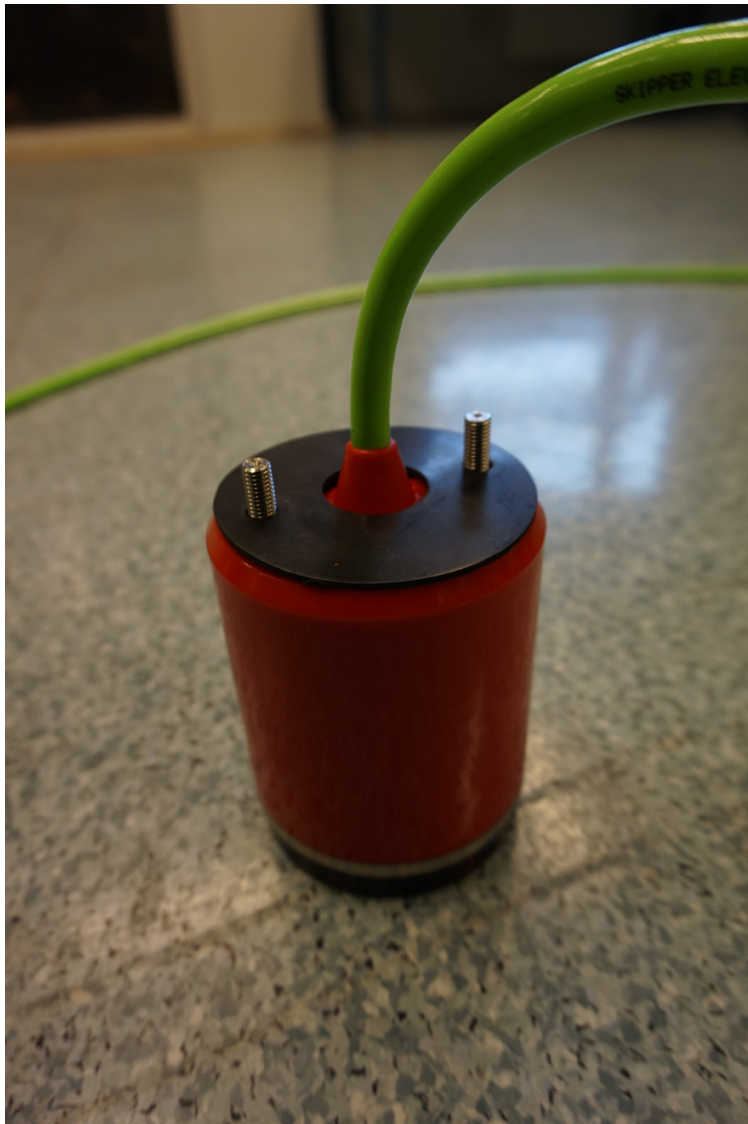
Figure 1-1. Dual Axis Doppler Speed Log System

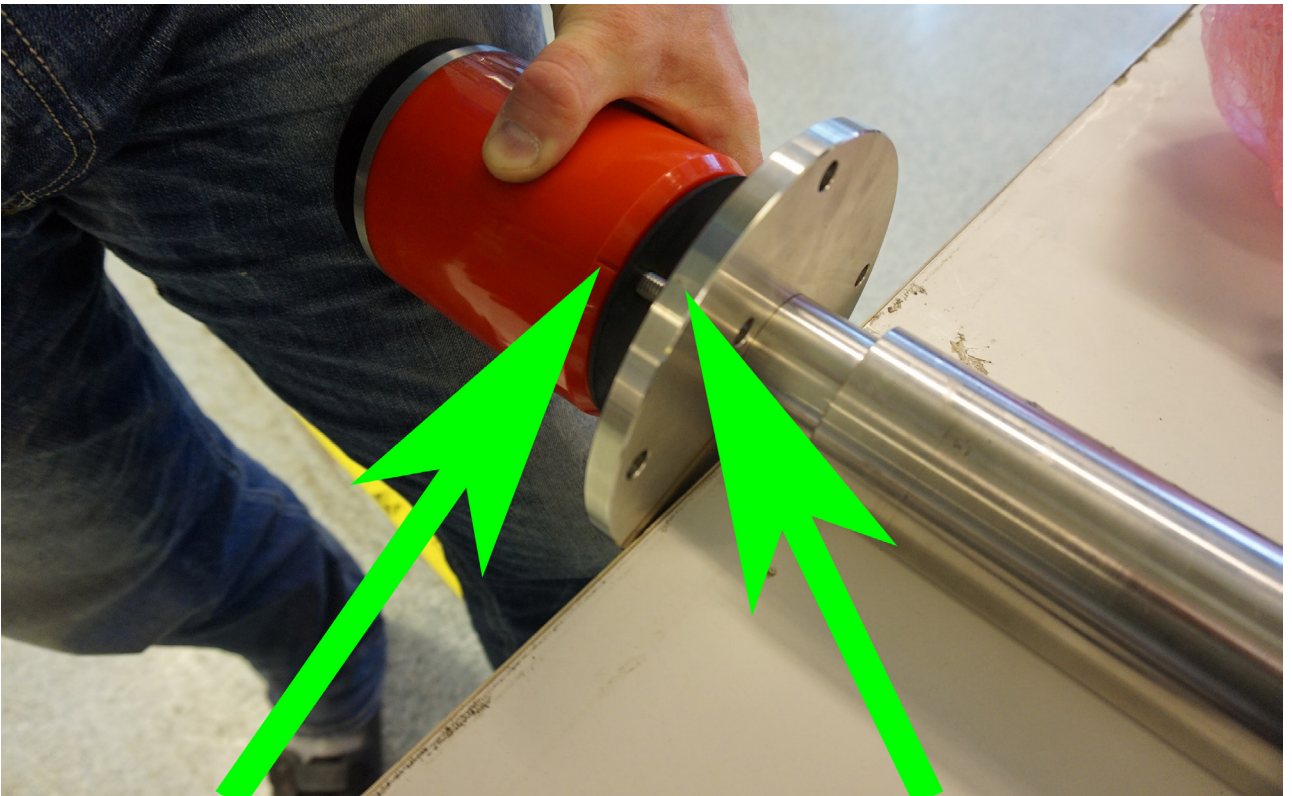
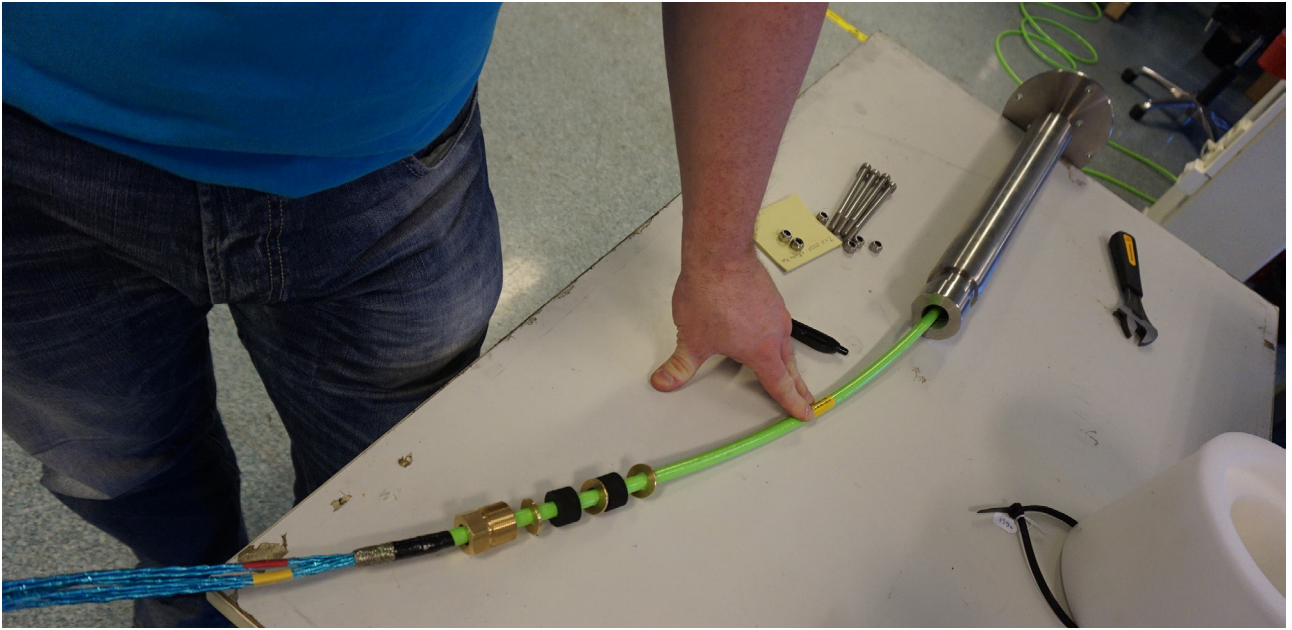
INSTALLING SENSOR ADAPTOR KIT

Install the sensor into the SRD421/500 adaptor as described in drawing.
Sensor forward (ahead) mark to be correctly positioned.



Fit gasket onto sensor cable and sensor

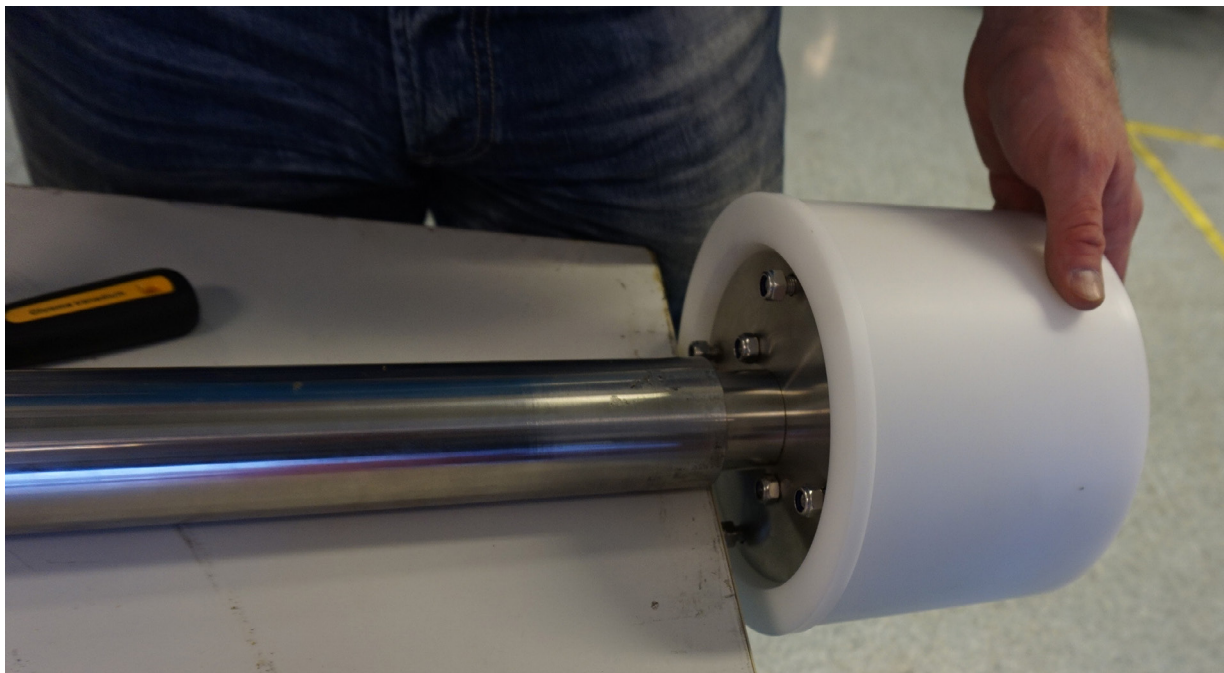


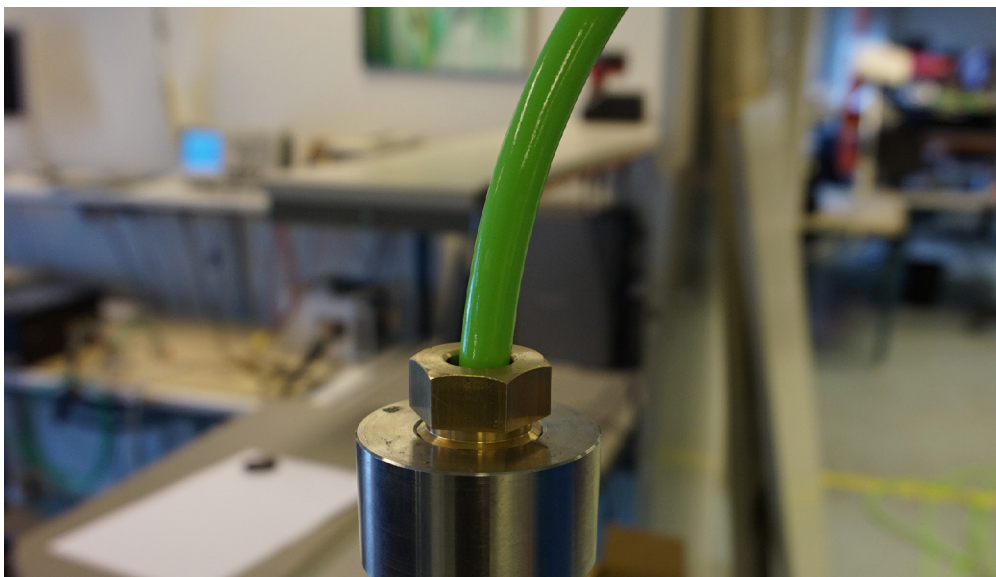


Sensor forward direction mark

Adaptor forward direction mark







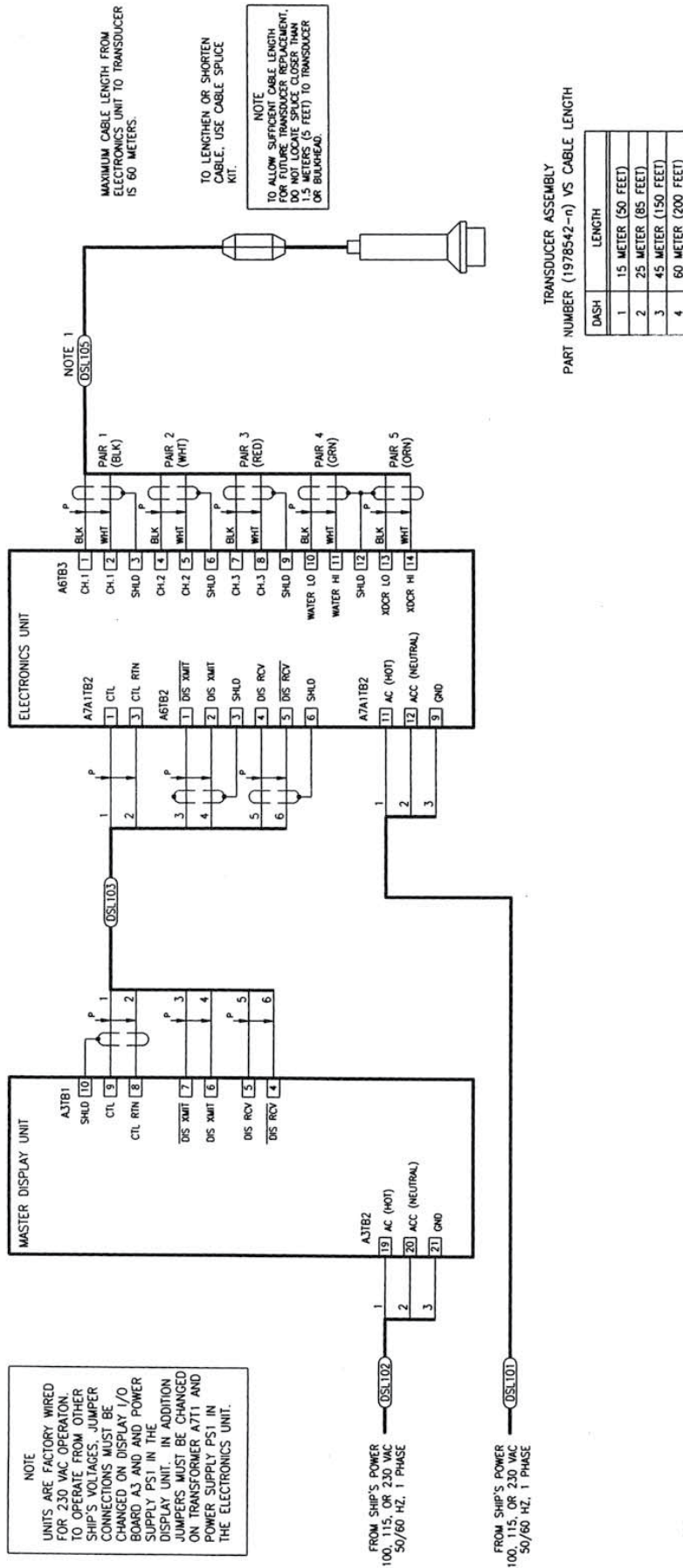
Sensor forward direction



INSTALL DL850 SENSOR IN SRD 421/500

Please see SRD 421/500 Sea chest manual for sensor replacement procedure.

DRAWINGS SRD421/500

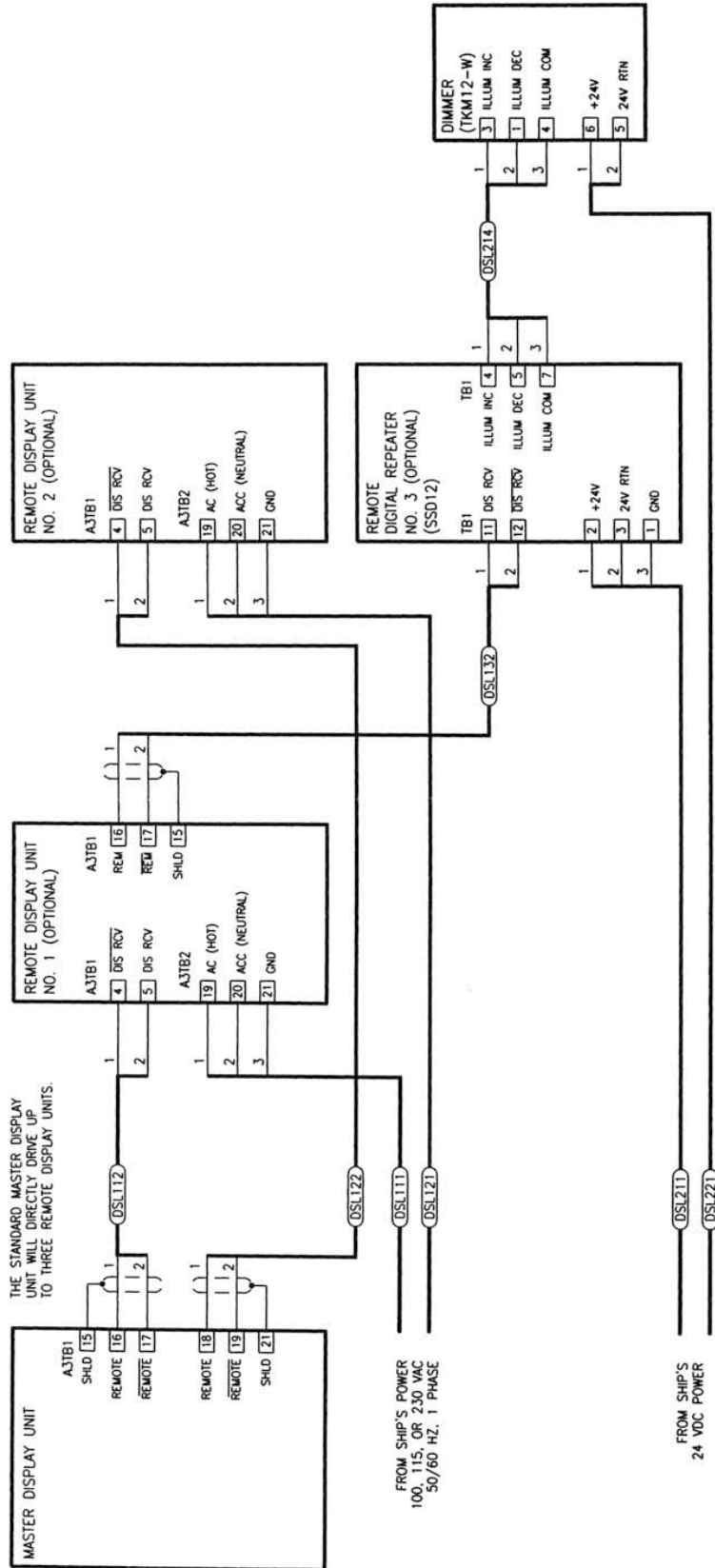


BASIC EQUIPMENT INTERCONNECTION WIRING DIAGRAM

Figure 8-4. SRD-421S Doppler Speed Log
Electrical Installation Drawing
(Sheet 3 of 17)

8-35/(8-36 blank)

1820457 (Sheet 3, Rev B)



NOTES:

1. THE MASTER DISPLAY UNIT RS-422 OUTPUT IS WIRED TO SUPPORT TWO (2) REMOTE DISPLAY UNITS. THE DRIVERS HAVE SUFFICIENT CAPABILITY TO SUPPORT THREE LOADS WITHOUT THE ADDITION OF AN EXPANDER/AMPLIFIER BOARD. IF THREE REMOTE DISPLAYS ARE REQUIRED, THE THIRD REMOTE DISPLAY CAN BE JUMPED FROM EITHER REMOTE DISPLAY UNIT NO.1 OR REMOTE DISPLAY UNIT NO.2 AS SHOWN.
2. REMOTE DISPLAY NO. 3 IS SHOWN AS A SSD12 TYPE DISPLAY. ANY COMBINATION OF SRD421S REMOTE DISPLAYS OR SSD12 REMOTE DISPLAYS CAN BE WIRED AS SHOWN IN THE TYPICAL CONFIGURATION.

OPTIONAL TYPICAL REMOTE DISPLAY(S), WIRING DIAGRAM

Figure 8-4. SRD-421S Doppler Speed Log Electrical Installation Drawing (Sheet 5 of 17)

1820457 (Sheet 5, Rev B)

8-39/(8-40 blank)

DRAWINGS DL2