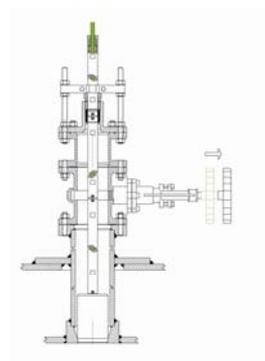
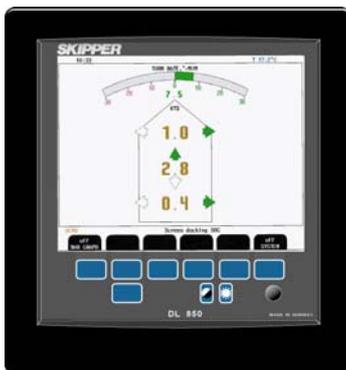


## The DL850-270(D) SAM-4682/3 (RevB)

# SKIPPER

Doppler Log

## Getting started



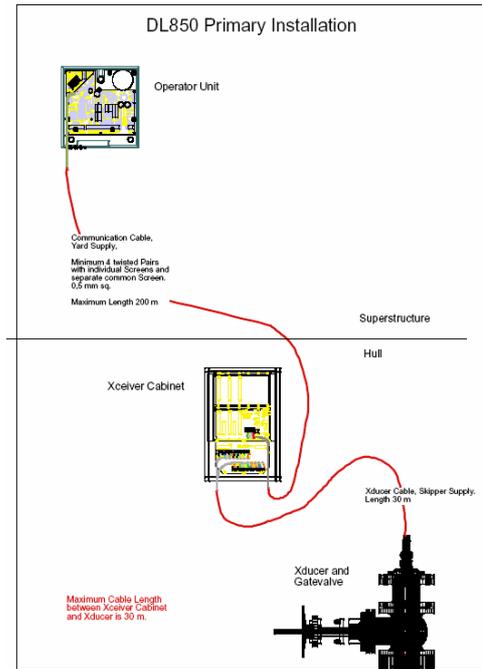
## Getting started with the DL850-270

This guide is a compressed version of the information found in the manuals 'DL850 Operation and Installation Manual', and '100mm Gate Valve for DL850 Operation and installation manual'. The diagrams can be found in greater detail in these manuals.

The system comprises of 4 sections:

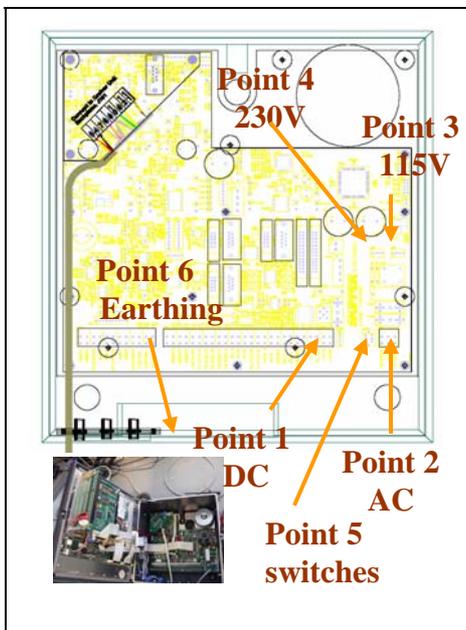
- The bridge unit
- The transceiver
- The transducer
- Cabling

The Unit is supplied with terminated cable for the transducer, and yard stock cable can be used for the longer transceiver – bridge section (individually screened twisted pair). Alternatively, this cable can also be provided by Skipper part nr **ZZK-01011**.



### Mounting the bridge unit

1. The bridge unit is mounted in or near the bridge, allowing a space for the air to escape at the back of the cabinet (>10mm). The bridge unit will accept 24VDC or 115/230V AC. Power cables are not provided.
2. Mount the unit using the 3 screws on the rear (provided) or using the skipper bracket ordered separately part nr ZZA-01125 (photo), alternatively a flush mount bracket can be ordered ZOA01042. Open the cabinet, using a Phillips (cross) screwdriver. Screw the power lines to the appropriate terminals pt1 or pt 2 (or both). If AC is used, select the correct voltage using connector pt 3 or pt 4 (unit supplied in



230V position)

3. Ground the unit to ship ground using the grounding terminal (pt 6)

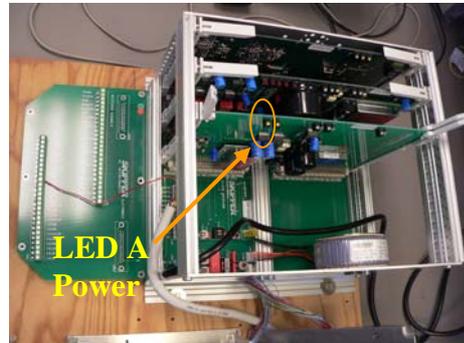
4. The unit is now ready to test. Turn on the appropriate power switch(es) pt 5. Press a button on the front panel. The unit will start and the display (with no data) will be displayed.

Note: The factory default has brightness low and night picture and may need adjusting to be seen in bright sunlight.

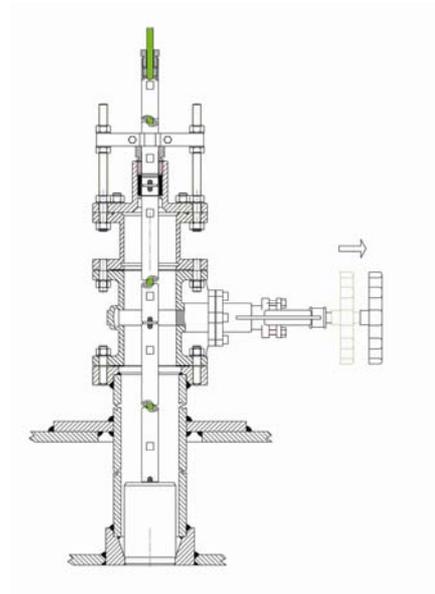
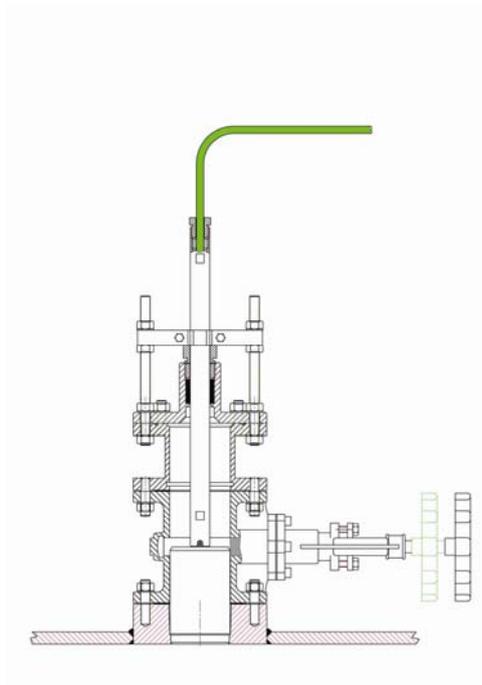
### Mounting the Transceiver.

1. Mount the unit on a solid wall. (The unit weighs 17 kg). Ground the unit via the bolts or with a cable to the ships ground. Route power to the unit (mains/24DC or both, The unit needs at least 60W at peak.)
2. Turning on the power with no cabling will not damage the unit, LED A should light.

(8-10mm bolts are needed to mount the unit to the wall, not supplied)



### Installing the Gate valve (See separate manuals for full details) SB-100-Manual and DB-100-Manual.



**Installing the Combo Tank and DL270 sensor in Tank. (See separate manual for full details) ComboTankInstManual.**

RevNo	Revision note	Date	Signature	Checked

**1. Recommended hull cross section profile for welding.**

**2. Assembling order**

**3. Assembled**

Item#	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
02	1	DL270 Sensor w. Housing	TC-2017-*/DL270 ST
01	1	Transducer Tank w. Adapter	TC-2018-*/ETNSTCL
04	6	Screw M8 x 16 DIN 912	St. steel A4
ITEM	QTY.	DESCRIPTION	Material/ Part. No.

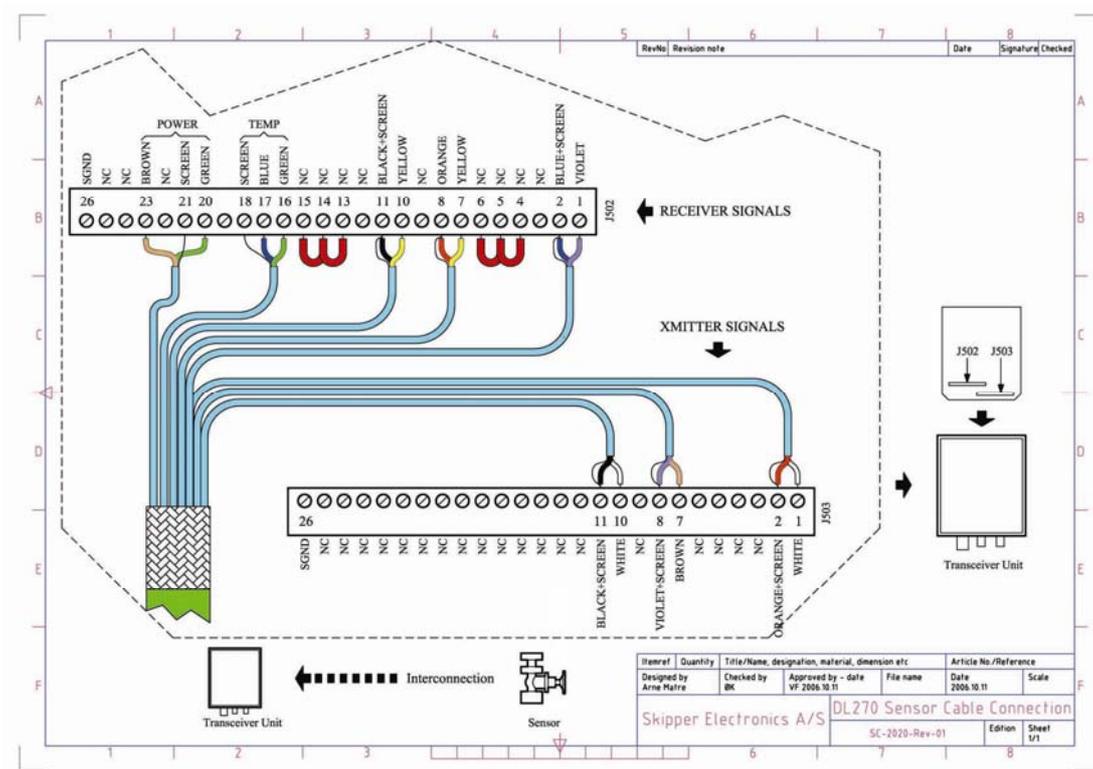
  

Designed by A.Maire	Checked by	Approved by - date	File name	Date 06.03.24	Scale
SKIPPER Electronics A/S				DL270ST Sensor in TC-2002	
				TC-DL-Rev-01	Edition 0
					Sheet 1/1

## Cabling

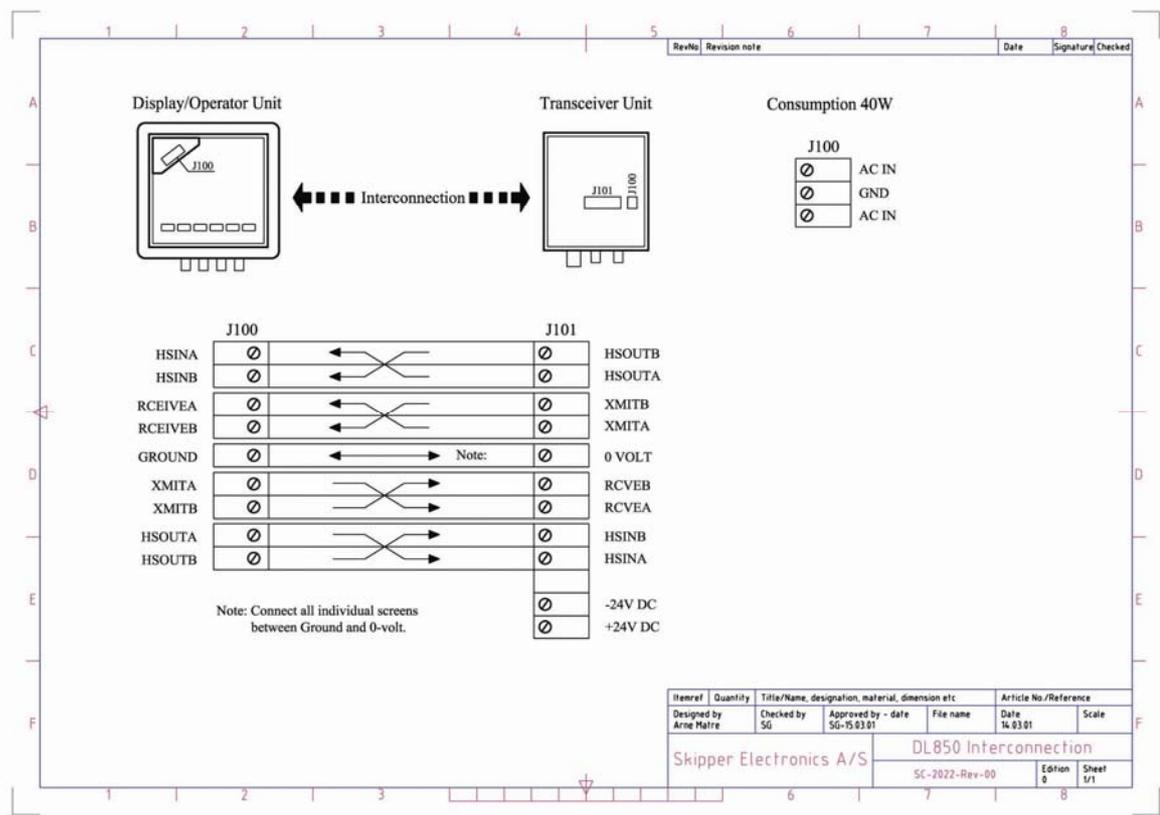
The transducer cable should be routed to the transceiver box. Any excess cable should be coiled in an area with little electrical noise (i.e. not next to a motor or generator). Cables are 40m long as standard.

The transceiver end of the cable is colour coded, and the transceiver screw terminals J502 and J503 are also colour coded. Attach the cables as per diagram p 62 operator and installation manual



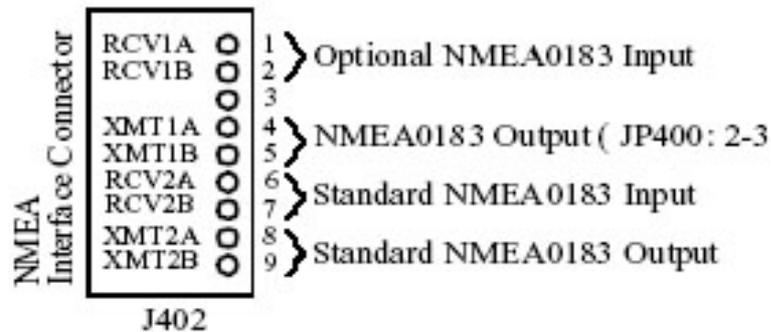
The cable from the transceiver box to the deck unit is connected as per diagram below. This cable transmits large quantities of data so should be routed away from potential noise sources. This cable is RS 422 with handshaking and should not be effected by anything but extreme noise.

(See page 61 of Operator and installation manual)



## Interfacing and connecting the NMEA outputs

This is documented in the Operation and installation manual on page 43



If the docking options are required, connect the gyro NMEA input set to ROT signal to one of the comports. The pin numbers for each comport can be seen on the NMEA screen on the unit. Standard docking units have 2 comports, and will accept both ROT (required) and GPS (optional)

### Operational Check

CARE: The system should ideally **not** be powered in air, if however you wish to check the system, the transmit wires can be disconnected, and the unit will operate. See page 62, J503 pins 1-15 (1 on the right) The unit will operate for up to 10 minutes in air, but must then be allowed to cool for at least 30 minutes.

### Calibration of the system

This is documented in the DL850 operation and installation manual page 50