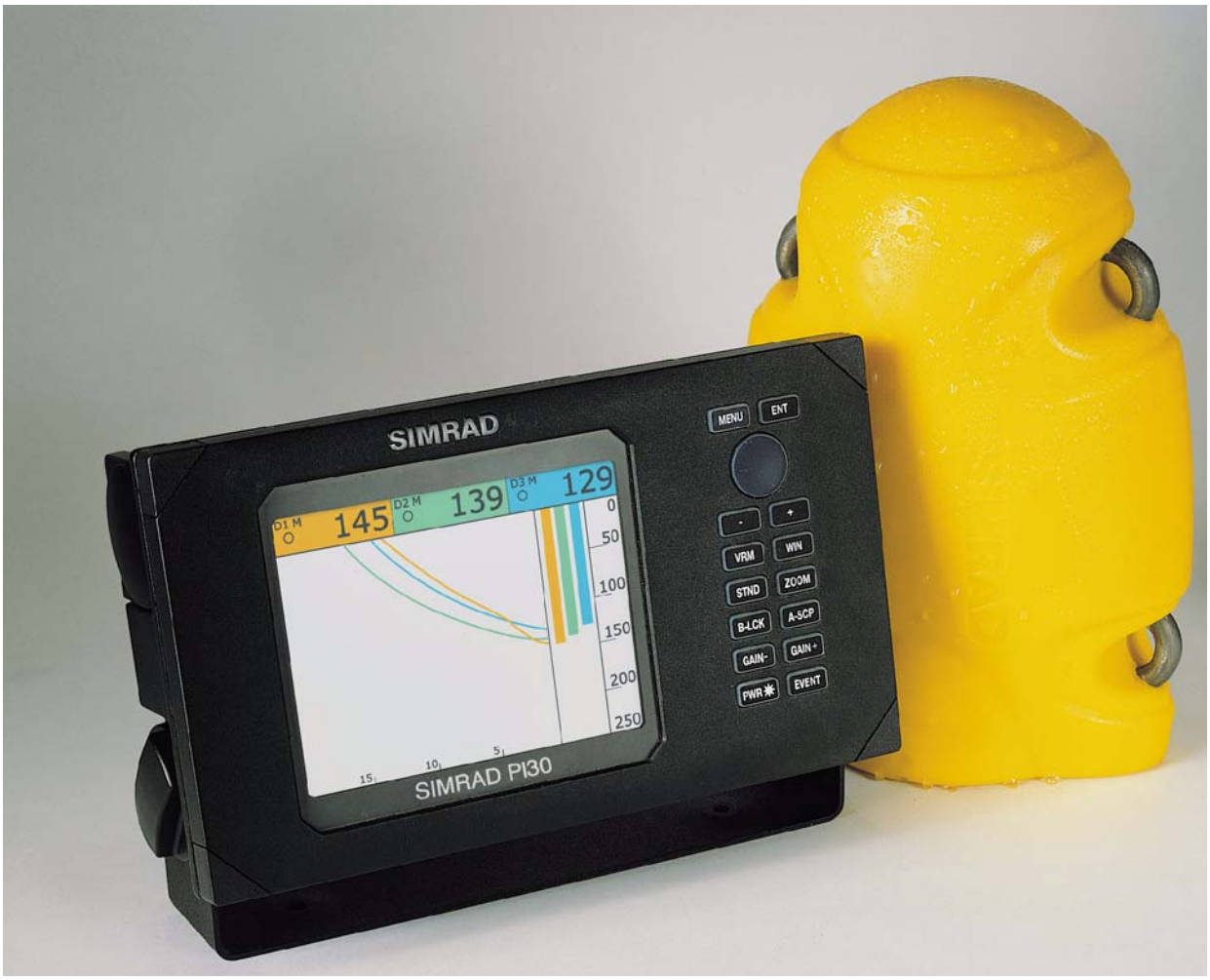
Installation Manual

Simrad PI30
Purse seining system

PI / ITI transducer installation



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Note

Simrad AS makes every effort to ensure that the information contained within this document is correct. However, our equipment is continuously being improved and updated, so we cannot assume liability for any errors which may occur.

Warning

The equipment to which this manual applies must only be used for the purpose for which it was designed. Improper use or maintenance may cause damage to the equipment or injury to personnel. The user must be familiar with the contents of the appropriate manuals before attempting to operate or work on the equipment.

Simrad AS disclaims any responsibility for damage or injury caused by improper installation, use or maintenance of the equipment.

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Document revisions

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A	04.09.00	LEA	KR	KR
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(The original signatures are recorded in the company's logistic database.)

To assist us in making improvements to the product and to this manual, we would welcome comments and constructive criticism. Please send all such - in writing or by Email - to:

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References

(The information on this page is intended for internal use.)

Document history

Rev. A First edition for PI30 /ITI hydrophone installations.

PI30 / ITI INSTALLATION

General

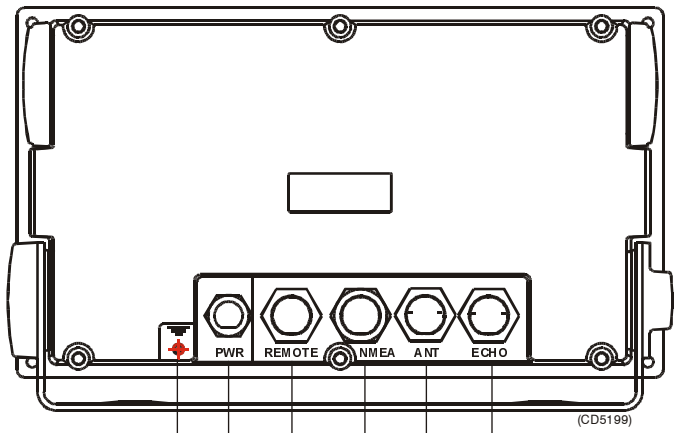
The following information is a general description of installation requirements for a PI30 purse seining system when used with an optional PI/ITI transducer.

Note ! *All cable connections and related installations must be made in accordance with the guide-lines set forth by the vessel's classification society.*

The cables identified in the cable plan are listed according to cable identification number and type.

ID	Type	Specifications	From/To
Power cable			
C500	W319	Manufacturer's supply (298-078426)	Ship's DC power supply to PI30 cabinet (integrated fuse and connector).
Signal lines			
C510	W222	Manufacturer's supply (298-078427)	PI30 Cabinet to DE30 remote display. Maximum distance 15m.
C516	W224	Manufacturer's supply (370-078423)	PI30 cabinet to optional echo sounder transducer.
Serial lines			
C520	W122	Manufacturer's supply (298-078425)	PI30 cabinet to NMEA serial data In/Out.
C530	W311	1 x 6 mm2	PI30 cabinet to ship's ground. Keep as short as possible.

PI30 Cable layout and plug diagram



Ground screw

PWR Fuse 2AF

Supply 10-32 Vdc:
1 - Positive; brown or red
2 - Negative; blue or black

REMOTE

Data input:
3 - RX A (data in)
4 - RX B (return)
Optional remote display DE30:
5 - Remote data
6 - Remote CLK

NMEA

Data output:
1- TX A (data out); white
2 - TX B (return); brown
Data input:
3 - RX A (data in); yellow
4 - RX B (return); green
Other:
5 - Alarm/log; grey
6 - N/A

ECHO

Triducer log:
Speed log - **1**
(+5 Vdc) speed log - **2**
Echo sounder transducer:
(TX +) echo sounder - **3**
NC - **4**
(TX -) echo sounder - **5**
GND & screen - **6**
Triducer temp. sensor:
Temperature sensor - **7**

HYDROPHONE

Hydrophone (-12 Vdc & signal) red - **1**
NC; black - **2**
NC; blue - **3**
Hydrophone GND/screen (screen) - **4**
NC; white - **5**
NC; green - **6**
Hydrophone (+12 Vdc & signal) yellow - **7**

NOTE: Cabinet connectors (male pins) are illustrated as seen from the back of the cabinet. Cable connectors (female sockets) are their corresponding mirror images.

Figure 1 - PI30 cable layout and plug diagram

PI30 Cable plan

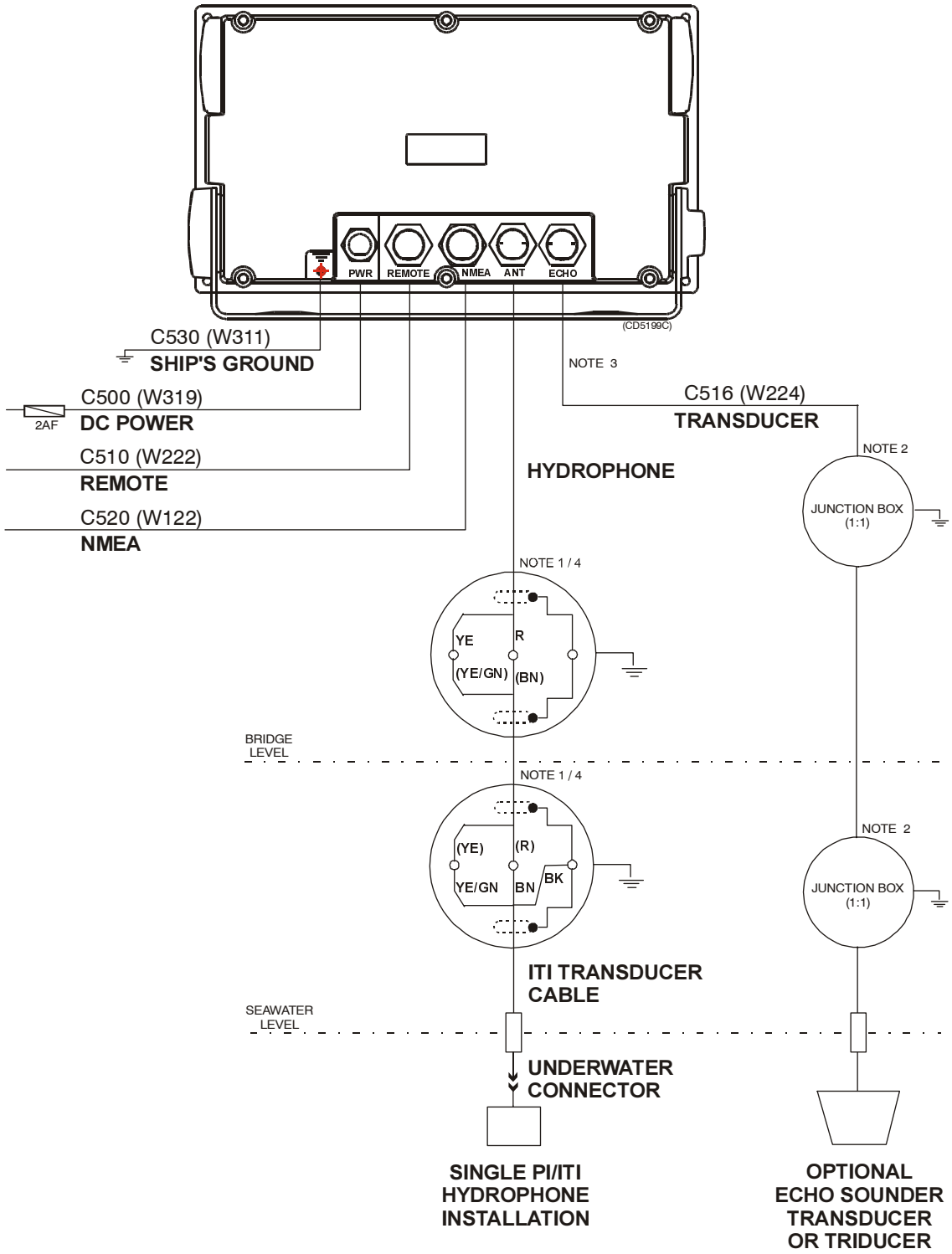


Figure 2 - PI30 cable plan (refer to page 4 for note descriptions)

Notes

The following notes refer to the PI30 cable plan:

Caution ! ***Use a multimeter to check continuity. DO NOT subject the PI30's wiring or related components to high voltage.***

Note 1 - If the PI30 is installed using an existing ITI transducer cable, always disconnect the cable from the ITI transceiver terminal before connecting the hydrophone.

Note 2 - Refer to the respective installation instruction for the connection of an echo sounder transducer.

Note ! *The PI30's echo sounder is designed for use with a high-impedance ceramic traducers, it may be therefore necessary to employ a matching transformer should a low-impedance transducer is used.*

Note 3 - If an optional echo sounder transducer is installed, the PI30 becomes a fully functional echo sounder with the ability to superimpose sensor data over the echo sounder display for comparison.

Note 4 - The wire colours of the ITI transducer cable are standardised. The wire colours of the cable run from the junction box in the bilge of the vessel to the bridge will vary. In the cable plan the assumed colours are provided in parentheses ( ) to illustrate the connection between the transducer cable and the PI30 cabinet as follows:

- YE/GN - connects with YE
- BN - connects with R
- BK - connects with the shielding*

*Cable shielding must be continuous, terminated in the PI30 cabinet and grounded in the junction boxes. Metal junction boxes must also be grounded.