

NINGLU IR261

Depth Repeater Operating & Installation Manual

Edition IR261EN 091001



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INSTRUCTION

NINGLU IR261, digital depth repeater, is used with echo sounders where NMEA0183 output is available. The operator may select the indication alarm depth in the menu. **IR261 will only indicate depth below transducer.** Brightness is adjusted on the front panel, or from the optional remote controller, IR30DIM.

OPERATION

1. Power Switch

To switch the unit on, press any key,

To switch off, press both up and down keys at the same time.

2. Brightness

Press up/down arrows to find suitable brightness setting.

3. Depth alarm

Press **S** key **once** and enter alarm setting mode, showing "Set A".

Set the desired depth by **UP** and **DOWN** keys. When desired alarm depth is set, the unit will go back to normal mode operation after 15 sec or press **S** to the depth occur.

When depth below transducer becomes same or less than the set alarm depth, the display will indicate "AL" alternating with actual depth. To disable alarm repeat operation no 3 and set alarm depth to 0 m.

4. Depth units (feet, meters or fathoms)

Press the **S** key **twice** and enter depth unit setting mode, "Set U".

Select wanted readings by pressing the **UP** or **DOWN** key. When a reading is set, the unit will go back to normal mode operation after 15 sec or press **S** to the depth occur.

5. Transducer position

Press the **S** key **three times** and enter the mode, "Set P".

Press **UP** or **DOWN** keys to select between the four choices: Unknown, Forward, Backward or Auto. The Unknown selection decode NMEA depth message and show the depth on the display. The position leds will then be off. The other selections decode the NMEA message \$PSKPDPT.

If Forward is selected only the readings from forward transducer is show, and in the same way for the Backward selection. The Auto selection switches between Forward, Backward and Unknown depending on the NMEA messages available. The led for the positions will shift automatically and blink every third second indicating that Auto selection is active. If transducer position is unknown both leds will be on and blinking.

NMEA Input

1. Accepted messages (NMEA0183, version 2.30), talker identifier is not processed:

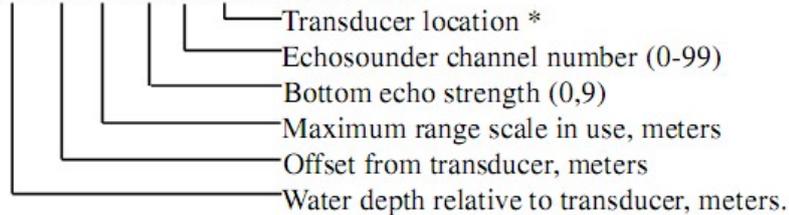
Depth & Draught SDDPT,xxxx.x,xxxx.x,xxxx.x <Cr><Lf>

Depth below transducer SDDBT ,xxxx.x,f,xxxx.x,M,xxx.x,F)

Depth below transducer by Skipper proprietary sentence

\$PSKPDPT,x.x,x.x,x.x,xx,xx,c-c*hh<CR><LF>

\$PSKPDPT,x.x,x.x,x.x,xx,xx,c-c*hh<CR><LF>



* Text string, indicating transducer position : FWD/AFT/PORT/STB. If position is not preset by operator, empty field is provided.

Environmental according to IEC60945

Supply voltage: 24V DC (20-32V) Power

Consumption: 3W at 24V

Operating temperature: -15~+55 °C according to IEC60945 to increase serviceability and life-time, we suggest working temperature: 0~+40°C.

Storage temperature: -20 - +70°C.

Humidity: 10 - 90% relative, no condensation.

Protection: IP 56

Diagnostic information

1 If IR261 doesn't receive any signal from the external source for more than 3 seconds Error (Err) message is indicated on the LED's. This may happen, for example if external talker is not connected or connection polarity is not correct.

2 If input messages don't contain sentences, required for indication of selected data, “_” (underline symbol) is indicated on the corresponding LED's. As an example: if there is no DBT message available on the input, IR261 will indicate “_____” instead of depth.

3 If fields in the received message is empty (not valid data), dots are indicated on the corresponding LED's. As an example, if the depth field is empty in the \$PSKPDPT sentence. “...” will be indicated instead of the depth value.

SERVICE

Adjustments and repairs should only be performed by qualified service engineers, and unqualified repair attempts will void the warranty.

INSTALLATION

The unit can be mounted in panel, table, wall or ceiling.

1. For tabletop mounting, wall or ceiling mounting use the supplied bracket.
2. For panel (flush) mounting, take off the bracket and take off the front frame.

Cut a 125x125mm size square window in the panel, fix the inside 4 holes with tapping screws, and put on the front frame again.

