THE ECHO SOUNDER
To ensure reliable operation of the Depth Indicator, it is essential that the receiver gain control is set correctly: Turn the gain control knob clockwise until a stable depth indication is obtained. If the setting is too low the display will start blinking. Too high setting may result in false depth indication from air bubbles, plankton layers, side lobes etc.

TECHNICAL SPECIFICATION IR 201

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Power supply</td>
<td>220V AC 50/60 Hz</td>
</tr>
<tr>
<td></td>
<td>11–40V DC</td>
</tr>
<tr>
<td></td>
<td>110V AC available</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Max. 5 Watts</td>
</tr>
<tr>
<td>Depth range</td>
<td>0.1–999 meters/fathoms/feet</td>
</tr>
<tr>
<td>Accuracy</td>
<td>+0–0.1 digit</td>
</tr>
<tr>
<td>Weight</td>
<td>2 kg</td>
</tr>
<tr>
<td>Outline dimensions</td>
<td>Width 190 mm</td>
</tr>
<tr>
<td></td>
<td>Depth 70 mm</td>
</tr>
<tr>
<td></td>
<td>Hight 190 mm</td>
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</tbody>
</table>
INSTALLATION

SKIPPER IR 201 Depth indicator is designed for connection to ED 161 and ED 162 Echo Sounders.

Cabinet mounting
The location of the cabined should be selected to provide the most convenient reading of the display. The cabinet may be mounted on the bulkhead, in the ceiling, on the table top or recessed in a panel. Mounting hardware is supplied for all mounting alternatives.

Bracket mounting
Fasten the brackets to the ceiling, bulkhead or table top with wood screws or feed-through bolts. Mount the cabinet in the brackets and tilt to a suitable angle, then tighten the fastening knobs.

Panel mounting
Maximum panel thickness is 50 mm. Cut a hole of 63 x 186 mm in the panel. Insert the cabinet and use the mounting brackets as counter-parts as shown on the outline dimensions drawing.

Electrical connections
Connect the cables to the IR 201 cabinet, Echo Sounder and ship’s mains according to the cable plan. Observe that AC and DC voltages have different connections. Before switching on the power make sure that the AC–DC mains selector is in correct position and that the fuses have the correct value.

Checking the operation
Switch on the Echo Sounder and the Depth Indicator. Check that the Depth Indicator operates as described in the operating instruction.
INTRODUCTION

SKIPPER IR 201 Depth Indicator is designed for connection to the ED 161 and ED 162 Echo Sounders. IR 201 receives the depth information from the Echo Sounder and displays the depth in meters, fathoms or feet on a three digits 25 mm numeric indicator.

An analog trend indicator provides information of increasing or decreasing depth.

OPERATING CONTROLS

SKIPPER IR 201 is easy to operate, having only two operating controls. Both are located on the front panel.

ON/OFF - intensity control
When the control is turned fully counterclockwise the Depth Indicator is switched off. Clockwise rotation of the control increases the light intensity.

Range unit selector.
The Depth Indicator displays the depth in meters, fathoms or feet as selected by the range unit selector.

DISPLAY

The three numeric indicators utilize red 25 mm tall digits of light emitting diodes. The Depth Indicator features automatic range selection. At depths less than 100 range units, the decimal point light to indicate the depth to one decimal place. At depths less than 10 range units the leftmost digit extinguishes.

Analog trend indicator.
A row of 42 light emitting diodes along the lower cabinet-front indicates whether the depth is increasing or decreasing. The analog trend indicator has two ranges 0—100 and 0—1000 (meters/fathoms/feet) with automatic range selection.
Transducer cable:
2 x 1.5 mm² with screen.

Mains cables and signal cable for IR201:
5 meters supplied by SKIPPER

Mains:
11 - 40 volts DC or 220 volts AC.
110 volts AC available.

Power consumption:
IR201: 5 watts. ED161/ED162: 50 watts.

Before switching on the power make sure that the AC-DC mains selector is in correct position and that the fuses have the correct value:
11 - 40 V DC: 1.0 A
110/220 V AC: 0.3 A

Valid for serial nos.:
IR201: Above serial no. 50.
ED161: Above serial no. 830045.
ED162: Above serial no. 840050.
Transducer cable: 2 x 1.5 mm² with screen.

Mains cables and signal cable for IR201: 5 meters supplied by SIMRAD.

Mains:
- 24 - 40 volts DC and 220 volts AC.
- 110 volts AC available.

Power consumption:
- IR201: 5 watts. ED161/ED162: 50 watts.

Before switching on the power make sure that the AC-DC mains selector is in correct position and that the fuses have the correct value:
- 11 - 40 V DC: 1.0 A
- 110/220 V AC: 0.3 A

Valid for serial nos.:
- IR201: Above serial no. 50.
- ED161: Above serial no. 830045.
- ED162: Above serial no. 840050.
1 pair each transducer,
1.5 mm screened Yard Supply

Steel pipe with hanging clamps (Yard Supply)

Transducer Tank

2 x 0.5 mm sq., with screen.

SKIPPER GDS 101
Connection of IR 201.
Overall Wiring of IR201 & DI202 with AC/DC Power Supply Installed
Parts Placement for DC Power Supply Board

Parts Placement for AC/DC Power Supply Board
Parts Placement/Analog Readout Board
for Simrad IR-201
Parts Placement/Digital Readout Board
for IR-201 & DI-202