

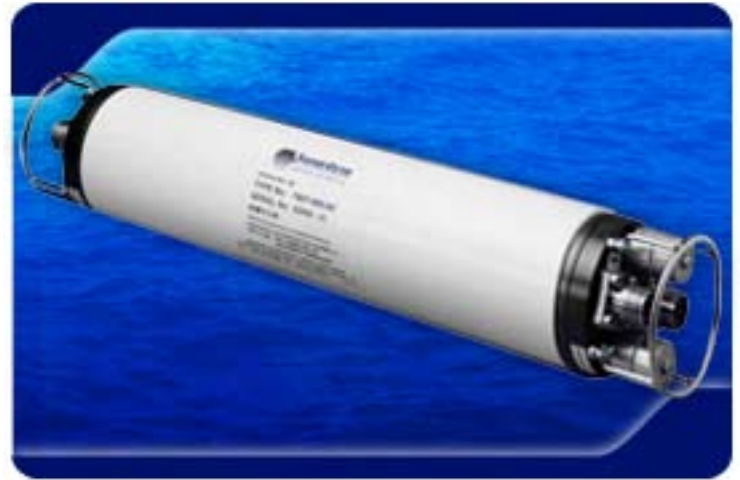


RovNav Mk 4 LBL Transceiver Types 7807/7808

RovNav is a remote, Long Baseline (LBL) acoustic transceiver that enables Remotely Operated Vehicle's (ROVs) and towfish to be accurately and rapidly positioned in deepwater and over long umbilicals.

RovNav is available in two frequency versions depending on the accuracy and range required. The Type 7807 Medium Frequency (MF) version gives ranges of up to 3km¹ with a relative positioning accuracy of $\pm 0.15\text{m}$.

The Type 7808 Extra High Frequency (EHF) RovNav gives ranges to 1km¹ and a relative positioning accuracy of $\pm 0.05\text{m}$. When configured as a responder, the MF RovNav can also be used with Sonardyne USBL systems.



FEATURES AND BENEFITS

- Depth rated up to 4,000 metres (MF)
- Baseline measurements <5cm (EHF)
- 12 channel simultaneous receiver enables fast position updates
- RS232/RS485 half duplex communications via ROV's umbilical
- Two remote transducers enable sequential position fixing
- Compact and rugged design
- Incorporates depth, temperature and (optional) salinity sensors

TECHNICAL SPECIFICATION

| System Property | Type 7807 | Type 7807 | Type 7808 |
|------------------------------------|--|--------------------------------------|--------------------------------------|
| Depth Rating | 4,000metres | 4,000metres | 2,500metres |
| Frequency | MF(18-36kHz) | MF(18-36kHz) | EHF(50-110kHz) |
| Remote Transducer Beamshape | Directional | Omni-directional | Omni-directional |
| Typical Accuracy | 0.15-1 metres | 0.15-1 metres | 0.02-0.15 metres |
| Source Level | | | |
| vertical | 200 dB re 1 μPa @ 1 metre | 190 dB re 1 μPa @ 1 metre | 190 dB re 1 μPa @ 1 metre |
| horizontal | 185 dB re 1 μPa @ 1 metre | 190 dB re 1 μPa @ 1 metre | 190 dB re 1 μPa @ 1 metre |
| Receiver Threshold | < 95 dB re 1 μPa | < 95 dB re 1 μPa | < 100 dB re 1 μPa |
| Pulse Length | 4ms | 4ms | 1ms |
| No. of Replies (Battery Operation) | 200 x 103 | 200 x 103 | 750 x 103 |
| Mechanical Construction | Aluminium Alloy Hard Anodised | | |
| Dimensions | 130.6mm dia. x 714.4mm long | 130.6mm dia. x 714.4mm long | 130.6mm dia. x 714.4mm long |
| Weight in Air RovNav/Tdr | 15 / 4.5 kg | 15 / 4.5 kg | 15 / 4.5 kg |
| Water RovNav/Tdr | 6.6 / 2.5 kg | 6.6 / 2.5 kg | 6.6 / 2.5 kg |
| Operational Sensors: | Depth: Digiquartz or Strain Gauge | | |
| | Temp: PRT | | |
| | Salinity: Conductivity | | |
| Acoustic Noise Shield | Optional | | |
| Options | Acoustic noise shield with remote transducer | | |

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.