

Instruction Sheet

Hydrophone for Minimate Pro4/Pro6

The Hydrophone advanced sensor may be connected to any Minimate Pro4 or Minimate Pro6 monitoring unit. The hydrophone senses pressure changes to 324 kPa (47 psi) down to water depths of 46 meters (150 feet).

WARNING

Do not use the hydrophone for monitoring near-field applications. Exceeding the minimum distance from the charge versus the Hydrophone may cause permanent damage to the sensor.

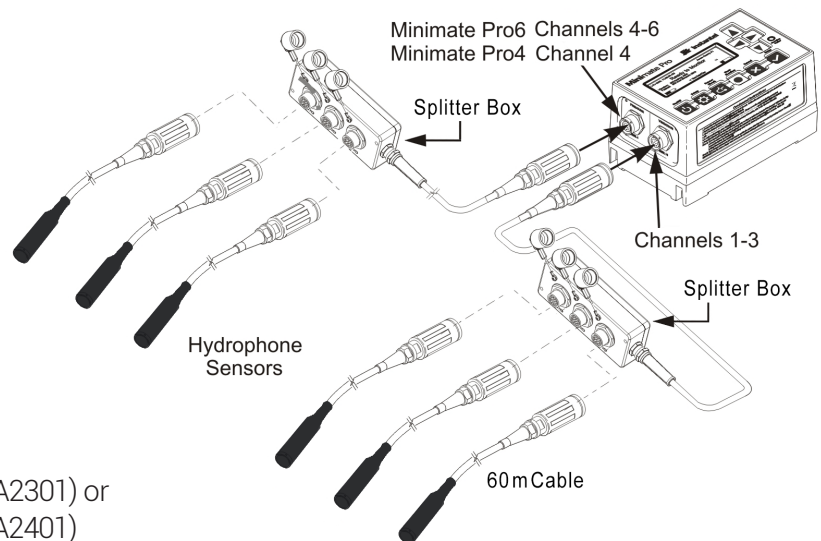


Range of Applications

- Underwater Monitoring
- Research/Education
- Environmental

Physical Installation

Hydrophones can be connected directly or via a Splitter Box to the Minimate Pro (see image - opposite). Before using the Hydrophone, use THOR Advanced software to configure the Minimate Pro with the Hydrophone settings (see next page).



Minimate Pro4/Pro6 Uniaxial Sensor Configuration with Two Splitter Boxes and Hydrophone Sensors

Tools and Materials Required

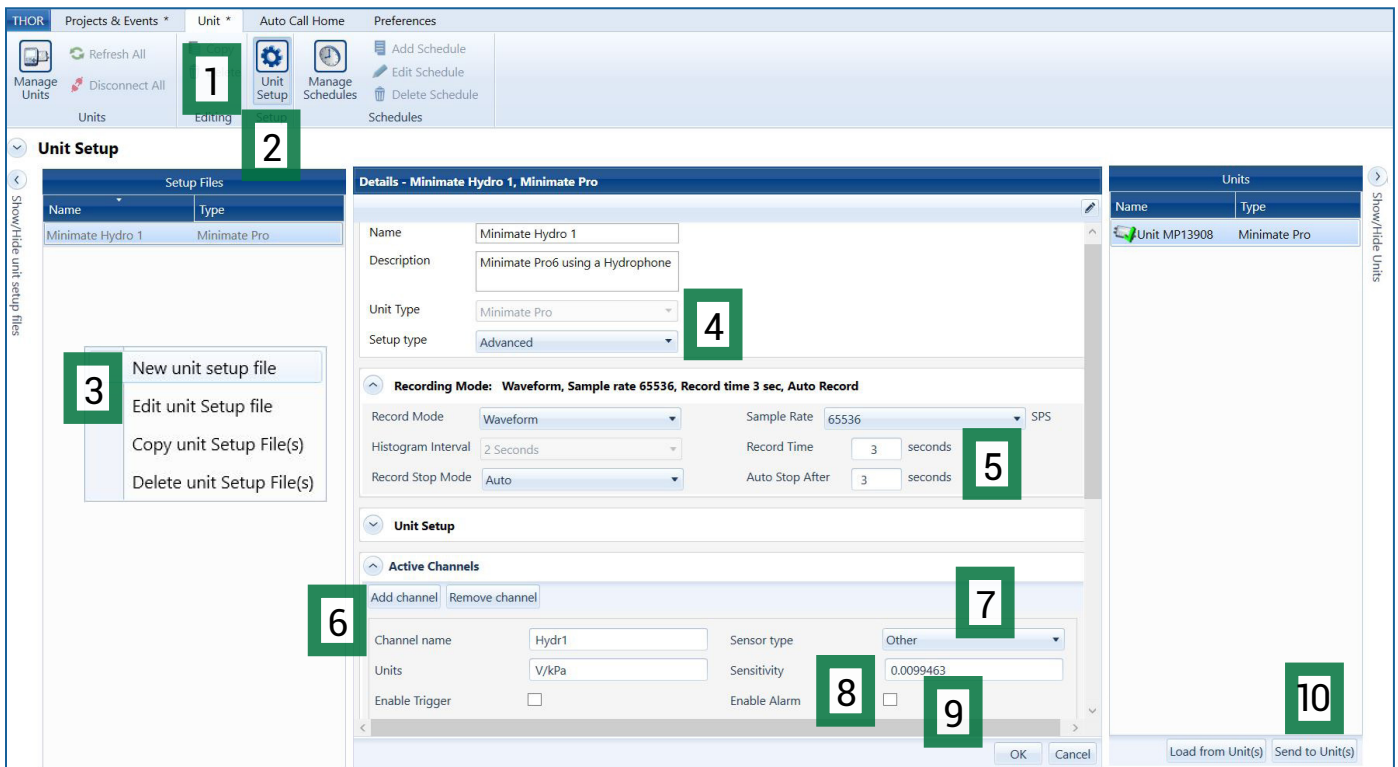
- Minimate Pro4 monitoring unit(P/N: 720A2301) or
- Minimate Pro6 monitoring unit(P/N: 720A2401)
- Hydrophone(P/N: 720A5001)
(recommended sample rate 65,536 S/s)
- Splitter Box(P/N: 720A5501)
- THOR Advanced software(P/N: 72300201)

| Specifications | Metric | Imperial |
|-------------------------|-----------------|-----------------|
| Amplitude Range | 324 kPa | 47 psi |
| Frequency Range | 8 - 500 Hz | |
| Sensitivity | 0.0099463 V/kPa | 0.068566 V/psi |
| Resolution | 0.0101 kPa | 0.00146 psi |
| Trigger Levels | 0.162 - 324 kPa | 0.0234 - 47 psi |
| Recommended Sample Rate | 65,536 S/s | |
| Natural Frequency | 14.7 Hz | |
| Maximum Operating Depth | 46 m | 150 ft |
| Cable Length | 60 m | 200 ft |

Software Setup

The Hydrophone setup requires InstanTel's THOR Advanced software.

1. Click on the **Unit Tab**.
2. Click on the **Unit Setup** icon.
3. In the Unit Setup section, right-click and select "**New unit setup file**".
4. Fill in the details and select **Unit Type: Minimate Pro**, then **Setup Type: Advanced**.
5. Set the **Sample Rate** (recommended 65,536 samples per second).
6. Under Active Channels, add the necessary channels by clicking the "**Add Channel**" button.
7. Under Sensor Type select "**Other**".
8. Fill in the sensitivity of the Hydrophone along with its respective units. Repeat for all connected Hydrophones.
(Note the Sensitivity values are dependent on the units used; metric or imperial)
9. Click **OK** (and save the changes in the popup dialog box).
10. Send the Setup File to the unit by selecting the unit from the list and clicking the "**Send to Unit(s)**" button.



Note: Make sure the Minimate Pro is using this setup file. To verify, press the **Setup** key on the unit followed by the **Enter** key.
Note: Use Channel 1 for a single Hydrophone, Channels 1-3 when using one Splitter Box and Channels 4-6 when connecting 4, 5, or 6 hydrophones.

Warranty

InstanTel products come with a one-year warranty. Monitoring units and sensors will have the warranty extended for a second year if they are returned to the InstanTel factory for service and calibration within 30 days of the 'Next Calibration' date printed on the calibration label located on the product.

If within a period of one year from the date of shipment to a customer, the instrument fails to perform in accordance with InstanTel's published specifications and the operator's manual, due to a defect in materials or workmanship, it will be repaired or replaced at InstanTel's option, free of charge. This warranty is void if the equipment has been dismantled, altered or abused in any way. This warranty is nontransferable.

This warranty does not include any implied warranty of functionality for a particular purpose. InstanTel assumes no responsibility for damages of any description resulting from the operation or use of its products. Since it is impossible to anticipate all of the conditions under which its products will be used either by themselves or in conjunction with other products, InstanTel cannot accept responsibility for the results unless it has entered into a contract for services which clearly define such an extension of responsibility and liability.

Any shipments returned directly to InstanTel Inc. must have our prior approval and all packages must display the Return of Material Authorization (RMA) number issued by InstanTel. Shipping charges to InstanTel's plant will be paid by the customer and those for return to the customer will be paid by InstanTel.

To protect your warranty, you must complete and return a Warranty Registration Certificate, or complete the online Warranty Registration Form, within ten days of purchase. Products will be assumed out of warranty if there is no warranty card on file at InstanTel. Retain this portion and the proof of purchase for your records.

EC Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.