

H3dX

Miniature Hydrophone



H3 Balanced-Element Miniature Hydrophone

The H3 hydrophone was designed as a leak finding tool. It offers exceptional sensitivity in a very small size that can easily be inserted into plumbing systems. Additionally, its mechanically-balanced dual-element design minimizes acceleration noise. This helps lower handling noise and vibration-induced noise.

The H3 is also used as a waterproof microphone in industrial applications where dust and coolants would make standard microphones unreliable.

Features:

- Low cost
- Small size (16.5mm diameter)
- High sensitivity
- Robust, low-mass design provides high mechanical shock resistance
- Balanced element design minimizes acceleration noise
- Available in four different output configurations to interface with almost any microphone amp
- Compact (4.5mm OD) Low-noise cable with tough urethane jacket
- High dynamic range
- Low self noise
- One-year limited warranty

Technical Data

The following specifications are based on typical response when using the H3dX with a standard 48V phantom power supply (48V with 6.8K pull-up resistors)

| | |
|----------------------------------|--------------------------------|
| Sensitivity (+/- 5dB 20Hz-10KHz) | -176dB re: 1V/ μ Pa |
| Useful range | <10 Hz to >100KHz |
| Not measured above 100KHz | |
| Approximate sensitivity @ 100KHz | -220dB re: 1V/ μ Pa |
| Polar Response (horizontal) | Omnidirectional |
| Operating depth | <80 meters |
| Output impedance | 6.8 kOhm |
| Power | 1.2 mA |
| XLR Connector | 18 V DC to 48 V DC |
| Physical | (cable + output plug excluded) |
| Dimensions | 17mm x 32mm |
| Mass | 10 grams |
| Specific Gravity | 1.3 |
| Cable length | 6 meters |

The H3dX is terminated with a 3-pin male XLR plug. Wiring is standard: pin 1 is ground, pin 2 is hot and pin 3 unused. This configuration should be compatible with any standard female XLR microphone jack found in recorders, mixing boards, professional video cameras and PA systems. Phantom power is required and will need to be switched on in your device. Any standard phantom power supply voltage will work. Do not exceed +48V when powering the H3dX. If your recorder or mic preamp offers options for phantom voltage, we recommend using the lowest voltage available for lowest noise and power consumption. With the connection firmly made and phantom power switched on, there's nothing more to do but adjust levels and take in the sounds of the deep.