



# ANTIFOULING PAINT RECOMMENDATIONS FOR SONTEK PRODUCTS

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Biological growth may cause a loss in signal strength, but it does not affect the water velocity measurements unless the signal strength is reduced very low (<5dB). Transducers (and underwater housing, if applicable) can be coated with commercial antifouling paints to prevent biological growth. Thick layers of anti-fouling paint on the transducers will cause a decrease in acoustic signal strength and will reduce the effective measurement range, but does not affect the velocity accuracy. For most applications, the loss of signal strength caused by anti-fouling paint does not have a significant effect on instrument performance.

Within the United States, we recommend using an anti-fouling paint called Interlux Tri-Lux. This paint contains a biocide (a copper derivative) that allows its use on all metals. For information on Interlux paints, see <http://www.yachtpaint.com/usa/>. Normal anti-fouling paints, which use cuprous oxide based biocides, cannot be used on some metals (especially aluminum) as they cause galvanic corrosion. Outside the United States, anti-fouling paints containing TBT can be used on metal systems with a suitable primer. When painting metal housings, a suitable conversion layer must be applied to the metal for adhesion and to isolate the metal from the anti-fouling paint. If the metal has been powder coated (as many ADV/ADP components are), this acts as an excellent conversion layer. If no powder coat is present, or if the powder coating has been damaged, we suggest Interlux 360 Underwater Metal Primer. The primer should be applied to all metal surfaces except transducer faces, sacrificial zinc anodes, cable, and areas where the powder coating is in good condition. On plastic systems, any type of anti-fouling paint can be used. Our experience with the above paint (Interlux Tri-Lux) on SonTek systems causes us to recommend its use for all systems.

When applying the anti-fouling paint, follow the instructions provided with the paint on all areas except the transducers. When painting the transducers, apply only one coat. Make the paint as smooth



*Example of acoustic Doppler profiler prepared with anti-fouling paint. This ADP was deployed in 83m of water near to the Iranian border in the Strait of Hormuz, Middle East. The equipment was raised every 3 months, swapped and redeployed lasting 18 months. Photo courtesy of Darren Birmingham, HDR Engineering.*

and uniform as possible, and avoid trapping any air bubbles on the transducer face.

**IMPORTANT:** Do not paint the sacrificial zinc anode - doing so will remove all corrosion protection on aluminum housings. If anti-fouling protection is desired for some portion of the cable, the paint can be applied directly to the polyurethane jacket without primer.



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