EXO™

Sonde Quick Start Guide

Thank you for using an EXO sonde for your environmental monitoring!

This document will assist with the initial steps required to use an **EXO™ sonde**.

Refer to the **EXO User Manual** *for:*
• Part numbers and accessories
• Maintenance guidelines
• Sensor calibration instructions
• Connecting EXO to a Data Logger

Unpacking and Inspection
Inspect the outside of the shipping container(s) for damage. If you see any damage, contact the shipping carrier immediately.

Remove the equipment from the shipping box. Some parts are loose in the box, so check the packing material carefully.

Items Needed
Included in Packaging
• Sonde
• Probes (Sensors)
• Batteries
• Battery cover wrench
• Sensor tool with magnet (to activate *Bluetooth*)
• KOR™ software on USB flash drive

Not Included
• EXO Handheld or PC running KOR™ software
• USB cable and adapter, field cable, or *Bluetooth* dongle (sold separately)

Preparing Sonde for Use
To prepare the sonde for operation, you will need to:
• Install probes into the connectors on the sonde bulkhead
• Install batteries
• Load KOR™ software onto PC
• Connect sonde to EXO Handheld device or PC

Install Probes
1. Remove buffer bottles and hydration caps on the sensors (if applicable).
2. Remove the calibration cup and guard from the sonde.
3. Remove port plugs and insert sensors into ports on the bulkhead. Finger-tighten the locking rings until snug. Ports are "universal," which means any sensor can be plugged into any port.
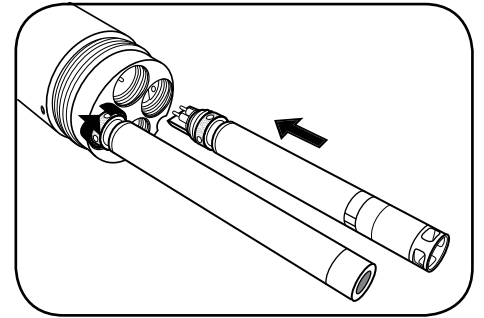
Exception – The <u>wiper</u> must be installed in the correct port to function properly:
• **EXO2 / EXO2s** – Central Port 7
• **EXO3** – Port 5

Install probes into the sonde bulkhead

The EXO Sonde Line

EXO1   EXO2   EXO2ˢ   EXO3

Install Batteries

The EXO1 and EXO3 Sondes use two (2) D-cell alkaline batteries and the EXO2 Sonde uses four (4) D-cell alkaline batteries as the recommended power source. For the EXO2ˢ, and at the discretion of the user for EXO1, EXO2, and EXO3, external power sources may be used.

Alternatively, the sonde may use rechargeable NiMH D-cell batteries (not provided). We recommend a NiMH D-cell battery with a minimum rating of 10,000 milliamp hours. However, due to variations in manufacturer capacity and discharge curves, deployment life cannot be estimated when using rechargeable batteries.

1. Remove the battery cover from the sonde:
   EXO1: Twist the blue battery cover counter-clockwise to unscrew, lift up to remove. Use included wrench to loosen, if necessary.
   EXO2 / EXO3: Unscrew and remove battery cap. Use included wrench to loosen, if necessary.
2. Insert the batteries with negative (-) terminals facing down toward the probes.
3. Replace the battery cover or cap and tighten until snug. **Do not overtighten.**

EXO2 / EXO3 Top View

EXO1 Side View
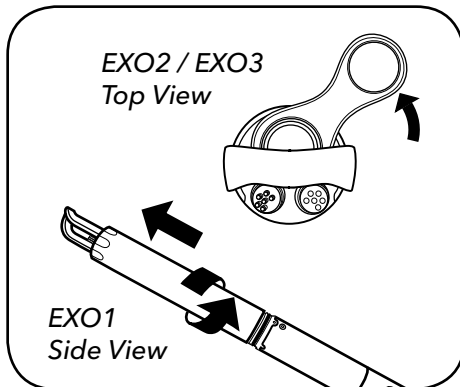
Remove battery cover/cap and install batteries

LED Indicators

When power is supplied to the sonde, two indicator lights will provide status updates.

Red LED – Sonde State
0.1 Hz (10s Blink): Asleep, logging enabled
1 Hz (1s Blink): Awake
On Solid: Awake with faults

Blue LED – *Bluetooth*
On Solid: On, not linked
2 Hz (0.5s Blink): On, successfully linked
**Off:** *Bluetooth* disabled

Communication

Connect Sonde to Computer
via USB Cable

1. First, install the KOR™ software on your computer. Follow the prompts to install the new hardware and drivers.
2. Plug in the USB Signal Output Adapter to the top of the sonde.
3. Plug in the small end of the USB cable to the top of the adapter and the large end in a standard USB port on the computer.

The USB adapter provides a hardwired communications link to a PC as well as providing power to the sonde.
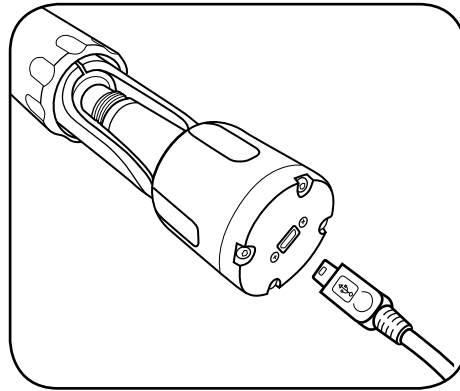

Connect sonde to computer with USB cable and adapter

via *Bluetooth*®
A computer must be equipped with an internal *Bluetooth* radio or use a *Bluetooth* dongle to establish a wireless connection to the sonde.

Activate *Bluetooth* by holding the included sensor tool with magnet at the magnetic activation area on sonde. Once activated, the blue light will be on. The software will automatically pair the instrument to your PC.
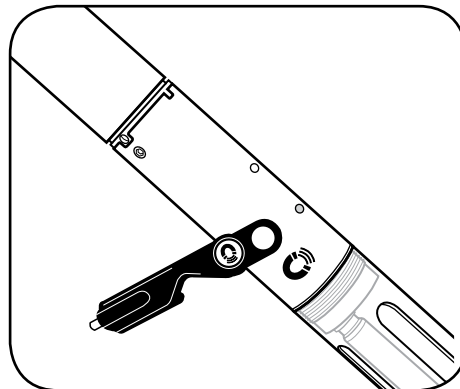
*If not using cable, activate **Bluetooth** wireless communication with magnet*

Troubleshooting

Establish *Bluetooth* link (Windows OS)

1. Check your version of Windows for the proper method to pair a *Bluetooth* device to your PC.
2. When prompted, locate the sonde from the list. The sonde name should begin with YSI.
3. Select "Enter the device's pairing code," and click Next. Enter the code 9876. Click "Next."
5. Select Finish.

Discover the Sonde in KOR™
Upon startup of the software KOR™ will search for and discover the activated sonde and request to connect to it. Once connected via *Bluetooth*, the blue light on the sonde will blink.

Interface with the sonde using KOR™

Connect Sonde to EXO Handheld
via Field Cable
Press in the male 6-pin connector on the cable to the top of the sonde. Press in the female 6-pin connector on the cable to the bottom of the handheld, then screw down the retaining collars on each end.
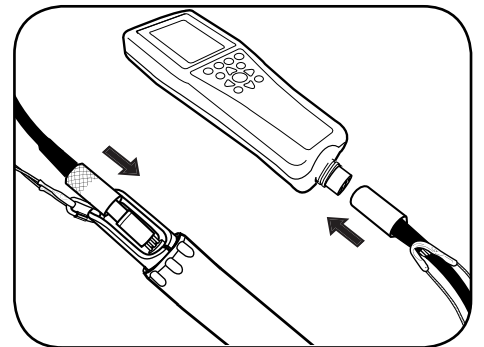
Connect sonde to handheld with field cable

You are now ready to calibrate your sensors and start collecting data!