

FIELD SURVIVAL GUIDE CHECKLIST FOR ENVIRONMENTAL SONDES

Technician	Date
Sonde ID	Hand Held ID
Sonde Battery Voltage	Battery Type
THE BIG SEVEN:	Checklist for Field Sampling and Profiling with a Handheld:
 Inspect your sensors Maintain your instrument connections Check batteries and power supply 	Ensure that the batteries in the Handheld are fresh or fully charged if rechargeable
 Update firmware and software Properly calibrate prior to data collection Final and a patting of the software 	Ensure that the batteries in the sonde are fresh or fully charged if rechargeable
6. Finalize your sonde settings 7. Prepare a "Survival Kit"	If you are not logging GPS coordinates turn off the GPS receiver to maximize battery life
Calibration Tips:	Carry 4 C size alkaline batteries for backup in your tool kit
	Reinstall wiper if using the EXO2
 Ensure that sensors are cleaned and free of all contaminants before beginning any calibration Make sure all optical sensor faces are clean, no finger prints 	Checklist for EXO Sonde Deployments, and DCP / SDI-12 deployments:
• pH sensors should be reconditioned quarterly using the procedure in the manual	Ensure that the batteries in the sonde are new and reading ~3.1 V for EXO1 and ~6.2V for EXO2. If redeploying with used batteries confirm the battery life calculation for the used cells is sufficient for the deployment
 Calibrate the DO sensor in a saturated water bath with an accurate local barometric pressure 	Ensure that the SDI-12 address is correct for the site where the sonde will be used
• Never calibrate the specific conductivity (SC) in less than 1000 us/cm standard	Ensure that the wiper has been reinstalled if removed for calibration
 If using rechargeable batteries in your Handheld always make sure they are fully charged before calibrating 	Use Anti-Fouling counter measures if deploying in a marine, estuarine or other fouling environment
 Remove wipers before calibrating to avoid carry over and particulate contamination of standards, tap sonde to release bubbles off the optical 	Ensure that the sonde is deployed in a properly secured housing that allows good flow to the sensors and good flow through the pipe over the entire submerged length
sensor faces	Ensure that the sonde is logging before it is deployed
 Remember to hit "Complete" after each calibration step, calibration is not stored until the "Complete" 	Ensure that cable connections are lightly grease and the cable is neatly coiled
button is pressed!Check QC scores to ensure a successful calibration	Ensure the cable Strain Relief is taking up all pull tension off the connector. If deploying in severe currents or adding extra depressor weight use a separate lift line on the sondes bail

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EXO: Set Sensor/Sonde Averaging Modes for your intended application:

Located in "Option" under "Sonde":



Rapid - used for spot sampling and slow profiles, sensor averaging ~ 5 to 10 seconds



Note: the sensors current averaging setting is displayed in the top right corner on both the HH and KOR desktop software, **D**= Default, **R** = Rapid, and **A** = Accelerated

Enable the "Vertical Position D" to see fastest depth sensor response when profiling, find in "Options/Units"

Notes



Sample Hold:

If using Sample Hold in your DCP deployment make sure that the sonde is told to take its readings ~ 5 minutes before the SDI-12 Measure (M) or Concurrent (C) command is issued. Use "Custom Time" to ensure that the sonde is not sampling when the SDI command is issued.

Field Survival Kit Suggestions:

Note: This is a list of common items to include in your Survival Kit. There may be tools and products specific to your application not listed here. Consider carefully additional items you may need in your kit for a successful deployment.

- Probe removal tool
- Battery compartment tool
- Extra O-rings
- Extra Grease
- Phillips screwdriver
- Flat head screwdriver
- Small Flashlight
- Can of compressed air
- Extra wiper pads or brushes
- Paper towels / Kim-wipes
- DI water
- Calibration standards
- Extra cables
- Back-up probes
- Port plugs
- Spare batteries





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