

IMPORTANT NOTES REGARDING HYDROBOX OPERATION!

Updated 15 Nov 2010

- Please be advised that the direct serial connection from the laptop computer to the Hydrobox is critical for reliable operation. The interface requires seamless real-time bidirectional serial communication; therefore care should be taken when selecting a laptop computer to operate with the Hydrobox. The laptop will require that suitable COM ports are made available.
- Because modern laptop computers will typically not have native 9-pin COM ports, some form of serial adapter will be required. See below for recommended options when selecting a suitable serial adapter to work with Hydrobox.
- The Hydrobox data cable incorporates a port-powered RS-232 to RS-422 converter. Because power to the converter needs to originate from the computer, some USB to serial converters do not work for this application. This is common for low end converters that are typically used for consumer electronic peripherals.
- Regarding the number of COM ports required for operation, it will depend on the user's application. For Hydrobox users without survey software, two COM ports are required. For users with survey software, four ports are used in the standard configuration with five ports required for all features to be enabled.

About Serial Adapters for laptops

- **PCMCIA to Serial:** A recently obsoleted expansion interface. This is a very good option, but finding adapter cards is becoming more difficult. Most brands of these types of cards work well with Hydrobox.
- **ExpressCard to Serial:** Currently the most common type of expansion interface, it has replaced the PCMCIA slot. This is a very good interface and most brands that we have tried work well with Hydrobox. We recommend the 4-port Quatech QSPXP-100 as a top performer.
- **SocketSerial:** A newer interface found on some laptops, and very similar to Express Card. Quatech makes them with up to 4 ports. A few of our customers have used these with Hydrobox and have not reported any difficulties.
- **USB to Serial:** This is an option available on all laptop computers. As per above note, some of these will not work with the Hydrobox. These can, however still be a good option for Hydrobox users if care is used when selecting one. Higher-end models will supply the power required for the Hydrobox data port. Also, they will provide users with controls to optimize operation and minimize latencies. We recommend the MOXA Uport 1410 (4-port) or Uport 1610-8 (8-port) as known good models and a top choice for Hydrobox users.