



HydroTech, P.O. Box 5520, Round Rock TX 78683

www.hydrotechzs.com

512-846-2893

E-HUB v2

User Manual

Rev: 2018-1



All HydroTech instruments are manufactured in Round Rock, Texas, U.S.A.



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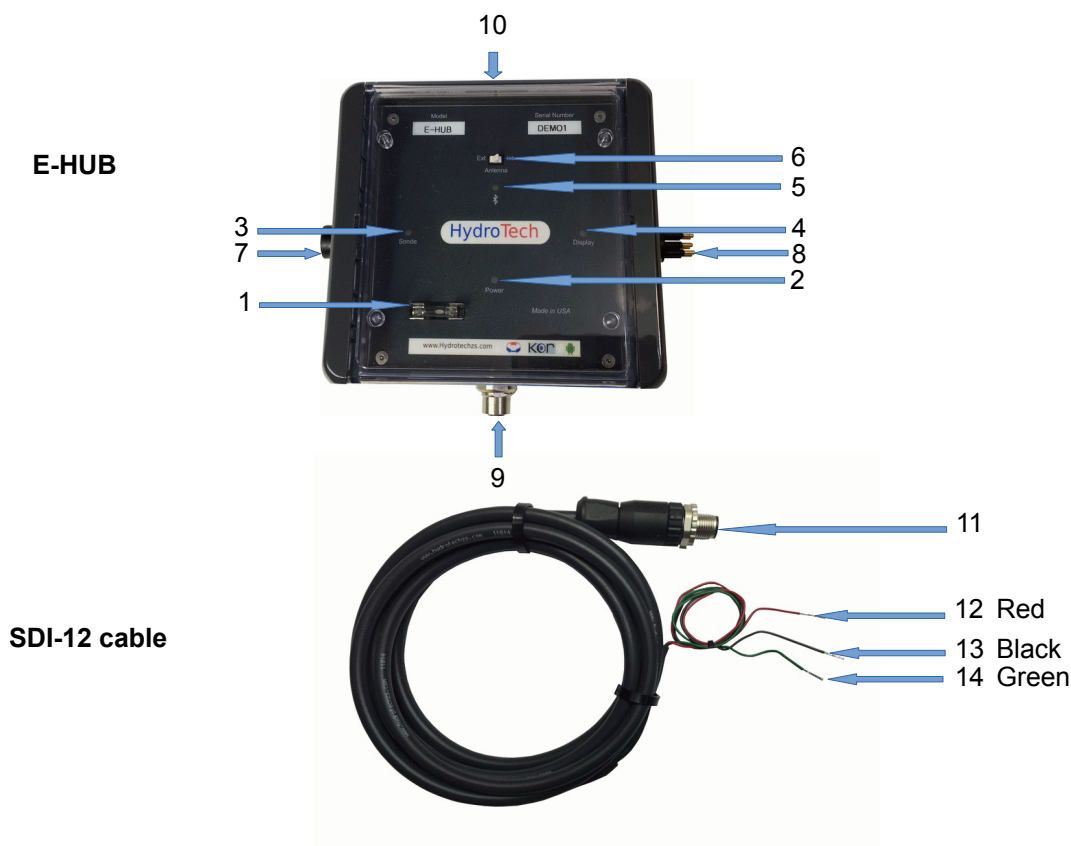
1- Instrument Description

The E-HUB is a smart HUB that allows you to easily, flawlessly, and simultaneously interface the following:

SDI-12 data logger

YSI® EXO® sonde

YSI® EXO® Display or HydroTech NX10 via cable or bluetooth



1	Fuse & LED Fuse
2	LED (Main power indicator)
3	LED (Sonde connection indicator)
4	LED (Display connection indicator)
5	LED (Bluetooth signal indicator)
6	Antenna switch
7	6 sockets connector for connecting the cable from the YSI® EXO® sonde.
8	6 pins connector for connecting the cable from the YSI® EXO® display or the HydroTech NX10 universal hand held.
9	5 sockets connector for connecting SDI-12 data signal and 12 volt power from the datalogger.
10	External antenna connector
11	SDI-12 to E-HUB connector
12	Red wire for 12 volts positive
13	Black wire for Ground
14	Green wire for SDI-12 data

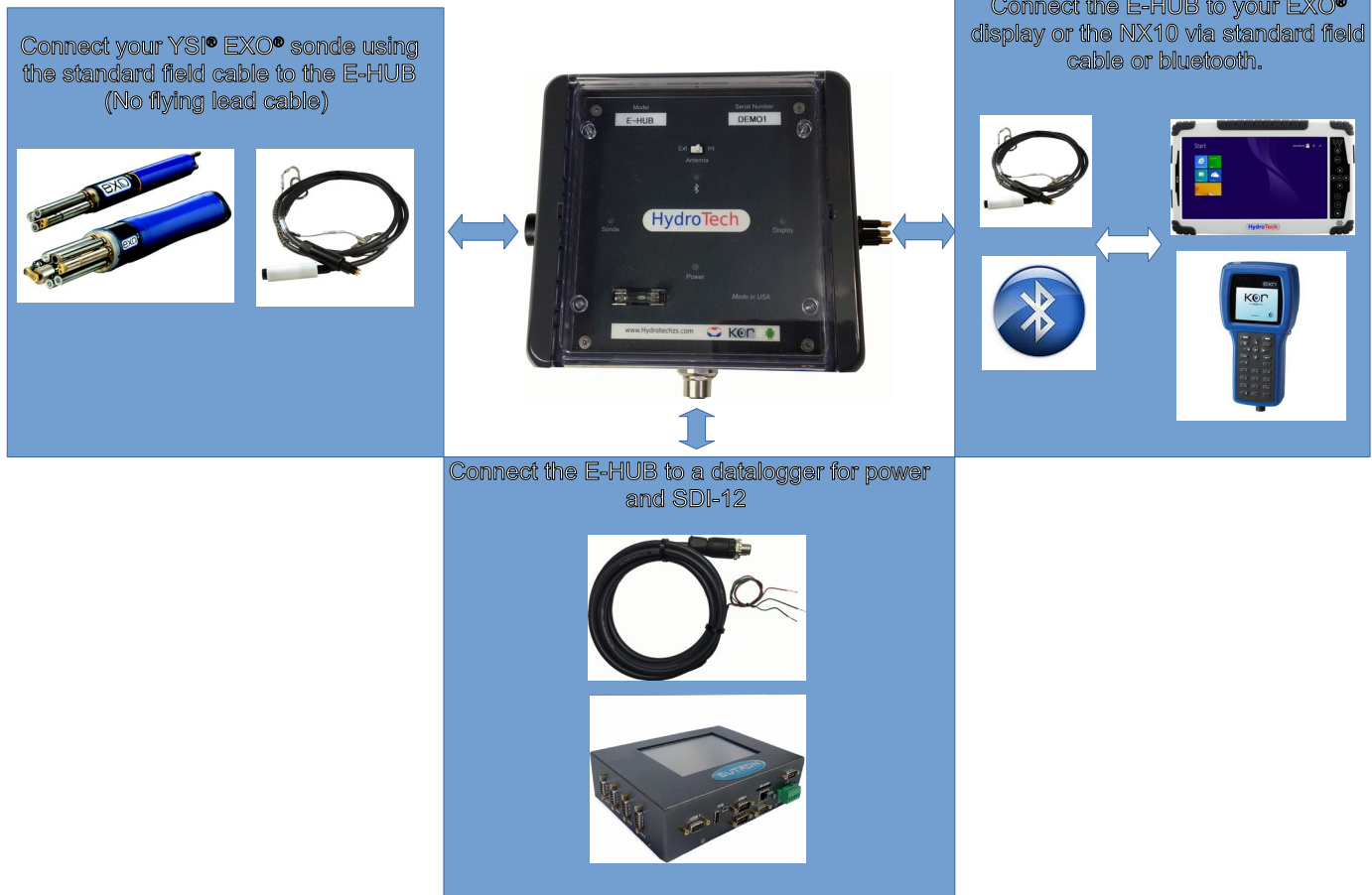
2- Connectivity

A- Connect a standard YSI cable to your EXO sonde. Connect the other end of the cable to “Sonde” port on the E-HUB.

B- Connect the E-HUB SDI-12 cable to the SDI-12 port on the E-HUB. Then connect the red wire to the positive power on the datalogger, the black wire to the ground, and the green wire to data.

Note: Follow LED light chart on page 6 to confirm proper wiring connection.
Even if the wires are connected backward, the E-HUB-V2 will not be damaged. (*New feature*)

C- When needed, you can connect a standard YSI cable to the “Display” port on the E-HUB then, connect the other end of the cable to a YSI display or the NX10. You can also activate the bluetooth on your YSI display or NX10 and use it to establish a bluetooth connection to the E-HUB.






3- Specs:

Size:	150.6 mm x 127 mm x 63.5 mm. Total with connectors: 185.5 x 177.8 x 63.5 mm. (5.93" x 5" x 2.5" inches. Total with connectors: 7.3" x 7" x 2.5")
Weight:	0.55 kg (1.2 lb.)
Temperature range:	-20 to 60 °C (-4 to 140 °F)
Bluetooth range:	20 m (65 F) with antenna
IP rating:	IP67
Current consumption:	120 mA
Voltage input / max	12 volts / 40 volts
Voltage output:	12 volts (To sonde)
Bluetooth range:	10 m (32.8 F) with internal antenna. 70 m with external antenna.
Box:	Polycarbonate

4- LED Light Diagnostic

The E-HUB is equipped with 5 LED lights, used for diagnostic and status indication.

5- LEDs Diagnostic Chart

LED #	Color	Status	Report
Power	Blue	Solid	The E-HUB is receiving power from the datalogger.
Power		OFF	The E-HUB is not receiving power from the datalogger.
Power	Green	Solid	The data wire is connected to the (+) . Disconnect immediately.
Power	Red	Solid	The (+) and the (-) are connected backward. Reverse connection.
Fuse	Red	Solid	Bad fuse. Replace fuse.
	Red	Solid	The E-HUB bluetooth is available for pairing with the hand held unit.
	Purple	Solid	The E-HUB bluetooth is connected to the hand held unit or PC.
	Purple	Blinking	Active bluetooth communication with hand held or PC.
Sonde	Pink	Solid	<ul style="list-style-type: none"> The EXO sonde is not connected to the E-HUB. The EXO sonde is not responding to the E-HUB. The E-HUB is waiting for the EXO to respond.
Sonde	Blue	Blinking	EXO sonde is connected to E-HUB
Display	Red	Solid	<ul style="list-style-type: none"> No display is connected via cable to E-HUB. A display is connected to the E-HUB via cable but the power to sonde option is off.
Display	Blue	Solid	A display is connected to the E-HUB via cable and the power to sonde option is ON.
ALL		OFF	E-HUB is not getting power from the datalogger.

6- Replacing The E-HUB Fuse



Insert a small flat screwdriver into the small slot on the E-HUB, then push the screwdriver to the right to pry open the latching mechanism.



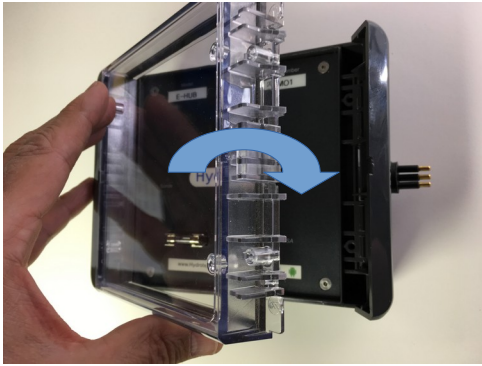
Finish opening the latching mechanism.



Swing open the clear lid and expose the fuse



If the fuse is bad, the LED behind the fuse will turn red. Replace the fuse when needed.
Fuse type: 20 mm x 5 mm, 1A, 220 V fast blow.
Use a small screwdriver to help remove the bad fuse. Insert a new fuse and press down firmly to latch it in place.



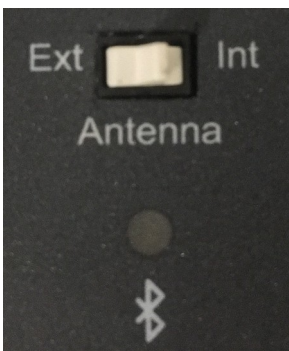
Swing down the clear lid to close it.
Press down on the clear lid then push the grey latching mechanism to lock it in place.
Make sure the grey latch is locked all the way.

7- Connecting Optional External Antenna



Connect the external antenna to the E-HUB port (10). Then install the antenna on the field box.

8- Bluetooth Antenna Selection Switch



Use the antenna switch to select:
- "Int" for internal antenna
- "Ext" for external antenna



9- Common Questions and Answers

Q: If I purchase an E-HUB, do I still need the YSI® EXO® DCP signal output adapter?

A: No.

Q: When I want to connect to the E-HUB via bluetooth, do I have to enable the EXO® sonde bluetooth?

A: No, the E-HUB bluetooth is completely independent from the sonde bluetooth.

Q: When I connect to the E-HUB via cable or bluetooth, will that affect my SDI-12 data?

A: No.

Q: Can I connect my display to the E-HUB via a cable and bluetooth at the same time?

A: No, the hand held unit always looks for the cable connection first.

Q: Does the E-HUB provide power to the EXO® sonde?

A: Yes, the E-HUB provides a regulated 12 volts to the EXO sonde.

Q: Does the E-HUB have surge protection?

A: Yes, the E-HUB is equipped with a 2Amp fuse.

Q: How do I know if the fuse is bad?

A: If the E-HUB fuse is bad, the fuse LED will be solid red.

Q: Can I replace the fuse in the field?

A: Yes, the fuse is easily replaceable in the field.

Q: If the field station loses power, can I still connect to the EXO® sonde via the E-HUB to retrieve live data?

A: Yes, even when the E-HUB is not powered, it will allow the hand held unit or the NX10 to power the sonde. Make sure to enable the power function to the sonde on the KOR® software.

10- Pair to a PC via Bluetooth:

To pair a the E-HUB to a PC via Bluetooth use the following paring code when prompted: **9876**

11- Customer Support

If you have any questions regarding this product please contact HydroTech at 512-846-2893 or via email to support@hydrotechzs.com

12- Service

Please ship all equipment for service to:

HydroTech
1700 Bryant Dr. Suite 103
Round Rock TX 78664
Att.: Customer Service

Please use the form on the next page to send your equipment for repair to HydroTech

13- Repair form



Repair Form

Ship all repairs to: HydroTech 1700 Bryant Dr. suite 103. Round Rock TX 78664 (512-846-2893)

Company name:	
Contact name:	
Phone number:	
E-mail:	
Ship to address:	
Bill to Address:	
Fedex account number (Optional):	

Serial numbers	Problem description



HydroTech
P.O Box 5520, Round Rock TX 78683 (512)-846-2893

SERVICE and LIMITED 2-YEAR WARRANTY

LIMITED 2-YEAR WARRANTY

THIS WARRANTY IS EXPRESSLY MADE BY HYDROTECH ZS CONSULTING AND ACCEPTED BY PURCHASER IN LIEU OF ALL OTHER WARRANTIES. HYDROTECH EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHETHER WRITTEN OR ORAL, EXPRESSED OR IMPLIED, OR STATUTORY. HYDROTECH DOES NOT ASSUME ANY OTHER LIABILITIES IN CONNECTION WITH ANY PRODUCT.

What Is Covered

This warranty statement applies specifically to the E-HUB, NX10, LDM (Longterm Deployment Module), Compact MS, Compact DS, OEM MS, OEM DS, HT6 and all HydroTech instruments introduced to market after January 1, 2012, unless specifically excluded in the warranty statement.

What Is Not Covered

This warranty does not apply to products or parts thereof which may be used or connected to HydroTech equipment but which are not manufactured by HydroTech. Our obligation to repair or replace does not apply to the parts that have been consumed through normal use. This warranty specifically excludes batteries of any type, filters, fitting and membrane caps of any type.

This warranty does not apply to products or parts thereof which have been altered or repaired outside of a HydroTech factory or other authorized service center, or products damaged by improper installation or application, or subjected to misuse, abuse, neglect or accident.

All new HydroTech products listed above are warranted by HydroTech against defects in materials and workmanship for two years (or for the term of an optional extended warranty) from date of invoice. During the warranty period, we will repair or, at our option, replace at no charge a product that proves to be defective provided that you return the product, shipping prepaid, to HydroTech. HydroTech's liability and obligations in connection with any defects in materials and workmanship are expressly limited to repair or replacement, and your sole and exclusive remedy in the event of such defects shall be repair or replacement.

HydroTech's obligations under this warranty are conditional upon it receiving prompt written notice of claimed defects within the warranty period and its obligations are expressly limited to repair or replacement as stated above.

HydroTech shall not be liable for any contingent, incidental, or consequential damage or expense incurred by you due to partial or complete inoperability of its products for any reason whatsoever or due to any inaccurate information generated by its products. HydroTech's obligations and your remedies are limited as described above.

Products are sold on the basis of specifications applicable at the time of sale. HydroTech ZS Consulting shall have no obligation to modify or update products once sold.

If you have any questions concerning this warranty, please call: 512-846-2893

SERVICE & SHIPPING

You may have your instrument repaired at HydroTech any time it needs service, whether it is in warranty or not. There is a charge for repairs after the warranty period.

HydroTech instruments within the two years warranty are normally repaired and shipped (transportation paid, via Ground service) within 10 working days of receipt at HydroTech.

Please carefully pack your equipment in its original shipping case (or other protective package) to avoid in-transit damage. Such damage is not covered by warranty, so we suggest that you insure the shipment. We also recommend that the entire instrument, including the battery pack and charger (when applicable), be returned unless a particular faulty component has been clearly isolated.

Send the instrument and a completed "Repair Form" to HydroTech, using the address shown on the repair form. You can download the repair form from the HydroTech website. <http://www.hydrotechzs.com>

Whether or not the unit is under warranty, it is your responsibility to pay shipping charges for delivery to HydroTech.

Ship all equipment for service to:

**HydroTech ZS Consulting
1700 Bryant Dr. Suite 103
Round Rock, TX 78664
Attn.: Customer service**

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