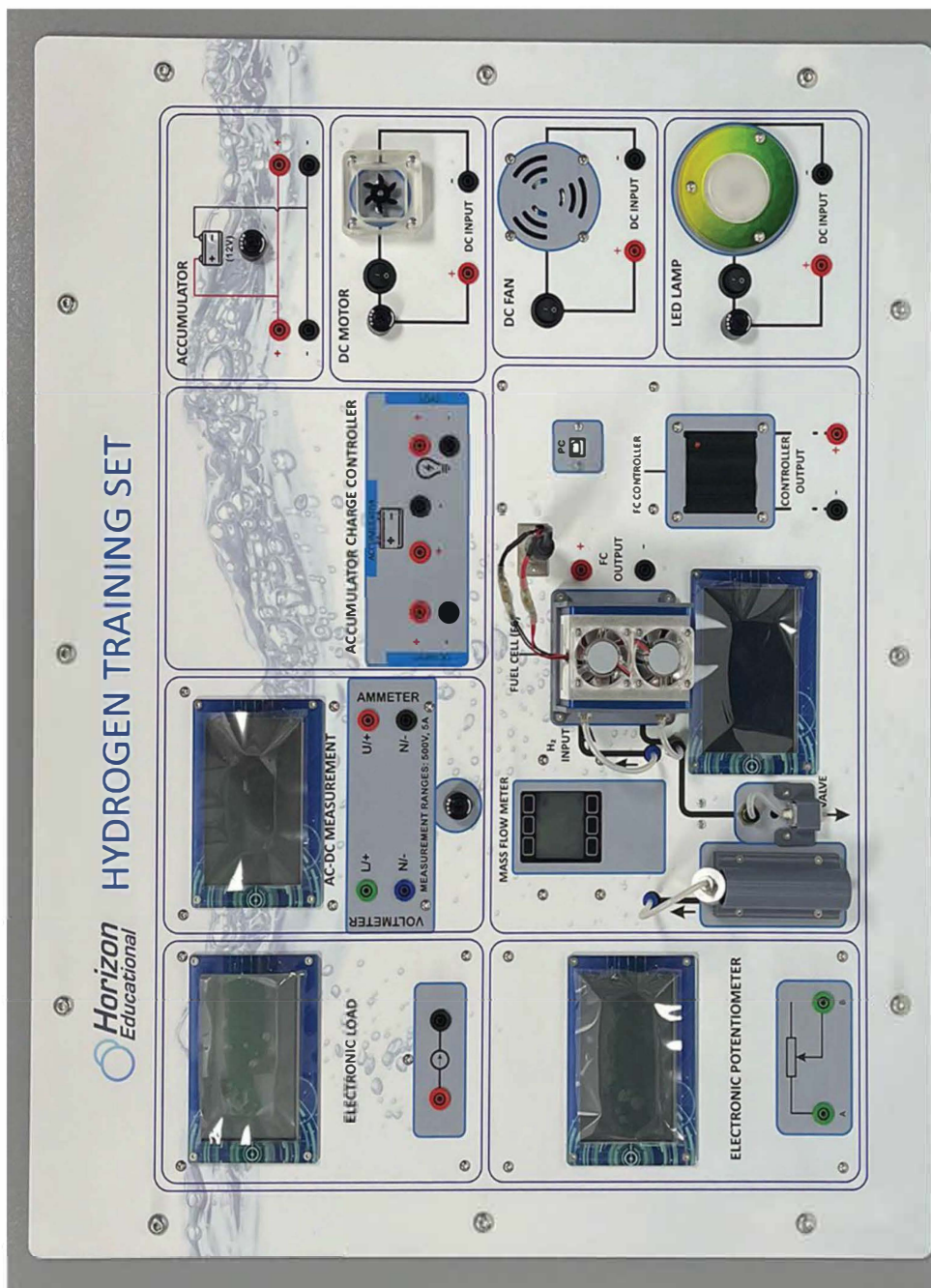


# **HORIZON HYDROGEN TRAINING SET-30 USER MANUAL**

# HYDROGEN TRAINING SET

The Hydrogen Training set overview:



This set includes an Electronic Load, Electronic Potentiometer, DC Measurement Module, Accumulator Charge Controller, Accumulator, DC Motor, DC Fan, LED Lamp, and Fuel Cell Module.

The connection of the flow meter and the Fuel Cell must be made as follows:



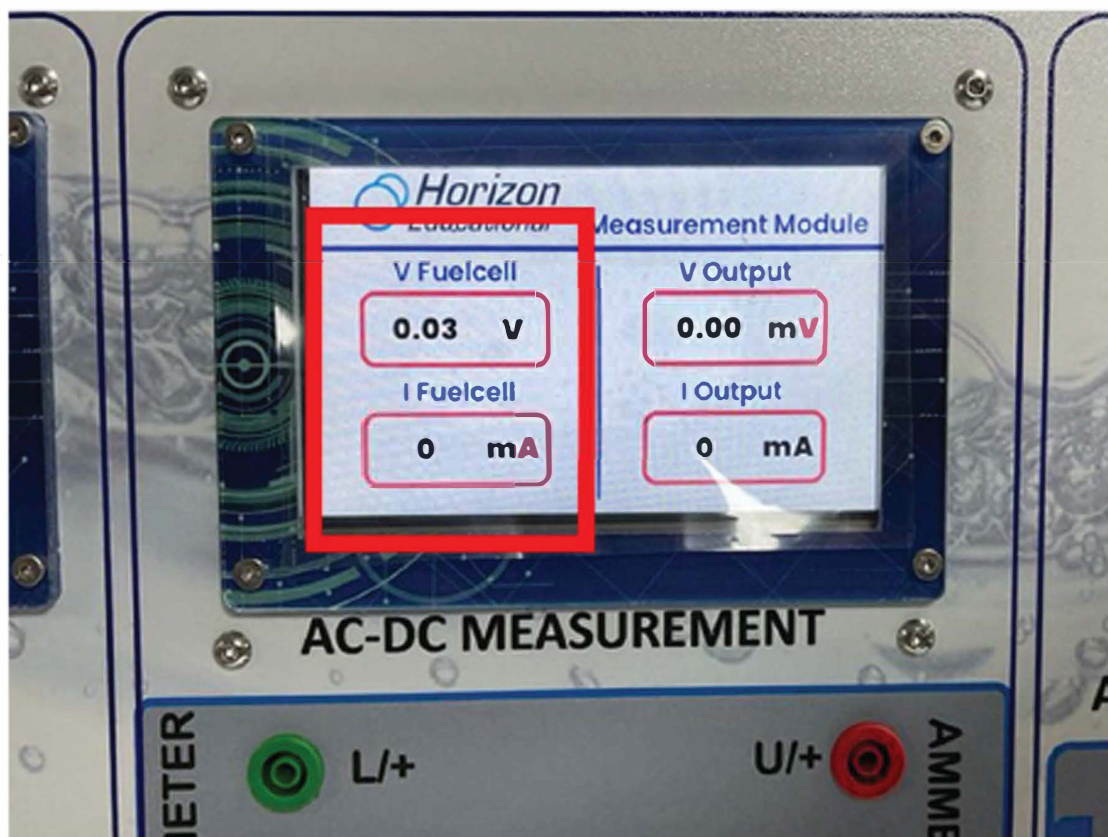
The flow meter data can be viewed on the 50-inch screen.

Prior to conducting experiments, press the 'TARE FLOW' button to calibrate the flow meter.

Ensure correct connections before attaching the Hydrostick to the fuel cell.

Once the Hydrostick is connected, allow the system to run idle for a period of 3-5 minutes. This enables more precise measurements to be taken.

The Fuelcell part of the DC measurement module measures the current and voltage at the fuel cell's output without requiring any connections.

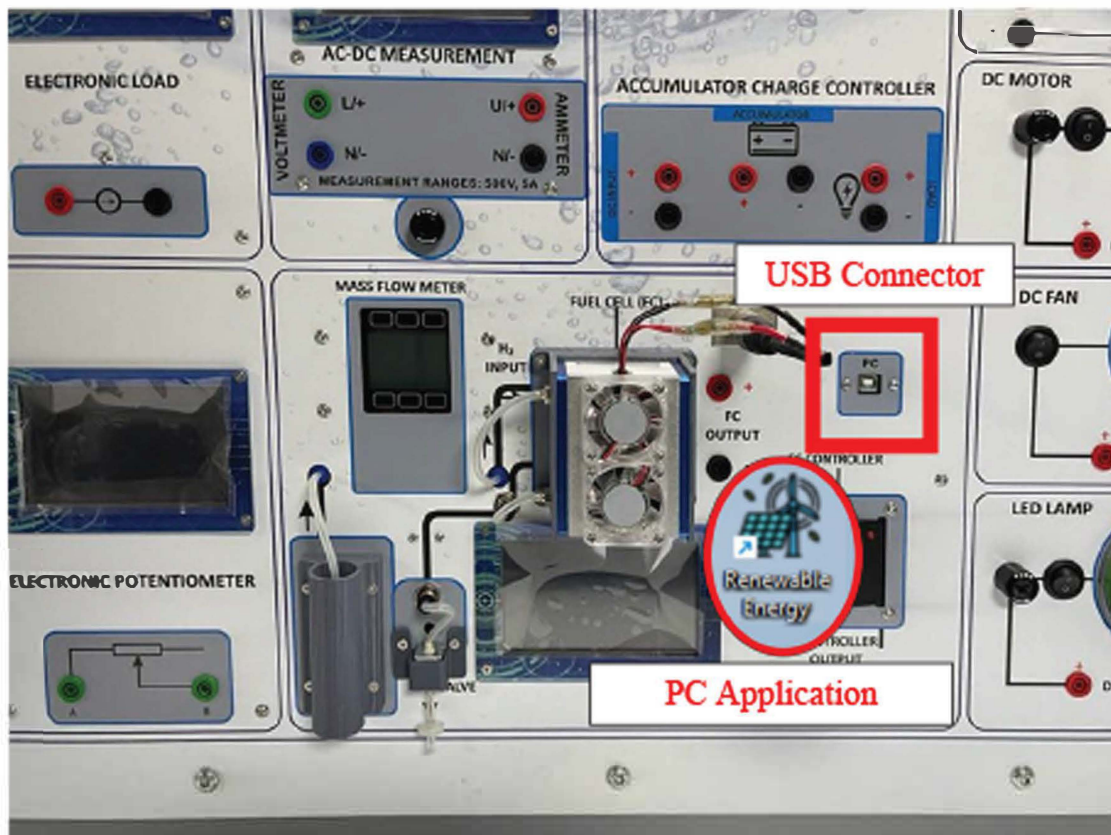


The output section measures the values of the binding posts on the DC measurement module.

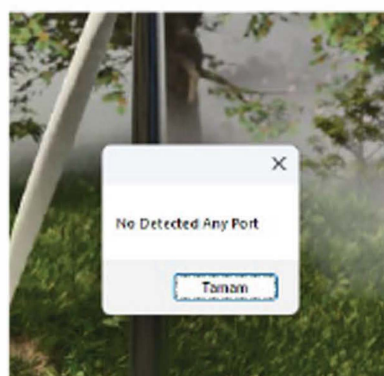
To measure the load, the output of the controller should be connected in series to an ammeter and in parallel to a voltmeter.



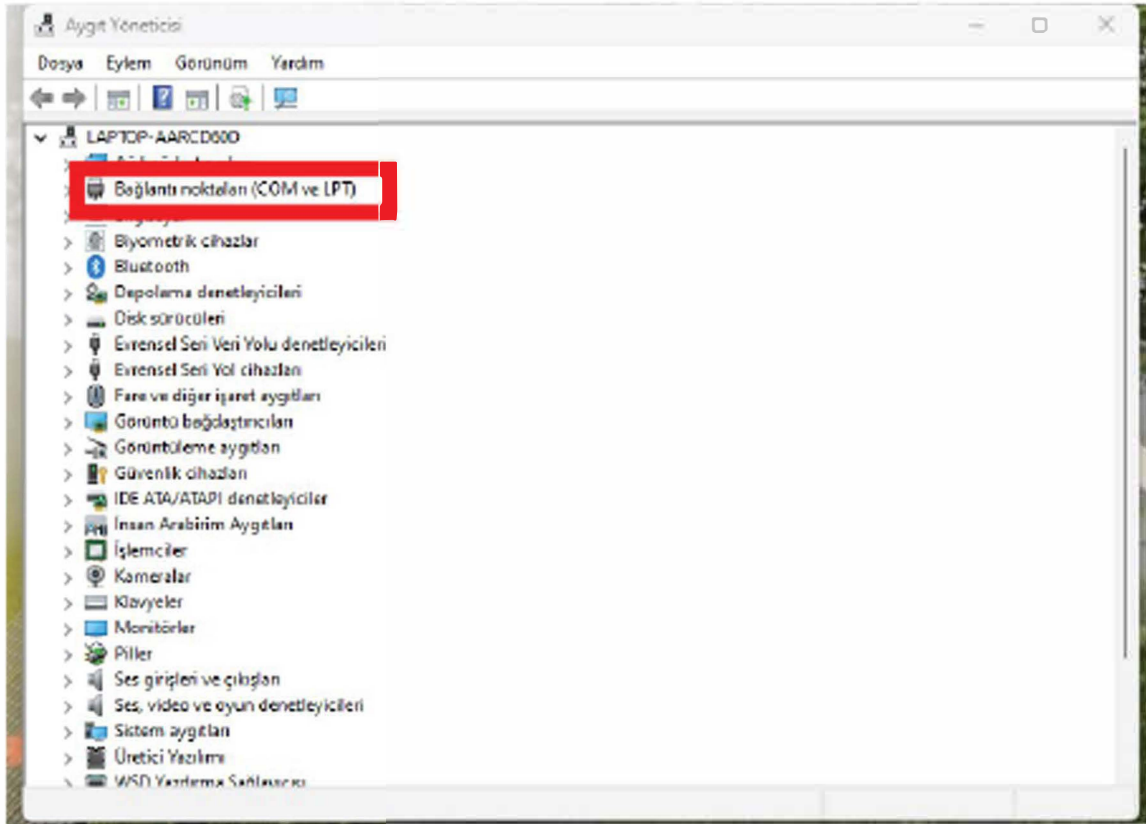
To obtain the values from the PC application, connect the USB and open the application. Then, select the Hydrogen Training set from the menu located at the top left.



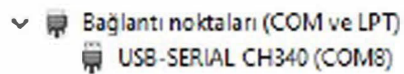
After opening the PC application, click OK on the screen that appears.



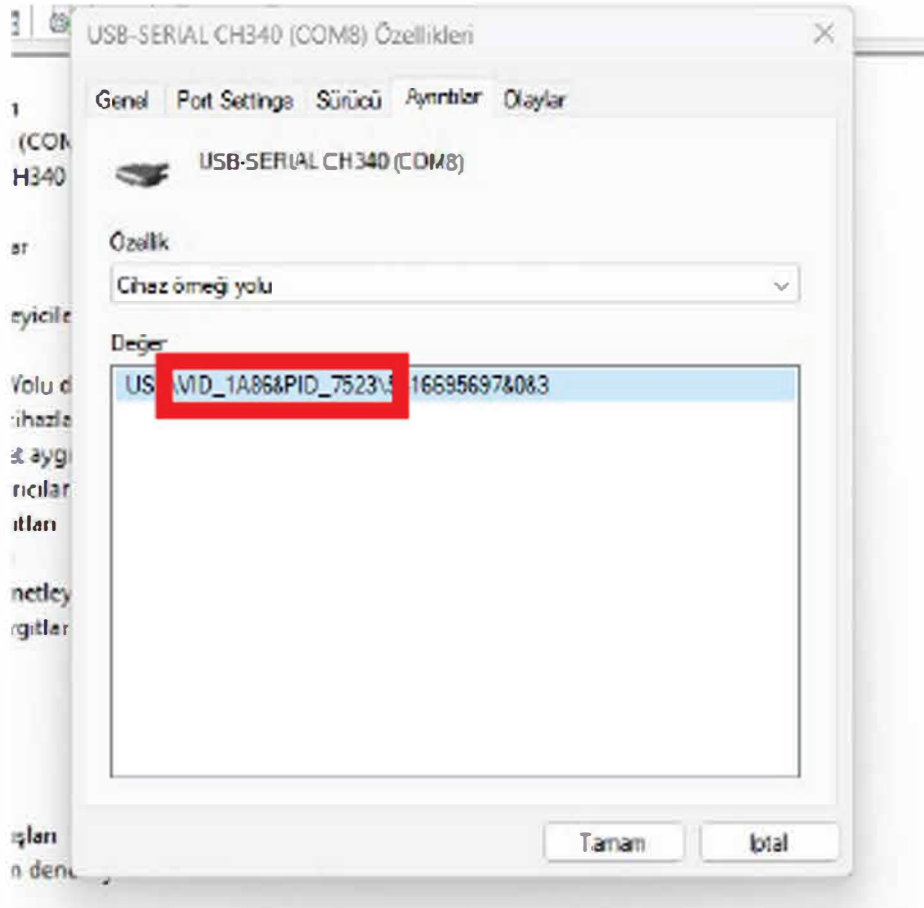
To access the device manager, search for it in the Windows search bar and select it from the results. Once open, navigate to the Ports tab.



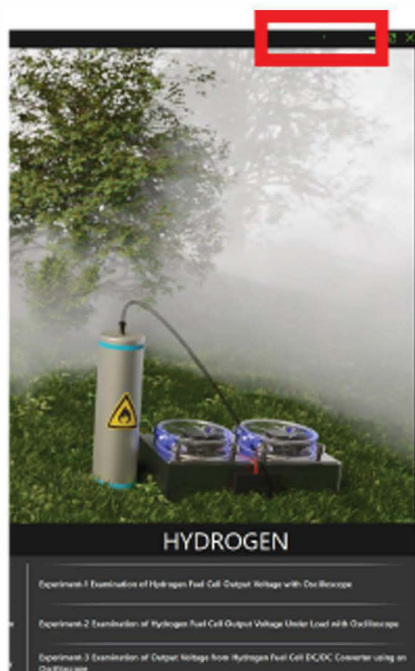
If only the Hydrogen trainer is connected, the port will appear one. If it is not connected, plug and unplug the USB to find the correct port. (e.g. COM8)



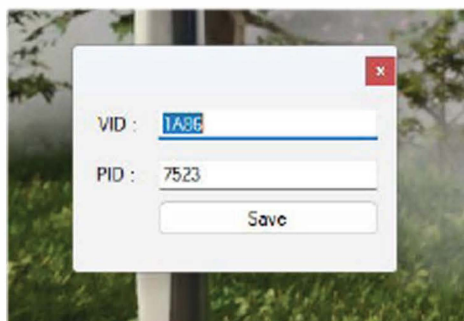
To open the properties, double-click on the port. Then, navigate to the details tab and select the Device Instance Path property.



Then click on the location marked in red on the image.

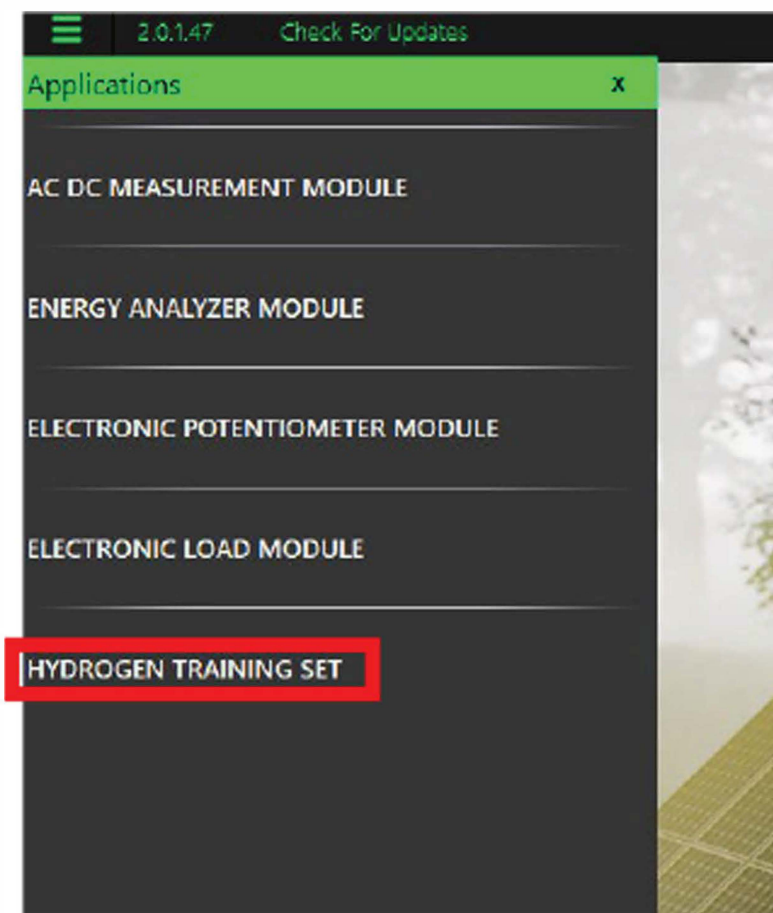


Enter the 4 digits for Device Instance Path VID\_XXXX in the VID section and the 4 digits for PID\_XXXX in the PID section on this screen.

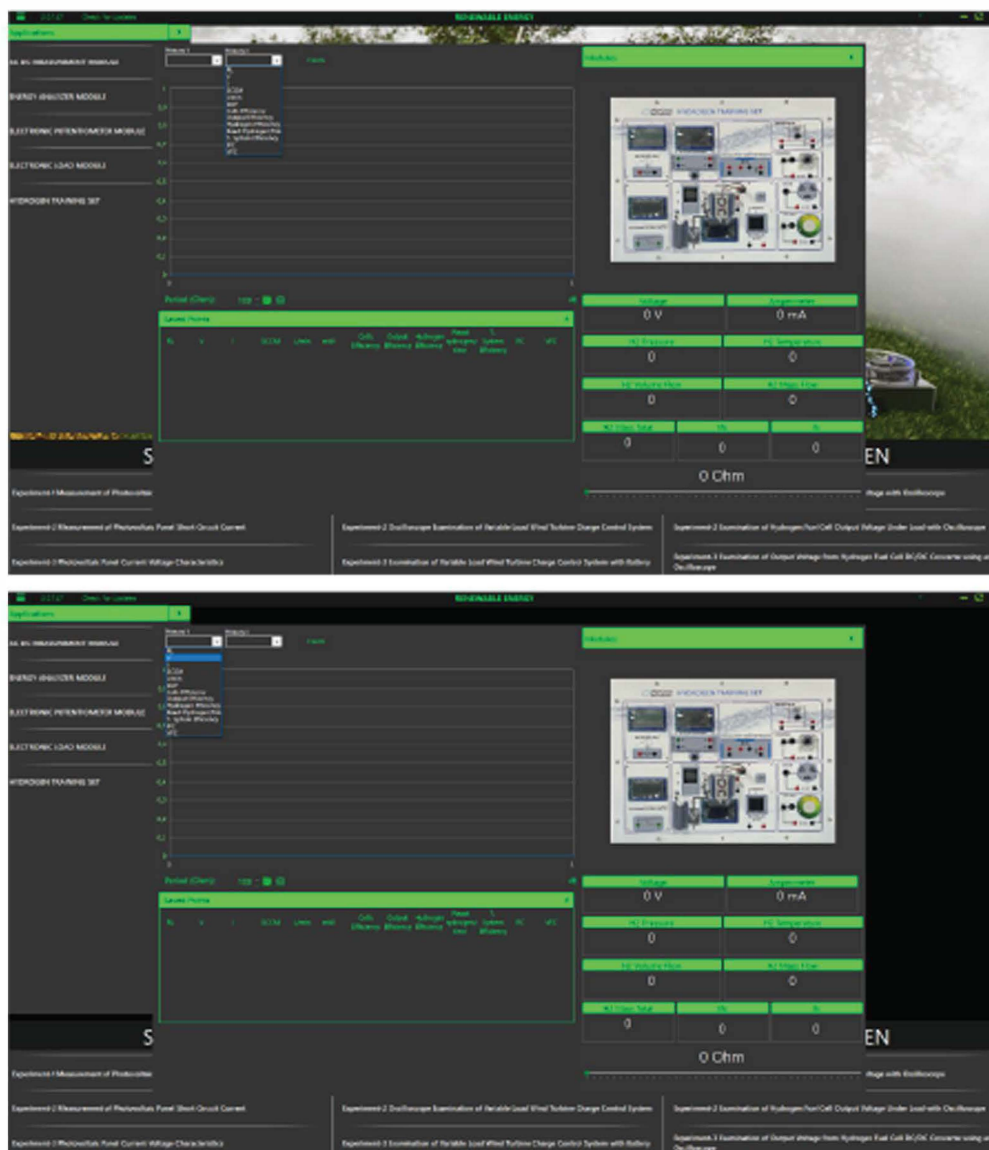




Then select the Hydrogen Training set from the menu located at the top left.



The application shows the data and allows you to control the potentiometer. You can select the desired values for the X and Y axes and view the corresponding graphs.



The Horizon Hydrogen Training Set-30 does not require pressurized hydrogen to run. The product comes included with a portable electrolyzer (Hydrofill PRO) which can be used to charge our small metal hydride cartridges (Hydrostik PRO).





Thank you for reading!

We hope you found this manual informative  
and useful

**[www.horizoneducational.com](http://www.horizoneducational.com)**

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