AQUANEX

Quick Start Procedure for DU2V Model 21

Before installing any software or hardware upgrade, backup any existing Aquanex data files.

Minimum computer requirements

If you are installing under Windows 7 or 8, use Aquanex V4.2 or higher and DU2V Model 21 or higher.

Software installation

The default values are strongly recommended for all installation options. If a message appears that a driver is not digitally signed, select the option to continue installation. If installing under Windows 8 or 10, disable the digital signature. Windows8: Click the Settings Charm/Change PCSettings/Update&recovery/ Recovery/Restart/Troubleshoot/Advanced options/Startup Settings/Restart/F7. The PC will then reboot. Windows10: Click the Start menu and select Settings/Update and Security/Recovery/Restart now under Advanced Startup/Troubleshoot/Advanced options/Startup Settings/Restart/7 or F7.

Insert the Installation CD into the CD drive.

Run setup.exe from the root directory on the CD. Follow the directions.

Open the DataDrivers1 folder on the CD and run iUSBDAQDriver2010.exe. Follow the directions.

Go to Device Manager, right click on iUSBDAQ, select Property/Update Driver and point to the path for hymchpusb.inf.

Open the Video Drivers directory on the CD and run setup.exe. Follow the directions.

Copy capture.avi into the C:\ directory.

Hardware installation

Disable the web camera – Control Panel/Device Manager/Imaging Devices.

Connect the Video Output to a USB port on the computer. Wait until the hardware is recognized by Windows. Follow the Wizard directions. (If the video does not install, run the Pinnacle Studio CD.)

Connect the Data Output to a USB port on the computer. Wait until the hardware is recognized by Windows. When the computer responds "Found New Hardware" do not use the auto install option. Point to the DataDrivers2 folder. Follow the Wizard directions.

Remove the camera lens cap. Install the underwater camera below the surface.

Connect the 12 volt DC power supply to the camera cable.

Connect the RCA connector on the camera cable to the Video Input on the Aquanex CIU.

Connect the sensors to the Channel 1 (yellow, left) and Channel 2 (red, right) sockets.

Run the Aquanex software

Select *Start/Programs/Aquanex/Aquanex*. (If your operating system is Vista, right click on Aquanex.exe and select *Properties*, *Compatibility*, Privilege Level, *Run as Administrator*.)

Select the *Client* menu bar command.

Select *Add Client* from the *Edit* menu bar command in the Client window.

Enter the client name, height, weight, and an ID (two initials are recommended).

Select the *Data/Monitor* menu bar command.

Adjust the sensor baselines to zero with the vertical scroll bars.

Click the *Start* button, click the *Stop* button, then select *Data/Monitor*.

Select the *File/Autosave* menu bar command.

Select the *Data/Monitor with Video* menu bar command.

(If a black screen appears in the middle of the window instead of a video image, check all connections from the camera to computer. If a green screen appears, exit Aquanex, run Amcap.exe from the Video Drivers folder. If there is an image, exit Amcap and run Aquanex. If there is no image in Amcap, select *Options/Video Crossbar/Video Composite*. Once *Video Composite* is selected, an image should appear. Exit Amcap and run Aquanex.)

Align the camera so that the point on the wall directly opposite the camera is in the center of the view.

When the swimmer passes the 10 yd mark, click *Start Data Collection*.

When the swimmer touches the wall, click *Stop Data Collection*.

Select the *Data/Graph with Video* menu bar command.

Click the single frame advance button on the multimedia control.

Observe that the cursors on the force graphs are synchronized with the video image.

For additional trials, have the swimmer return to the starting point and pull the cable toward the wall.

When the testing session is completed and the sensors are removed from the swimmer, tap the sensors on your hand to clear the water from the ports on both sides.