

# HydroView Pro PC App



# Getting Started

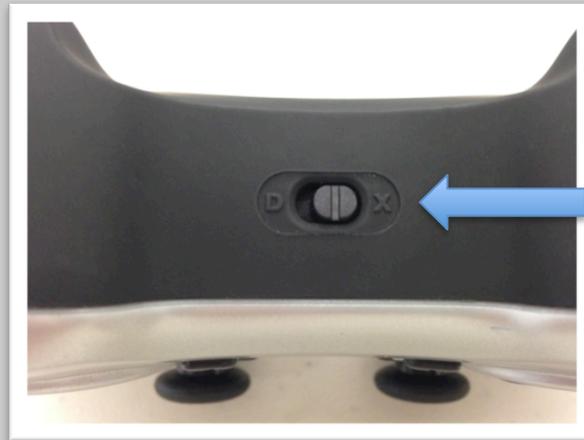
1. Download the PC Application from the Aquabotix website at [www.aquabotix.com/support\\_downloads.php](http://www.aquabotix.com/support_downloads.php)
2. Connect your HydroView to the topside box as described in the HydroView Pro User manual, available at [www.aquabotix.com/support\\_manuals.php](http://www.aquabotix.com/support_manuals.php)
3. Aquabotix suggests the use of a Cat 5E cable for LAN connection between the topside box and your laptop. LAN connection provides 5X better performance than the WiFi connection. When using the LAN connection be sure to turn WiFi off on your laptop.
4. Once all connections are made, power on the HydroView. Then open the application.
5. Please note: The Performance Panel should **not be used** unless directed by Aquabotix Customer Service. This can cause damage to vehicle operations.

# Game Controller

Aquabotix recommends the use of a game controller with the PC Application. We recommend the Logitech F310 game controller. You may purchase a controller on our website: <http://www.aquabotix.com/products.php?cat=27>

Please be sure that the dongle is inserted in the USB port for your laptop. If you do not wish to use the game controller, remove the dongle and then restart the HydroView application.

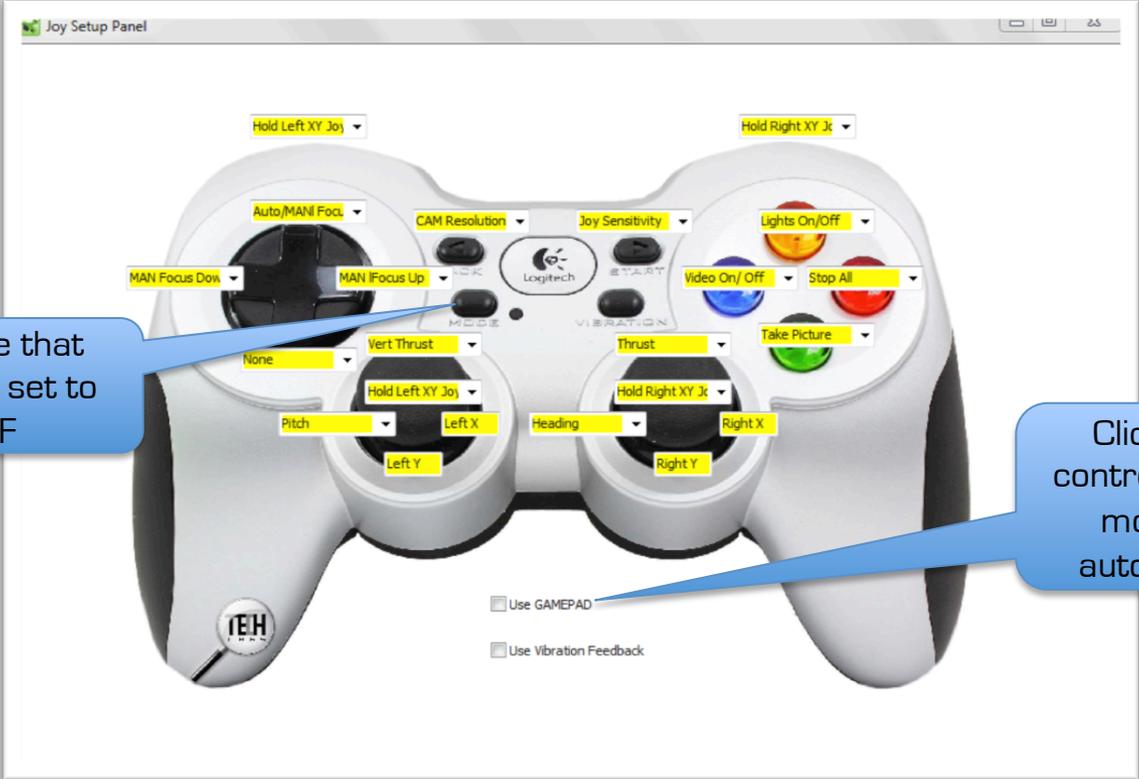
Please note the button on the side of the controller must be selected to X (wireless remotes only).



# Game Controller

The Game Controller is configurable to the user's preferences. This menu is accessed in the menu bar under tools > joystick setup.

Each button's controls can be changed using the dropdown menus.

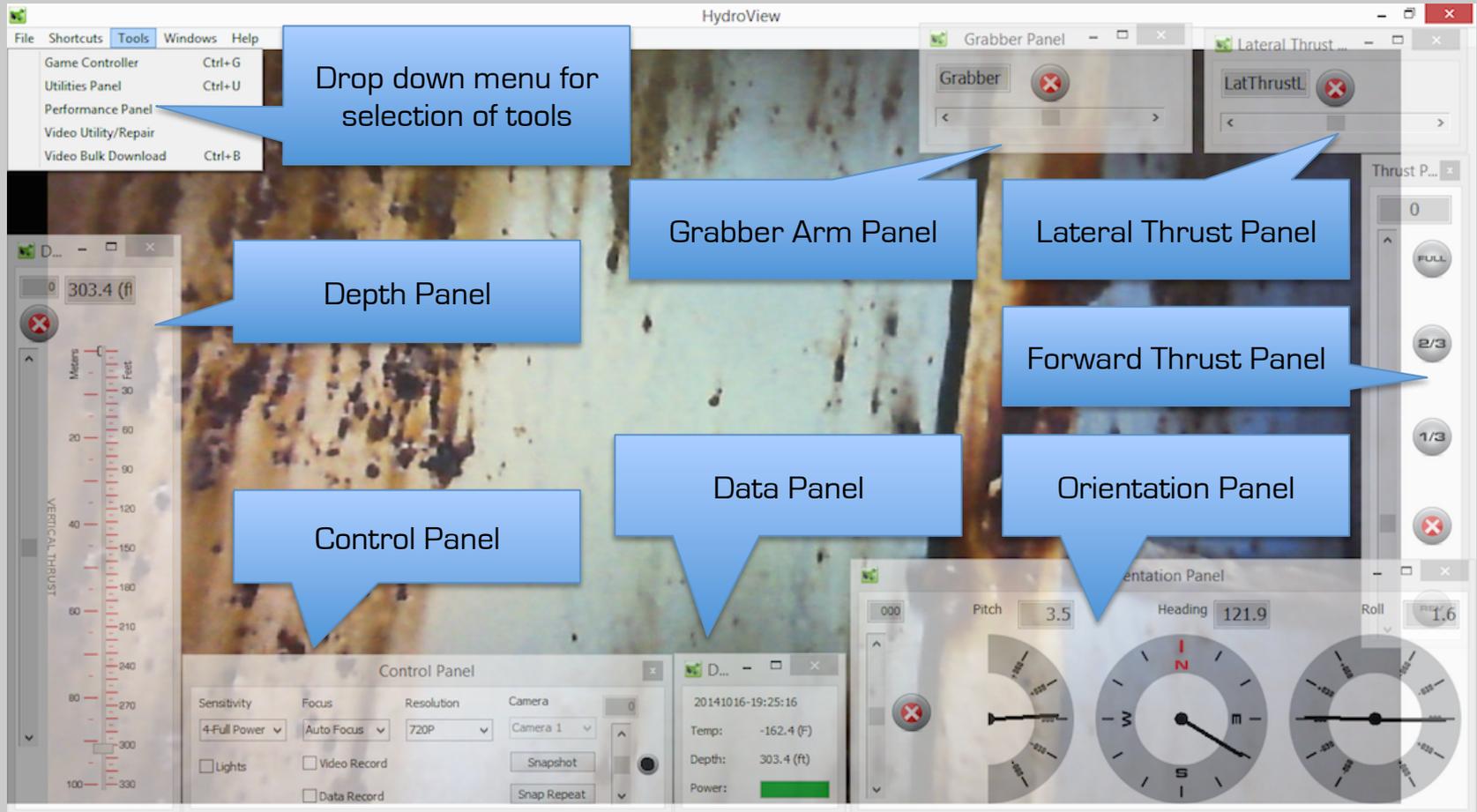


The screenshot shows the 'Joy Setup Panel' window with a game controller overlaid. The controller has numerous dropdown menus and checkboxes for configuration. Two callout boxes provide additional information:

- Callout 1 (Left):** A blue speech bubble pointing to the 'MODE' button on the controller. The text inside reads: "Be sure that mode is set to OFF".
- Callout 2 (Right):** A blue speech bubble pointing to the 'Use GAMEPAD' checkbox. The text inside reads: "Click to enable game controller. When enabled, mouse controls are automatically disabled.".

Other visible configuration options include: 'Hold Left XY Jo', 'Hold Right XY Jo', 'Auto/MAN Foc', 'CAM Resolution', 'Joy Sensitivity', 'Lights On/Off', 'MAN Focus Down', 'MAN Focus Up', 'Video On/ Off', 'Stop All', 'Take Picture', 'Vert Thrust', 'Thrust', 'None', 'Pitch', 'Left X', 'Heading', 'Right X', 'Left Y', 'Right Y', 'Use GAMEPAD', and 'Use Vibration Feedback'.

# Overview of App Screen



The screenshot displays the HydroView application interface with several panels and callouts:

- Drop down menu for selection of tools:** Points to the 'Tools' menu in the top-left corner, which includes options like Game Controller (Ctrl+G), Utilities Panel (Ctrl+U), Performance Panel, Video Utility/Repair, and Video Bulk Download (Ctrl+B).
- Grabber Arm Panel:** Points to the 'Grabber' control panel in the top-right area.
- Lateral Thrust Panel:** Points to the 'LatThrustL' control panel in the top-right area.
- Depth Panel:** Points to the vertical depth scale on the left side of the screen, showing a reading of 303.4 (ft).
- Data Panel:** Points to the central data display area showing temperature (-162.4 (F)), depth (303.4 (ft)), and power.
- Orientation Panel:** Points to the orientation control panel at the bottom right, featuring gauges for Pitch (3.5), Heading (121.9), and Roll (1.6).
- Control Panel:** Points to the bottom-left control panel, which includes settings for Sensitivity (4-Full Power), Focus (Auto Focus), Resolution (720P), Camera (Camera 1), and checkboxes for Lights, Video Record, and Data Record.

# Feedback Icons



Sensitivity Setting %



Video Recording



Vehicle not connected



Video Recording Off



Vehicle Battery Power Low



LED Lighting On



Auto Depth Control



Hold Left Joystick



Hold Right Joystick



Data Recording On

# Control panel

## Sensitivity

Controls the vehicle's responsiveness. Power can be set at 25%, 50%, 75% and 100%

## Focus

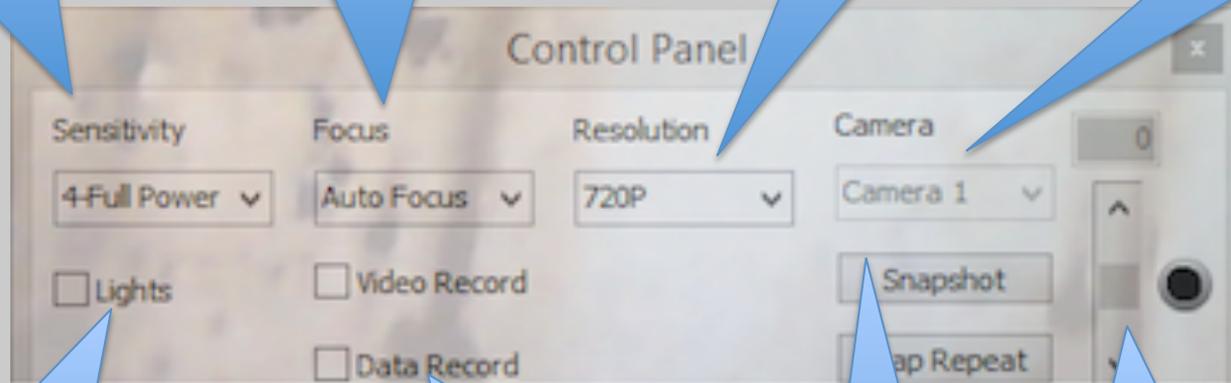
Auto Focus or Manual Focus.

## Resolution

Camera Resolution settings can be selected from low to HD

## Camera

With the external camera upgrade, this setting allows you to select the camera used



## Lights

Toggle the LED lighting on/off

## Video and Data Record

Toggle the recording on/off. Video recording stay on when you exit the app without powering off the vehicle.

## Snapshot

Click to take a picture  
**Snap Repeat**  
Take pictures on regular intervals

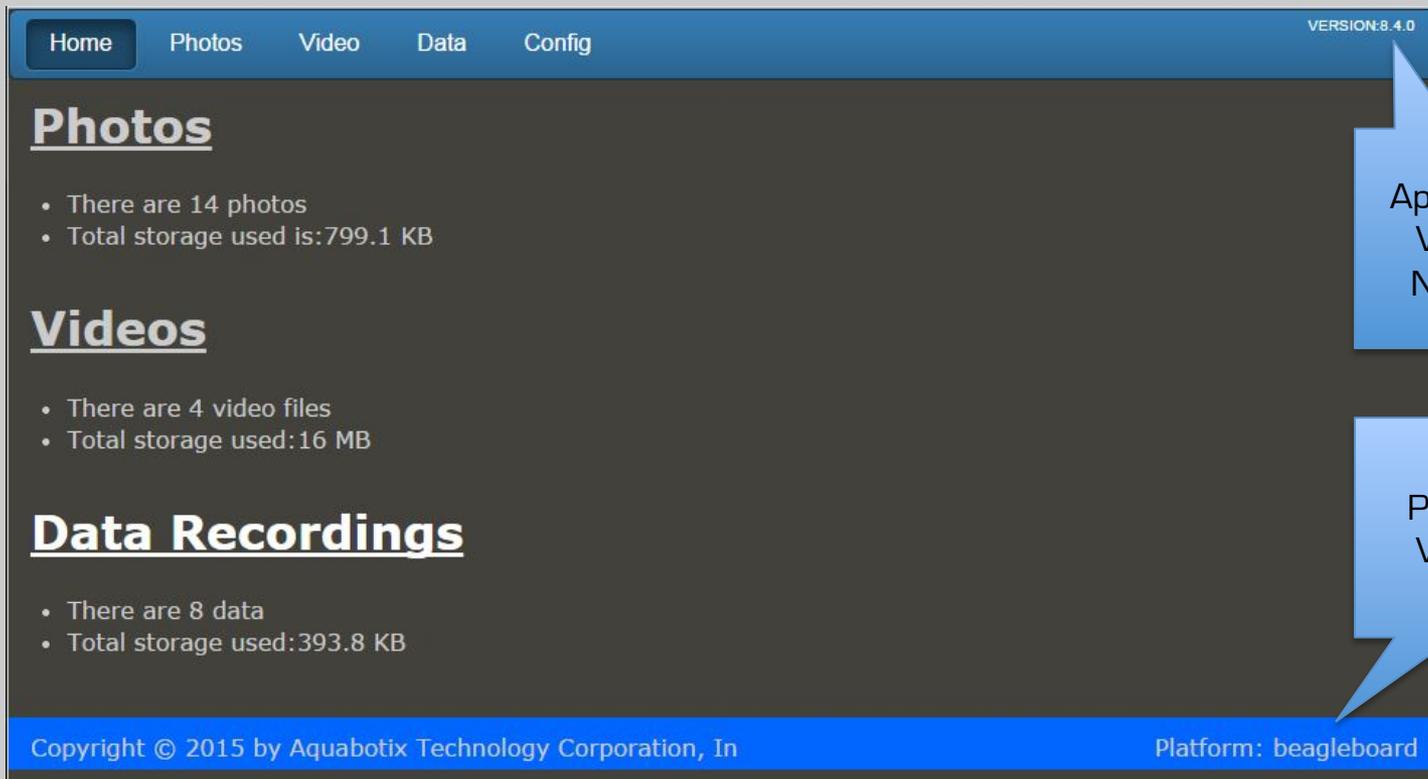
## Tilt Camera

Control camera tilt up/down (only available with tilt camera upgrade)

# Vehicle Media

All media and data is stored on the vehicle's web server. This can be accessed through the control panel or the top menu bar.

All media is time stamped using Zulu time.



The screenshot displays a web interface with a top navigation bar containing 'Home', 'Photos', 'Video', 'Data', and 'Config'. The 'Photos' section shows 14 photos and 799.1 KB of storage used. The 'Videos' section shows 4 video files and 16 MB of storage used. The 'Data Recordings' section shows 8 data files and 393.8 KB of storage used. A blue callout box points to the 'VERSION: 8.4.0' text in the top right corner, and another points to the 'Platform: beagleboard' text in the footer.

Home Photos Video Data Config VERSION: 8.4.0

## Photos

- There are 14 photos
- Total storage used is: 799.1 KB

## Videos

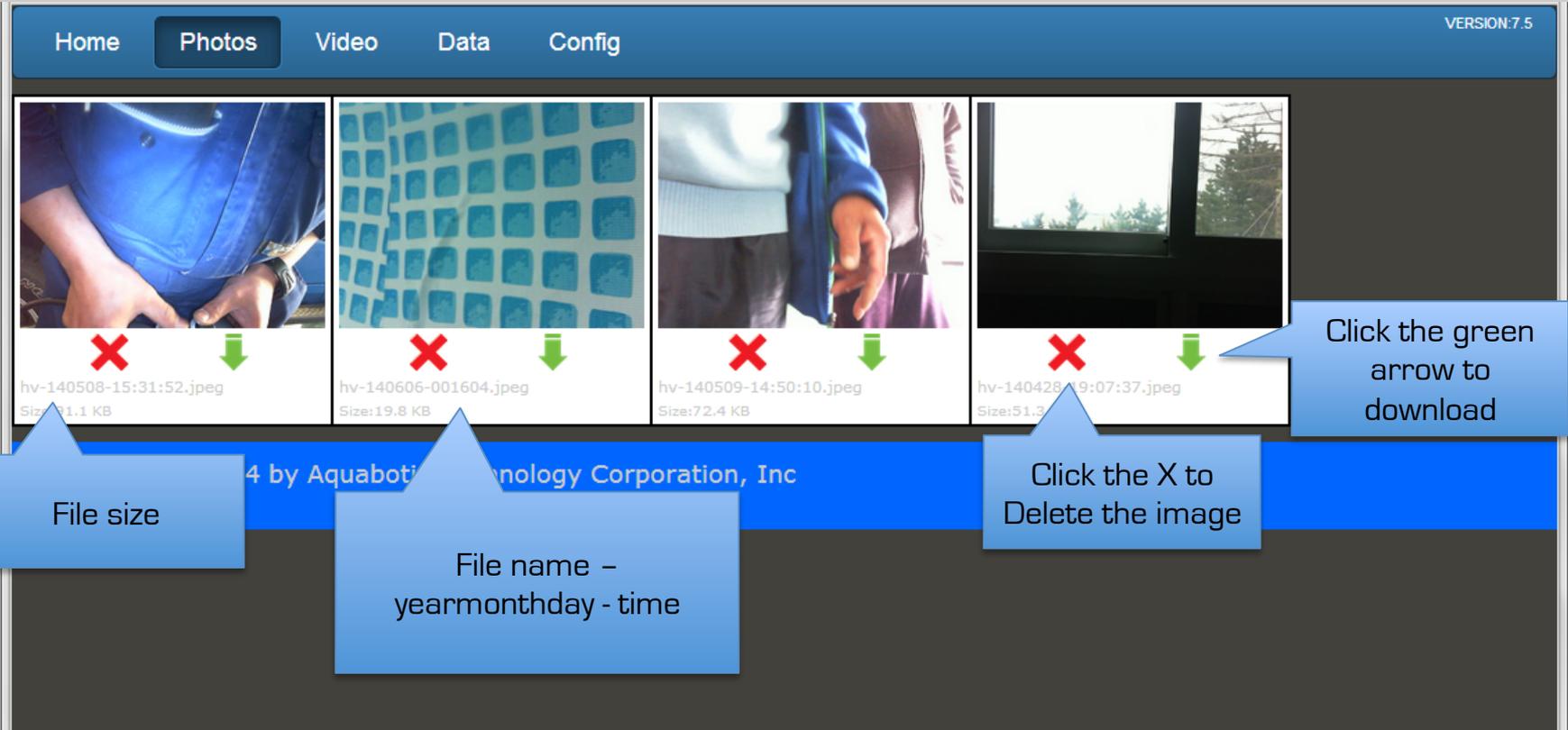
- There are 4 video files
- Total storage used: 16 MB

## Data Recordings

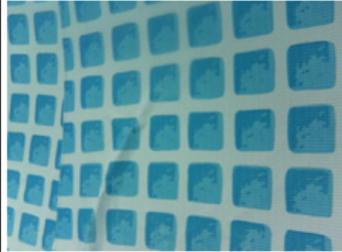
- There are 8 data
- Total storage used: 393.8 KB

Copyright © 2015 by Aquabotix Technology Corporation, In Platform: beagleboard

# Photos/Video



The screenshot shows a web interface with a blue header containing navigation tabs: Home, Photos (selected), Video, Data, and Config. The version number 'VERSION:7.5' is in the top right. Below the header is a grid of four photo thumbnails. Each thumbnail has a red 'X' icon and a green downward arrow icon. Below each thumbnail is the file name and size. Callouts provide instructions: 'Click the green arrow to download' points to the green arrow; 'Click the X to Delete the image' points to the red X; 'File size' points to the size text; and 'File name - yearmonthday - time' points to the file name text.

Thumbnail	File Name	File Size	Action
	hv-140508-15:31:52.jpeg	Size: 1.1 KB	Delete (X) / Download (Green Arrow)
	hv-140606-001604.jpeg	Size: 19.8 KB	Delete (X) / Download (Green Arrow)
	hv-140509-14:50:10.jpeg	Size: 72.4 KB	Delete (X) / Download (Green Arrow)
	hv-140428-09:07:37.jpeg	Size: 51.3 KB	Delete (X) / Download (Green Arrow)

# Data

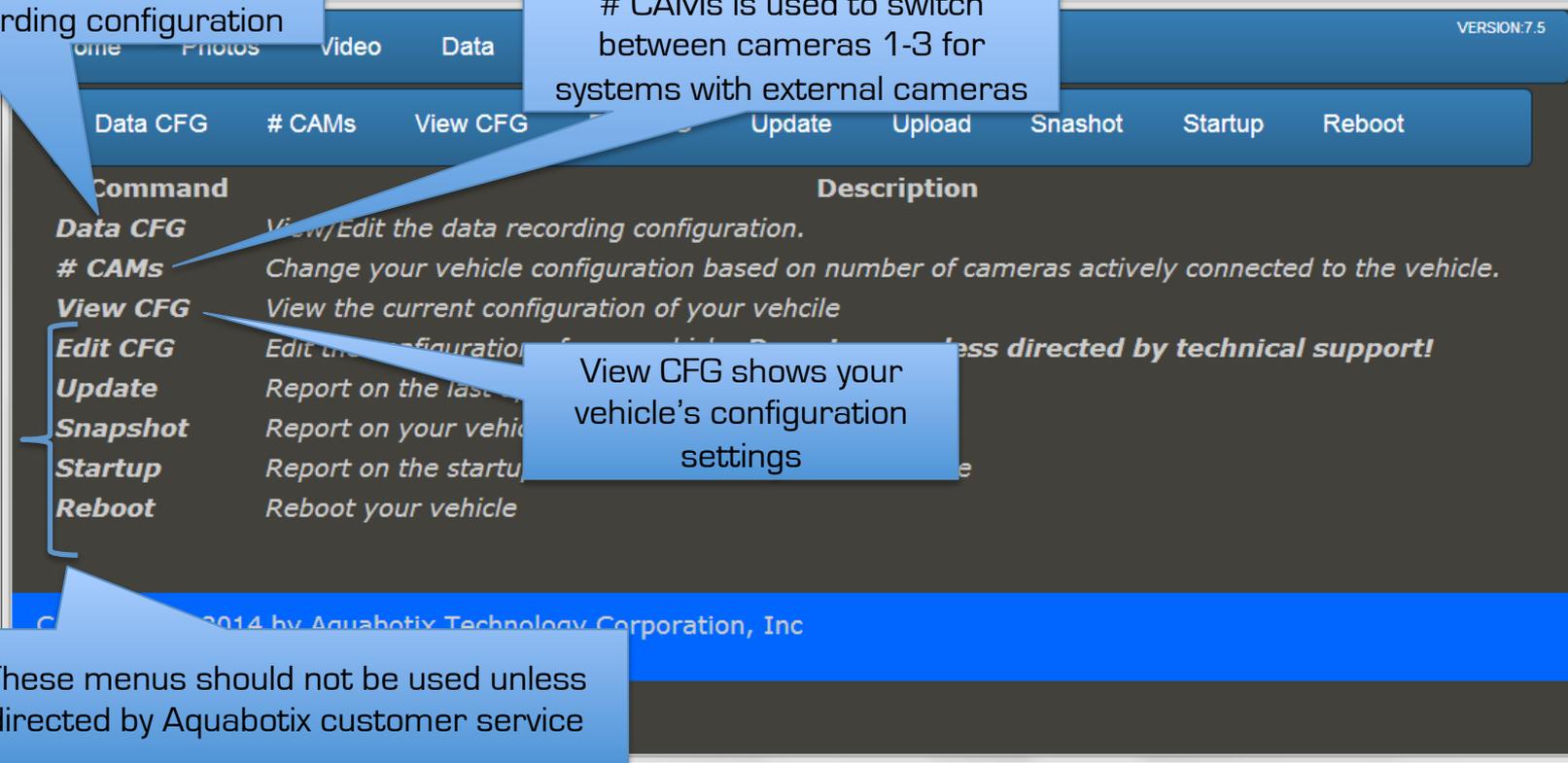


The screenshot shows a web interface for data management. At the top, there is a navigation bar with tabs for Home, Photos, Video, Data (selected), and Config. The version number 'VERSION:7.5' is displayed in the top right corner. Below the navigation bar, a file entry is shown with the name 'data-140606-001416.csv' and a size of '586'. To the right of the file name are two icons: a red 'X' for deletion and a green downward arrow for download. Three callout boxes provide instructions: one pointing to the file name with the text 'File name - yearmonthday-time', one pointing to the red 'X' with the text 'Click the X to delete the .csv file', and one pointing to the green arrow with the text 'Click the green arrow to download the .csv file'. A copyright notice 'Copyright © 2014 Aquabotix Technology Corporation, Inc' is visible at the bottom of the interface.

# Vehicle Configuration

Data CFG is used to make edits to your data recording configuration

# CAMs is used to switch between cameras 1-3 for systems with external cameras



The screenshot shows a web interface for vehicle configuration. At the top right, it says 'VERSION: 7.5'. Below that is a navigation bar with buttons: 'Data CFG', '# CAMs', 'View CFG', 'Update', 'Upload', 'Snapshot', 'Startup', and 'Reboot'. Below the navigation bar is a table with two columns: 'Command' and 'Description'. The table contains the following entries:

Command	Description
<b>Data CFG</b>	<i>View/Edit the data recording configuration.</i>
<b># CAMs</b>	<i>Change your vehicle configuration based on number of cameras actively connected to the vehicle.</i>
<b>View CFG</b>	<i>View the current configuration of your vehicle</i>
<b>Edit CFG</b>	<i>Edit the configuration of your vehicle. <b>Use with caution! Access directed by technical support!</b></i>
<b>Update</b>	<i>Report on the last update</i>
<b>Snapshot</b>	<i>Report on your vehicle's current configuration</i>
<b>Startup</b>	<i>Report on the startup sequence</i>
<b>Reboot</b>	<i>Reboot your vehicle</i>

At the bottom of the interface, there is a blue bar with the text: '© 2014 by Aquabotix Technology Corporation, Inc'.

View CFG shows your vehicle's configuration settings

These menus should not be used unless directed by Aquabotix customer service

# Utilities Panel

Utilities Panel

Vehicle Messages On     Metrics On

App Version  
Vehicle Version  
Payload Version  
Vehicle Platform

Update Vehicle BBxM  
Update Vehicle WB

Force Update

**Manual Focus Calibration**

	Distance	Focus Level
Focus 1	??.??	<input type="text"/>
Focus 2	??.??	<input type="text"/>
Focus 3	??.??	<input type="text"/>
Focus 4	??.??	<input type="text"/>
Focus 5	??.??	<input type="text"/>
Focus 6	??.??	<input type="text"/>
Focus 7	??.??	<input type="text"/>

Save Values    Load Values

20150126-23:48:16

COMMS CONNECTED  
VIDEO CONNECTED

Calibrate Depth  
Offset: ??.??  
Calibrate Compass  
Save Settings as Default  
Game Controller Setup

Save Pictures Locally  
 use METRIC System  
 Use GAMEPAD  
 Invert Steering  
 Automation  
 Simulation  
 Panel Transparency

192.168.2.170

Only to be used with customer service

Only to be used with customer service

Updates should be made before going into the field. Call customer service for further assistance.

Manual Focus is set to 7 different focal ranges. These can be altered based upon customer needs.

After changes the manual focus settings, Click Save and reboot the app.

Save pictures directly to documents folder. Must use when recording video and taking pictures simultaneously.

See pg. 13

Contact customer service for compass calibration

Click to access to game controller configurations.

Switch to metric measurements

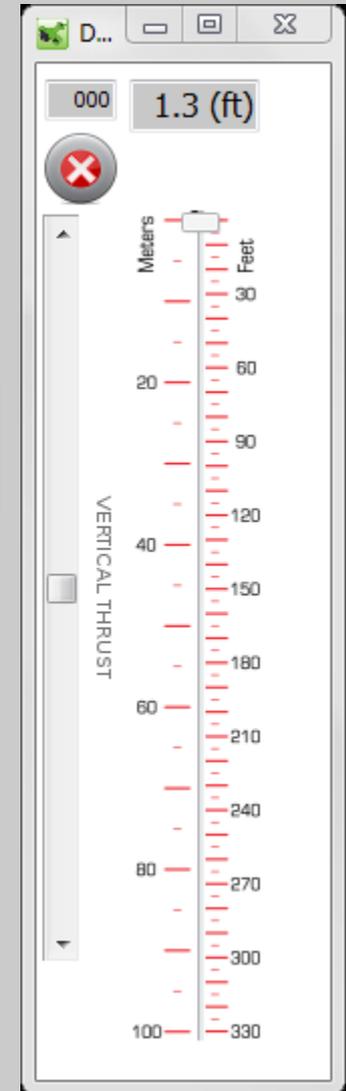
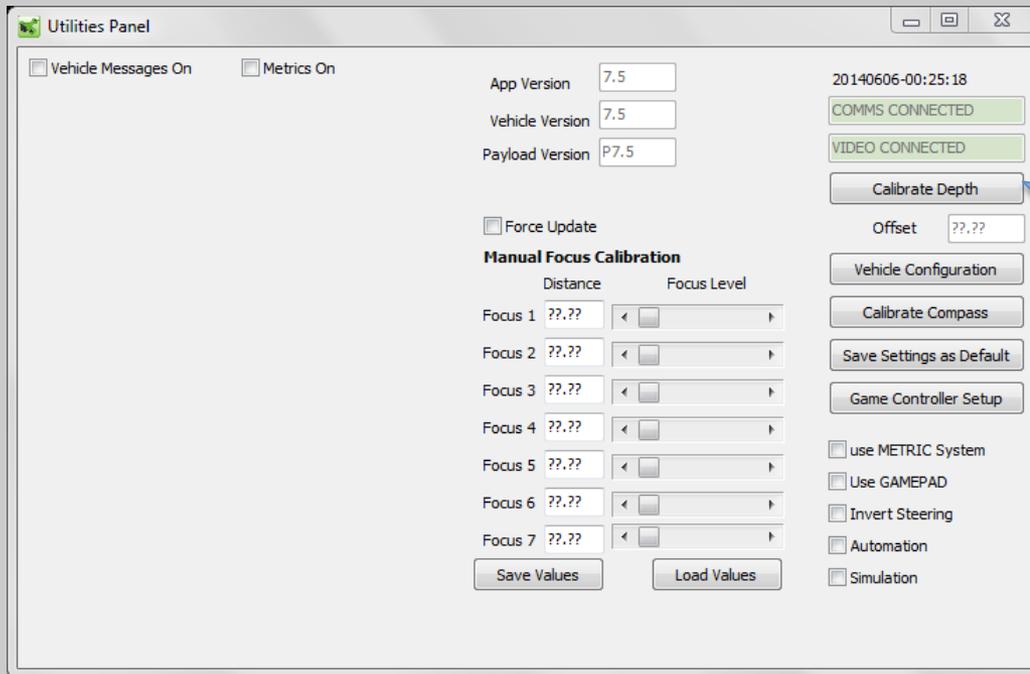
Click to control the vehicle with the game controller

See pg. 14

Set transparency of control panels

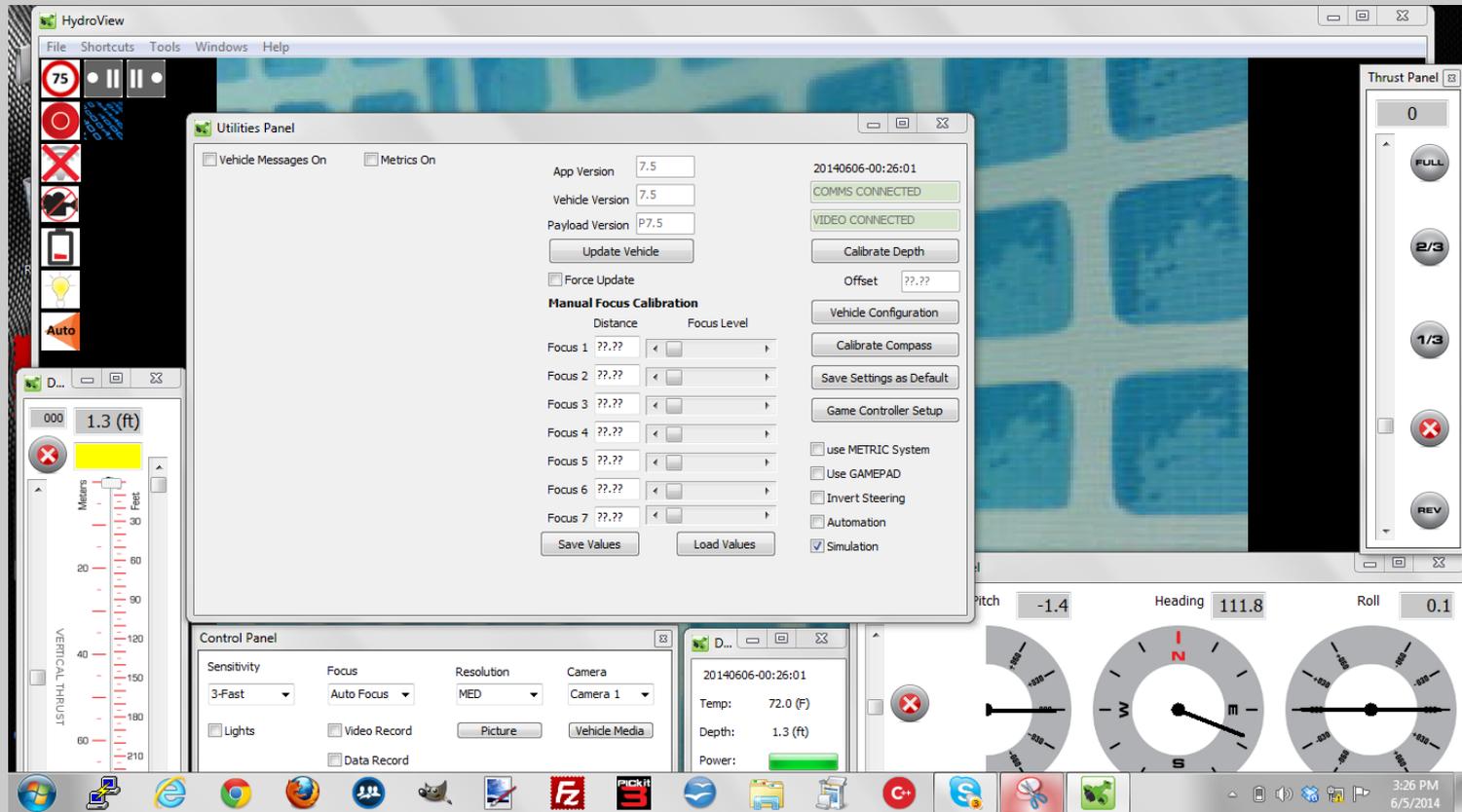
# Depth Panel

Depth needs to be calibrated before each deployment. This calibration needs to be completed **at water level** on site. The calibration is in the utilities menu.

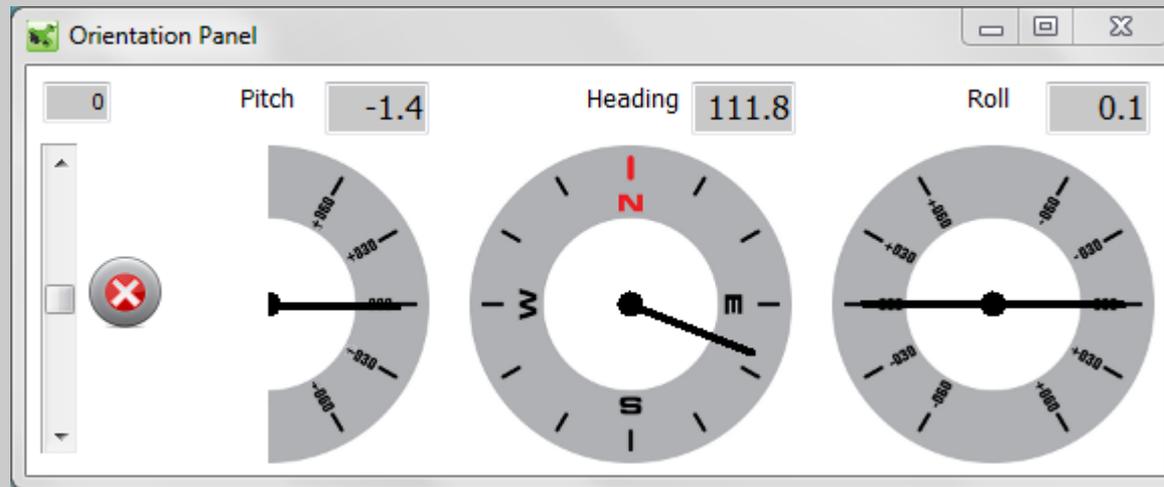


# Simulation

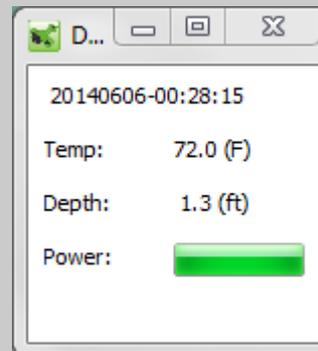
Simulation allows the user to see all panels open with all feedback icons shown.



# Orientation Panel



# Sensor Panel



# Forward/Reverse Thrust Panel



## Grabber Panel



Open grabber  
(slide to control speed)

Close grabber  
(slide to control speed)

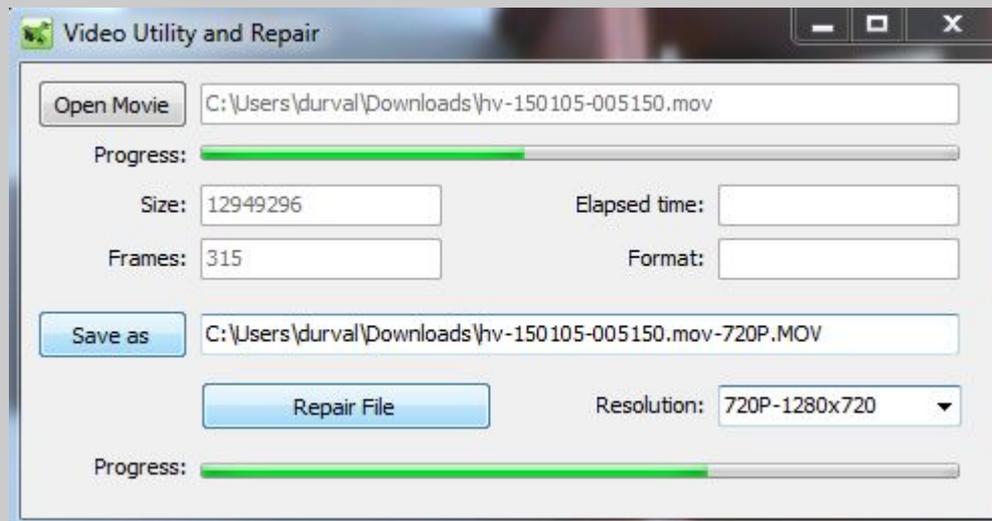
## Lateral Thrust Panel



# Video Repair

If a movie downloaded from the HydroView is unreadable or incomplete, the video repair utility can be used to fix the file.

1. Find and open the movie. The utility will analyze it.
2. Select the resolution and enter the save as information.
3. Click repair file.



# Video Bulk Download

This utility enables the bulk download of videos stored on the HydroView.

1. Click the movies list
2. Select the videos to download
3. Click download.

