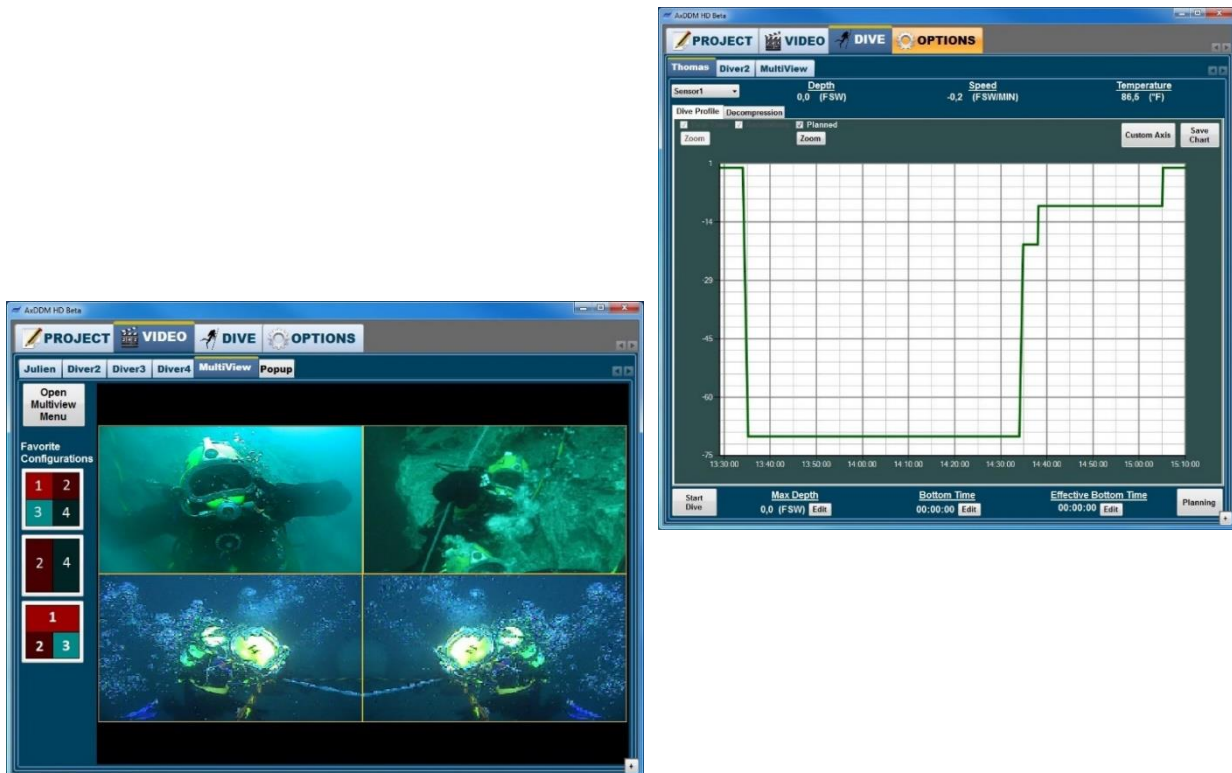


# AxDDM Diving Data Management Software for AxVIEW Subsea Video & Depth Recording Systems

## Instruction Manual

Version 3.1

Nov 2016



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This document applies to AxDDM Software Version 2.0.10 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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**WARNING!**

**READ THIS MANUAL CAREFULLY!** Read this instruction manual in its entirety paying close attention to ALL WARNINGS listed below. Make sure that you fully understand the use, displays and limitations of the digital video recorder and dive computer because any confusion resulting from neglecting to follow this instruction manual or from improper use of this device may cause a diver to commit errors that may lead to serious injury or death.

**WARNING!**

**FOR PROFESSIONAL USE!** AXSUB Dive Data Management (AxDDM) Software and LED Controller & Camera Viewer (AxVIEW) are intended for professional use only. Commercial or professional diving activities may expose the diver to depths and conditions that tend to increase the risk of decompression illness (DCI). Therefore, AXSUB strongly recommends that the diving supervisor use these devices in redundancy with their conventional method as a back-up solution (dive profile & decompression module).

**WARNING!**

**ONLY DIVERS TRAINED IN THE PROPER USE OF Surface Supplied DIVING EQUIPMENT SHOULD USE THE AxVIEW!** No computer can replace the need for proper Supervisory and Diver training. Insufficient or improper training may cause divers to commit errors that may lead to serious injury or death.

**WARNING!**

**THERE IS ALWAYS A RISK OF DECOMPRESSION ILLNESS (DCI) FOR ANY DIVE PROFILE EVEN IF YOU FOLLOW THE DIVE PLAN PRESCRIBED BY DIVE TABLES OR A DIVE COMPUTER. NO PROCEDURE, DIVE COMPUTER OR DIVE TABLE WILL PREVENT THE POSSIBILITY OF DCI!** An individual's physiological make up can vary from day to day. The AxDDM Software cannot account for these variations. You are strongly advised to remain well within the exposure limits provided by the instrument to minimize the risk of DCI. As an added measure of safety, you should consult a physician regarding your fitness before diving.

**WARNING!**

**USE BACK-UP INSTRUMENTS!** Make sure that you use back-up instrumentation including a Pneumo gauge, submersible pressure gauge, timer or watch, and have access to decompression tables whenever diving with the Dive Profile and Decompression modules with the AxDDM software.

**WARNING!**

PERFORM PRECHECKS! Always activate and conduct a functionality check of the device before diving in order to ensure the pressure sensor reads atmospheric pressure, that the display works adequately and that the sensor is secured to the diver's harness. We recommend using one battery pack (Product No. 011001 – B05Ah-24VDC) per diver connected to the AxVIEW system to enable the UPS battery back-up of the system or one or high capacity battery pack (001003 – B15Ah-24VDC). This will prevent shut down of the underwater light, computer rebooting and/or video loss (if applicable) in case a Main Power Supply shut down or voltage drop.

**WARNING!**

Although the AxVIEW systems does not count down the NO-FLYING TIME, ALWAYS REFER TO YOUR COMPANY PROCEDURES AND METHODS or follow your diving table procedures. There can never be a flying after diving rule that is guaranteed to completely prevent decompression illness!

**WARNING!**

DO NOT DIVE AT ALTITUDES GREATER THAN 300m WITH THE AXVIEW UNLESS IT IS EQUIPPED WITH AN ALTITUDE DIVING TABLES, Diving at altitude without compensation of the Actual and Decompression Stages Depth can increase the risk of DCI.

**WARNING!**

ALWAYS REFER TO YOUR COMPANY PROCEDURES AND METHODS! The Diving Data Management (AxDDM) Software and the AxVIEW System are intend to be a working tool for the commercial diving supervisor to crosscheck information and log information that can be referred to later on. You must always maintain and keep the paper system & external stopwatch to control the dive in case of technical problems with the device and/or sensors.

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# 1. Safety Precautions

Do not attempt to use the AxVIEW system or AxDDM software without reading this instruction manual in its entirety, including all the warnings. Make sure that you fully understand the use, displays and limitations of the instrument. If you have any questions about the manual or the dive computer, contact your AXSUB dealer before diving with the dive computer.

Always remember that YOU ARE RESPONSIBLE FOR THE SAFETY OF YOUR DIVES! When used properly, the AxVIEW system and AxDDM software are outstanding tool for assisting properly trained, certified divers in planning and executing commercial dives. It is NOT A SUBSTITUTE FOR CERTIFIED DIVING SUPERVISOR INSTRUCTION, including training in the principles of decompression.

## 1.1 Software Limitations

While the software is based on current decompression research and technology, you must realize that the software cannot monitor the actual physiological functions of an individual diver. All decompression schedules currently known to the authors, including the U.S. Navy, DCIEM and MT92 Tables, are based on theoretical mathematical models, which are intended to serve as a guide to reduce the probability of decompression illness.

# 2. Release Notes

## Version 1.0

- Initial software release under the name AxWare

## Version 1.1.2

- Name changed to AxDDM Software
- Changed comments entry method and added timestamp to comments
- Added a second stopwatch per diver
- Added depth display in the Chamber pages of the Deco tab
- Improved French version of the software. Reports can now be produced in French
- Dive number is now carried from projects to projects
- Corrected a bug that prevented depth meters to properly restart after failure
- Corrected a bug that prevented some decompression schedule from working
- Corrected a bug that caused display problems in the Multi-View Menu
- Corrected a bug with the camera assign function that caused problem with the 3 and 4 divers systems

## Version 1.2.0

- User interface updated
- German language added to the software
- Added options for streaming live video
- Added options to log data from Analox SDA gas sensors
- Depth points now logged in .CSV files in the RawData folder
- Corrected a bug that caused shift on the depthmeter's zero while operating in chamber
- Corrected a bug that caused display problems at some screens resolution or DPI settings.
- Changed the way license keys are handled to facilitate the use of multiple AxVIEWs with a single computer

## Version 1.2.2 to 1.2.6

- Corrected a bug that caused the software to crash when loading saved parameters

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- Corrected a bug that caused problems on Windows 10

#### **Version 1.2.7**

- Language now properly loaded at software startup
- Added recording flashing red dot

#### **Version 1.2.8**

- Added MT92 tables
- Dive Chart now filtered to avoid lag during long dives

#### **Version 1.2.9**

- Updated video drivers
- Corrected a bug that caused the software to crash when plugging USB devices

#### **Version 1.2.11**

- Added Video and Dive Popup tabs
- Software optimized for CPU usage
- Corrected a bug that caused BAR to FSW conversion errors
- Merged Dive and Deco tabs

#### **Version 1.2.12**

- Corrected a bug that caused video encoders to disconnect

#### **Version 2.0.0**

- Added HD video to software
- Added dive planning to Dive tab

#### **Version 2.0.1**

- Added temperature to log file
- Corrected dive planning of No-Table decompression

#### **Version 2.0.2**

- Added keyboard popups for Touch computers
- Added page numbers to report
- Re-introduced automatic dive start at 5 feet once dive planning has been completed
- Corrected a bug that prevented Depth OSD when Pre-dive Page wasn't filled

#### **Version 2.0.3 – 2.0.6**

- Added option page to monitor data from Analox gas analyzers
- Added permission to record video without license
- Corrected a bug that prevented proper start-up when license was expired or invalid
- Added button to save depth chart

#### **Version 2.0.7**

- Corrected a bug that caused software to crash when the Analox loading page was left empty

#### **Version 2.0.8**

- Corrected a bug that caused Depth chart to stop updating after first data clean
- Updated standard definition OSD so it can display 160 characters (previously 80)

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#### Version 2.0.9

- Increased stability of Analox data reading algorithm
- Added alarm and debug messages to troubleshoot Analox communication
- Corrected a bug that prevented Analox alarm to reset
- Corrected a bug that caused display problems on Analox chart

#### Version 2.0.10

- Changed Analox chart so that data is automatically set to zero and chart line turns to red when connection is lost

### 3. Software Requirements

Supported Operating Systems (English and French versions):

- Windows 10, 32-bit
- Windows 10, 64-bit
- Windows 8, 32-bit
- Windows 8, 64-bit
- Windows 7, 32-bit
- Windows 7, 64-bit
- \*

Make sure to use the appropriate AxDDM installer for your operating system (32 bits or 64bits), otherwise it may lead to installation failure or drivers incompatibilities

\* Other operating systems might work but are not officially supported by AXSUB

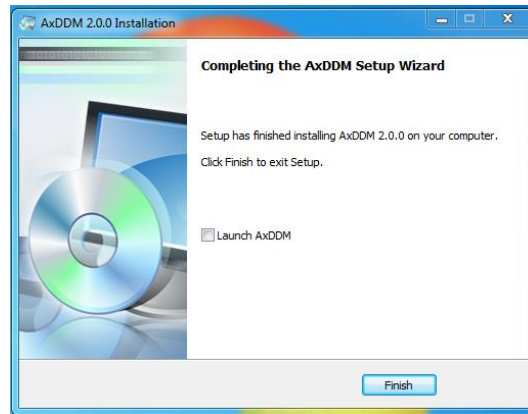
Software requirements:

- Microsoft .NET Framework 4.0 (installed by default with Windows 8 and Windows 10, otherwise available on Microsoft website)

Software Installation

- 1) **IMPORTANT:** Before installation, unplug any AxVIEW or other AXSUB device (USB cables) from your computer or it may lead to improper installation of the video drivers
- 2) If your operating system is 32 bit, run AxDDM\_x86.exe. If it is 64 bits, run AxDDM\_x64.exe.
- 3) Follow the steps on screen until installation is completed. Note that during installation, setups for Sensoray's video drivers and FTDI CDM communication drivers will start automatically. You must install those components for the software to work properly.

Once the installation of all drivers is completed, this window will be displayed:

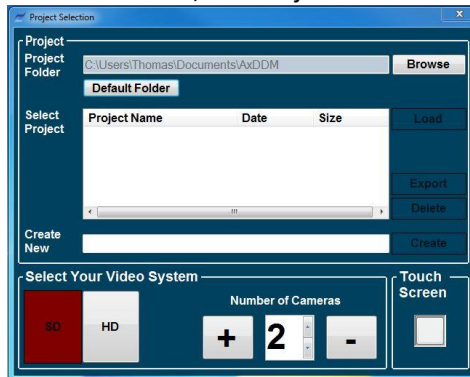


Before you click Finish, if you choose to launch AxDDM, first connect your AxVIEW(s) to your computer and wait for drivers to load.

## 4. Getting Started

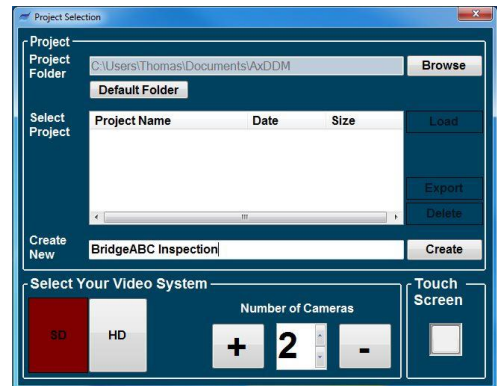
### 1) Project Selection

Every time the AxDDM Software is launched, the Project Selection window will appear.

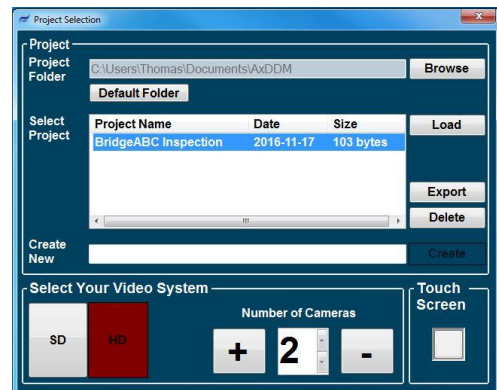


This window allows the user to choose the location where all files produced by the software (videos, snapshots, reports, etc.) will be saved for the current project. By default, the main folder for projects is the Documents\AxDDM folder, and this folder can be accessed anytime by clicking the *Default Folder* button. It is also in this window that the user has to select its video system (standard or high definition) and the number of cameras of the system.

You can choose to either create a new project:

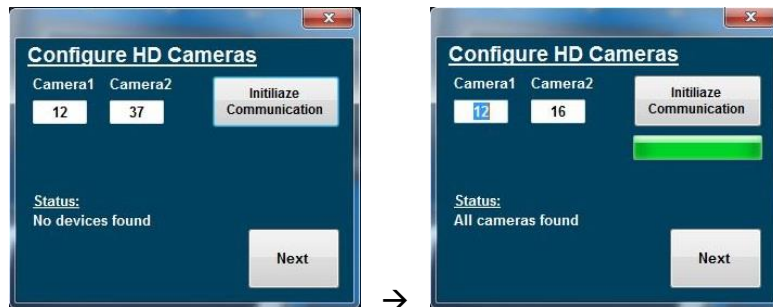


Or you can choose to load an existing project:



- Once a new project has been created, or an old project loaded, the user will be asked to enter the addresses of its cameras (only in HD system) and depth meters.

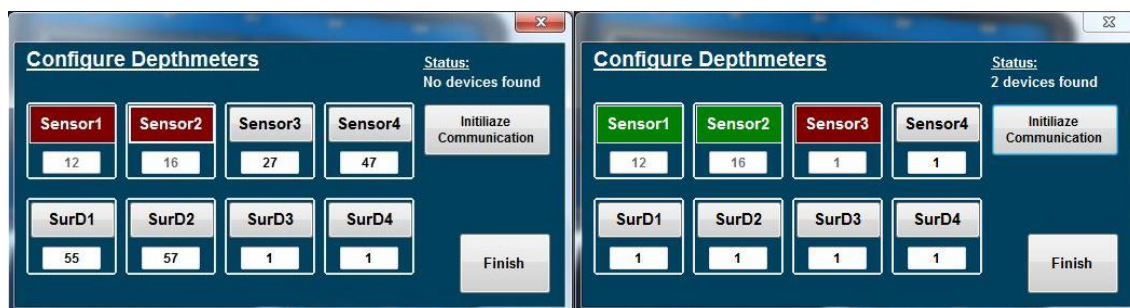
For HD cameras, enter the addresses in the corresponding boxes then click Initialize Communication button. Once completed, the status label will update itself to show which devices were found. The user can hit the Next button while the devices are being initialized and continue to depth meters configuration; the initialisation will go on in a background process.



For depth meters, enter the addresses in the corresponding boxes then click on the sensor button above the address to enable the sensor (an enabled sensor show in RED, a disabled sensor show in GREY). Once all sensors have been configured, click Initialize Communication button. Once completed, the status label will update itself to show how many devices were found. The sensor buttons of all devices that have been detected will turn green to indicate the sensors are now activated. Unfound sensors will remain red. The user can hit the Finish button while the devices are being initialized and continue to the main software window; the initialisation will go on in a background process.

**Important: Initializing the depth meters does not only starts to read pressure data, it also takes the surface pressure value that is used to measure depth. Make sure the sensor is at surface before initialisation otherwise there will be an offset on the depth values.**

To read a new surface pressure for a sensor that has been initialized, click on the corresponding sensor button above its address. The button will turn gray to show it is not used. Click again on the sensor button. It will turn red to show it awaits initialisation. The user can then click the Initialize Communication button. Active sensors that have not been deactivated (button turned to gray) prior to initialization won't read new surface pressure.



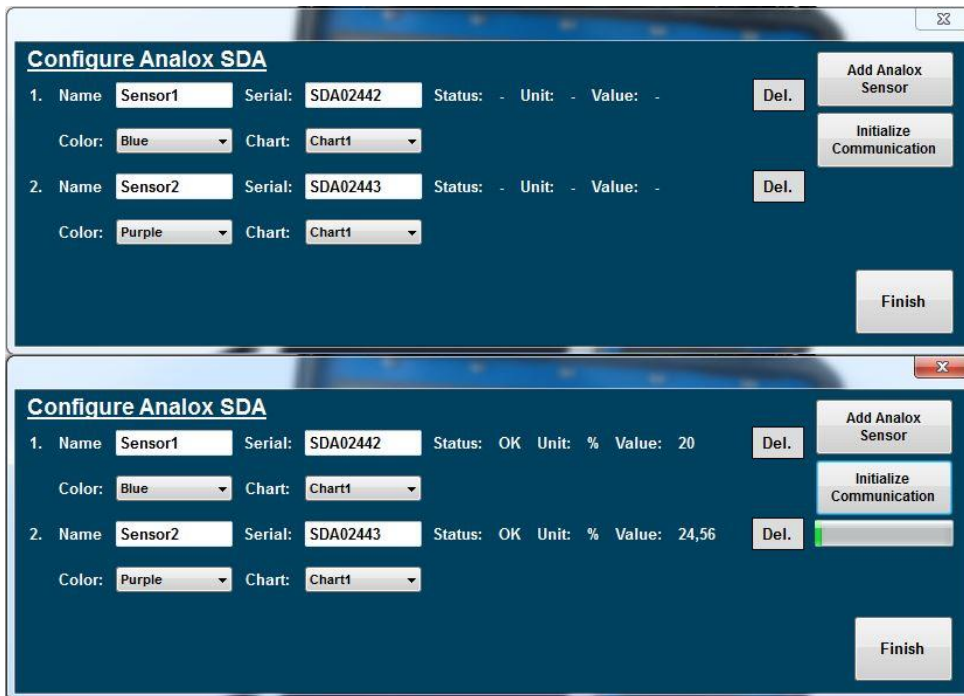
For Analox gas analysers, click the Add Analox Sensor button to add new sensors. Serial numbers of the devices can then be entered in the corresponding boxes to allow communication. Names can be given to the sensors with the sole purpose of making it easier to remember which device is what. Display configuration about the line color on the chart and the chart selection can also be chosen here, but to add new charts, it is necessary to go the Analox Options tab of the Options page. Finally, devices can be deleted by clicking the Del. button.

Once the serial number of a device has been set, click the Initialize Communication button. The software will then scroll through all COM ports on the computer to see if a device is connected to the computer. If a device is found, the Status, Unit and Value labels will all be updated with data coming from the sensors. If scrolling through the COM ports does not result in finding a sensor whose serial number has been set, the status label will display "Device not found".

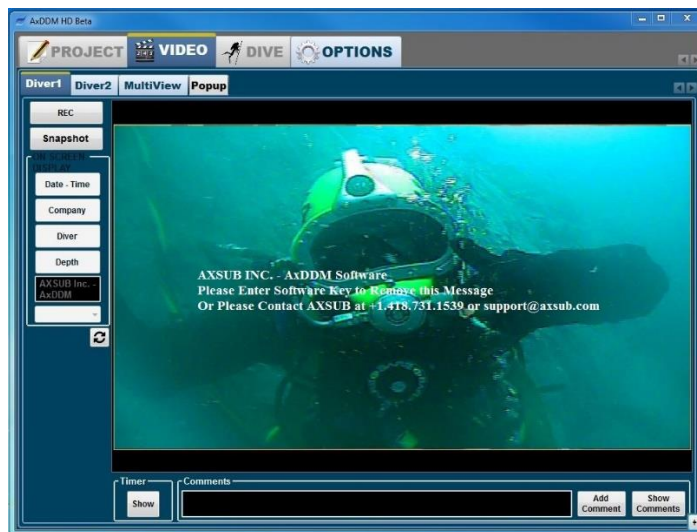
**Caution: One issue about the Analox devices is that they don't use any communication protocol (ex: Modbus protocol). That means that instead of sending data only when required to, they continuously push data on the serial bus. This behavior can cause some problems:**

**-First, is multiple devices are connected on the same bus, data collision might occur if 2 units are synchronised and they push data at the same time. This can result in data corruption/losses, and it is the reason why each Analox sensor has to be on a separate RS485-to-USB interface for the AxDDM software to able to properly read data strings.**

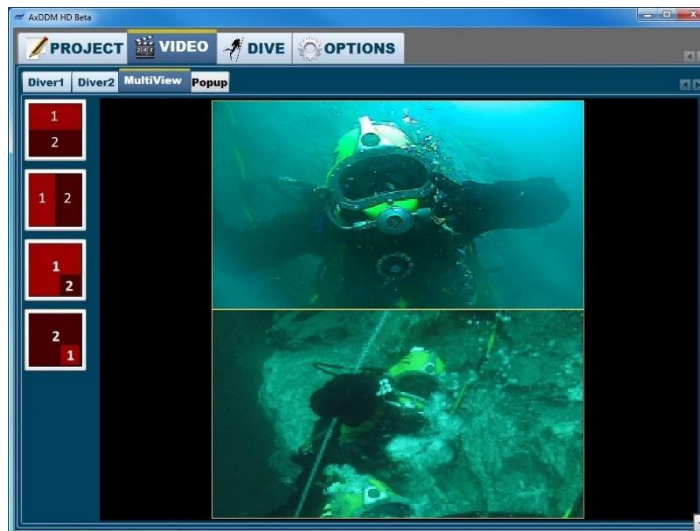
**-Second, there can be no data on the RS485 bus when the RS485-to-USB interface is being initialized by the computer, otherwise it can cause the serial port on the computer to crash. Because the Analox is continuously outputting data, this serial port crash can occur at system start-up. The workaround is to connect the USB cable between the AxVIEW and the dive computer BEFORE connecting the cable between the AxVIEW and the Analox devices.**



- 3) Once a new project has been created, or an old project loaded, the main software window will appear:



Until the software is registered, only the Video tab and the Options tab are available. The Video tab allows the user to record videos, take snapshots, display text on screen and use basic timer functions like stopwatches and countdowns. If the MultiView tab is selected, multiple video streams may be displayed in the main panel at the same time with the desired configuration.



The Options tab allows user to configure the program options, the videos options and if registered, the depth meters options and the Breathing Air Analyser Analox SDA.

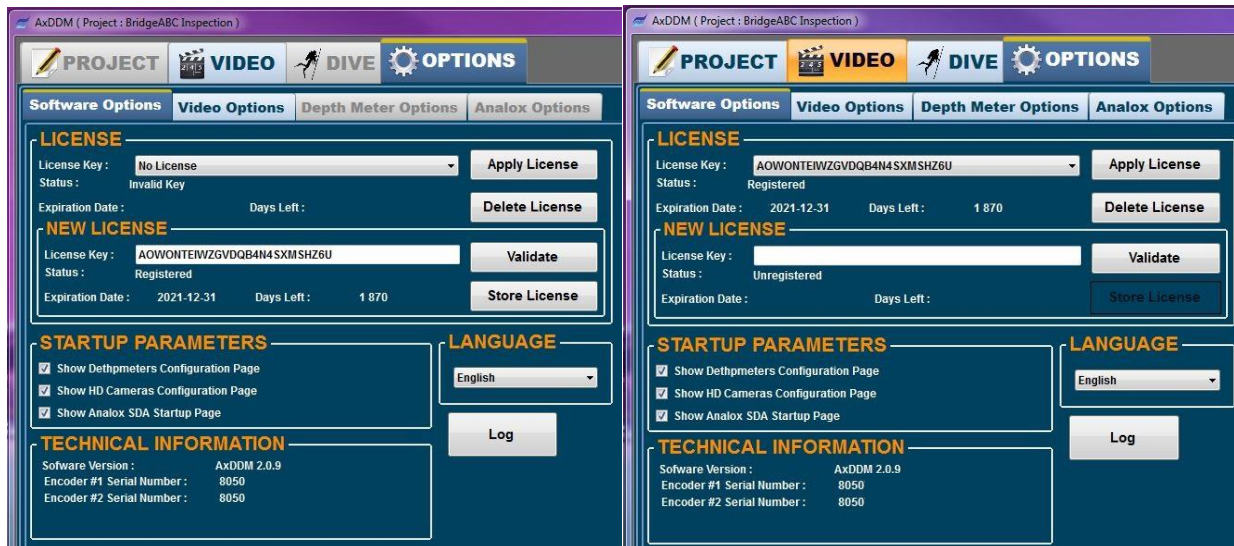


## 5. Registering

To unlock the software and access the Project and Dive menus, the software must be registered. License keys are provided by AXSUB for every system delivered and an extended license key can be upgraded later at extra cost. Therefore, each AxVIEW system must have its own dedicated license in order to unlock the software options.

To store a new license, type or paste the key in the License Key textbox and click the *Validate* button. If the key fits with the currently connected AxVIEW, the *Store License* button will become enabled and clicking it will add the license key to the software database and apply this license. When the software is launched, it will automatically scroll through all stored licenses to see if one fits with the currently connected AxVIEW. If a key does fit, it will be automatically selected and options related to the license will be unlocked. To change the currently applied license key, select the desired key in the License Key combo box.

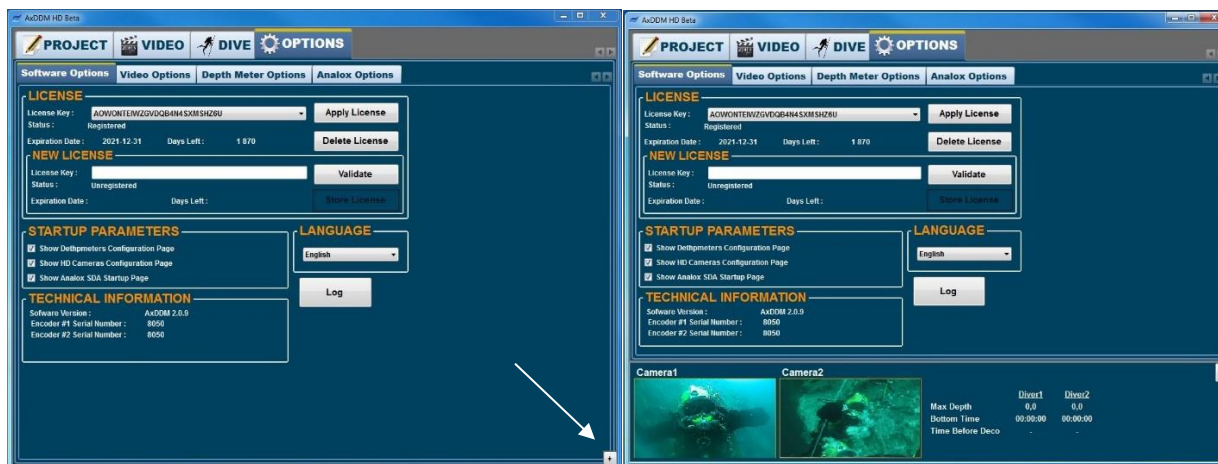
To delete a stored license, select it in the License Key combo box and click the *Delete License* button.



## 6. Complete Overview

### 6.1 Summary Panel

Clicking the small “+” button in the lower right side of the screen will open the summary panel. When inside the Video Tab, this panel displays the important dive data and when inside any other tab, the panel will show the videos and the dive data.



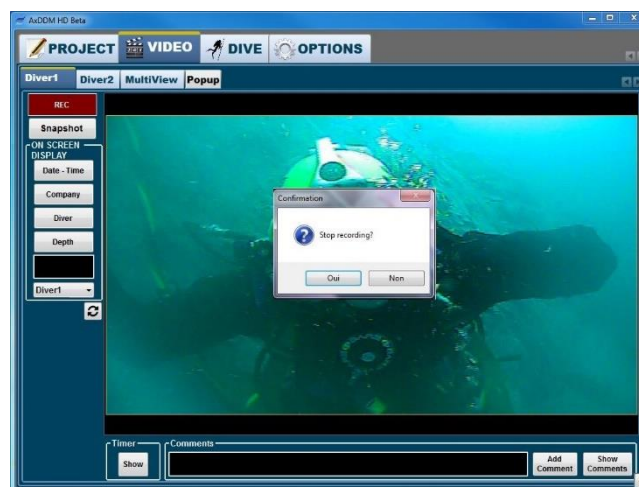
### 6.2 Video Tab

#### 6.2.1 Video Preview

The video preview for each camera can be seen in the corresponding Diver page of the Video tab. The previews are designed to always keep their height to width ratio. This way, the main window can be resized at any time without losing the video's proportions.

#### 6.2.2 Recording

To record a video, click on the **REC** button. The button will turn red to indicate that the camera is recording. A flashing red dot will also appear on the diver tab and on the top right corner of the video in the summary panel. To stop recording, click again on the **REC** button. A window will appear to confirm the end of recording.





The length of all video files can be set in the Video Options tab with a minimum length of 1 minute and a maximum length of 360 minutes (6 hours). When the length of a recording video exceeds the defined length, the recorded files is automatically saved and a new file is created to keep recording. This options is used to facilitate post-processing of video files and to minimise risks of data loss due to file corruption.

**Important: For HD video, the file size is also limited to 1 Go. This means the recording will stop when the defined length is exceeded or when the file size exceeds 1 Go.**

The quality of all SD video files can also be set in the Video Options tab. The available options are Low (2 500 kbit/s), Medium (5 000 kbit/s) and High (10 000 kbit/s).

If streaming have been set and enabled, clicking the REC button will also start sending the stream to the URL server (standard definition only).

All video files are saved in the Videos folder of the current project folder (default: MyDocuments\AxDDM\MyProject \Videos), with the name of each file being the timestamp of the start of the recording plus the diver number.

### 6.2.3 Snapshot

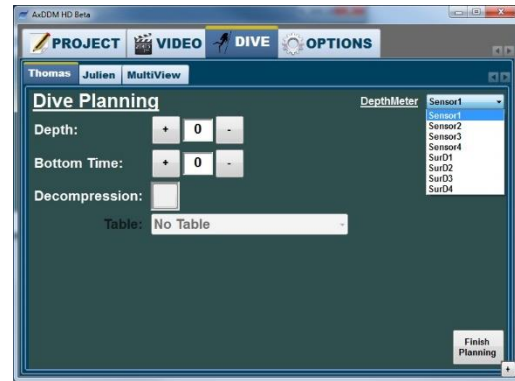
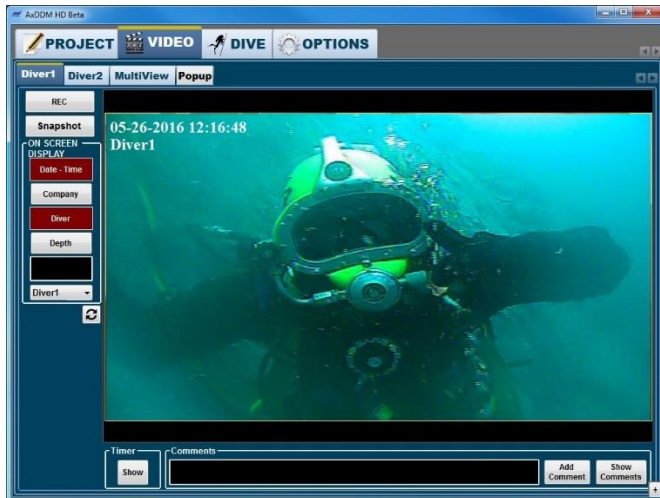
To take a picture of what is currently shown by the camera, click the Snapshot button. A preview window will appear on screen to show the taken picture for a definite amount of seconds and will then close automatically. The display time can be set in the Video Options tab.

All image files are saved in the Images folder of the current project folder (default: MyDocuments\AxDDM\ MyProject \Images), with the name of each file being the timestamp of the snapshot plus the diver number.

### 6.2.4 On Screen Display (OSD)

The OSD buttons are used to add text on the top left corner of the video. There are four (4) pre-set OSD texts that can be added, which are the date and time, the dive company, the diver name and the current depth. When clicked, these buttons will turn red to indicate their new status. There is also a text box that allows user to add custom text. The use of the Company and Diver OSD texts require that the Pre-Dive Info tab and the Company Info tab of the Project tab have been filled. Once all divers have been entered in the dive team in the Pre-Dive Info tab, the user can select which Diver is associated with the Video tab by using the list box under the OSD controls.

**Important: The OSD Depth is related to the sensor used by the diver. To display depth, the user must go first to the Dive Tab and select the sensor used by the diver. Then, back in the video tab, selecting the diver in the OSD list box will link the video to the depthmeter and display correct Depth OSD.**



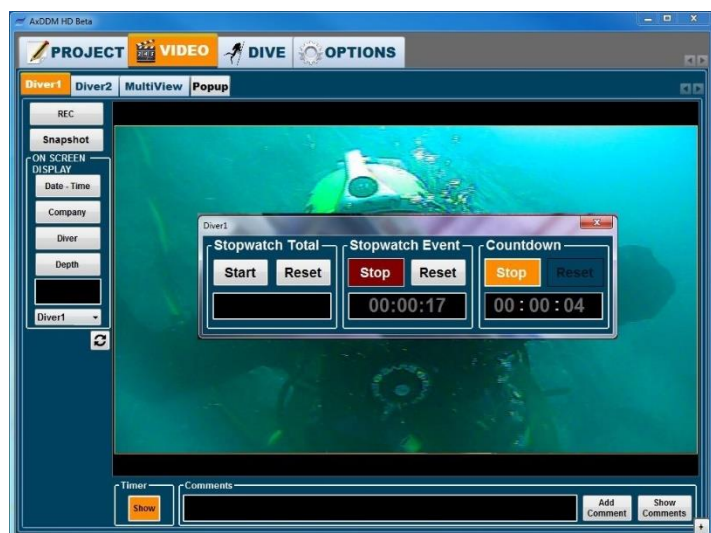
For SD system, the maximum number of characters that the OSD can display is 160. Excess characters will be ignored.

### 6.2.5 Timers

The Video tab contains basic timer tools to help supervisors during dive. The button Show of the Timer box will open a window containing 2 stopwatches and 1 countdown timer. The stopwatches are named Total and Event, but can be used to measure the time of any event.

**Important: the stopwatch timers are based on the computer's date and time settings, thus it is not recommended to change the computer's time during measurement or it will affect the stopwatches elapsed time.**

To set the countdown timer, click in the time text box and enter the desired time value with your keyboard. Once done, click on the Set button to save the value and enable the Start button. When the Start button is clicked, the text will change to "Stop" and it will turn red to indicate that it is running and the time display will start to show remaining time. The countdown timers are all linked to an alarm that will automatically start when the remaining time is less than 10 seconds. When the alarm is triggered, the Video tab will start flashing yellow and red, as well as the Diver tab for which the timer is set and the Show button of the Timer box. This way, if the timer window isn't showed on screen, the user will know exactly where to go to stop the alarm. Click on the Stop button to shut the alarm.



The timer windows are designed to always be displayed on top of any other page, so that the supervisor can always keep an eye on them if needed. They can be hidden by clicking the X in the top right corner, and the timers will keep working in the background even if not showed.

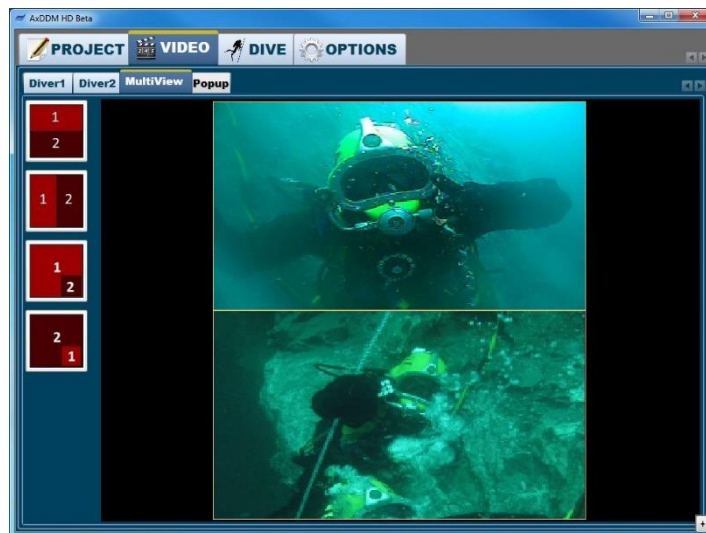
### 6.2.6 Comments

The Comments text box is used to print comments on the report. To add a comment, write text in the Comments text box and click on the Add Comment button. A timestamp will automatically be added to the comment. At any time, you can view and modify all comments by clicking the Show Comments button. This will open a window containing all text to be printed on the report. The user can add or modify the text as he wishes, and click Apply to save modifications or Cancel, to restore the text to what it was before the Show Comments button was clicked.

### 6.2.7 Multi View

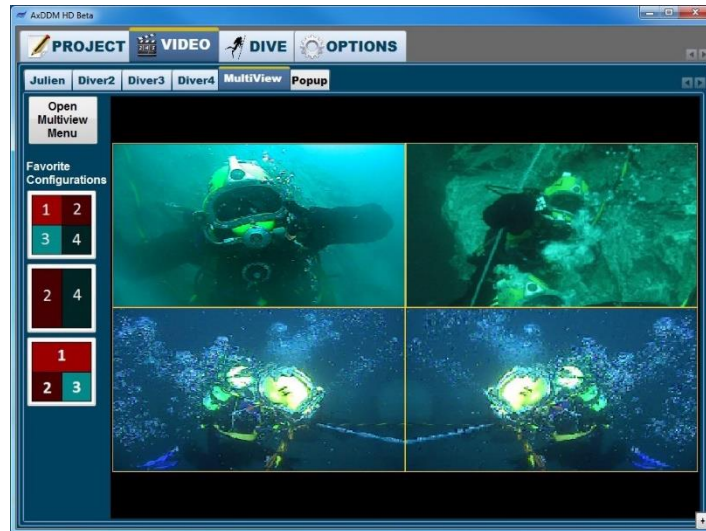
#### 2-diver system

To display both video streams in the main panel, simply select the MultiView page of the Video tab and choose one of the four possible configurations by clicking the corresponding button.

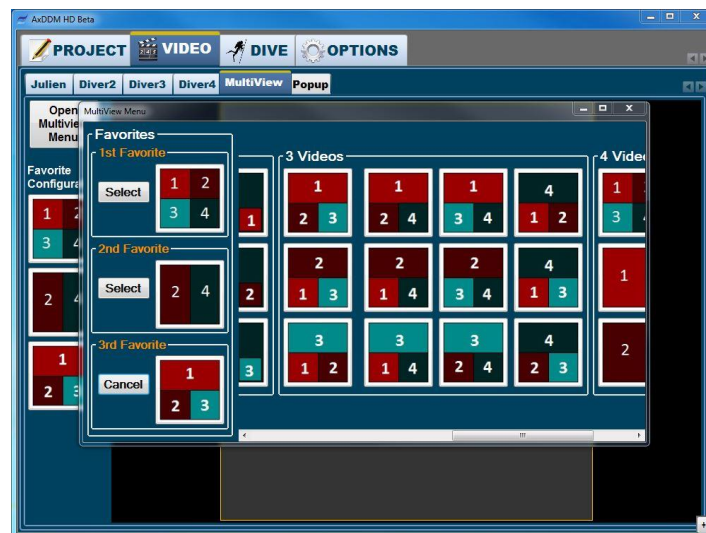


### 3-diver or 4-diver system

When a 3-diver or 4-diver system is connected to the computer, the MultiView page is different than with a 2-diver system. There are 3 buttons for favorite configurations and one button to open the MultiView Menu. When the software is used for the first time, the favorite configuration buttons are blank, because they need to be set in the MultiView Menu. Once set, they will take the shape of their corresponding configuration.



Click on the Open MultiView Menu button to open the MultiView Menu.

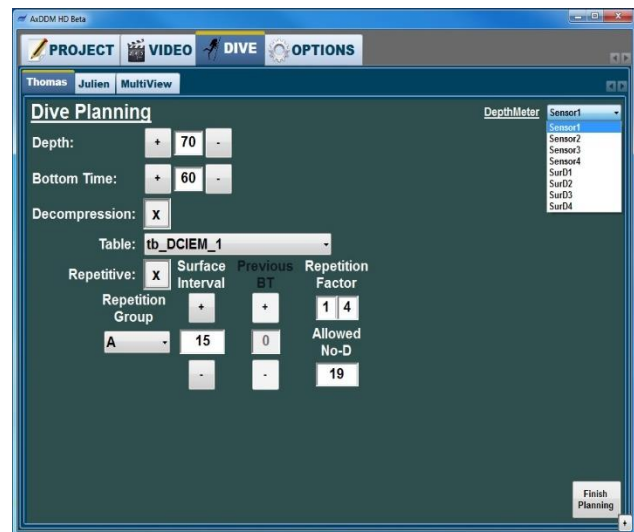
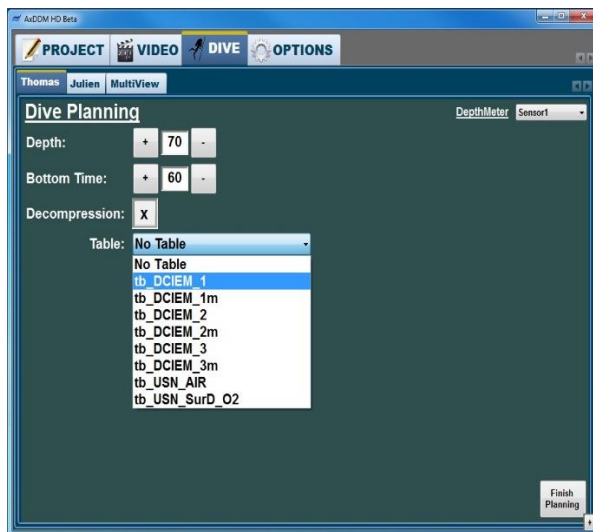


This menu shows all the possible configurations to display videos in the MultiView page. To select a configuration, click on it to be automatically redirected to the main window with the selected configuration. To set Favorite buttons, click on a Select button, then click on any configuration button to assign the configuration to the selected Favorite button.

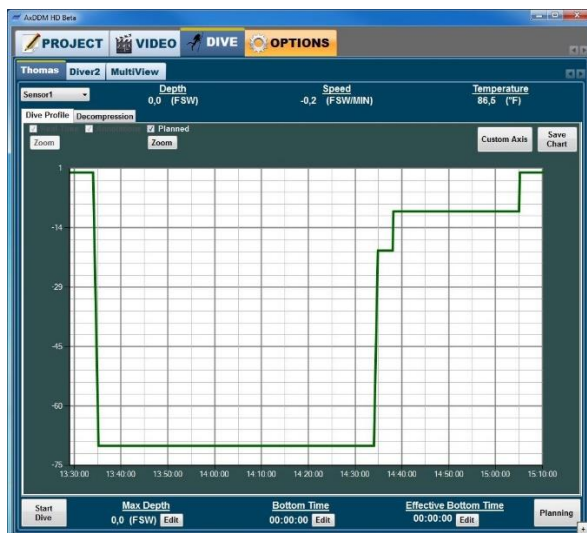
## 6.3 Dive Tab

### 6.3.1 Start New Dive

Before starting a new dive, depth meters must be configured and dive must be planned. See section 6.5.3 to learn how to configure depth meters in the DepthMeters Options tab. The dive planning is done by entering the maximum depth and bottom time and by choosing the decompression table and repetitive dive parameters (DCIEM table only). Before clicking the *Finish Planning* button, the user can choose the depthmeter associated with the diver.



Once planning is done, the chart will display a curve representing the planned dive with the decompression steps according to the selected table. The user can also select the decompression tab to see all decompression related data.



The screenshot shows the 'Dive Profile' table and settings. The table displays the decompression steps, and the settings panel shows the configured parameters for the current dive.

Step	Ref. Time	Elaps. Time	Arrived	Left
Stop:	10 ft	00:27:00		
Stop:	20 ft	00:04:00		

**Settings**

- Table: tb\_DCIEM\_1
- Current Dive
- Schedule: 20:30
- Repetition Group: A
- Planned Dive
- Max Depth: 70
- Bottom Time: 60
- Effective Bottom Time: 72
- Schedule: 70:30
- Repetition Group: K
- Previous Dive
- Repetition Group: A
- Surface Interval: 40
- Repetition Factor: 1.2
- Allowed No-D: 25



Clicking the Start Dive button will start logging depth and will also start the Bottom Time timer.

**Important: the timers are based on the computer's date and time settings, thus it is not recommended to change the computer's time during measurement or it will affect the Dive Time and the Bottom Time.**

Depth and temperature points are saved in .csv files in the RawData folder of the current project folder (default: MyDocuments\AxDDM\ MyProject \RawData), with the name of each file being the diver number plus the timestamp. Each row in the .csv files contains the date, the time and the depth.

### 6.3.2 Dive Steps Management

Dives with the AxDDM software goes through 2 main steps: descent+bottom and ascent. Descent is initialized by clicking the Start Dive button. When the diver reaches the bottom, the user has to click the Arrived Bottom button. By clicking this button, the time at which the diver arrived at the bottom will be printed on the report.

#### STEP 1



#### STEP 2



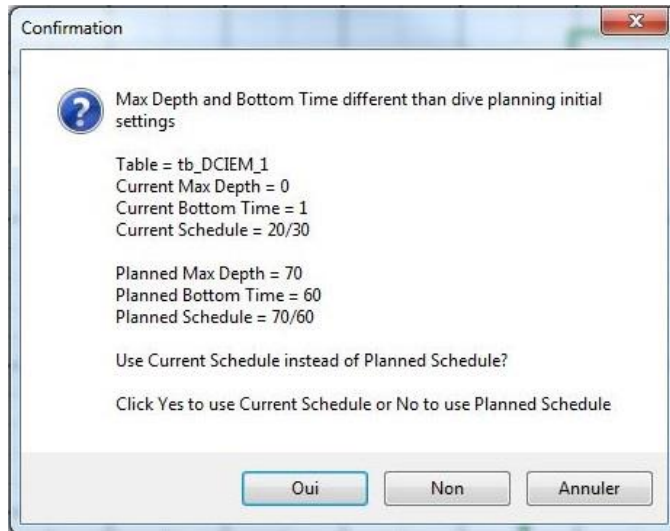
#### STEP 3



#### STEP 4



Clicking the Ascent Button will define the final Bottom Time value. If dive with decompression was selected in the dive planning, a decompression steps recalculation will occur. If Max Depth and Bottom Time correspond to the dive planning values, decompression can start as initially planned. If data is different, a choice between using initially planned decompression steps or using new calculated decompression steps will be given to the user.



Once ascent has been started, clicking the Next Step button will select the next decompression step until there are no more left. If decompression without table was selected in the planning, the Next Step button will instead add a new step every time it is clicked.

Thomas Julien MultiView

Sensor1 Depth -0,1 (FSW)

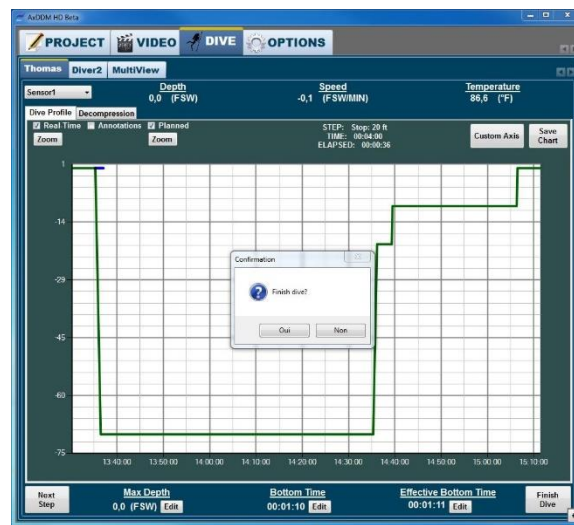
Step	Ref. Time	Elaps. Time	Arrived	Left
Stop: 10 ft	02:39:00			
Stop: 20 ft	01:11:00			
Stop: 30 ft	00:30:00			
Stop: 40 ft	00:13:00			
Stop: 50 ft	00:07:00			
Stop: 60 ft	00:05:00			
Stop: 70 ft	00:04:00	00:00:16	12:21:55	
Stop: 80 ft	00:04:00	00:00:14	12:21:41	12:21:55
Stop: 90 ft	00:02:00	00:00:10	12:21:31	12:21:41
Stop: 100 ft	00:04:00	00:00:11	12:21:20	12:21:31

Thomas Julien MultiView

Sensor1 Depth 0,0 (FSW)

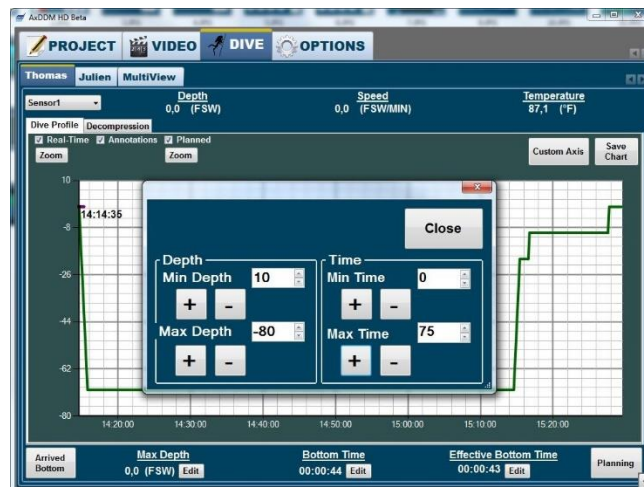
Step	Ref. Time	Elaps. Time	Arrived	Left
		00:00:27	12:41:53	12:42:20
		00:00:16	12:42:20	12:42:36
		00:00:11	12:42:36	12:42:47
		00:00:16	12:42:47	12:43:03
		00:00:03	12:43:03	

When all decompression steps are done, clicking the *Finish Dive* button will stop data logging. If the Automatic Report Generation is selected in the DepthMeters Options tab, the report will be automatically generated and will open in a PDF file.



### 6.3.3 Axis Properties

By default, the chart's axis are auto-scaled to best fit the depth curve. The *Zoom* buttons allow to scale the chart axis to either the real-time data curve or to the planned curve. Each curve can be hidden by unchecking the checkboxes above the Zoom buttons.

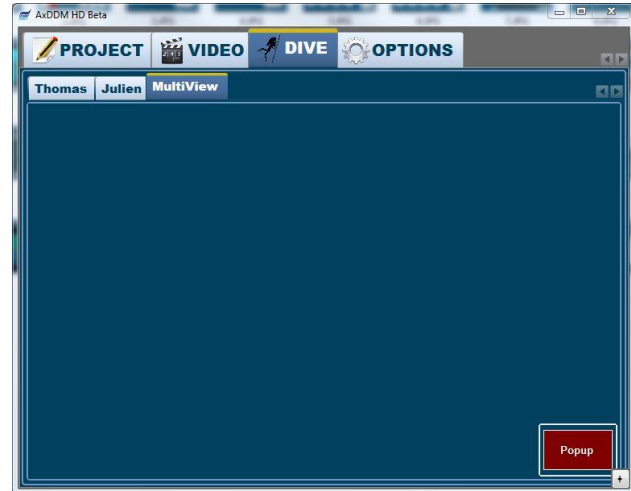
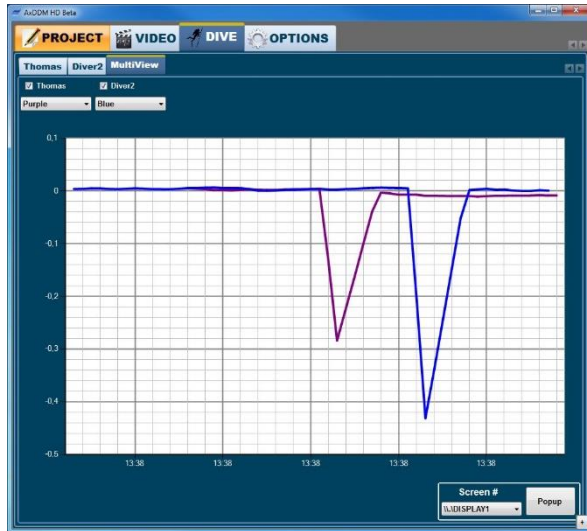


It is also possible to use custom axis values on the depth chart. Click on the *Custom Axis* button to display the axis settings. To set the Y axis limit values, write the desired values in the Min Depth and Max Depth text boxes, or select the values by clicking on the up and down arrows of the text boxes. For the X axis, the same applies but with the Min Time and Max Time text boxes. At any time, you can return to auto-scaled axis by clicking the *Zoom* buttons.



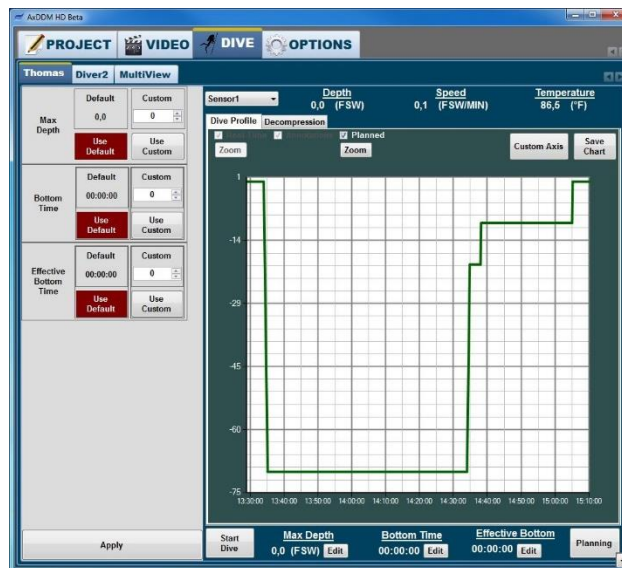
### 6.3.4 MultiView Tab

The Multiview chart is used to display the real-time curves of all active dives. The curves for each diver can be shown or hidden using the checkboxes and the color of each curve can be changed. The *Popup* button allows to open the chart in a new window. When clicked, the window will open full size on the selected monitor. The chart can be returned at any time to the main window either by clicking the *popup* window in the Multiview tab, or by closing the popup window



### 6.3.5 Custom Decompression Values

It is possible to use custom values to determine the decompression schedule. This may be used, for example, to set a security factor over the bottom time and max depth values. To set the custom values, click on the Edit button of any of dive data.

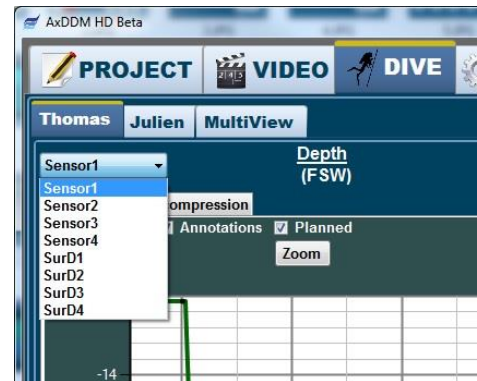


Write the desired value in the corresponding textbox and click on the Use Custom button. It will turn red to indicate that the custom value is selected and the Deco Values will also be updated. Click on the Use Default button to return to the actual values rather than the custom values.

### 6.3.6 Move to chamber / Change DepthMeter

The depthmeters are independent from the divers. At any time during an active dive, the user can change the depthmeter associated with a diver by using the sensor list box.

This can be used, for example, to associate a surface decompression sensor to a diver that just got out of the water. That way, the real-time data curve and decompression steps that were started in the water can be continued when the diver reaches the surface for decompression in chamber and free up a depth sensor for a new diver while the diver is doing the surface decompression within a chamber.



### 6.3.7 Save Chart

To save the chart as a JPEG picture, click the Save Chart button.

All image files are saved in the Images folder of the current project folder (default: MyDocuments\AxDDM\ MyProject \Images), with the name of each file being the timestamp plus the chart number.

## 6.4 Project Tab

### 6.4.1 Pre-Dive Info Page

The Pre-Dive page is used to write most of the information to be printed on the dive report. Initially, the Default Pre-Dive sheet is selected, and this sheet is used to produce the generic AXSUB report.

To update the pre-dive sheet, click the Change PreDive button. The sheet will turn brown to indicate its being modified.

The Project box of the sheet is to set the dive number, the vessel name and the location. Dive number will automatically increment by 1 every time a new report is generated, allowing to keep track of the reports with the software. The number can however be set manually by clicking the Set button.

The screenshot shows the 'PreDive Info' page in the AxDDM HD Beta software. The page title is 'Project Name: BridgeABC Inspection'. There are three main sections: PROJECT, CLIENT, and DIVE TEAM. The PROJECT section has fields for Date (2016.05.26), Dive No. (1), Vessel, and Location, with a 'Set' button. The CLIENT section has a 'Client Profile' dropdown and a 'Manage Client Profiles' button. The DIVE TEAM section has a 'Manage Members' button. At the bottom, there is a 'PreDive Sheet: Default Pre-Dive' dropdown.

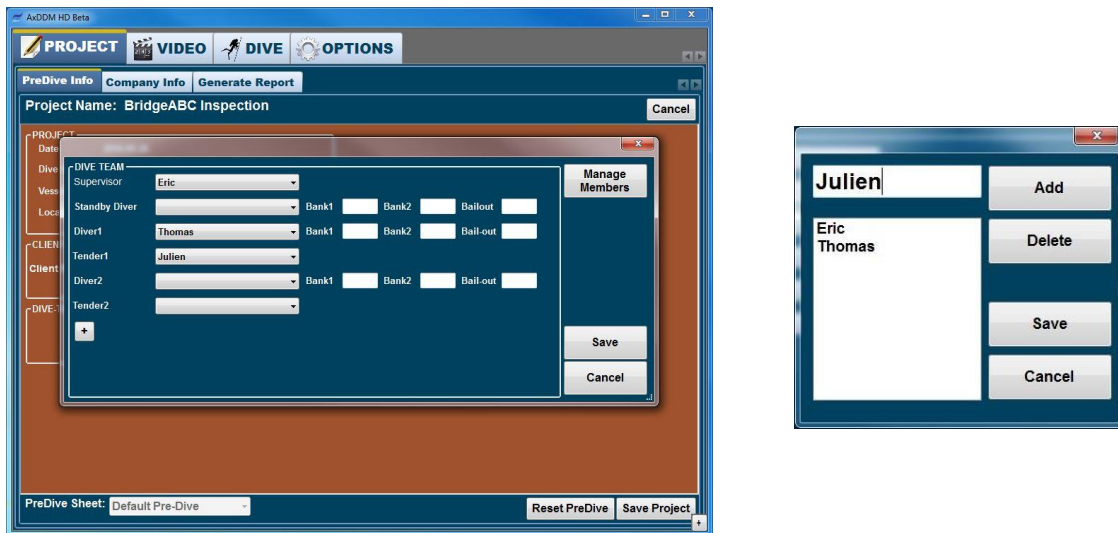
The Client box is to set all contact information about the clients. To add or delete a client profile, click the Manage Client Profiles button. A window will open containing the current profiles list and options to add/delete profiles.

The screenshot shows the 'Manage Client Profiles' window in the AxDDM HD Beta software. The window is titled 'Profiles List' and has a 'Cancel' button. It contains a list of profiles with 'Axsub' selected. Below the list are buttons for 'Add New Profile', 'Delete Profile', and 'Update Profile'. The 'Client Profile' section has a 'Profile Name' field with 'Axsub' entered, and buttons for 'Add Profile' and 'Cancel'. The 'DIVE TEAM' section has fields for Company (Axsub), Address (112, montee Industrielle), Contact Name (Eric), City (Rimouski), Phone Number (418-731-1639), ZIP Code (G5M1B1), Email (eric@axsub.com), and Country (Canada). At the bottom, there are buttons for 'Reset PreDive' and 'Save Project'.

To delete a profile, select it in the list and click the Delete Profile button. To add a profile, click the Add New Profile button, and fill the text boxes in the Client Profile box. When creating a new profile, profile name can't be blank or be the same as an already existing profile. Once the text boxes are filled, click the

Document ID: AxDDM\_SW\_IM\_V3.1

Add Profile button to add the profile to the list, or click Cancel to stop editing a new profile. Once profile list is completed, click the Save button to update the list in the PreDive page, or click Cancel to dismiss the changes.



The Dive-Team box is to set the roles of each member and to note the air banks and the bail-out bottles pressures. To add or delete a team member, click the Manage Members button. A window will open containing the current members and options to add/delete members. To delete a member, select it in the list and click the Delete button. To add a member, write his name in the text box and click the Add button. Once member list is completed, click the Save button to update the list in the PreDive page, or click Cancel to dismiss the changes.

**Important: The Dive-Team Window also allow the user to increase the number of divers by clicking the “+” button at the end of the members list. Adding divers doesn’t change the number of video tabs, because the camera quantity is fixed for an AxVIEW system and video duplicates are of no use. It does however change the number of divers in the Dive tab, because the number of divers can be greater than the number of cameras (for example, there can be 3 divers in a surface decompression chamber using the same depthmeter, so the user might want to see a data curve for each diver, but he doesn’t want to see the same video on 3 different tabs).**

Once all changes have been made to the pre-dive sheet, click the Save Project button to apply changes. The Cancel button can also be clicked to stop editing pre-dive and dismiss changes. Also, leaving the pre-dive page while edition is ongoing will result in all changes being dismissed. The Reset PreDive button is used to empty all boxes of the pre-dive sheet except for the dive number text box. All client profiles and team members will remain but they will have to be selected from their corresponding text boxes.

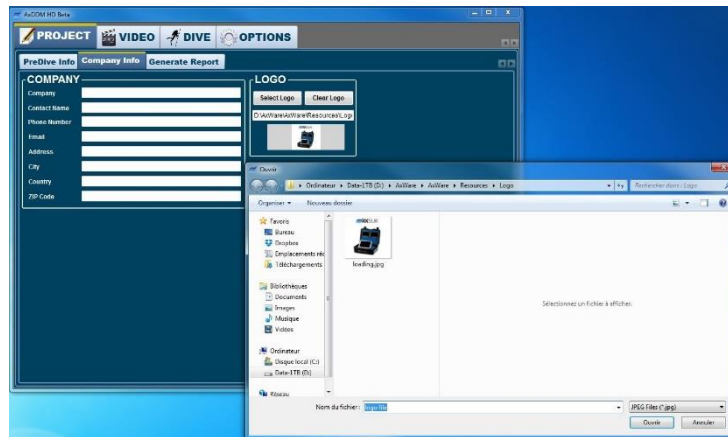
Companies that want to use a specific report template may contact AXSUB to talk about integrating their report into the software. When bought, these customs report pages will be made available through a specific license key.

All information about the pre-dive page is saved in the project folder (default: MyDocuments\AxDDM\MyProject). When creating a new project, client profiles and team members will be available but they will have to be selected from their corresponding textboxes. The dive number is set to carry from one project to another.

## 6.4.2 Company Info Page and Generate Page

The Company Info page is used to write information about the dive-team's company and to select the logo to be printed on the report. To select the logo, click on the Select button and choose a JPEG file from your computer. Once selected, the logo will appear in the Logo Preview box.

**Important: Logos will be automatically resized to fit the available space while keeping their size ratio, but logos that are more than 3 times wider than tall might not be resized appropriately.**



The Generate Page is used to produce reports manually if Automatic Report Generation is not used. To produce the report, click the Generate Report button for the corresponding diver. All reports made with the generic template contains the pre-dive information, the dive data, the depth chart, the decompression spreadsheet and the video comments. All reports are saved as PDF files in the report folder (default: MyDocuments\AxDDM\MyProject\Reports) with the name of each file being the timestamp plus the diver number.

## 6.5 Options Tab

### 6.5.1 Program Options Page

The Program Options page is used to unlock the AxDDM software with an appropriate license key and to change the language of the software. As of version 2.0.1, supported languages are English, French and German.

The Program Options page also displays the technical information such as the software version, the firmware version and the encoders' serial numbers.

For license configuration, see [section 5](#).

## 6.5.2 Video Options Page

The Video Options page is used to set various parameters relative to the cameras and the video encoders.

The Camera Type box is used to set the camera type. SD cameras can be either NTSC or PAL, but all cameras must be the same type. NTSC cameras can't run alongside PAL cameras, and vice-versa. For HD camera, the camera type is used to select between 720p and 1080p image format. The latest has the best image quality, but this format requires a better computer to run smoothly, it produces bigger video files and may experience higher latency.

The Video Recording box is used to set the quality of the recordings and length of the video files. See section [6.1.2](#) for further details about recording.

The Levels box is used to set video's brightness, contrast, saturation and hue. All levels can be set using the slide bars and can be set back to default values by clicking the Defaults button. The Video Color box is a sub function of the Levels box that applies minimum saturation in order to get a black and white image. All changes made to levels affect both the video preview and the video recording.

The Audio Preview box is used to start or stop the audio previews. The audio preview is a preview of what sound is being recorded by the video encoders. When started, the preview will be read by the computer and should be played if it has speakers. In most AxVIEW SD systems, the Audio In is shared by all encoders, thus it is not necessary to start all audio previews of an AxVIEW to hear what is recorded by all encoders. Starting all previews of encoders sharing the same audio input will result in sound superposition. For AxVIEW HD systems, make sure the selected sound device is USB PnP Sound Device.

The Snapshot Preview box is used to set the display time of the snapshot preview. The maximum display time is 120 seconds (2 minutes) and the minimum display time is 1 second. See section [6.1.3](#) for further details about snapshots.

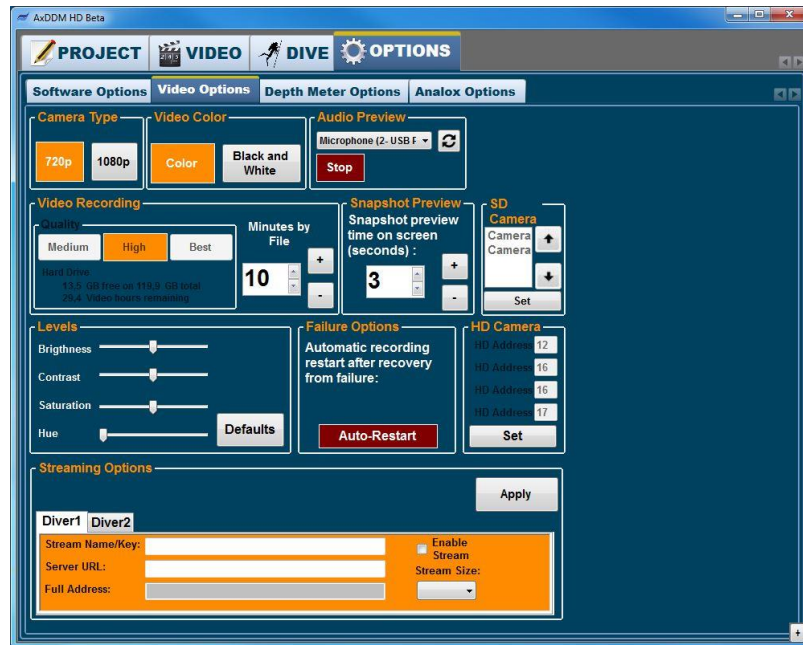
The Failure Options box is used to set the automatic recording restart after failure. If deactivated, user will have to manually restart any recording that was stopped due to a signal loss between a camera and an AxVIEW or an encoder and the computer.

The Camera Assign box is used to assign cameras to divers. To change the default configuration, select a camera in the list, then click the up and down arrows to change its position. Once the new order is set, click the Apply button to assign each camera to its diver.

Note that while any video is being recorded, the Camera Type box, the Quality box of the Video Recording box and the Camera Assign box are all disabled. If a change is required, please Stop all recording to enable these buttons again.

The Streaming Options box is used to upload the video in real-time to stream servers such as Youtube Live, Twitch, Justin TV, etc. For each stream, the three parameters to set are the stream full address, the stream size and the check box that enables the stream or not. The stream full address is set by writing the stream name or stream key and the primary server URL. Once parameters have been set for each divers, click the Apply button. Once the parameters applied, if the Enable Stream check box has been checked,

clicking the REC button in the Video pages to start uploading video stream to the defined address. To apply new stream parameters, stop recording first then apply the new stream parameters, because if a video profile is already recording and streaming, it won't take changes into account. Streaming the video for a diver will automatically record the video locally in the Video Folder (default: MyDocuments\AxDDM\MyProject \Videos). See Appendix A for detailed streaming example using Youtube Live.





### 6.5.3 Depth Meters Options Page

The Depth Meter Options page is used to set various parameters relative to the depth meters.

The Units box is used to select whether the depth is expressed in Feet of Sea Water (FSW), Feet of Fresh Water (FFW), Meters of Sea Water (MSW) or in Meters of Fresh Water (MFW) and if the temperature is expressed in degrees Celsius (°C) or in degrees Fahrenheit (°F).

The Automatic Report Generation button indicates if a dive report will be generated automatically once a dive is finished in the Dive tab or if the user has to generate the report manually in the Project tab.

The Pressures Sensors is used for all matters related to depthmeters. There can be up to 8 devices open on a session of the software. The communication address is the last 2 digits of the serial numbers of the AxSEE57i, the AxDEPTH57S or AxDEPTHHMS. For instance, the address for serial number 005-0125 is 25, and for serial number 005-0205, the address is 5.

**Important : The exception is for serial numbers terminating with 00 (as 005-0200): in such case, use address 1 instead of 0. It is important to define a unique address for all divers connected - cannot use a camera 005-0225 (address 25) with camera 005-0125 (address 25). Same for camera 005-0200 (address 1) with camera 005-0101 (address 1).**

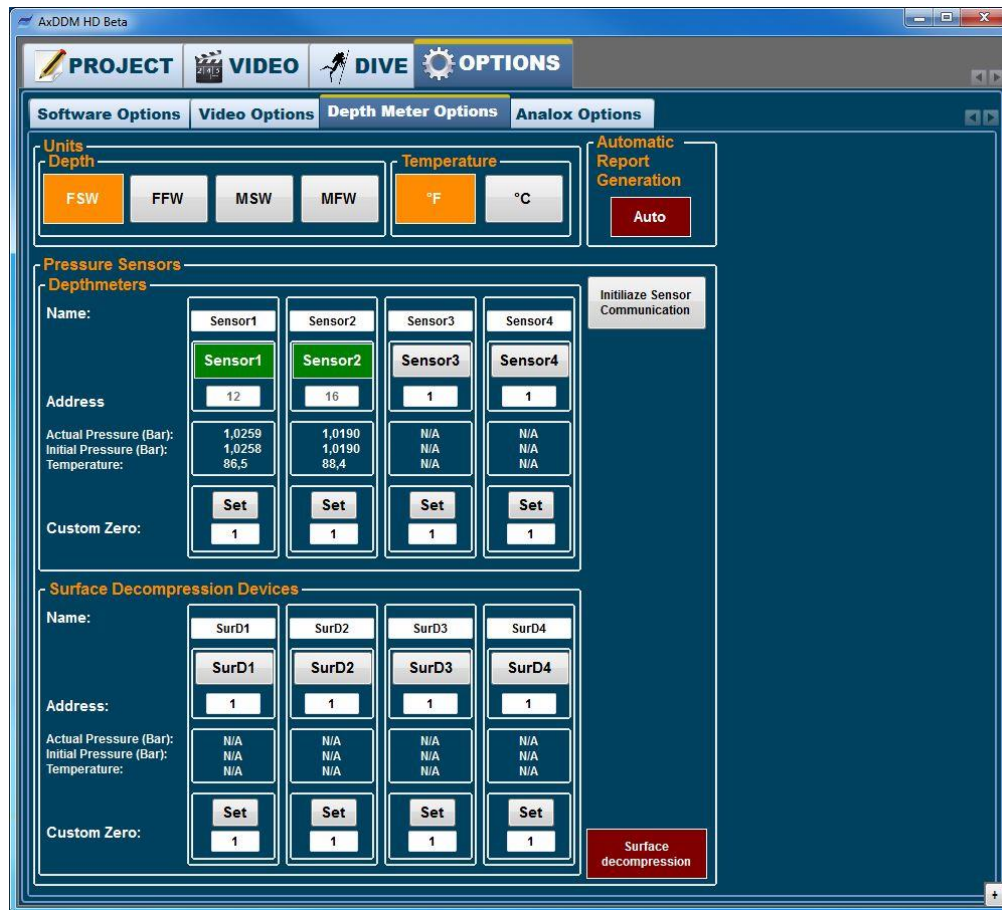
For convenience only, sensors are grouped into water decompression devices and surface decompression devices, but a sensor can be set in the surface decompression devices and still be used as a water decompression device. The user can even rename the sensors as he wishes by editing the textboxes with the name of each device.

To start the pressure sensors, enter the addresses in the corresponding boxes then click on the sensor button above the address to enable the sensor. Once all sensors have been configured, click Initialize Communication. The sensor buttons of all devices that have been detected will turn green to indicate the sensors are now activated. Unfound sensors will remain red.

**Important: Initializing the depth meters for the first time does not only starts to read pressure data, it also takes the surface pressure value that is used to measure depth. Make sure the sensor is at surface before initialisation otherwise there will be an offset on the depth values.**

To read a new surface pressure for a sensor that has been initialized, click on the corresponding sensor button above its address. The button will turn gray to show it is not used. Click again on the sensor button. It will turn red to show it awaits initialisation. The user can then click the Initialize Communication button. Active sensors that have not been deactivated (button turned to gray) prior to initialization won't read new surface pressure.





The Custom Zero box is a tool to help recover from a failure. Depth is measured by a difference of pressure between surface and distance underwater. Depth measures therefore need a surface pressure reference in order to measure depth. If for any reason the surface pressure references are lost (computer failure, software failure, accidental program closing, etc.) some custom references may be used. This way, when software is restarted and surface pressure references are actually taken underwater, it is possible to bypass to wrong references with custom ones. To use custom values, write the value in the corresponding text box and click on the Set button. It will turn red to indicate custom zero is being used.

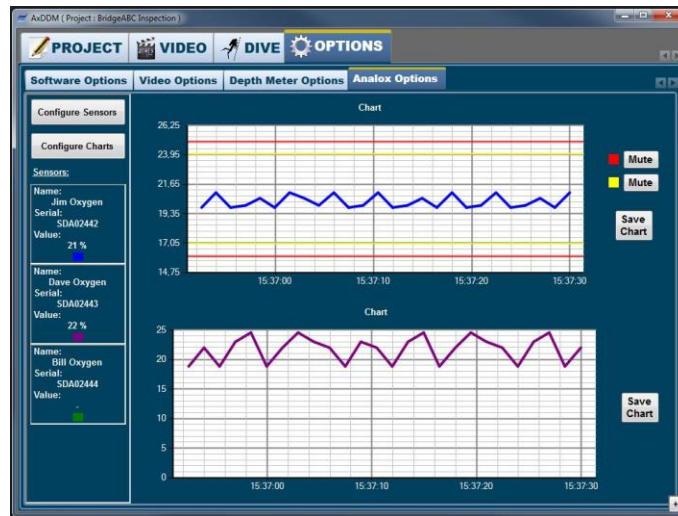
**Important:** To separate digits, use a comma with a French operating system and a dot with an English operating system. Any incorrect entry will lead to the Set button going back to default state and custom value being ignored.

## 6.5.4 Analox Options Page

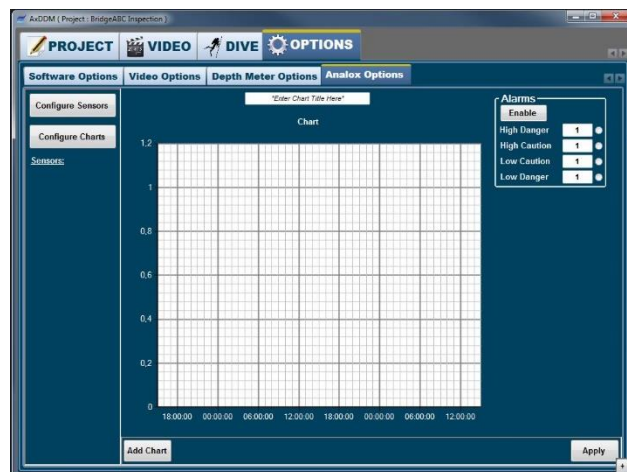
The Analox Options page is used to monitor incoming data from analox SDA sensors. At any time, charts can be saved as JPEG pictures by clicking the [Save Chart](#) button.

All image files are saved in the Images folder of the current project folder (default: MyDocuments\AxDDM\ *MyProject* \Images), with the name of each file being the timestamp plus the chart number.

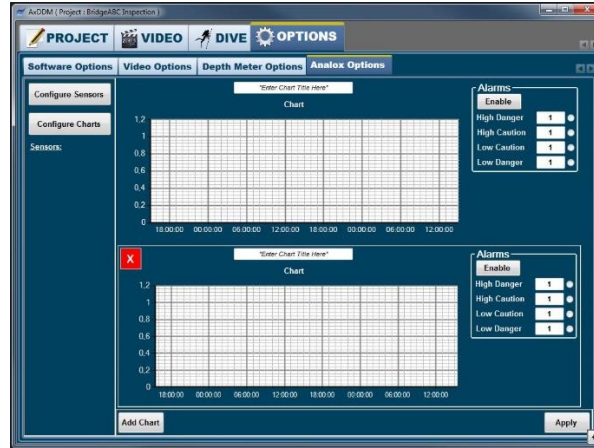
Also, all data received by the sensors are logged in .csv files in the RawData folder of the current project folder (default: MyDocuments\AxDDM\ *MyProject* \RawData), with the name of each file being the serial number of the Analox device. Each row in the .csv files contains the date, the time, the sensor's status, the sensor's unit and the sensor's value.



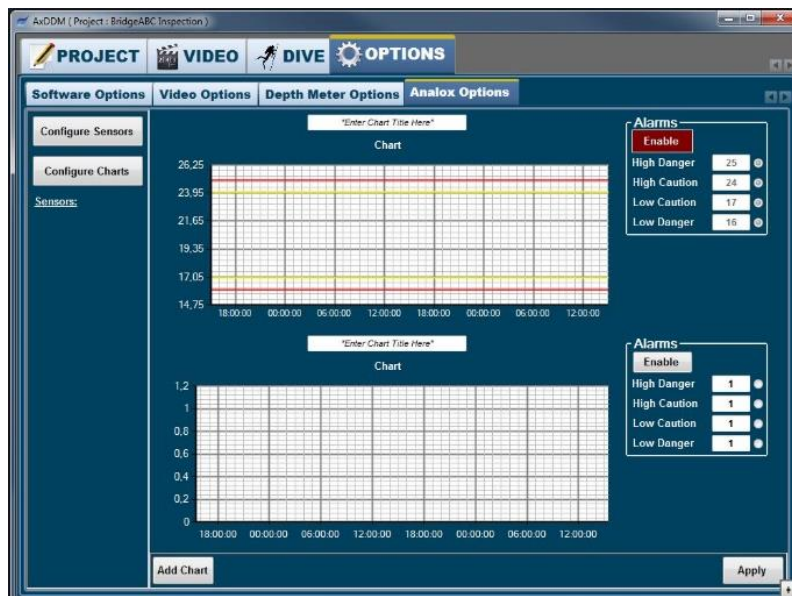
The default page contains only one basic chart. This chart can be used to display any kind of data from an Analox sensor. Also, the same chart can display data from multiple sensors at the same time. Clicking the [Configure Charts](#) button allows the user to make changes to the charts. Names can be given to the charts, high and low alarms can be set and new charts can be added by clicking the [Add Charts](#) button.



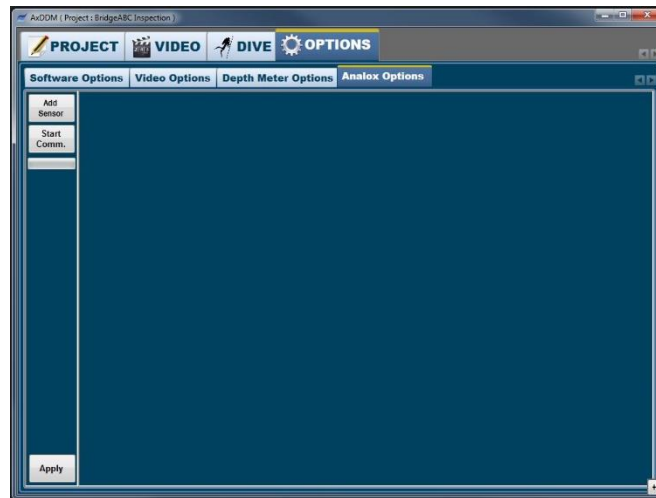
To delete a chart while in the configure charts menu, hover the mouse over the chart. A red X button will appear in the top left corner of the chart. Clicking on it will delete the chart, and this action cannot be undone.



To set alarms, fill the corresponding textboxes. “Danger” alarms will be displayed on the chart with red striplines, while “Caution” alarms will be displayed with yellow striplines. The value of the “Caution” alarms can never be greater the “Danger” alarms. Once done editing the values in the textboxes, click the Enable button. Striplines will appear on the chart, and the scaling of the chart will be updated to focus on the important area. Also, back in the main panel, Mute buttons will appear to disable the alarm sounds if needed.



When done editing the charts, click the Apply button in the lower left corner. Clicking the Configure Sensors Button will take the user configure sensors menu.



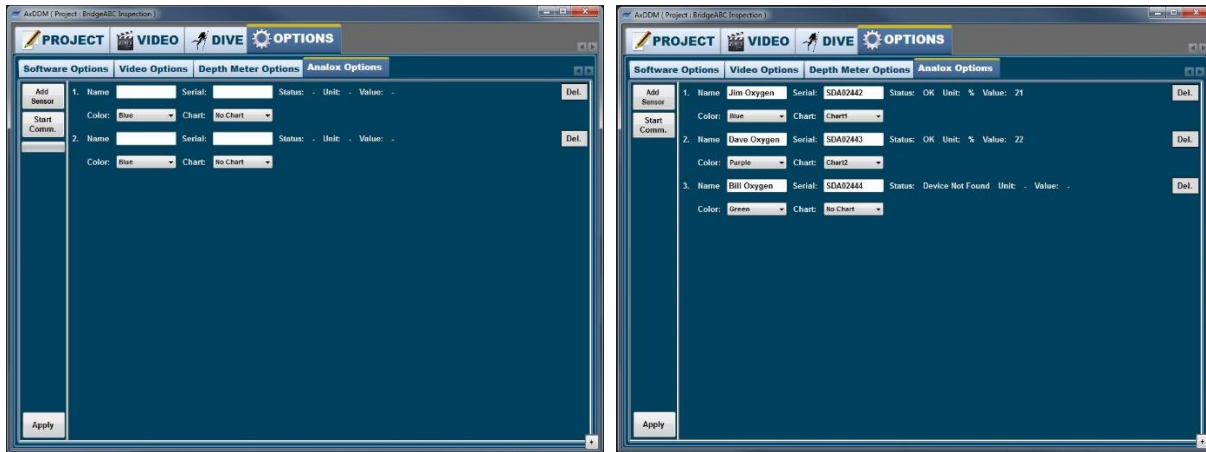
New sensors can be added by clicking the Add Sensor button. Serial numbers of the devices can then be entered in the corresponding boxes to allow communication. Names can be given to the sensors with the sole purpose of making it easier to remember which device is what. Display configuration about the line color on the chart and the chart selection can also be chosen here. Finally, devices can be deleted by clicking the Del. button.

Once the serial number of a device has been set, click the Initialize Communication button. The software will then scroll through all COM ports on the computer to see if a device is connected to the computer. If a device is found, the Status, Unit and Value labels will all be updated with data coming from the sensors. If scrolling through the COM ports does not result in finding a sensor whose serial number has been set, the status label will display “Device not found”.

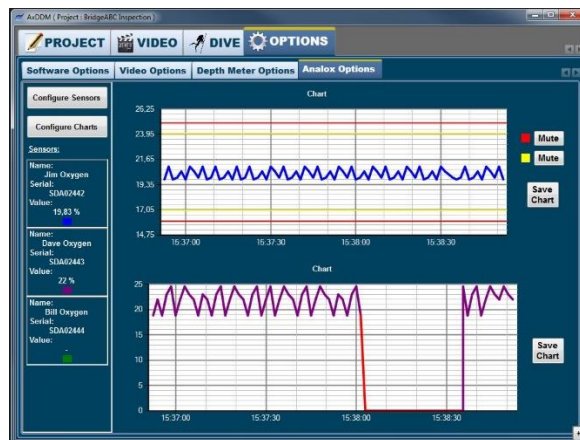
**Caution: One issue about the Analox devices is that they don't use any communication protocol (ex: Modbus protocol). That means that instead of sending data only when required to, they continuously push data on the serial bus. This behavior can cause some problems:**

**-First, if multiple devices are connected on the same bus, data collision might occur if 2 units are synchronised and they push data at the same time. This can result in data corruption/losses, and it is the reason why each Analox sensor has to be on a separate RS485-to-USB interface for the AxDDM software to be able to properly read data strings.**

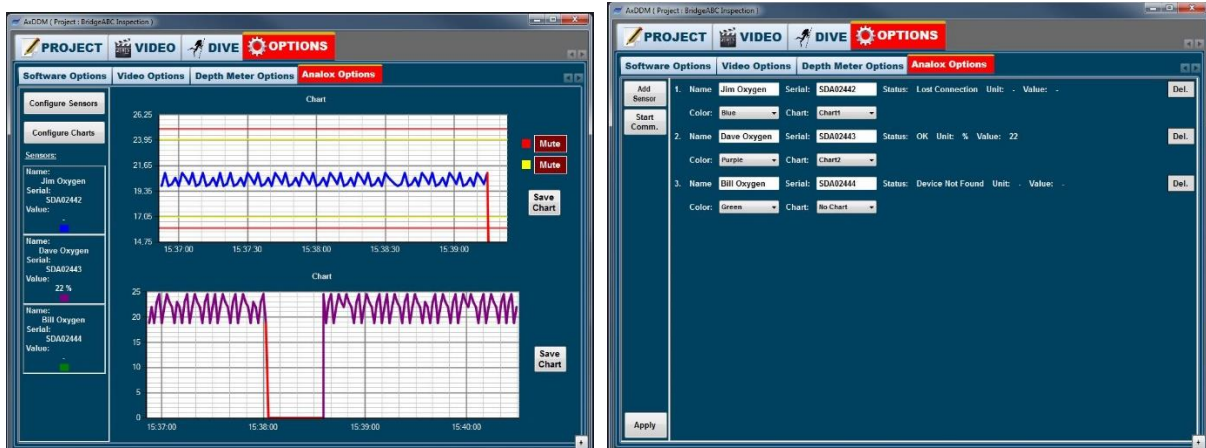
**-Second, there can be no data on the RS485 bus when the RS485-to-USB interface is being initialized by the computer, otherwise it can cause the serial port on the computer to crash. Because the Analox is continuously outputting data, this serial port crash can occur at system start-up. The workaround is to connect the USB cable between the AxVIEW and the dive computer BEFORE connecting the cable between the AxVIEW and the Analox devices.**



If connection is lost with a device during runtime, value will drop to zero, chart line will turn red and the status of the device in the configure sensor menu will change to “Lost connection”.



Also, if alarms are set, they can be triggered.





## 8 AXSUB Limited Warranty for AxVIEW and Accessories

This Limited Warranty is valid as of August 1st, 2012.

AXSUB Inc. (“AXSUB”) provides this limited warranty to those who have purchased the AxVIEW and/or AXSUB diving accessories (“Product”). AXSUB warrants that during the Warranty Period AXSUB or an AXSUB Authorized Service Center will, at its sole discretion, remedy defects in materials or workmanship free of charge either by a) repairing the Product or the parts, or b) replacing the Product or the parts, or c) refunding the purchase price of the Product, subject to the terms and conditions of this Limited Warranty. Your mandatory legal rights under your applicable national laws relating to the sale of consumer products are not affected by this Limited Warranty.

This Limited Warranty is only valid and enforceable in the country in which you purchased the Product, provided that AXSUB has intended the Product for sale in that country. If, however, you purchased the Product in a member state of the European Union, Iceland, Norway, Switzerland or Turkey, and AXSUB originally intended the Product for sale in one of these countries, this Limited Warranty is valid and enforceable in all of these countries. The warranty service may be limited due to the possible country-specific elements in the Products. Any service made during and after warranty subject to service fee and compensation for the shipment costs incurred by AXSUB or an AXSUB Authorized Service Centre. You can have warranty service other than in the country in which you purchased the Product.

### 8.1 Warranty Period

The Warranty Period starts at the date of retail purchase by the original end-user purchaser. The Product may consist of several different parts, and the different parts may be covered by a different warranty period (hereinafter “Warranty Period”). The different Warranty Periods are:

- 1) One (1) year for the AxVIEW systems
- 2) Three (3) months for the consumable parts and accessories, including (but not limited to) chargeable batteries, chargers, cameras, lamps, depth meters, cables, power supply (whether included in the AxVIEW sales package or sold separately).

To the extent your national laws permit, the Warranty Period will not be extended or renewed or otherwise affected due to subsequent resale, AXSUB authorized repair or replacement of the Product. However, part(s) repaired or replaced during the Warranty Period will be warranted for the remainder of the original Warranty Period or for three (3) months from the date of repair or replacement, whichever is longer.

### 8.2 Exclusions and Limitations

This Limited Warranty does not cover:

- 1) a) normal wear and tear, b) defects caused by rough handling (including, without limitation, defects caused by sharp items, by bending, compressing or dropping, etc.), or c) defects or damage caused by misuse of the Product, including use that is contrary to the instructions

provided by AXSUB (e.g. as set out in the Product's user guide and/instruction manual), and/or e) other acts beyond the reasonable control of AXSUB;

- 2) User manuals or any third-party software (even if packed or sold with the AXSUB hardware), settings, content or data, whether included or downloaded in the Product, or whether included during installment, assembly, shipping or at any other time in the delivery chain or otherwise and in any way acquired by you;
- 3) Defects or alleged defects caused by the fact that the Product was used with, or connected to, any product, accessory, software and/or service not manufactured or supplied by AXSUB, or was used otherwise than for its intended use;
- 4) Usage with a power supply other than AXSUB product PS-24V-001;
- 5) Usage with a battery different than an AXSUB Battery Pack B05Ah-24VDC or B15Ah-24VDC;
- 6) Usage with a power source different outside limits of the power supply: 100-240VAC 50/60Hz.

This Limited Warranty is not enforceable if:

- 1) The Product has been opened, modified or repaired by anyone other than AXSUB or a AXSUB Authorized Service Centre;
- 2) The Product has been repaired using unauthorized spare parts;
- 3) The Product's serial number has been removed, erased, defaced, altered or made illegible in any way - and this shall be determined at the sole discretion of AXSUB;
- 4) The Product has been used when surrounding temperature exceed the limits of -20...50°C;
- 5) The Product has been exposed to influence from chemical products including (but not limited to) mosquito repellents;
- 6) The Product has been used in a dust / particle contaminated air that might block ventilation orifices;
- 7) The Product has been cleaned with a high pressure air jet.

AXSUB does not warrant that the operation of the Product will be uninterrupted or error free or that the Product will work in combination with any hardware or software provide by a third party.

### **8.3 Access to AXSUB warranty service**

Please access and review the online help resources available at [www.axsub.com/FAQ](http://www.axsub.com/FAQ) or referred to in the Product manual before seeking warranty service.

If a claim under this Limited Warranty appears to be necessary, please contact your local authorized AXSUB retailer – for contact information please visit the AXSUB website [www.axsub.com](http://www.axsub.com) or call the AXSUB Help Desk (national or premium rates may apply) for further details on how to make a claim. You will then be advised on how to bring your Product for warranty service. Should you wish to return the Product by shipping it to your local authorized AXSUB retailer, please use prepaid freight. When making a claim under this Limited Warranty you are required to include your name and address, proof of purchase and/or service registration card (AXSUB warranty registration at [www.axsub.com](http://www.axsub.com) is considered adequate for this purpose), as required in your country, which clearly indicates the serial number, name and address of the seller, the date and place of purchase, and the product type. The claim will be honored and the Product

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repaired or replaced at no charge and returned in a reasonable amount of time. This shall be determined at the sole discretion of AXSUB or an AXSUB Authorized Service Center. If the Product is found not to be covered by the terms and conditions of this Limited Warranty, AXSUB or an AXSUB Authorized Service Centre reserve the right to charge a handling fee.

Any claim under this Limited Warranty is subject to you notifying AXSUB or a AXSUB Authorized Service center of the alleged defect within a reasonable time of it having come to your attention, and in any event no later than before the expiry of the Warranty Period.

## 8.4 Other important notices

Please remember to take backup copies of all important content and data stored in your Product (if applicable) because content and data may be lost during repair or replacement of the Product. AXSUB or a AXSUB Authorized Service Centre is not responsible for any damage or loss of any kind whatsoever resulting from loss of, damage to, or corruption of content or data during repair or replacement of the Product. When the Product or a part is replaced, any replaced item becomes the property of AXSUB. If a refund is given, the Product for which the refund is given must be returned to an AXSUB Authorized Service Centre as it becomes the property of AXSUB and/or AXSUB Authorized Service Centre. When repairing or replacing the Product, AXSUB or an AXSUB Authorized Service Centre may use products or parts that are new, equivalent to new or re-conditioned.

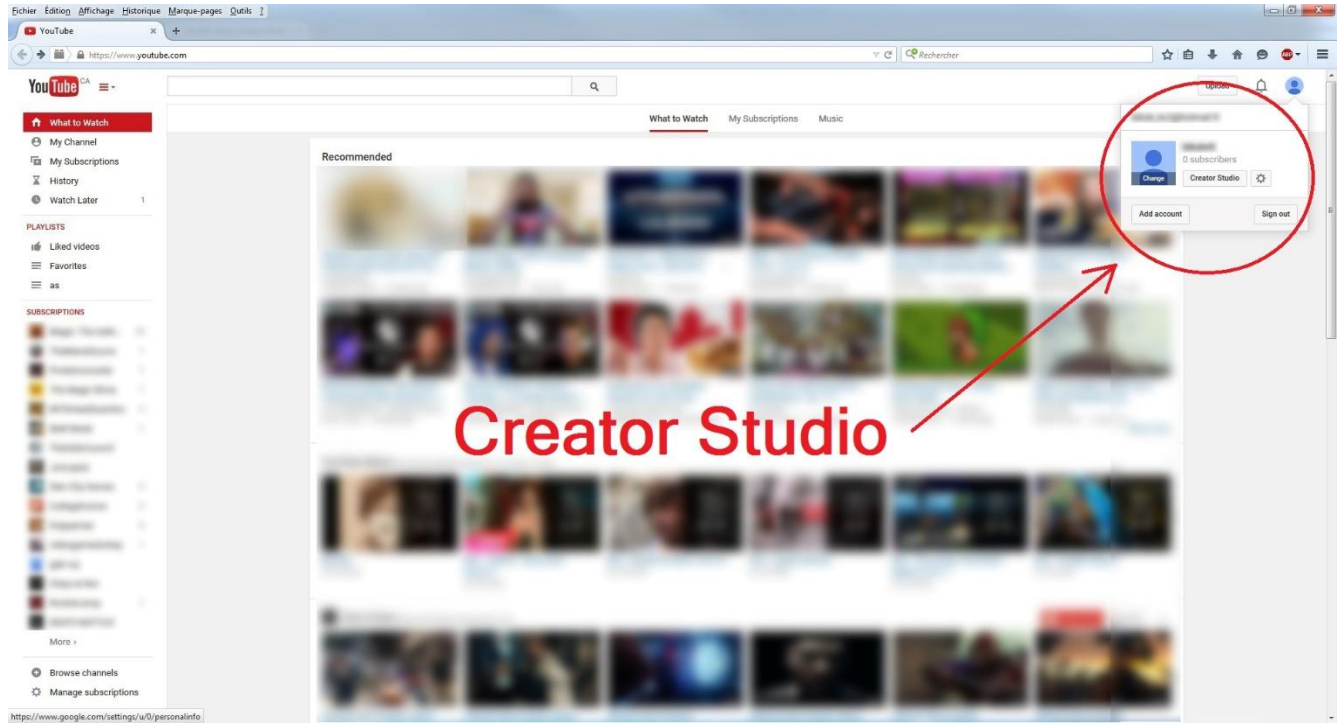
## 8.5 Limitation of Liability

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE MANDATORY LAWS, THIS LIMITED WARRANTY IS YOUR SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. AXSUB SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF AXSUB KNEW OF THE POSSIBILITY OF SUCH DAMAGES. AXSUB SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE TIME THE PRODUCT IS BEING REPAIRED.



## Appendix A – Streaming example using Youtube Live

1. In order to stream on Youtube, you must first create or sign in to your Youtube/Google account. Once logged in, go to the Creator Studio page of your account.



2. If Streaming is not yet enabled on your account, go the Status and features page of the CHANNEL tab and click on the Enable button next to the Live Events label. Follow the steps on screen until you registered your account for streaming.

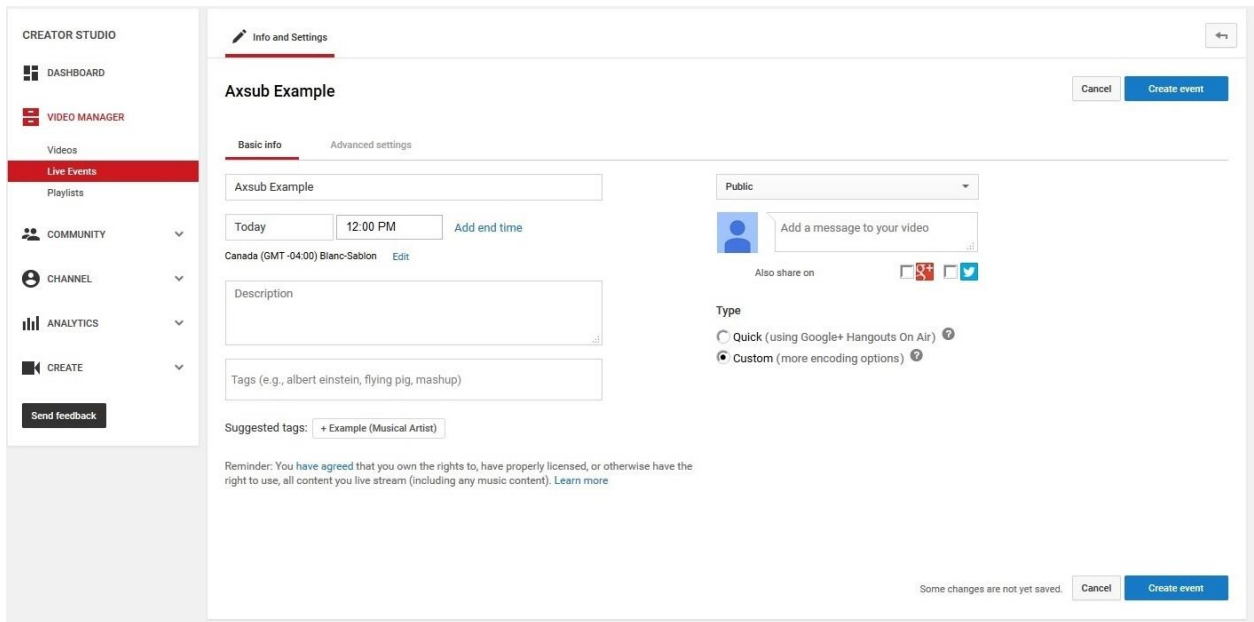
The screenshot shows the 'Features' page in the YouTube Creator Studio. The left sidebar is expanded to the 'CHANNEL' tab, with 'Status and features' selected. The main content area shows a list of features with their status and descriptions. The 'Live events' feature is circled in red, and a red arrow points to it from the text 'Enable Streaming'.

Feature	Status	Description
Monetization	Enable	Become a partner through monetization by displaying ads on your videos. <a href="#">Learn more</a>
Longer videos	Good standing	You can now upload videos longer than 15 minutes! <a href="#">Learn more</a>
External annotations	Good standing	Lets you link annotations to external sites or merch partners. <a href="#">Learn more</a>
Custom thumbnails	Good standing	Choose your video's thumbnail by uploading your own. <a href="#">Learn more</a>
Paid content	Not enabled	You must enable monetization before you can offer paid content. <a href="#">Learn more</a>
Content ID appeals	Good standing	Lets you appeal rejected Content ID disputes. <a href="#">Learn more</a>
Unlisted and private videos	Good standing	Lets you have unlisted and private videos. <a href="#">Learn more</a>
Live events	Enable	Lets you stream live events. <a href="#">Learn more</a>
Video editor	Good standing	Lets you edit your videos' content. <a href="#">Learn more</a>

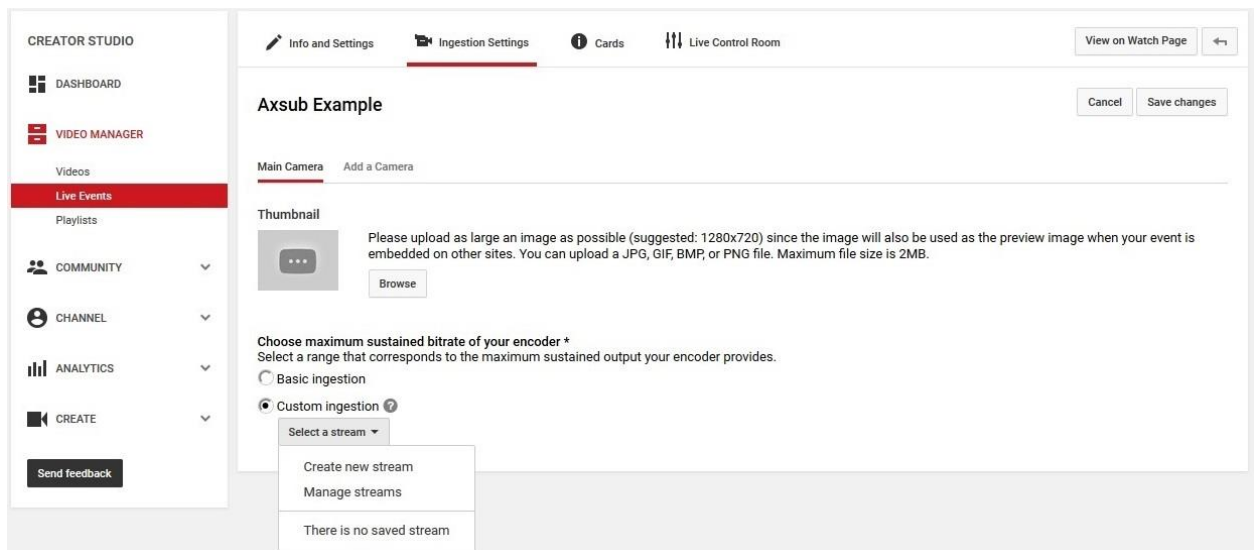
3. When streaming is enabled on your account, go to the Live Events page of the VIDEO MANAGER tab. Click on the New Live Event button, or on Schedule a new event, to be directed to the Info and Settings page of your new live event.

The screenshot shows the 'Events' page in the YouTube Creator Studio. The left sidebar is expanded to the 'VIDEO MANAGER' tab, with 'Live Events' selected. The main content area shows a message: 'You don't have any upcoming events. Schedule a new event.' There is a 'New live event' button in the top right corner.

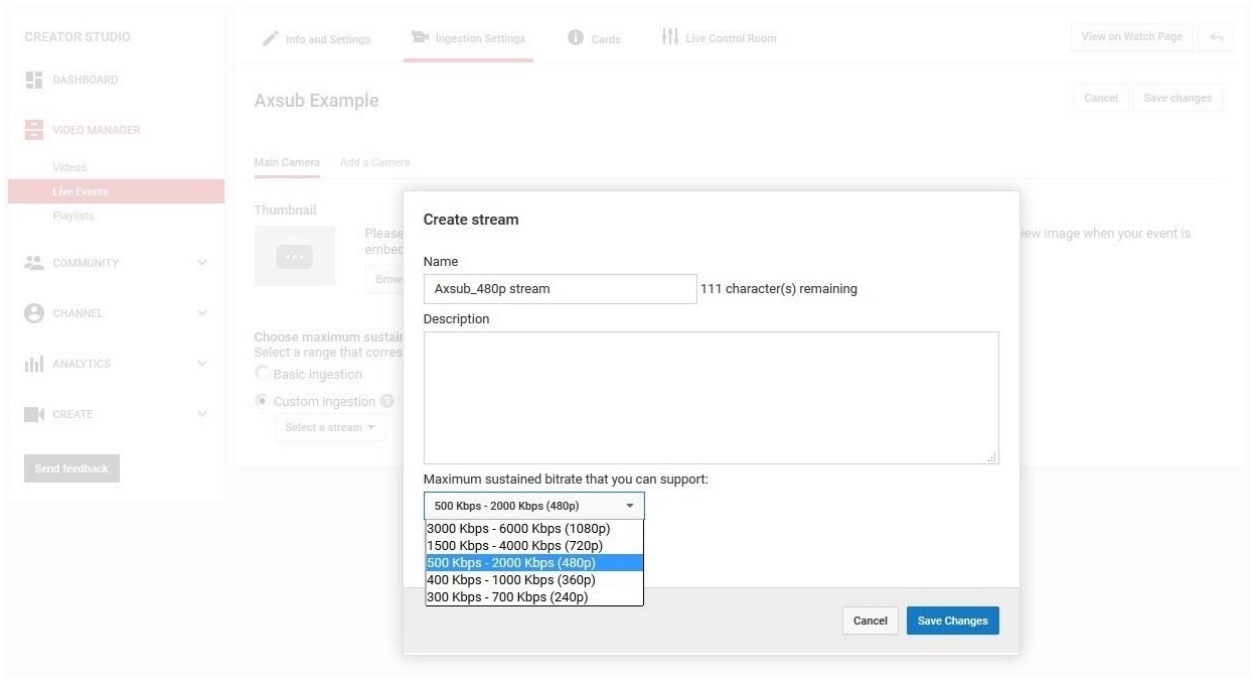
- The Info and Settings page allows the user to set the name of the event, as well as the audience and some more advanced settings such as the video category, the chat options, etc. When settings are done, click the blue Create Event button.



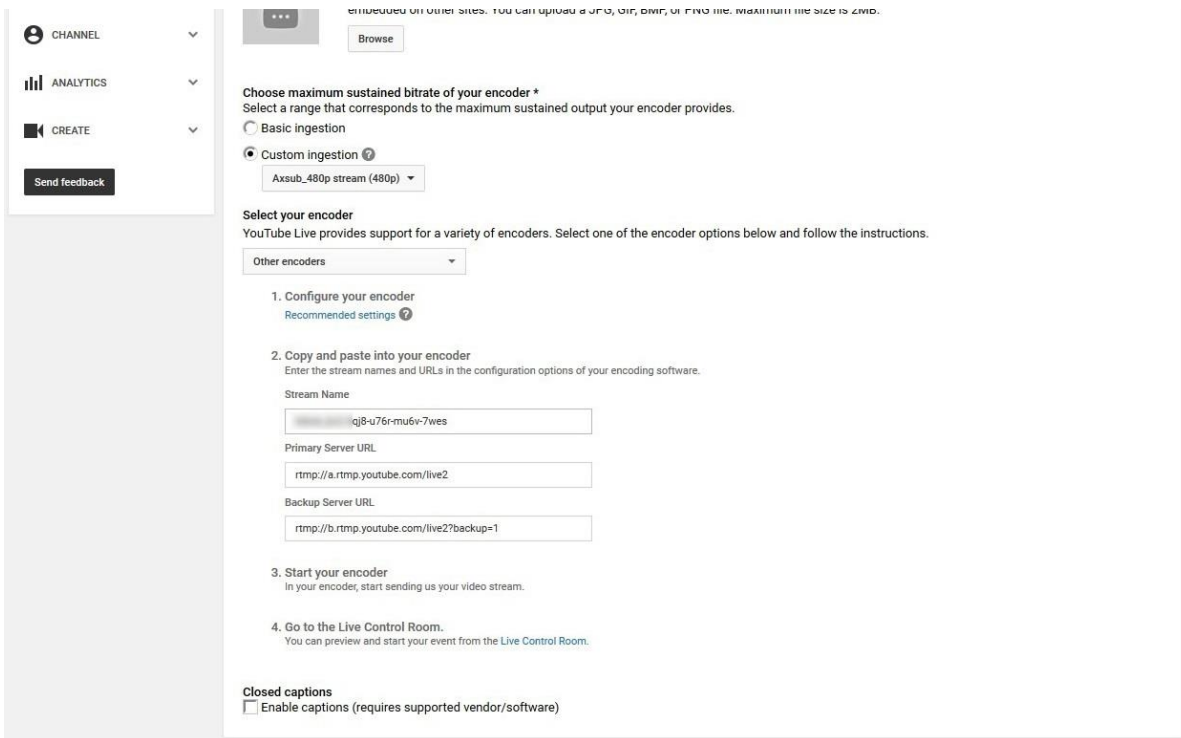
- You will then be directed to the Ingestion Settings page. This is the page where you will get information about the server URL and the stream name. First, select a stream from the Custom Ingestion combobox or, if not exist yet, create a new stream.



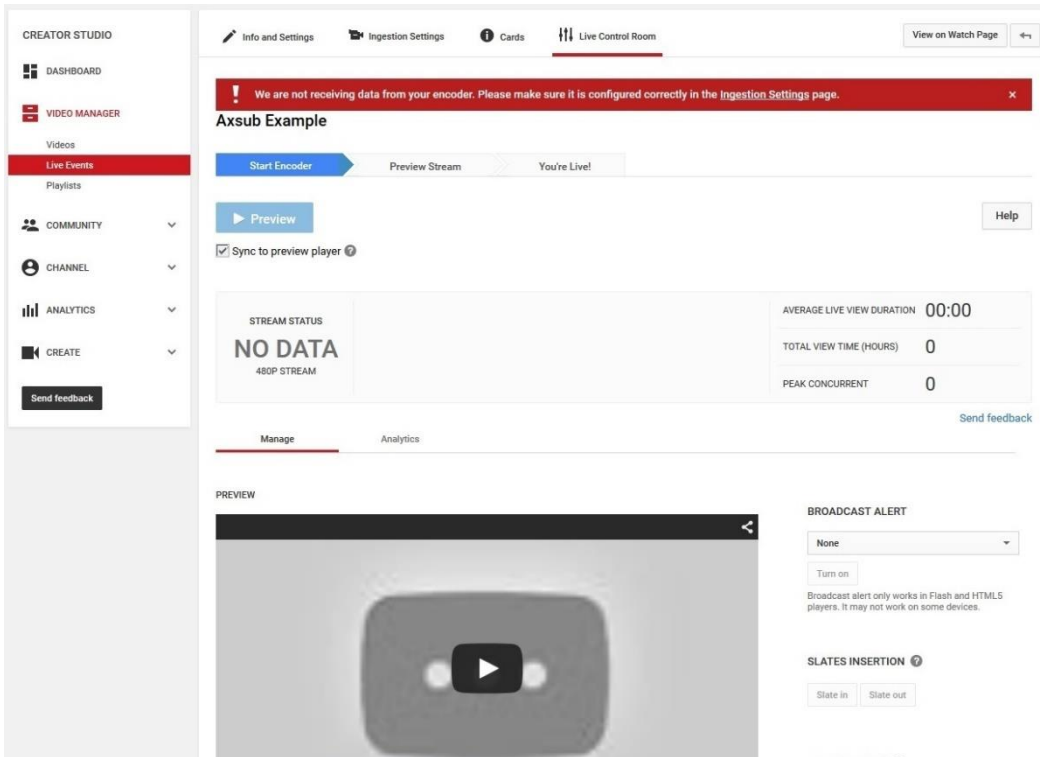
- If you choose to create a new stream, name the stream then select the maximum sustained bitrate, which also consist in the stream size. AxDDM software won't stream size larger than 480p, so always choose between 240p, 360p or 480p.



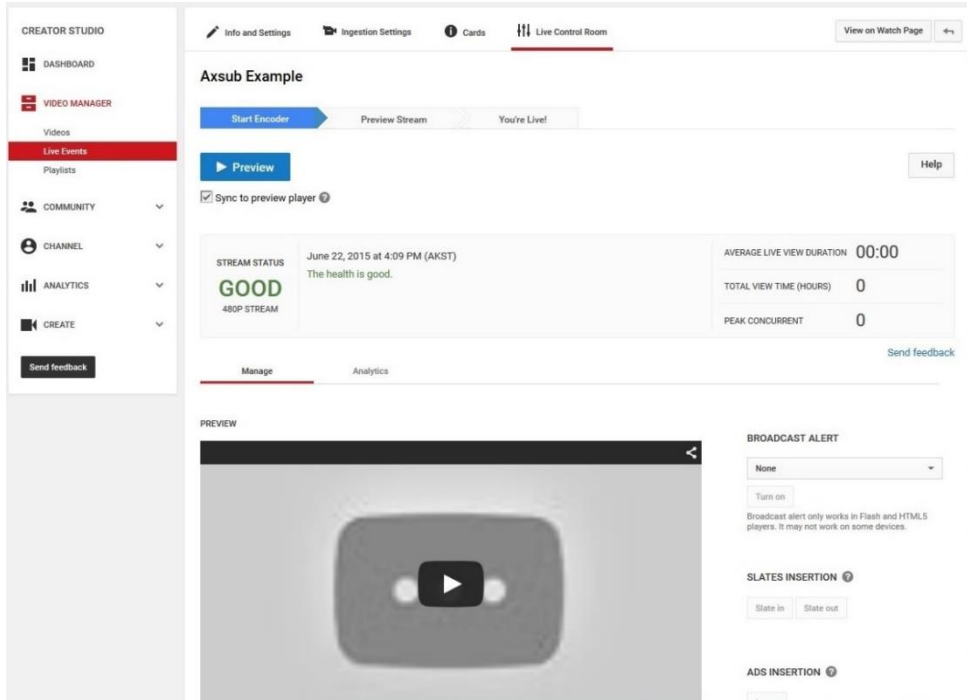
- When the stream is selected, your stream name and server URL will be displayed.



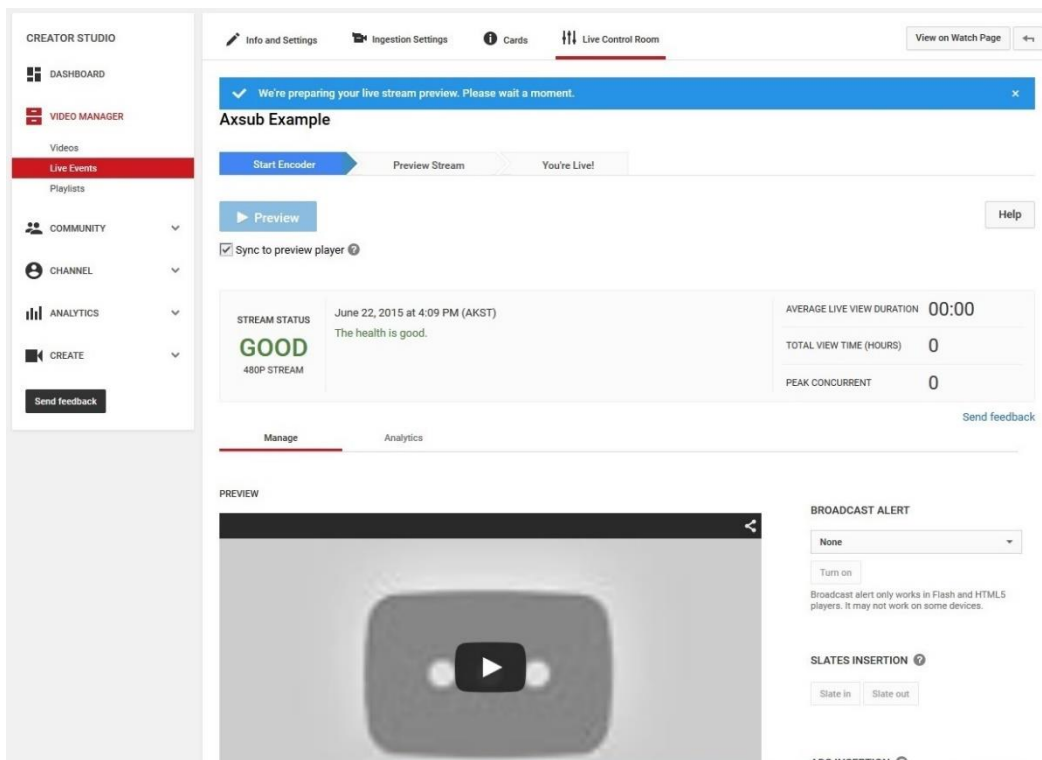
- Cut/Paste these information into the textboxes of the Streaming Options of the AxDDM software.  
Once done, click the Apply button, go to the Video tab and click the REC button to start recording and streaming.
- Back on Youtube, go to the Live Control Room page.



- If all parameters have been correctly entered in AxDDM, the recording has been started and your network connection is good, Youtube should start receiving data.

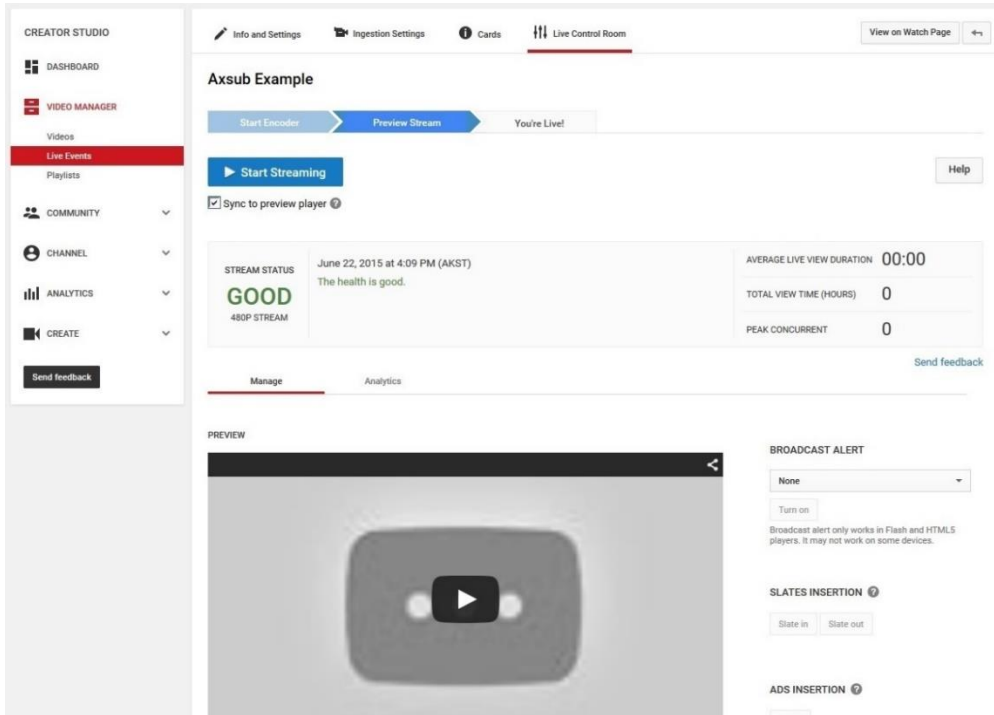


12. Check the Sync to preview player box, then click the Preview button.

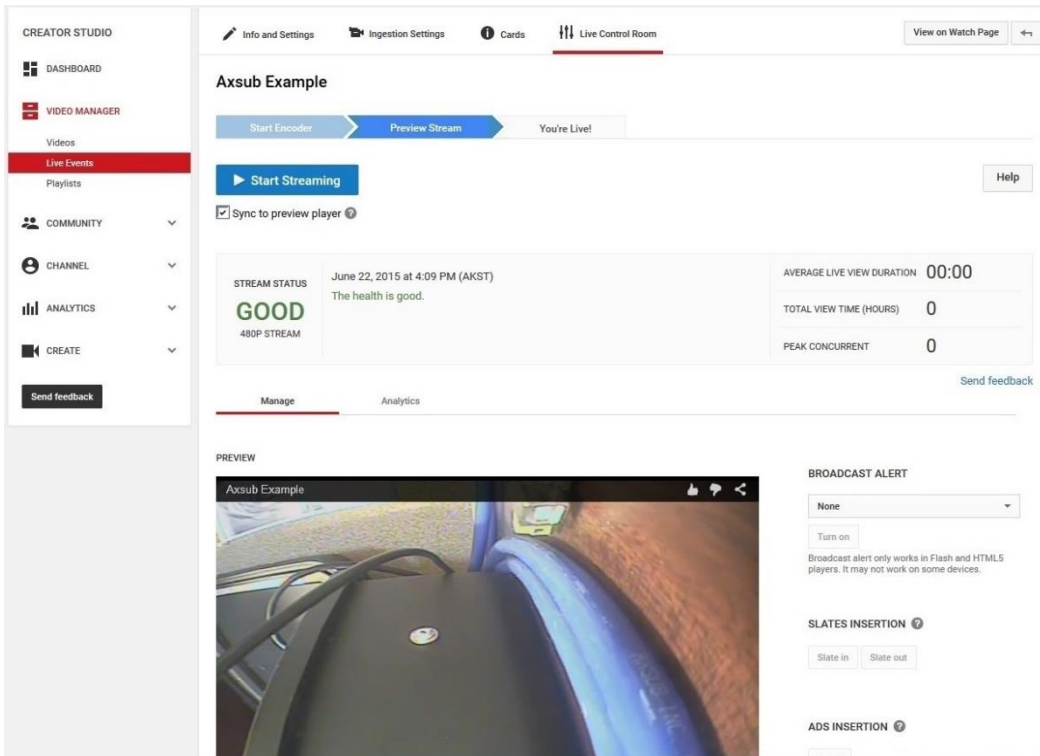


13. The Preview button will turn to light blue, then its text will change to Start Streaming, then it will turn to dark blue again. This may take a few seconds.

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14. You can then test your stream by clicking on the play button in the preview window.



15. When ready to lunch your stream, click the Start Streaming button.

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