

- English -



[Link to Youtube video](#)

# DashWare Link

## 1 Aim

The software Dashware can be used in conjunction with the 2D software to create a measurement data overlay. The recorded data is displayed during the video using various, freely configurable display options.

## 2 Description

Due to the improved usability of the Dashware feature and the automatic synchronization of GoPro videos in the 2D software, only the channels need to be selected and a toolbar button pressed to export the measurement data. Only the part of the measurement data that actually corresponds to the video is then exported to a csv file. This csv file is then loaded together with the video in the Dashware software.

## 3 Preparations



- The following steps 3.1 to **Fehler! Verweisquelle konnte nicht gefunden werden.** must be executed only once!

### 3.1 Dashware application

Install the DashWare (<http://www.dashware.net/dashware-download/>) program on your PC and register the software. Start the program once before continuing.

### 3.2 Dashware preparations

Go to <http://2d-datarecording.com/en/support/dashware/> and download the *2D DashWare Link* package and unzip the downloaded folder


- In unzipped folder open *Dashware\DataProfiles* and copy the profile *2DDatarecording.xml* into your *My documents*-folder  
(C:\Users\YourUsername\Documents\Dashware\DataProfiles)
- In unzipped folder open *Dashware\Gauges* and copy all folders into your *My documents*-folder (C:\Users\YourUsername\Documents\Dashware\Gauges)

### 3.3 Computer preparations



- If you are using a GoPro of type Hero 7 Black and newer, please make sure that the following Windows tool is installed, that all video applications can display HEVC-coded videos! For more information about HEVC-video codec click [here](#).

### 3.4 WinARace preparations

- Open WinARace and check if Dashware toolbar-button  is available.  
If not please go to *WinARace* → *View* → *Toolbar* → ... *Link Dashware tool chain*

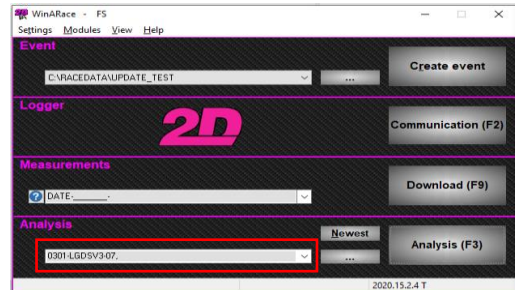
## 4 Analyzer




At least Race 2013.1 Software Version is required. Please update your software to latest version.  
WinARace → Help → Search for software updates

### 4.1 Select measurement

- Select the measurement data and thus the measurement from which you want to display data from in Dashware video



### 4.2 Prepare Video

- Click on  to import videos to the measurement



For more information about how to automatically synchronize GoPro videos to 2D-measurements please see the manual **GoPro\_Autosync** on our website:  
<http://2d-datarecording.com/downloads/manuals/>

- When videos are imported, open the Analyzer, activate the Video\_File\_Index channels, open the plugins and decide which video you want to use in Dashware.

Camera 1	<input type="text" value="Video_File_Index_1=1"/>		
Camera 2	<input type="text" value="Video_File_Index_2=1"/>	<input type="text" value="Video_File_Index_2=2"/>	
Camera 3	<input type="text" value="Video_File_Index_3=1"/>	<input type="text" value="Video_File_Index_3=2"/>	<input type="text" value="Video_File_Index_3=3"/>
Camera 4	<input type="text" value="Video_File_Index_4=1"/>		
<input type="button" value="Measurement"/>			

- Note down the Camera (Video\_File\_Index\_...) with the respective video (=...) you want to use in Dashware

- Note down the file name of the video (name can be found at the respective plugin-window)



- Videos that start within the measurement time, e.g. Video 2 Camera 3 (Video\_File\_Index\_3=2), are easiest to synchronize in Dashware
- Videos that start before the measurement time, e.g. Video 1 Camera 4 (Video\_File\_Index\_4=1), require further synchronization steps, which are also described in this manual later (see 6.3).

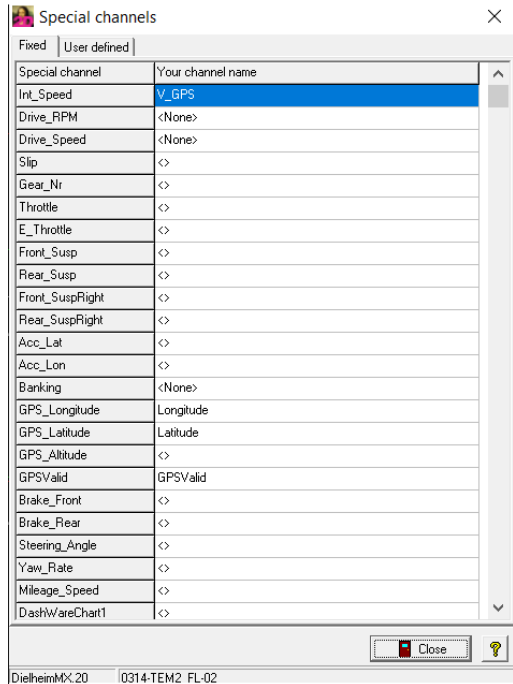
### 4.3 Prepare your measurement data

- When Analyzer is opened, press [SHIFT + S] and assign as much channels as you can to the prevented special channels.



- Try to assign as much channels as possible
- All predefined Dashware special channels can be ignored and left at <>
- If no channel could be assigned to a special channel meaningfully, please choose <None>

- Close this window and Analyzer when you are finished




- <> No channel selected to special channel
- <None> To this special channel no channel can be assigned meaningfully
- Channel Selection of the respective channel for this special channel

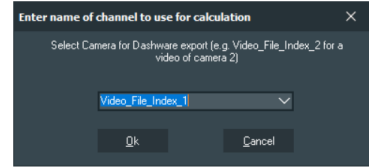


- An allocation of the special channels to the respective Gauges can be found at chapter7

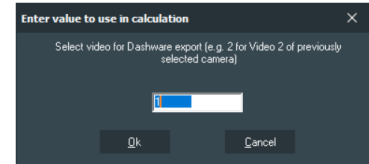
## 5 Export measurement data

- Open WinARace and click on the following toolbar-icon  to **Start data export for Dashware**

- Select desired Video\_File\_Index (and thus Camera)



- Select desired Video of camera



- A CSV-file named like the respective measurement was created in the event of the respective measurement

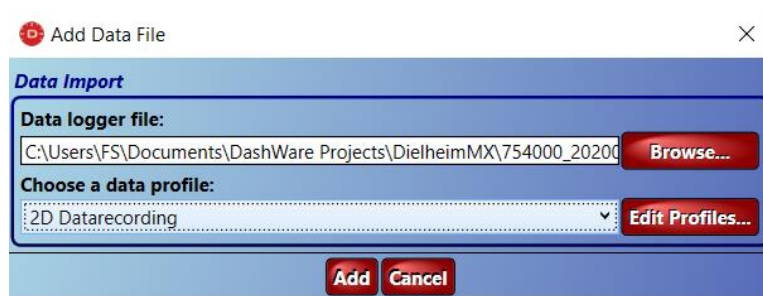
## 6 DashWare Steps

### 6.1 Load your video and measurement

- Open Dashware
- Create a new project and set Project Template to <None>
- Open tab *Project*
- Load your video file
- Load previously exported csv-file, while using the *2D Datarecording* data profile



When importing the video file, especially for GoPro videos, you may also be asked for a dataprofile. Please select the dataprofile *GoPro* in this case. Afterwards, delete the automatically inserted GoPro-dataprofile at the Data File field and load the previously exported csv-file from respective event folder to use the 2D-measurement data to use more accurate and extended 2D-measurement data!

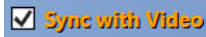


### 6.2 Insert Gauges

- Open tab *Gauge Toolbox* and insert the prepared 2D-gauges and 2D-Logo from *Gauges Toolbox* by drag and drop

### 6.3 Synchronizing Video

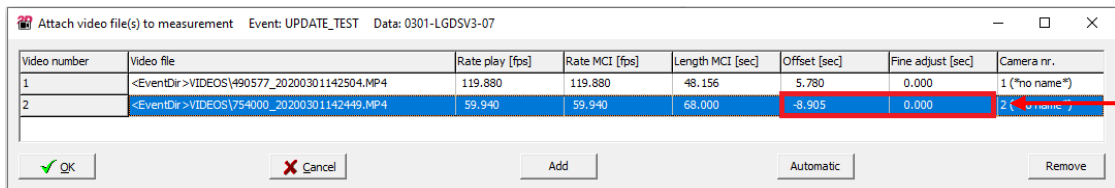
- Please ensure that the video time bar is located at the beginning of the video
- Open the tab *Synchronization* and check the box *Sync with Video*



- Save project



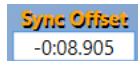
Only if the desired video starts before the measurement and thus has a negative offset to the measurement data, the following steps 1-4 must be executed additionally (Open following window from WinARace-Toolbar):



1. Close Dashware
2. Open the respective project directory in *My documents*-folder (C:\Users\YourUsername\Documents\DashwareProjects\) and open *cdp-project-file* with an editor
3. Enter the sum of *Offset* and *Fine adjust* at *syncOffset*

<DataFile profile="2D Datarecording (1)" fileName="C:\Racedata\Update\_Test\DW\_0301-LGDSV3-07.csv" currentTime="0.0" dataSynced="True" syncOffset="-8.905">

4. Save *cdp-project-file* and re-open the Dashware-project
5. Open submenu *Synchronization* and check *Sync Offset*



- Do not check/uncheck  *Sync with Video* otherwise *syncOffset* is reseted!

### 6.4 Export Video

- Open tab *File* and click on *Create Video* or use shortcut <CTRL> + <SHIFT> + <C>



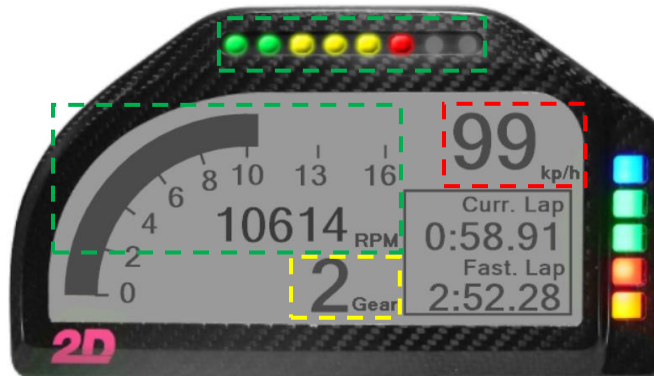
## 7 Gauges and Special channels



- The gauges can be extended and adapted to customer requirements

### 7.1 Dashboard

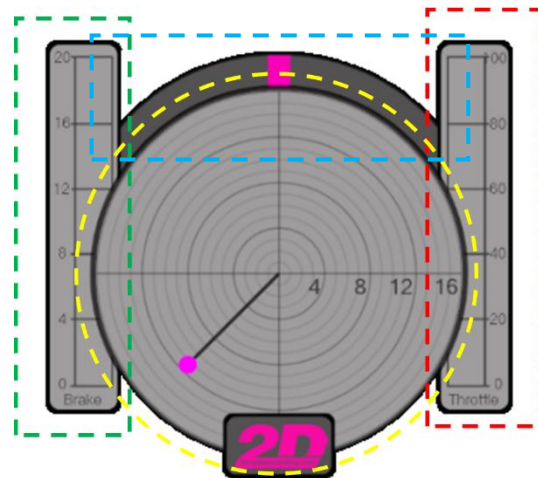
Special CH	Proposal
@Drive_RPM	
@Int_Speed	#V_GPS
@Gear_Nr	



- Curr. Lap and Fast. Lap are created automatically
- First and last lap can be marked out via Dashware

### 7.2 Acc circle

Special CH	Proposal
@Brake_Front	
@Brake_Rear	
@Throttle	
@Acc_Lat	#A_Lat_GPS
@Acc_Lon	#A_Lon_GPS
@Banking	#Banking_GPS



- @Brake\_Front and @Brake\_Rear are combined to one channel where always the values of the currently higher channel is used
- The combined channel is unified to 15 bar max pressure!

### 7.3 2D Map

Special CH	Proposal
@GPSValid	#GPSValid
@GPS_Longitude	#Longitude
@GPS_Latitude	#Latitude

