- 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 3.3 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 WinARace 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!

https://www.microsoft.com/de-de/p/hevc-video-extensions-from-device-manufacturer/9n4wgh0z6vhq?irgwc=1&OCID=AID2000142_aff_7593_159229&tduid=(ir__uzmtweee3skftwszkk0sohzg232xlq6l12ednboc00)(7593)(159229)()(UUwpUdUnU56887YYwYwo5uw4zdpo5zwgzloorzgc3bomnxw2)&irclickid=_uzmtweee3skftwszkk0sohzg232xlq6l12ednboc00&activetab=pivot%3Aoverviewtab

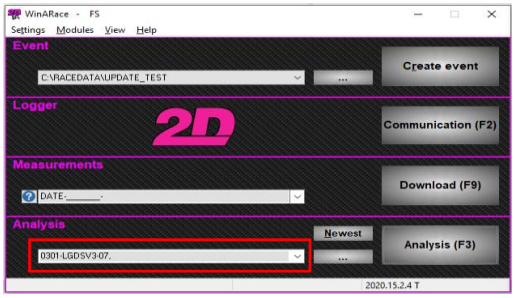
- Open WinARace and delete all toolbar-buttons with  icon which **not** shows the hint **"Start data export for Dashware"** when cursor is put on icon.

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

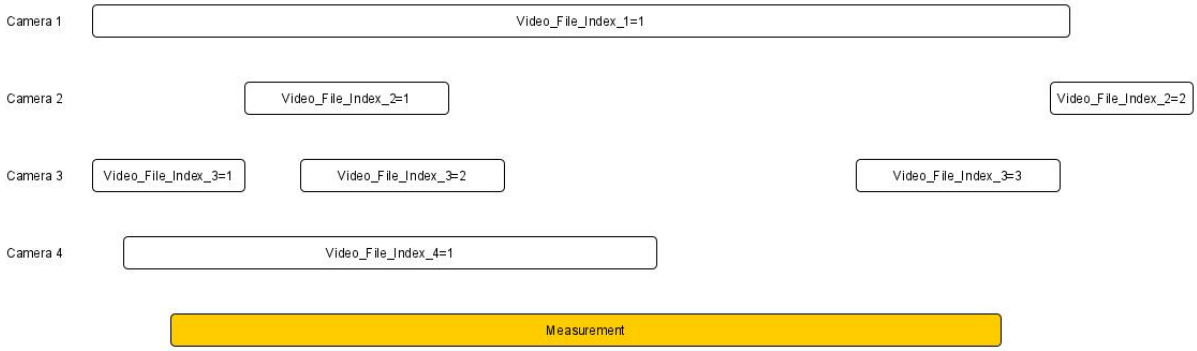


4.2 Prepare Video

- 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.



- Note down the Camera (Video_File_Index_...) with the respective video (=…) you want to use in Dashware

Video_File_Index_ =

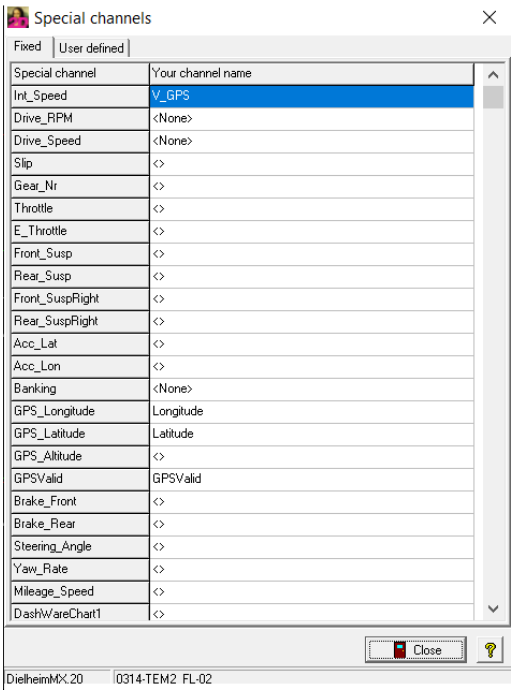
- Note down the file name of the video (name can be found at the respective plugin-window)

Videoname:

- 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

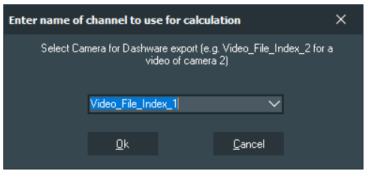
- An allocation of the special channels to the respective Gauges can be found at chapter7

5 Export measurement data

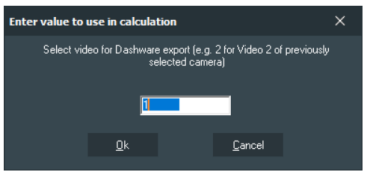
- Open WinARace and click on the following toolbar-icon  to **Start data export for Dashware**

- Execute only the button where the "**Start data export for Dashware"-**message appears if you put the cursor over it!

- 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

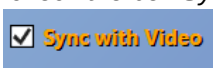
When importing the video file, especially for GoPro videos, you may also be asked for a dataprofile. Please select the dataprofile *GoPro* in this case.
Afterwards, delete the automatically inserted GoPro-dataprofile at the Data File field and load the previously exported csv-file from respective event 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

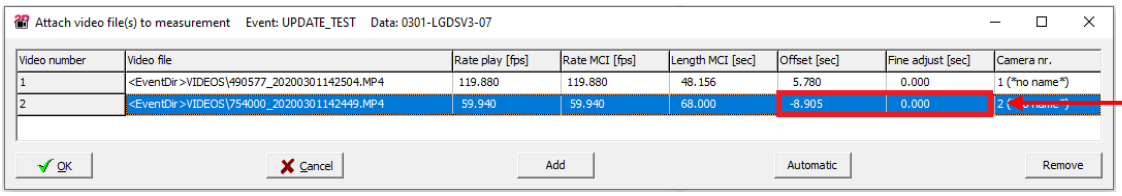
6.3 Synchronizing Video

- 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):

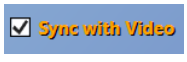


1. Close Dashware
2. Open the respective project directory in *My documents*-folder (C:\Users\YourUsername\Documents\DashwareProjects\) and open cdp-project-file with an editor
3. Enter the sum of *Offset* and *Fine adjust* at *syncOffset*

```
<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 

otherwise SyncOffset is reseted!

6.4 Export Video

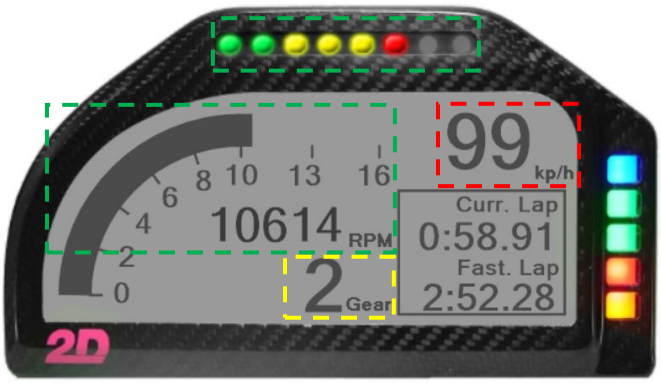
- Open tab File and click on Create Video or use shortcut <CTRL> + <SHIFT> + <C>

7 Gauges and Special channels

- The gauges can be extended and adapted to customer requirements

7.1 Dashboard

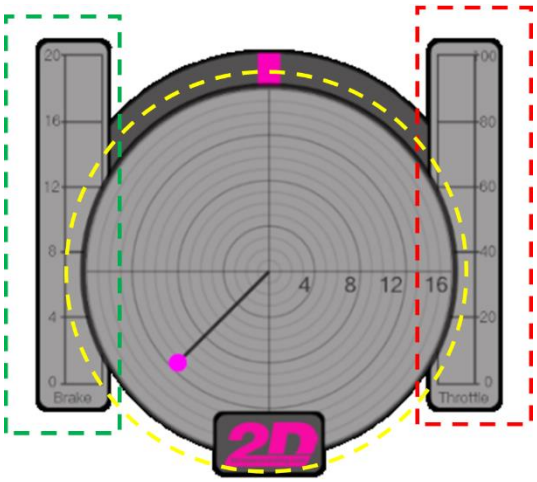
Special CH	Proposal
@Drive_RPM	
@Int_Speed	#V_GPS
@Gear_Nr	



- *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 care 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