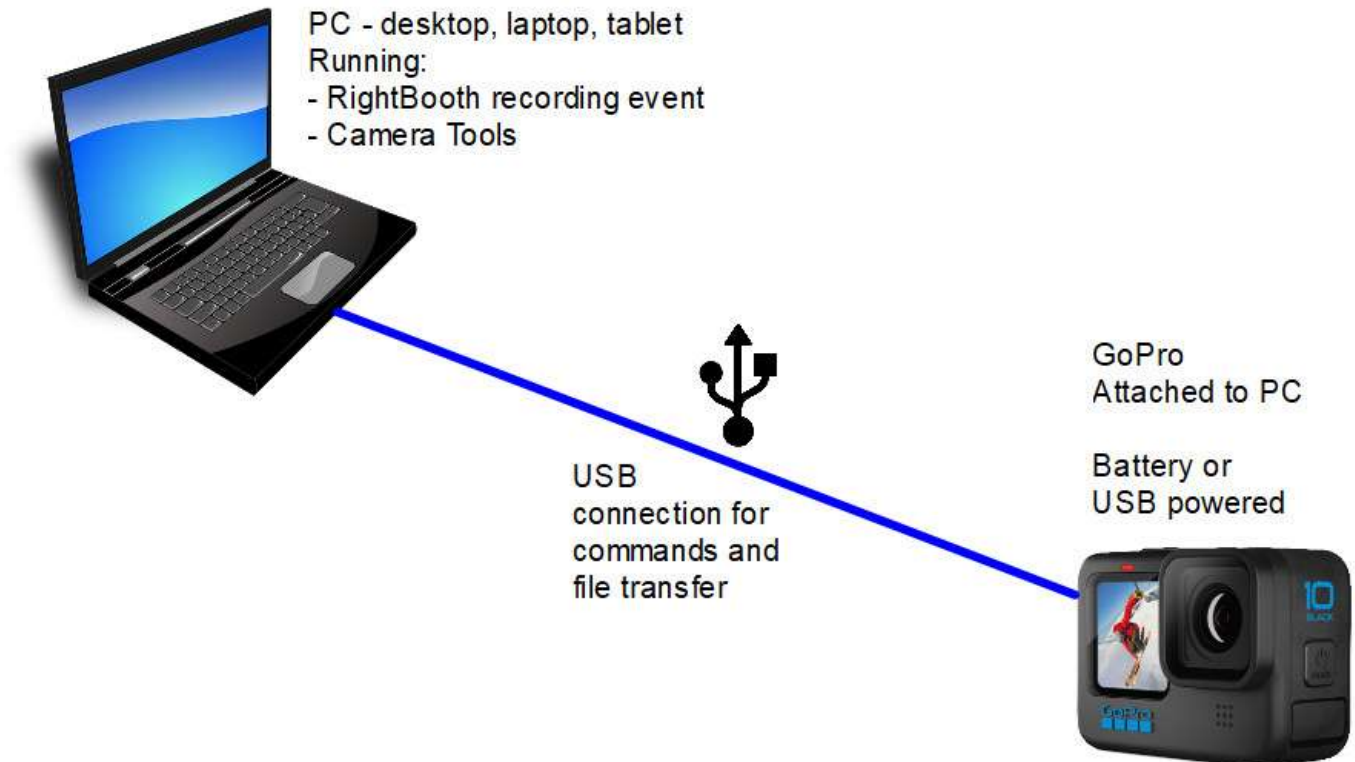


Use A GoPro in RightBooth - USB Option

IMPORTANT: This solution applies to GoPro Hero 8, 10, 11 and Mini cameras only

This document explains how to configure a system that uses RightBooth on a desktop, laptop or tablet PC to record videos and take photos by sending commands to a GoPro camera connected by USB cable to the PC.

This solution avoids the requirement to use the GoPro Bluetooth or GoPro WiFi, which can prove to be unreliable in some environments.



Suitable For

- Small form factor builds
- Fixed video booths and photo booths
- Handheld roaming booths when using a portable PC or tablet.

Supported Cameras

RightBooth can operate the following GoPro cameras over USB (via the Camera Tools app):

Hero 8, 10, 11, Mini

Preparing Your GoPro

- Make sure your GoPro is running with the latest firmware. Full instructions on how to do this can be found here: <https://gopro.com/en/us/update/>
- Make sure you are using an SD card that is fully compatible with your GoPro. See here for recommended cards: https://community.gopro.com/s/article/microSD-Card-Considerations?language=en_US
- Remove all files from your GoPro SD card. You can do this by formatting SD card on your GoPro, using the built in SD Format option available on your GoPro Menu. Then power off your GoPro, remove the battery for around 10 seconds, re-insert the battery and power it back on again.
- Set the correct Date and Time on your GoPro.

Note: You should consider reformatting your GoPro SD card each time prior to host an event.

Using Camera Tools

RightBooth allows you to record videos and take photos using a GoPro camera connected to your PC using the USB lead provided with your camera. This is achieved using the following app that can be purchased and installed separately:

Camera Tools for Heros: <https://www.toolsforgopro.com/cameratools> - In this document it is named **Camera Tools**. Cost: 10 Euros (approx).

Note: If you experience problems with Camera Tools you can contact the app developer at: <https://www.toolsforgopro.com/contact>

For all other technical enquiries, contact support@rightbooth.com

IMPORTANT: Make sure you are running the latest version of the Camera Tools App (version 1.5.0 or later). You can get the latest version here: <https://toolsforgopro.com/dl/herocameratoolswin.exe>

Make sure you install the full product, including the GoPro webcam utility.

The latest release notes for Camera Tools is available here: https://www.toolsforgopro.com/dl/changelog_cameratools.txt

Camera Tools (see link above) lets RightBooth control your GoPro directly in order to record videos and take photos on the GoPro's SD card. RightBooth can then download the video and photo files onto the PC for inclusion in your event as part of the ongoing event flow.

Advantages: You can record videos and photos at the resolution provided by your GoPro's camera (e.g. HD, or 4K). You can use many of RightBooth's video and photo processing features, including overlays, resizing, cropping, rotation, mirroring and video enhancements.

Disadvantages: There will be no GoPro live camera feed available for inclusion on your RightBooth event screens. You cannot use stamps, props, face recognition or greenscreen features.

We will now explain how you can set up everything. Note: In this document we are using a GoPro Hero 8.

Note: Before continuing with the rest of this document we recommend that you perform a one time reset of any previously used GoPro connections on your camera. This is available in your GoPro '**Preferences**' on the **Connections** menu, and (on the Hero 8) it is entitled '**Reset connections**'. It may be slightly different on other models.

Connect your GoPro to the PC

- Turn on your GoPro.
- Select '**Preferences**', then choose '**Connections**'
- On the GoPro Connections menu, scroll down to the option '**USB Connection**'
- Set the USB Connection to: '**GoPro Connect**'
- Connect your GoPro to your PC using the USB lead provided with your GoPro. Ideally, you should connect your GoPro to a USB 3 port on your PC.
- The GoPro will then show the message:

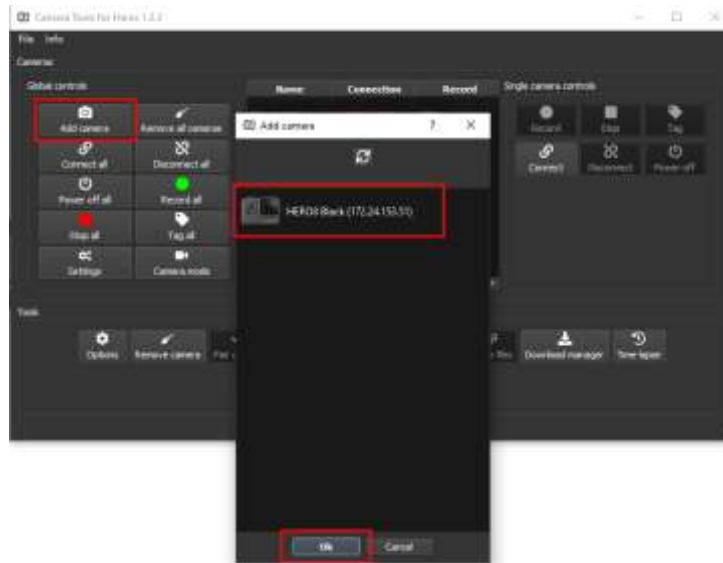
USB Connected

Setting Up and Using Camera Tools and RightBooth

Add Your GoPro Into The Camera Tools App

Note: This step is usually a **one time set up process** and will only need to be repeated if you reset your GoPro connections or reset it to factory defaults.

- 1) Run Camera Tools. Make sure you are running version 1.5 or newer.
- 2) Select the **'Add camera'** button.
- 3) On the 'Add camera' panel, choose the 'USB' option and click the OK button.
- 4) You should now see your camera listed for selection. Choose your camera and click the **OK button**.
- 5) In our example we are adding **Hero 8 Black...**



Your GoPro will now be added to the camera list. Camera Tools will now remember your camera between sessions so you should not need to repeat this step.

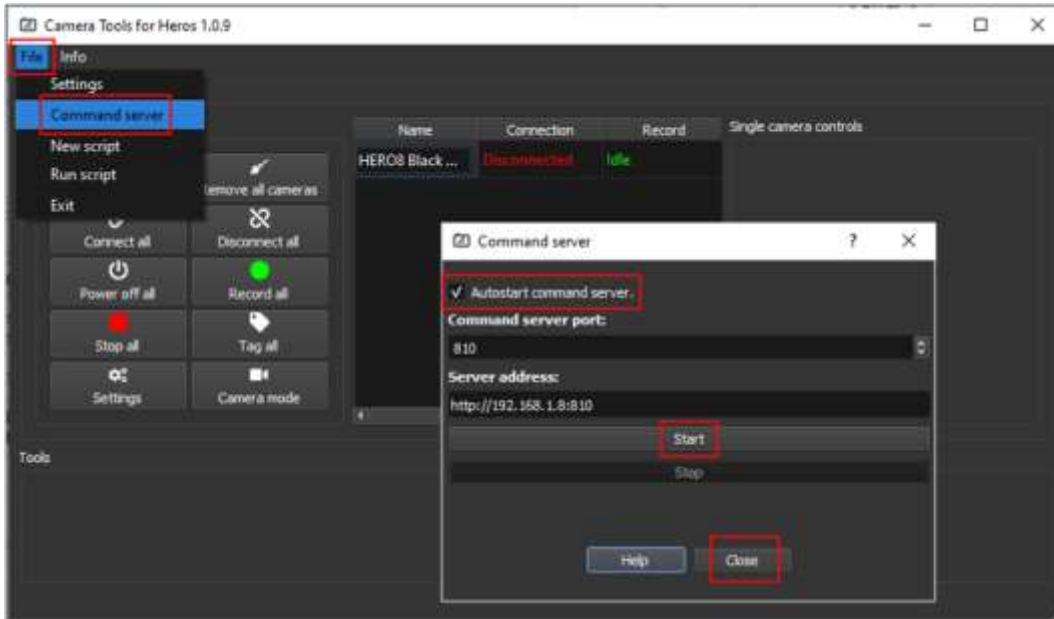
Set the Camera Tools 'Command Server' to Run Automatically

The Command Server is part of the Camera Tools App and it is the feature that RightBooth will use to control your GoPro.

Note: This step is usually a one time setup process.

- 1) In the Camera Tools app, click the **File** menu option.
- 2) Click the **'Command Server'** menu option.
- 3) On the Command server panel, tick **'Autostart command server'**. Doing this will ensure that the Command Server will be automatically started each time you run the Camera Tools App, so you won't need to perform this step again.

- 4) Click the **Start** button to start the Command Server running...

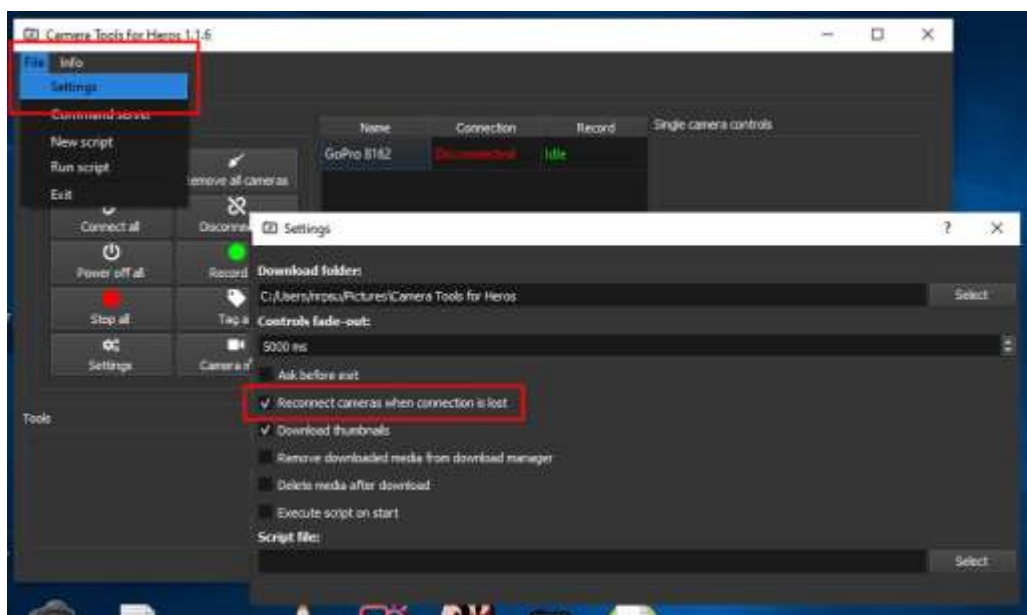


- 5) On the Command server panel, make a note of the **Command server port** number and **Server address**. This information will be required when setting up RightBooth (see later).
- 6) Click the **Close** button on the Command Server window.

Remember, you have configured the Command Server to start automatically each time you run Camera Tools, so you will not need to repeat this step.

Set the Camera Tools App To Reconnect When Connection is Lost

- 1) Click the **File** menu option.
- 2) Click the **'Settings'** menu option.
- 3) In Settings, tick, **Reconnect cameras when connection is lost** and save your changes...



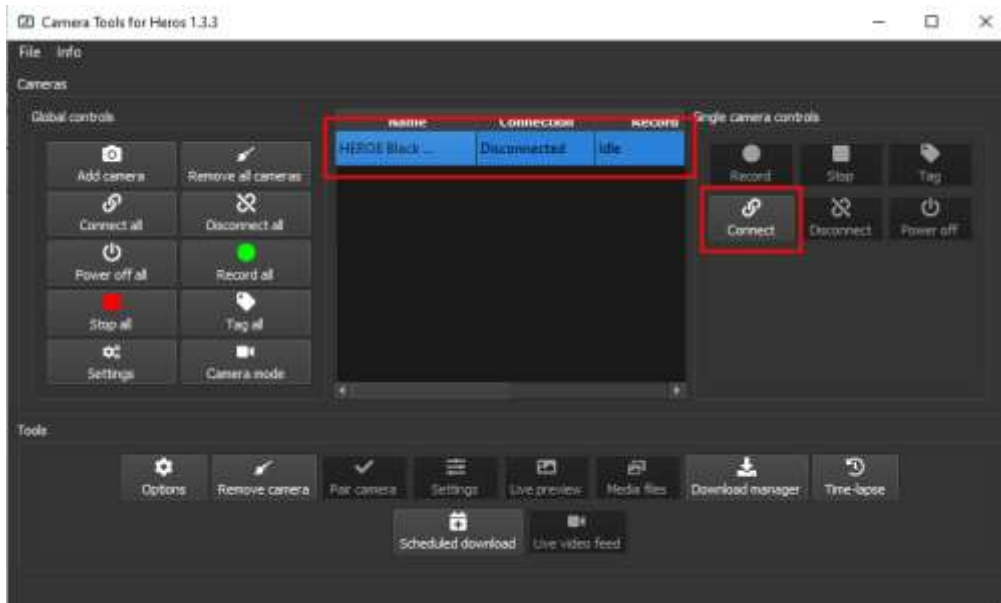
This action will help to prevent the GoPro Bluetooth connection being lost.

You will not need to repeat this step.

Connect your GoPro to the Camera Tools App

Note: You **MUST** repeat this Step every time you turn on your camera and **BEFORE** starting to use RightBooth.

- 1) Run Camera Tools.
- 2) Click on your camera name in the list to select and highlight it, then click the **Connect** button:

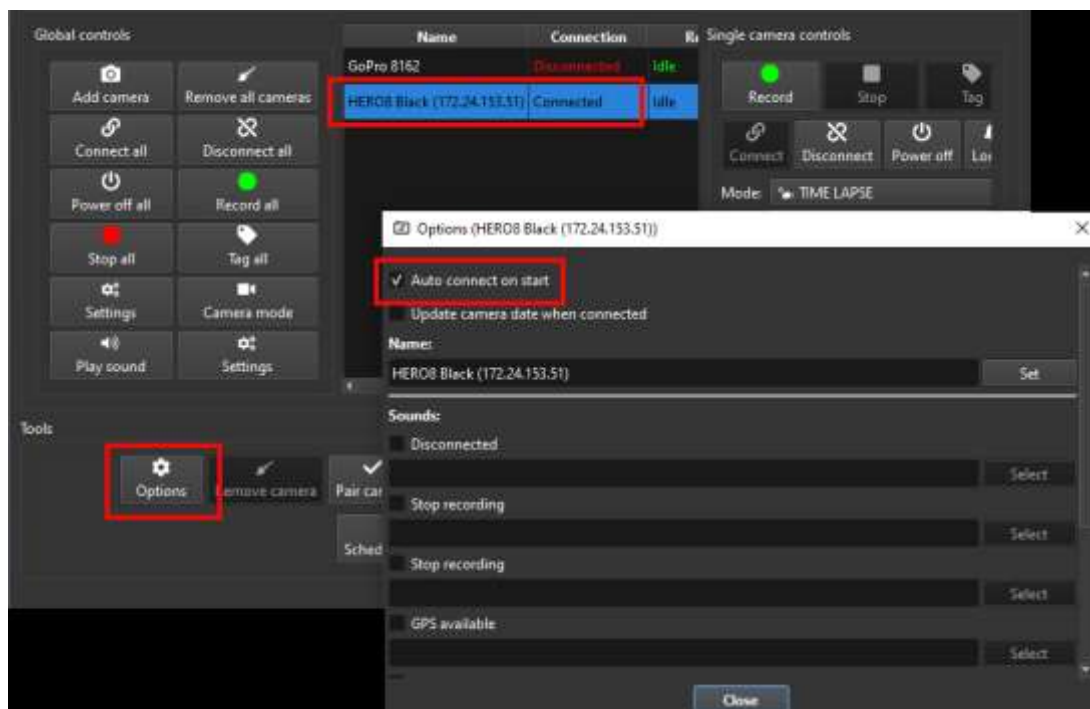


- 3) The camera will then be shown as **'Connected'**.
- 4) You must now keep the Camera Tools app running to allow RightBooth to control your GoPro, so we suggest you minimise the app to the Windows Task Bar.

Automatically connecting to the camera

If you would refer Camera Tools to automatically connect to your GoPro when it starts running:

- Select your camera in the Camera list
- Click the **'Options'** button
- Tick the option: **'Auto connect on start'**...



If Camera Tools fails to connect to your camera, try turning your camera off, take the battery out, wait a while, reinsert the battery, turn the camera back on, then close and restart Camera Tools and repeat Step 4.

IMPORTANT

If the GoPro continues to show the 'USB Connected' screen, in the Camera Tools app:

- select your camera from the list,
- make sure the **Video** option is selected in Camera Tools.
- click the '**Record**' button, followed by the '**Stop**' button to record a very short video.

Doing this should remove the 'USB Connected' screen from the camera and will allow all subsequent commands to be sent to the camera.

Set Up RightBooth to Control Your GoPro

Make sure you are running RightBooth version 7.11.0 or later. Make sure all the previous steps have been completed.

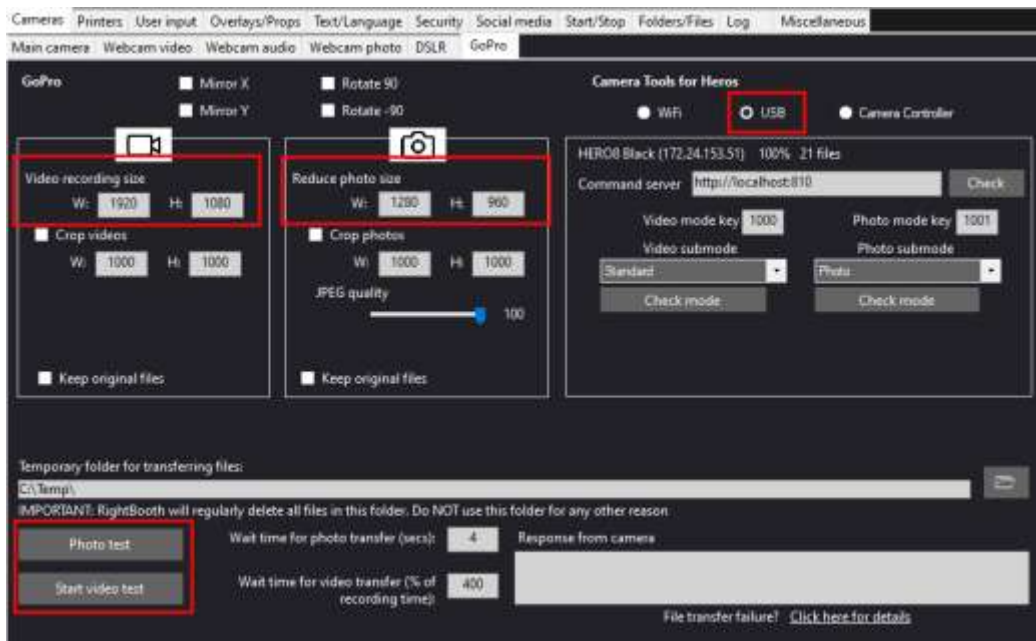
IMPORTANT: RightBooth will be controlling the GoPro by sending commands to the Command Server in the Camera Tools App. By default, these commands are sent through Port 810 on your computer. These commands might get blocked by your Windows Defender Firewall or Virus Protection software. If you find that RightBooth is not controlling your GoPro, try turning off your Windows Defender Firewall and/or stopping your Virus Protection software or making Port 810 available for use within these packages. For details on how to do this, refer to your Windows Firewall/Virus Protection documentation.

Note: This Step is normally a 'one time' set up process.

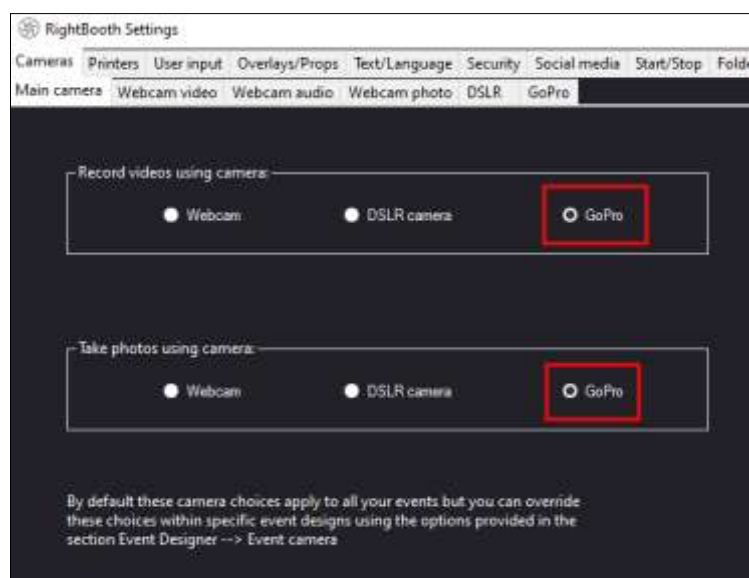
- 1) Run RightBooth.
- 2) Go to RightBooth **Settings** → **Cameras** → **GoPro**
- 3) In the Camera Tools for Heros section, select the option: '**USB**'
- 4) If RightBooth has successfully connected to your GoPro you will see the Camera name, Battery level and file count showing in the panel (See screenshot below). If you do not see this information, close and restart RightBooth.
- 5) Ensure the Command Server address is set to: **http://localhost:810**
- 6) Click the **Get status** button to check that RightBooth has correctly set some values into the **Video mode key** and **Photo mode key** text boxes. You should not modify these values.
- 7) Select a **video sub mode** and a **photo sub mode** option from the combo boxes provided. GoPro cameras provide a number of operating submodes for both the video recording and the photo capture modes, and these sub modes vary from model to model. We recommend you choose the standard **video submode** and **photo submode** options, as this will reduce the amount of recording that the GoPro will be required to perform. When you have chosen your submodes you can use both '**Check mode**' buttons to verify that RightBooth correctly switches your GoPro between your chosen submodes.
- 8) Set the **Video recording size W** and **H** values to match the GoPro video recording size. We recommend you set your GoPro to record 1920x1080 HD videos, so enter W=1920 and H=1080 in these text boxes.
- 9) Set the **Reduce photo size in RightBooth W** and **H** values to match your GoPro photo capture size **OR LESS**. GoPro cameras usually capture photos at 4000x3000 pixels but we recommend you set **W** and **H** to values

that are less than this, as it will help to prevent potential memory problems when running RightBooth. Additionally, the W and H values you choose should match the aspect ratio of the GoPro photo size. In our example screenshot (below), W=1280 and H=960, which is the same aspect ratio of 4000 x 3000, i.e. 1.333 to 1.

- 10) Select a temporary folder for transferring files from the camera. This must be a folder that exists on your computer, one that is empty of files and one that you have permission to write to. If you are an Admin user I would suggest you create a new folder off the route of Drive C: such as 'c:\temp' and select that folder in RightBooth. If you have restricted login rights, you may need to create a sub folder in somewhere like My Pictures. Whichever folder you choose, make sure it is empty of files and note that RightBooth will regularly delete files from it when transferring files from the GoPro.
- 11) Use the **Photo test** button and **Video test** button to check that RightBooth correctly controls your GoPro and also receives the recorded files from the camera.



- 12) Finally, go to the RightBooth Settings section: **Cameras** → **Main camera** and select the **GoPro** option for both video recording and photo capture:



RightBooth is now configured to control your GoPro via the Camera Tools App, and your RightBooth events will now receive videos and photos directly from your GoPro.

Remember – After everything has been set up correctly

Each time you switch on your computer and you want to use your GoPro connected by USB at one of your RightBooth events:

- Turn on your GoPro.
- Ideally, reformat the SD card, then Power the GoPro Off and Back On again.
- Ensure your GoPro Voice control option is turned OFF. Leaving this on can cause unexpected camera behaviour.
- Connect the GoPro to your PC with the USB lead. The PC should acknowledge the camera USB connection with a beep.
- Run the Camera Tools App.
- Perform: Step 3 - Connect your GoPro to the Camera Tools App (described above).
- Run RightBooth. Before playing your event, check that RightBooth is connected to the Camera Tools App by looking in Settings → Cameras → GoPro.

Problems Connecting to the GoPro or Transferring Files from the GoPro to RightBooth?

Try the following:

- Make sure your GoPro is running with the latest firmware. See Preparing your GoPro (see earlier).
- Make sure you are using a compatible SD card in the GoPro.
- Reformat the GoPro SD card so that it does not contain any files. Power the camera down, remove the battery, wait a while, re-insert the battery and power it back on.
- Set the correct Date and Time on your GoPro.
- Make sure your GoPro, PC, laptop or tablet is **NOT** set to power down or go into Sleep mode, as this will cause connections to be dropped.
- Check the USB connection and cable between the PC and the GoPro.
- Make sure the **Firewall on your PC is not enabled** OR alternatively add the HeroCameraTools.exe and the RightBooth.exe into your Firewall app's exemption list.
- Make sure **Camera Tools is running** and that you have connected the GoPro and checked that '**Media Files**' can be obtained.
- In Camera Tools, make sure you have ticked '**Autostart command server**'
- In RightBooth GoPro Settings, make sure it is possible to write files to the 'Temporary folder for transferring files from camera'
- In RightBooth GoPro Settings, increase the **Wait time for photos to 8 seconds** and increase the **Wait time for videos to 400**.