

Streaming Checklist

- ☐ 2x GoPro + Entaniya 250° lens
- ☐ iFixit electronics repair kit
- ☐ Camera case
- ☐ 3x black HDMI cable (5m)
- ☐ 3x Mini-USB charge cable
- ☐ USB hub + power cord
- ☐ 2x HDMI > USB3.0 adapter + USB3.0 cable
- ☐ Tie wraps
- ☐ Laptop + power cord
 - ☐ Sleep mode OFF
 - ☐ Vahana
 - ☐ Team Viewer
- ☐ Backpack
- ☐ Camera stand
- ☐ Power cord
- ☐ Ethernet cable
- ☐ Lens cleaning equipment
- ☐ Vahana USB dongle
- ☐ Garbage bags
- ☐ Duct tape
- ☐ Cooling spray for electronics

Setting up the stream

Setting up Vahana VR

1. Set GoPro settings to:
 - a. NTSC
 - b. 1440p
 - c. 30fps
 - d. Protune OFF
 - e. Spot meter OFF
 - f. On Screen Display OFF
 - g. Auto Power Off OFF
2. Download and install Vahana VR from: <http://vdstt.ch/vahstable> (stable)
3. Open Vahana VR, click the *Play* icon and then *New Configuration*
4. Click *Edit Input*, select all the input devices, and then press the *next* arrow on the bottom right hand corner

5. Use the following settings:
 - a. Resolution: 1080p30
 - b. Pixel format: **YUV2**
 - c. Audio source: Digital In
6. Click *Configuration > Calibration* > fill in the path to your PTGui template
7. Go to <https://cloud.wowza.com/> and log in
8. Click *Live Streams > Add Live Stream*
9. Give your stream a name and select the area closest to you (Belgium/Germany), then click *Next*
10. Select **Other RTMP** and **Push Stream**, set *Aspect Ratio* to **1920 x 1080**, and select **Disable authentication**, then click *Next*
11. Select **Responsive** as *Player Width* and when needed you can upload a poster image which will be shown before the stream goes live, then click *Next*
12. Set *Hosted Page* to **NO**
13. Review your settings, then click *Finish*
14. Write down the Primary Server url and the Stream Name, which is shown on the next page
15. In Vahana, go to *Configuration > Outputs > Add a new output > RTMP Stream > Next*
16. Fill in the *Primary Server* url from Wowza in the **Stream URL** field in Vahana and then add a "/" and then the *Stream Name* to the end of the url, e.g.
<rtmp://3d0d18.entripoint.cloud.wowza.com/app-a4be/d09f1e17>
17. Change **GOP** to 60, click *Enable audio* and select AAC as Audio codec and 128 as bitrate
18. Now click the *Save icon* and then the *Checkmark*
19. Go to Wowza and click *Start Stream* (takes about 60 seconds to get started)
20. In Vahana, go to *Configuration > Outputs > RTMP Stream* and switch it from OFF to **ON**

C'est tout! Grab a beer and enjoy your 360 live stream.