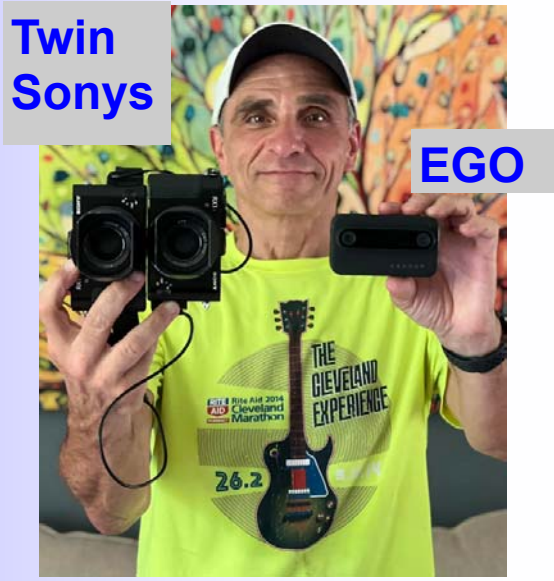
QooCam EGO

What Is It & Should You Get One?



By George Themelis

QooCam EGO

- **A new stereo camera made by a Chinese company (Kandao)** https://www.kandaovr.com/qoocam-ego/
- **Two lenses, 65mm apart**
- **Fixed f-stop (f1.8) and Manual Focus**
- **Compact & durable**
- **Records on micro SD Card**
  3D pictures (JPG 2x4000x6000)
  3D Video (MP4 2x1920x1080)
- **Comes with a 3D viewer**
- **Kickstarter first, now $369**

EGO Ergonomics & Use

- **Compact & lightweight**
- **Shock/drop & water proof**
- **Buttons hard to press**
- **Has a touch screen**
- **Boot time delay ~ 20s**
- **Poor battery performance**

Settings via Touch Screen

Note: Setting can change in future firmware updates

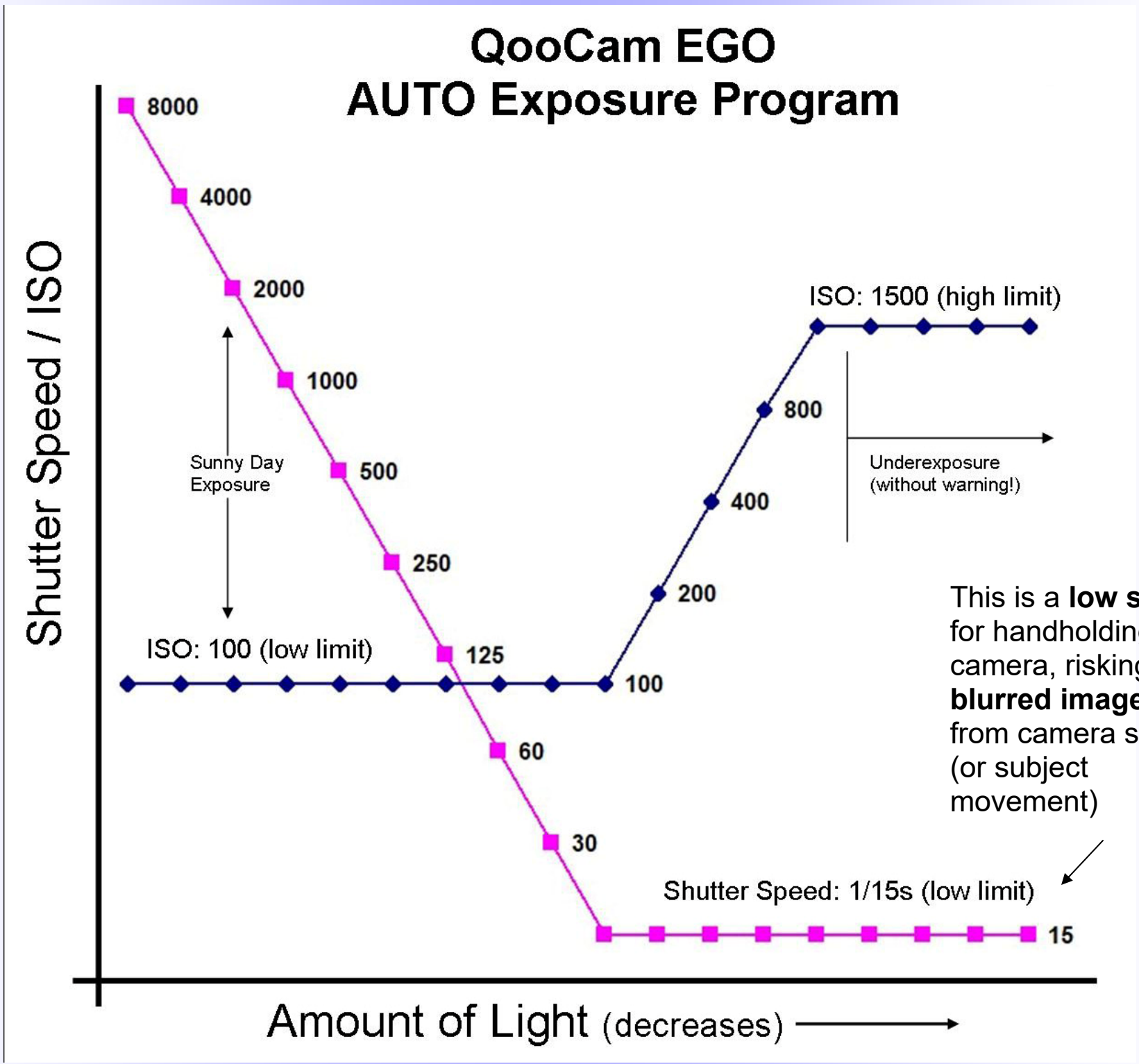
Exposure Control

Three factors control exposure:

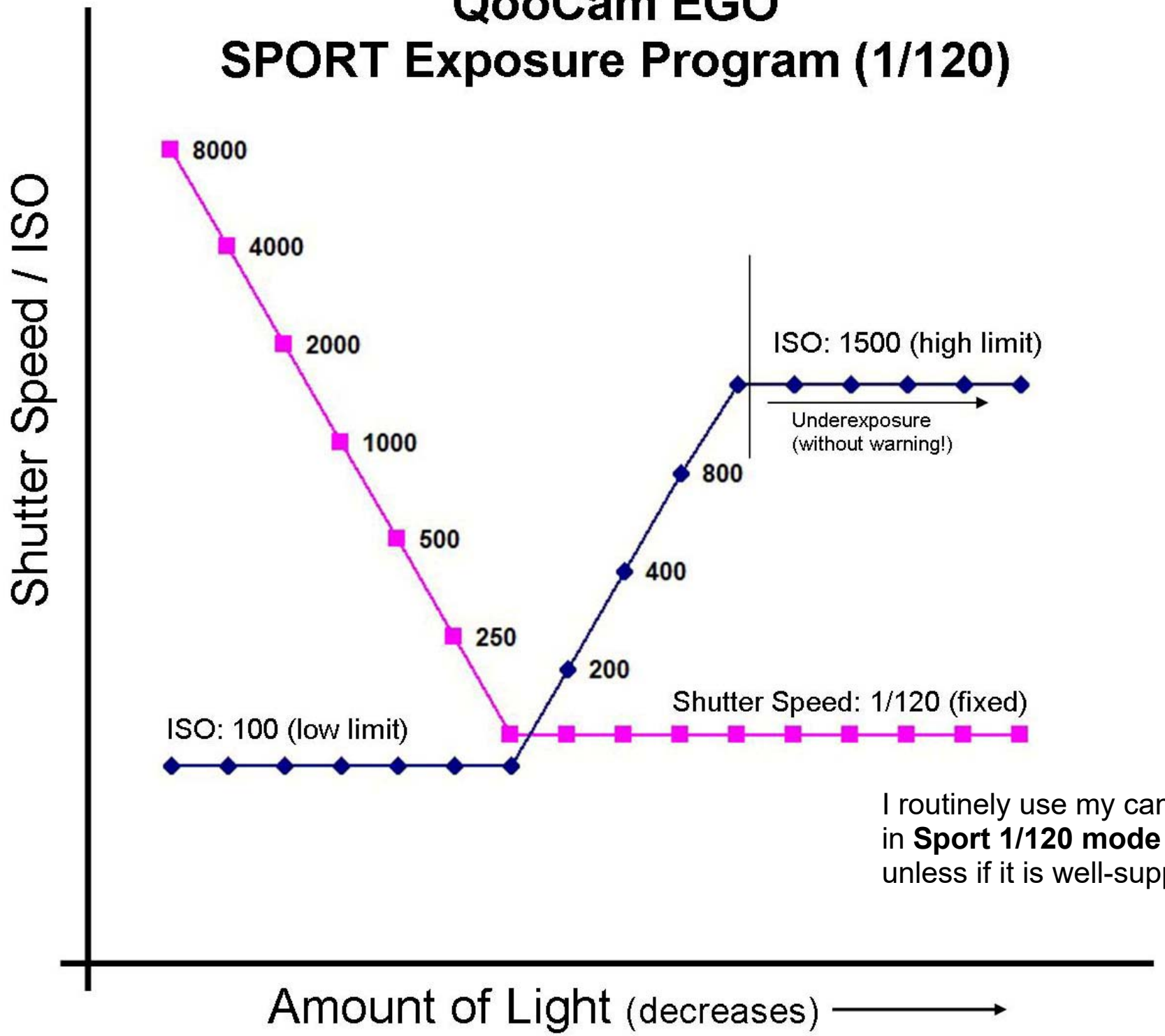
- **F-stop** (fixed here at f1.8)
- **Shutter Speed**
- **ISO**

No manual control—two exposure modes instead:

- **AUTO mode** (sets both shutter speed & ISO)
- **SPORT Mode** (allows user to set a minimum shutter speed)

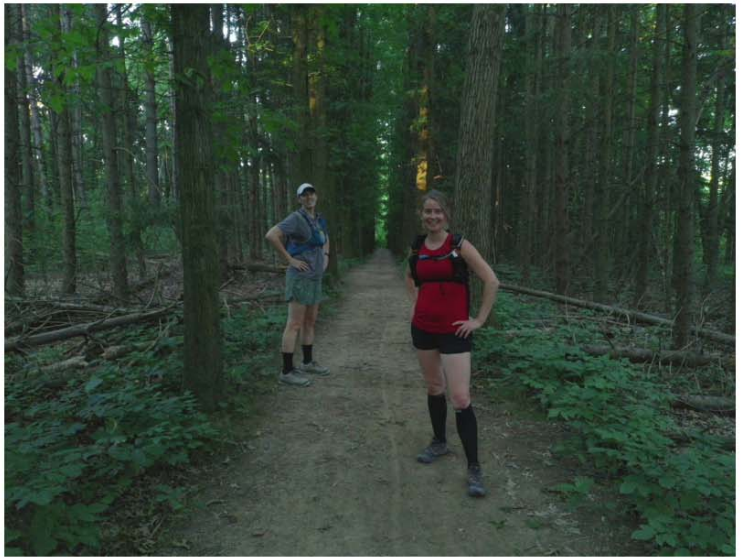

QooCam EGO
AUTO Exposure Program
Shutter Speed / ISO
8000
4000
2000
1000
500
250
125
100
60
30
15
800
400
200
ISO: 1500 (high limit)
ISO: 100 (low limit)
Sunny Day
Exposure
Underexposure
(without warning!)
Shutter Speed: 1/15s (low limit)
Amount of Light (decreases)
This is a low speed for handholding this camera, risking blurred images from camera shake (or subject movement)

QooCam EGO
SPORT Exposure Program (1/120)



I routinely use my camera
in **Sport 1/120 mode**
unless if it is well-supported

- 1/15s slowest shutter speed = **long exposures not possible**
- **Camera will underexpose without warning**



Manual Focus

Focus Setting	Distance (l)		Base Ratio B/l
	m	Range	
1	4	2-INF	1/60
2	2	1.3-4.6	1/30
3	1	0.85-1.6	1/15
4	0.5	0.45-0.60	1/8
5	0.4	0.35-0.45	1/6
6	0.32	0.30-0.35	1/5

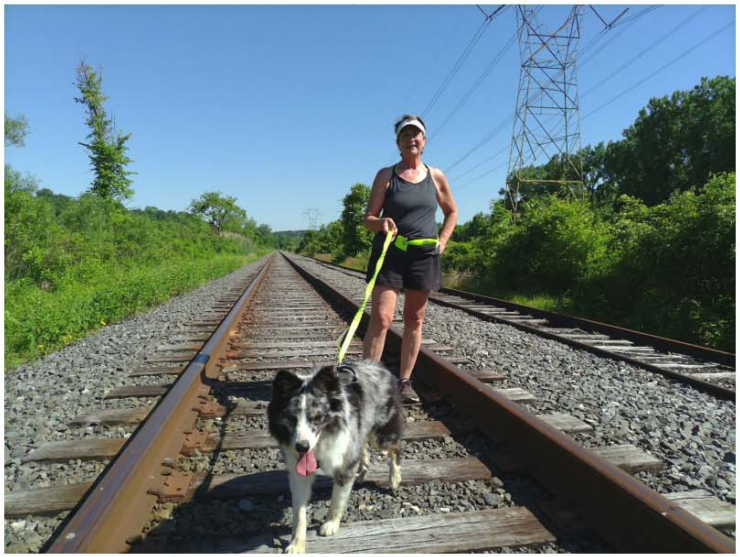
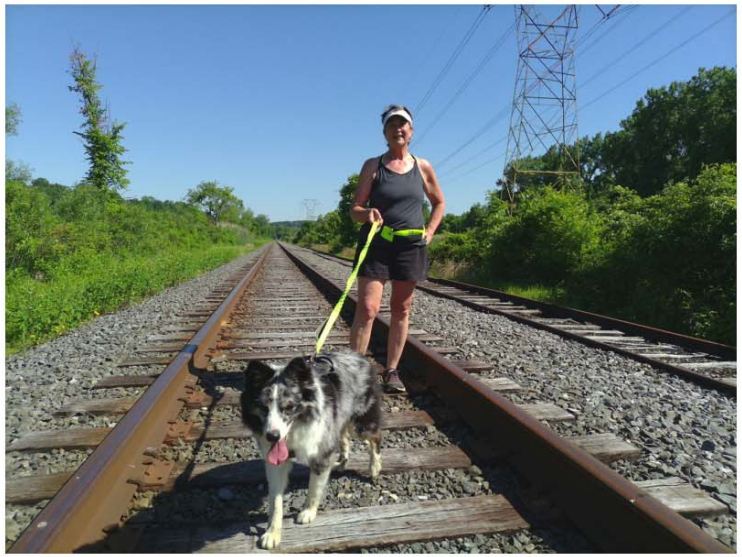
- The camera **does not have autofocus** but offers **6 different focus settings**
- These can be changed by touching the screen or **pressing the side buttons**
- **I routinely use #1 or #2 and don't change focus from shot to shot**

Image Quality & Performance

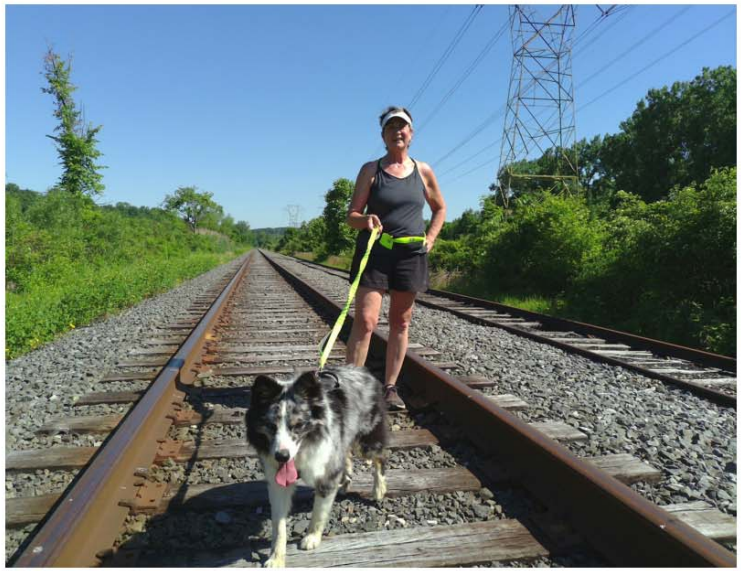
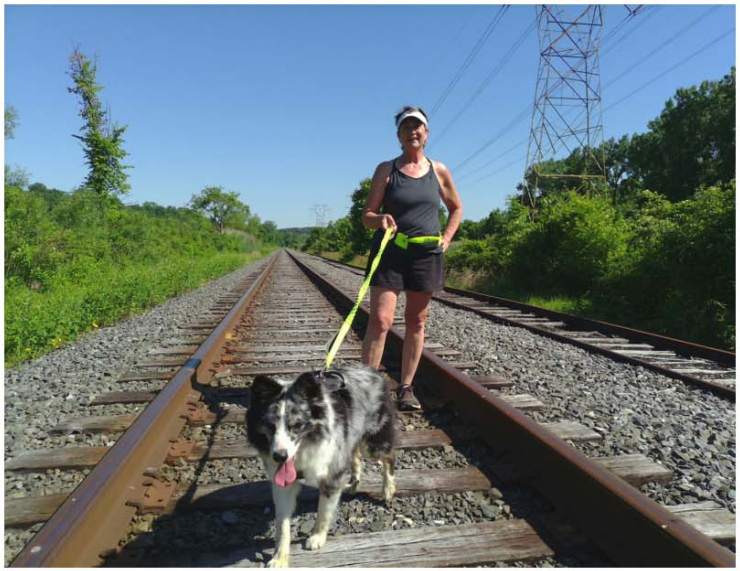
- **Good quality for sensor size**
- **Advantage in sports photography**
- **Advantage in indoor shots**
  - **Wide angle** (24mm vs. 35mm)
  - **Normal stereo base** (65mm vs. 75mm)
  - **SPORT mode exposure 1/120 plus no hunting for focus guarantees good indoor shots**
- **Good for documentation shots**
- **Alignment & Unique Issues**

Issue: Alignment

As recorded: 1) **Vertical misalignment** ~50 pixels, 2) **No stereo window** (set at infinity).
(Note: Vinny's paws are entirely in the picture, judging from the R image that I saw on the screen)

After alignment with SPM: Perfect alignment and good stereo window placement, but Vinny's paws are now cut off the frame)

Issue: Up/Down Shots

To record this picture I put the camera on the ground, on timer, gathered my running friends around, and fired the shutter. I was disappointed to find out that **the picture was out of focus**, even though I focused correctly.

When pointing the camera up or down, the lens moves a bit. It only takes a very small lens movement to change the focus.

To compensate for this movement, you must adjust the focus as follows:

- **When pointing the camera up, focus close**
- **When pointing the camera down, focus far**

Remember to change the focus for the next shot. If you feel uncomfortable, use the viewer as a viewfinder to see the correct focus.

Other Positive EGO Features

- **Small company, responsive to user feedback**
- **Features are added or improvements are made via firmware updates**
- **Smartphone App** (you can change camera settings or control camera, fire shutter, etc., using your phone)
- **Picture/Video Sharing via WiFi** (You can upload photos or videos onto the company's server. Each picture/video gets a code. Anyone with this code can download your picture/video into their cameras.)

PS. I am mostly interested in still 3D Photography and have no experience with 3D Video, app use, or content sharing with this camera. Google for more information on these features.

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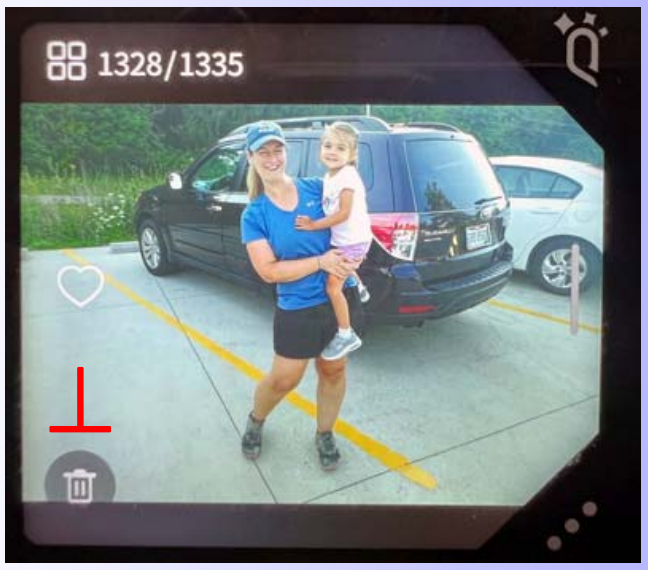
3D Viewer

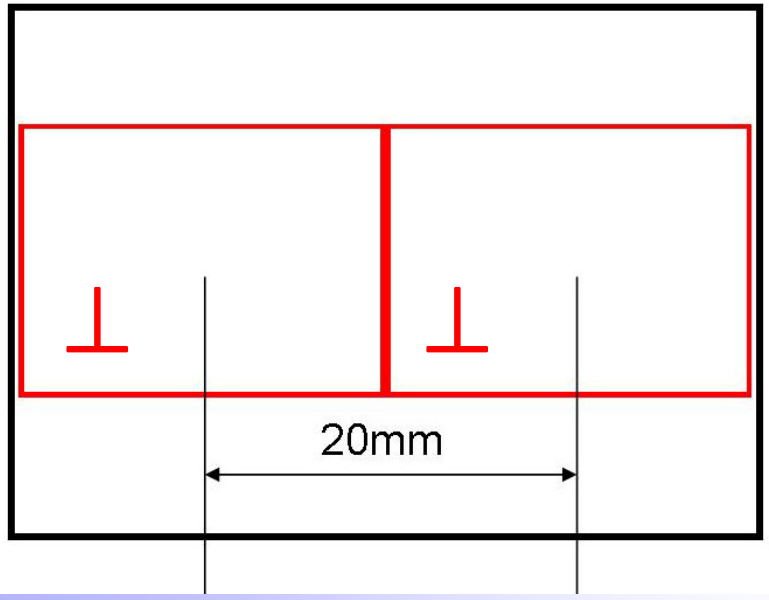
- Viewer attaches **magnetically**
- W/out viewer you see the **R picture**
- W/viewer attached, camera switches to **unique 3D format** (Tri-Delta/Prism format - viewer uses mirrors to bring this format to the eyes in the correct orientation)
- Can view 3D pictures from **any camera** (if they are properly formatted)
- Can be used as a **viewfinder** when recording (but it is a bit awkward since you are facing at a different direction than the camera)

3D Viewer

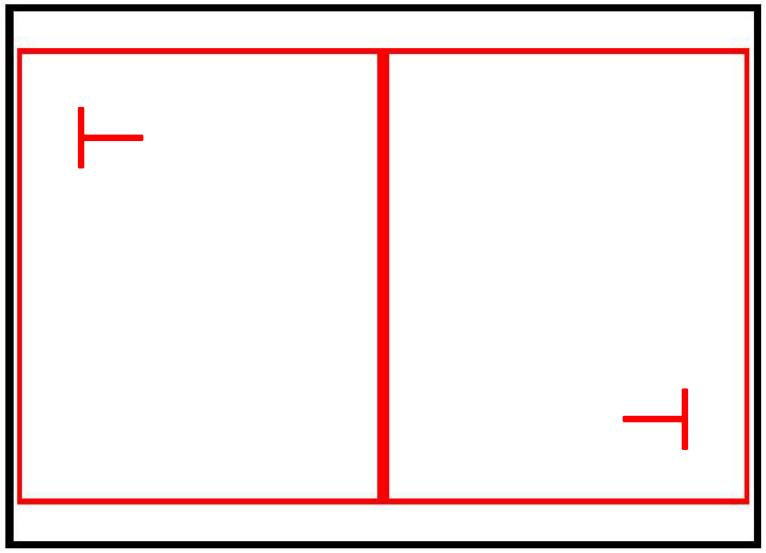


- 11 element aspherical lenses
- Mirrors w/high transmittion correction
- 7H Hardness Protective Glass

Parallel Design



Current Design



QooCam EGO

Why I keep & use mine

- **Compact** & **lightweight**, easy to **carry everywhere**
- Advantages when I go **running / play sports**
- My only 3D camera that **can be used near water**
- Good for **indoor** & **documentation** shots
- Biggest annoyance: **Delayed start**
  Followed by: Battery performance & up/down focus issues
- **The Future**: I hope that the **company continues to support the system** and maybe **produces a better camera**
- To learn more, google for reviews or join this facebook user's group: https://www.facebook.com/groups/614227793126608