HOW TO EXPOSE V-LOG ON THE PANASONIC GH5: THE WOLFCROW SYSTEM

By Sareesh Sudhakaran | wolfcrow.com

This is a supplement to the video I made on exposing V-Log correctly on the Panasonic GH5. You can find the videos here:

YouTube: https://www.youtube.com/watch?v=rsOLAdVccEk
Vimeo: https://vimeo.com/218932709

Warning: *Everything provided in this supplement is for information only and is not intended to be accurate or reliable. Please conduct your own tests before shooting.*

The Exposure Bubble

Every camera has a range of settings within which you can expect the best image quality. If you step out of these boundaries the image begins to deteriorate. Some of this can be mitigated in post production, but at the cost of time and money. This range of settings is what I call the "exposure bubble".

The Panasonic GH5 has its own bubble, and here they are for your quick reference.

ISO

For maximum dynamic range, you need to stick to ISO 400. Here are tests I've made with the camera (mind you, they are not meant to be scientifically precise, just generally useful):

Recommended ISOs							
At ISO 400				**At ISO 800**			
Shutter	**IRE**	**Stops**	**Difference**	**Shutter**	**IRE**	**Stops**	**Difference**
8000	7	-7	n/a	8000	7	-6.66	n/a
4000	8	-6	1	4000	8	-6	1
2000	10	-5	2	2000	10	-5	2
1000	12	-4	2	1000	12	-4	2
500	18	-3	6	500	18	-3	6
250	25	-2	7	250	25	-2	7
125	33	-1	8	125	33	-1	8
60	42	0	9	60	42	0	9
30	49	1	7	30	49	1	7
15	57	2	8	15	57	2	8
8	65	3	8	8	65	3	8
4	73	4	8	4	73	4	8
2	80	5	7	2	80	4.66	7
			12 stops	*wolfcrow.com*			**11.32 stops**
Acceptable in a pinch				**Not recommended**			
At ISO 1600				**At ISO 3200**			
Shutter	**IRE**	**Stops**	**Difference**	**Shutter**	**IRE**	**Stops**	**Difference**
8000	7	-6.3	n/a	8000	7	-6	n/a
4000	8	-6	1	4000	8	-6	1
2000	10	-5	2	2000	10	-5	2
1000	12	-4	2	1000	12	-4	2
500	18	-3	6	500	18	-3	6
250	25	-2	7	250	25	-2	7
125	33	-1	8	125	33	-1	8
60	42	0	9	60	42	0	9
30	49	1	7	30	49	1	7
15	57	2	8	15	57	2	8
8	65	3	8	8	65	3	8
4	73	4	8	4	73	4	8
2	80	4.66	7	2	80	4.33	7
			10.96 stops				**10.33 stops**
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Try to stick to ISO 400 and 800, and never shoot 3200 or higher. There is too much noise, and a color shift at those ISOs. Furthermore, you will lose dynamic range as well, so what's the point of shooting V-log then?
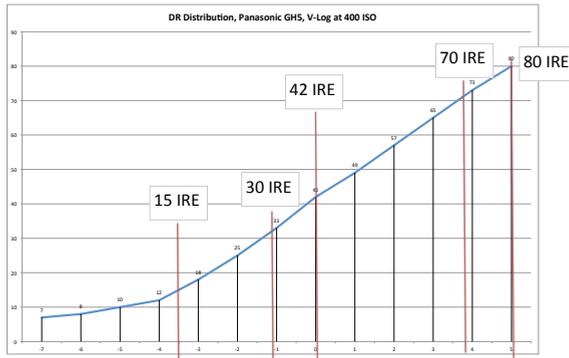
The standard exposure settings for V-Log

The goal of V-Log is to get the maximum dynamic range out of the camera, but with the assumption that you will color grade the footage later in post. Panasonic gives us these values:

- 0 or black: 7.3 IRE
- 18% middle grey: 42 IRE
- 90% white (Studio swing): 61 IRE
- 100% white: 81 IRE

The five important IRE points for exposure

Here's the chart from the video:

The key parts of the Wolfcrow system are:

1. In the Photo Style in camera, set Noise Reduction (NR) to its lowest setting, and Sharpness to its lowest setting. There are no other settings to change in V-Log.

2. Custom White Balance your scene. This is important to keep colors constant later for grading. I have a video of how to do this well on the YouTube channel.

3. Keep everything above 15 IRE. This means your entire waveform should be above 15 IRE at all times, regardless of the scene in front of you.

4. Keep important information above 30 IRE. This is everything except skin tones.

5. Keep skin tones between 40 to 70 IRE. If you have multiple skin tones in the same shot you need to negotiate a way to get everything to fall in
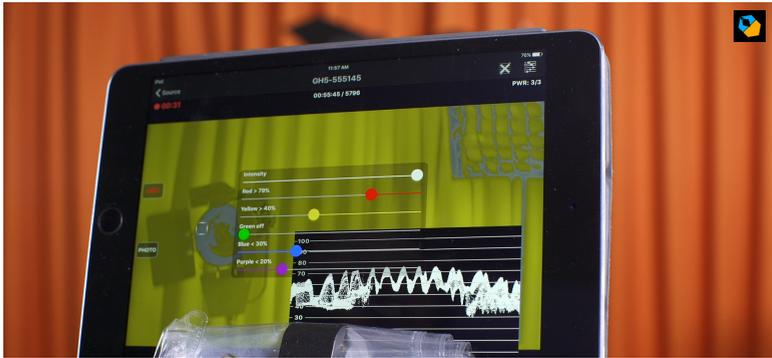
this range. This means you might have to light the scene. If you can't, something will suffer.

6. Use a false color tool or waveform to get this done. If you don't have a customizable false color tool a waveform is better and less confusing. However, nothing beats a customizable false color tool like the app I've shown in the video.

When lit correctly, your scene will look something like this:

Notice where the IRE levels lie, and how the false color behaves. My settings for the customizable false color tool are:

I hope you've found this supplement useful. To help me create more videos like this please ask others to download it from the link you got it from.

Happy shooting!