
THE ULTIMATE DIY GUIDE ON HOW TO ACHIEVE THE ANAMORPHIC LOOK ON THE CHEAP!
- LENS FLARES!
- OVAL BOKEH!
- DISTORTION!
- ASPECT RATIO!
ANAMORFAKE IT UNTIL YOU MAKE IT!
BY TITO FERRADANS

I did not invent the anamorfake method/process. I did come up with the name though and have pushed for it more than anyone.

The first time I saw an anamorfake lens was on Amir Safari's "Is that thing anamorphic?" video, way before anamorphic became mainstream and anamorfakes were sold on eBay. Amir had modified a Helios 44M and posted the results to Vimeo. Between October of 2012 and June of 2013 we exchanged messages and Amir pointed me to some of the lenses in this guide as well as taught me the steps to open them up.

I was living in Brazil at the time and could not find a place to get laser cuts done. Amir sent me a few discs all the way from Austria which allowed me to get started. He is one of the biggest influences in my DIY anamorphic/anamorfake journey, and I dedicate this guide to him.

Thank you!

To Amir Safari.

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01. INTRODUCTION

The anamorphic format has a lot of ups and downs and if you are reading this guide you have already done some research on the subject. One of the biggest barriers for entering the anamorphic world and start shooting is the price of admission. Due to low availability and high demand many anamorphic adapters now cost well over $1000, which brings up the question: "are they really worth it?".

If you are a hardcore tinkerer, if you love taking expensive things apart and fiddling with their insides, sometimes succeeding sometimes failing; or if you are more focused on the learning process than the resulting images for a few

The vintage Isco-Göttingen anamorphic family:
Iscomorphot 8/1.5x - $750, Isco Widescreen 2000 MC - $1300, Iscorama pre-36 - $3500, and Iscorama 54 - $4000.

weeks or months - and if you have money to spare -, shooting with anamorphic adapters is for you. If you are not passionate about any (or all) of these things, there are different paths to choose from and, most importantly, they all lead to the anamorphic look.

The first path is an easy one: rent proper anamorphic glass whenever you have a project that matches the look. There are plenty of options, from vintage LOMOs, to SLR Magic primes, to Atlas' Orion series, P+S Technik and all the way up to Hawk, Zeiss, Cooke and Panavision. These are all-in-one units that do not display all the quirks of shooting with adapters. They have good minimum focus, standard mounts, regular focus and aperture rings, no play on the mount or in the middle of the lens, and they output excellent images. They are too expensive to own though, so you will be renting every time and that can still run pricy.

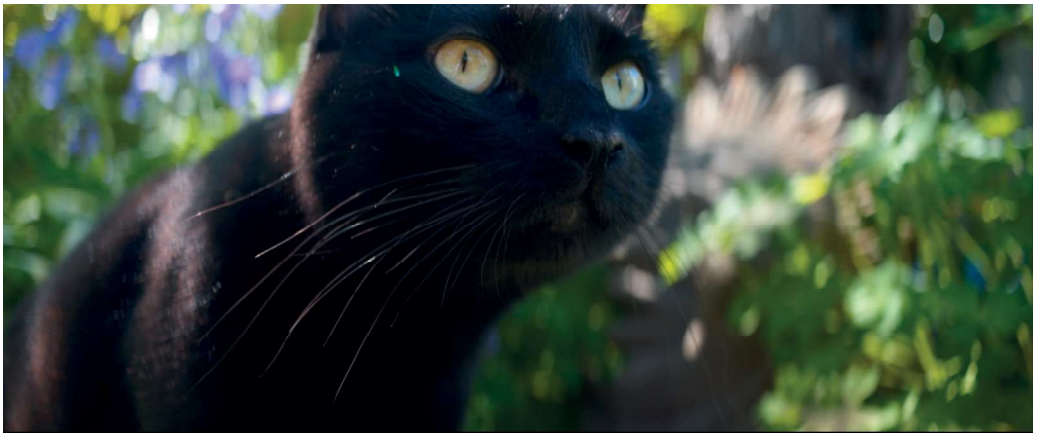
The second path involves some tinkering - on a lighter level - and it will give you much faster results. It is like warming up to shooting with adapters. Going down this path does not require you to change your shooting style to accomodate lenses' limitations. As a matter of fact, you might not even have to change your regular lenses! This is anamorfaking: a combination of tweaks to spherical lenses and post-processing that aims to achieve a convincing anamorphic look.

Frame grabs from Train Station, by Amir Safari. Full anamorfake set.

02. WHAT IS ANAMORFAKE?

I have been working on anamorfake projects and tutorials for more than five years - check out this playlist - and, when it comes to the resulting images, most of the audience is unable to tell the difference. Depending on the case, even the experts will have a hard time telling them apart.

I call this process **anamorfake** because it delivers some of the most pronounced features of the anamorphic look but it does not involve anamorphic glass, hence "faking it". Two things that scream anamorphic on the screen are streak flares and oval bokeh. Anamorfaking consists in forcing these traits on spherical lenses through light modification.



Contax Zeiss 28mm f/2.8 @ f/4 with anamorfake mod on Sony a7s II

In short: we are going to add an oval cutout at the aperture mechanism of spherical lenses to shape bokeh and out-of-focus areas. We are also adding a fishing line to create the streak flares from strong light sources. In this guide I will go over the process of opening multiple lenses, provide templates for the oval inserts so you can get them cut and explain how to make custom cutouts for lenses not covered in this book. I also expand on the streak flares, how to control them and optimal scenarios, as well as a little bit of post-production.

The first step is to cover what are the limitations of anamorfaking. I am a strong believer that you need to know the bad before you know the good. If you are unable to work with these limitations, it is not even worth looking at the

amazing things anamorfakes are capable of rendering. Then we will move on to the good stuff: what are the advantages of anamorfakes over anamorphic adapters - there are several - and how to use them effectively.

If you are absolutely not into tinkering, there is a chapter for ready-to-use products on the market and brief reviews about them, like the Cinemorph filter from Vid-Atlantic, Richard Gale's optics (former DogSchidtOptiks), IronGlass, Motion Six and some other independent manufacturers.

From there we have a chapter on how to design oval inserts for any lens you are able to open besides the ones I am explaining here, then streak flares customization. Lastly we move to the tutorials themselves, covering how to modify six famous (and cheap) Soviet M42 lenses, a full set of six Rokinon/ Samyang Cine primes and a budget set of five Contax Zeiss lenses, with useful advice from Ron Sim at **SIMMOD Lens**.

The last chapter is about post-production, getting the right aspect ratio, how to add a little bit of distortion to your shots, a hardcore method for oval bokeh and digital flares too.

The additional files that come with this guide include oval cutout templates for different apertures and stretch factors for all the lenses shown here. I also included a few templates for post and masks for different aspect ratios that can be easily imported into any editing software. Just for fun I added some tutorials, samples and other maker files on top. You know, a production value boost.

ARE YOU READY?

Helios 44-2 58mm f/2 @ f/2 with anamorfake mod and amber tint on Sony a7s II - Amber Helios Test Shoot

03. THE WORST PARTS OF FAKING IT

Let's start with the downsides of anamorfaking. Some of these things are just me being picky, others are downsides when compared to shooting anamorphic, and others are downsides when compared to shooting in general.

Shooting with anamorphic glass widens your field of view due to the horizontal compression. Anamorfaking, however, will not give you any extra field of view. If you are using a 50mm, you will still get the field of view of a 50mm: there is no squeeze.

This is a bit of misconception that happens every once in a while. I have seen folks believe that because the lens has an oval shape inside it has been turned into anamorphic and the footage is going to be squeezed, field of view extended and so on. That does not happen. At all. No gain in field of view, but no loss either.

Since there is no squeeze, that means that your shooting aspect ratio is your base aspect ratio for post. If you are shooting 16:9 (most of us are), you will have to crop or mask parts of the frame in order to output your final product as 2.4:1 or any other wide aspect ratio (this process is covered in **Chapter 10**). Ultimately this means that you are losing some resolution by anamorfaking (roughly 25% of your total pixels when going from 16:9 to 2.4:1).

The striped areas represent parts of the image that would be discarded from 16:9 to 2.4:1 crop. Roughly 25%.

By using the oval inserts as new aperture shapes you will give up the ability to stop down the lens to control exposure. This is a little confusing so bear with me: by following the tutorials in this guide you are still going to be able to stop down the lenses, but when doing so you will lose the oval shaped bokeh. Because of this limitation you will have to think thoroughly what is your most used aperture and prepare to be stuck with it. Yes, you can always change the disc inside each lens but that can be a time consuming and precise process not fit to be done on set.

Having a locked aperture will require you to use good neutral density (ND) filters to control exposure without changing ISO and/or shutter speed. SIMMOD Lens offers excellent variable NDs if you want to check that out.

The streak filter also introduces some artifacts. The most noticeable of them is a vertical line cutting through the middle of your bokeh. This is something very few people notice when watching a finished film, but I promised I was going to tell you all about the negative aspects of anamorfaking before we got to the good parts.

Canon 85mm f/1.8 @ f/2 + Cinemorph 58mm from Vid-Atlantic on Canon EOS 5D MkIII

A brief review of the downsides: no extra field of view, cropping is required to achieve widescreen aspect ratios, oval bokeh requires fixed aperture plus ND filters, and streak flares introduce a line through bokeh. It is not that bad, right? This list is twice as long when shooting with anamorphic adapters, trust me.

04. COULD I GET SOME GOOD NEWS?

Now let's have a look at the advantages of anamorfaking over real anamorphic adapters. The advantages over spherical are pretty obvious: a neat look that feels way more expensive than it actually costs.

Low cost is one of the key points for anamorfakes. All you need is the lens you want to modify, an oval aperture disc (easy to make and cheap to buy) and tools that are easily accessible. No "months of stalking eBay for the perfect adapter". No need to pay $500+ for an entry level adapter. Just pick your spherical lens and you are good to go. If you start with $25 lenses you can build an entire set for a fraction of the price of an anamorphic adapter.

Simplicity is another good point. When using an anamorfake lens all you need to do is attach it to your camera and press record. You avoid all the step-rings, clamps, rails and lens supports that most anamorphic adapters require. You also avoid the extra weight!

Focusing is one of anamorphic adapters' worst quirks. If you buy a cheap adapter you are doomed to double focusing - setting both your taking lens and anamorphic adapter at the same distance to produce a sharp image - or buying a single focus solution - are you ready to fork out another $500+ to buy rack-focusing capabilities? Focusing with anamorfakes is the same as focusing any standard lens. If you modify an auto-focus lens you can even have your camera do all the work for you.

Anamorfake Canon EF 50mm f/1.4 USM - autofocus good and ready to go!

Besides all of these amazing feats, every anamorfake you make teaches you a little more about the mechanics of lenses, what parts usually connect together, how the glass is held in place and how to come up with creative solutions for unexpected problems. It also makes you appreciate your gear a lot more: you see the amount of detail that goes into building even a simple lens and you will treat it with proper respect.

Another thing about anamorfaking: never tell anyone you are faking it. Most people will never figure out how your footage looks so special. Plus, if you start using anamorphic adapters you can always add them on top of your anamorfakes for even more pronounced oval bokeh!

Three disassembled USSR lenses in the process of anamorfaking. You will get there too!