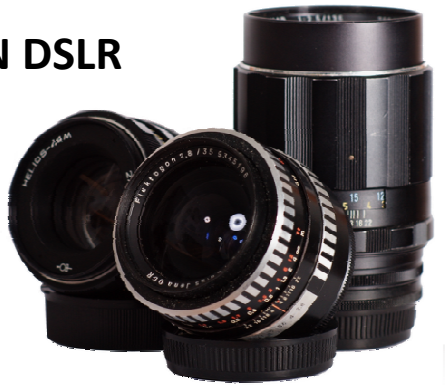
A GUIDE TO USE OLD MANUAL LENSES ON DSLR CAMERAS



And just so you know from the very start: Not all old, manual lenses are cheap to buy. Quality and prestige really has something to say here. If you are looking for some of the old stars on the market you have to prepare yourself for prices well above $300. But you might strike good luck and find stars for much less and more likely, you might find very good lenses that just haven't got public appeal. Some of my favorite lenses didn't cost more than $40.

Using old lenses on your DSLR might not only turn out to be very cost effective it will most likely also turn out to be very rewarding.

I always have at least one old manual lens in my back sack when I go for a photo shoot. Normally I have two or three old lenses with me.

And we might as well get it clear from the start: It not because the old lenses as a general rule are better than modern lenses. It is because of the way they make me fell. I love to do all the choices about aperture, shutter speed and place focus where I want it etc. My modern lenses would for sure give me at least the same quality; but I am sad to say: None of them give me the same feeling.

Today my collection contains of more than 30 pieces. Some of them are just wonderful; some of them are up for sale. I have old lenses ranging from 24mm to 600mm; from f/1.4 to f/8 as their best. And my lenses come from a wide range of brands. I have Asahi Takumar, Carl Zeiss, Helios, Jupiter, Pentacon, Revue, Sigma, Soligor, Tamron Adaptall and Zuiko.

This brief guide is for you, if you have an interest in the old lenses. It doesn't really matter if the interest comes from the love of old stuff, from the urge to get cheap lenses, from the admiration of properly build lenses, from the romantic dream of quality images in old style or something completely different. The interest just has to be there.

Content in headlines
The guide will cover a wide range of questions and tricks that I have faced and learned from during the years I have used old lenses.

Something about old lenses will give you an insight into the world of lenses and take you through some of the different elements in the old lenses.

Camera settings and Focusing will introduce you to the giving world of getting away from the camera setting Auto.

What to look (out) for when buying will give you some insight in the questions I have when looking for old lenses. I buy most of my lenses at eBay. But get inspiration at reviewssites like pentax forums, mflens etc.

Sample images is the showing off area for the old lenses. Here I will let them brag about their capabilities. You will find images to illustrate what you can get using the old lenses.

Something about old lenses

Old manual lenses, produced for analog film with their need for capabilities to catch light and produce details are very relevant for users of DSLR's and the new lines of small cameras without mirror but with interchangeable lenses. All you need is an adaptor, and eBay is flooded with adaptors.

An adaptor is needed because most of the makers of DSLR cameras have changed mounts during the transition from analog to digital photography.

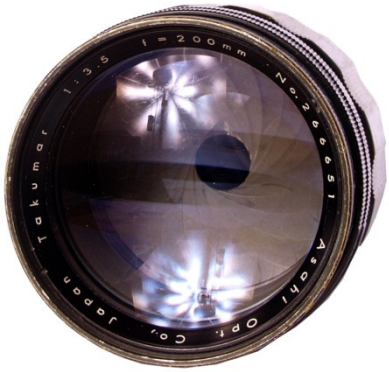
There are a number of old mounts. Most of the camera makers had their own mount (as they do today) and third party makers of lenses had either to comply with those mounts or have adaptors ready for the different camera mounts.

The key point is, however, it doesn't really matter what brand your DSLR is. You will be able to find adaptor rings to fit most of the old lenses anyhow.

I buy my adaptor rings on eBay. They are affordable and normally I don't have to wait long time for the packets.

Some of the adaptor rings have a small electronic device glued to them. This device enables your focus alarm in your camera to go off, when focus is reached. It doesn't give you autofocus. It just activates the camera "biip" when you manually find focus. And that is really very nice to have. Because when you use old manual lenses and you stop down the aperture, you will quickly find that the light in the viewfinder disappears thus making it hard to see properly.

NOTE: that if you have a Nikon DSLR you might have special problems using old lenses. Make sure that the adaptor ring will get the lens as far away from the moving mirror in your camera as needed. Nikon mirrors are closer to the lens than other DSLR brands. Most adaptor ring for Nikon does (of course) take that into account.



Since the old lenses have no automatic functions, you will find that the lens has not only a moving ring for focusing, but also a ring for setting the aperture. Looking into an old lens can really be a treat. Just look at the picture above: The 50 years old Asahi Takumar 200mm f/3.5 lens showing all the blades in the aperture. Note firstly the numbers of blades. Feel free to count them. And then note that the blades are rounded providing a perfect circle no matter what aperture is chosen. I find this very beautiful. And even with 50 years of hard work, the blades and the lens is still working perfectly.

The old manual lenses are normally is little more heavy than you are used to with modern lenses. Electronics and focus motors and so forth doesn't weigh as much as thick glass and metal housings. If your camera is small or very lightweight that might give you a nose heavy sensation. I do find that balance is worth considering when using old lenses.

Camera settings and focusing

You might have your camera in Auto when using an old lens that has manual aperture. You just have to remember that the aperture has to be changed manually by you. And you have to remember that even though you have the camera in Auto Focus (AF, it doesn't work. You have to turn the focus ring yourself. But if you use an adaptor ring with focus assist then leave the focus in AF. Then the camera will give you the "biip" when focus is reached.

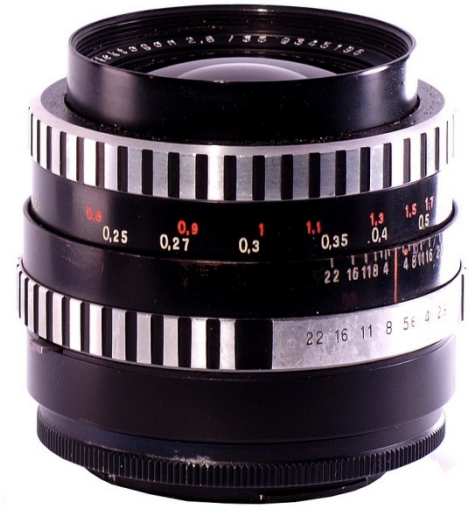
I normally have my camera in Aperture Priority (A) when I use old lenses. Then I tell the camera that I control the aperture and let the camera set the shutter time to match the present level of light.

But you can just as easily chose the fully manual mode (M) and set the shutter time yourself. The

camera will always provide you with indication of the light. Just hold a keen eye on the Exposure Value.

It is also possible to use old manual lenses with the camera in Shutter priority (S), even though it means that you would expect the camera to set the aperture. It can't of course since the aperture is manual. But you get to lock the shutter time as you want and just have to remember that the camera cannot react to changes in the light (adjusting aperture) on its own.

Finding focus when using old manual lenses might be a new challenge for you. Look at the beautiful Carl Zeiss 35mm f/2.8 to the right. The focus ring is the front ring with the pattern of black and shinny aluminum. The pattern is called "zebra". When the ring is turned, the elements (pieces of glass) inside the lens is moved back and forward is order to change the point of focus.



As mentioned earlier the process of focusing gets harder and harder the more you close the aperture – stop it down. Fully stopped down to f/22 the viewfinder in your camera is almost completely black (unless you are looking directly into some very bright lights). So what you often will do is setting the aperture very high (e.g. f/2.8) in order to have lots of light into the viewfinder, then focusing and *then* turning the aperture ring into the wanted position. This takes time and is not very easy to do standing somewhere with the camera.

Some old lenses are equipped with two rings for the aperture. The normal ring, which is set to the desired aperture and an extra ring (with no steps) that allow you to open the aperture to max. from your chosen setting. This feature is often called "preset". When you then focus you have all the light possible in the viewfinder, and when you have found focus, you just turn the preset ring in the opposite direction. The aperture then closes. Not to the minimum value of the lens, but to the aperture you chose to begin with.

Once you learn to use that extra ring, it is actually a very nice way of getting the light into the viewfinder while focusing.

Buying old lenses

Buying old lenses does of course carry some risks. Especially when you make business with people you don't know and even more when you make business with people and businesses on the internet. Nevertheless, I buy most of my old lenses on the internet and mostly on eBay.

I do of course follow the normal paths of caution when doing business on eBay: checking the sellers feedback, making sure that the seller accept Paypal etc.

But the lens itself does give stuff to be concerned about too.

Fungus: Fungus is actually a common sight in old lenses. Fungus is, as the name implies, small fungus's growing inside the lens between the elements. If (or when) the fungus grows big enough, it will influence the quality of the images. Fungus can only be removed by taken the lens apart. I never buy lenses with fungus, and if I get a get one that has fungus, I complain and send it back or get my money back and throw the lens away.

Aperture blades: The blades that make out the aperture has to be dry and without any traces of oil. Oil inside a lens is not what you want. The movement of the blades has to be snappy and without any hesitation. There might some visible wear and tear on the blades. But that is only normal after many years of sliding along each other.

Scratches and coating: I do of course prefer to have lenses without scratches in the elements. But note that most scratches on the front element are 100% invisible in your images. The scratches have to be very big before they actually influence the image quality.

I look much more seriously as damages in the coating of the elements. Coating is added to the lenses to prevent flares and false light to influence the images. Missing or uneven coating might give some very strange effects. And this is just another very good reason to think twice before using anything other than just water to clean the front and back element of your lenses. Never use stuff meant for glasses; windows; cars or owns and so on.

Dents:
Of course I would like to have lenses without any dents. But sometimes there are dens in the housing of the lens. I don't buy lenses with dents in the housing itself. Not even if the seller make a guaranty about the image quality anyhow. My consideration is simple: Lens housing is actually a very resistant construction. The round shape provides maximum strength and if a hit on the lens has been able to make a dent, I will suspect that it might have caused one or more elements in the lens to have moved a little. Movement in the elements could easily give you little or no sharpness in your images or make it difficult or even impossible to find focus.

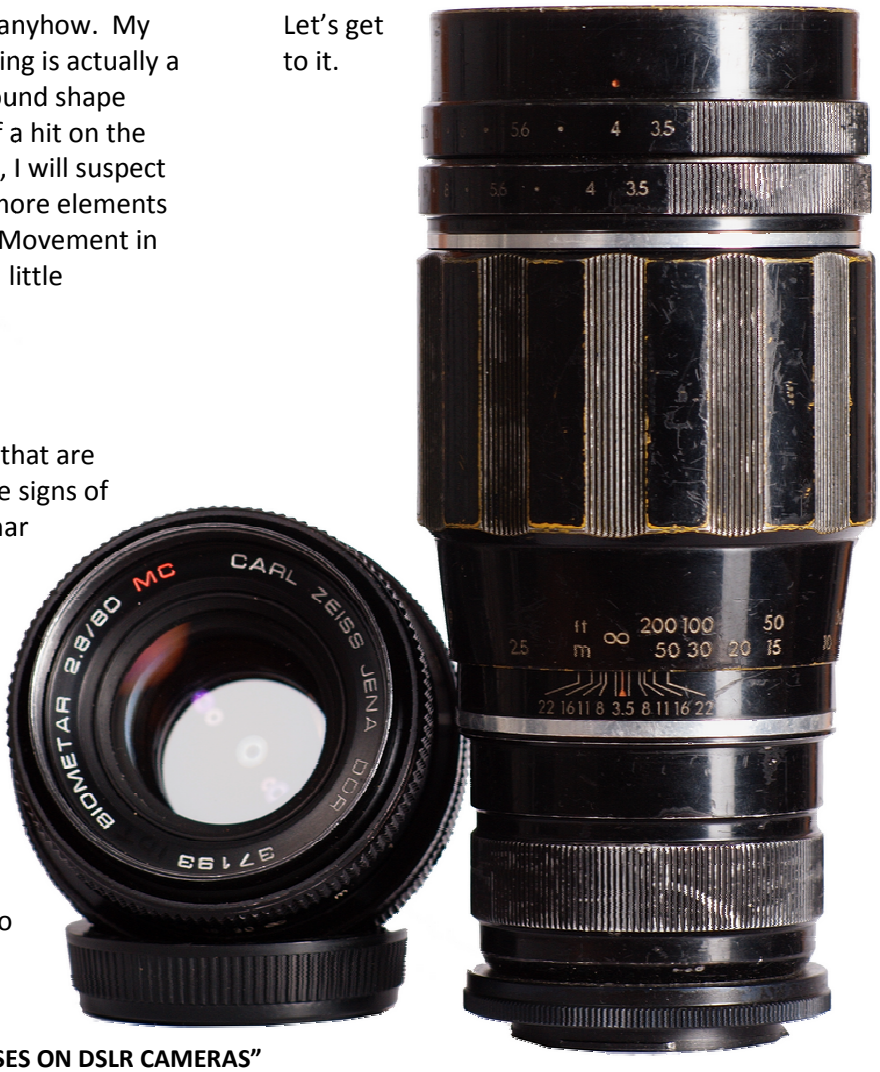
Wear and tear: Sometimes lenses that are offered for sale have to very visible signs of their use. Look at the Asahi Takumar 200mm f/3.5 to the right in the picture. There are clearly some visible sign of use. Scratches and chips of missing paint. But none of the damages are sign of heavy blows, drops or anything like that. It simply looks like the lens has been used a lot. And lenses that are used a lot, are most likely to be lenses that perform well. There is no reason to believe that a lens with poor performance will be used a lot, right? Wear and tear is not (necessarily) a warning sign. It might just as well be a sign of quality. And in the case of my Asahi Takumar 200mm it was. Just wait and see.

Samples from my back yard
The hardest job in writing this brief guide has really been to choose the lenses that I will bring samples from and to choose the sample images.

I really like a lot of my old lenses. But I have chosen between them and the following will be their time "15 seconds" even though I really hope that you will spend more than 15 seconds looking at the images.

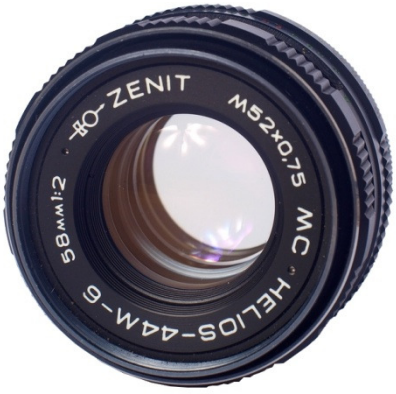
Forget about the motives and the scenes. They are not really important here. Only in the sense of giving you an idea of difficulty of the light and the amount of details the lens is coping with. The lenses are presented in order of focal length.

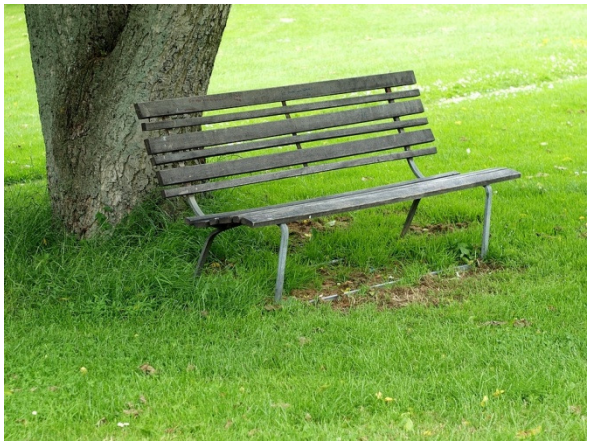
Let's get to it.

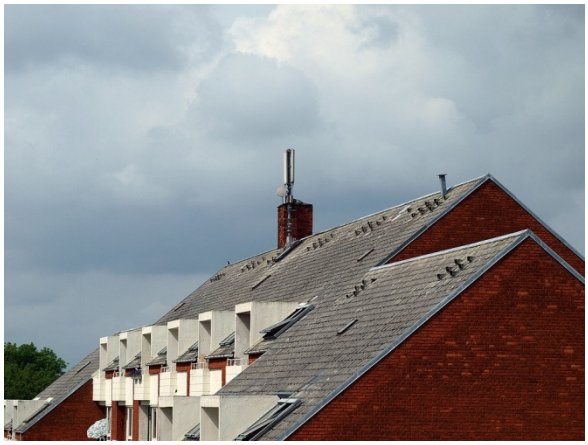


Carl zeiss 35mm f/2.8, M42

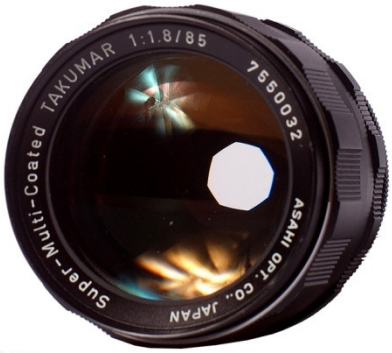
Helios 44M-6, 58mm f/2, M42



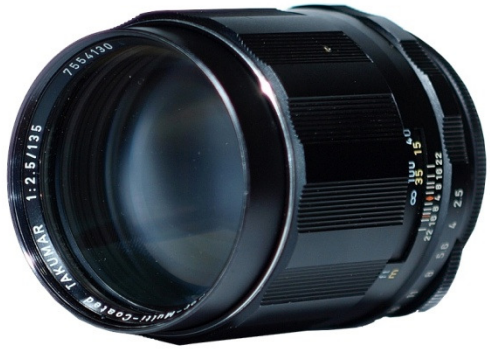


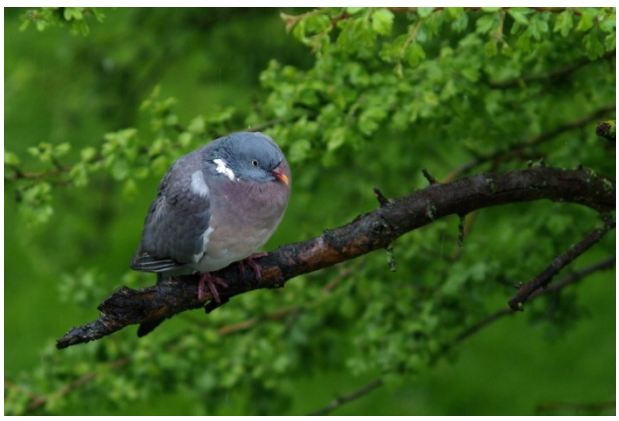


Takumar 85mm f/1.8, M42



Takumar 135mm f/2.5, M42





Takumar 200mm f/3.5, M42