

Vintage Lens Focusing

By George E. Norkus



Many photographers are able to get the latest and greatest totally automatic camera items. That's great. In my case I have learned to use much older less expensive lenses. Many of these were built before much automation was used and came with a common mounting of M42, (42 Metric). Many lenses came built to fit a certain brand. If you look around carefully, there may be an adapter to fit your camera. In my case, one such item is my 500mm f4.5 Pentax, (Takumar), lens, from the Asahi Optics Company of Japan. The other is my 300mm Pentacon f:4 made in the G.D.R. That lens was not meant to be used by other manufacturers at all. Then there is my 50mm f1.2 Pentax lens which only has automatic aperture.

Several of my lenses are vintage and do not have auto focusing. Some don't even have an auto aperture setting. It would be nice to get the latest lenses although I just can't afford them. With my aging eyesight, those with manual focusing often need assistance. This is where I think about either taking an approximate guess or using a rangefinder to dial in the distance.



1

The top circle is used to transmit the in-fared beam.
The center circle is used to look at the object.
The lower circle is used to receive the reflected infrared beam.



2

The eyepiece in the center.
The lower circle holds the battery.

Both the 500mm and the 300mm lenses come with the vintage M42 mount, where as my nifty 50 was made to directly fit on my cameras. For both of the lenses with the M42 mount, there are many low cost adapters already made to fit just about any other camera on the market. Both telephoto lenses originally came with a Nikon adapter. Since I own Pentax cameras, a simple adapter switch is all that was needed.

There are two type of rangefinders, one is a “Golf” rangefinder and the other is a “Hunting” or “Field” rangefinder. The golf rangefinders have a magnification of 2x to 4x to focus on short-to-medium distances objects of about 5 to 400 yards, (some more quality type go up to 1000 yards). Field or hunting rangefinders offer higher viewing magnification of 7x-8x, and have a longer, more powerful distance coverage up to 3000+ yards. This is not needed for focusing lenses so I highly recommend using a golf rangefinder which will properly cover closer objects.

Once you have a good golf rangefinder, go to something that has been measured out , like a football field at your nearby school and start to calibrate the finder to your lens. Depending on the lens, please remember if yards or feet are used. I'm hoping you have a marked and adjustable focusing dial on the lens. If not you'll need to have another type of indicator for the distance on the lens. Play it by ear.

The more professional the lens, the better the distance marks usually are. You'll find that some manufactures have very good markings no matter what kind of lens they offer. I'm sure the distance of the golf rangefinder is pretty accurate but your lens may not be. Check it several times just to be sure that both are calibrated reasonably close to each other. Now that both the rangefinder and your lens are calibrated to each other, you should have a really close starting point. Use the rangefinder for the initial distance then dial in your lens. Remember to convert the yards, feet, or meters to match each other.

You'll note that my rangefinder is Halo XL450. Halo brand is the company, (never heard of that company), the XL, (XL is a puzzle to me also), and the 450 represents that it measures up to 450 yards. Other brands use different markings. The price for this Golf rangefinder when I purchased it in 2018, was around \$40.00. I just looked up the price in February 2026 and it is around \$60 to \$100 dollars, Most of the other brands hover around \$300 to one thousand dollars which I believe is way overpriced! Get a low cost used model in that case. Even with the cost of the lens the price will save lots of cash overall compared to a brand new lens especially if you pick up several vintage lenses.