

El Cheapo SmartPhone Star Finder System

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How about a Star Finder system that requires minimal alignment, uses readily available parts, and costs less than \$10.00! Here it is AND it works.

There is a smartphone app for both iOS and Android called SKYVIEW. It uses the smartphone camera to map the sky and will use an arrow to direct the user to a designated astronomical target. It is available at the appropriate App store for less than \$5.00. I think it is well worth the money, even if you do not use it for the purpose outlined in this article. The documentation is quite good and self-explanatory and will not be repeated here.

If you have the app and a smartphone, you will need some way of attaching your smartphone to your telescope. David Fuller operates a great website called [EYES ON THE SKY](#). There is a menu on the homepage titled DIY IMPROVEMENTS. In that section is an article about making a “homebrew” [smartphone holder for astrophotography](#). I got the idea from David’s article and have made several with excellent results each time. You will need to make one of these and I shall not repeat David’s instructions here as I could not improve on them. The adapter is the epitome of simplicity and can easily be completed in less than 30 minutes.

I use the adapter to clamp the holder onto the finderscope of one of my telescopes. Pictures are included at the conclusion of this article.

If you’ve come this far; i.e., downloaded SKYVIEW, fashioned the adapter and attached it to your finderscope, you are ready for the final phase – alignment. The easiest way I’ve found is to line up Polaris in my finderscope and tweak the smartphone in its holder so that the smartphone display also targets Polaris. You are now “READY TO ROCK!” Using the SKVIEW app’s SEARCH feature, tell it what you want to find and follow the arrow to your target. It should be in your finderscope and your eyepiece – assuming you remembered to make sure your telescope and finderscope are properly aligned.

CONGRATULATIONS – you now have an electronic starfinder system for less than \$10.00.

