

# PVC Digital Slide Scanner

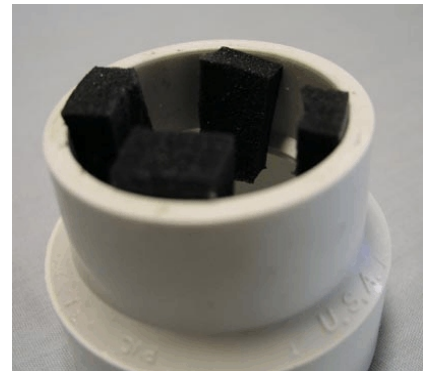
by Chuck Flanagan

When my mom decided to move from her house into an apartment, she downsized a lot and I inherited the family slide collection. Because my wife and I are full-timer RVers, I decided that I needed a way to downsize that collection into something more manageable for storage in our RV. Having some 7-10,000 of my own slides provided additional incentive. I decided that I needed to digitize them and save them on CD's. The question was, "How?"

I'd done some previous shopping and knew that the local camera shop sold a slide scanner. It sold for about \$700 and would copy one slide at a time. Then I saw a new model "all-in-one" HP unit that would hold 8 slides at a time...for about \$350. That was still a lot more than I was willing to pay. Then I remembered to "think digital".

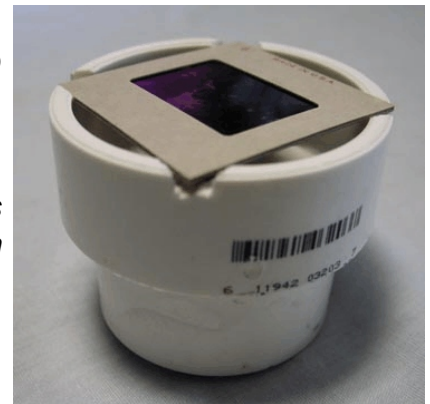
I've been teaching an intro to digital photography course for several years and in it I suggest that one of the uses of a digital camera is as a scanner. I've done this several times myself, copying a photograph or government form. This, however, would be a much bigger project.

I started by taking my camera on a visit to the local Home Depot. My plan was to find a PVC fitting that would slip over the lens and could hold a 35mm slide. I found the one shown here, for \$1.65 (plus tax). To ensure a snug fit over the lens, I inserted some tabs cut from foam weatherstripping.



I then used my wife's Dremel tool to cut four notches in the large end to hold the 35mm slide.

*Note: My camera has a "Super-macro" setting that allows me to focus down to 1.2 inches. Otherwise, I would have had to add a short extension tube (PVC pipe/paper roll, etc.) matched to the focal length of my camera.*

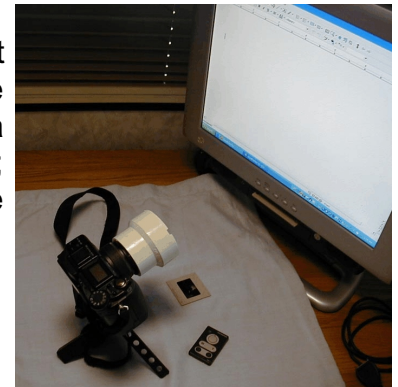


The actual slide copying process is fairly straightforward. I put the camera on a short tripod, then mount the PVC device to my camera. The camera settings I use are:

Resolution: Maximum “.jpg” (5MP)  
Focus: Super-macro, manual  
Exposure: Manual aperture  
Flash: Off  
Remote: On  
LCD viewfinder: On



The final requirement is to have a uniform white light source. I decided that a computer monitor showing a blank word processing screen would be almost perfect. So, I set the camera up facing the PC monitor; inserted a slide into the adapter; checked alignment and focus in the viewfinder; pointed the remote at the PC screen and pushed the button. The IR remote signal reflected off the PC screen and the camera went “click.”



After that, the process went very quickly and I was able to copy about 10-15 slides per minute

How does it work? I'll let you be the judge.



The picture on the left is the digital image I took of a ~50 year old slide. The picture on the right is a “PhotoShopped” copy of the first.

And in case you're wondering, I'm the kid behind the girl in the checked dress.