

## Xtend-a-Slide™ PLUS

A component of the Xtend-a-System(tm) family of products for Digital cameras

Made in U.S.A.  
by  
photosolve™  
4830 E 112<sup>th</sup> Street  
Tulsa, OK 74137

Email: [phil@photosolve.com](mailto:phil@photosolve.com)

See all the fine Xtend-a-System™ products at:

<http://www.photosolve.com>

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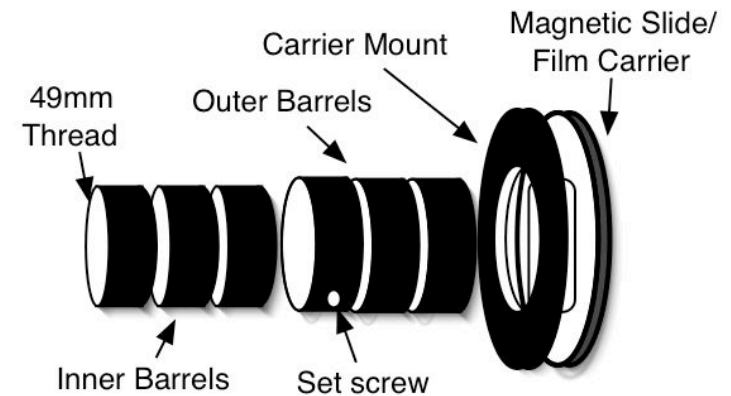
## Xtend-a-Slide™ PLUS

For use with most Digital Cameras  
**User Guide**

Congratulations on your purchase of the Xtend-a-Slide™ PLUS adapter. Xtend-a-Slide PLUS represents the next evolutionary step in slide copying and 35mm film copying, taking its basic design from the Xtend-a-Slide PRO.

### Description

The Xtend-a-Slide PLUS is a precision optical device designed specifically to allow the digital copying of 35mm slides and film. The major body parts are constructed of durable anodized aluminum and steel, which should provide years of useful service with camera. The units should be handled carefully, as damage can occur with rough handling or high temperatures.



Xtend-a-Slide Plus components

The Xtend-a-Slide consists of four components: the inner **Focusing Barrel Assembly**, which is comprised of three individual barrels, with 49mm threading, separable into three individual barrels; the steel **Carrier Mounting**

**Ring;** the **Outer Barrel Assembly**, also separable into three barrels, and the **Magnetic Slide/Film Carrier**, providing the mount for film or slide. The **Focusing Barrel** and the **Outer Barrel Assembly** are designed to slide smoothly together, providing approximately 1 inch to 5.5 inches of separation from the front of the camera lens (or close-up lenses) to the slide or film being copied. Once the proper distance has been determined, the nylon set screw holds the two barrels in place. The Slide/Film Carrier is a single sheet of diffusion plastic with sheet magnetic material that holds a single 35mm slide (included with the Xtend-a-Slide). The magnetic material adheres to the steel carrier mount and allows the carrier to be positioned correctly for copying. Optional carriers are available for 35mm film, QuickLoad Slides, Glass Mount Slides and Quickload Glass Mount Slides.

### Determining what you need to use the Xtend-a-Slide Plus

Each digital camera has different focusing capabilities that are dependent upon the primary lens optics. We've tested a number of different cameras with the Xtend-a-Slide, and you may find your camera listed on the compatibility page at [photosolve.com](http://photosolve.com) however, if not, you can use the following procedure (while not 100% conclusive) to help you determine the different components you may need for your camera.

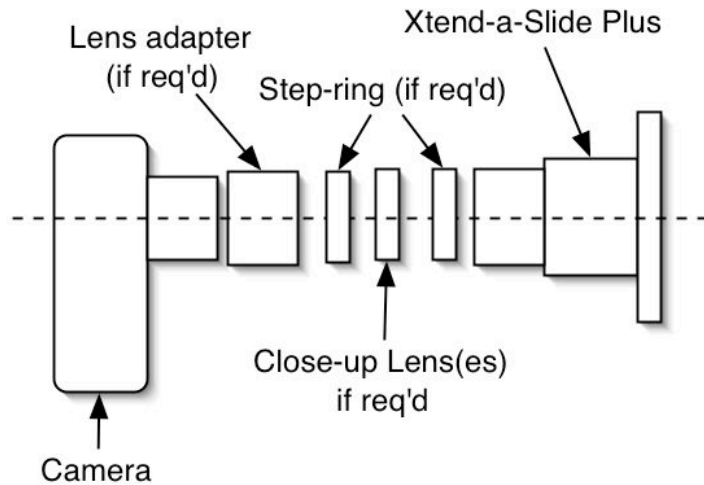


Figure 1

Your digital camera **MUST** have threads either built-in or available through the use of a lens adapter (such as the Xtend-a-Lens™ product line).

### Transforming 35mm negative film

You can digitize 35mm film and turn it into regular prints with the same set up.

**Note:** It is important to remember that you won't magically get positive pictures from either the camera or Xtend-a-Slide. Once you've taken a picture of the negative film, you must convert it by post-processing the negative pictures in a program such as Photoshop. **There is an article on how to do this at [photosolve.com](http://photosolve.com)**

### Care and Feeding of your adapter

Because of the rugged design, the Xtend-a-Slide should not require any special cleaning or care other than an occasional wipe with a clean cloth. Please observe the following when using or storing your adapter.

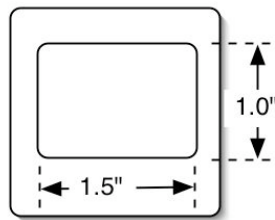
- **DO NOT apply solvents to the adapter**
- **DO NOT expose the adapter to high temperatures**
- **DO NOT expose the large steel ring to moisture as it may rust**
- **DO use the adapter for the purpose it was intended**
- **DO enjoy your new range of opportunities**

### Warranty

Xtend-a-Slide(tm) Plus is warranted to be free of manufacturing defects for a period of 90 days. If during that time, the unit becomes defective, it should be returned to the place of purchase for replacement. The manufacturer reserves the right to repair or replace defective units.

Units out of warranty will be repaired or replaced at a nominal fee.

1. You won't be able to connect the Xtend-a-Slide to your camera without the filter threads.
2. Your digital camera must be able to focus at between 1 and 5.5 inches (for the standard Xtend-a-Slide Plus) either by itself or with the use of close-up lenses. Some cameras have a "macro mode" which will allow the camera to do this quite well.
3. Your digital camera should have, when focused in the above range, a field of view (width by height) of approximately 1.5 inches by 1 inch (this is the width/height of the standard 35mm slide and film frame). While it's not absolutely necessary to meet this requirement, you may end up cropping the photo otherwise.



35mm slide format

Before you begin hooking everything together, you'll need to do the following:

1. Install the lens adapter (if required)
2. Install the MACRO (+10) close-up lens (if close-up lenses are required) or a "starting" combination of close-up lenses. The idea here is to minimize the amount of close-up magnification while still allowing you to frame and focus the slide within the range of the Xtend-a-Slide.. This is the portion of the set-up that may require a few different attempts.
3. Using the zoom of the camera AND moving the slide closer or further from the camera, you need to focus and frame the film portion of the slide at between 1.5 inches and 5.5 inches. (Try less magnification or more as required.
4. Measure the distance from the front of the front-most close-up lens or the primary lens of the camera to the slide. This is the length of the Xtend-a-Slide that you'll set.

### Connecting it all together (Refer to Figure 1)

- Using the distance determined in the previous section, select the number of inner and outer barrels you'll need to get THAT distance from the close-up lens to the slide. (don't forget to include the thickness of the steel

carrier assembly). Attach those barrels together and slide the inner and outer barrels together. Tighten the white plastic set screw.

- Attach a stepping ring (if required) to the camera, lens adapter or close-up lens. This should be the final stepping ring to get to 49mm,
- Screw the 49mm end of the Focusing Barrel Assembly into this assembly.
- Attach the Carrier Mounting Ring to the final outer barrel.
- Remove the Magnetic Slide Carrier from the Carrier Mounting Ring, and insert a 35mm slide, oriented horizontally (this generally works best, as the normal orientation of the camera is horizontal). If you have the quickload carrier, simply insert a slide and move into position using the next slide and orient horizontally.
- Take pictures by simply framing the slide in the LCD or viewer. You may need to "fine tune" the length of the barrel assembly by loosening the white plastic screw and moving the barrels in/out as necessary.

### Focusing

To reach proper focus, take a series of photos using the index marks on the Focusing Barrel Assembly. Pick the best picture, reposition to the appropriate index mark, and tighten the nylon set screw. As the entire assembly is attached to the camera, there is no need to use a tripod to minimize vibration, although, for large quantities of slides, it is recommended that the camera and Xtend-a-Slide assembly be positioned on a flat reflective surface for ease of use and consistent lighting. To aid in positioning the slide at the same place each time, a small black dot on the Magnetic Slide Carrier and a white dot on the large ring will help you get the two positioned correctly each time. Alternatively, you can use an optional Quick Load carrier and simply push the slides in place one after the other.

### Lighting Techniques

Because the Slide Carrier assembly is made from a plastic with diffusion characteristics, most light sources will provide an even source of illumination. You may leave the Auto White Balance set within the camera, or you may change it based on the lighting you use. The best lighting is from overhead or to the sides of the unit positioned at approximately 45 degrees, and is reflective. Typically, two gooseneck lamps with 60-watt bulbs can be used. Some customers report best results using an external flash bounced from a reflective card. Natural exterior lighting works extremely well, or you can even place a reflective card in front of the Xtend-a-Slide and use a flash attached to your camera. As each camera is different, the best combination will be a matter of experimentation.