

## Mounting a Pentax K-mount lens on a Canon EOS camera body

Jim Colwell  
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I am aware of two methods for mounting a Pentax K-mount lens on a Canon EOS camera body:

1. the “Keos”<sup>1</sup> adapter, usually available on eBay from member “mr.rolfo”; and,
2. the SRB mount conversion procedure available through SRB Film [www.srbfilm.co.uk](http://www.srbfilm.co.uk) and described online at [www.cottysnaps.com/snaps/mods/eoskmount.html](http://www.cottysnaps.com/snaps/mods/eoskmount.html).

In both cases, the Pentax K-mount lens must undergo an aperture leverectomy operation to remove the aperture control lever and its protective tab (if present), as the EOS body mirror box is too shallow around the edges to fit a lens with an aperture lever sticking out past the mount. As a result, the modified K-mount lens will provide only manual “stop down” aperture operation. A few SMC Pentax lenses, such as the 400mm f/5.6 and 500mm f/4.5, have manual apertures without an aperture control lever, and so they do not have to be modified in this way. Of course, any Pentax K-mount lens will provide only manual focus on a Canon EOS body.

The Keos adapter can be attached to and removed from the K-mount lens, and so the lens can be used on both Canon EOS and Pentax K bodies, but only with manual aperture control on both bodies. The SRB mount conversion procedure is a permanent change, as part of the K-mount is cut off and replaced by an EF mount (EF is the Canon autofocus lens mount, and EOS is the Canon autofocus camera system, which includes EF lenses).

The Keos adapter is a very slender, solid metal ring with a Pentax K body mount on the inside surface and a Canon EF lens mount on the outside. The Pentax K lens mount fits into the adapter, rotates about 30 degrees and is secured from rotating back by a single, very small set screw. The lens with-adapter-attached then mounts on the EOS body as a normal EF lens (but manual focus and manual aperture). The Keos adapter is easy to take off the lens, just be careful not to drop the set screw; it's very, very small. The Keos adapter is strong and secure, but it is never a good idea to hold only the body when a heavy lens is mounted.

The aperture leverectomy operation which is required for both the Keos and SRB methods is a more or less permanent modification to the lens. For example, when modifying my SMC Pentax 18/3.5, we discovered<sup>2</sup> that you can't simply remove the aperture control lever mechanism, as it is a single part which connects the external aperture control lever to the manual aperture control ring and to the actual diaphragm. If you remove this mechanism entirely, then the aperture cannot be controlled at all, and so you have to cut off the external lever and leave the internal parts intact. It would be nice to have two aperture control assemblies, one with the lever and one without. Other Pentax lenses may be different.

For more information on using non-EF lenses on Canon EOS cameras, see NK Guy's article “Using manual lenses and telescopes with EOS cameras”, at [photonotes.org/articles/eos-manual-lenses/](http://photonotes.org/articles/eos-manual-lenses/), and Robert Monaghan's Megasite at <http://medfmt.8k.com/third/mounts.html>.

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<sup>1</sup> pronounced “chaos”; Keos is the name I invented to describe mr.rolfo's K-mount to EOS body adapter.

<sup>2</sup> Dave Orrell at Halifax's Camera Repair Centres did most of the work for me.