



HOT ROD PL Tuner Kit - MANUAL

Dear Customer: Thank you for your purchase of the Hot Rod PL Tuner Kit. Please see our website for the most current information on all of our products – www.hotrodcameras.com.

READ these instructions completely and thoroughly before attempting to use the Hot Rod PL Tuner Kit. IF YOU DON'T READ AND UNDERSTAND THIS MANUAL, THINGS COULD GO BADLY WHEN YOU ATTEMPT TO USE THIS PRODUCT.

Introduction and Cautions:

Thanks for choosing to read this manual! We really do want you to have a terrific experience with this product so we have made every effort to communicate all the different places where it is possible to mess things up. We did this because we've read manuals which did not offer stringent warning on what may seem like perfectly intuitive use or function based on the experiences of the user.

Since we have no way of knowing how much (or how little) of an expert you are, we are attempting to cover all the bases of where it is possible someone could potentially get into trouble with this product. Some information may seem obvious but please read the entire manual (you can also look for our spelling mistakes at the same time.)

There has never been a time in the history of the motion picture or television industry where a professional level of optical and imaging technology has been available at such a low price point. Because of this, there are many new people working with professional level equipment. So if this is all old-hat to you please hang in there with us as we attempt to write a manual that will be helpful to the lowest common denominator.

The Hot Rod PL has been designed and engineered for **PROFESSIONAL USE ONLY**. The Hot Rod PL is not a toy. If mishandled, misused or abused, you can damage your camera body, lenses and/or The Hot Rod PL Tuner Kit. **IF YOU HAVE ANY DOUBTS ABOUT HOW TO CORRECTLY USE THIS PRODUCT, CONTACT YOUR PLACE OF PURCHASE OR HOT ROD CAMERAS BEFORE ATTEMPTING USE.** The Hot Rod system has been manufactured to precise specifications. If your unit has been damaged or you have any doubt about its structural integrity, please contact your place of purchase for service.

The Hot Rod PL mount systems have been engineered to support nearly any PL mount lens, designed to fit on a 35mm film motion picture camera. However, to get full benefit of the PL mount adapter you must use the included PL Support Chassis. Working together, the Hot Rod PL mount and Support

Chassis have been thoroughly tested with prime lenses up to 7 lbs. No additional front lens support is required at this working weight or less. If you plan to use large/heavy zoom lenses you must also use the lens manufacturer's rod/lens support bridge in order to be properly supporting the lens. For the largest/heaviest zoom lenses, place the Hot Rod X-Baseplate on top of a 19mm studio support systems, as would be required for a 35mm motion picture camera.

The Hot Rod PL Tuner Kit contains:

- 1) Hot Rod PL Mount (PLM)
- 2) X-Baseplate (XBPL)
- 3) PL Mount Support Chassis (PLSC)
- 4) This manual

This kit does not include 15mm iris rods. 15mm iris rods of at least 7" are required for the kit to function properly. Hot Rod Cameras urges our customers to use common sense when using heavy lenses and accessories. Do not use rods that are obviously flexing, bending, or are otherwise structurally unsound. If you are unsure of which rods to use, it is better to favor thick walled (1.5mm+) stainless steel rods over rods made of carbon fiber or aluminum.

Basic Set-Up:

The Hot Rod PL Tuner Kit has been designed for tool-less operation, with the exception of the 15mm rod supports vertical axis bolts located on either end of the X-Baseplate (Fig 4). You will need a 5/32" hex driver to complete the basic set-up. You cannot set up the X-Baseplate to the correct optical axis height for the first time without this common tool. After height has been set correctly, it is unlikely you will need to adjust it again, unless you are switching to a camera with a different optical axis height.

1) Attach your camera to the X-Baseplate using the supplied D-ring capture screws located in the X-Baseplate (Fig 3). If you lose these screws contact Hot Rod Cameras to purchase replacement parts. Make sure that you tighten the camera in place so that the lens port axis is facing exactly forward. If you do not, the PL Support Chassis will not line up with the PL Mount support foot. Do not go on to step 2, until the camera is straight.

2) Attach the Hot Rod PL Mount as you would a standard micro 4/3 lens. Make sure that there is no foreign material located on the micro 4/3 mount on the camera or the mating surface of the PL mount adapter. Align the PL Mount support foot (found at 6:00) to about the 4:00 position on the camera body and then turn clockwise until the mount is securely in place. The mount should turn and lock into place without too much effort. If the mount does not turn/lock into place do not attempt to use it and contact Hot Rod Cameras for a RMA#.

3) If you did not jump ahead the moment you got the required tool, loosen the 15mm rod support bolts on the front and rear of the X-Baseplate with a 5/32" hex driver. Adjust them downward so that they are

extending about 4/5 of the maximum distance they can travel. Tighten only the front 15mm rod support bolt and insert (2x) 15mm iris rods into the front 15mm support of the X-Baseplate, tripod block, and rear 15mm rod support.

4) Make sure that the inserted iris rods are long enough to completely pass into the rear 15mm rod support and now tighten the rear 15mm rod support with a 5/32" hex driver. Check your 15mm lightweight rod accessories. If the optical height is not correct, re-adjust. If your rods do not pass through fairly easily after you have tightened down the rear 15mm support, it is possible that you have made the rear support slightly out of alignment, loosen front/rear and try again. Make sure that there is enough rod space in the front to add the Hot Rod PL Support Chassis (Fig 1).

5) Make sure that the vertical knob of the PL Support Chassis is loose (not falling off loose) and the vertical support is completely lowered. Slide the Hot Rod PL Support Chassis on to the 15mm iris rods into place directly below the PL mount attached to your camera. If the Support Chassis does not clear the PL mount locking ring, the vertical axis of the X-Baseplate has not set correctly, repeat step 3, and this time extend the 15mm supports a little further. Once you have the Support Chassis under the PL Mount support foot, raise the vertical column of the Support Chassis until the horizontal locking knob (Fig 1.) can mate with the PL mount support foot. Tighten the horizontal knob **carefully** until the PL mount and the vertical column of the Support Chassis are fully engaged. The vertical column should not be leaning forwards or backwards, if it is, it maybe because the vertical column is beyond simply loose and maybe near falling off the bolt that runs through the vertical knob, make sure that it is visibly straight up and down. This may sound like common sense, but it needs to be said anyway- do not attempt to slide the PL Support Chassis when it is engaged with the PL mount!

6) Once the PL Mount and Support Chassis are fully engaged, tighten the rod locking levers on the Support Chassis (Fig 1).

7) After tightening the Support Chassis rod levers- **only now should you tighten the vertical knob of the support column.**

CONGRATULATIONS! – Your new PL mount is now attached correctly; you can now mount any 35mm PL mount lens. Make sure that the PL mount lock ring is adjusted to the **correct open position** before inserting a PL mount Lens. If it is not, you will **not** be able to properly mount or lock a lens. When facing the Hot Rod PL it's- "righty tighty", "lefty loosey." The Hot Rod PL mount uses a special locking ring thread design, unlike some other PL mounts, a large amount of torque is not required to secure a PL mount lens. Always secure lenses tight (just past snug), but without over-tightening, or you may find it difficult to loosen the PL mount. You should feel secure about the amount of tightening and still be able to open the PL mount without a serious amount of effort.

The X-Baseplate should be used with rods at all times, even if you are not using the included PL mount or PL Mount Support Chassis. When in use, rods should be long enough to pass through the 15mm rod supports on BOTH ends of the X-Baseplate (Fig 2). Always have the same rods pass through both front and rear 15mm rod supports on the X-Baseplate.

The X-Baseplate tripod block (Fig 1) can be used without an additional quick release plate on many mid-sized professional tripods, including: Cartoni Gamma & Delta, Miller Arrow 25/40/55 and Compass 25, Sachtler DV12, Video 15/18/20/25 and Video 18 dutch. If you are using another tripod- don't worry! Nearly every tripod quick release plate can also be attached to the 1/4" and 3/8" screw holes located at the bottom of the X-Baseplate tripod block. The X-Baseplate tripod block can be removed for handheld shooting configurations, but it should be replaced under the X-Baseplate before mounting to a tripod. Do not attempt to mount the X-Baseplate to a tripod without the tripod mounting block.

This package includes the Hot Rod PL Mount and Hot Rod PL Support Chassis. While it is possible to use very light lenses inside the Hot Rod PL Mount without the PL Support Chassis, this practice is not recommended.

A note for those who are renting this equipment- It is worth spending a moment to educate your client, as they may not be familiar with the proper amount of pressure needed to lock the Hot Rod PL and they may attempt to over tighten the mount. Do not use any kind of tool to force the PL mount open or closed! If you over tighten you can still get the ring unlocked with only the strength in your hands, just make sure the camera is secure and stable, and be sure you are standing in a place that allows you to get proper leverage. If you have never mounted a PL mount lens before, don't understand this concept or have questions, please contact your place of purchase, a professional rental facility, or finally Hot Rod Cameras.

IMPORTANT NOTES: As a general rule when using the PL Support Chassis do not mount a lens until the vertical knob has been tightened. Do not apply pressure to the lens mount or Support Chassis in any direction when tightening the vertical knob. Always lock the PL Mount Support Chassis in the same order **1) engage horizontal knob fully 2) lock rod levers 3) tighten vertical knob.** Always remove the PL Mount Support Chassis in the **opposite order** and only do this when **no lens is attached 1) loosen vertical knob 2) unlock rod levers 3) loosen horizontal knob until fully disengaged.**

TECHNICAL NOTES – All Hot Rod PL mounts for micro 4/3 cameras sold after December 15, 2010 are compatible with all known native 35mm imaging size PL mount lenses. It is possible that someone has retrofitted a lens to PL, or adapted a lens to PL or has crafted a brand new design of lens with a PL mount that will not fit on the mount. These lenses were not necessarily designed for a 35mm camera. These lenses may or may not work on the Hot Rod PL mount or other products that utilize a PL mount, and Hot Rod Cameras cannot guarantee compatibilities of such rarities. Most Arri standard and Arri B adapters fit inside the Hot Rod PL, but a few may not. If you have one that does not, do not attempt to force it in the Hot Rod PL. We don't mind if you try to mod/alter our product, just be aware that this will void your warranty. So obviously you won't be able to return it to us or your place of purchase if you muck up the job! If you want custom work done, send us an email at HotRodCameras.com

If you are using a camera made by **Panasonic** (likely) you may need to turn off a menu item called "Lens Check", or enable a mode called "Shoot without Lens", otherwise the camera will tell you to check the lens mount, or show no image at all when a PL mount and lens are installed correctly.

Remember to use common sense when your camera has heavy lenses attached to the PL mount! Lift the camera in the correct manner (a tightly attached camera handle or well supported from underneath). **Do not lift or carry** the camera from the lcd screen, or by any accessory attached to a hot shoe. This will also void your warranty and most likely result in damage to the equipment! Some people have decided to lift a heavy camera this way and suffered the consequences-hence this warning! This a bad thing- do not attempt!

Notes Regarding Flange Focal Depth

The Hot Rod PL adapter ships with the flange focal depth set correctly for a properly collimated PL mount lens to focus at infinity. However, the sensor in any micro 4/3 mount camera (actually any camera), will not necessarily be set to the exact same point that our test camera is set. Because of this the Hot Rod PL mount can be shimmed in order to adjust the flange focal depth to a precise 52mm.

*****NOTE** - adjusting the flange focal depth is a maintenance item intended to be performed **ONLY** by a professional camera/lens service technician with appropriate tools for the job. For a list of authorized maintenance facilities please check www.hotrodcameras.com. Adjusting the Hot Rod PL flange focal depth incorrectly **WILL** cause focus or other imaging problems. Performing this maintenance is not difficult for a qualified professional, however should you decided to do this work outside of an approved facility it is **AT YOUR OWN RISK** and could result in damage to your mount and will **VOID THE WARRANTY**. When in doubt contact Hot Rod Cameras, your local professional rental facility, cine lens repair shop or other authorized facility for details.

For Lens/Camera Service Technicians – How to Adjust the Hot Rod PL Flange Focal Depth:

- Turn the PL locking ring to reveal 4x flange bolts.
- Remove bolts.
- Separate the PL flange plate from the rest of the PL mount.

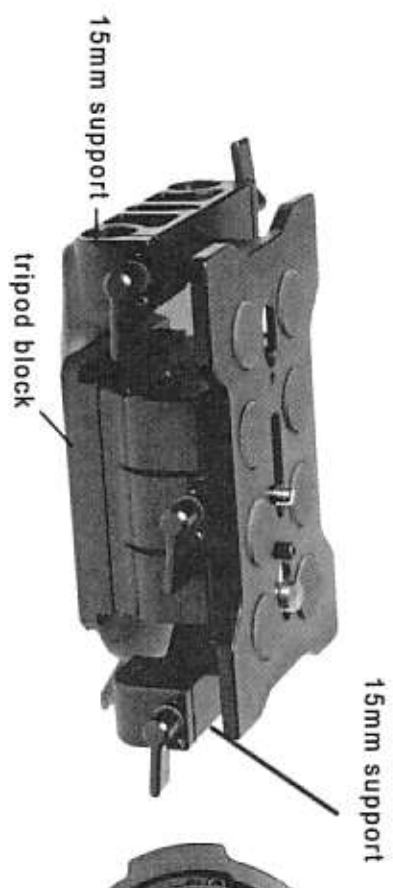
This is the place to adjust the amount of shim stock. PET or PVC shim stock or proprietary shims compatible with the Hot Rod PL is recommended. We recommend at least 8x pieces of rectangular shim that fits within the width of the mount, with 1-piece flanking each bolt. Assuming the mount came straight from the factory, it's likely what you are looking at right now.

- Replace PL flange
- Replace bolts and tighten slowly and evenly. As a note to the daring individual who probably shouldn't

be attempting this- if you do this last step wrong you could break the mount, VOID THE WARRANTY..etc..etc.!

For complete details on this product, please visit www.hotrodcameras.com

X-Baseplate



15mm support

tripod block

15mm support

PL Mount



PL Support Chassis



horizontal knob

vertical knob

rod levers

Fig 1.

Hot Rod PL Tuner Kit

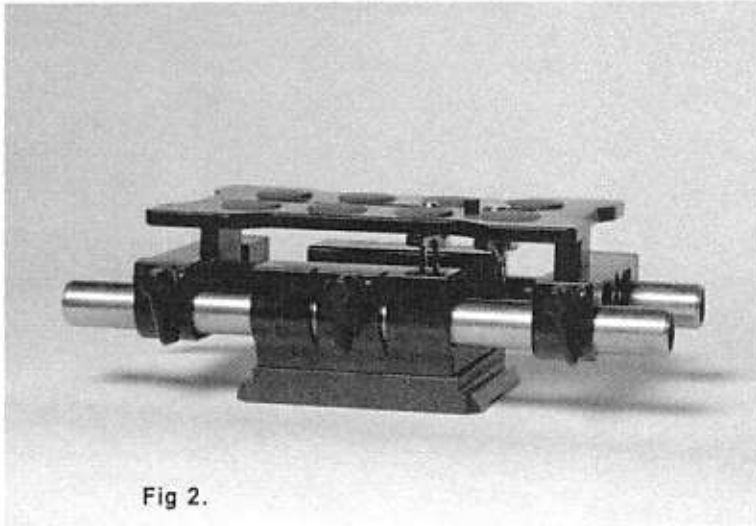


Fig 2.

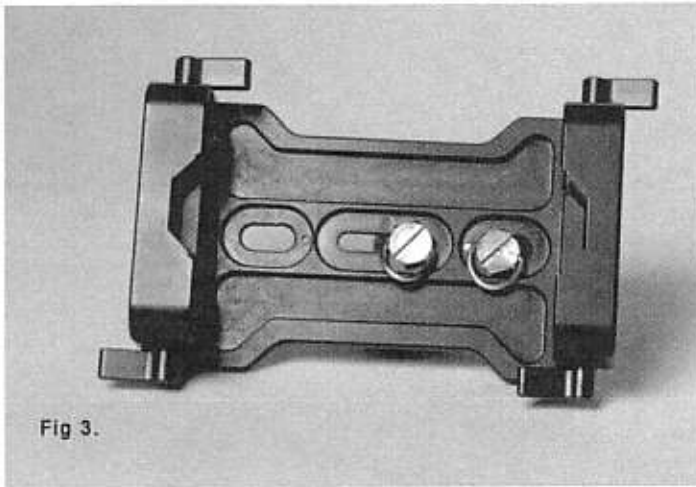
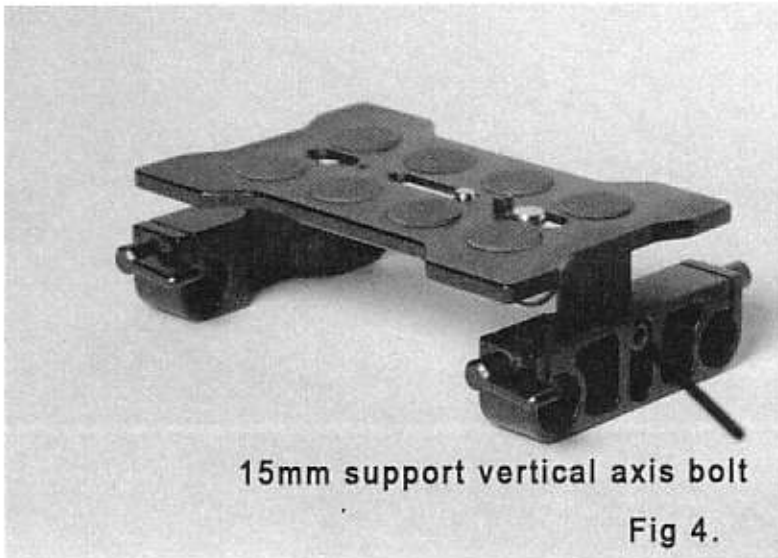


Fig 3.



15mm support vertical axis bolt

Fig 4.