

## FGV PLXD

### Who is FGV Schmidle?

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FGV Schmidle is a motion picture camera and lighting rental house, based in Munich and Berlin with more than 35 years of experience. We are renting out 16/35mm film cameras, SD and HD camcorders as well as single sensor cameras like RED, F35, lighting, grip, generators and trucks. A couple of years ago we started to rent professional still DSLR cameras.

When Canon introduced the 5D Mark II we also started using still cameras for motion picture work. Lots of production houses are using DSLR cameras now to shoot commercials, features, industrial presentations and even more...

Part of our business always was to adapt or improve existing gear or even to invent and manufacture our own solutions. Actually the famous Panther dolly came into being exactly this way.

Have a look at our website for other [FGV Development](#) products.

### What is the PLXD camera's scope of application?

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There are many applications for this new generation of DSLR cameras with built-in movie functions. Currently we think the quality is good enough to use them as a director's viewfinder or to shoot plates for CGI work in still photography mode with the same lenses you use to shoot the movie.

Just think of action sequences: Eymos have become rare and expensive, so why not use a DSLR – they are certainly perfectly small "Man-Cams".

Professional lenses and accessories can be used even for a quick and comparatively inexpensive recording option. It is certainly a type of camera type that will become a basic on all film sets because it is handy, small, cheap, easy to use and gives you the freedom to do things very quickly without hours of rigging a film camera. A further and truly decisive advantage is to be able to use all lenses and accessories from your A-Cam.

### Which PL Lenses can be used with the FGV PLXD cameras?

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You can use all known 35mm PL-mount motion picture fixed focal or zoom lenses (Zeiss, ARRI, Cooke, Angénieux, Red...), which will fit on ARRI, Moviecam or Aaton, Red, Sony 35mm cameras. However, there might be an issue with the image circle of certain lenses, when the extremely wide sensor of the FGV PL1D is used. The sensor area is even bigger than the widest ANSI S35 4-Perforation format. For further explanation, see below.

If you are planning a real crash scene, we will certainly help you out with a proper crash housing, or a splash housing to film in or on water.

### What about the flange-focal distance?

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Well, we are talking seriously about a real PL-mount – as a consequence we are using the same principles than in "real" movie cameras. So – yes: you can adjust the flange focal distance the regular and professional way if necessary.

## FGV PL7D

### What film formats are matched best with the FGV PLXD cameras?

While the FGV PL7D is optimally suited to match the S35 3-perforation format, the FGV PL1D even goes beyond this, offering an sensor area that covers even the widest ANSI S35 4-Perforation film format.

FGV PL7D	aspect	width	height
1.78 ANSI 3-Perforation	1.78	23.11	12.98 (i.e. ARRI)
7D sensor format in stills mode	1.5	22.3	14.9
-> In movie mode Canon does not utilize the entire height of the sensor – this results in:			
16:9	1.78	22.3	12.53
FGV PL1D	aspect	width	height
1.78 ANSI 4-Perforation	1.78	24.9	14.4 (i.e. ARRI)
1D sensor format in stills mode	1.6	29.7	18.6
-> In movie mode Canon does not utilize the entire height of the sensor – this results in:			
16:9	1.78	29.7	16.69

### What is the maximum take length?

As always this strongly depends on the chosen settings of frame rate and size. Since the electronics were not modified the original values apply: maximum file size is 4 GB with a maximum length of 29min. 59s.

### What is the movie's file format?

The Canon cameras originally record in \*.mov format (H.264) with linear PCM audio.

### What is in the upgrade package?

In order to be able to use all PL mounted lenses, we had to redesign the original plastic case for the mirror and the sensor mount. There was no other possibility to update the original Canon housing and still provide the necessary rock-solid connection between the sensor and the PL-mount.

We redesigned these parts to our needs by milling them out of a single metal block. The new carrier comes without the reflex-mirror. As a consequence, the autofocus unit, the groundglass and the prism viewfinder were also left out. In order to focus or to control the image the Live-View mode is used, which also offers a decent magnification for critical settings.

What we added is a rigid connection to the base plate to be able to mount the entire setup to any kind of professional support system. The FGV-PLXD cameras are designed to be truly rock-solid even with big and heavy zoom lenses known from film sets: the new FGV sensor carrier module weighs more than 300g alone. The PL-Mount directly connects to a metal plate and a raiser plate that offers two 3/8" threads at the bottom for mounting. Together with the new sensor carrier and a solid mounting for the original CMOS sensor a rugged and at the same time very precise imaging unit was designed.

For external Start/Stop with a LCS or a simple remote switch there is a 3-pin Fischer connector. The rest of the camera stays the same.

The package of the FGV PL1D additionally already covers a Start/Stop button, the FGV Hybrid Light-weight Support and the FGV Cable Protector.

### Can I send my own camera in, to get it upgraded?

Unfortunately not – it is not a reversible update kit. We have to disassemble the entire camera to replace the mirror case and eliminate parts that are not necessary for the movie function. So far we just sell the complete camera package which includes the Canon camera with PL Mount, one battery and one charger. The FGV PL1D comes with the FGV Hybrid LWS and the FGV Cable Protector additionally.

## FGV PLXD

### What is the delivery time?

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All incoming and paid orders will be handled to the “first come, first serve” principle. The cameras are basically in stock.

### Why didn't you choose the 5D for modification?

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The sensor of the 5D is much bigger than the image area of most motion picture cameras. The majority of professional 35mm film format lenses are calculated to just cover the maximum 35mm film format of 24 x 18mm. As a consequence, a sensor area of 36 x 24mm necessary for the bigger sensor would not be covered without serious vignetting.

Also the new generation of Canon cameras already support the typical film frame rates 23.98 / 25 / 29.97 fps @1920x1080 as well as 50 / 59.98 fps@1280x720 or 640x480.

The sensor format of the 7D is ideal for 1:1.78. The actual sensor size is 23.11 x 12.53mm, which is best compared to motion picture S35 – 3 Perforation ANSI 1.78 format (23.11 x 12.98mm). As a consequence, the 7D's active sensor size is quite close to the standard 3P film format.

The FGV PL1D goes even beyond this format covering an area of 29.7 x 18.6 mm which is even bigger than the largest S35 – 4Perforation ANSI format. Its wider pixel pitch offers additional advantages in low light situations.

### Can I still use the PLXDs as a stills camera?

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Yes you can. We left the shutter in the camera, so you are able to take photos in “Manual” and “Automatic exposure time” (Av) mode. However, you have to focus manually in the live view function on the LCD screen at the back of the camera (or an external monitor – not part of delivery). Since there is no mirror, the autofocus unit and the ocular were also taken out. In this aspect the PLXDs are just like a regular point and shot cameras – but they come with a great display and an easy magnification mode even for critical focussing.

### What do I get for my money?

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You get a very reliable PL conversion for the 1D and the 7D. It is rock-solid because the update includes internal camera modification instead of just a “screwed” on PL Mount. This is what you actually need when heading for a real action-cam mounted to a race car, using heavy zooms etc.

### Where can I order?

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You can send your order by E-Mail to [PLXD@FGV-rental.de](mailto:PLXD@FGV-rental.de) or fax it to +49 89 699 00 88. American customers please contact [band pro](#).

Please include your invoicing address as well as the delivery address, and let us know your preferred shipping method and account number of the freight agent. You will get a pro forma invoice together with the delivery date for your advanced payment. As soon as the funds have arrived, we send out the unit. Usual delivery time is two weeks. Payment has to be made prior to shipment.

### Do you sell any other accessory for the PLXD cameras?

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We are currently manufacturing an [Hybrid](#) lightweight support, so you can mount all kind of accessories i.e. lens control motors, matte boxes, follow focus to the camera. This lightweight support comes with two pairs of 15mm rods in different length – 120mm and 240mm. It centers the lens and provides the proper height and offset to use standard motion picture equipment. If you attach a zoom or tele-lens you can use your own 15 or 19 mm bridge plate and support rods and use the lightweight support as a raiser plate for perfect height and offset.

The FGV [Cable Protector](#) mechanically guards the electrical connections to the camera. In everyday run and gun filming this is essential for a long lifetime of the equipment.

Both – the FGV Hybrid LWS and the FGV Cable Protector – are already included in the FGV PL1D package.

## FGV PLXD

### Do you plan to upgrade other DSLR cameras?

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Of course we are looking into the new Canon cameras like an 5D3. Just keep watching our web site for news [www.fgv-rental.de](http://www.fgv-rental.de) or attend to our newsletter.

### Warranty

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Our modification of course voids the original Canon warranty. However, there is our limited one year FGV warranty.

### Für weitere Informationen:

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