



ROAD TEST SONY FS7

Digital Studio caught up with three seasoned directors of photography to get their views on Sony's FS7

Sony's FS7 camera was seen by many as something of a game-changer in the 4K camera market owing to its high-spec and relatively modest price tag. With the camera set to gain significant attention at CABSAT this month, Digital Studio asked three DoPs for their impressions of the camera so far.

DIGITAL STUDIO: What is your background? What led you to try the Sony FS7?

FARE-MATTHEWS: This was the first time I have ever used a 4K camera, so I was expecting it to be very complex. I attended a trial of the FS7 to give myself some experience with something 4K and also see what all the fuss was about. You can imagine shortly after meeting the Sony crew, I asked about prices and I was shocked at how it was very closely priced, if not a tad lower than some of the HD equipment we bought a few years back. To be honest I was a bit frustrated as I could tell from that

moment this would be a camera I would certainly be interested in purchasing.

For me this is a bit of a game-changer because yes, 90% of your audience is not going to appreciate this beautiful 4K image but what is handy, especially as I edit as well as shoot, is the flexibility and data you have available in post-production.

SENAN: Being accustomed to the DSLR world of filming in the past, the FS7 was a huge relief.... Easy to handle and the control systems were well placed although it would take a while to go through the menu in detail and figure it out.

THE REVIEWERS



Bechara El Khoury
Cinematographer, filmmaker



Timothy Fare-Matthews
Film DXB



Sumesh Senan
Clicksmiths

EL KHOURY: I am a cinematographer and filmmaker influenced by film cameras and everything related to combining old or new lenses and gear with new technologies, somehow to create a personal touch in the image that I produce.

After using and renting a wide variety of Sony cameras, I was pretty interested by the FS7 model as a personal camera.

So I decided to buy my own. In fact, I was waiting the second version of the FS700 since it was a really good affordable camera, but with some disadvantages, in my personal opinion.

Once the FS7 was announced, I was really excited and surprised by the big update Sony made on this camera series. It was more than expected!

What were your initial impressions of the FS7 as you first started using it?

EL KHOURY: The overall design of the camera was the first big surprise. It's a great design - the small, light and compact shape with the curved back, which is very easy to hold over the shoulder. The removable hand grip is amazing.

The whole camera can turn even smaller. In fact, it can fit in a normal DSLR bag, which is really helpful in some hard long documentary shoots, where big bulky bags can ruin your back and shoot.

Second, the crazy affordable features:

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the ability to shoot 4K internally, with no device attached to the camera. The 4K resolution is a very important feature in the camera. Cropping is no issue and the sharp crisp image that it delivers is simply outstanding, plus the Super Slow motion option, 60fps in 4K/180 fps in HD. The Cine-EI mode with Slog 3 that allows the camera to have 'technically' 14 stops of dynamic range!

This perfect combination of the three master options gives a serious output, which is exactly the same in other higher end "Pro cinema" camera bodies that cost two to three times more. That's super impressive.

FARE-MATTHEWS: The most surprising aspect for me, being a frequent Sony XDCAM user anyway, was how similar and simplistic it was for what it is. Mini buttons, laid out very nicely, very well

FS7 SPEC

Sony's PXW-FS7 was the first 4K XDCAM camera to feature a Super35 CMOS sensor. Capable of shooting in 4K Quad Full HD[iii] (QFHD) and super slow-motion Full HD, the camera has been designed for documentary, music video, online content creators and corporate filmmakers looking for beautiful picture quality and an unrivalled choice of recording formats.

The 11.6 million-pixel Super35 'Exmor' CMOS sensor within the PXW-FS7 delivers a high level of sensitivity, shallow depth of field, a high signal-to-noise ratio and fantastic low light performance. The camera has the ability to record QFHDi with 4:2:2 10-bit sampling up to 600 Mbit/s, with support for a variety of recording formats including XAVC Intra, Long GOP, MPEG HD422 and Apple ProRes 422 available early 2015 by firmware update.

thought out and not very big. It reminded me very much of the Sony EX1R. Even just glancing over it, I know I could be left alone with it for the first time and be able to work it.

So the first time I turned it on with a beautiful 70-200mm 2.8 Mk2 L series lens, it really blew me away with not only

how crisp the image looked but how much information we were gathering from the image. To think I was shooting in the most compressed 4K setting, if I had the computing power and storage to shoot a less compressed version I would! But regardless, I was very impressed.

The shoot we were on was a documentary covering this Indian Racing driver, Gautam Singhania, competing for the first time in the Ferrari World Finals in Abu Dhabi. It was the first time in its history where the Ferrari Challenge held its final outside of Europe and considering it was the Yas Marina Circuit, to me one of the best circuits in the world, with now potentially one of the newest 4K cameras in the world, I was very happy for this opportunity.

The results were astonishing if I am being honest. Considering that I had two other units with me using PMW-320s, although terrific cameras it really was like chalk and cheese on the edit suite with picture quality.

I was quite surprised how well it assembled together, and little touches like how even how the flap opens to input the QCD cards seem to be a lot more durable and sturdy than previous makes. It was nice to see almost a bridge between broadcast and cine cameras that I know I would have no issue using.

What type of work did you do with it, and what did you think of the results?

SENAN: I intend shooting mostly documentaries, interviews, events, corporate videos etc. The results are indeed impressive especially in the Slog and the RAW.

EL KHOURY: I did a lot of corporate movies, a documentary movie for tourism, and now I am working on a video clip and

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▲ Bechara El-Khoury lauded the FS7's light, compact design and the fact it can fit in a DSLR bag.



▲ The device won the thumbs up from the DoPs.

a short fiction film.

But my ultimate future project is a long wild life docu-fiction project, in remote areas and for quite a long period. That's where this camera will help me produce a remarkable quality with less physical efforts.

The results are as expected, beautiful output. The picture quality is very consistent: colour, grain, light sensitivity, resolution.

It's also a really "user friendly" camera with diverse file formats. You don't need a lot of hassle to change the settings and configuration for shooting anything fast. While on the other hand, I have plenty of options to customise the settings. In fact, I'm still very excited testing some options in the camera.

What has most impressed you about the camera?

FARE-MATTHEWS: What impressed

me was the low light performance more than anything. I don't think I used the Gain button once because even in low light, with the amount of data being recorded, I knew at worst case I could pull it back in post if I had to. For me having this flexibility is everything.

Alright – Yas Marina certainly has its fair share of outside lighting but there were aspects of the shoot like with any, where you are grabbing that quick interview from a well-lit pit to shooting inside a car, where you are constantly battling through filters, iris and shutter to obtain that perfectly composed block.

Low light performance was also excellent in the slow motion settings on the camera. Considering I was shooting at 400th of a shutter I was planning on really only having to use it in the day and it is here where I guess I captured the shot of the shoot.

At the end of the main straight of the circuit I was attempting to capture Gautam brake from 160mph to almost 50mph where he would then fiercely battle to compose the Ferrari through a tight chicane. The reason why this location is so important is, even from the naked eye, you can see the brake discs glowing so hot that they burn red.

EL KHOURY: It's not only one option. It's the interesting cocktail. In fact, there are a lot of camera brands and models that simply drive every user to his need and taste and I am aware that every six



▲ Timothy Fare-Matthews liked many aspects of the camera, including its simplicity.

months to one year something new and interesting will be launched. But no other brand has done the same combination yet.

SENAN: The dynamic range of 14 stops is incredible. I think that is easily one of the best plus-points in this camera and can beat most of the competition hands down. The ability to shoot raw is useful during editing. Also, the slow motion – I think very few cameras within this price range offer 180 fps.

Its low light capability was astounding. I did some indoor shoots in really low light and the camera's performance was superb.

What are its strengths and weaknesses?

EL KHOURY: This camera has: small light full controllable body (mounting / de-mounting). I can mount it easily on my DJI Ronin and other Gimbal systems. It has the ability to mount all types of lenses. Using Sony's E-mount and many other options with third party adapters.

It has all the competitive options of today's camera settings such as 4K, super slow motion option, Cine-EI Slog 3. As well, the XQD card type is extremely fast for transfer.

SENAN: I thought it was easy to handle and not too bulky. I did attract some attention walking around with it but could easily manoeuvre it in and out of the bag as we moved around, so it's ideal for most run-and-gun shoots. The quality of output

and the dynamic range was incredible and the ability to shoot slow motion a huge plus point. Weaknesses – the jello effect due to rolling shutter. Of course the global shutter comes at a price and this camera has many positives on its side to negate the rolling shutter.

Is the camera versatile in terms of formats (RAW, SLOG etc)?

FARE-MATTHEWS: I must say the format, considering it is 4K, worked very well for me on Sony Vegas. My only problem was computing power, but considering I was shooting a live event I did not have the freedom to try RAW and other formats, but I can vouch how brilliant the most compressed 4K format is and look forward if I do get an opportunity again to shoot in other formats.

EL KHOURY: It's quite fun how many file formats I can choose in this camera, there's a solution for every type of shoot and post production requirements – XAVC-I, XAVC-L (with different bit rate options), MPEG HD422, all internally.

Starting from long time full run shootings, to TV broadcast requirements, to documentary or corporate type fast file handling, to cinema style output (with or without the extra Sony recorder with the help of good colour grading).

SENAN: I shot mostly in Slog and XAVC. In post-production we used FCP and both formats worked well.

Any other points you would like to mention about the camera?

FARE-MATTHEWS: Apart from the many strengths mentioned above, I would say its major weakness for me was having a set of manual lenses with me. Track content when you are working with lenses that only give you great depth of field meant that I was struggling to frame, pan, tilt and focus-pull all at once.

I was hoping to try it with PL lenses from the PMWs that we own but considering this FS7 will come with one, I believe very soon I would love to try it again with the ability to zoom, auto focus, auto iris – all from a servo.

Two XLR ports are fine, but I do frequently use three as I enjoy the stereo shotgun mics we have on the PMW-320s.

Apart from that, I would prefer to have a quicker way to switch between 4K and super slow mo HD on the camera other than having to do it in the menu. For me I was doing this a lot trackside and on average it took me about 20 to 30 seconds to do this every time which meant the risk of losing out on that valuable content.

However I understand not many situations would be this stretched on time so that really is, for me, its only weakness.

EL KHOURY: I am always waiting for new updates for this camera. I just have a small comment. I wish to have more control over the settings of interval recording for time-lapse (it's embedded in the S&Q mode) and the auto exposure mode in the camera. These fine tunings or updates would be more than perfect.

FARE-MATTHEWS: For me, I still need to try this with the V-Lock battery extension and larger shoulder mount adapter or even a 15mm rail kit because there are still many aspects of this camera I need to test it in. But from what I have used I couldn't be happier with the results.

For a small production house our gear is everything to us and considering this camera is a great bridge between broadcast and cine, I don't think you could ask for a better camera. For the money it certainly is a lot of bang for your buck and I expect Sony to do very well on this piece of equipment. ○