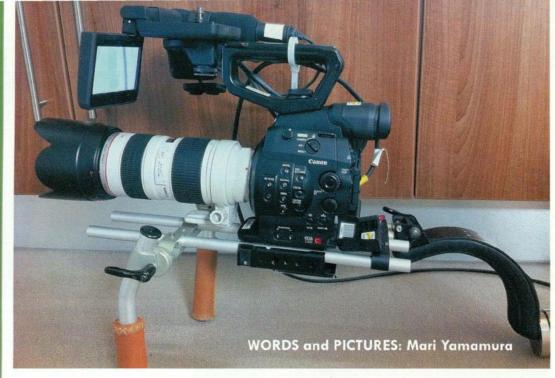
## Canon EOS C300 Quick Review

I had a chance to work with the new Canon C300 for the first time the other week. It has a Super 35mm CMOS sensor with a proper audio function for sync sound. It records on 4:2:2 at 8 bit and 50 Mbps (normal speed). It does fast/slow motion, time-lapse and stop motion recordings. Due to the fast scanning speed, apparently rolling shutter artifacts are much reduced as well. It comes with either the Canon EF or PL mount. Luckily there was the 'Look Listen Experience' roadshow in Bristol presented by Visual Impact, which happened to be on the week before the shoot, so it was a perfect opportunity to ask questions directly to the Canon reps and the team at Visual Impact for my prep.



First of all, the overall impression was good. All the functions are nicely laid out, they are easy to see, it felt intuitive. It is quite compact and has a unique box shape with a modular feel to it, perhaps not unlike that of the Red Epic. It has an LCD screen attachment called a 'Monitor Unit' (rather than a flip-out one, like with Sony F3 or EX3), which also has the playback deck and two XLR sockets for mics built in as one unit.

This attachment is necessary if you want to record sound at the same time. To reduce height it can be mounted on the handle or directly onto the camera. The handle itself is screwed onto the accessory shoe, so you could choose to have it or not, but what I thought was quite nifty is that

the handle has two accessory shoes, one on top horizontally and another vertically on the end so you can decide which way you want the 'Monitor Unit' to be mounted. Even with the handle on, which makes the screen position quite high, you can swivel and flip down the LCD screen, so you can position it at a reasonable eye level. With this modular system it seems as if you are given an opportunity to configure the camera to your liking. I think it is something that you need to try it yourself, preferably beforehand, to see which of these positions work well for you. Luckily we had a pre-light day so we could try out a few things in not too great a rush.

One good thing I found on this camera is that it is very easy and quick to change the most

critical variables such as ISO, Shutter Angle/Speed, Colour Temperature without having to go through the menu. You just hit the 'Fn' (function) button and twiddle one of the two large wheels on the side of the camera. The other wheel is for iris. I liked these large wheels. It makes it easier to go through the menu as well. I personally find the rolling type wheels on cameras such as the F3 and EX3 quite small and fiddly, particularly when you are in a hurry, and prone to not select what you intended, because the menu has rolled on to the next or previous item.

There are plenty of assignable function buttons all around the camera in easy-to-access places, which I thought was useful. There are enough buttons to assign all the



functions you want for quick access. One particularly useful feature is the waveform monitor. With the touch of a button, you can double check your exposure, there and then, without having to resort to an external monitor.

Initially, I struggled to find the on/off button but, as we progressed through the shoot, my colleague and I kept finding more and more of them! In the end we found four on/off buttons on all sides of the body but they are relatively small, black and not very obvious. I don't feel they are in particularly convenient positions, except the one on the handgrip, due to the ergonomics of the camera.

The ISO setting on this camera is 850 by default. That is where the distribution of latitude is equal above and below 18% grey. Allegedly, it has 12 stops of latitude on 'Canon Log', which is their version of Log C. You can also set your sensitivity to 'Gain' instead; however the light level seems to change as you swap between 'Gain' and 'ISO'. Apparently, this is due to the increment differences between ISO and dB. It doesn't feel normal to see the sensitivity set to 24dB for example. found it much simpler just to leave it as 'ISO' with 1/3 stop increments, which allows you to make finer adjustments as well. One of the Canon reps on the stand said that picture doesn't suffer until about 5,000 ISO, which is very high, but it can go up to 20,000 ISO. In fact, on our shoot, I wanted to keep a shallow depth of field so I just left the aperture wide open and adjusted the exposure with ISO. I went up to 1250 ISO as the highest, but the picture was clean, and there was no noticeable noise level compared to the lower ISO. The lowest ISO you can set is 320.

The built in ND filters give you a choice of 2, 4 and 6 stops, more like a camera with 2/3 inch sensor than a 1/3 inch





sensor camera with just ND 1 & 2. However, with other functions like the zebra, the lowest level you can set it to is 70%, which I think is limiting. Furthermore, although you can put two settings for zebra — '1' & '2', you can only put one or the other on at a time, not simultaneously, which is quite unusual.

I find both the LCD screen and the viewfinder quite good clear and sharp, easy to tell focus and exposure. I found them much better than those of the Sony F3 and Panasonic AF101 for both matters. For critical focus, I tended to rely on the viewfinder. Another unique and very useful feature I find with the C300 is that you can have both the LCD and the viewfinder on at the same time; the LCD monitor is a separate module so the viewfinder doesn't get deactivated by flipping out the LCD screen on the side, as with the F3. The shoot I was on was all done hand-held, so it was convenient to have both images on at

the same time, I would switch between them depending on what position I was in, and also sometimes I would quickly viewfinder with my right eye to check the focus, keeping the frame steady with my left eye on the LCD. Some other times, the director could still see the framing on the LCD, while I was looking through the viewfinder, which I thought was useful and productive.

One issue I had with the C300 on this occasion was the handheld rig. Because of its shape and size, the weight distribution is quite unique to this camera. The guys from Visual Impact mentioned that they had just had a meeting that week about which type of hand-held rig they should purchase to supply with the C300. The camera is fairly new, so they hadn't had the chance to decide, before we hired the kit out. On our shoot, they supplied us with a Vocas 5D shoulder mount kit with shoulder support, which worked very well and I could do almost everything I wanted to, but there were a few occasions when I struggled a bit, where I had to follow extreme close ups on a long zoom(Canon EF 70-200mm). With that particular rig, it was very comfortable as long as



## Canon EOS C300 Quick Review

you could put both hands on the handgrips, but when you had to do extensive zooming and focusing with one hand and holding the camera steady with the other, it got a bit heavy and awkward.

Another thing that didn't help was the handgrip on the camera itself (which is another module, therefore detachable). With the long zoom, it does get a little front heavy ergonomically, the handgrip felt that it was at the wrong angle after a long take - it was straining my wrist. I wished the handgrip was more horizontal like the one on an ENG lens, not a vertical one. It was more like the position of holding a DSLR camera, such as the 5D or 7D. It would have probably been fine without the handheld rig, holding just the camera on its own, but I wanted a steady handheld rig with 15mm bars underneath the lens. Also, because I wanted to be able to turn the camera on and off and adjust the iris,

without disruption, I wanted my right hand to be on the camera handgrip, which has an on/off button and another iris dial. The combination of the handheld rig, long lens and handgrip on the camera worked most, but not all of the time.

To be fair, perhaps the Vocas ria would be more suitable for drama set ups, with the operator purely operating. The Visuals guy did mention that in the meeting they had, they were thinking of going for a monopod style handheld kit for single-person operation, so that you can support the camera and reach all the dials more easily. For extensive handheld work, it is worth spending some time to find the most suitable and comfortable shoulder rig for your project.

In terms of work flow, it worked fine as well. It was the first time for everyone to use the C300, including the DIT, so we also had a Nano Flash, just in case we encountered any problems downloading the rushes. In the end, everything worked fine, so we didn't need it. It was a relief for me, otherwise there would have been more weight on the shoulder and we would have had to record on to double the number of cards, because you need to have a card in the camera to be able to press record.

The C300 records MXF files, so you need to download a program called 'Canon XF Utility' from Canon so that you can view and manage the rushes - but it does seem to have a clever compression system. According to the DIT, when you import the rushes into your computer, it downloads as four separate folders, which you then convert into rushes, using this software. Apparently, with this system, even though it records at 50 Mbps, it allows you to record as long as you can with a 5D at 35 Mbps on CF cards, and yet, once retrieved, the rushes are much



better quality than those from the 5D on H264.

We were all happy with the images we got from this camera on our shoot. That was with the 'Gamma' on a default setting, which is 'Normal 1'. With the 'Canon Log', the potential is even greater, if your production is grading afterwards.

Despite the minor inconveniences, I can see a wide range of applications from documentaries to dramas. Once you get your rigs sorted and work out the most comfortable configurations for your production, it can be a very nice camera to use. I personally like it.

**FUJINON** 

## **Surprisingly affordable! HD lenses**

Two new 2/3" format lenses from Fujinon make HD video acquisition surprisingly affordable.

The XA20sx8.5BRM & BERM from the Fujinon exceed range offer a 20:1 zoom ratio teamed with an 8.5mm minimum focal length.

- Renowned Fujinon HD optics using the latest Electron Beam Coatings
- New ergonomic professional Digi-Power servo grip, with quick zoom for easy focus checks
- Compatible with standard 8 pin zoom remotes
- BERM model with 2X optical range extender
- Robust & light weight mechanical construction

The XA20sx8.5BRM is available from under £1,900.

Call for special offers for GTC members.

Models also available for 1/2" & 1/3" format cameras.

XA20sx8.5BRM & BERM



Pyser-SGI Limited Fircroft Way, Edenbridge, Kent, United Kingdom, TN8 6HA Tel: +44 (0) 1732 864111 Fax: +44 (0) 1732 865544 broadcast@pyser-sgi.com www.pyser-sgi.com

eXceed - your expectations for performance and value. PYSER - SGI