

# IMPRESSIVE IMPRESSIONS



By John Keedwell GBCT

**I**n the ever-evolving realm of digital imaging, Sony has consistently raised the bar with its cutting-edge camera technologies. I had the privilege of exploring the recently-released Burano for a short while, looking at some of its features and capabilities, and where the camera may fit in real-world situations.

This is not a comprehensive review – I don't fly a plane or have a wingsuit that you might have seen in promotional films about the Burano online. I had the camera for just a few days and examined it at home. So this is more of a look at some of the features and the benefits those can bring from the user's point-of-view.

The Sony Burano takes Venice's image-quality and usability and reconfigures its design to be accessible for single operators and small, team productions to make use of the advanced functions.

Of course, the picture quality of a camera is always paramount, yet there are other important areas to consider in normal operations too. The ergonomics, design, usability and the interesting tools it presents to different users, and its flexibility in use on-location, are all important.

Firstly, let's quickly run through the list of main features:

- 8.6K full-frame 36x 24mm sensor
- 33% lighter than a Venice 2 at 2.9kg
- Variable ND
- Removable PL lens mount with Sony E-mount behind
- IBIS in-body image-stabilisation using PL mount lenses
- Advanced auto-focus systems
- Time-lapse interval recording
- Pre-roll cache recording
- New CF Express cards
- ... and more!

The Burano is Sony's smallest full-frame CineAlta camera, and in many ways it's their most technically-advanced yet. The camera is packed full of useful tools that can make life simpler for crews in many different ways. 8K is the new 4K, and the image has a maximum resolution of 8632 x 4856 and, through oversampling, it can output phenomenal looking 4K content.

## Design & build:

The main area where the Burano differs from its bigger Venice 2 sister is the way it has been designed for building a rig for both small crew documentary-style and full studio-style shooting. It can be used as a first unit A-camera, or as a B-camera with the footage cutting together seamlessly alongside the Venice 2. Alternatively, it can be configured as a lightweight hand-held unit.

Burano comes with an industry-standard PL lens mount and is compatible with Super 35 and Full Frame lenses (spherical and Anamorphic). In addition, by removing the PL mount adapter using the hex key bolts, it then reveals the E-mount hidden behind. This can be done on-location (in a clean environment, obviously) and it gives extra possibilities for E-Mount lenses to be employed for certain shots, or changing the configuration to a more documentary style.

## Focus-pulling & AF

Nowadays the high sensitivity levels of camera sensors are used to great effect in low light levels, making for much more natural-looking images. The current trend for shooting at lower lighting levels giving a moody and atmospheric look, means shooting with wide-open apertures, and this brings challenges to the camera operator and 1st AC.

Focus-pulling is a true skill and art, and getting it right takes a great deal of dedication and knowledge of lens capabilities, often with very precise marks to hit. When a subject deviates from those marks even by a few inches it means a compensation input is required for focus. That is the real skill.

Time to wheel-in the AI Subject Recognition AF.

**“Image-stabilisation is exceptionally-good”**

This recognises eye position, as well as human torso and head positions and it can also lock-on to a face – much like in the movie *Minority Report* (2002, dir. Steven Spielberg, DP Janusz Kamiński).

You can accurately track a subject even if they have a mask on or are facing away from the camera. The user simply touches the screen and the camera will track that person. That's great if you only want to focus on one person in the scene, but it gets a bit tricky if focus-pulls are required between one person and another, for example when we want to draw attention to who is talking.

In such circumstances the Burano's fast and

**“AI Subject Recognition AF is a great technology”**

accurate autofocus system proved invaluable when capturing spontaneous moments or tracking subjects in motion. It is a tool that can perhaps get the shot when otherwise it would be extremely challenging, such as fast action sequences.

This is a great technology, of course, yet needs to be used with care and by skilled camera crews who know its capabilities as well as its limitations. It could become relied upon too much until it makes a mistake and then it's back to the tape measure!

## Image-stabilisation

The next great tool is the cutting-edge built-in

camera image-stabilisation. This was originally developed for Sony's Alpha series of mirrorless stills cameras, like the AF system. The Burano is the world's first cinema camera that supports five-axis in-body optical image stabilisation (IBIS) for almost any attached lens, including PL mount lenses, and it can stabilise any lenses that do not have image-stabilisation built-in.

Comprising of a gyroscopic sensor and control algorithm, it compensates for camera shake even for handheld shooting whilst walking. Camera shake data can then be passed to post-production for precise alignment with CGI and used in LED volume stages.

The image-stabilisation in the Burano is so effective that it removes the need for any extra equipment for many applications. It is exceptionally good in-action and the camera ironed out huge camera shakes and yaw when tested. There are limits, of course, and whilst it won't necessarily change the use of Steadicam in acquiring shots, operators may need to watch out!

## Variable ND

In changeable lighting conditions there is a need for the use of ND filters, and constantly changing them can take time. Introducing the Burano Variable ND. With physical ND filters on the front end of the lens no longer required, the operator can quickly adjust the electronic filter density by simply rotating the ND dial. It can smoothly change the density from 0.6 (1/4) to 2.1 (1/128).

Operators can also maintain a constant depth-of-field by adjusting the stepless electronic ND filter and the iris control together. I can envisage camera shots being formulated to demonstrate this effect, much like the dolly zoom in *Jaws* (1975, dir. Steven Spielberg, DP Bill Butler ASC) or the bullet-time effect seen in *The Matrix* (1999, dirs. The Wachowskis, DP Bill Pope ASC).

## Cache recording

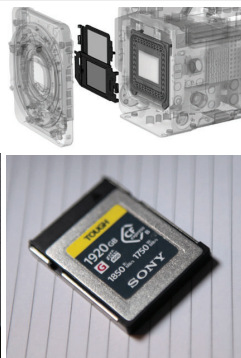
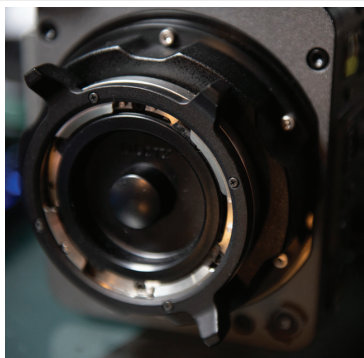
The Burano can shoot 4K at 120fps and you can have a 10-second pre-roll recording. This idea has been used for many years in high-speed cameras shooting thousands of frames per second. 1,000 fps recording at 4K is a huge chunk of data to record if it's not needed. Using cache recording the Burano records up to 30 seconds before you capture the shot, as long as you remember to push the button or trigger the camera!

As a single-take event – such as a volcano eruption or perhaps a stunt – could be potentially missed, cache recording stops those “Ready when you are, Mr DeMille” moments where all the cameras miss the unrepeatable money shot!

There is also a time-lapse mode, another useful feature for those money shots that can elevate a production.

## Menu system

The Menu system is slightly different to the Venice 2, yet has the same layout and the same controls, so anybody who is used to working with the Venice will find this very familiar.



The monitor can be used on either side of the camera, one in assistant mode or operator mode. The monitor overlays are significantly reduced in operator mode, so there's less clutter in the eyepiece, and it can be expanded when the AC wants to monitor or change settings.

**Recording & storage**

The new CF express VPG 400 cards are fast-enough to record X-OCN LT internally, which is Sony's 16-bit RAW coding and a fantastic format

“ This new camera is packed full of useful tools ”

to work with in post-production, reducing storage requirements and accelerating file transfer times for 8K content.

There are multiple ways to record, depending on your needs. S-Gamut/S-Gamut, a cine wide colour space that, as with the Venice 2, covers a gamut exceeding BT.2020. DCI-P3. S-Log3 and X-OCN, also dramatically enhance creative flexibility in post-production. Take your pick!

**Summing-up**

My short time with the Burano showed many interesting and useful features that have been thoughtfully-considered by Sony, and are all extremely useful in skilled hands. The imagination of users will open-up some interesting images for new stories. There are several showreel pieces out there to evaluate for yourself, and they are well worth a watch. The capabilities of this new camera are likely to be pushed to create some memorable images.

Images: photos by John Keedwell. Main image from Sony Burano Leopard promo © Chris Schmid Photography.

