SONY

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HDC User Group Newsletter No.4

This edition is mostly focussing on the major software upgrade programme that is now nearly complete.
Known as V1.10, or 'Ethernet upgrade' this has involved software and PLD upgrades requiring the use of download jigs, plus some hardware mods. It's taken a lot of our time and yours, and we hope there has not been too much disruption to your business.
If you've not been 'done' yet, please contact the helpdesk to be booked in. 01256 828828
As well as the ethernet capability implied above there are several other useful new features, detailed in this newsletter.

The Ethernet control system is a subject in itself, and as a start, an introduction to network set-up is attached as an appendix. It may be a bit basic for many of you, but not being an IT person I found it very useful. Thanks to Ian Sheldon for this.

If you don't wish to receive this letter, or you know other people who might wish to receive it, please let me know: neil.thompson@eu.sony.com

HDVF-C950W

The HDVF-C950W 9” LCD viewfinder is now available. We’re hoping to get a demo unit shortly that we can send round a number of users who have requested a look

- Large display area.
- Improved lag.
- Improved colourimetry.
- Improved viewing angle.
- Independent viewfinder knee control

Colour Monoculars

While on the subject of viewfinders, the colour monocular HDVF-C30W has been discontinued. Not widely used with systems cameras, mainly because of the price, but generally regarded as a pretty good viewfinder. It will be replaced by a similar unit with a 3.5” screen, though we won’t be able to start shipping until June. (We’re very dependant on the LCD panel manufacturers for this kind of product.) Should be about the same price as the C30W…but bigger!

If you do get a chance to use a colour monocular, please remember to point the screen downwards when not in use. Because of the lens in front of the screen it is possible to burn the screen if left pointed at the sun. There’s a polarising filter to help avoid this, so please only change the eyepiece for an exact replacement unit.

4:4:4 Output Option

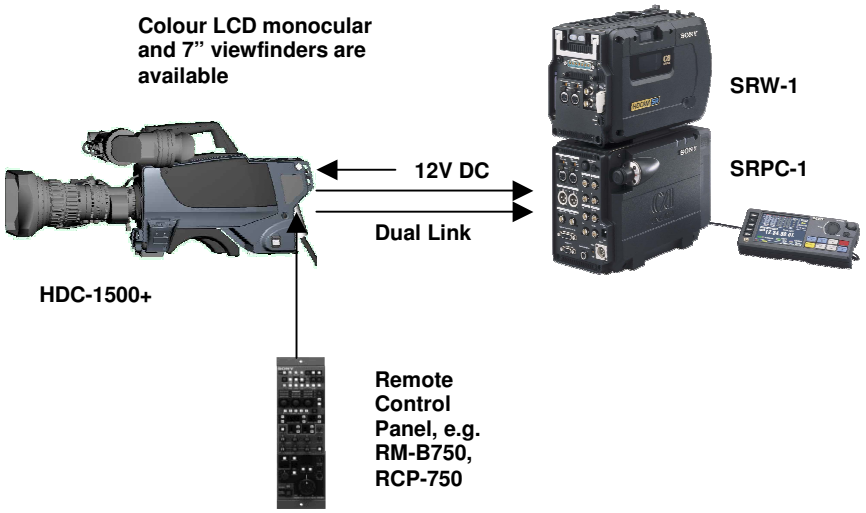
Unlikely to be of interest to OBs, but **4:4:4 colour sampling** is flavour of the month at the Cinematography end of the market.
A software upgrade option is now available to enable 4:4;4 dual link HDSDI
List price for the upgrade is £3470, product code: HDC 444SFTV1

Ordinarily, the output of the camera is an HDSDI signal, colour sub-sampled at 4:2:2. For certain applications, typically critical chroma-keying, a 4:4:4 sampled output is useful. This generates more data and necessitates the use of dual link HDSDI which is output on two BNC connectors from the camera.

In 4:4:4 mode the camera can be used in stand alone configuration, with external DC power, and two BNC cables (typically up to 50m maximum) to a recording system that can handle dual link HDSDI (The SRW-1 HDCAM SR portable VTR would be suitable.)

- Fibre cable connection to an HDCU camera control unit is not possible in this mode.
- 4:4:4 operation is not possible at 50P and 60P frame rates.
- Once this option is installed, the camera can easily be switched between normal 4:2:2 mode and 4:4:4 mode.

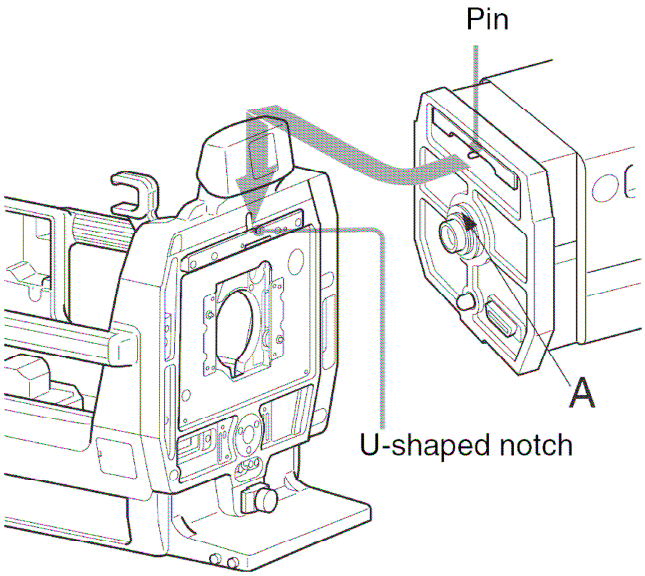
We’re running a trial of 4:4:4 production on a low budget movie at the moment. So far so good….we’ll update you in the next issue!



HDLA lens locking

If you're having difficulty locking the camera to the lens when using the HDLA, please bear in mind that the manual recommends removing a locating pin from the back of the lens. This allows a very small amount of lateral movement that helps align the camera and lens more easily.

We do understand this can be an issue if using a hired lens but it may not always be necessary. Again, we'd appreciate your feedback, and will try and provide more information as soon as we can.



Manuals and Menus

The camera menus have been substantially revised in the new software. We now have a new edition of the maintenance manual that lists the menus and tells you which items are stored in which type of file.
Probably the easiest way to make this available is for me to put it on my personal website. Scroll right down on the homepage, and you'll find it tucked out of sight.

www.imagemechanic.co.uk

As usual, operation manuals can be downloaded from www.sonybiz.net

V1.10 New Features

Return/ Genlock video input

The prompter BNC on the rear of the camera will now function as a prompt / genlock or return video connector as well. There's a small patch stuck over the selection switch next to the BNC that can now be removed.
For the moment, the video input when used in RET mode must be an HD analogue luminance source. There may be a further upgrade to allow use of composite video in the future.

Dual Channel prompter

There are now 2 independent channels for composite video from the HDCU to the camera head. The prompt 2 output on the camera head is the unlabelled BNC beneath the HDSDI1 connector in the side bulge.
Although it's designed for composite SD video, it will accept any 75ohm 1V 5MHz bandwidth signal.

SD Matrix

We're still a little unsure about this feature at the moment. It seems that it simply removes the HD matrixing, giving a 'clean' SD feed with SD colourimetry but without a matrix applied.
We hope to have some more useful information next time.

Electronic range doubler

Sounds a bit cheesy, but looks surprisingly good. It's a simple electronic zoom, so there's bound to be a loss of resolution, but if it's too dark for an optical range doubler this might be just the job.
In order to switch it on, you have to assign this function to the assignable switch next to the filter control buttons on the camera (No RCP control I'm afraid.) This can be done via the 'Switch Assign 2' page in the user menu.
There are warnings on the RCP and in the viewfinder if selected, but it is quite easy to forget it's been selected.

Optical signal strength meter

A bar graph of optical signal strength for each fibre can now be displayed on the RCP-750 or MSU-900/950. This should help assess how much headroom you have before it's necessary to clean connectors / replace cables or extend cable runs.

To view the bar graph on the MSU, press the FUNCTION mode button to the top left of the display, and then STATUS on the touch screen.

RCP assignment / preview

Although Ethernet control has mostly made things simpler, one thing that the old CNU did was to look after RCP preview switching if RCPs were re-assigned to different CCUs. The way round this when using Ethernet control is to do the preview switching from the HDCU. This means the RCP assignment system can keep track of which camera the preview selection is supposed to switch, and drive the switching from the HDCU.
Version 1.10 allows pin 11 of the mic remote connector on the HDCU to drive the preview switch. It's an active low, with 47K pull-up.
You'll also need to change the RCP menu to tell the RCP to drive the preview from the HDCU:
Maintenance / RCP config / Preview / , set to **CCU mode**

There will be a more detailed guide to monitoring in the next issue of the newsletter.

CCU menu control

The configuration menus within the HDCU have until now only been accessible from the toggle switches inside the front panel of the HDCU. You can now access this menu via the MSU. Press CONFIG / CCU / CCU MENU. Saves wearing a groove in your finger pressing the toggle switches and getting a crick in your neck trying to see a monitor from the equipment racks.

Intercom set-up

There are now several pages in the operation menu that enable relatively simple set up of the comms. (Simple compared to previous generations of incomprehensible internal switches that is.)
One page sets levels and mic powering / gain, then there's a page each for the headset, tracker and earphone connectors. For each connector you can decide whether you'd like to hear production, engineering, programme1, programme2 and tracker, and decide if you'd like each to be on left ear, right ear or both.
It's been a long time coming, but it looks like the comms are sensibly laid out and easy to use!

Bars character

Used to be available on previous generations of cameras, but this feature has only just been enabled for the HDC-1500. The character generator isn't too hard to use either.

Embedded audio on HDSDI

Embedded audio was missing from the SDI output until this upgrade.

Just a reminder of some contacts:

www.sonybiz.net

Sony UK Technical Services Group Helpdesk: 01256 828828
The helpdesk is the central point for contacting the Technical Services Group.

Andy Rosic	Service manager
Lee Prosser	Field Support
Giovanni Federico	Field support
Phil Dunk	Technical investigations
Kate Bosworth	Service Contracts
Kevin Holt	Field support (VTR)

And a new member of the team, recently of Finepoint, Dominic Smye-Rumsby

That's not everyone, and I'm sure their job titles are not quite as I've put them but I hope they won't mind.

I'm product manager for the HDC camera systems:
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07774 142724

RCP-920..will be available as an alternative to the RCP-750 from March