SONY

HDC User Group Newsletter

It's been a good few months here at Sony as far as our new HD camera systems are concerned. We've delivered a lot of cameras into the UK and Ireland market, which is good news, but now comes the hard bit…trying to keep the users happy while the cameras go live for the first time.

To that end we thought we'd circulate a newsletter, to share some of the knowledge and feedback we have received. Every 4 to 6 weeks we'll send this letter to all interested parties

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

This issue is mostly concerned with making sure you know who to talk to and where to look for information. If there's anything you'd like to see next issue, any questions, or feedback, please send me an e-mail.

Sony Support Helpline

Sony is prepared to support broadcasters at the Soccer World Cup in Germany. In case of a technical problem, service centres and partners from Sony are standing by to provide expert technical support to broadcasters.

Central Helpline will solve your technical problem or guide you to the next possible service centre.

+49 (0)221 537 2006

The Sony Support Helpline will be available from 9th June till 9th July, 7 days a week from 9 am to 8 pm. Spoken language is German and English.

(29th May till 8th June from Mo-Fr 9 am to 5 pm)

Who to talk to at Sony:

You'll all have an account manager, of course; Roy, Catherine, Ahmed and Kevin cover most of our HDC customers, but, in the unlikely event of any technical difficulties….

Neil Thompson
UK product manager for the HDC camera systems. Based rather inconveniently in Sheffield, but contactable most of the time on 07774 142724.

Lee Prosser
Phil Dunk
Kevin Holt
Giovanni Federico

This is our UK service team, with over 200 years experience between them…probably. Lee and Giovanni are mainly field based, and also cover switchers and other products. Phil has a more European / product sustaining role, particularly for HD camcorders, but often lends us a hand with system camera issues. Kevin is usually in Jays Close in Basingstoke. He covers a lot of other stuff besides cameras though
Lurking in the background you may also find Richard Arthur, who has looked after systems cameras for many years, but now usually only works a couple of days a week. (Editors note: insert joke here)

They can all be reached via the helpdesk on 01256 828828

Behind the front line team there is European product management in Basingstoke, and European Tech support in Germany. We're also fortunate in that the HDC and BVP camera systems are now manufactured in the UK at Pencoed, and we have some useful contacts here as well as in the design group in Japan.

Andy Rosic is the UK service manager, and **Kate Bosworth** looks after the Prime Support service contracts (more next month about service contracts). Both can be contacted via the helpdesk.

Where to look for information:

www.sonybiz.net/uk

Register on this site, and click on 'support'
You can then:

- Search for engineering bulletins about known technical issues.
- Search for part numbers, and order them if you sign up to the IBIS system
- Check latest software versions and find a sales code for the software. (This will typically be of the form BPE-SS-XXX, and can then be ordered via your usual sales channel. Alternatively, if the software is a bug fix rather than new features, and is loaded via memory stick, we can often e-mail you the new software.)
- Find European and worldwide service contacts
- Download product brochures (and most operation manuals)

Manuals:

There will be ops manuals available on this site for download eventually. (Already available for many products).

However….if you'd like a CD ROM containing a set of ops and maintenance manuals for all the system components now available, please e-mail me your postal address. Neil.Thompson@eu.sony.com

Current most frequently asked about:

- ## Triax / fibre adapter cable short detection

The triax / fibre converters will detect a short between the two screens of a triax cable, and shut down. This is an additional safety feature to the current BVP protection systems. If it is really causing you operational problems please contact neil.thompson@eu.sony.com . We would strongly recommend however, that the best solution is to check the condition of triax cables, and ensure they are well maintained in order to take advantage of this extra safety feature.

- ## Cable ranges:

There's some updated info on fibre only cable runs below, and we know the fibre triax converters will run with up to 800m of 11mm triax. We still need some non-theoretical figures e.g. for the amount of fibre you can run at each end of the triax in different configurations.

Configuration	HDCU-1500	HDCU-1000
HDC-1500 with local power, one piece cable	10000	10000
HDC-1500 + HDVF-20A	1800	3000
HDC-1500 + HDLA-1505 + HDVF-C730W	1350	2300
HDC-1500 + HDLA-1500 + HDVF-700A	1200	2000

Any practical experiences of cable runs would be gratefully received. Please let us know the exact kit configuration for a given combination of cables that worked for you.

- Software for network connection of MSU and RCPs.

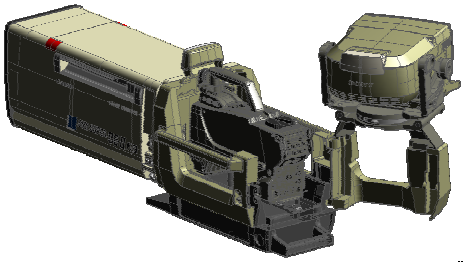
This new software is due imminently. Once installed it will allow an MSU-900 or MSU-950 to talk to up to 24 cameras via an IT network. All CCUs and the MSU need to be connected to an Ethernet switch.
At present the CCUs and MSUs are shipping with a cover over the RJ-45 connector, which can easily be removed.

Quick summary of the system, covering some FAQs

Camera

- The camera uses a new type of CCD. 1920 x 1080 pixel structure, but for the first time a 1080 50P signal can be read out from the camera. 1080 50P is not yet an 'official' HD format, but may be of use in the future. Difficult to handle in terms of recording or display at present, and can only be output from the camera (not the CCU) via dual link HDSDI on 2x BNC connectors.
- The new CCD allows a very high quality 720P output to be available from the HDCU if required, down-converted from the 1080 line sampling of the CCDs.
- It's a one piece camera with fibre optic HD output. Pictures stay digital all the way to the CCU output…no modulation, crosstalk, HF attenuation issues etc.
- Camera head menu is accessed via a toggle switch on the side of the camera, and then a roller wheel on the front of the camera, that clicks when pressed to drive down into the menus.
- When first switched on, the user menu comes up, which has been configured to contain all the menu items we thought you might need.
- There is an extended menu, with access to all controls, entered by a multiple button push. (Press the front rotary control wheel, and the unlabelled button next to the filter wheel control buttons, while you switch the menu toggle switch on…but you would have worked that out after a few hours anyway!)

Camera cradle



- The cradle has a latch towards the back of the side panel, that allows the whole of the rear of the cradle to swing open to allow easy mounting of the camera.
- The camera should have two 'hanger' brackets fitted to the front, which click the camera into position when attached to the cradle. These brackets are supplied with the cradle.
- There is a built in 'connector shoe' in the base of the camera that takes care of viefinder and lens connections….no further cables to connect.
- Mounting instructions are shown inside the cradle.
- Note: Lens locking lever should be left in the 'locked' position before putting the camera in the cradle.
- This cradle will not work with portable lenses. The HDLA-1507 is a version of this cradle that will work with portables but not box lenses.

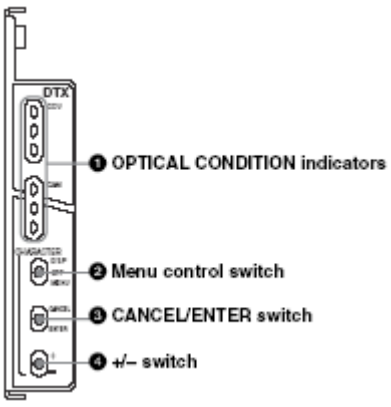
Viewfinders:

- The LCD viewfinder mounts directly on the camera, and should be used with portable lenses. You can use it with the camera cradle, but you would need to remove the bracket at the back of the cradle.
- Please try adjusting 'VF Detail' either directly from controls on the back of the cradle, or via the user menu on the camera head. In conjunction with viewfinder peaking, this allows very accurate focussing despite the resolution limitations of HD viewfinders.
- The CRT viewfinder can only be used with the cradle, mainly because of weight and power consumption. It's still a monochrome CRT, but gives best results for fast moving subjects..
- Note improved viewing angle from below.

CCU

- Two versions of the CCU are available. The lightweight HDCU-1500 supplied, and a full rack width HDCU-1000, which can supply more power, run longer cable lengths, and has some more options for input and output connections.
- Both CCUs will power the cradle, and work with fibre/triax converters.
- Both CCUs and cameras are interchangeable with the HDC-950, HDCU-900 and HDCU-950 systems already in use. (720P output not available when using 9xx components.)
- Comms and tally connections are same as for previous SD camera systems (e.g. CCU-550) via a 25 pin D connector. There's a page of comms settings in the user menu of the camera.
- There are cable short / open warning lights on the front of the CCU
- If you open the front door panel, there are red, amber, green traffic lights to indicate the strength of optical connection down the fibre cables. Amber light : still working, but connectors need cleaning.

- There is also a CCU menu control function inside the front panel. Menu is displayed on the composite PIX output, or on SDI outputs if required. Use this menu to set the output BNCs to HDSDI or SDSDI. (You can also set these outputs via the MSU menu, but there's a bug in this menu and it's not easy to use at the moment.)
- On the back of the CCU there are three digital output connections that can be configured via the CCU menu to be SD or HD with or without characters. (When shipped they were set to 1 &2 HDSDI, 3 SDSDI.)
- There are two option slots that allow further digital outputs, further analogue outputs or 3/2 pulldown option for 24P / 60i working.
- There is also a PAL output, labelled rather mysteriously, CHARACTER / SYNC



Differences between HDCU-1500 and HDCU-1000

These are the most important differences:

- Both CCUs can power both HDLA-15XX cradles, and the HDCU-1000 large body camera.
- 3 digital outputs as standard, plus 2 option card slots on the ‘1500
- 8 digital outputs as standard, plus 4 option card slots on the ‘1000
- The small CCU supplies DC volts rather than AC volts, and will not therefore supply power over as long a range as the large CCU. (see table at the end of this document.)
- No AES / EBU digital audio outputs (analog only) on the 1500.
- Three return inputs rather than the 4 on the HDCU-1000.
- No AC utility power outputs from cradle or HDC-1000 if using the HDCU-1500
- Separate return connectors for HDSDI, SDI or composite returns on the HDCU-1000. (All these input format options available on the ‘1500, but only one BNC per return input)
- Extra prompt input and extra data channel on the ‘1000

Control Panels

- Supplied with an MSU and an RCP. You can attach the MSU to the HDCU, and then the RCP to the MSU for this demo system.
- Existing MSU-7xx and RCP-7xx control panels will work with the HD cameras. (Latest software gives access to more functions.)
- Normally the MSU and RCPs would all connect to a CNU command network unit to integrate all the control panels.
- From April this year it will be possible to do without the CNU and network the MSU across all cameras using Ethernet cables and a simple network switch. (RCPs will still connect via the existing control cable in order to supply power, and to ensure control in case of network problems.)
- The MSU allows control of normal paint functions via the paint menu, plus functions such as file transfer and RCP re-assignment (including joystick preview switching)
- You can also configure frame rates and outputs (via: config / CCU / multi-format menus.)

Fibre Triax Converters:

- The adapters are fitted with Lemo triax connectors.
- You can use up to approximately 800m of 11mm triax between the fibre /triax converters.
- If there is a short between the two outer screens of any of the triax cables, (not uncommon, and a normal SD triax system will still work if this is the case) the system will shut down and show a short circuit warning light.
- The camera end unit is self powering, the truck end unit needs 240V ac.
- You can still use long fibre runs at each end with the triax in the middle. Total fibre run up to about 600m in addition to the triax, depending on the

combination of kit and its power consumption. (Probably not practical to run long fibre cable at the truck end as the adapter needs ac power.)

- There will be some reduction in bandwidth and picture quality because of the conversion to analogue.
- The following signals are **not** carried by the triax / fibre converters: Teleprompt, Aux data, Utility Power, Skin detail gate signal. Return video is monochrome if using triax.