SONY

HDCAM

HDW-750PC
HDW-750P
HDW-730S

Digital Camcorder

www.sonybiz.net/hdcam

A worldwide standard for digital production

With the first High Definition (HD) transmissions already launched in Europe, broadcasters and programme makers are rushing to embrace the business opportunities presented by better-looking, more seductive pictures.

Whether you're shooting quality drama, mainstream entertainment or commercials, High Definition is guaranteed to grab any audience's attention. Aside from its vastly improved on-screen look, High Definition increases the shelf-life and international marketability of all your productions.

Offering true 1080-line resolution to satisfy the broadest possible range of distribution requirements, Sony HDCAM is the perfect complement for any project where a prestige look is required. A natural partner for documentaries, natural history and live events as well as mainstream entertainment, HDCAM has become firmly established as the format of choice for quality-conscious media professionals everywhere.

Drawing on its unmatched expertise in the development of High Definition equipment, Sony offers a choice of HDCAM camcorders that builds on more than 25 years heritage in ½" tape technology. Sharing the same user ergonomics that have already made Sony camcorders the preferred choice for thousands of programme makers, the HDW-730S and HDW-750P HDCAM camcorders capture High Definition images that will give your audience an unforgettable viewing experience.

HDCAM broadens your creative and commercial options with a choice of shooting modes to suit the demands of any production. The HDW-750P is switchable between 1080/50i and 1080/25P modes, offering the flexibility of progressive operation when a more 'filmic' look is preferable. The most recent addition to the HDCAM camcorder line-up, the HDW-730S can be switched between 1080/50i and 1080/59.94i operation – removing the need to hold separate camcorders for European (50i) and Japanese and US-based (59.94i) projects.

And, new for 2005/2006, both camcorders now come equipped with version 2 software adding a powerful new film gamma characteristic for stunning natural-looking film-like images.

The benefits of HDCAM aren't limited to productions destined for transmission and distribution in HD today. Pictures shot with the HDW-730S and HDW-750P look better when downconverted and delivered to the home in Standard Definition than pictures acquired in 625/50. Shooting in HDCAM with HDW-730S and HDW-750P thus ensures your content commands a premium today… and tomorrow.

With HDCAM there's no need to compromise your personal vision. At a price that's firmly within reach of Standard Definition production budgets, the Sony HDW-730S and HDW-750P are accessible to anyone who's passionate about making great-looking programmes.

HDW-750PC	**1080/50i,1080/25P switchable, with 2.7-inch colour viewfinder**
HDW-750P	**1080/50i,1080/25P switchable, with mono viewfinder**
HDW-730S	**1080/50i,1080/59.94i switchable, with mono viewfinder**

State of the Art Technology for the High Definition Era

The latest advances in imaging and recording technology are built into the HDW-730S and HDW-750P HDCAM camcorders. The result is a stunning combination of picture quality, durability and ease of operation.

HAD Sensor Technology

The HDW-750P uses Power HAD™ CCDs incorporating the latest FIT sensor and on-chip lens structure. The 2/3-inch 2.2 million pixel sensors have a dramatically improved light collecting capability, and are based upon the 1920 x 1080 CIF (Common Interchange Format). Class-leading sensitivity of F10 at 2000 Lux enables the capture of images in extremely low lighting conditions. Signal-to-noise ratio is 54dB and vertical smear is –135dB*.

2/3-inch 2.2 million pixel IT CCD sensors are used in the HDW-730S. These provide equivalent performance to the FIT CCDs used in the HDW-750P, but with a smear level of –125dB*.

The HDW-730S and HDW-750P provide a choice of picture acquisition modes. The HDW-730S can acquire at 1080/50i and 1080/59.94i making it ideal for users who need to shoot pictures for European (50i) and US, Japanese etc. (59.94i) audiences.

The HDW-750P can record in either interlace 1080/50i or progressive 1080/25P mode, providing a choice of "film" look progressive or "TV" look interlace pictures.

*Typical numbers.

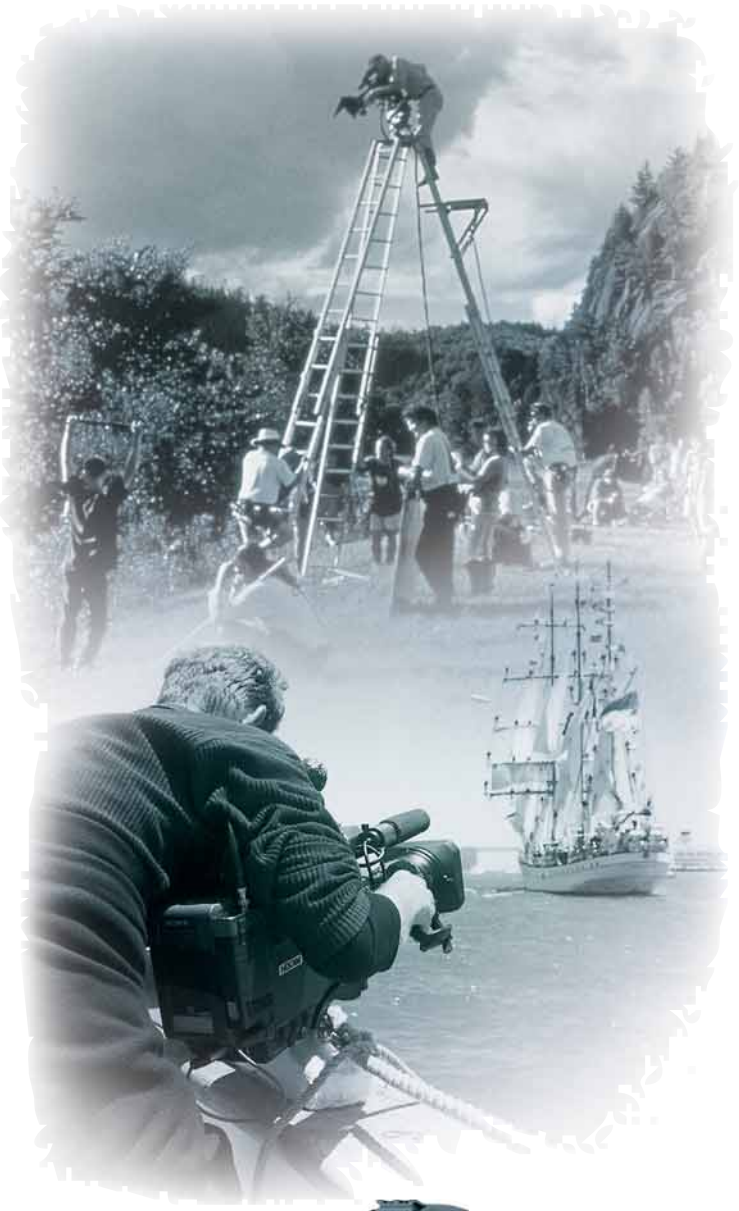
10-bit A/D and Advanced Digital Signal Processor

Both the HDW-730S and the HDW-750P use 10-bit A/D conversion and Advanced Digital Signal Processing (ADSP). This ensures superb picture quality while keeping power consumption low.

A 600% wide dynamic range, excellent tonal reproduction and powerful “in-camera” picture manipulation prevents any compromise in creativity. The well-known Memory Stick set up system allows set up parameters to be stored and recalled as required, for instant set up of the camcorder. All factors relating to colourimetry and tonal reproduction can be stored. Access to the image parameters within the set-up menu of each camcorder is both user-friendly and intuitive.

Great Ergonomics

Sony has refined the ergonomics of its professional camcorder line up through continuous discussion with camera professionals over more than 25 years. The compact design, rugged construction and logical layout of switches, indicators and meters in the HDW-730S and HDW-750P leaves you free to concentrate on the creative requirements of the production. Careful attention has been paid to the weight distribution and balance of both models. With a total weight of around 5.4kg, including viewfinder, battery, cassette and microphone, they are ideal for both hand-held and shoulder mounted operation.



Dual Optical Filter Wheels

Two independent filter wheels, one for Neutral Density (ND) and the other for Colour Correction (CC), are provided. An optional servo filter drive unit, the BKDW-701, can also be fitted allowing filter settings to be changed with the RM-B750/150 Remote Control Unit.

*The HDW-730S adopts a single optical filter wheel.

Two Assignable Buttons

You can assign two frequently-used functions to these buttons.

Dual Earphone Output

The HDW-750P and HDW-730S are equipped with two earphone outputs. These can be used simultaneously.

Turbo Gain

The inherent sensitivity of the HDW-750P/730S is high enough to capture images under various low light conditions, but in some situations it is necessary to image in unusually low light conditions. The Turbo Gain function immediately boosts the gain level to +42 dB at the touch of the button. Thanks to this function, it is possible to capture critical scenes down to around 0.3 lux of incident scene illumination.

Slot-in Wireless Microphone Receiver (Built-in UHF Synthesizer Receiver Unit)

The optional WRR-855B Wireless Microphone Receiver can be fitted directly to the HDW-750P/730S camcorder using a slot-in mechanism that gives a cable less interface between the camcorder and the receiver. This system increases mobility by maintaining compact overall dimensions even when the receiver is attached to the camcorder.

*WRR-855B is an option.

LCD Status Panel and Diagnostic System

All the main operational controls and switches are located on the left-hand side of the camcorder. The LCD panel is on the same side, and shows a wide range of status and diagnostic displays such as Tape Remaining, Battery Level, Audio Levels, etc.

Tally Lamp

A Tally Lamp is included in the connector panel of the camcorder body.

Stereo Audio Output

A stereo audio line output is available from the 5-pin XLR connector on the rear of the camcorder. This provides two analogue audio output channels, which can be selected to be either Channel-1/2 or Channel-3/4.

HD SDI Output for Field Monitoring

The HDW-750P/730S provides an HD-SDI output with four channels of embedded digital audio. You can monitor high quality HD images in the field without any adapter.

Extended Clear Scan

The Extended Clear Scan function is particularly useful when shooting scenes that contain computer or TV screens as it minimises the horizontal bars that can appear. The ECS shutter speed is continuously variable.

Cassette Loading

Cassette loading is fast, simple and reliable, with a cassette change taking less than 5 seconds*. The loading mechanism is robust and vertical cassette loading is used to keep dust and rain out. This also helps prevent drum rotation noise from being picked up by the microphone.

*Sony measurement.

Electronic Shutter

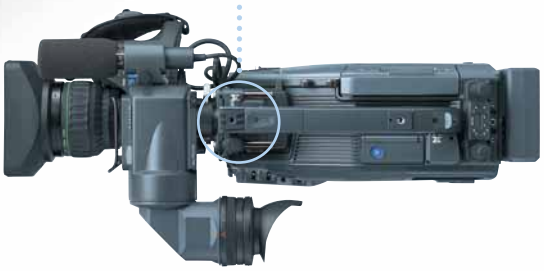
The electronic shutter helps in capturing clear images of fast-moving objects by selectively minimising motion blur.

Safe Area Markers

To allow for individual production requirements, the HDW-750P/730S provides safe-area markers for any aspect ratio.

Intelligent Light Shoe

The HDW-750P/730S HDCAM camcorder incorporates an intelligent light shoe on the upper part of the carrying handle. A standard two-pin socket provides up to 50 watts of power from the attached battery. The power can be switched on and off manually or, when in Auto mode, it can be set to be synchronised with the operation of the REC button. A switch on the side of the camcorder selects Manual or Auto mode.



Lens Mount

The B-4 mount ring of the HDW-750P/730S is strong enough to support the heaviest of lenses.

Enhancing Creative Image Capture

Menu-driven set up that enables creative image making in the studio or field has been widely accepted. To help this creative process, we have made it very easy to customise the settings of many image parameters, and then digitally save these settings. A simple and intuitive menu driven set up has freed camera adjustments from being a purely engineering exercise into a uniquely creative process. Various setup parameters can be stored and then transferred between camcorders via the Memory Stick storage medium. This capability represents a major advance in operational and creative versatility. The design of the menu “page layout” for the HDW-750P/730S is inherited from the HDW-F900 multi-format HD camcorder, – an easy and intuitive camcorder set up system. “Page customisation” is also inherited to speed up the operation by allowing relevant parameters to be grouped together to allow operators fast access to the adjustment required for a given production. Some of the most important operational adjustments are described here.

Colourimetry

The HDW-750P and HDW-730S produce pictures with astonishing colur reproduction, and offer controls that offer further creative colour manipulation.

Multi Matrix

Multi Matrix offers unique possibilities for creative control by allowing selective colour enhancement or alteration. It allows a particular colour to be selected and its hue changed over a range of approximately 22.5 degrees. The level of saturation can also be modified. This control allows creative “in camera” effects – similar to the secondary colour correction normally reserved for post production special effects work – to be added at full bit depth.

Multi Matrix

Multi Matrix ON

Colour Balance

Consistent scene-by-scene colour balance is widely accepted as one of the key settings during production. There are a number of ways of setting this when working with an HDW-750P/730S camcorder. By using Auto White (and Black) balance, the HDW-750P/730S gives an accurate overall colour balance. A Menu “Paint” function allows colour levels to be adjusted on-set according to creative needs. For this operation, the RM-B750/150 controller can be connected and paint parameters can be remotely adjusted.

Auto Tracing White Balance

This function allows automatic tracing of white balance in situations where overall colour temperature of the lighting fluctuates. This is particularly useful for continuous shooting that requires a subject to be followed from outside to inside (i.e. from daylight to tungsten lighting) with no opportunity to re-set the colour balance of the camera.

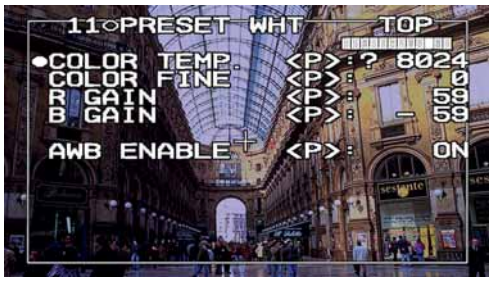
Colour Temperature Control

Digital Colour Temperature Control makes it possible to dial in the required colour temperature of the camera. In addition, this function can be used creatively. The overall colour balance of the picture can be changed to make it ‘warmer’ or ‘colder’. Four types of colour filters are also provided as standard for optical colour temperature adjustment.

Colour Temperature Control

3,200K

5,500K



8,024K

Contrast Range

The HDW-750P/730S can handle a very wide contrast range. A number of useful features are readily available to aid the operator to more precisely reproduce any given scene. Creative possibilities are offered by modifying “gamma settings”, offering a great advantage to achieving a desired ‘look’.

Selectable Gamma Curves

A vital factor in achieving an appropriate contrast range is the gamma curve. Gamma determines the transfer characteristic of a normal exposed scene. For Sony’s digital camcorders, gamma curves can be adjusted on location. The overall (Master) gamma curve of the HDW-750P/730S offers a very natural overall tonal reproduction because of the 10-bit A/D converter and ADSP (Advanced Digital Signal Processing) providing multiple gamma points. While the master gamma can be changed between two calculating patterns, several fixed master gamma curves are available for each pattern. These are all accessible and interchangeable via the set-up menus.

Gamma Calculating Pattern A
- No.1: SMPTE 240M (Initial Gain 4.0)
- No.2: ITU-R.BT709 (Initial Gain 4.5)
- No.3: BBC Gamma setting (Initial gain 5.0)

Gamma Calculating Pattern B
- No.1: Sensitivity is equivalent to 50 ISO
- No.2: Sensitivity is equivalent to 100 ISO
- No.3: Sensitivity is equivalent to 200 ISO

RGB Gamma Balance

By changing the RGB gamma balance it is possible to change the colour balance of the mid-tones without affecting black or white balance.

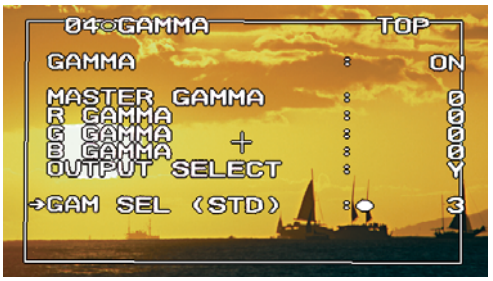
Variable Black Gamma Range

The Variable Black Gamma Range function allows fine adjustment of tonal reproduction in shadow areas. This feature can help to bring out details from the dark parts of the picture without affecting mid-tones while maintaining absolute black level. The variable range is LOW, MID and HIGH.

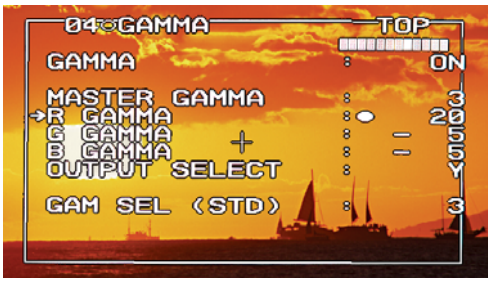
Black Stretch

Adjustment of the Variable Black Gamma Range can be limited to picture luminance only, without affecting other parameters of the video signal. This is particularly helpful for dark scenes when the black has to stay black, but there is a requirement to pull out more detail.

RGB Gamma Balance



Normal



Red Channel Enhancement

Variable Black Gamma Range

Normal

Variable Black Gamma Range Function ON

Knee Saturation Function

Normal

Knee Saturation Function ON
(Adaptive Highlight Control)

Adaptive Highlight Control (Auto Knee mode)

Conventional Video Equipment

TruEye

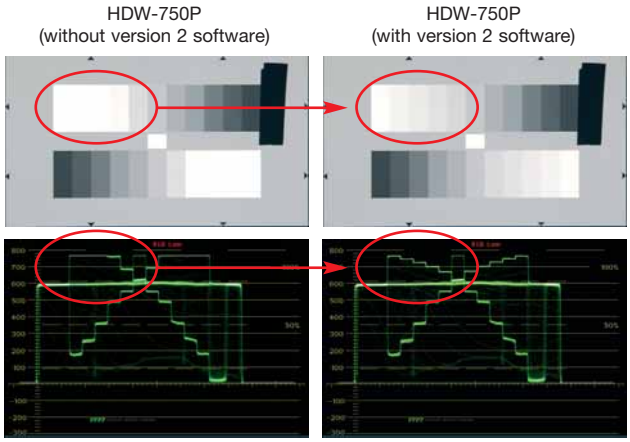
Highlight Handling

Sony Advanced TruEye™ processing allows much improved highlight handling, with faithful colour reproduction.

NEW

Increased Dynamic Range

(HDW-730S and HDW-750P with version 2 software only)
Version 2 software offers a significant boost in the latitude of the camcorder to give a more film-like dynamic transfer characteristic. This allows far more detail to be seen in the highlight and lowlight areas of the image.



Increased Dynamic Range

Adaptive Highlight Control (Auto Knee mode)

The Sony ADSP system intelligently monitors the brightness of all areas of the picture and automatically adapts the knee point/slope for optimum reproduction within given areas of the scene area. A typical example is the ability to shoot an interior scene which includes a sunlit exterior seen through a window.

Knee Saturation Function

The Sony TruEye processor is one of the most innovative features of Sony's ADSP development and makes it possible to reproduce very natural colours in a high contrast scene. Without TruEye, when only knee correction is applied to the RGB channels, a colour distortion in highlight areas will occur. A typical example is human skin tones which tend to take on a yellow tone in highlights. Knee Saturation processing automatically retains accurate colour in highlight areas and maintains colour saturation in picture areas compensated by the TruEye processor.

High Definition – Picture Sharpness

HDCAM camcorders capture beautiful pictures with natural sharpness and fine detail. The use of three 2.2 million pixel CCDs combined with wideband digital recording ensures faithful image capture. Very precise control of picture texture is a key feature of both the HDW-750P and the HDW-730S.

Triple Skin Tone Detail control

Skin Tone Detail allows control of image enhancement within user specified colour tones. The HDW-750P/730S camcorder allows enhancement to be set independently for up to three distinct colour/or hue ranges.

The conventional use of Skin Tone Detail correction is to reduce the image enhancement in areas of skin tone. With the HDW-750P/730S, correction is not restricted to areas of skin tones and can be set to apply to any three colour areas. Image enhancement within those three areas can be increased or decreased relative to the overall image enhancement of a given scene.

Normal

Ch 1 ON (Green)

Ch 2 ON (Blue)

Ch 3 ON (Red)

Level Dependent Detail

This function provides natural detail enhancement in extreme highlights by automatically limiting the amplitude of edge signals in high contrast area. Detail aliasing in these areas is virtually eliminated.

Normal

Level Dependent Detail Control ON

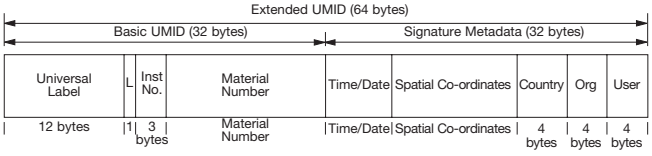
Meta-data Handling

Since the early days of film and television, meta-data such as shot number, slate information and other production notes has been used increasingly during the production process. While much of this data has been generated and stored on paper, the use of computers for storage and management of meta-data has grown significantly. However the lack of a unique identifier for each segment of material recorded on the filed tape has made it difficult to link this meta-data to the actual material. HDW-730S and HDW-750P camcorders solve this problem by providing the capability to generate and record a globally unique identifier relating directly to the video material. This process is made possible by recording UMID (Unique Material Identifier) information.

UMID* recording

The UMID is a unique identifier for picture, audio and data material that is created and globally unique. The HDW-750P/730S automatically generates and records UMID on tape at every scene change. By adding UMID information during the acquisition process, future benefits such as easy search of material during editing, and archive can be realised. Sony supports UMID as well as Extended UMID** for further operational convenience.

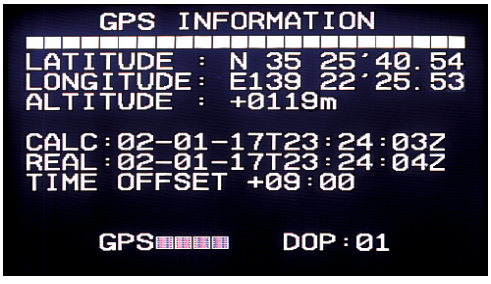
*UMID is standardised as SMPTE 330M
**Extended UMID adds Signature Meta-data, time, positioning, and user information to the Basic UMID.



GPS Unit — HKDW-704 (Optional)

Utilising the Meta-data capability of the HDW-750P/730S camcorder, the HKDW-704 GPS unit has been introduced to enhance the ability to store Global Position information in association with the field-recorded material. The HKDW-704 offers real-time recording of global positioning information on tape as well as the Memory Stick storage medium. When the camcorder plays back a tape that has recorded GPS information, the positioning information of the shooting site can be indicated on a PC running map illustration software*. The position data is also recorded as Extended UMID on the tape keeping the link between video/audio and positioning data.

*Output format from the REMOTE connector is NMEA.



Tele-File™ System

The Sony Tele-File system stores and recalls various types of production data, such as shot data and shot marks, onto and from an optional cassette label with a built-in memory IC. The camcorder is equipped as standard with a Tele-File reader/writer module, allowing this information to be managed electronically. Use of the Tele-File system can significantly raise efficiency in the subsequent editing process and management of archives.

HDW-750P/730S Menu

HDW-2000 Series time code list

HDW-2000 Series VTR

Shot Mark and Shot Data Handling

The HDW-750P/730S is capable of recording shot marks (time codes for 'good' shots) and shot data (data, shot ID, cassette number etc.) to the tape. When a tape containing shot marks is played back on an HDW-2000 series VTR, the shot mark positions are automatically detected and a list of all marks is generated for display on a video monitor. This allows operators to easily select and cue-up to the scene of interest.

The shot marks and shot data can be utilised for a wide range of applications to provide more efficiency in the production chain.

Optional Accessories

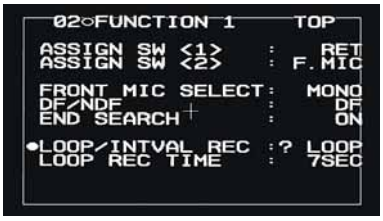
Slow Shutter Board (Optional)

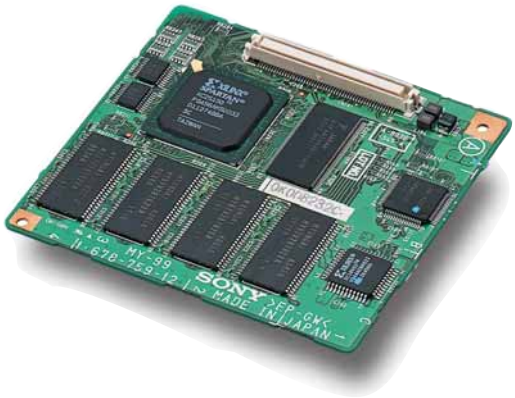
The optional HKDW-705 Slow Shutter Board enhances the operational and creative versatility of the HDW-750P/730S camcorder in both ENG and EFP applications. With the HKDW-705, the HDW-750P/730S can slow its shutter speed down to a 64-frame period*. During this long frame period, electrical charges accumulate on the CCDs, dramatically increasing sensitivity. This helps camera operators to shoot in extremely dark environments. In addition, because more picture blur occurs when shutter speed is reduced, the HKDW-705 allows operators to produce creative pictures when shooting a moving object with the intentional use of blurred images.

*The shutter speed can be adjusted to a 1-, 2-, 3-, 4-, 5-, 6-, 7-, 8-, 16-, 32-, or 64-frame period.

Picture Cache Board (Optional)

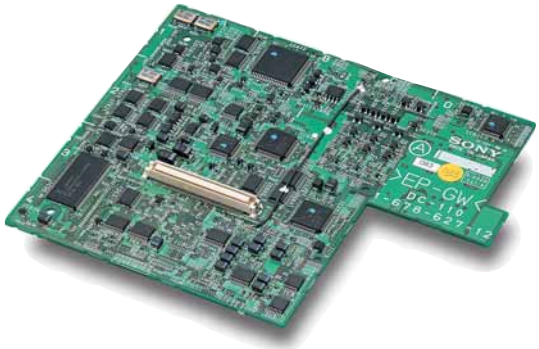
The optional HKDW-703 Picture Cache Board provides up to seven seconds (HDW-750P) and eight seconds (HDW-730S) of loop recording using solid state memory. All the action occuring within this period before the REC button is pressed is captured. The loop recording capacity can be set to 1, 2, 3, 4, 5, 6 or 8 seconds in the HDW-750P and HDW-730S.





Down Converter Board (Optional)

The optional down converter board adds a Standard Definition output with four embedded digital audio channels. SD-SDI or analogue composite can be selected via the camcorder's set up menu.



Colour Viewfinders (Optional)

2.7-inch type LCD Colour Viewfinder – HDVF-C30W

The HDVF-C30W 2.7-inch* type HD LCD colour viewfinder has been designed to display extremely clear images. Its full-colour, flicker-free TFT LCD provides a resolution of 960 pixels horizontally x 540 pixels vertically for each R, G and B colour component, a luminance level of 300 cd/m^2 and a 200:1 high-contrast ratio. In addition, the HDVF-C30W delivers several unique features:

- Gray scale signals can be generated, allowing camera operators to easily adjust exposure to the appropriate level.
- The 2x magnification function simplifies focus operation, especially when prime lenses are used.
- A detachable eyepiece design allows the user to directly view the LCD.
- Lightweight construction and low power consumption characteristics are a great aid when working in battery-powered mobile applications.

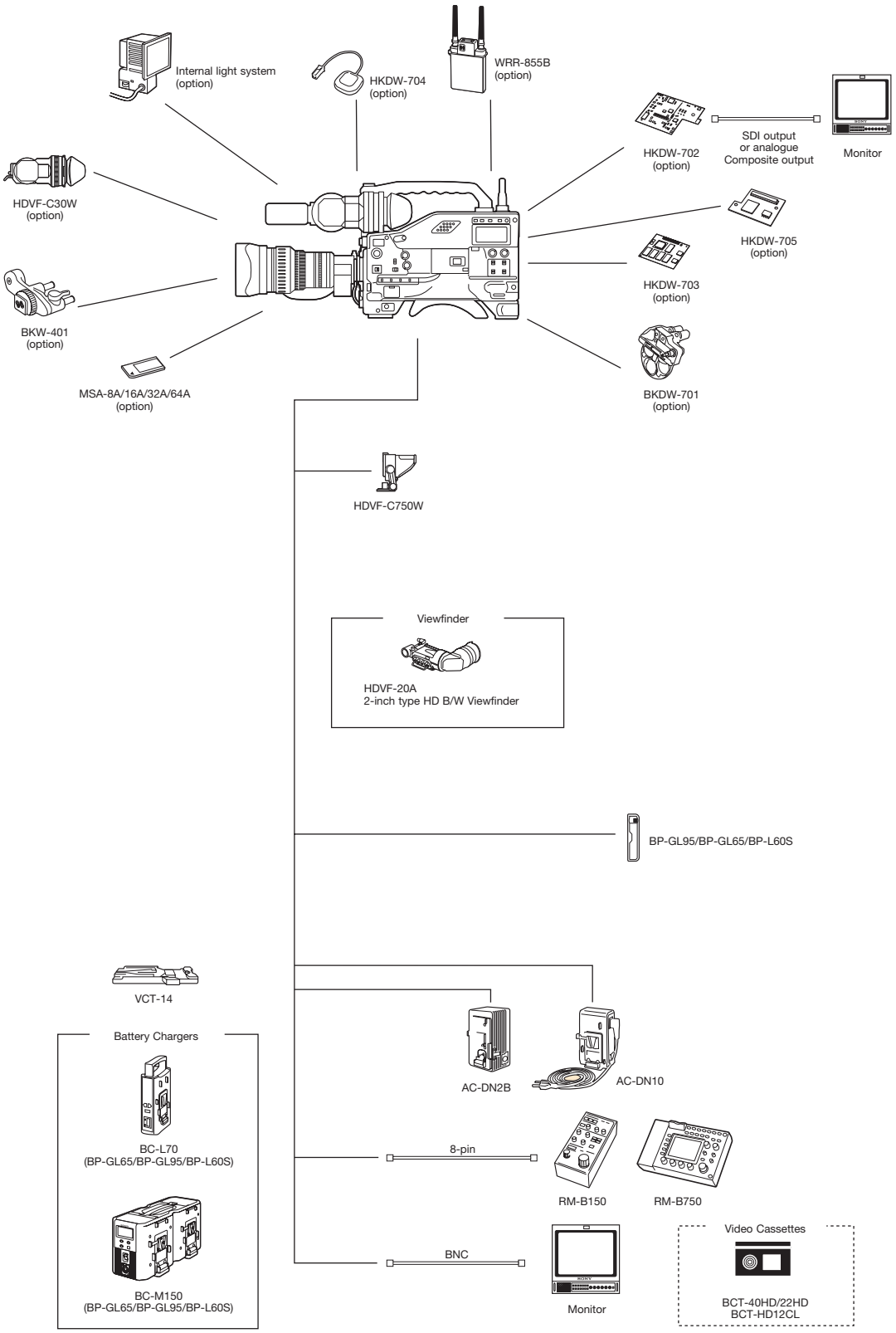
6-inch type LCD Colour Viewfinder – HDVF-C750W

The HDVF-C750 6-inch* type HD LCD colour viewfinder is also available for the HDW-750P/730S. The HDW-C750W provides a resolution of 960 pixels horizontally x 530 pixels vertically for each R, G and B colour component.

*Viewable area measured diagonally

**The liquid crystal display fitted to this unit is manufactured with high precision technology, giving a functioning pixel ratio of at least 99.99%. Thus a very small proportion of pixels (at most 0.01%) may be "stuck" constantly on or constantly off. In addition, over a long period of use, because of the physical characteristics of the liquid crystal display, such "stuck" pixels may appear spontaneously. These problems have been kept to absolute minimum, but are an unavoidable characteristic of liquid crystal technology.

System Configuration



Optional Accessories

VCT-14
Tripod Adapter

LMD-9050
Colour LCD

Memory Stick
MSA-8A/16A/32A/64A

BCT-40HD/22HD
HDCAM Tape Cassettes

AC-DN2B
AC Adapter

AC-DN10
AC Adapter

BP-GL95
Info Li-Ion Battery

BP-GL65
Info Li-Ion Battery

BP-L60S
Info Li-Ion Battery

BC-M150
Battery Charger

BC-L70
Battery Charger

BKDW-701
Servo Filter Unit

BKW-401
Viewfinder Rotation Bracket

RM-B750
Remote Control Unit

RM-B150
Remote Control Unit

WRR-855B
Wireless Microphone Receiver

WRR-862B
Dual Diversity
Microphone Receiver
(Adapter required)

WRT-847B
UHF Handheld Transmitter

WRR-8B
Belt Pack Transmitter

ECM-678
Shotgun Microphone

1-547-341-12, Fog-proof filter
A-8262-537-A, Viewfinder Eye-piece (High magnification)
A-8262-538-A, Viewfinder Eye-piece (Low magnification)
A-8267-737-A, Viewfinder Eye-piece (Standard magnification with special compensation for aberrations)
A-8314-798-A, Viewfinder Eye-piece (High performance, x3)

X-3608-271-1, Standard viewfinder lens
A-8278-057-A, Mounting bracket for WRR-862B

HDW-750P/730S Specifications

General	HDW-750P	HDW-730S
Mass	Approx. 3.7 kg (8 lb 3 oz): Main Body Approx. 5.4 kg (11 lb 14 oz) (with MIC, VF, BCT-40HD, BP-L60S)	
Dimensions (WxHxD)	127 x 206 x 308 mm (5 x 8 1/8 x 12 1/4 inch)	
Power requirement	DC 12V + 5.0 V/-1.0 V	
Power consumption	34 W (with 12 V power supply, REC mode, without VF)	33 W (with 12 V power supply, REC mode, without VF)
Operating temperature	0 °C to +40 °C (+32 °F to +104 °F)	
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)	
Operating humidity	25% to 80% (Relative humidity)	
Continuous operating time	Approx. 135 min with BP-GL95	Approx. 155 min with BP-GL95
Inputs/outputs connectors		
Genlock video input	BNC type x 1, 1.0 Vp-p, 75Ω	
Time code input	BNC type x 1, 0.5 V to 18 Vp-p, 10 kΩ	
Audio CH1/CH2 input	XLR-3-pin type x 2 (Female), -60 dBu/+4 dBu selectable, high impedance, balanced (0 dBu = 0.775 Vrms)	
Mic input (Stereo)	XLR-5-pin type x 1 (Female), -60 dBu	
Test output	BNC type x 1, 1.0 Vp-p, 75Ω , unbalanced	
VBS/SDI output(option: HKDW-702)	BNC type x 1, 75Ω / VBS out: 1.0 Vp-p/SDI out: 0.8 Vp-p	
HD-SDI output	BNC type x 1, 0.8 Vp-p, 75Ω , unbalanced	
Audio output	XLR-5-pin type x 1 (Male), 0 dBm	
Time code output	BNC type x 1, 1.0 Vp-p, 75 Ω	
Earphone	Mini-jack (x 2), 8, -∞ to –18 dBs variable	
Lens	12-pin	
Remote	8-pin	
Light	2-pin, DC 12 V, max. 50 W	
DC input	XLR-4-pin type (Male), DC 11 V to 17 V	
DC output	4-pin (for wireless microphone receiver), DC 11 V to 17 V, maximum current 0.1 A	
VTR section		
Recording format	HDCAM	
Tape speed	Approx.80.6 mm/s (at 50i/25P format)	Approx. 96.7 mm/s (at 59.94i format) Approx. 80.6 mm/s (at 50i format)
Playback/Recording time	Max. 48 min. with BCT-40HD	Max. 40 min. with BCT-40HD (at 59.94i format) Max. 48 min. with BCT-40HD (at 50i format)
Fast forward/rewind time	Approx. 5 min. with BCT-40HD	
Recommended tape	Sony HDCAM cassette BCT-22HD, BCT-40HD	
Digital video performance		
Sampling frequency	Y: 74.25 MHz, PB/PR: 37.125 MHz	
Quantization	10 bits/sample (8 bits/sample for compression processing)	
Channel coding	S-NRZI PR-IV	
Compression	Coefficient recording system	
Error correction	Reed-Solomon code	
Error concealment	Adaptive three dimensional	
Audio performance (Playback with standard HDW-500/F500/M2000/M2100)		
Frequency response	20 Hz to 20 kHz, + 0.5 dB/-1.0 dB	
Dynamic range	More than 85 dB (emphasis ON)	
Distortion (at 1 kHz, emphasis ON, reference level)	Less than 0.08%	
Cross talk (at 1 kHz, reference level)	Less than -70 dB	
Wow & flutter	Below measurable limit	
Camera section (Performance)		
Pickup device	3-chip 2/3-inch type FIT CCD	3-chip 2/3-inch type IT CCD
Effective Picture elements	1920 (H) x 1080 (V)	
Optical system	F1.4 prism (Equipped with Quarz Filter)	
Lens mount	Special bayonet mount	
Built-in filters	ND 1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND CC A: CROSS, B: 3200K, C: 4300K, D: 6300K	ND 1: Clear, 2: 5600K + 1/8ND, 3: 5600K, 4: 5600K + 1/64ND
Sensitivity (2000 lux, 89.9% reflectance)	F10.0 (typical) Equivalent to ISO 600 or more	
Minimum illumination	Approx. 0.3 lx (F1.4 lens, +42 dB turbo gain)	
Smear level	-135 dB	-125 dB
S/N ratio	54 dB (typical)	
Modulation depth at 5 MHz	45% +/-5%	
Horizontal resolution	1000 TV lines	
Shutter speed	1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 50i format) 1/33, 1/50, 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 25P format)	1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 59.94i format) 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 50i format)
Clear Scan	25 Hz to 4700 Hz	60 Hz to 4300 Hz (at 59.94i format) 50Hz to 4700 Hz (at 50i format)
Programmable Gain	-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB (select in camera setup menu for L/M/H/TURBO)	
Viewfinder		
CRT	2.0-inch monochrome	
Controls	BRIGHT, CONTRAST, PEAKING controls / TALLY, ZEBRA, DISPLAY/ASPECT switches	
Horizontal resolution	500 TV lines (16:9, at centre)	
Microphone	Ultra-directional stereo microphone (Detachable)	Ultra-directional monaural microphone (Detachable)
Supplied accessories	HDVF-20A, HD Electric viewfinder (1) Stereo microphone, Super cardioid directional, external power supply type (1) Operation manual (1) Lens cap (1) Shoulder strap (1) XLR cap (4)	
Optional accessories	HKDW-702, HD-SD Down Converter Board HKDW-703, Picture Cache Board HKDW-704, GPS Unit HKDW-705, Slow Shutter Board VCT-14, Tripod Adapter BKW-401, Viewfinder Rotation Unit BKDW-701, Servo Filter Unit RM-B150, Remote Control Unit RM-B750, Remote Control Panel HDVF-C30W, HDVF-C750W, HD LCD Colour Viewfinder BP-GL95/GL65/L60S, Info Li-Ion Battery BC-M150, Battery Charger BC-L70, Battery Charger	AC-DN2B, AC Adapter AC-DN10, AC Adapter MSA-8A/16A/32A/64A, Memory Stick WRR-855B, UHF Synthesized Tuner Unit WRR-862B, UHF Synthesized Tuner Unit (A-8278-057-A, WRR mounting bracket required) ECM-678, Shotgun Microphone CAC-12, Microphone Holder WRT-8B, Belt Pack Transmitter WRT-847B, UHF Handheld Transmitter MLB-1M-100, Memory Label BCT-22HD/40HD, HDCAM Tape Cassette BCT-HD12CL, Cleaning Cassette LC-DN7, Hard Carrying Case

SONY