1/2-Inch Platform Advances to Greater Heights
Since introducing its first models, Sony has continually enhanced the BETACAM™ Series of products, each offering the highest possible performance and always preserving a consistent half-inch platform. The excellence of the analog BETACAM™/BETACAM SP™ formats introduced an entirely new set of opportunities to ENG and EFP, while the use of digital processing in the Digital BETACAM™, BETACAM SX™, and MPEG IMX™ formats brought standardized 4:2:2 digital recording into both news gathering and field production. Today, each format is in service in a multiplicity of programming applications, offering the pinnacle of reliability and performance that only BETACAM technology provides.

In 1997 Sony revolutionized HDTV program origination with the introduction of the 1/2-inch camcorder the HDW-700. This was soon followed by the HDW-700A camcorder, which operates according to the updated 1080/60i production standard. This camcorder, in association with its editing VTR the HDW-500, extended the BETACAM format tradition into the realm of mobile HD program creation. In 1999 the HDCAM™ format was dramatically broadened to include the new multi-frame rate camcorder the HDW-F900 and its companion VTR the HDW-F500 – both responding to the breakthrough new ITU 709 global standard for international HD program origination. The pivotal inclusion of the new 24-frame progressive format in this standard constituted a central design imperative for the HDW-F900/F500 system and introduced to the world the first digital 24-frame motion picture capture system.

With the HDW-F900/HDW-F500 Series squarely addressing the needs of movie-making and high-end prime time television program and commercial production, Sony returned to the central agenda of a mainstream HD capture system in support of the emerging broader DTV broadcasting agendas around the world. This is based upon the SMPTE 274M HD production standard.

A second generation 1080/60i camcorder and VTR system has been developed which is intended as a more cost-effective and feature enhanced system specifically designed to streamline the migration to DTV. A central design strategy was to more firmly incorporate this new HDCAM system into the totality of Sony’s 1/2-inch acquisition and editing platform. Accordingly, the new HDW-2000 Series VTR offers full HDCAM record and editing facilities, but also includes both the all-important legacy playback of all standard definition BETACAM formats and internal up-conversion of that playback to the 1920 x 1080 digital sampling format for playout in the HDTV format. The legacy playback includes analog BETACAM/SP, Digital BETACAM, BETACAM SX and the MPEG IMX 1/2-inch tape recordings. Thus a crucial bridge between SDTV libraries (and ongoing SDTV digital origination) has been realized. Recognizing the inevitable two-way flow of program material between SDTV and HDTV, the new HDW-2000 Series VTR also includes digital down-conversion as a standard feature, thus allowing the creation of “Super-sampled” digital 4:2:2 SDTV program material.

The HDW-2000 Series also provides the same reliability and operability inherited from the long-established BETACAM Series offering a powerful workhorse solution to HDTV environments as well as to current SDTV systems.

The HDW-750 camcorder is extremely compact and lightweight while maintaining the robust and reliable construction for which BETACAM technology is world-renowned.

Some innovative new functions are added to meet various requirements in the field. The latest addition to the HDCAM Series, with its high quality, superb operability and added reliability is an economically well-balanced solution for next generation ENG and EFP programming.

*As for HDCAM tape cassettes, HDW-2000 Series is applicable for 50i and 59.94i operation only.
Technical Innovations – Enhance Shooting in the Field

The compact and stylish body of the HDW-750 contains many technological innovations. They are brought together to enable the creation of some of the most versatile and outstanding in-the-field visual experiences of the new century, while ensuring durability and ease of use for the challenging conditions of field shooting.

HAD Sensor Technology
The well-established innovations of CCD technology already incorporated in Sony’s HDC-900 Series cameras and HDW-F900 camcorders are also used in the new HDW-750 camcorder. Inheriting Sony HAD sensor technology and on-chip lens structure of the latest Power HAD™ sensors, this imaging device is based on the 1920 x 1080 CIF (Common Image Format). With its light collecting capability dramatically improved, this 2/3-format, 2.2 million-pixel FIT CCD, boosts the sensitivity to an industry-leading f10 at 2,000 Lux, thus enabling image capture in extremely low light conditions. The signal-to-noise ratio is 54 dB and vertical smear is less than -135 dB*.

*Typical numbers.
10-bit A/D and Advanced Digital Signal Processor
The new HDW-750 uses the proven 10-bit A/D converter and Advanced Digital Signal Processing (ADSP) presently used in the HDW-700A. They ensure low-power operation and superb picture quality. A 600 % wide dynamic range and excellent tonal reproduction, combine with creative manipulation of picture parameters for “in-camera effects”, which were pioneered by Sony and are now widely accepted among Digital Cinematographers. The well known Memory Stick™ setup system allows five alternative camera setups to be stored and recalled whenever they are required. These include all factors relating to colorimetry and tonal reproduction adjustment, so that at any time (such as a scene re-shoot) these settings can always be readily accessible.

To help maximize the camera image-making capabilities, special attention has been paid to the careful design of the camera menus so that access to certain image parameters is user-friendly and intuitive.

New Ergonomics
Sony has been continually improving camcorder body design over many years, always trying to make them more user friendly and practical as well as stylish and appealing.

Another important factor, especially for the challenging conditions of ENG shooting, is the attention to physical robustness as well as maintaining a compact and lightweight camcorder. To meet these conditions, the body design of the HDW-750 is totally new, but all switches, meters and indicators are in the most logical places and are positioned for optimum functionality and ease of use. This has been achieved through meticulous consideration of the human physiology and the application of fundamental ergonomic principles. The operation of every single switch and button reflects our thorough understanding of the operator’s needs and working practices. Sony has been making professional cameras for over 20 years, and during that time we have listened very carefully to suggestions that users have contributed to ongoing refinements to camera body design. The superb weight distribution and balance combined with a low optical axis make the HDW-750 particularly suitable for hand-held shots. It also sits comfortably on the shoulder and can be easily carried with minimum fatigue. Even with the viewfinder, battery, cassette, microphone, the total weight is only 5.4 kilograms (less than 12 pounds). This astonishingly compact and lightweight camera opens new possibilities for handheld creative camera work while delivering uncompromising picture quality. This new, compact and stylish body of the HDW-750 houses some very highly innovative technologies.
Two Assignable Buttons
You can assign two required functions to these switches, functions which are frequently used in the field, for instance to be operated with a single action of touching a button, such as Viewfinder Return, Record etc.

Dual Optical Filter Wheels
For the optical picture treatment, two independent filter wheels, one is for Neutral Density (ND) and the other is Color Correction (CC), are installed. An optional servo filter drive unit, the BKDW-701, can also be fitted allowing filter settings to be changed with the RM-B150 Remote Control Unit.

Dual Earphone Output
The HDW-750 is equipped with two earphone outputs, one is output from the front side of the camcorder body, and the other is from rear side. These two outputs can be used simultaneously.
Technical Innovations — Enhance Shooting in the Field

Tally Lamp

Newly added is the Bottom Tally light located in the connector panel section of the rear of the camcorder body.

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

The optional WRR-855A Wireless Microphone Receiver can be fitted directly to the HDW-750 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-855A is an option.

Turbo Gain

The inherent sensitivity of the HDW-750 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 up the gain level to an incredible +42 dB at the touch of the button. Thanks to this function, it is possible to capture critical scenes down to around 0.15 lux of incident scene illumination — somewhat exceeding the color sight capability of the human eye.

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.

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 analog audio output channels, which can be selected to be either Channel-1/2 or Channel-3/4.
Cassette Loading
The cassette loading is fast, simple and reliable. It takes less than 5 seconds* for a cassette change. This ease of change and long recording runs (40 minutes) offer new levels of efficiency on location. The loading mechanism is robust and designed to be dust and drip proof. The vertical cassette loading helps to minimize the risk of anything unwanted getting into the tape mechanism. It also reduces the unwanted sound of a fast rotating VTR drum to be captured via an on-board microphone of the camcorder.

*Sony measurement.

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

HD SDI Output for Field Monitoring
The HDW-750 directly provides an HD-SDI output with four channels of embedded digital audio. You can monitor all image capture in the field as high quality HD images without any adapter.
Technical Innovations – Enhance Shooting in the Field

Safe Area Markers
To allow for individual production requirements, the HDW-750 provides safe-area markers for any aspect ratio.

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

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

*L Anton/Bauer products may not be available in some countries.

Lens Mount
The B4 mount ring of the HDW-750 is strong enough to support the heaviest of lenses. Same as other Sony HD cameras/camcorders, conventional lenses for NTSC and PAL systems can also be attached to these camcorders.
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 customize 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. Up to five versions of camera set up parameters can be stored, and can then be 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-750 is inherited from HDW-F900 multi-format HD camcorder*, an easy and intuitive camcorder set up system. “Page customization” 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 below.

*Set up data is not compatible between HDW-F900 and HDW-750.
Colorimetry
The HDW-750 produces pictures with astonishing color reproduction capability and offers controls that offer further creative color manipulation.

Multi Matrix
Multi Matrix offers unique possibilities for creative control by allowing selective color enhancement or alteration. It allows a particular color 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 very interesting “in camera” effects – similar to the secondary color correction normally reserved for post production special effects work – and is performed at the full bit depth.

Color Balance
Consistent scene-by-scene color 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-750 camcorder. By using Auto White (and Black) balance, the HDW-750 gives an accurate overall color balance. A Menu “Paint” functions allow color levels to be adjusted on-set according to creative needs. For this operation, the RM-B150 paint 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 color 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 color balance of the camera.

Color Temperature Control
Digital Color Temperature Control makes it possible to dial in the required color temperature of the camera. In addition, this function can be used creatively. The overall color balance of the picture can be changed to make it ‘warmer’ or ‘colder’. On the other hand, for Optical Color Temperature treatment, four types of color filters are equipped as standard. The BKDW-701 optional Servo Filter Drive Unit can also be attached to the camera, allowing CC filters to be remotely controlled.
Contrast Range

The HDW-750 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 are readily adjustable on location. The overall (Master) gamma curve of the HDW-750 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 per 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 color balance of the mid-tones without affecting black or white balance.

Variable Black Gamma Range

Variable Black Gamma Range function allows fine adjustment of tonal reproduction in the shadow area. 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

When Variable Black Gamma Range function is performed, it can be limited to picture luminance without affecting any other factors of the video signal. It is particularly helpful for dark scenes when the black has to stay black, but there is a requirement to pull out more detail.
Highlight Handling
Sony Advanced TruEye™ processing allows much improved highlight handling, with faithful color reproduction.

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, makes it possible to reproduce very natural colors in a high contrast scene content. Without TruEye, when only knee correction is applied to the RGB channels, a color 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 color in highlight areas and maintains color saturation in picture areas compensated by the TruEye processor.
Definition – Picture Sharpness
The new HDW camcorder produces rich pictures having natural sharpness with fine details. Each RGB 2.2-million pixel CCD in combination with wideband digital recording on the 1080-line HD format ensures faithful image capture. The HDW-750 facilitates very precise control of picture texture and image enhancement.

Three-channel Skin Tone Detail Correction
Skin Tone Detail Correction allows user control of the detail level of objects with specific color tones. The HDW-750 allows detail correction to be set independently for each of the three separate Skin Tone Detail channels. Control is not limited to skin tone, detail level can be set for any color. Detail within the chosen colors may be increased or decreased relative to the overall detail level set on the camcorder.

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.
The optional HKDW-703 Picture Cache Board provides up to seven seconds of loop recording using solid state memory. Thus, when the REC start button is pressed, everything that happened up to seven seconds before that moment can be recorded to tape. Just imagine – if something unexpected happens in front of your camera, the operator will still have up to seven seconds of that event stored in RAM before being able to hit the record button. There is a choice of recording for 0, 1, 2, 3, 4, 5, 6 seconds or Max (7 seconds).

A full range of operational accessories is available to take full advantage of the versatility and features of the HDW-750. Many accessories developed for HDW-700A and HDW-F900 are also applicable to this new HDCAM camcorder.
HD-SDI Camera Adapter (Optional)
The HDCA-901 Camera Adapter provides an additional two HD-SDI outputs and also enables access to all four audio tracks provided by the HDCAM format. Tracks 1 and 2 are accessed via the AUDIO IN Ch-1/Ch-2 connectors on the camcorder, and tracks 3 and 4 are accessed via the AUDIO IN Ch-3/Ch-4 connectors on the HDCA-901. A 5-pin stereo XLR connector and a headphones output connector (stereo phone jack) are also incorporated. The HDCA-901 can be used to select the monitoring signal to be either from Ch-1/Ch-2 connectors on the HDW-750 or the Ch-3/Ch-4 connectors on the HDCA-901.

Shot Mark Recording (Optional “Tele-File™” Memory Label)
HDW-750 allows automatic (or manual) recording of shot data. While recording, data such as Date, Time, Shot ID, Cassette Number and Shot Number can all be recorded on an intelligent cassette labels containing a memory IC. This Memory Label, called Tele-File, can store this information via contact-less induction-coil transmission. Information in the Tele-File can be read out through an optional reader unit for stand-alone use. Shot Marks, are recorded each time the operator presses the REC button or RETURN button, can be read by the HDW-M2000/M2100 and HDW-F500 recorders/players, simply by inserting the cassette into the cassette compartment. The entire Shot Mark information is detected via an internal contact-less transmission system, and the corresponding time code information are listed automatically.

Down Converter Board (Optional)
The optional Down Converter Board HKDW-702 enables Standard Definition output with four channel audio embedded. SD-SDI or analog composite can be selected via camcorder’s set up menu.

Color Viewfinder (Optional)
Two types of LCD-based color viewfinders are available, the BVF-VC10W 1.5-type SD viewfinder and the 6-type HDVF-C750W HD viewfinder.

*The BVF-VC10W requires an optional down converter board HKDW-702.
*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.
Optional Accessories

Sony AC-DN2B, AC adapter
Sony VCT-14, Tripod Adapter
Sony VMB-D9H5U, Color Video Monitor
Sony BF-L60A/L90A, Lithium-ion Battery
Sony RM-B150, Remote Control Unit for HDW-750
Sony BC-L120, Battery Charger
Sony BKDW-701, Servo Filter Unit
Sony BKDL50/L50CE, Battery Charger
Sony BKDW-701, Servo Filter Unit
Sony BF-L60A/L90A, Lithium-ion Battery
Sony RM-B150, Remote Control Unit for HDW-750
Sony BC-L120, Battery Charger
Sony BKDW-701, Servo Filter Unit
Sony BF-L60A/L90A, Lithium-ion Battery
Sony RM-B150, Remote Control Unit for HDW-750
Sony BC-L120, Battery Charger
Sony Memory Stick, MSA-4A/8A/16A/32A/64A/128A
Sony AC-DN2B, AC adapter
Sony VCT-14, Tripod Adapter
Sony VMB-D9H5U, Color Video Monitor
Sony BF-L60A/L90A, Lithium-ion Battery
Sony RM-B150, Remote Control Unit for HDW-750
Sony BC-L120, Battery Charger
Sony BKDW-701, Servo Filter Unit
Sony BF-L60A/L90A, Lithium-ion Battery
Sony RM-B150, Remote Control Unit for HDW-750
Sony BC-L120, Battery Charger
Sony Memory Stick, MSA-4A/8A/16A/32A/64A/128A

* A certain models may not be available in some countries. For the details, please contact each manufacturer.
System Configuration

- **Monitor, etc:**
  - HD-SDI
  - HDVF-20A
  - 2-type HD/B/W Viewfinder
  - BVF-VC10W
  - 1.5-type LCD Color Viewfinder

- **Viewfinders**
  - HDVF-C750W
  - AC-S50/50CCE
  - HDCA-901

- **Internal light system (option)**
  - BKW-401
  - BKDW-701

- **Battery Chargers**
  - MSA-4A/8A/16A/32A/64A/128A
  - Internal light system (option)
  - WRR-855A
  - BCT-HD12CL

- **Video Cassettes**
  - HDCA-901
  - BP-L60A/U90A
  - HDVF-C750W
  - AC-D5N2B
  - AC-5N2B
  - BCT-40HD/22HD
  - BCT-HD12CL

- **BNC**
  - Monitor
  - Monitor, etc

- **AC-DN2B**
  - 8-pin
  - AC-DN2B

- **Battery Chargers**
  - BC-L50/L50CE (BP-L60A/U90A)
  - BC-L120 (BP-L60A/U90A)
### HDW-750 Specifications

**General**
- **Mass**: Approx. 5.4 kg (11 lb. 15 oz) with cassette and BP-L60A Battery
- **Power requirement**: DC 12 V (+5.0 V/-1.0 V)
- **Power consumption**: 14 W (With 12 V power supply, REC mode, without HDVF-20A)
- **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. 110 min (With BP-L60A)

**Inputs/outputs**
- **Genlock video input**: BNC, 1.0 Vp-p 75 Ω
- **Time code input**: BNC, 0.5 V to 18 Vp-p, 10 kΩ
- **Audio CH1/CH2 input**: XLR-3-pin type (female), -60 dBu/+4dBu selectable, high impedance, balanced
- **HD-SDI output**: XLR-5-pin type (female), 60 dBu
- **Audio output**: BNC, 1.0 Vp-p, 75 Ω
- **TEST OUT**: BNC, 1.0 Vp-p, 75 Ω
- **Earphone**: Mini-jack (x2), 8 Ω, –∞ to –18 dBs variable
- **DC input**: XLR-4-pin type (Male), 11 to 17 V DC
- **DC output**: 11 to 17 V DC, Max. 100 mA
- **Lens**: 8-pin

**VTR section**
- **Recording format**: HDCAM
- **Tape speed**: Approx. 96.7 mm/s
- **Playback/Recording time**: Max. 40 min with BCT-40HD
- **Fast forward/rewind time**: Approx. 5 min with BCT-40HD
- **Recommended tape**: Sony BCT-40HD/22HD
- **Sampling frequency**: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (sec)
- **Clear scan**: (ECS) 60.1 to 7000 Hz
- **Viewfinder**: 2.0-type monochrome
- **Controls**: Brightness control, Contrast control, Peaking control, Tally switch, Zebra Pattern switch, Display/Aspect switch
- **Frequency response**: More than 85 dB (Emphasis ON)
- **Dynamic range**: 0.08 % Max.
- **Distortion**: Below measurable limit
- **Wow & flutter**: Below measurable limit
- **Cross talk**: +20 dB
- **Audio performance (Playback with Standard HDW-508/HDW-F500/HDW-M2080/HDW-M2100)**
- **Recording format**: HDV
- **Tape speed**: Approx. 96.7 mm/s
- **Playback/Recording time**: Max. 40 min with BCT-40HD
- **Fast forward/rewind time**: Approx. 5 min with BCT-40HD
- **Recommended tape**: Sony BCT-40HD/22HD
- **Sampling frequency**: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (sec)
- **Clear scan**: (ECS) 60.1 to 7000 Hz

**Camera section (Performance)**
- **Pickup device**: 3-chip 2/3-type FIT type CCD
- **Picture elements**: 2,200,000 pixels
- **Optical system**: F1.4 prism system
- **Sensitivity**: ND 1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
- **CC A**: CROSS, B: 3200 K, C: 4300 K, D: 6300 K
- **Minimum illumination**: 0.15 lux (+4 dB gain up)
- **S/N ratio**: 54 dB (typical)
- **Modulation depth**: 45 +/–5 % (at 800 TVL, 27.5 MHz)
- **Vertical resolution**: 1000 TVL
- **Registration**: 0.02 % (All zones, without lens)
- **Smear Level**: +135 dB
- **Shutter speed**: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (sec)
- **Regulation**: 1000 TVL
- **Registration**: 0.02 % (All zones, without lens)
- **Smear Level**: +135 dB
- **Viewfinder**: 2.0-type monochrome
- **Controls**: Brightness control, Contrast control, Peaking control, Tally switch, Zebra Pattern switch, Display/Aspect switch
- **Frequency response**: More than 85 dB (Emphasis ON)
- **Dynamic range**: 0.08 % Max.
- **Distortion**: Below measurable limit
- **Wow & flutter**: Below measurable limit
- **Cross talk**: +20 dB
- **Audio performance (Playback with Standard HDW-508/HDW-F500/HDW-M2080/HDW-M2100)**
- **Recording format**: HDV
- **Tape speed**: Approx. 96.7 mm/s
- **Playback/Recording time**: Max. 40 min with BCT-40HD
- **Fast forward/rewind time**: Approx. 5 min with BCT-40HD
- **Recommended tape**: Sony BCT-40HD/22HD
- **Sampling frequency**: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (sec)
- **Clear scan**: (ECS) 60.1 to 7000 Hz

**Camera section (Operational)**
- **Lens mount**: Special bayonet mount
- **Built-in filters**: ND 1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
- **CC A**: CROSS, B: 3200 K, C: 4300 K, D: 6300 K
- **Shutter speed**: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (sec)
- **Clear scan**: (ECS) 60.1 to 7000 Hz
- **Viewfinder**: 2.0-type monochrome
- **Controls**: Brightness control, Contrast control, Peaking control, Tally switch, Zebra Pattern switch, Display/Aspect switch
- **Frequency response**: More than 85 dB (Emphasis ON)
- **Dynamic range**: 0.08 % Max.
- **Distortion**: Below measurable limit
- **Wow & flutter**: Below measurable limit
- **Cross talk**: +20 dB
- **Audio performance (Playback with Standard HDW-508/HDW-F500/HDW-M2080/HDW-M2100)**
- **Recording format**: HDV
- **Tape speed**: Approx. 96.7 mm/s
- **Playback/Recording time**: Max. 40 min with BCT-40HD
- **Fast forward/rewind time**: Approx. 5 min with BCT-40HD
- **Recommended tape**: Sony BCT-40HD/22HD
- **Sampling frequency**: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (sec)
- **Clear scan**: (ECS) 60.1 to 7000 Hz

**Supplied Accessories**
- HDVF-20A, HD Electric Viewfinder (1)
- Stere Microphone, Super cardioid directional, external power supply type (1)
- Shoulder strap (1)
- Operation manual (1)

**Optional Accessories**
- HKDW-702, Down Converter Board
- HKDW-703, Picture Cache Board
- VCT-14, Tripod Adapter
- HDCA-901, HD-SDI adapter
- HDVF-C750W, HD LCD Color Viewfinder
- BP-L60AL60A, Lithium-ion battery
- BC-L120, Battery charger
- AC-550/550CE, AC adapter
- BCT-40HD/22HD, HDCAM tape cassette
- BKDW-701, Servo filter unit
- BKW-401, Viewfinder rotation bracket
- RM-B150, Remote control unit
- C-74, Microphone