

FAQ's for the HDW-F900

What lenses can be used with the HDW-F900 camcorder?

All Sony HDW camcorders support the B4 lens attachment standard. Most manufacturers make lenses that have been dubbed "HD series", designating that they have been designed with HD tolerances in mind. These lenses have been created to tighter specifications than those designed for Standard Definition camera systems. Their performance, especially in areas of chromatic aberration, are generally better than their SDTV counterparts.

There are also specialty lenses designed for HD imaging. These include prime lenses from manufacturers such as Canon, Fujinon and Panavision. Other key lens manufacturers are in design or planning stages with lenses designed for the HDW series camcorders.

The HKDW-702 image inversion board for the HDW-F900 and the HDW-750/730 series camcorders will allow lenses designed to work with some film cameras to be used with an adapter on High Definition cameras.

What type of field monitoring is available for the HDW series camcorders?

All camcorders come standard with an analog Y/Pb/Pr output with can used with most high definition monitors. With the optional HDCA-901 SDI/4 Channel audio adapter, the HDW-F900 can also output 2 channels of HD-SDI (High Definition Serial Digital Output), which will output video, 4 channels of audio and timecode information.

The HDW-750/730 offer 2 channels of HD-SDI output as standard. With the optional HKDW-701 board installed, these two camcorders can output 1 channel of SDTV signals as well.

There are also other manufacturers that offer small outboard devices that can transcode the analog output of the HDW-F900 to HD-SDI or SDI for monitoring.

What accessories are available for the HDW series camcorders?

Along with the usual array of battery and power management accessories typically available for a digital camcorder, there are many different accessories available for the HDW camcorders. Such as:

Field Use:

Extension viewfinders

Various lenses

MSU-750 master set-up unit

RCP-700 series remote control panels

RMB-150 hand held remote control panel
Various matte box configurations from Arriflex, Croziel and Petroff
Large LCD Viewfinders as well as black and white hi resolution 2" viewfinders
2" color viewfinder (HDW-750/730 only with downconverter)
Various remote control systems for lenses (such as Microforce)
Follow focus units
HDCA-901 4 channel audio adapter
BKDW-701 remote filter wheel control
HKDW-702 video cache board (HDW-750/730 only)
HKDW-703 image inversion board

What audio recording options are available for the HDW series camcorders?

The HDW-F900 can record either 2 or 4 channels (with the optional HDCA-901) of 20-bit audio. The HDW-F900 has one XLR input in the front of the camera and 2 rear XLR inputs complete with phantom power.

The HDW-750/730 record 16 bit audio and have the same input and adapter capabilities as the HDW-F900.

All three camcorders record audio in sync with pictures.

What types of camera mounts are supported by the HDW camcorders?

Because the HDW camcorders have a built in video assist system, they can be mounted on any platform that can hold a 12-pound camera (plus lens). This includes Hot Heads, light cranes and jib arms and light duty fluid or gear heads.

The HDW series camcorders can also be mounted on Steadicam systems.

What types of Operational Controls are available on the HDW series camcorders?

The HDW series camcorders utilize very high-level Digital Signal Processing that offers many operation adjustments. Control of parameters such as Color, Gamma, Sharpness and Frame Rate are available to the operator. A comprehensive number of adjustments are available to tailor the look of the camcorders.

What Frame Rates are available with the HDW camcorders?

The HDW-F900 supports 23.97, 24, 25 and 30 frames progressive as well as 59.94 and 60 frames interlace.

The HDW-730/750 series camcorders support 59.94 and 60 frames interlace.

What are the main differences between the HDW-F900 and the HDW-750/730 series camcorders?

The HDW-F900 has been designed primarily to function as an alternative to 35mm film production. With that in mind, it offers a frame rate of 24 frames (as well as 23.94, 25 and 30 frame progressive) to emulate the look of film.

The HDW-750/730 camcorders are designed to be used in producing for the broadcast and production market and have a frame rate that is traditionally used for broadcast at 59.94 frames interlace.

The audio performance of the HDW-F900 is 20 bit, the 700 series is 16 bit. The HDW-700 series can utilize the HKDW-701 down converter board, the HDW-F900 cannot.

The A/D converter of the HDW-F900 utilizes 12 bit, the HDW-700 series is 10 bit.

The HDW-750/730 camcorders have a built in HD-SDI output, the HDW-F900 requires the HDCA-901 for HD-SDI output.

The HDW-750/730 camcorders are physically smaller and lighter than the HDW-F900. The HDW-750/730 camcorders would be more appropriate for use in ENG applications than the HDW-F900.

What is the longest tape length available for the HDW series camcorders?

The longest tape length available for the HDW-F900 is 50 minutes (in 23.94/24P mode). The longest tape length available for the HDW-750/730 series camcorders is 24 minutes (59.97 or 60 frame interlace mode).

Can I use multiple HDW series camcorders on a shoot?

Yes, the HDW series camcorders have the ability to "jam sync" time code. If equipped with the HDCA-901 HD-SDI adapter, the output of the HDW-F900 can be sent to a digital HD switcher for live mixing. Cameras can be remote controlled by either the MSU-750, RCP-700 series or RMB-150 portable remote control panel.

The scene files, color setup and operational values from one HDW series camera can be transferred to another HDW camcorder for a very accurate camera match via Memory Stick® media.

However for ultimate control in a multi camera situation, the HDC-900 series Multi Frequency High Definition cameras may be a better choice as transmission lengths and camera control are more comprehensive in this environment.

What is the per minute running cost of 24P tape?

The per minute cost of recording in 24P mode is approx. \$ 1.60* (BCT-40HD in USD).

*Data as of September 2001, on file at Sony Electronics Inc.

Does the HDW-F900 have “Stop Motion” capability?

The HDW-F900 has a frame-by-frame recording capability that provides stop-motion and time-lapse modes of operation in-camera. This offers new and innovative creative opportunities in both animation and model shooting.

Where are my cost savings shooting HD?

All the rules and processes of high-end image making apply equally to HD as they do with film. The subject has to be lit, framed and lensed properly. To accomplish this, the regimen is the same between the two media with a few exceptions.

The major cost saving is the media itself. The cost of film stock, combined with developing and telecine for a daily can cost on an average of just over \$ 70 (USD) vs. the per minute cost of HDCAM tape at approximately \$ 1.70 per minute*.

*Data as of September 2001, on file at Sony Electronics Inc.

While using a HDW-750/730 camcorder, a video “cache” is available. This system loop records up to 8 seconds into memory, allowing the operator to wait for action to begin before rolling tape. This is especially effective for nature photography. No tape is wasted and nothing will be missed while waiting for the action to start. This system can save a great amount of media and battery power by avoiding false recording starts. And since human reaction time is generally .75 seconds, having 8 seconds already “in the can” before you press the record button can often be the difference in saving a shot.

Are there Underwater Housings available for the HDW series camcorders?

There are several manufacturers making housings for the HDW series cameras such as Pace Electronics and Amphibico Inc.

One great benefit of having up to 50 minutes recording time (24P) is the amount of time an HDW camcorder can operate in difficult environments without having to change reels. Unlike a film camera, the HDW’s physical size does not change based on the media loaded in the camcorder.

Are there NTSC and PAL versions of the HDW Camcorders?

The HDW-F900 is a world-wide model. The models sold are the same everywhere. The HDW-F900 can record at 24/25 frames progressive and 50 interlace for down conversion to PAL . The HDW-F900 can also record at 23.94/24 frames progressive and 59.97 interlace for down conversion for NTSC.

The HDW-750/730 camcorders have regional differences for framerates commensurate with PAL/NTSC.

Is SupportNet(sm) service available for the HDW Camcorders?

Yes. All HDW camcorders have extended warranty packages available. Please consult your Sony sales representative for pricing information.

What is the Tele-file system?

The HDW series cameras allow automatic (or manual) recording of shot data. During camcorder recording, data such as Date, Time, Shot ID, Cassette Number and Shot Number can be recorded on an intelligent cassette label containing a memory IC. This memory label, called Tele-File™, can store this information via a contact-less induction-coil transmission. Information stored on the Tele-File label can be read through an optional reader unit for stand-alone use. Shot Marks are recorded each time the operator presses the REC or Return button and can be read by the HDW-M2000/2100 and the HDW-F500 record/players.

What is 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 the saturation of colors can also be changed.

This circuit is a key ingredient in establishing the characteristics of all HDW camcorders. Settings for Multi-Matrix can be stored on the memory card and transferred to other like camcorders for in field matching.

What is Digital Color Temperature Control?

Digital Color Temperature Control makes it possible to dial in the required color temperature of the camcorder. In addition, this function can be used creatively. The overall color balance of the picture can be changed to make it “warmer” or “cooler”.

For optical color temperature control, there are four color balance filters equipped on the HDW camcorders.

What is Auto Tracing White Balance?

This function allows an automatic adjustment of white balance in situations where the overall color temperature of the lighting fluctuates. This function can be toggled on and off.

What is 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.

What is Knee Saturation?

The Sony TruEye® processor is one of the most innovative features of Sony's ADSP development, making it possible to reproduce very natural colors in a high contrast scene content. This can correct for color shifts traditionally found in highlight areas. For example, the TruEye circuit can help maintain blue hues in an over exposed sky.

