

Sony HDR-CX7 AVCHD Camcorder

CX7 Tapeless Entertainment

by Brandon Pinard



Sony Electronics, Inc.
1 Sony Drive
Park Ridge, NJ 07656
<http://sonystyle.com>

The HDR-CX7 is the first Sony camcorder to record AVCHD video directly to Sony's Memory Stick PRO Duo. The CX7 is very small and fits in one hand easily. With a collection of other features, like its 1/2.9" ClearVid CMOS sensor and dual record mode, the HDR-CX7 unveils a new type of camcorder functionality.

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Fly-by

The HDR-CX7 is a stealthy-looking Handycam that is not much bigger than a 12-oz. soda can. It has a solid enough weight to provide for some handheld shooting stability, and it takes 4.6-megapixel still images while simultaneously recording video. The CX7 is equipped with Sony's Super Steadyshot optical image stabilization system, which minimizes the unwanted vibrations of handheld shooting. Many of the CX7's features reside in the touch screen navigation menu on the 2.7" widescreen LCD. The LCD rotates 270 degrees for ease of viewing from varying angles, which is key, as there is no viewfinder on this camcorder. The LCD is large enough for viewing but it can potentially be cumbersome to users with clumsy or larger fingers. There are a number of recording modes such as beach, sports lesson, candle, fireworks and sunrise, to name a few, as well as a host of other features that are within the navigation screen menu options.

Instrumentation

A View Images playback button, located on the left side of the camcorder (with the LCD screen open) makes it simple to watch what has been recorded by pressing a button and navigating the thumbnails on the LCD screen. To play your videos, simply press Play on the touch screen, and your video clips automatically play back. The playback controls are embedded in the touch screen menu only. There is a film roll index button, located next to the View Images button, that takes you directly to the index. Additional features located on the left side of the camcorder are the Nightshot mode on/off switch that allows for low-light recording, the backlight feature and an Easy button that switches the camcorder to full auto mode.

2.7" TOUCH LCD SCREEN



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The 10x optical zoom rocker is located on the top rear of the camcorder, right in front of the on/off switch, which also changes the camcorder from video to still mode. There is a Photo button present between the zoom rocker and the on/off dial. This button can capture a still image while the CX7 is recording video in either high definition or standard definition. The CX7 can capture a digital still image of 6.1 megapixels in photo mode. The images we captured turned out looking good, with nice color saturation and clarity, even while zoomed in and moving laterally. A hot shoe adapter located on the top-front of the lens barrel is useful for attaching an external microphone or light. Located on the back of the camcorder are the HDMI port, the A/V out, the DC in and the Record button. The dock included with the CX7 connects to the bottom of the camcorder. The docking station includes a one-step disc burn button (functional with appropriate software on your PC) and has numerous ports to connect to a computer, printer or television. The dock also acts as a battery-charging station while your camcorder is parked. While most docking stations for camcorders serve as an added accessory, the CX7 dock is a necessity. The docking station supplies the USB 2.0 and component connection to the HDR-CX7. This alone makes it an essential component, unless you plan to use only your HDMI output.

In Focus

There is a Smooth Slow record mode that is ideal for high-speed movement, such as a golf swing or aerial acrobatics. This mode is easily accessible on the LCD screen by selecting the home icon and then Smooth Slow record mode. We tested this feature on a number of golfers, and the CX7 displayed smooth images. However, the CX7 auto focus had a hard time getting a sharp focus on the subject. Once manual focus is selected using the touch screen navigation, focusing can be performed on the LCD screen.

TECH SPECS

Format	AVCHD(HD), MPEG2-PS (SD)
Number of CCDs	1
Size of CCDs	1/2.9" ClearVid CMOS sensor
Pixels on CCD	3200(k)
Video Effective Pixels	2,280,000k
Focus	Full-range auto/manual (dial, touch panel)
Shutter Speed	Auto
Maximum Shutter Speed	1/500
Minimum Shutter Speed	1/2
Lens f-stop	f1.8-2.9
Program Exposure Modes	Touch panel (24 steps)
Optical Zoom	10x
Focal Length	40-400mm
Image Stabilization	Super SteadyShot optical image stabilization system
Manual White Balance	Auto, Indoor, One-push, Outdoor
Viewfinder	N/A
LCD Monitor	2.7" (211k pixels) wide (16:9) Touch Panel-Clear Photo LCD Plus
Progressive Scan	N/A
HD Modes	1080 (60i) AVCHD
Video Out	USB 2.0 (dock only), Component (dock only), HDMI, composite
Mono/Stereo Recording	5.1 Stereo
Microphone In	No
VU Meters	No
Manual Audio Level	
Controls	No
Headphone Jack	No
Speaker	Yes
Still Shot Media	JPEG
Memory Card included	No
Flash	Yes
Wireless Remote	Yes
External Battery	
Charger Provided	No, camcorder only
Battery Type	InfoLiTHIUM
Tape Loading	
Configuration	N/A
Onboard Video Light	No
Accessory Shoe	Active interface shoe

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Audio

The CX7 comes equipped with a built-in 5.1-channel onboard microphone. We tested the CX7's onboard microphone in a variety of sound scenarios, from a quiet golf course to a crowded baby shower party. We were pleased with the overall performance of this camcorder's built-in mic. Even at very close range, semi-loud voices were not very muffled or distorted. When we tested the microphone outdoors, again we were pleased with the microphone's performance in picking up both ambient noise and the sounds created by the golfer's swing and golf shot. We were not able to hear the camcorder motor while recording in a quiet setting. For picking up good-quality voice, the best results were from in front of the camcorder and about 4 to 6 feet away.

Format

The AVCHD format's problems with motion artifacts seems to be a thing of the past, and the HDR-CX7 is evidence of this new direction for Sony camcorders. Testing the CX7's motion compensation turned out great results with very few compression artifacts and little ghosting. Under daylight conditions, the CX7 showed very sharp and smooth images. We were very pleased with color reproduction. Under indoor lighting conditions, the

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CX7 still performed fairly well, with a slightly slower auto focus and increased digital noise. Low-light conditions will definitely be your biggest enemy in maintaining pristine images. Overall, we were pleased with the smooth motion of our recorded images under indoor conditions. We tested the CX7's image capabilities in a more difficult task with an ocean sunset, moving along a freeway, and found the motion to be very smooth with no visible artifacts, the auto focus quick and sharp and the color vivid and accurate.

