

School of Communications Design Media Lab

Canon Vixia HFS10 High Definition Camcorder Quick Start Guide

The Canon HFS10 is a Hard Drive/Flash Memory camera. This means the footage can be recorded to a memory card or to the camera's hard drive. This has many advantages: no money spent on video tapes, no digitizing videotapes for editing, and easier storage of footage. The disadvantages are: there are no tapes backing up your work and the memory cards are small and easy to lose.

When checking out and using this camera, make sure you have DVD +/- R discs, an external hard drive, or a large (8gb+) Flash Drive with you to back up your work.

Files are easier to be misplaced and corrupted than tapes are, so please be smart about your recording and be organized with your files! (Please see the Transferring Footage Instructions for more information.)

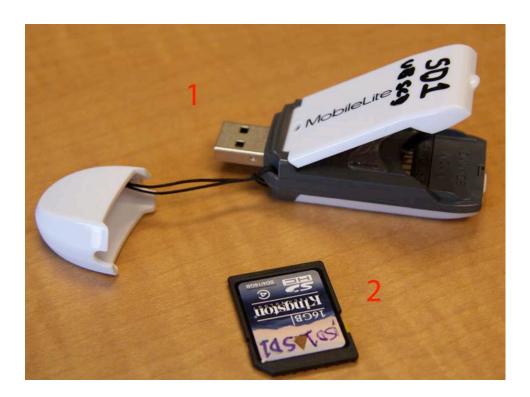


In the Bag – check it you are responsible for all items on return:



- 1. Camera
- 2. Remote
- 3. USB2 Cable (to transfer footage from camera to computer)
- 4. 2 Extra Batteries (3 Batteries total)
- 5. AC Power Cable
- 6. AC Power Transformer
- 7. RCA adapter (not shown)

You will also need – to be checked out separately:

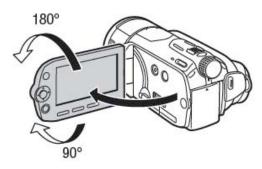


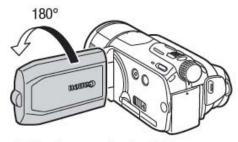
- 1. Card Reader
- 2. 16GB Flash Media Card
- 3. Tripod



How it works:

Tour of the Camera:





Subject can monitor the LCD screen

The **LCD screen** is on the left side of the camcorder, open it by pulling gently on the grip on the end of the screen. The LCD can tilt and swivel to adjust the viewing angle.

Inserting and Removing the Memory Card:



- 1. Power on/off switch
- 2. Open the memory card slot cover.
- 3. Insert the memory card straight, with the **label facing up**, all the way until it clicks.
- 4. Close the door. Do not force anything.
- 5. To remove, push in on the card, it will pop out.



Battery:

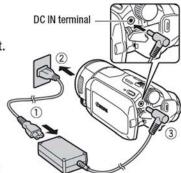
Charging the Battery Pack

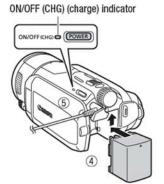
The camcorder can be powered with a battery pack or directly using the compact power adapter. Charge the battery pack before use. For approximate charging times and recording/playback times with a fully charged battery pack, refer to the tables on pages 176-177.

- Connect the power cord to the compact power adapter.
- 2 Plug the power cord into a power outlet.
- 3 Connect the compact power adapter to the camcorder's DC IN terminal.
- 4 Attach the battery pack to the camcorder.

Press the battery pack softly into the battery attachment unit and slide it up until it clicks in place.

- 5 Charging will start when the camcorder is turned off.
 - If the camcorder was on, the green ON/OFF (CHG) indicator will go out when you turn off the camcorder.
 After a moment, the ON/OFF (CHG) indicator will start flashing in red (battery pack charging). The red ON/ OFF (CHG) indicator will go out when the battery pack is fully charged.





To remove the battery pack

- Slide BATTERY RELEASE in the direction of the arrow and hold it pressed down.
- 2 Slide the battery pack down and then pull it out.



Navigation:

All movement between menus is controlled by the Function (1) and Set (2) buttons. The Set button toggles 4 ways: ▲ up, ▼ down, ◀ left, ▶ right. Push in to "take" or "set" the action.



Setting the Camcorder to record on the Memory Card:



Press Function (1)

Use the Set Button (2) to toggle ▼ down to Menu – the bottom icon.

Press Set to enter the action (2)



Toggle ▶ right to the first Icon the Movie Mode (3)

Toggle ▼ down to the first selection Rec Media for Movies

Press Set to enter the action



Toggle ∇ down to Mem. Card and Select Memory Card (4). Press Function again to turn off the display.

Headphones and AV Playback:

The same jack (5) is used for headphone and A/V playback (on a TV). You need to make the appropriate menu selection for either function to work properly.



Press Function and toggle down to the bottom selection Menu and press Set. Toggle 4 icons to the ▶ right and then toggle ▼ down to AV/Headphones. Press Set, toggle ▲ up or ▼ down to choose Headphones or AV (for TV playback) and press set again to make your selection. Press Function to turn off the display.



Other Random Buttons, Bells & Whistles:



Display turns off and on the menu text on the screen.



- 1. Zoom
- Photo button for taking still photos
- 3. Power button turns unit off and on



- 1. Dual Shot = Dummy auto settings. Forget this exists and you KNOW BETTER!
- 2. Movie Mode set when you're shooting video
- 3. Still Photo Mode set when you're shooting stills
- 4. AC Open flap and plug in AC adapter to charge camera
- 5. Headphone/AV Jack Open flap for headphone jack or for AV playback

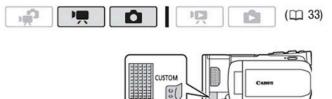


- 1. Component Out = plugs into TV Set with RCA cable
- 2. USB out = Plugs into Computer with USB cable
- 3. HDMI Out = Plugs into HDTV (with an HDMI cable not provided)
- 4. Mic Jack Plug your external mic in here

Custom Button:

Using the Custom Key and Dial

You can assign to the CUSTOM button and dial one of five frequently used functions. You can then adjust the selected function using the CUSTOM button and dial, without having to access any menus.



Options (* Default value)

[Exposure] Manual exposure adjustment (70). Press CUSTOM to turn the manual exposure on/off and turn the dial to compensate the exposure.

[Focus] Manual focus (71). Press CUSTOM to turn the manual focus on/off and turn the dial to adjust the focus.

[Assist Functions] Press CUSTOM to turn the selected camera assist function on/off (144). If [Assist Functions] is set to [For Off], the zebra pattern (70%) will be activated.

[Mic. Level]* Adjust the audio recording level (80). Press CUSTOM to turn the manual adjustment of the recording level on/ off and turn the dial to adjust the audio recording level.

[AGC Limit]* Press CUSTOM to turn the AGC limit on/off and turn the dial to select the maximum value for the automatic gain control (

143).

* Available only in pm mode.



Under the Hood:

Image Quality:

The camera offers 5 recording modes. The better the image quality means more memory used.

Approximate recording times					◆ Default valu	
Recording mode → Memory ↓	MXP*	FXP*	XP+	SP◆	LP	
(HFS10) 32 GB Built-in memory	2 hr. 55 min.	4 hr. 10 min.	5 hr. 45 min.	9 hr. 35 min.	12 hr. 15 min.	
4 GB Memory card	20 min.	30 min.	40 min.	1 hr. 10 min.	1 hr. 30 min.	
8 GB Memory card	40 min.	1 hr.	1 hr. 25 min.	2 hr. 20 min.	3 hr.	
16 GB Memory card	1 hr. 25 min.	2 hr. 5 min.	2 hr. 50 min.	4 hr. 45 min.	6 hr. 5 min.	
32 GB Memory card	2 hr. 55 min.	4 hr. 10 min.	5 hr. 45 min.	9 hr. 35 min.	12 hr. 15 min.	

^{*} Recorded in 1,920 x 1,080 resolution. Movies recorded using other recording modes are recorded in 1,440 x 1,080 resolution.

To select Recording Mode:

Push Function

Then, Toggle down ▼ 4 stops to Recording Mode
Then, Toggle ◀ left or ▶ right to make your selection

^{** (}IFSI) At the time of purchase, the built-in memory contains about 170 MB of music files.



Exposure:

Depending on what you're shooting, you either want to control the exposure manually or let the camera control it for you.

To Set Exposure:

Push Function

Then, Toggle cursor to the top icon
Then, Toggle ◀ left or ▶ right to make your selection

- [P Programmed AE] The camcorder automatically adjusts the aperture and shutter speed to obtain the optimal exposure for the subject.
- [Tv Shutter-Priority AE] Set the shutter speed value. The camcorder automatically sets the appropriate aperture value. Use faster shutter speeds to record subjects moving quickly; use slower shutter speeds to add motion blur, emphasizing the feel of movement.
- [AV Aperture-Priority AE] Set the aperture value. The camcorder automatically sets the appropriate shutter speed. Use low aperture values (larger lens opening) to softly blur the background in a portrait; use high aperture values (smaller lens opening) to get a wider depth of field, giving a sharp focus all throughout a land-scape.
- FUNC. Programmed AE Desired recording program*
- * When you select [TV Shutter-Priority AE] or [AV Aperture-Priority AE], do not press FUNC.] and continue instead with the following procedure.

To set the shutter speed or aperture value

- 1 Press (SET).
- 2 Adjust (◄►) the shutter speed or aperture value to the desired value.
- 3 Press (SET), then (FUNC.) to save the setting and close the menu.

Shutter speed guidelines

Note that on screen only the denominator is displayed – [Tv 250] indicates a shutter speed of 1/250 second, etc.

[1/2]*, [1/4]*, [1/8], [1/15], [1/30] To record in low-light situations.

[1/60] To record under most ordinary conditions.

[1/100] To record indoor sports scenes.

[1/250], [1/500], [1/1000]** To record from within a moving car or train or to shoot fast-moving subjects such as roller coasters.

[1/2000]** To record outdoor sports scenes on sunny days.

* mode only. ** mode only. In mode, when the frame rate is set to [P24] PF24], the shutter speeds available will be the following: 1/6, 1/12, 1/24, 1/48, 1/60, 1/100, 1/250, 1/500, 1/1000 and 1/2000.

Available Aperture Values

[F1.8], [F2.0], [F2.4], [F2.8], [F3.4], [F4.0], [F4.8], [F5.6], [F6.7], [F8.0]

- (i) NOTES
- [Tv Shutter-Priority AE]:
 - When recording in dark surroundings, you can obtain a brighter picture by using slow shutter speeds; however, image quality may not be as good and autofocus may not work well.
 - The image may flicker when recording with fast shutter speeds.
 - Recording movies under fluorescent lights: If the screen starts to flicker, select [Tv Shutter-Priority AE] and set the shutter speed to 1/100.
- [AV Aperture-Priority AE]: The actual range of values available for selection will vary depending on the initial zoom position.
- When setting a numeric value (aperture or shutter speed), the number displayed will flash if the aperture value or shutter speed is not appropriate for the recording conditions. In such case, select a different value.
- During exposure lock, the aperture value/shutter speed cannot be changed. Set the aperture value or shutter speed before manually adjusting the exposure.

Cinema Mode: Giving a Cinematic Look to your Recordings

Give your recordings a cinematic look by using the [Lii Cine Mode] recording program. Combine this recording program with the 24 fps progressive frame rate [PF24] FF24] to get the enhanced effect of the 24p Cinema Mode.





To set the [Cine Mode] recording program

FUNC. ○ [P Programmed AE] ○ [□ Cine Mode] ○ FUNC.

To change the frame rate

FUNC. [Menu] [FUNC.] [Frame Rate] [FUNC.]

Mini Video Light

You can turn on the mini video light to shoot video or take photos in dark places.



- 1 Open (A) the joystick guide.
- 2 Select (▲▼) [★ Video Light] and press (⑤).
 - The mini video light pops-up and * appears on the screen.
 - Press (ET) again to turn the mini video light off and gently press the pop-up mini video light to close it.

(i) NOTES

- We recommend not using the mini video light while the optional Wideconverter or Tele-converter is attached; its shadow can appear on the screen.
- The mini video light cannot be turned on while recording.



White Balance:

This is how your camera sees the color white. White is a standard and the electronics can set every other color from this reading.

To Set White Balance:

Push Function

Then, Toggle cursor the second option White Balance Then, Toggle ◀ left or ▶ right to make your selection

White Balance

The white balance function helps you to accurately reproduce colors under different lighting conditions so that white objects will always look truly white in your recordings.



POINTS TO CHECK

Select a recording program other than the Special Scene recording programs.

Options (* Default value)

- [## Automatic] The camcorder automatically sets the white balance for natural looking colors.
- [* Daylight] To record outdoors on a bright day.
- [a Cloudy] To record on a cloudy day.
- [**Tungsten] To record under tungsten and tungsten-type (3-wavelength) fluorescent lighting.
- [**#Fluorescent**] To record under warm white, cool white or warm-white-type (3-wavelength) fluorescent lighting.
- [## Fluorescent H] To record under daylight or daylight-type (3-wavelength) fluorescent lighting.
- Use the custom white balance setting to make white subjects appear white under colored lighting.



^{*} When you select [♠ Custom WB], do not press FUNC. and continue instead with the following procedure.

To set the custom white balance

- 1 Point the camcorder at a white object, zoom in until it fills the whole screen and press (ET).
 - When the adjustment is completed, so stops flashing and stays on. The camcorder retains the custom setting even if you turn off the camcorder.
- 2 Press FUNC. to save the setting and close the menu.
- (i) NOTES
- When you select the custom white balance:
 - Set the custom white balance in a sufficiently illuminated place.
 - Turn off the digital zoom (142).
 - Reset the white balance when the lighting conditions change.
 - Depending on the light source, amay keep flashing. The result will still be better than with MR Automatic.
- · Custom white balance may provide better results in the following cases:
 - Changing lighting conditions
 - Close-ups
 - Subjects in a single color (sky, sea or forest)
 - Under mercury lamps and certain types of fluorescent lights
- Depending on the type of fluorescent light, optimal color balance may not be obtained with [※ Fluorescent] or [光 Fluorescent H]. If the color looks unnatural, select [刷 Automatic] or [Custom WB].

HDTV or Standard TV:

Make the choice if you'd rather shoot in HDTV or Standard TV. The high definition files are much larger and will take up more room on your disc however, the quality is vastly improved over the standard format. You MUST stay consistent with your choice from shoot to shoot, or you'll never be able to edit your video.

Press Function. Toggle ▼ down to the last entry Menu, press Set.

Toggle ▶ right to the fourth icon then, toggle ▼ down to Component Output.

Press Set.



Toggle to 480i (Standard TV) or 1080i (HDTV)



Press Function to return to the camera.

Fine Tuning:

Press Set and Toggle ▲ up to reveal menu choices then toggle to your selections and press Set. You control the sub-menus by toggling ◀ left and ▶ right to make selections.



- 1. Turns the mini video light on and off. Use sparingly. It's better to light with a light kit. But this light is great for kicking a bit of light into shadows.
- 2. Focus. After selecting focus, press set. Then Press Set again to switch between Automatic Focus A and Manual Focus M. Within Manual focus, toggle ◀ left and ▶ right to adjust focus. Note: set the Custom Button to Focus and you don't have to worry about menus while you're shooting.
- 3. Mic Level. After selecting Mic, press set. Then Press Set again to switch between automatic Mic Levels A and Manual Mic Levels M. Within Manual Mic Levels, toggle ◀ left and ▶ right to adjust your level. Your objective is to keep the levels as close to -12db as possible.
- 4. Face Detection. You can use the camera to automatically detect a person's face and adjust the focus accordingly. After selecting face detection, press set. Then Press Set again to switch between Automatic Face detection A and Manual face detection M. Within face detection, toggle ◀ left and ▶ right to adjust framing.



To Record:

After making all the appropriate menu choices, press the record button to start and stop recording.



Playback:

To View your footage. Press the playback button.



Your clips will appear in the Playback Screen.



Toggle \triangle up to access the hard drive or storage card (4) then, toggle \triangleright right to make your selection. Then, toggle \blacktriangledown down to the clip window. Toggle right, left and up and down within the clip window to pick the clip you want to view and press Start/Stop (1) or Set (3) to play and pause and (2) to Stop.

While within the clip:

- You can increase/decrease the playback volume by toggling the Set button ▲ up twice and then ◀ left or ▶ right to adjust volume.
- You can fast forward and rewind by toggling the Set button ▲ up once and then ◀ left or ▶ right to move backwards and forwards.

Press the Playback button to return to camera mode.

To Delete a Clip:

From the playback window, toggle to the clip you want to delete. Press Function. Toggle to the trash can icon and press Set. Toggle down to This Scene and press set again. Toggle to Yes. Press Set and the scene will be deleted.





Retrieving Your Footage:

Remove the Memory Card from the camera, put it into the Card Reader and Plug it into a USB2 slot on the computer.

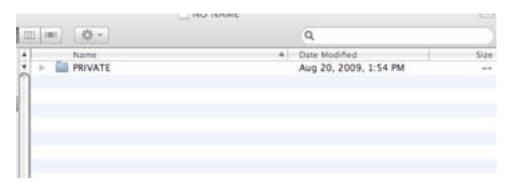




The card will appear as an icon on the desktop just like any other external devise.



Open the Mounted Drive. You'll see the Folder "Private". Before you do anything else, **copy this folder** to a DVD, a Flash Drive, an external Hard Drive. You will not be able to run your video from any of these backup drives (except the external drive).



Once you're satisfied that you've made a good copy, put Private in the Trash and Empty the Trash, Eject the Drive, and return everything to the Media Lab.

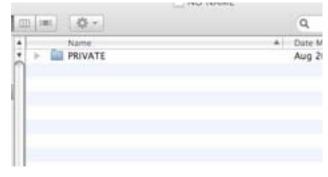
Importing your Footage to Final Cut Pro:

- 1. Removed the card from the camera, put it into the card reader, and plug the reader into a USB2 port on an Intel Computer (this won't work on the older Power PC computers.)
- 2. Turn the power on DO NOT unplug the cable until properly ejected (like a hard drive) then change the camera to "PLAY" mode. No Name icon will appear on the desktop.





3. Open the Mounted Drive.
You'll see the Folder "Private".
Before you do anything else,
copy this folder to a DVD, a
Flash Drive, or an external
Hard Drive. You will not be
able to run your video from
any of these backup drives
(except the external hard
drive).



To Edit: Copy the folder to

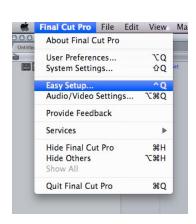
the Desktop. NEVER add/subtract or do anything to the contents of this folder. One file out of place and it will be difficult to retrieve your data/footage.

4. After you've made a back up copy of the Private file and transferred a copy to the Desktop for decompressing, eject the disc from the desktop by putting it into the Trash. Plan your check-in time accordingly - your transfer and/or backup to DVD time should be included in your sign up period.

These are the only steps that you have to do before returning the camera-you can "Log and Transfer" in FinalCut Pro from the DVD.

Log And Transfer In Final Cut Pro:

1. Open Final Cut Pro and choose Final Cut Pro > Easy Setup...



2. Choose the following Easy Setup:

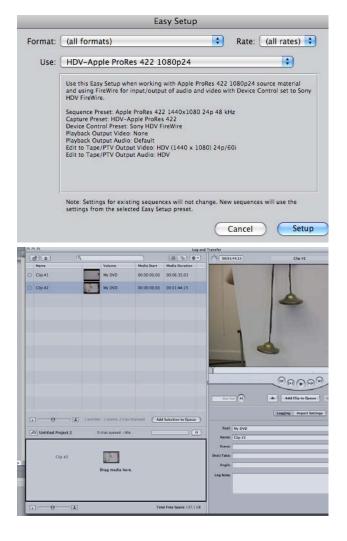
Format: (all formats)

Use: HDV-Apple ProRes 422

1080p24

Click "Setup".

3. Choose File > Log and Transfer.



4. Drag and Drop clips as shown to transfer.

Please note!

iMovie (with the star icon, not the older iMovie HD) will import this footage as well. In Video Production Classes, do not use iMovie.

Lab assistants will delete the footage from the camera before each checkout, therefore, you do not have to delete the footage from the camera.

You MUST USE an Intel Mac to do the Log and Transfer in Final Cut Pro - all non-Intel Macs have been labeled with a red dot by the name tag.