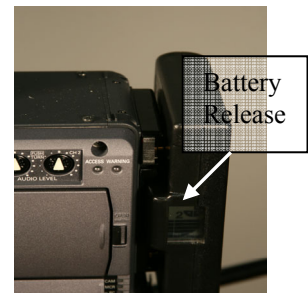


# Using the Panasonic P2HD AG-HPX500P Camcorder With Final Cut Pro

This camera does not use videotape; information is recorded onto P2 cards. There are four P2 card slots on the right side of the camera. The camera will have these cards in place when you sign it out. Cards should be always kept in the camera except when loading video onto the computer. Computers with card readers are located in LC 21, 28 and 31 for this purpose. Each camera will have one 32 GB card which will provide approximately 128 minutes of recording time if all of the cards are blank when you start. A second card may be available if needed.

## To Install Battery

Carefully attach an Anton Bauer Digital Trimpac battery or power supply to the camera by aligning the three holes on the back of the camera plate and the matching studs on the battery. Then slide the battery to the right. To remove the battery, press the release button and slide the battery to the left. The AC power supply is attached to the camera in the same manner as the battery. The AC power supply is also a battery charger. It will charge a battery when the charger is not attached to the camera and a battery is attached to the power supply. A bar graph located in the viewfinder indicates the charge remaining for the battery.



Turn on the power switch, which is deeply recessed towards the front of the lower left side of the camcorder.

## To remove a P2 card

- Turn off the camera
- Press the door release and slide the door open.
- Flip the card release button down.
- Press the card release button to eject the card.
- Slide the door closed



**NOTE\* - PLEASE BE SURE DOOR IS CLOSED AT ALL TIMES OTHER THAN INSTALLING OR REMOVING CARDS**

## To install a P2 card

- Turn off the camera.
- Press the door release and slide the door open.
- Insert the card connector end with the Panasonic P2 logo facing the back of the camera.
- Flip up the card release lever.
- Close door when all cards are installed.

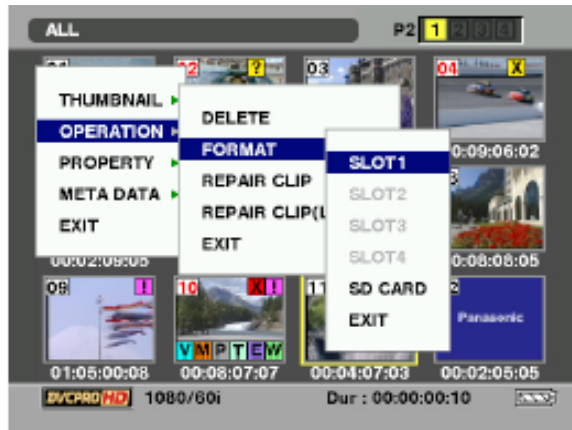


**NOTE\* - EACH CAMERA COMES WITH ONLY ONE CARD. PLACE THE CARD IN THE LOWEST NUMBERED SLOT. ADDITIONAL CARDS MAY BE AVAILABLE IF NECESSARY.**

## Erasing all clips (formatting the P2 card)

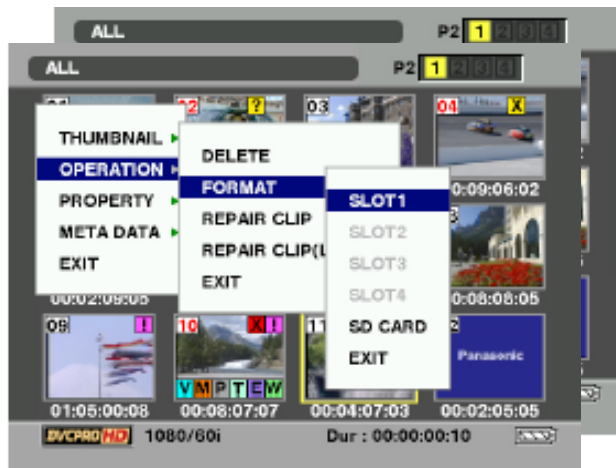
Before shooting be sure that the person using the camera before you has erased all of the clips so you will have room to shoot your footage. (NOTE – New video will NOT overwrite what is already on the P2 cards)

- Open the LCD display and VCR panel.
- Press the MODE button to change to MCR mode.
- Press the THUMBNAIL MENU button to open the menu.
- Use the cursor buttons to select OPERATION → FORMAT.
- Use the cursor buttons to select the SLOT#.
- Press CURSOR AND SET.
- Confirm format.
- Use cursor to select YES.
- Repeat for all cards if more than one used.



## Deleting Some Clips

- Open the LCD display and VCR panel.
- Press the MODE button to change to MCR mode
- Select the clip to delete by using the cursor to highlight it.
- Press the THUMBNAIL button to select OPERATION → DELETE.
- Use the cursor and set buttons to select YES.
- Repeat for all clips you wish to delete



## To Set Camera for DVCPRO 25, 16:9 aspect ratio

- Open the LCD display and VCR panel.
- Press the MODE button to change to CAM mode
- Use cursor and set buttons to select Item #2, Camera Setup.
- Make sure Aspect is set to SQUEEZE and Setup to 7.5.
- Use cursor and set buttons to select Item #4, Recording Setup.

- Make sure Recording Format is set to 480i/60i, DVCPRO Normal.
- Use menu button to return to main menu.

## To Begin Camera Setup

- Locate the controls just above the power switch.
- Set the SAVE (VTR) to the OFF position to record.
- Set the GAIN to the L (low) setting for no gain, or unless shooting in very low light set to M (medium) gain.
- The OUTPUT switch has 3 settings: BARS, CAMERA AUTO KNEE ON, and CAMERA AUTO KNEE OFF. Auto Knee adjusts the black level and contrast for scenes with high contrast or strong backlight. Set the OUTPUT switch to CAM AUTO KNEE OFF for normal recording.
- The WHITE BAL switch has 3 settings: Preset, A, and B. Preset is 3200. A and B are memory locations to store 2 different white balance settings. **Set White BAL Switch to A or B to do a white balance using a white card.**



- Perform a white balance by holding a white card in the light, which will illuminate your subject, zooming in and focusing the camera on it. Carefully reach under the lens and push **UP** on the AWB (auto white balance) switch. The viewfinder will display AWB A OR AWB B OK depending on if you have the preset set to A or B.
- Perform a black balance by pressing **DOWN** on the same the ABB Switch (auto black balance). The iris on the lens will close and perform the balance. The viewfinder will then display the message ABB OK.
- Perform a white balance again using the procedure above.
- **White balance each time the lighting is changed.** A black balance is only necessary for the first shoot in that location.



- Set the iris to either automatic or manual operation. The switch is located in the front of the zoom rocker and is labeled A (auto) and M (manual).



- Frame your shot as desired using the zoom rocker switch (above). The pressure applied controls the speed of the zoom. Set focus by zooming all the way in on the subject and turning the wheel behind the sunshade on the front of the lens until the image appears in focus. Then zoom out to the desired shot. If the subject does not remain in focus, check that the MACRO switch on the back of the lens is in the off position or adjust back focus if necessary



- Depress the record button (VTR), normally under your right thumb if your hand is through the strap on the lens of the camera. Remember to start recording at least 10 seconds before cueing talent or when shooting in general. When the shot is complete, press the record button a second time to pause the recording. The gray button to the left of VTR (labeled Q-Z & C-Z) is a quick zoom that will allow you to quickly zoom in and focus when it is depressed. The lens will zoom back out when released.

## Audio

The camera mic mounted on the top of the camera can and should be used **ONLY** to record natural or ambient sound in the field. Microphones can be plugged into the XLR connectors located under the battery on the back of the camera. The camera has 4 channels of audio **however**, channels 1&3 are the same and channels 2&4 are the same. Therefore, these instructions will only cover the use of channels 1 and 2.

Open the audio panel located on the left back-side of the camera.



### MONITOR SELECT switch

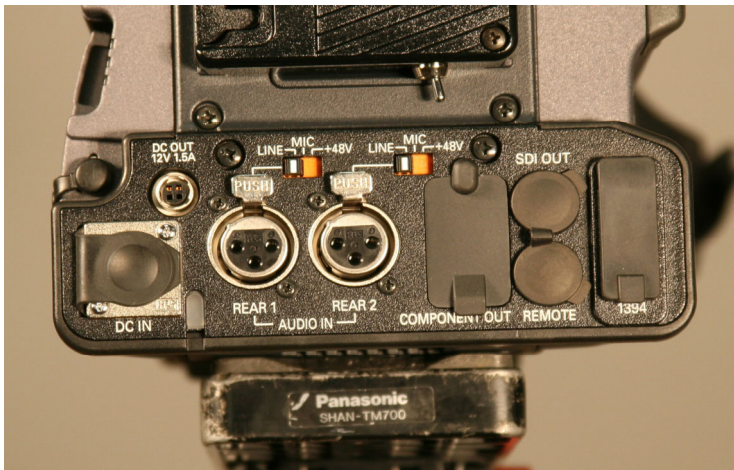
- Set to ST for stereo (Channel 1 and 2)
- Set CH1/2

### AUDIO SELECT Ch1, CH2

- Set to MAN for manual control of audio or AUTO for automatic gain control. Manual is recommended.



## FRONT/REAR



from an audio board or PA System.

- Set the audio in for each channel to FRONT for the camera mic and REAR for the XLR inputs located on the back of the camera.
- Set the audio input type. MIC, LINE, or 48V.
- Only use 48V setting for mics that require phantom power.
- Use LINE setting only for applications taking a feed

Tone is set to -20. Peaks should reach -5 and anything over 0 will be distorted.

The audio meter in the fold out LCD panel has a square at -20DB. Audio level indicators are displayed as dashes (----). When you see | (a vertical line) displayed, you are peaking and audio will become distorted if not corrected.

The MONITOR pot on the front left side of the camera will adjust the level of the speaker or headphone. **Note\* - do not use this to determine recording levels.** Headphones should always be used to monitor field audio. The headphone jack can be found on the rear left of the camera.



## Camera Mic

A camera mic has been provided and is mounted on top of the camera unit. It connects to either Front 1 or Front 2 on the front right-side of the camera. **We have connected it to FRONT 1!!!** REMEMBER, a camera mic is of lesser sound quality than that used for recording dialog. Camera mics should only be used to record ambient or natural sound and not dialog.



If you do not need the camera mic, be sure to turn the channel not being used by the rear XLR connection to “rear”, which will disengage the front mic.

## Capturing footage into an FCP Project

Make sure your FCP project settings are set for **NTSC Anamorphic!** Use **Transfer** and Capture rather than Log and Capture. Set your Capture/Scratch directory as usual and then insert P2 card into card reader. Select clips you wish to capture by checking the round dot to the left of each clip, or you can select all. Add Selection to Cue will actually transfer selected clips to the server, allowing you to name them if desired.

Eject the P2 card(s) when done and return them to the camera(s). Save your FCP project as usual.

## Offloading footage to DVCPro tape

Once you return it will be necessary to offload the footage you shot onto a DVCPro tape (as well as make DVD copies). This should be done prior to handing in your camera so where possible, plan on this extra time when signing out your equipment and determining its return time. LC 31 will be the room for this process.

Place the battery pack on the camera and power it up. Open the LCD door and along with the door housing the playback controls. Move the switch on the right to “MCR”. Select “MODE” which will then show you thumbnails of each scene in the LCD panel. Be sure the first “scene is highlighted in the LCD panel. Each of the 3 DVCPro decks in LC 31 will have a bundle of cables attached to the back. Take the BNC and red and white RCA audio cables and hook them up as in the diagram. The BNC connector is hooked to the video out on the camera (located on the back right side), the white audio cable is plugged in to CH 1, while the red cable is plugged in to CH 2.



- Place your DVCPro tape into the deck.
- Turn on the television monitor
- Turn on the DVD player

- Adjust the Monitor to display the DVD player (**IMPORTANT NOTE – THE MONITOR MUST BE SET TO MONITOR EITHER THE DVD OR VHS MACHINE AS THERE IS NO INPUT TO MONITOR THE CAMERA DIRECTLY**)
- If you wish to make a DVD copy of your footage at the same time, insert a DVD into the machine and be sure it is set properly for either a straight dub or a window dub.
- Press PLAY AND RECORD on the DVCPRO deck.
- Press PLAY on the camera (between Thumbnail and Mode buttons)
- If you are also making a DVD, hit the record button on the remote.
- When done recording, hit stop on the DVCPRO deck (and follow the directions to finalize your DVD if making one).
- **IMPORTANT NOTE – BEFORE RETURNING YOUR CAMERA AND/OR MEMORY CARD, BE SURE TO PLAY THE DVCPRO TAPE TO BE SURE YOU ACTUALLY RECORDED ONTO IT.**
- Put the camera away and return it to the student worker.

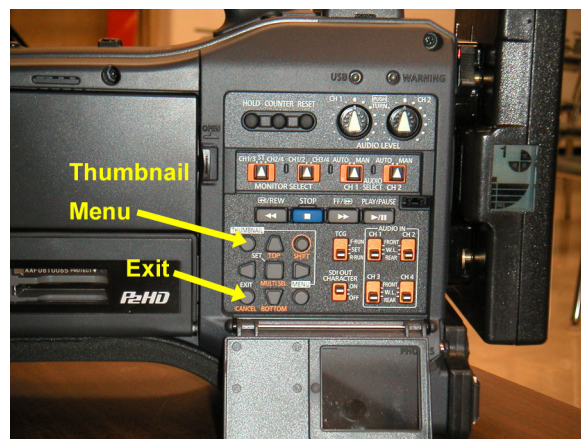


## Using the Panasonic P2HD AG-HPX300P Camcorder

The HPX300P series camcorders are a scaled down version of the HPX500 series. They use 1/3 inch chips rather than 2/3 inch, which allows for a smaller lens and a lighter, less expensive camera overall. The video quality may be slightly less than with the 500s, but these are still **network quality** camcorders used by NBC News. Battery installation is identical to the 500s.

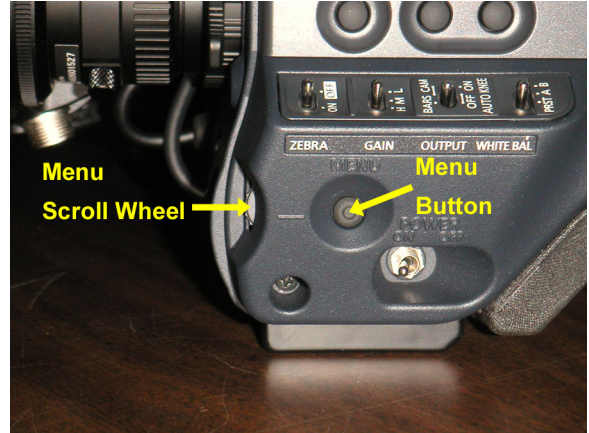
Other than the smaller chip size, the main difference from the 500s is that there are only two slots for P2 cards. Our current 32 Gig P2 cards allow for at least 128 minutes of standard definition video per card, and we have some extras available, so this should not pose any practical problems. Students planning to shoot high definition should probably reserve the 500 series cameras.

The card menus are accessed by the THUMBNAIL button and cleared by the EXIT button located under the large door on the left rear of the camera. P2 card functions perform exactly as with the 500 series described above.



## To Set the 300 Series Camera for DVCPro 25, 16:9 aspect ratio

- The system menu is accessed by a button deeply recessed on the lower front left side of the camera, directly below the Zebra and Gain switches. Pressing this button once reveals the menu in the LCD display and pressing it again exits the menu function.
- Once the menu is activated, it is operated by a small thumbwheel on the front left of the camera.
- Turning the wheel scrolls through menu items, and pressing inward on the wheel selects whatever is highlighted.
- Once you have activated the menu function, use the wheel to scroll to item #2, System Setup. It should be set as follows:



System Mode	480-59.94i
Rec Signal	Camera
Rec Format	DVCPro/60i
Scan Reverse	Off
Aspect Conv	Squeeze
Setup	7.5% A

- Set other menu functions as discussed above for the 500 series cameras. When you are satisfied with the setup, press the recessed button on the side of the camera to exit menu mode.

## Shooting in High Definition, 16:9 aspect ratio

While both the 300 and 500 series P2 cameras will shoot in a huge variety of formats including 1080i, we do not have Blu-Ray burners at present, so standard definition, 16:9 as described above will create stunning quality DVD release copies.

For special projects, however, students may want to shoot in a higher resolution. DVCPro HD is a very attractive compromise between increased image quality and reasonable file size. Simply change System Mode to 720p/60p (59.94p for the 300 series). Rec Format only relates to 480i recording on the 500 series cameras. Check settings on the 300 series cameras and set to 720p/60p if necessary.

Please remember to return settings to the Standard Definition settings when turning the camera in to the Student Workers.