

Setting up Digital VTRs for Dolby E and Dolby Digital Compatibility

- In all cases, any audio channels used for recording either Dolby E or Dolby Digital must be in unity gain mode. Depending on the VTR, proper unity gain mode requires either selecting unity in the setup menu or physically “pressing in” the audio level knobs. Manually adjusting audio level controls to set unity gain will not work.
- Editing of Dolby E requires “cut” edits. Cross fading will cause Dolby E frames to be corrupted at the edit point.
- Editing of Dolby Digital is not supported in any mode and can cause muting.

Sony HDCAM SRW-5500

Dolby E Compatible	Yes
Dolby Digital Compatible	Yes
Channel Bit Depth	20bit
PCM I/O Delay	Yes (audio output advance and additional input delay)
24 Frame Compatible	Yes (Dolby Tri-Level Sync Adaptor required for Dolby E)

The menu settings that apply are for disabling sample rate conversion, enabling valid edits with Dolby E, selecting Dolby E or Dolby Digital compatibility, and disabling PCM I/O delay on output.

To access the Setup Menu:

1. press Setup key
2. press F6 (VTR SETUP)
3. scroll to menu number

- #809 “Digital Jog Sound” Mode (On/Off)
This menu provides the ability to mute the audio output during a jog/shuttle operation. Muting the audio may be desirable if the downstream Dolby E decoder does not support or is not configured for PCM Bypass operation.
- #830 “Audio Input” Mode (SDI/AES)
- #831 “Non-Audio” Mode (SDI/AES/OFF)
This menu enables/disables sample rate conversion on the selected audio channels. Selecting “Non-Audio” disables sample rate conversion for the selected channels and inputs. Selection is in channel pairs from 1/2 to 11/12.
- #831 “HDCAM Record” Mode (Burst/Continuous)
“Burst” mode is required for encoding Dolby E. “Continuous” mode is required for encoding Dolby Digital.
- #821 “Audio Advance Mode”
This menu enables/disables the 1 frame PCM audio advance on output only. Turning Audio Advance “On” will enable the 1 frame PCM audio advance on

output (fig.1). This feature should be “-1F” when Dolby E is in sync on tape, and “Off” when Dolby E is advanced on tape one frame with respect to video.

1. hold SFT (shift) key and press (Diag)
2. hold SFT (shift) key and press (Mainte Exec)
3. press (Others/Check)
4. press (Alt)
5. press (Phase set)
6. press (F4) Audio PB Out (-1F/OFF)

Audio Input Delay should be set to OFF

#317 “Edit” Mode
Selects cut or crossfade edit (cut is correct mode for Dolby E)

#305 “Field Edit” Mode
Selects if the VTR edits on field or frame boundaries (1-2 is correct mode for Dolby E)

To change the frame rate:

1. hold SFT (shift) key and press (Diag)
2. hold SFT (shift) key and press (Mainte Exec)
3. press (Others/Check)
4. press (Systems Menu)
5. change line, scan mode, frame rate and record format as required
6. System will reboot automatically

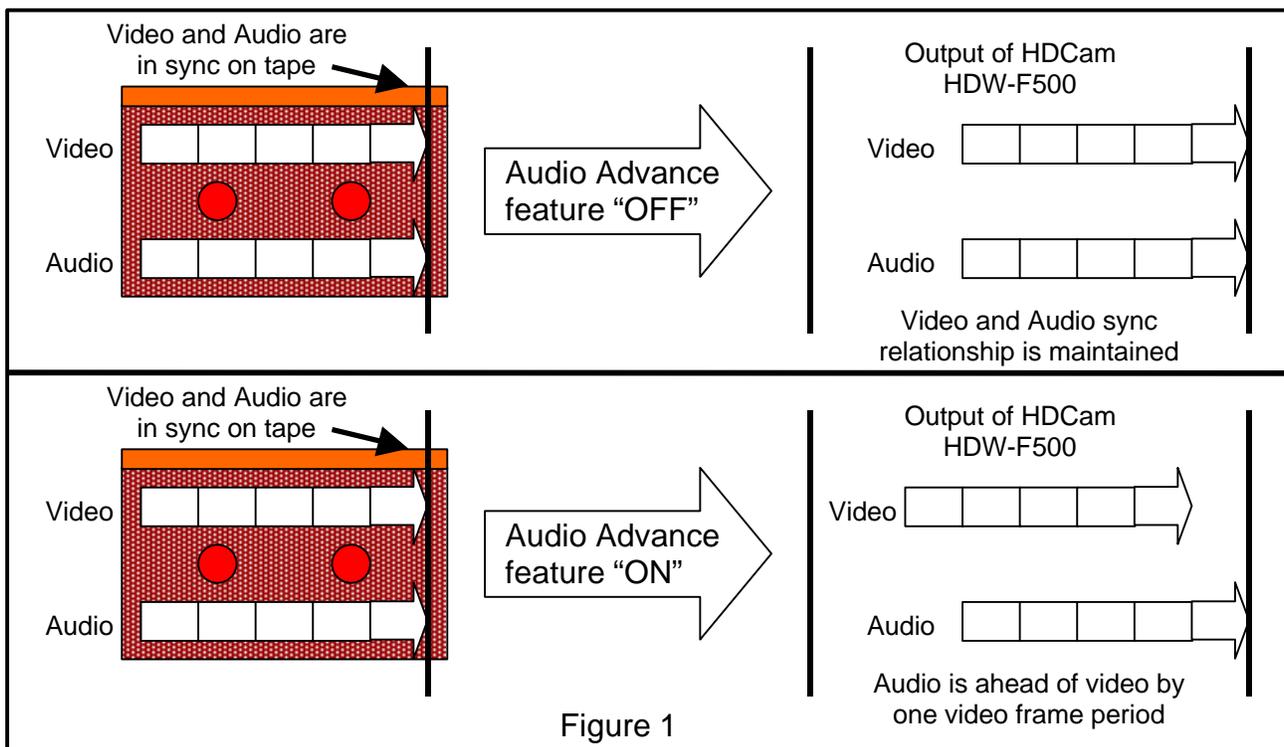


Figure 1

Information regarding equipment by manufacturers other than Dolby Laboratories is supplied to assist the end user in setting up units to be compatible with Dolby technologies. All menu information is believed to be accurate, however changes to any manufactures software and functionality is at the discretion of that manufacturer. You should consult your product's manufacturer for more information.