

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.

Panasonic HD D5-3700

Dolby E Compatible	Yes, when in “data mode”
Dolby Digital Compatible	Yes, when in “data mode”
Channel Bit Depth	20 and 24bit
Sample Rate Conversion	Yes, but offers a “data mode” for Dolby E/Dolby Digital
Audio Advance Function	Yes, on both input and output (can be disabled)
24 Frame Compatible	Yes (Dolby Tri-Level Sync Adapter required for Dolby E) ¹

The menu settings that apply are for disabling sample rate conversion, enabling valid edits with Dolby E and selecting the appropriate audio/video input/output sync parameter based upon the application.

To select “STYLE” mode (commonly referred to as Data Mode):

Note: “Data Mode” is only present when using the 3700 in 4-channel mode, in either 1080i or 720p. This selection is not present when using the 3700 in any of the 8-channel modes.

1. Press the “AUDIO IN” key
2. Hold “F” key and press “F10” to toggle between “DATA” and “PCM”
3. “DATA” is correct for Dolby E or Dolby Digital

To select “Playback Fade” mode (affects the edit point for Dolby E playback):

1. Press the “AUDIO OUT” button.
2. Press “SETUP” [F8]
3. Press “PB FADE” [F4]
4. Set to “OFF”

To select EDIT mode:

1. Press “INSERT” key on keypad
2. Press “F9” key (INSERT) to set insert on...Insert key from first step will illuminate

¹ System Version 0.14Q or 0.14S // Servo 0.21 // AV 0.17E // Front 0.11 supports 23.98 fps only, 24 fps is not supported.

3. Press "F8" (SETUP) key
4. Press "F13" key to set mode to "CUT" (cut mode is correct for Dolby E)
5. Press and hold "F" key
6. Press "F1" key to set timing to <F1> (field 1 is correct for Dolby E)
7. Press "F8" key to exit
8. Press "F13" (CH SELECT) to choose channels for recording and engage appropriate channels

To select "DATA ADV" (Data Advance) mode (available only for 59.94/1080i/20 bit, 4-ch modes):

This mode affects both the record and playback of the VTR.

Setting "Data Advance" to a value greater than "0" (zero) allows audio to be recorded on tape or played out of the VTR at the selected percentage (up to a maximum of 1 frame period) ahead of picture (fig.1). Turning Data Advance to "0" (zero) will preserve the same audio/video sync relationship at the output of the VTR that is present at the input or on the videotape.

1. Press AUDIO IN or OUT key on keypad
2. Press "F8" key (SETUP)
3. Press "F9" key -- Then Turn "ADJUST" knob to appropriate selection (range is from 0 to 1 frame in 0.1 increments)
4. Press "F8" key to (exit)

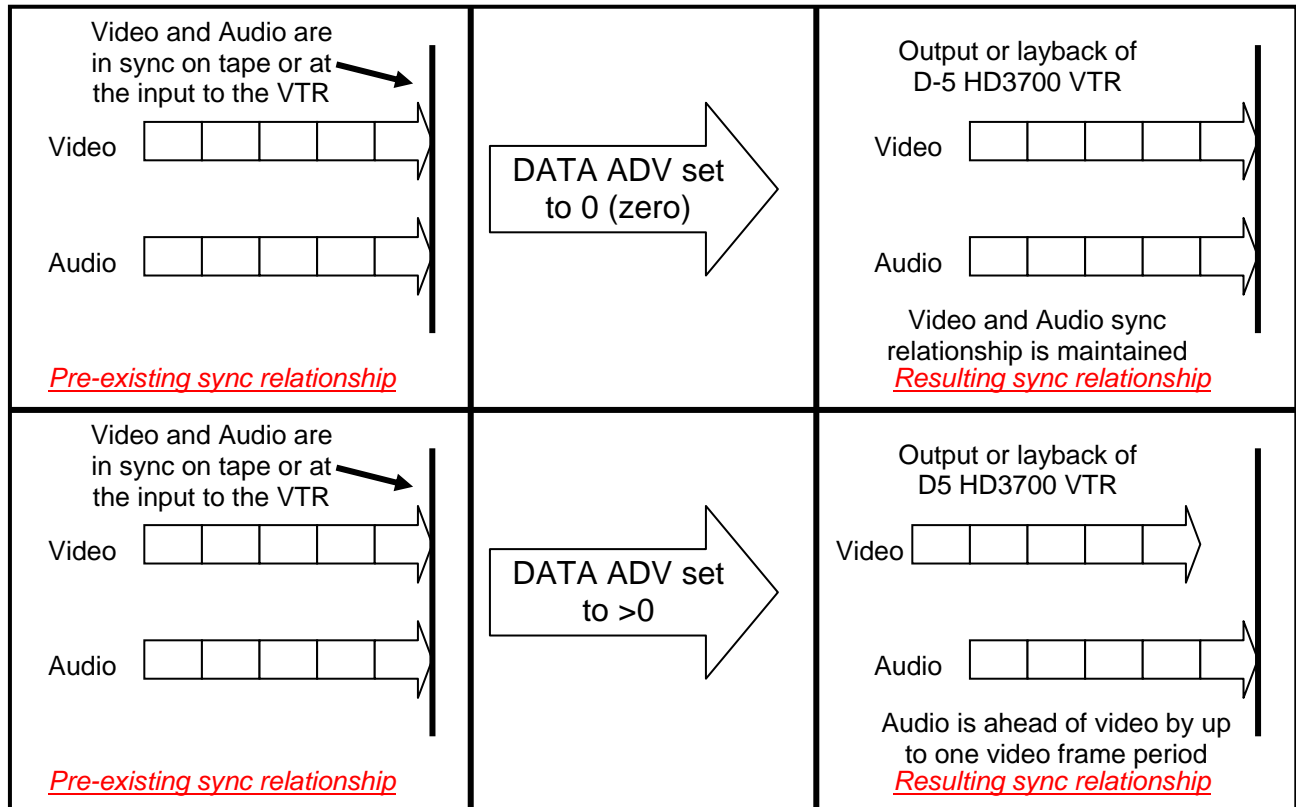


Figure 1

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.

HD-D5 3700 Application examples:

1. With Data Advance set to "1" (one), the one video frame audio advance on both the input and output of the 3700 allows the placement of a Dolby E Encoder in front (record path) and a Dolby E Decoder behind (playback path) without requiring any external delays to maintain sync on tape and on playback (fig.2).
2. When the Dolby E data on tape is in sync with video, turning Data Advance to "1" (one) will result in the decoded audio (decoded via the DP572 Dolby E Decoder) being in sync with video due to the one frame decoding delay within the DP572 (fig.2: "Playback Path").
3. When duplicating or "cloning" a D5 tape containing Dolby E, turning Data Advance to "0" (zero) will maintain the same audio/video sync relationship from the master to the copy. Setting Data Advance to "1" (one) will result in Dolby E data on the copy being one frame advanced from the master with respect to video.
4. When the Dolby E data on tape is advanced one frame with respect to video, turning Data Advance to "0" (zero) will result in the decoded audio (decoded via the DP572 Dolby E Decoder) being in sync with video.

To Select "RATE CON" (sample rate converter): "ON" enables and "OFF" disables the sample rate converters

1. Press AUDIO IN or OUT key on keypad
2. Press F* key (SETUP)
3. Press "F11" key to toggle between "ON" and "OFF" ("OFF" is the correct mode for Dolby E or Dolby Digital)

To change frame and scan rate (eject tape from machine before changing):

1. Press "SETUP" key
2. Press "F4" key (System)
3. Hold "F" key and press "F1" key (FREQ)
4. Using cursor, select frame rate
5. Press "BS" key & "ENT" key simultaneously to accept selection
6. Using cursor, select scan rate
7. Press "BS" key & "ENT" key simultaneously to accept selection
8. Using cursor, select bit depth
9. Press "BS" key & "ENT" key simultaneously to accept selection

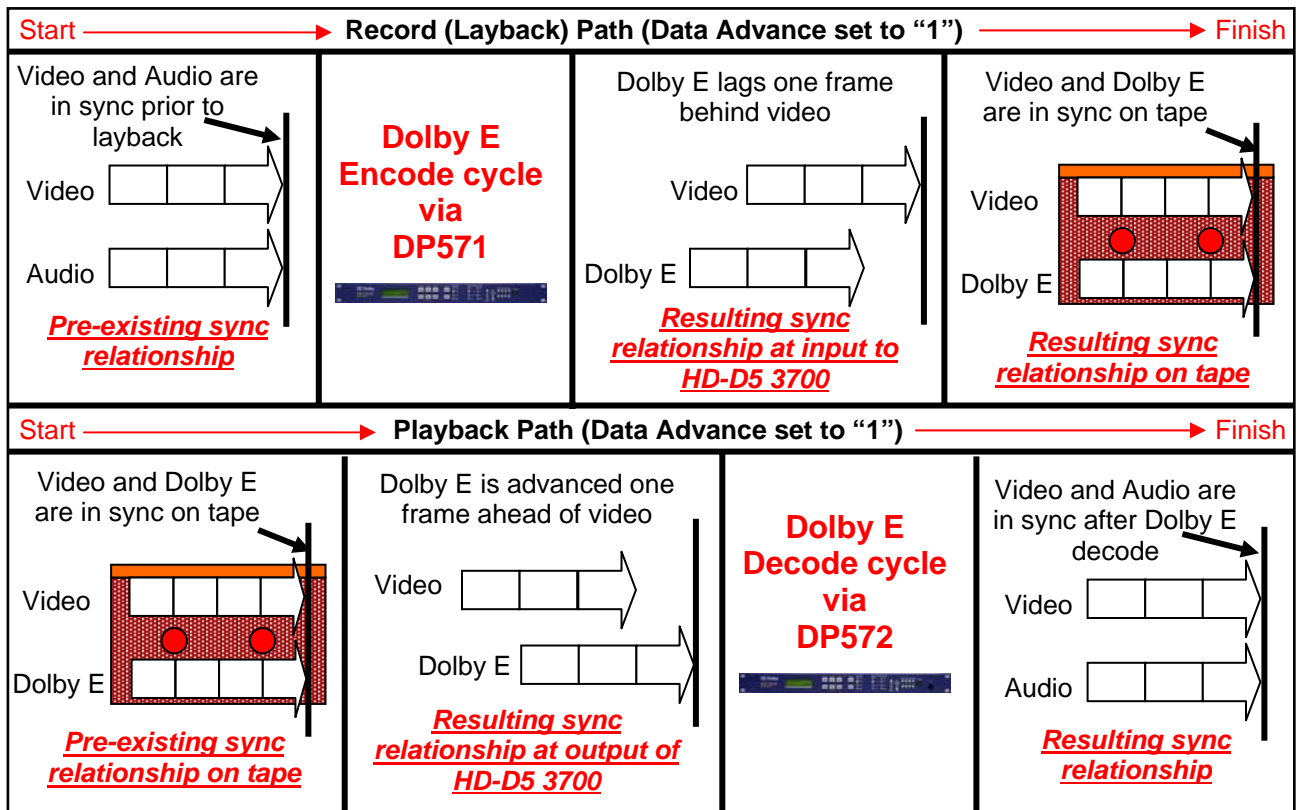


Figure 2

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