

Source	Copy					
	23.98 FPS	24FPS	25FPS 50i	29.97 FPS 59.94i	PAL	NTSC
23.98	OK	0.1% speed up	4.1% Speed Up or Alchemist	2:3 Cadence added	4.1% Speed Up or Alchemist	2:3 Cadence added
24FPS	0.1% slow down	OK	4.0% Speed Up or Alchemist	0.1% Slow down plus 2:3 Cadence added	4.0% Speed Up or Alchemist	2:3 Cadence added
25FPS / 50i	Alchemist	Alchemist	OK	Alchemist	Alchemist down convert	Alchemist down convert
29.97 FPS 59.94i	Inverse Telecine or Alchemist	Inverse Telecine or Alchemist	Alchemist	OK	Alchemist down convert	Alchemist down convert
PAL	Alchemist	Alchemist	Alchemist UP Convert	Alchemist UP Convert	OK	Alchemist
NTSC	Alchemist	Alchemist	Alchemist UP Convert	Alchemist UP Convert	Alchemist	OK

	Adding cadence will keep a majority of the frames unblended but there will be blended frames every 3rd Frame
	Does not Normally require pitch correction
	Only applicable if material was originally made with 2:3 Cadence
	Alchemist HD Required and will cause frame blending
	Material can be speed changed with no frame blending which may require pitch correction or Converted through Alchemist
	Alchemist Required for upconversion but should not introduce Frame Blending



Example of Frame Blending

