

Summary: Adobe Media Encoder CC 2014 vs. Apple Compressor 4.2

		<i>AME 1-pass</i>	<i>AME 2-pass</i>	<i>Compressor Single Instance 1-pass</i>	<i>Compressor Multiple Instance 1-pass</i>	<i>Compressor Single Instance 2-pass</i>	<i>Compressor Multiple Instance 2-pass</i>
Percentages							
New Mac Pro		100.0%	155.1%	78.5%	145.7%	203.9%	175.8%
21" iMac		100.0%	141.2%	34.2%	68.1%	70.3%	258.3%
15" MacBook Pro		100.0%	192.9%	39.9%	97.7%	77.7%	265.3%
Indicates Fastest							
Actual Times (Minutes:Seconds)							
New Mac Pro	<i>Total Time</i>	59:39	92:30	46:51	86:55	121:36	104:52
	<i>Average</i>	14:55	23:08	11:43	21:44	30:24	26:13
21" iMac	<i>Total Time</i>	86:07	121:38	29:29	58:39	60:30	222:26
	<i>Average</i>	21:32	30:25	07:22	14:40	15:08	55:37
15" MacBook Pro	<i>Total Time</i>	69:11	133:28	27:35	67:35	53:47	183:32
	<i>Average</i>	17:18	33:22	06:54	16:54	13:27	45:53
Average time to compress 1 minute of each source codec with each setting (Minutes:Seconds:Milliseconds)							
	<i>Source Minutes</i>	<i>Compression Time per Source Minute (Minute:Second:Millisecond)</i>					
XDCAM EX	8.967	00:48.102	01:26.056	00:18.810	06:30.655	02:53.079	01:57.282
ProRes 422 HQ	52.83	00:27.377	00:42.555	00:15.307	00:23.582	00:34.494	01:12.112
ProRes 4444	37.58	00:25.945	00:44.811	00:07.779	00:16.064	00:14.786	00:41.130
Average time, per System, to compress one minute of each codec using Compressor in 1-pass, single-instance mode (Seconds:Milliseconds)							
		<i>Compression Time per Source Minute (Minute:Second:Millisecond)</i>					
	<i>Source Minutes</i>	<i>MacPro</i>	<i>21" iMac</i>	<i>15" MacBook</i>			
XDCAM EX	8.967	38.697	10.037	07.695			
ProRes 422 HQ	52.83	38.709	27.352	25.781			
ProRes 4444	37.58	11.150	06.227	05.961			

Adobe Media Encoder CC 2014 vs. Apple Compressor 4.2 - MacPro

Type of File	Source File Size	TRT	Source Codec	Source Image Size	Adobe Media Encoder (Mac Pro 1-pass)		Adobe Media Encoder (Mac Pro 2-pass)		Compressor 4.2 Mac Pro (1-pass Single instance)		Compressor 4.2 Mac Pro (1-pass Multiple instances)		Compressor 4.2 Mac Pro (2-pass Single instance)		Compressor 4.2 Mac Pro (2-pass Multiple instances)		File Name
					Time to compress with YouTube HD 720 setting	File Size	Time to compress with YouTube HD 720 setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	
QuickTime Movie	2.33 GB	8m 58s	XDCAM EX	1280 x 720	7m 26s	1.04 GB	10m 56s	678.6 MB	5m 47s	665.5 MB	18m 1s	665.5 MB	20m 7s	678.9 MB	15m 55s	686.7 MB	2RG ep10
QuickTime Movie	14.87 GB	4m 45s	ProRes 422 HQ	1920 x 1080	4m 9s	516.7 MB	7m 48s	365.9 MB	4m 34s	348.9 MB	10m 13s	348.9 MB	12m 4s	359.3 MB	15m 12s	355.3 MB	Tour
QuickTime Movie	46.83 GB	37m 35s	ProRes 4444	1280 x 720	13m 25s	1.67 GB	23m 21s	1.63 GB	6m 59s	950.2 MB	19m 1s	950.2 MB	12m 6s	1.69 GB	16m 59s	877.3 MB	Craft 01
QuickTime Movie	79.07 GB	48m 5s	ProRes 422 HQ	1920 x 1080	34m 39s	5.72 GB	50m 25s	3.71 GB	29m 31s	3.64 GB	39m 40s	3.64 GB	1h 17m 19s	3.54 GB	56m 46s	3.62 GB	Interviews
				<i>Total Time</i>	<i>0h 59m 39s</i>		<i>92m 30s</i>		<i>46m 51s</i>		<i>86m 55s</i>		<i>2h 1m 36s</i>		<i>104m 52s</i>		
		<i>52m 50s</i>		<i>Average</i>	<i>0h 14m 55s</i>		<i>23m 8s</i>		<i>11m 43s</i>		<i>21m 44s</i>		<i>0h 30m 24s</i>		<i>26m 13s</i>		
NOTES																	
	* Compressor HD720 default setting used. AME changed bit rate from default of 16 mbps to 10 mbps to match Compressor																
	• AME default YouTube 720p setting changed to VBR 2-pass at 10 mbps to match Compressor settings.																
	* Since not all source files were the same image size, all files were scaled to the same compressed image size of 1280 x 720																
	* Compressor creates QuickTime movies for YouTube, AME creates MP4 movies.																
	* New Mac Pro, 3.0 GHz 8 core Xeon, 32 GB RAM, AMD D700 GPU — all source files stored on the internal SSD drive																
	* The New Mac Pro supports up to 3 instances of Compressor running at once. For this test, all three were enabled.																
	• All files stored on internal storage. Files stored on external single-drive storage tend to compress about 15% slower.																
	* The goal in this test was to compare compression speeds and resulting file sizes using common settings. Bit rates this high should yield excellent image and audio quality.																

Adobe Media Encoder CC 2014 vs. Apple Compressor 4.2 - 21" iMac

Type of File	Source File Size	TRT	Source Codec	Source Image Size	Adobe Media Encoder (21" iMac 1-pass)		Adobe Media Encoder (21" iMac 2-pass)		Compressor 4.2 21" iMac (1-pass Single instance)		Compressor 4.2 21" iMac (1-pass Multiple instances)		Compressor 4.2 21" iMac (2-pass Single instance)		Compressor 4.2 iMac (2-pass Multiple instances)		File Name							
					Time to compress with YouTube HD 720 setting	File Size	Time to compress with YouTube HD 720 setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size								
QuickTime Movie	2.33 GB	8m 58s	XDCAM EX	1280 x 720	7m 8s	668 MB	13m 13s	678.6 MB	1m 30s	662.6 MB	18m 20s	665.5 MB	3m 11s	682.6 MB	17m 30s	680.1 MB	2RG ep10							
Quick Time Movie	14.87 GB	4m 45s	ProRes 422 HQ	1920 x 1080	4m 44s	342.8 MB	8m 49s	363.2 MB	3m 11s	360.5 MB	5m 17s	360.5 MB	6m 25s	362.9	14m 10s	356.2 MB	Tour							
QuickTime Movie	46.83 GB	37m 35s	ProRes 4444	1280 x 720	19m 34s	1.62 G	31m 50s	1.63 GB	3m 54s	1.18 GB	5m 28s	1.18 GB	8m 12s	1.49	29m 27s	859.7 MB	Craft 01							
QuickTime Movie	79.07 GB	48m 5s	ProRes 422 HQ	1920 x 1080	54m 41s	3.71 GB	1h 7m 46s	3.71 GB	20m 54s	3.64 GB	29m 34s	3.64 GB	42m 42s	3.67 GB	2h 41m 19s	3.65 GB	Interviews							
				<i>Total Time</i>	<i>86m 7s</i>		<i>121m 38s</i>		<i>29m 29s</i>		<i>58m 39s</i>		<i>60m 30s</i>		<i>222m 26s</i>									
				<i>Average</i>	<i>21m 32s</i>		<i>30m 25s</i>		<i>7m 22s</i>		<i>14m 40s</i>		<i>15m 8s</i>		<i>55m 37s</i>									
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* iMac compression done on a Late 2013 21" iMac 3.1 GHz Intel Core i7 with 16 GB of RAM, NVIDIA GeForce GT750M GPU with 1024 VRAM																								
* The 21" iMac only supports 1 additional instance of Compressor.																								
* No other tasks were running during these compression tests, except for Numbers (to record results) and iTunes Radio (to keep me awake.)																								
• All files stored on internal storage. Files stored on external single-drive storage tend to compress about 15% slower.																								
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Adobe Media Encoder CC 2014 vs. Apple Compressor 4.2 - 15" MacBook Pro

Type of File	Source File Size	TRT	Source Codec	Source Image Size	Adobe Media Encoder 15" MacBook Pro (1-pass)		Adobe Media Encoder 15" MacBook Pro (2-pass)		Compressor 4.2 - 15" MacBook Pro (1-pass Single instance)		Compressor 4.2 - 15" MacBook Pro (1-pass Multiple instances)		Compressor 4.2 - 15" MacBook Pro (2-pass Single instance)		Compressor 4.2 - 15" MacBook Pro (2-pass Multiple instances)		File Name
					Time to compress with YouTube HD 720 setting	File Size	Time to compress with YouTube HD 720 setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	Time to compress with YouTube HD 720 default setting	File Size	
QuickTime Movie	2.33 GB	8m 58s	XDCAM EX	1280 x 720	7m	668 MB	14m 26s	678.6 MB	1m 9s	662.6 MB	22m 2s	665.5 MB	2m 34s	682.6 MB	19m 10s	680.1 MB	2RG ep10
QuickTime Movie	14.87 GB	4m 45s	ProRes 422 HQ	1920 x 1080	6m 20s	342.8 MB	11m 24s	365.9 MB	3m 36s	360.5 MB	6m 27s	360.5 MB	6m 55s	362.9 MB	15m 16s	356.2 MB	Tour
QuickTime Movie	46.83 GB	37m 35s	ProRes 4444	1280 x 720	15m 46s	1.63 GB	29m 1s	1.62 GB	3m 44s	1.18 GB	5m 42s	1.18 GB	7m 29s	1.49 GB	30m 51s	859.7	Craft 01
QuickTime Movie	79.07 GB	48m 5s	ProRes 422 HQ	1920 x 1080	40m 5s	3.71 GB	1h 18m 37s	3.71 GB	19m 6s	3.64 GB	33m 24s	3.64 GB	36m 49s	3.67 GB	1h 58m 15s	3.64 GB	Interviews
				<i>Total Time</i>	<i>69m 11s</i>		<i>133m 28s</i>		<i>27m 35s</i>		<i>67m 35s</i>		<i>53m 47s</i>		<i>183m 32s</i>		
				<i>Average</i>	<i>17m 18s</i>		<i>33m 22s</i>		<i>6m 54s</i>		<i>16m 54s</i>		<i>13m 27s</i>		<i>45m 53s</i>		
NOTES																	
	* Compressor HD720 default setting used. AME changed bit rate from default of 16 mbps to 10 mbps to match Compressor																
	• AME default YouTube 720p setting changed to VBR 2-pass at 10 mbps to match Compressor settings.																
	* Since not all source files were the same image size, all files were scaled to the same compressed image size of 1280 x 720																
	* Compressor creates QuickTime movies for YouTube, AME creates MP4 movies.																
	* MacBook compression done on a Late 2013 15" Retina MacBook Pro 2.6 GHz Intel i7, 16 GB RAM, NVIDIA GeForce GT750M GPU with 2048 VRAM.																
	* The MacBook only supports one additional instance of Compressor.																
	* No other tasks were running during these compression tests, except for Numbers (to record results) and iTunes Radio (to keep me awake.)																
	• All files stored on internal storage. Files stored on external single-drive storage tend to compress about 15% slower.																
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