

Compression Speed Summary: Adobe Media Encoder vs. Apple Compressor

<i>Total Compression Time</i>	<i>AME 2014</i>	<i>AME 2015</i>	<i>AME 2016</i>	<i>2016 vs 2015</i>	<i>2016 vs 2014%</i>	<i>Compressor 4.2 (1-pass)</i>	<i>AME 2016 vs. Comp. 4.2</i>
1-pass	1:26:07	1:19:43	1:06:54	-16.1%	-22.3%	0:29:29	126.9%
2-pass	1:59:40	2:22:16	2:11:57	-7.3%	10.3%	1:00:30	118.1%
XDCAM	0:20:18	0:20:02	20:08	0.5%	-0.8%	0:04:41	329.9%
ProRes 422 HQ	2:14:10	2:14:05	1:52:28	-16.1%	-16.2%	1:13:12	53.6%
1-pass 10 mbps			1:06:54				
1-pass 16 mbps			1:15:00				
10 mbps time savings			-10.8%				
10 mbps file size			6,391.8				
16 mbps file size			8,939.4				
File size savings			-28.5%				

Adobe Media Encoder Speed Tests - 2014, 2015, 2016

Type of File	File Size	TRT	Codec	Image Size	AME 2014 (21" iMac 1-pass)		AME 2014 (21" iMac 2-pass)		AME 2015 (21" iMac 1-pass)		AME 2015 (21" iMac 2-pass)		AME 2015.3 (2016) 27" iMac 1-pass) 10 mbps		AME 2015.3 (2016) 27" iMac 1-pass) 16 mbps		AME 2015.3 (2016) 27" iMac 2-pass) 10 mbps		AME 2015.3 (2016) 27" iMac 2-pass) 16 mbps		Compressor 4.2 21" iMac (1-pass)		Compressor 4.2 21" iMac (2-pass)		File Name
					Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 setting	File Size (MB)	Time to compress with YouTube HD 720 default setting	File Size (MB)	Time to compress with YouTube HD 720 default setting	File Size (MB)	
QuickTime Movie	2.33 GB	8m 58s	XDCAM EX	1280 x 720	0:07:08	668	0:13:10	678.6	0:06:52	669.6	0:13:10	678.7	0:06:57	669.6	0:08:17	1040.0	0:13:11	678.7	0:15:55	1070.0	0:01:30	662.6	0:03:11	682.6	2RG ep10
QuickTime Movie	14.87 GB	4m 45s	ProRes 422 HQ	1920 x 1080	0:04:44	342.8	0:09:09	363.2	0:04:55	352.3	0:08:14	366	0:04:01	352.2	0:04:44	539.4	0:07:50	356.2	0:09:03	568.0	0:03:11	360.5	0:06:25	362.9	Tour
QuickTime Movie	46.83 GB	37m 35s	ProRes 4444	1280 x 720	0:19:34	1620	0:31:45	1630	0:23:59	1660	0:43:53	1650	0:22:34	1660.0	0:23:11	1710.0	0:43:41	1650.0	0:45:14	1790.0	0:03:54	1180	0:08:12	1490	Craft 01
QuickTime Movie	79.07 GB	48m 5s	ProRes 422 HQ	1920 x 1080	0:54:41	3710	1:05:36	3710	0:43:57	3710	1:16:59	3720	0:33:22	3710.0	0:38:48	5650.0	1:07:15	3720.0	1:15:46	5870.0	0:20:54	3640	0:42:42	3670	Interviews
				Total Time	1:26:07		1:59:40		1:19:43		2:22:16		1:06:54	6391.8	1:15:00	8939.4	2:11:57	6404.9	2:25:58	9298.0	0:29:29		1:00:30		
				Average	0:21:32		0:29:55		0:19:56		0:35:34		0:16:44		0:18:45		0:32:59				0:07:22		0:15:08		
NOTES																									
* Compressor HD720 default setting used.																									
• AME default YouTube 720p setting changed to 10 mbps to match Compressor bit rate setting.																									
* 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 files.																									
• 21" iMac compression done on a Late 2013 21" iMac, 3.1 GHz Intel Core i7 with 16 GB of RAM.																									
• 27" iMac compression done on a Late 2013 27" iMac, 3.5 Ghz Intel Core i7 with 32 GB RAM — this CPU is 12.9% faster than the 21" iMac used for earlier testing																									
• All files stored on internal SSD storage. Files stored on external spinning media storage tend to compress about 15% slower.																									
* No other tasks were running during these compression tests, except for Numbers (to record results).																									
* 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.																									