

# Table of contents

<b>1. Introduction.....</b>	<b>4</b>
GETTING STARTED WITH FFMPEG .....	5
1.1.1 WHAT IS FFMPEG?.....	5
1.1.2 COMPONENTS OF FFMPEG .....	6
1.1.3 COMPRESSION.....	7
1.1.4 BITRATES.....	8
1.1.5 AUDIO SAMPLING FREQUENCY .....	10
1.1.6 FRAME RATE.....	12
1.1.7 CONTAINERS.....	12
INSTALLING FFMPEG.....	13
1.2.1 INSTALLING FFMPEG .....	13
1.2.2 FFMPEG COMMAND SYNTAX .....	15
<b>2. Audio processing.....</b>	<b>16</b>
2.1 TRANSCODING AUDIO FILES .....	17
2.1.1 INTRODUCTION TO TRANSCODING .....	17
2.1.2 AUDIO COMPRESSION.....	18
2.1.3 GETTING YOUR AUDIO FILE READY .....	18
2.1.4 TRANSCODING TO A DIFFERENT FORMAT .....	19
2.1.5 CHANGING THE BITRATE OF THE AUDIO .....	21
2.1.6 AUDIO GRABBING .....	23
2.2 SOME POPULAR AUDIO FORMATS .....	25
2.3 AUDIO PROCESSING RECIPES .....	26
<b>3. Video processing.....</b>	<b>27</b>
3.1 TRANSCODING VIDEO FILES.....	28
3.1.1 VIDEO TRANSCODING INTRODUCTION.....	28
3.1.2 SETTING THE RESOLUTION OR FRAME SIZE OF A VIDEO .....	29
3.2 EXTRACTING IMAGES FROM A VIDEO .....	31
3.2.1 CREATING A VIDEO FROM IMAGES .....	33
3.3 MISC. VIDEO PROCESSING TASKS .....	33
3.3.1 EXTRACT A VIDEO SEGMENT .....	33
3.3.2 SPLITTING A VIDEO .....	34
3.3.3 COMBINING OR STITCHING VIDEOS .....	35
3.3.4 RECORDING A SCREENCAST .....	35
3.4 VIDEO PROCESSING RECIPES.....	36
3.5 SOME POPULAR VIDEO FORMATS.....	37

<b>4. Filters</b> .....	<b>38</b>
APPLYING VIDEO FILTERS .....	39
4.1.1 CROPPING VIDEOS .....	39
4.1.2 EXPRESSIONS AND CONSTANTS .....	41
4.1.3 PADDING VIDEOS .....	43
4.1.4 FLIPPING VIDEOS .....	45
4.1.5 DRAW BOX .....	45
4.1.6 SCALE .....	46
4.1.7 OVERLAY - WATERMARKING YOUR VIDEOS .....	47
4.1.8 SHARPENING AND BLURRING VIDEOS .....	50
4.1.9 TRANSPOSE .....	51
4.1.10 FADE .....	52
4.1.11 DRAWTEXT .....	53
CHAINING FILTERS .....	54
<b>5. Php</b> .....	<b>56</b>
INTEGRATING FFMPEG WITH PHP .....	57
<b>Appendix a. Ffmpeg options</b> .....	<b>59</b>
A.1 GENERIC OPTIONS .....	59
A.2 MAIN OPTIONS .....	61
A.3 VIDEO OPTIONS .....	63
A.4 AUDIO OPTIONS .....	65