

visual effects for film & television

mitch mitchell





Contents

۸.	cknowledgement	7	4	Front of camera	66
A note from the author		7		Optical effects	67
^				Filtration	70
	Introduction	8		Masks and vignettes	71
1	What makes an effect 'special'?	8		The glass shot	73
	Why create 'effects'?	9		Photo cut-outs and	
	Film, video, digital and string	10		hanging miniatures	80
	Film	10		Mirrors	83
	Video	11		Special processes using	
	Conclusion	17		mirrors	87
	Stocks and formats	18			
		18			
	Film formats	23	5	Composite photography	92
	Film stocks	24		Mixes and supers	92
	Video formats	24		Film multiple imaging	92
	Methods of creating	00		Video superimposition	99
	visual effects	28		Matte and split-screen	101
				Video/digital switch and	
2	Photography for effects	30		wipes	105
	Camera parameters	30		Rephotography/re-recording	108
	The lens	30		Film rephotography	108
	The shutter/pulldown			Video re-recording	114
	system	34			
	Video shutter and speed	39	_		
	Filters and lens		6	Combined action with	
	attachments	39		pre-shot backgrounds	122
	Other image enhancements	41		Physical backgrounds	122
	Temporal manipulation	42		Shooting backplates	124
	Stop frame/motion			Background (scenic)	
	animation	42		projection	131
	Timelapse	44		Rear projection	132
	Timeslice	46		Front projection	136
	Miniatures	48		Miniature projection	144
	Visual effects shooting toolkit	56		Large-screen video	
	~			(including video projection)	146
3	imaging without a camera	60			
	Film	60	-	Call metting processes	150
	Direct application	60	•	Self-matting processes	
	Photogrammetry	61		Brightness separation matte	150
	Chemical applications	62		Multiple run mattes	156
	Non-photographic	02		Colour separation matting	158
	photography	62		Film historic	158
	Video	63		Video historic	162
	Digital	64		Choice of formats	166
	o igitai	04		Choice of keying colour	169

	Creating the backing	170	Formats	
	Lighting and setting up	174		216
		174	Input to digital world	220
	Steps for a basic	470	Output to analogue	221
	colour screen shot	176	Digital image	
	Complex colour		manipulation	222
	screen shots	176	2D digital image	
	Staging colour screen		manipulation	223
	shots	182	Compositing software	231
	Special uses of blue/green		New life into old methods	233
	screen processes	187	Perfecting the illusion	235
	Compositing colour screen		3D computer-generated	
	shots	188	imaging (CGI)	239
	Difference matting	195	Digitizing (getting	
	J		information into the	
R	Computer-based		computer)	243
_	systems and techniques	198	Rendering (getting the	
	Computers – external	190	images out of the	
		200	computer)	245
	processes (for control)	200	compater)	245
	Recording/post systems	201		
	Camera systems	201		
	Computer-controlled		Glossary and further reading	
	camera movement	202	These are to be found on the	
	Computers – internal		companion website pages at:	
	processes (for digital		http://www.books.elsevier.com/	
	imaging)	216	companions/0240516753	
	- 		•	