

coolux Pandoras Box BROADCAST DUAL SERVER TECH SPECS



CENERAL HARRIWARE CRECIFICATION		CTD	Inno
GENERAL HARDWARE SPECIFICATION Physical Dimensions, Server:	LT	STD	PRO
428 x 178 x 596mm (W x H x D without handles)			
482 x 178 x 649mm (W x H x D with handles)			
Physical Dimensions, DVI-Processor:			
482 x 44 x 140mm (W x H x D)			
Weight: appx. 30 kg			
Case: 6 U 19" Rackmount (optional)			
Server grade hardware components, built for 24/7 use.	CCD: 240 CD/1	CCD - 400 CD /10	CCD: 0C0 CD/10
Hard Drive Capacity (redundant memory space/RAID): Please note that the Pandoras Box installer file itself will require	SSD: 240 GB/1	SSD: 480 GB/10	SSD: 960 GB/10
appx. 90GB of your available disk space.			
appx. 300b of your available disk space.			
Power Supply Voltage: 100-240 V			
Power Supply Wattage: 850 W			
Operating System: Windows 8.1			
Front Panel LCD Display			
Mouse/Keyboard (German or English): Certifications: CB and ETL			
USB Ports (one USB Port needed for DVI-Processor)	2+2	2+2	2+2
OUTPUTS & INPUTS	212	212	212
2x 3G HD-SDI Output	YES	YES	YES
4x DVI Single Link (parallel to HD-SDI)	YES	YES	YES
Art-Net	YES	YES	YES
Genlock/Framelock/IO	YES	YES	YES
2x HD-SDI Input card included	YES	YES	YES
VIDEO Maximum Blayback Resolution:			
Maximum Playback Resolution: Playback up to 4K / 8K is possible, performance depends on factors			
like codecs, compression (where applicable) etc.			
Special image ratios up to 16K or 32K canvas width are possible			
with image sequences, depending on overal pixel measurements. If			
in doubt, please consult with coolux – A Christie company.			
Maximum Output Resolution:			
1920 x 1080 @60p per output.	-		
Maximum number of video layers:	8	16	Unlimited
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of particle systems:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	Unlimited	Unlimited	Unlimited
Base Parameter: XYZ, Scale, rotation, position, pivot	YES	YES	YES
Sequences:	1	1	1
Network Control:	YES	YES	YES
Recording (MPEG2, frame accurate recording):	YES	YES	YES
Embedded Encoder	YES	YES	YES
Extensive Media Library	YES	YES	YES
Media Format (recommended):	AVI uncompressed		AVI uncompressed (SSD),
Please keep in mind that different types of content will work better	(SSD),	uncompressed	BMP Image Sequences (SSD), DDS Image
with different types of codecs.	BMP Image	(SSD),	Sequences (SSD), MPEG2.
Please also refer to the performance charts towards the end of this document.	Sequences (SSD), DDS Image	Sequences	MPEG2.
document	Sequences (SSD),	(SSD), DDS	
	MPEG2.	Image	
		Sequences	
		(SSD),	
		MPEG2.	
General formats: MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K			
MXL,DDS (SSD strongly recommended), JPEG, BMP, TGA, PNG,			
WAV, MP3, MPEG4, QT, H.264, JPEG2000 (via Image Converter)			
*(referring to all codecs included in Windows) AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Outputs of build in ASIO sound card.	8	8	8
Synchronized playback on multiple machines.	YES	YES	YES
KEY FEATURES	VEC	VEC	VEC.
Realtime 3D Rendering	YES	YES	YES
Advanced 3D Projection Mapping Softedge	YES YES	YES	YES
Sorteage Keystone	YES YES	YES YES	YES YES
Synchronized Video and Audio Playback on multiple machines.	YES	YES	YES
Genlock	YES	YES	YES
Advanced EDID Management	YES	YES	YES
Aeon Effects Engine	YES	YES	YES
A realtime dynamic shader effects engine.			
FireFly Particle System	YES	YES	YES
Realtime 3D Particle System	YES	YES	YES
Districts	<u>YES</u> YES	YES YES	YES YES
Playlists Vanue Sites 3D Pre-Visualisation Tool		163	YES
Venue Sites 3D Pre-Visualisation Tool		YES	
Venue Sites 3D Pre-Visualisation Tool Web Browser	YES	YES YES	
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server	YES YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool Web Browser	YES		
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES YES YES	YES YES	YES YES
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D FluidFrame: A frame blending algorithm that allows smooth cross	YES YES YES YES	YES YES YES	YES YES YES
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES YES YES YES YES YES	YES YES YES YES YES	YES YES YES YES YES YES YES
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate. StreamiX	YES YES YES YES YES YES YES YES	YES YES YES YES YES	YES YES YES YES YES YES YES YES
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate. StreamiX Media Encryption	YES YES YES YES YES YES	YES YES YES YES YES	YES YES YES YES YES YES YES
Venue Sites 3D Pre-Visualisation Tool Web Browser Web Server Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate. StreamiX	YES YES YES YES YES YES YES YES	YES YES YES YES YES	YES YES YES YES YES YES YES YES



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Using the Warper it is easy to apply textures to complex curved and	Ì			
shaped screens. With this tool it is possible to project onto regular	Ī			
3D surfaces like a dome or sphere and realize amazing 360°	Ī			
projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes	Ī			
a 3D marker calibration mode to save valuable production time.	Ì			
The Warper also supports .3ds and .fbx files.	Ì			
Dome Master:		YES	YES	YES
The Dome Master is a spherical map converter that allows the				
conversion of dome master files into spherical map files.				
Splitter:		YES	YES	YES
The Splitter is an extremely useful tool for splitting image	Ì			
sequences into multiple parts, that can then be distributed as a	ı			
large master file over multiple servers. Perfect for panoramic	Ì			
projections and/or dome projections. Matrix Patcher:		VEC	VEC	VEC
The Matrix Patcher is an important tool for special applications		YES	YES	YES
where LED or lighting fixtures are required to be patched to	ı			
individual pixels.	ı			
Image Converter:		YES	YES	YES
The Image Converter makes high performance image batch				
conversions possible and can turn image sequences into video files.				
Synchronized playback on multiple machines.		YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS				
Master/Client Ability (Master or client)		YES	YES	YES
Synchronized Multiscreen Playback		YES	YES	YES
Video Engine: Full 3D Render Engine		YES	YES	YES
Global video effects on output		YES	YES	YES
Realtime rendering		YES	YES	YES
Remote Control (via PB Manager) Seguences in Master Mode		YES 1	YES 1	YES 1
Sequences in Master Mode Sequence Control via SMPTE (SMPTE Master or Slave)		YES	YES	YES
Sequence Control via SMPTE (SMPTE Master of Slave) Sequence Control via Art-Net		YES	YES	YES
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control		YES	YES	YES
via Art-Net (Patchable)	İ		1	-=-
Control via RS232/422 send/receive (WD/Spark)		YES	YES	YES
Control via MA Net, input only		YES	YES	YES
Control via SACN	·	YES	YES	YES
MIDI Show Control, input only		YES	YES	YES
Thumbnail Exchange via CITP 1.0		YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-		YES	YES	YES
Out device)				
Warper for 3D mapping		YES	YES	YES
Video Out via Matrix (Art-Net, parallel to first DVI output)		YES	YES	YES
3D Objects on layers, .x files, objects and texture		YES	YES	YES
Softedge on outputs (left/right/top/bottom)		YES	YES	YES
Up to 100% Overlap-Region		YES	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)	ı	YES	YES	YES
Maximum number of additional input cards (Dual HD-SDI Inputcard		1	1	1
included)				
General 3D Object information				
Maximum of 65000 vertices, x.files, objects have to be set to pivot,	ı			
objects needs a have a mapped texture.				
DVI-PROCESSOR		+		
2x DVI-D Dual Link-In (max. 1 meter cable length at input) 4xDVI-D Single Link Out		+		
2x SDI-Out (SD-HD, 3G ready)				
Supported resolutions: PAL, NTSC, 720p50, 720p59, 720p59.94,		1		
720p60, 1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97,	ı			
1080p30, 1080i50, 1080i60			<u> </u>	
4K Display Support				
4K Display Synchronisation (2 x 2048 x 1080@60hz)				
Built-in EDID Management		ļ	ļ	
OPTIONAL INPUT CARDS		<u> </u>		
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI, Single 3G	İ			
HD-SDI, Dual 3G HD-SDI, Quad 3G HD-SDI OPTIONAL ACCESSORIES		+	 	
DMX Link In		+	1	+
DMX Link In DMX Link Out		 	1	
SMPTE-Link		+	+	
Net Link I/O solutions for embedding analogue sensors and relays		1	1	
with the media system.	İ			
Widget Designer (for interactive and sensor based applications)				
R3 SERVER HARDWARE PERFORMANCE OVERVIEW				
Mpeg Videos		ļ		
720p 1280x720p30 @14Mbit/s	16	20	20	
HD 1920x1080p30 @20Mbit/s	8	10	12	
4K* 4080x2160p30 @80Mbit/s	2	2	2	ļ
4K* 4080x2160p60 @160Mbit/s	1	1	1	
Book days a Book DDC (Towns and MON)		 	1	
Pandoras Box DDS (Imageseq or MOV)	10	- 22		<u> </u>
HD 1920x1080p30	16	20	24	
4K* 4096x2160p30	2	2	2	
4K* 4096x2160p60	1	1	1	
Pandoras Box DDSA (Imageseq or MOV)		+	1	+
HD 1920x1080p30	8	10	12	<u> </u>
4K* 4096x2160p30	1	1	1	
Pandoras Box YCoCg				



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HD 1920x1080p30	8	10	12	
·				
QT ProRes 422				
HD 1920x1080p30	2	2	2	
AVI Uncompressed				
HD 1920x1080p30	2	2	2	
Pandoras Box BMP imageseq				
HD 1920x1080p30 (SNP)	2	4	4	
HD-SDI Live Input				
1920x1080 i59.94 (De-interlaced, TopField)	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0	
or additional simultaneous DDS 1920x1080p30	2	4	4	
or additional simulaticods BBS 1320x1000p30		-	7	
1920x1080 i59.94 (De-interlaced, TopField)	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
3G Live Input				
1920x1080 p59.94	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4	
or additional simultaneous DDS 1920x1080p30	6	8	8	
1920x1080 p59.94	1	-	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
All information contained within this document is subject to change without prior notice.				
*The same approximate values also apply to UHD 3840x2160 test results.				



coolux Pandoras Box BROADCAST QUAD SERVER TECH SPECS



				A CIMISITE COMPANY
GENERAL HARDWARE SPECIFICATION		LT	STD	PRO
Physical Dimensions, Server:				
428 x 178 x 596mm (W x H x D without handles) 482 x 178 x 649mm (W x H x D with handles)				
Physical Dimensions, DVI-Processor:				
482 x 44 x 140mm (W x H x D)				
Weight: appx. 30 kg Case: 6 U 19" Rackmount (optional)				
Server grade hardware components, built for 24/7 use.				
Hard Drive Capacity (redundant memory space/RAID):				
Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.		SSD OPTION: 240 GB/1	SSD OPTION: 480 GB/10	SSD OPTION: 960 GB/10
Power Supply Voltage: 100-240 V			,	
Power Supply Wattage: 850 W				
Operating System: Windows 8.1 Front Panel LCD Display				
Mouse/Keyboard (German or English):				
Certifications: CB and ETL		2 - 2	2.2	2.2
USB Ports (one USB Port needed for DVI-Processor) OUTPUTS		2+2	2+2	2+2
4x3G HD-SDI Outputs		YES	YES	YES
Art-Net		YES	YES	YES
Genlock/Framelock/IO INPUTS		YES	YES	YES
2x 3G HD-SDI Input card included		YES	YES	YES
VIDEO				
Maximum Playback Resolution: Playback up to 4K / 8K is possible, performance depends on factors				
like codecs, compression (where applicable) etc.				
Special image ratios up to 16K or 32K canvas width are possible with				
image sequences, depending on overal pixel measurements. If in doubt, please consult with coolux – A Christie company.				
Maximum Output Resolution:				
1920 x 1080 @60p per output.				
Maximum number of video layers:		8	16	Unlimited
Maximum number of graphics layers:		Unlimited Unlimited	Unlimited	Unlimited Unlimited
Maximum number of particle systems: Maximum number of effects:		Unlimited Unlimited	Unlimited Unlimited	Unlimited Unlimited
Base Parameter:				
XYZ, Scale, rotation, position, pivot		YES	YES	YES
Sequences: Network Control:		1 YES	1 YES	I1 YES
Recording (MPEG2, frame accurate recording):		YES	YES	YES
Embedded Encoder		YES	YES	YES
Extensive Media Library		YES	YES	YES AVI uncompressed (SSD)
Media Format (recommended): Please keep in mind that different types of content will work better		AVI uncompressed (SSD), BMP Image Sequences	AVI uncompressed (SSD), BMP Image Sequences (SSD),	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD),
with different types of codecs.		(SSD), DDS Image	DDS Image Sequences (SSD),	MPEG2.
Please also refer to the performance charts towards the end of this		Sequences (SSD),	MPEG2.	
document.		MPEG2.		
General formats: MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL,				
DDS (SSD strongly recommended), JPEG,JPEG2000, .3DS, . FBX,				
BMP, TGA, PNG, WAV, MP3, MPEG4, H.264, JPEG2000 (only via Image				
Converter) */referring to all codess included in Windows)				
*(referring to all codecs included in Windows) AUDIO				<u> </u>
Volume Control/Panning	-	VEC	VEC.	YES
		YES	YES	
ASIO Audio		YES YES	YES	YES
Number of Tracks				
		YES 8	YES	YES Unlimited
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES		YES 8 8 YES	YES 16 8 YES	YES Unlimited 8 9 YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering		YES 8 8 YES	YES 16 8 YES YES	YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping		YES 8 8 YES YES	YES 16 8 YES YES YES	YES Unlimited 8 YES YES YES YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone		YES 8 8 YES	YES 16 8 YES YES	YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines.		YES 8 8 8 YES YES YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock		YES 8 8 YES YES YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management		YES 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 8 YES YES YES YES YES YES YES YES YES YE
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine.		YES 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unilmited 8 YES YES YES YES YES YES YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engline A realtime dynamic shader effects engine. Playlist		YES 8 8 YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES YES YES YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist FireFly Particle System		YES 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unilmited 8 YES YES YES YES YES YES YES
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Pireliy Particle System Realtime 3D Particle System Realtime 3D Particle System		YES 8 8 YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES Y
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist FireFly Particle System Realtime 3D Particle System Realtime 3D Particle System Art-Net based video pixels to DMX channel mapping.		YES 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 8 YES YES YES YES YES YES YES YES YES YE
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Geniock Advanced EDID Management Acon Effects Engine A realtime dynamic shader effects engine. Playlist FireFly Particle System Realtime 3D Particle System Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback Venue Sites 3D Pre-Visualisation Tool		YES 8 8 8 YES YES YES YES YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES YES YES YE
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Firefly Particle System Realtime 3D Particle System Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback Venue Sites 3D Pre-Visualisation Tool S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D		YES 8 8 8 YES YES YES YES YES Y	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES Y
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Sofnedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist FireFiy Particle System Realtime 3D Particle System Realtime 3D Particle System Multiscreen-Playback Venue Sites 3D Pre-Visualisation Tool S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D Web Browser FludGrame: A frame blending algorithm that allows smooth cross		### S	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES Y
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist FireFly Particle System Realtime 3D Particle System Realtime 3D Particle System Art-Net based video pixels to DMX channel mapping. Multiscreen Playback Venue Sites 3D Pre-Visualisation Tool S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D Web Browser FludFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.		YES 8 8 8 YES YES YES YES YES Y	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES Y
Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist FireFly Particle System Realtime 3D Particle System Realtime 3D Particle System Multiscreen-Playback Venue Sites 3D Pre-Visualisation Tool S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D Web Browser FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.		YES 8 8 8 YES YES YES YES YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES Y
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Number of Tracks Outputs of build in ASIO sound card. Synchronized playback on multiple machines. KEY FEATURES Realtime 3D Rendering Advanced 3D Projection Mapping Softedge Keystone Synchronized Video and Audio Playback on multiple machines. Genlock Advanced EDID Management Aeon Effects Engine A realtime dynamic shader effects engine. Playlist FireFly Particle System Realtime 3D Particle System Realtime 3D Particle System Multiscreen-Playback Venue Sites 3D Pre-Visualisation Tool S3D Stereoscopy' Active 3D/ passive 3D/ Side by Side 3D Web Browser FliudFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate. Streamix Media Encryption EMBEDDED CONTENT TOOLS Wapper:		YES 8 8 8 YES YES YES YES YES YES YES YES YES YES	YES 16 8 YES YES YES YES YES YES YES YES YES YES	YES Unlimited 8 YES YES YES YES YES YES YES Y
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coolux Pandoras Box BROADCAST QUAD SERVER TECH SPECS



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April Proceedings Procedure Proced					
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additional simultaneous mpeg 1920x1080p30@20 Mbit/s 6 8 8 or additional simultaneous DDS 1920x1080p30 16 18 20 All information contained within this document is subject to change without prior notice. *The same approximate values also apply to UHD 3840x2160 test	HD 1920x1080p30 4K* 4096x2160p60 Pandoras Box DDSA (Imageseq or MOV) HD 1920x1080p30 4K* 4096x2160p30 AK* 4096x2160p30 AK* 4096x2160p30 OT ProRes Box YCoCg HD 1920x1080p30 OT ProRes 422 HD 1920x1080p30 AVI Uncompressed HD 1920x1080p30 Pandoras Box BMP imageseq HD 1920x1080p30 (SNP) HD-SDI Live Input 1920x1080 i59.94 (De-interlaced, TopField) additional simultaneous mpeq 1920x1080p30 1920x1080 i59.94 (De-interlaced, TopField) additional simultaneous mpeg 1920x1080p30 1920x1080 i59.94 (De-interlaced, TopField) additional simultaneous mpeg 1920x1080p30 1920x1080 i59.94 (De-interlaced, TopField) additional simultaneous mpeg 1920x1080p30 3G Live Input 1920x1080 p59.94 additional simultaneous mpeg 1920x1080p30	2 1 8 1 2 2 2 2 2 4 0 2 2 1 6 16	2 1 1 10 10 1 1 10 10 1 1 1 1 1 1 1 1 1	2 1 1 12 1 12 2 2 2 2 4 4 0 4 0 4 1 1 8 20	
or additional simultaneous DDS 1920x1080p30 16 18 20 All information contained within this document is subject to change without prior notice. *The same approximate values also apply to UHD 3840x2160 test	HD 1920x1080p30 4K* 4096x2160p60 Pandoras Box DDSA (Imaqeseq or MOV) HD 1920x1080p30 4K* 4096x2160p30 Pandoras Box YCoCq HD 1920x1080p30 OT ProRes 422 HD 1920x1080p30 AVI Uncompressed HD 1920x1080p30 AVI Uncompressed HD 1920x1080p30 (SNP) Pandoras Box BMP Imaqeseq HD 1920x1080p30 (SNP) HD-SDI Live Input 1920x1080 159.94 (De-interlaced, TopField) additional simultaneous DDS 1920x1080p30 1920x1080 159.94 (De-interlaced, TopField) additional simultaneous DDS 1920x1080p30 3G Live Input 1920x1080 159.94 (De-interlaced, TopField) additional simultaneous mpeg 1920x1080p30@20 Mbit/s or additional simultaneous DDS 1920x1080p30 3G Live Input 1920x1080 p59.94 additional simultaneous mpeg 1920x1080p30@20 Mbit/s or additional simultaneous mpeg 1920x1080p30@20 Mbit/s or additional simultaneous mpeg 1920x1080p30@20 Mbit/s or additional simultaneous mpeg 1920x1080p30@20 Mbit/s or additional simultaneous mpeg 1920x1080p30@20 Mbit/s or additional simultaneous DDS 1920x1080p30@20 Mbit/s or additional simultaneous DDS 1920x1080p30@20 Mbit/s or additional simultaneous DDS 1920x1080p30@20 Mbit/s	2 1 8 1 2 2 2 2 2 4 0 0 2 1 6 16	2 1 1 10 10 1 1 10 10 1 1 10 10 1 1 1 1	2 12 11 12 2 2 2 2 4 4 0 4 0 4 1 1 8 20	
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without prior notice. *The same approximate values also apply to UHD 3840x2160 test	HD 1920x1080p30	2 1 8 1 2 2 2 2 2 2 1 6 16 4 2 6	2 1 1 10 10 1 1 10 10 1 1 10 10 1 1 1 10 10	2 12 11 12 12 2 2 2 4 4 0 4 0 4 1 1 8 20	
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coolux Pandoras Box Compact Player TECH SPECS



GENERAL HARDWARE SPECIFICATION	Compact Player
Physical Dimensions, Compact Player: 222 x 40 x 165mm (W x H x D), please consult CAD drawings as well.	
Weight: appx. 4 kg Server grade hardware components, built for 24/7 use.	
Hard Drive Capacity: Please note that the Pandoras Box installer	SSD: 120GB
file itself will require appx. 30GB of your available disk space. external Power Supply Voltage: 100-240 V	
external Power Supply Wattage: Operating System:	STBY:1W, Full Load: 65W Windows 8.1
USB 3.0 Ports	1 Front+ 2 Back
USB 2.0 Ports OUTPUTS & INPUTS	2 Back One render output supported
Frontpanel:	2x Audio (1x input, 1x output) 1x SD Card Reader
Backpanel:	1x eSata
	1x Gigabit Lan 1x Audio
	1x DVI-I 1x HDMI
VIDEO	27.130.12
Maximum Playback Resolution: 2 x 1920x1080p @ 25/30 fps	
Maximum Output Resolution: 1920 x 1080 @60p	
Maximum number of video layers:	2
Maximum number of graphics layers: Maximum number of particle systems:	Unlimited 2
Maximum number of effects: Base Parameter:	2 per layer
2D XY, Scale, rotation, position, pivot	YES
Sequences: Network Control:	0 YES
Embedded Encoder	Optional MPEG2
Media Format (recommended): MPEG-1, MPEG-2, MPEG-4, AVI*, WMV, Quicktime*, DDS, JPEG, BMP, TGA,	IFFLGZ
PNG, WAV, MP3, QT*, H.264, JPEG2000 (via Image Converter), *(referring to all codecs included in Windows)	
AUDIO	VECTANO
Volume Control/Panning ASIO Audio	YES**/NO NO
Number of Tracks Synchronized playback on multiple machines.	0 NO (referring to runtime sync)
KEY FEATURES	
Advanced 3D Projection Mapping Softedge	YES YES
Keystone Synchronized Video Playback on multiple machines.	NO YES
Genlock	NO
Aeon Effects Engine - A realtime dynamic shader effects engine. FireFly Particle System	YES 2D
Playlist Web Browser	YES YES
Web Server	YES
Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback	YES YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES
StreamiX	2
Media Encryption EMBEDDED CONTENT TOOLS	DECRYPTION ONLY
Warper: Using the Warper it is easy to apply textures to complex curved and shaped	2D
screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The Warper also supports .3ds and .fbx files.	
Dome Master: The Dome Master is a spherical map converter that allows the conversion of	YES
dome master files into spherical map files. Splitter:	YES
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	
Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.	YES
The Image Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines.	YES YES
TECHNICAL SHOW CONTROL DETAILS	
Master/Client Ability (Master or client) Synchronized Multiscreen Playback	YES YES
Video Engine: Full 3D Render Engine	YES
Global video effects on output Realtime rendering	YES YES
Remote Control (via PB Manager/Master) Sequences in Master Mode	YES 0
Sequence Control via SMPTE (SMPTE via Master or Slave)	VIA MASTER
Sequence Control via Art-Net Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control via Art-	VIA MASTER YES
Net (Patchable) Control via RS232/422 send/receive (WD/Spark)	YES
Control via MA Net, input only	YES
Control via SACN MIDI Show Control, input only	YES YES
Thumbnail Exchange via CITP 1.0	YES



coolux Pandoras Box Compact Player TECH SPECS



Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out	YES
device)	
Warper for 2D mapping	YES
Video Out via Matrix (Art-Net)	YES
3D Objects on layers, .x files, .obj, .fbx, 3ds, objects and texture	YES
Softedge on outputs (left/right/top/bottom)	YES
Up to 100% Overlap-Region	YES
Recommended Video Format:	MPEG2, DDS
General 3D Object information	
Maximum of 65000 vertices, x.files, objects have to be set to pivot, objects	
needs a have a mapped texture.	
OPTIONAL ACCESSORIES	
DMX Link In+Out,	
Sensor-Link	
Widget Designer (for interactive and sensor based applications)	
Net-Link	
Fibre-Link	
**on video layers	
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coolux Pandoras Box Compact Station TECH SPECS



GENERAL HARDWARE SPECIFICATION	Compact Station
Physical Dimensions, Compact Station:	
222 x 40 x 165mm (W x H x D), please consult CAD drawings as	
well.	
Weight: appx. 4 kg	
Server grade hardware components, built for 24/7 use.	
Hard Drive Capacity:	SSD: 120GB
external Power Supply Voltage: 100-240 V	
external Power Supply Wattage:	STBY:1W, Full Load: 65W
Operating System:	Windows 8.1
USB 3.0 Ports	1 Front+ 2 Back
USB 2.0 Ports	2 Back
OUTPUTS & INPUTS	
Frontpanel:	2x Audio (1x input, 1x output)
	1x SD Card Reader
Backpanel:	1x eSata
	1x Gigabit Lan
	1x Audio
	1x DVI-I
	1x HDMI
All information contained within this document is subject to change w	vithout prior notice.



coolux Pandoras Box DUAL SERVER TECH SPECS



GENERAL HARDWARE SPECIFICATION		LT	STD	PRO
Physical Dimensions, Server:		<u> </u>	316	rko
428 x 178 x 596mm (W x H x D without handles) 482 x 178 x 649mm (W x H x D with handles)				
Weight: appx. 30 kg				
Case: 4 U 19" Rackmount (optional) Server grade hardware components, built for 24/7 use.				
Hard Drive Capacity (redundant memory space/RAID): Please note that the Pandoras Box installer file itself will require				
appx. 90GB of your available disk space.		SSD OPTION: 240 GB/1	SSD OPTION: 480 GB/10	SSD OPTION: 960 GB/10
Power Supply Voltage: 100-240 V		555 6. 116.11. 2.10 35,1	355 6. 11611. 166 65/16	555 6. 116111 366 65, 16
Power Supply Wattage: 850 W Operating System: Windows 8.1				
Front Panel LCD Display				
Mouse/Keyboard (German or English): Certifications: CB and ETL				
USB Ports OUTPUTS		2+2	2+2	2+2
2x DVI-D Outputs		YES	YES	YES
Art-Net VIDEO		YES	YES	YES
Maximum Playback Resolution:				
Playback up to 4K, 8K is possible, performance depends on factors like codecs, compression (where applicable) etc. Special image ratios up to 16K or 32K canvas width are possible with image sequences, depending on overal pixel measurements. If in doubt, please consult with coolux – A Christie company.				
Maximum Output Resolution: 2560 x 1600 per output.				
Maximum number of video layers:		8	16	Unlimited
Maximum number of graphics layers: Maximum number of particle systems:		Unlimited Unlimited	Unlimited Unlimited	Unlimited Unlimited
Maximum number of effects:		Unlimited	Unlimited	Unlimited
Base Parameter: XYZ, Scale, rotation, position, pivot		YES	YES	YES
Sequences:		1	1	1
Network Control: Recording (MPEG2, frame accurate recording):		YES YES	YES YES	YES YES
Embedded Encoder Extensive Media Library		YES YES	YES YES	YES YES
Media Format (recommended): Please keep in mind that different types of content will work better with different types of codecs. Please also refer to the performance charts towards the end of this document.		AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.
General formats: MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL,DDS (SSD strongly recommended), JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000 (via Image Converter)				
AUDIO Volume Control/Panning		YES	YES	YES
ASIO Audio		YES	YES	YES
Number of Tracks Outputs of build in ASIO sound card.		8	16 8	Unlimited 8
Synchronized playback on multiple machines.		YES	YES	YES
KEY FEATURES Realtime 3D Rendering		YES	YES	YES
Advanced 3D Projection Mapping Softedge		YES YES	YES YES	YES YES
Keystone		YES	YES	YES
Synchronized Video and Audio Playback on multiple machines. Genlock		YES OPTIONAL	YES OPTIONAL	YES OPTIONAL
Advanced EDID Management		NO	NO	NO
Aeon Effects Engine A realtime dynamic shader effects engine.		YES	YES	YES
FireFly Particle System Realtime 3D Particle System		YES YES	YES YES	YES YES
Playlist		YES	YES	YES
Art-Net based video pixels to DMX channel mapping. Venue Sites 3D Pre-Visualisation Tool		YES YES	YES YES	YES YES
Web Server		YES	YES	YES
Web Browser Multiscreen-Playback		YES YES	YES YES	YES YES
S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D		YES	YES	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.		YES	YES	YES
StreamiX Media Encryption		8 Decryption	16 Decryption	32 Decryption
Media Encryption EMBEDDED CONTENT TOOLS				
Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3 D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when		<u>3D</u>	3D	3D
it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The				
Dome Master:		YES	YES	YES
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.				
Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.		YES	YES	YES
Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual		YES	YES	YES
pixels. Image Converter:		YES	YES	YES
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.				
Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS		YES	YES	YES
Master/Client Ability (Master or client)		YES	YES	YES
Synchronized Multiscreen Playback Video Engine: Full 3D Render Engine		YES YES	YES YES	YES YES
Global video effects on output		YES	YES	YES
Realtime rendering Remote Control (via PB Manager)		YES YES	YES YES	YES YES
Sequences in Master Mode		1	1	1
Sequence Control via SMPTE (SMPTE Master or Slave) Sequence Control via Art-Net		YES YES	YES YES	YES YES
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control				
via Art-Net (Patchable) Control via RS232/422 send/receive (WD/Spark)	_	YES YES	YES YES	YES YES
Control via MA Net, input only		YES	YES	YES
Control via SACN		YES YES	YES YES	YES YES
MIDI Show Control, input only	_	120		120



coolux Pandoras Box DUAL SERVER TECH SPECS



Thumbnail Exchange via CITP 1.0		YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-				
Out device)		YES	YES	YES
Warper for 3D mapping		YES	YES	YES
Video Out via Matrix (Art-Net, parallel to first DVI output)		YES	YES	YES
3D Objects on layers, .x files, objects and texture		YES	YES	YES
Softedge on outputs (left/right/top/bottom)		YES	YES	YES
Up to 100% Overlap-Region		YES	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)		YES	YES	YES
Maximum number of optional input cards (can be freely combined)		2	12	2
General 3D Object information		2	2	2
Maximum of 65000 vertices, x.files, objects have to be set to pivot,				
objects needs a have a mapped texture.				
OPTIONAL INPUT CARDS				
OF HONAL INFO CARDS				
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI				
OPTIONAL ACCESSORIES				
DMX Link In+Out,				
SMPTE-Link				
Sensor-Link				
Widget Designer (for interactive and sensor based applications)				
R3 SERVER HARDWARE PERFORMANCE OVERVIEW				
Mpeg Videos				
720p 1280x720p30 @14Mbit/s	16	20	20	
HD 1920x1080p30 @20Mbit/s	8	10	12	
4K* 4080x2160p30 @80Mbit/s	2	2	2	
	1	1	1	
4K* 4080x2160p60 @160Mbit/s	1	1	1	
	\vdash		 	
Pandoras Box DDS (Imageseq or MOV)				
HD 1920x1080p30	16	20	24	
4K* 4096x2160p30	2	2	2	
4K* 4096x2160p60	1	1	1	
Pandoras Box DDSA (Imageseq or MOV)				
HD 1920x1080p30	8	10	12	
4K* 4096x2160p30	1	1	1	
Pandoras Box YCoCg				
HD 1920x1080p30	8	10	12	
QT ProRes 422				
HD 1920x1080p30	2	2	2	
AVI Uncompressed				
HD 1920x1080p30	2	2	2	
Pandoras Box BMP imageseq HD 1920x1080p30 (SNP)				
HD 1920x1080p30 (SNP)	2	4	4	
HD-SDI Live Input				
1920x1080 i59.94 (De-interlaced, TopField)	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0	
or additional simultaneous DDS 1920x1080p30	2	4	4	
1920x1080 i59.94 (De-interlaced, TopField)	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
		-5	-	
3G Live Input	\vdash		i e	
ov any angus			i e	
1920x1080 p59.94	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4	
or additional simultaneous DDS 1920x1080p30	6	8	8	
or additional simultaneous DDS 1920X1000p30	0		<u> </u>	
1920x1080 p59.94	1	1	1	
	_			
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
	ш			
All information contained within this document is subject to change				
without prior notice.				
*The same approximate values also apply to UHD 3840x2160 test				
results.				



coolux Pandoras Box DUAL/QUAD PLAYER TECH SPECS



GENERAL HARDWARE SPECIFICATION Physical Dimensions, Workstation:		DUAL	QUAD
428 x 178 x 596mm (W x H x D without handles)			
482 x 178 x 649mm (W x H x D with handles)	<u> </u>		
Physical Dimensions, DVI-Processor (in case of QUAD Player): 482 x 44 x 140mm (W x H x D)			
Weight: appx. 30 kg			
Case: 4 or 6 U 19" Rackmount (optional)		optional	optional
Server grade hardware components, built for 24/7 use. Hard Drive Capacity (redundant memory space/RAID):		HDD Option: 500 GB/1, SSD Option:	HDD Option: 500 GB/1, SSD Option: 240 GB
Please note that the Pandoras Box installer file itself will require appx. 90GB of		240 GB	1100 Option: 300 GB/ 1, 330 Option: 240 GB
your available disk space.			
Power Supply Voltage: 100-240 V Power Supply Wattage: 650 W			
Operating System: Windows 8.1			
Mouse/Keyboard (German or English):			
USB Ports (one USB Port needed for DVI-Processor) OUTPUTS		2+8	2+8
1xDVI-D, 1xDVI/VGA; the QUAD has 4x DVI-D		2	4
2x HD-SDI Outputs (parallel to 2x DVI outputs)		NO	YES
HD PLAYBACK (720p) Art-Net		YES	8 YES
VIDEO		123	ILS
Maximum Playback Resolution:		4080x2160@30p as MXL 1	4080x2160@30p as MXL 1
		1920x1080@30/25p: 4 1280x720@30/25p: 4 SD PAL/NTSC Clips: 4	1920x1080@30/25p: 4 1280x720@30/25p: 8 SD PAL/NTSC Clips: 8
Maximum Output Resolution:		2560 x 1600	2048 x 1080
Maximum number of video layers:		4	8
Maximum number of graphics layers: Maximum number of effects:		Unlimited 2	Unlimited 4
Base Parameter:	L		
Scale, rotation, position, pivot		XY	XY
Sequences: Media Format (recommended):	<u> </u>	MPEG2	1 MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL,DDS (SSD strongly recommended), JPEG, JPEG2000, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000 *(referring to all codecs included in Windows)		111 - 02	111 EVE
AUDIO		VEC	VEC
Volume Control/Panning ASIO Audio		YES YES	YES YES
Number of Tracks		4	8
Output depending on ASIO sound card.			
Synchronized playback on multiple machines. KEY FEATURES		YES	YES
Realtime 2D Rendering		YES	YES
Advanced 3D Projection Mapping		YES	YES
Softedge Keystone		YES YES	YES YES
Synchronized Video and Audio Playback on multiple machines.	L	YES	YES
Genlock		OPTIONAL	OPTIONAL
Advanced EDID Management (QUAD Player only)		NO	I VI-L:
			YES YES
Aeon Effects Engine A realtime dynamic shader effects engine.	E	YES 2D	YES 2D
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist		YES 2D YES	YES 2D YES
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping.		YES 2D YES YES	YES 2D YES YES YES
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser		YES 2D YES YES YES YES YES	YES 2D YES YES YES YES YES
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback		YES 2D YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES YES YES YES
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX		YES 2D YES YES YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES YES YES YES YES YES
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback		YES 2D YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES YES YES YES
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Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX Media Encryption EMBEDDED CONTENT TOOLS Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files. Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels. Image Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchronized Multiscreen Playback Video Engine: Full 2D Render Engine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequence Control via SMPTE (SMPTE Master or Slave) Sequence Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net		YES 2D YES YES YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES YES A Decryption 2D YES YES YES YES YES YES YES YE
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX Media Encryption EMBEDDED CONTENT TOOLS Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files. Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels. Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchronized Multiscreen Playback Video Engine: Full 2D Render Engine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequence Control via Art-Net		YES 2D YES YES YES YES YES YES YES YES 4 Decryption 2D YES YES YES YES YES YES YES YE	YES 2D YES YES YES YES YES 8 Decryption 2D YES YES YES YES YES YES YES YE
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX Media Encryption EMBEDDED CONTENT TOOLS Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files. Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels. Image Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchronized Multiscreen Playback Video Engine: Full 2D Render Engine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequence Control via SMPTE (SMPTE Master or Slave) Sequence Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net (Patchable) Control via RS232/422 send/receive (WD/Spark) Control via SACN		YES 2D YES YES YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES YES A Decryption ZD YES YES YES YES YES YES YES YE
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX Media Encryption EMBEDDED CONTENT TOOLS Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files. Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels. Tmage Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchronized Multiscreen Playback Video Engine: Full 2D Render Engine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequence Control via SMPTE (SMPTE Master or Slave) Sequence Control via Art-Net Layer/Camera Control via Art-Net Layer/Camera Control via Art-Net Layer/Camera Control via Art-Net (Patchable) Control via MA Net, input only Control via SACN MIDI Show Control, input only		YES 2D YES YES YES YES YES YES YES YES 4 Decryption 2D YES YES YES YES YES YES YES YE	YES 2D YES YES YES YES YES YES B Decryption 2D YES YES YES YES YES YES YES YES YES YE
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX Media Encryption EMBEDDED CONTENT TOOLS Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files. Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels. Image Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchronized Multiscreen Playback Video Engine: Full 2D Render Engine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequence Control via SMPTE (SMPTE Master or Slave) Sequence Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net (Patchable) Control via RS232/422 send/receive (WD/Spark) Control via SACN		YES 2D YES YES YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES YES A Decryption ZD YES YES YES YES YES YES YES YE
Aeon Effects Engine A realtime dynamic shader effects engine. Playlist Art-Net based video pixels to DMX channel mapping. Web Server Web Browser Multiscreen-Playback StreamiX Media Encryption EMBEDDED CONTENT TOOLS Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files. Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels. Image Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchronized Multiscreen Playback Video Engine: Full 2D Render Engine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequence Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-Net Laver/Camera Control via Art-		YES 2D YES YES YES YES YES YES YES YES YES	YES 2D YES YES YES YES YES 8 Decryption 2D YES YES YES YES YES YES YES YE



coolux Pandoras Box DUAL/QUAD PLAYER TECH SPECS



Video Out via Matrix (Art-Net, parallel to first DVI output)		YES	YES
3D Objects on layers, .x files, objects and texture		YES	YES
Softedge on outputs (left/right/top/bottom) Up to 100% Overlap-Region		YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)		YES	YES
Recommended Video Format:		MPEG2	MPEG2
Maximum number of optional input cards (can be freely combined)		1	1
General 3D Object information			
Maximum of 65000 vertices, x.files, objects have to be set to pivot, objects			
needs a have a mapped texture.			
DVI-PROCESSOR (QUAD PLAYER ONLY)			
2x DVI-D Dual Link-In (max. 1 meter cable length at input)			
4xDVI-D Single Link Out			
Supported resolutions: PAL, NTSC, 720p50, 720p59, 720p59.94, 720p60,			
1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97, 1080p30, 1080i50,			
1080i60			
2K Display Support			
2K Display Synchronisation (2 x 2048 x 1080@60hz)			
Built-in EDID Management		NO	YES
OPTIONAL INPUT CARDS			
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI,			
OPTIONAL ACCESSORIES			
DMX Link In+Out,			
SMPTE-Link			
Sensor-Link			
Widget Designer (for interactive and sensor based applications)			
	ىسلە		
All information contained within this document is subject to change without pri	╆		



EDITOR TECH SPECS



GENERAL INFORMATION	EDITOR
Operating System: Windows 8.1	
Recommended Hardware: Recommended Hardware: Intel Quad	
Core 3,2 GHz, RAID System (Raid 1, Mirror) 2 hard drives, 500 GB	
useable space	
Number of Outputs:	NONE
VIDEO	INOINE
	Danas da as Handoras
Maximum Output Resolution:	Depends on Hardware
Maximum number of video layers:	Unlimited
Maximum number of graphics layers:	Unlimited
Maximum number of sequences:	Unlimited
Maximum number of particle systems:	Unlimited
Maximum number of effects:	Unlimited
Base Parameter:	
XYZ, Scale, rotation, position, pivot	YES
Sequences:	Unlimited
Network Control:	NO
Recording (MPEG2, frame accurate recording):	YES
Extensive Media Library	YES
Media Format (recommended):	MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS, JPEG, BMP,	
TGA, PNG, WAV, MP3, MPEG4, QT, H.264,	
*(referring to all codecs included in Windows)	
AUDIO	
Volume Control/Panning	YES
ASIO Audio	YES
Number of Tracks	32
Output depending on ASIO sound card.	32
Synchronized playback on multiple machines.	NO
KEY FEATURES	INO
Realtime 3D Rendering	YES
Advanced 3D Projection Mapping	YES
	YES
Softedge	YES
Keystone	
Synchronized Video and Audio Playback on multiple machines.	NO
Genlock:	OPTIONAL
Advanced EDID Management	NO
Aeon Effects Engine - A realtime dynamic shader effects engine.	YES
FireFly Particle System	YES
Playlists	YES
Realtime 3D Particle System	YES
Art-Net based video pixels to DMX channel mapping.	YES
Multiscreen-Playback	YES
S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES
FluidFrame: A frame blending algorithm that allows smooth cross	
conversion and can take any input and output frame rate.	YES
Media Encryption	Encryption/Decryption
EMBEDDED CONTENT TOOLS	Error y perorry Beer y perorr
Warper:	YES
Using the Warper it is easy to apply textures to complex curved and	TES
shaped screens. With this tool it is possible to project onto regular 3D	
surfaces like a dome or sphere and realize amazing 360° projections.	
The Warper is an indispensable and advanced tool when it comes to	
cutting edge projection mapping.	VEC
Dome Master:	YES
The Dome Master is a spherical map converter that allows the	
conversion of dome master files into spherical map files.	NEO NEO
Splitter:	YES



EDITOR TECH SPECS



The Splitter is an extremely useful tool for splitting image sequences	
into multiple parts, that can then be distributed as a large master file	
over multiple servers. Perfect for panoramic projections and/or dome	
projections.	
Image Converter:	YES
The Image Converter makes high performance image batch	
conversions possible and can turn image sequences into video files.	YES
Synchronized playback on multiple machines.	YES
TECHNICAL SHOW CONTROL DETAILS	
Preview Engine:	Full 3D Render Engine
Global video effects on output	YES
Realtime rendering	YES
Sequence Control via SMPTE (SMPTE Master or Slave)	YES
Sequence Control via Art-Net	YES
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control	
via Art-Net (Patchable)	YES
Control via RS232/422 send/receive (WD/Spark)	YES
Control via MA Net, input only	YES
Control via SACN	YES
MIDI Show Control, input only	YES
Thumbnail Exchange via CITP 1.0	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out	
device)	YES
Warper for 3D Keystone	YES
3D Objects on layers, .x files, objects and texture	YES
Recommended Video Format:	MPEG2
All information contained within this document is subject to change with	nout prior notice.



coolux Pandoras Box General Input Card Information Sheet



DVI-SINGLE INPUT CARD	DVI-DUAL INPUT CARD
DVI-A (analog)	DVI-A (analog)
640x480@60Hz	640x480@60Hz
640x480@62Hz	640x480@62Hz
640x480@72Hz	640x480@72Hz
640x480@75Hz	640x480@75Hz
640x480@85Hz	640x480@85Hz
720x400@56Hz	720x400@56Hz
800x600@56Hz	800x600@56Hz
800x600@60Hz	800x600@60Hz
800x600@72Hz	800x600@72Hz
800x600@75Hz	800x600@75Hz
800x600@85Hz	800x600@85Hz
1024x768@60Hz	1024x768@60Hz
1024x768@70Hz	1024x768@70Hz
1024x768@75Hz	1024x768@75Hz
1024x768@85Hz	1024x768@85Hz
1280x1024@60Hz	1280x1024@60Hz
1280x1024@75Hz	1280x1024@75Hz
1600x1200@60Hz	1600x1200@60Hz
1920x1080@60Hz	1920x1080@60Hz
DVI-D (digital)	DVI-D (digital)
640x480@60Hz	640x480@60Hz
640x480@62Hz	640x480@62Hz
640x480@72Hz	640x480@72Hz
640x480@75Hz	640x480@75Hz
640x480@85Hz	640x480@85Hz
720x400@56Hz	720x400@56Hz
800x600@56Hz	800x600@56Hz
800x600@60Hz	800x600@60Hz
800x600@72Hz	800x600@72Hz
800x600@75Hz	800x600@75Hz
800x600@85Hz	800x600@85Hz
1024x768@60Hz	1024x768@60Hz
1024x768@70Hz	1024x768@70Hz
1024x768@75Hz	1024x768@75Hz
1024x768@85Hz	1024x768@85Hz
1280x1024@60Hz	1280x1024@60Hz
1280x1024@75Hz	1280x1024@75Hz
1600x1200@60Hz	1600x1200@60Hz
1920x1080@60Hz	1920x1080@60Hz
1920x1200@60Hz	
2048x1536@75Hz	DVI-D Duallink with second input disabled:
2048x1536@60Hz	1920x1200@60Hz
2560x1600@60Hz	2048x1536@75Hz
	2048x1536@60Hz
	2560x1600@60Hz



coolux Pandoras Box General Input Card Information Sheet



SINGLE HD-SDI INPUT CARD
1 Stream of SDI (SD or HD)
Supported video standards: PAL SMPTE 259M NTSC SMPTE 259M 720p 50Hz SMPTE 296M
720p 50Hz SMPTE 296M 720p 60Hz SMPTE 296M 720p 59.94Hz SMPTE 296M 1080p 25Hz SMPTE 274M 1080p 30Hz SMPTE 274M
1080p 29.97Hz SMPTE 274M 1080i 50Hz SMPTE 274M 1080i 60Hz SMPTE 274M 1080i 59.94Hz SMPTE 274M



coolux Pandoras Box General Input Card Information Sheet



DUAL HD-SDI INPUT CARD
2 Streams of (SD or HD2 Streams of (SD or HD)
Commented vides about dands
Supported video standards
PAL SMPTE 259M
NTSC SMPTE 259M
720p 50Hz SMPTE 296M
720p 60Hz SMPTE 296M 720p 59.94Hz SMPTE 296M
1080p 25Hz SMPTE 274M
1080p 30Hz SMPTE 274M 1080p 30Hz SMPTE 274M
1080p 29.97Hz SMPTE 274M
1080i 50Hz SMPTE 274M
1080i 60Hz SMPTE 274M
1080i 59.94Hz SMPTE 274M
10001 33.34112 3111 TE 274111



coolux Pandoras Box MANAGER TECH SPECS



GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Operating System: Windows 8.1		310	FRO
Recommended Hardware: Recommended Hardware: Intel Quad Core			1
3,2 GHz, RAID System (Raid 1, Mirror) 2 hard drives, 500 GB useable			
space			
VIDEO			
Sequences:	2	8	Unlimited
Network Control:	YES	YES	YES
Video Export:	YES	YES	YES
Recording (MPEG2, frame accurate recording)	YES	YES	YES
,			
Media Format (recommended): MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL,DDS (SSD strongly	DDS Image Sequences (SSD MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
recommended), JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000			
*(referring to all codecs included in Windows)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Output depending on ASIO sound card.			
Synchronized playback on multiple machines.	YES	YES	YES
Playlist	YES	YES	YES
EMBEDDED CONTENT TOOLS			
Warper:			
Using the Warper it is easy to apply textures to complex curved and			
shaped screens. With this tool it is possible to project onto regular 3D			
surfaces like a dome or sphere and realize amazing 360° projections. The			
Warper is an indispensable and advanced tool when it comes to cutting			
edge projection mapping.	3D	3D	3D
Dome Master:			
The Dome Master is a spherical map converter that allows the conversion			
of dome master files into spherical map files.	YES	YES	YES
Splitter:			
The Splitter is an extremely useful tool for splitting image sequences into			
multiple parts, that can then be distributed as a large master file over			
multiple servers. Perfect for panoramic projections and/or dome	YES	YES	YES
projections. Image Converter:	TES	IES	ILD
The Image Converter makes high performance image batch conversions			
possible and can turn image sequences into video files.	YES	YES	YES
Synchronized playback on multiple machines.	YES	YES	YES
Matrix Patcher:	TLS	ILS	TES
The Matrix Patcher is an important tool for special applications where LED			
or lighting fixtures are required to be patched to individual pixels.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS	123	1123	123
Synchronized Multiscreen Playback	YES	YES	YES
Preview Engine: Full 3D Render Engine	YES	YES	YES
Global video effects on output	YES	YES	YES
Realtime rendering	YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool	YES	YES	YES
Media Encryption		yption Encryption/Decryption	
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequence Control via Art-Net	YES	YES	YES
Layer/Camera Control via Art-Net (Patchable)	YES	YES	YES
Control via RS232/422 send/receive (WD/Spark)	YES	YES	YES
Control via MA Net, input only	YES	YES	YES
Control via SACN	YES	YES	YES
MIDI Show Control, input only	YES	YES	YES
Thumbnail Exchange via CITP 1.0	YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out			
device)	YES	YES	YES
Warper for 3D Keystone	YES	YES	YES
All information contained within this document is subject to change without	prior notice.		



coolux Pandoras Box OFFLINE MANAGER TECH SPECS



GENERAL HARDWARE SPECIFICATION	OFFLINE MANAGER
Operating System: Windows 8.1	
Recommended Hardware: Recommended Hardware: Intel Quad	
Core 3,2 GHz, RAID System (Raid 1, Mirror), 2 hard drives, 500 GB	
useable space	
VIDEO	
Sequences:	Unlimited
Network Control:	NO
Video Export:	NO
Recording (MPEG2, frame accurate recording)	NO
Media Format (recommended):	DDS Image Sequences (SSD), MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL,DDS (SSD strongly	
recommended) JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264,	
*(referring to all codecs included in Windows)	
AUDIO	
Volume Control/Panning	YES
ASIO Audio	YES
Number of Tracks	32
Output depending on ASIO sound card.	
Synchronized playback on multiple machines.	NO
PLAYLIST	YES
EMBEDDED CONTENT TOOLS	
Warper:	
Using the Warper it is easy to apply textures to complex curved and	
shaped screens. With this tool it is possible to project onto regular 3D	
surfaces like a dome or sphere and realize amazing 360° projections.	
The Warper is an indispensable and advanced tool when it comes to	
cutting edge projection mapping.	YES
Dome Master:	
The Dome Master is a spherical map converter that allows the	
conversion of dome master files into spherical map files.	YES
Splitter:	
The Splitter is an extremely useful tool for splitting image sequences	
into multiple parts, that can then be distributed as a large master file	
over multiple servers. Perfect for panoramic projections and/or dome	
projections.	YES
Image Converter:	
The Image Converter makes high performance image batch	
conversions possible and can turn image sequences into video files.	YES
Synchronized playback on multiple machines.	NO
TECHNICAL SHOW CONTROL DETAILS	
Synchronized Multiscreen Playback Preview	YES
Preview Engine: Full 3D Render Engine	YES
Global video effects on output	YES
Venue Sites 3D Pre-Visualisation Tool	YES
Media Encryption	Decryption
Realtime rendering (Preview only)	YES
Sequence Control via SMPTE (SMPTE Master or Slave)	NO
Remote Control (via PB Manager)	NO
Sequence Control via Art-Net	YES
Layer/Camera Control via Art-Net (Patchable)	YES
Control via RS232/422 send/receive (WD/Spark)	YES
Control via MA Net, input only	YES
Control via SACN	YES
MIDI Show Control, input only	YES
Thumbnail Exchange via CITP 1.0	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-	
Out device)	NO
Warper for 3D Keystone	YES
All information contained within this document is subject to change with	out prior notice.



PLAYER TECH SPECS



GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Operating System: Windows 8.1			
Recommended Hardware:			
Recommended Hardware: Intel Quad Core			
3,2 GHz, RAID System (Raid 1, Mirror) 2			
hard drives, 500 GB useable space			
Number of Outputs	1	1	1
DVI/VGA Output	De	pends on Hardw	are
Art-Net	YES	YES	YES
VIDEO			
			4080x2160
Maximum Playback Resolution:	1920×1080	1920×1080	@30fps MXL
Maximum number of video layers:	1	2	4
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	NONE	2	4
Base Parameter:	XY	XY	XY
Sequences:	NONE	1	1
Show control standalone	NO	YES	YES
Network Control:	YES	YES	YES
Encoder	Optional	Optional	Optional
Elicodel	Орстопат	Орегонал	Ориона
Video Input	DirectShow	DirectShow	DirectShow
video Input	Directoriow	Directoriow	Directoriow
	DDS Image	DDS Image	DDS Image
Media Format (recommended):	Sequences	Sequences	Sequences
	(SSD), MPEG2	(SSD), MPEG2	(SSD), MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*,			
4K MXL,DDS (SSD strongly			
recommended), JPEG, JPEG2000, BMP,			
TGA, PNG, WAV, MP3, MPEG4, QT, H.264,			
*(referring to all codecs included in			
Windows)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	1	2	4
Output depending on ASIO sound card.			
Synchronized playback on multiple machine	YES	YES	YES
KEY FEATURES			
Advanced Projection Mapping	YES	YES	YES
Softedge	NO	YES	YES
Keystone	NO	NO	YES
FireFly Particle Engine	NO	2D	2D
Playlist	YES	YES	YES
Web Server	YES	YES	YES
Web Browser	YES	YES	YES
EMBEDDED CONTENT TOOLS			
Warper:			



PLAYER TECH SPECS



Using the Warper it is easy to apply			
textures to complex curved and shaped			
screens. With this tool it is possible to			
project onto regular 3D surfaces like a			
dome or sphere and realize amazing 360°			
projections. The Warper is an			
indispensable and advanced tool when it			
comes to cutting edge projection			
mapping.	2D	2D	2D
Dome Master:			
The Dome Master is a spherical map			
converter that allows the conversion of			
dome master files into spherical map files.	YES	YES	YES
Splitter:			
The Splitter is an extremely useful tool for			
splitting image sequences into multiple			
parts, that can then be distributed as a			
large master file over multiple servers.			
Perfect for panoramic projections and/or			
dome projections.	YES	YES	YES
Matrix Patcher:			
The Matrix Patcher is an important tool for			
special applications where LED or lighting			
fixtures are required to be patched to			
individual pixels.	YES	YES	YES
Image Converter:			
The Image Converter makes high			
performance image batch conversions			
possible and can turn image sequences			
into video files.	YES	YES	YES
Synchronized playback on multiple			
machines.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS			
Master/Client Ability (Master or client)	YES	YES	YES
Synchronized Multiscreen Playback	YES	YES	YES
Video Engine: Full 2D Render Engine	YES	YES	YES
Global video effects on output	NO	YES	YES
StreamiX	1	2	4
Media Encryption	Decryption	Decryption	Decryption
Realtime rendering	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequences in Master Mode	0	1	1
Sequence Control via Art-Net	NO	YES	YES
Layer/Camera Control via Art-Net			
(Patchable)	YES	YES	YES
Control via RS232/422 send/receive			
100-1-10	•		1
(WD/Spark)	YES	YES	YES
(WD/Spark) Control via MA Net, input only Control via SACN	YES YES	YES YES YES	YES YES YES



PLAYER TECH SPECS



MIDI Show Control, input only	YES	YES	YES
Thumbnail Exchange via CITP 1.0	YES	YES	YES
Programming of DMX Devices (via Art-Net			
or optional DMX-Link In-Out device)	YES	YES	YES
Warper for 2D mapping	YES	YES	YES
Video Out via Matrix (Art-Net, parallel to			
first DVI output)	YES	YES	YES
3D Objects on layers, .x files, objects and			
texture	YES	YES	YES
Softedge on outputs			
(left/right/top/bottom) Up to 100%			
Overlap-Region	NO	YES	YES
Koystono on outputs 16Rit			
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)	NO	NO	YES
left/fight(top/bottom(iiileanty)	INO	INO	ILS
	DDS Image	DDS Image	DDS Image
	Sequences	Sequences	Sequences
Recommended Video Format:	(SSD), MPEG2	(SSD), MPEG2	(SSD), MPEG2
The soft in the state of the st	(333), 1 11 232	(882)/ 1 11 282	(333)/ 1 11 232
Maximum number of optional input cards			
(can be freely combined inside coolux			
hardware)	$ _1$	1	
That arraine)	-	-	-
All information contained within this			
document is subject to change without			
prior notice.			



coolux Pandoras Box QUAD SERVER TECH SPECS



GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Physical Dimensions, Server: 428 x 178 x 596mm (W x H x D without handles)		315	FRO
482 x 178 x 649mm (W x H x D with handles)			
Physical Dimensions, DVI-Processor: 482 x 44 x 140mm (W x H x D)			
Weight: appx. 30 kg Case: 6 U 19" Rackmount (optional)			
Server grade hardware components, built for 24/7 use. Hard Drive Capacity (redundant memory space/RAID):			
Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.	SSD OPTION: 240 GB	SSD OPTION: 480 GB	SSD OPTION: 960 GB
Power Supply Voltage: 100-240 V	55b 01 120N. 240 GB	SSD OF FIGN. 400 GB	335 OF 110N. 900 GB
Power Supply Wattage: 850 W Operating System: Windows 8.1			
Front Panel LCD Display Mouse/Keyboard (German or English):			
Certifications: CB and ETL USB Ports (one USB Port needed for DVI-Processor)	2+2	2+2	2+2
OUTPUTS 4xDVI-D Output	YES	YES	YES
2x3G HD-SDI Outputs (parallel to 2xDVI Outputs) Art-Net	YES YES	YES YES	YES YES
VIDEO Maximum Playback Resolution:			
Playback up to 4K / 8K is possible, performance depends on factors like codecs, compression (where applicable) etc.			
Special image ratios up to 16K or 32K canvas width are possible with image sequences, depending on overal pixel measurements. If in			
doubt, please consult with coolux - A Christie company.			
Maximum Output Resolution: 2048 x 1080 per output.			
Maximum number of video layers: Maximum number of graphics layers:	8 Unlimited	16 Unlimited	Unlimited Unlimited
Maximum number of particle systems: Maximum number of effects:	Unlimited Unlimited	Unlimited Unlimited	Unlimited Unlimited
Base Parameter: XYZ, Scale, rotation, position, pivot	YES	YES	YES
Sequences: Network Control:	1 YES	1 YES	1 YES
Recording (MPEG2, frame accurate recording):	YES	YES	YES
Embedded Encoder Extensive Media Library	YES YES	YES	YES YES
Media Format (recommended): MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
recommended), JPEG,JPEG2000, .3DS, . FBX, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000			
*(referring to all codecs included in Windows) AUDIO			
Volume Control/Panning ASIO Audio	YES YES	YES YES	YES YES
Number of Tracks	8	16 8	Unlimited
Outputs of build in ASIO sound card. Synchronized playback on multiple machines.	YES	YES	YES
KEY FEATURES Realtime 3D Rendering	YES	YES	YES
Advanced 3D Projection Mapping Softedge	YES YES	YES YES	YES YES
Keystone Synchronized Video and Audio Playback on multiple machines.	YES YES	YES YES	YES YES
Genlock Advanced EDID Management	OPTIONAL YES	OPTIONAL YES	OPTIONAL YES
Aeon Effects Engine A realtime dynamic shader effects engine.	YES	YES	YES
Playlist FireFly Particle System	YES YES	YES YES	YES YES
Realtime 3D Particle System	YES	YES	YES
Art-Net based video pixels to DMX channel mapping. Multiscreen-Playback	YES YES	YES YES	YES YES
Venue Sites 3D Pre-Visualisation Tool S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES YES		YES YES
Web Browser FluidFrame: A frame blending algorithm that allows smooth cross	YES		YES
conversion and can take any input and output frame rate. StreamiX	YES 8	YES 16	YES 32
Media Encryption EMBEDDED CONTENT TOOLS	Decryption	Decryption	Decryption
Warper: Using the Warper it is easy to apply textures to complex curved and			
shaped screens. With this tool it is possible to project onto regular 3D			
surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to			
cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The Warper also			
supports .3ds and .fbx files. Dome Master:	3D	3D	3D
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	YES	YES	YES
Splitter:	120	120	120
The Splitter is an extremely useful tool for splitting image converges			
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for page and projections and/or dome			
into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	YES	YES	YES
into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where	YES YES	YES YES	YES YES
into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.		YES YES	
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into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections. Matrix Patcher: The Matrix Patcher is an important tool for special applications where LEO or lighting fixtures are required to be patched to individual pixels. The Image Converter: The Image Converter makes high performance image batch conversions nossible and can turn image sequences into video files. Synchronized playback on multiple machines. TECHNICAL SHOW CONTROL DETAILS Master/Client Ability (Master or client) Synchrolized Multiscreen Playback Video Endine: Full 3D Render Endine Global video effects on output Realtime rendering Remote Control (via PB Manager) Sequences in Master Mode Sequence Control via Art-Net (Patchable) Layer/Camera Control via Art-Net Layer/Camera Control via Art-Net (Patchable) Layer/Camera Control via Art-Net (Patchable) Control via Art Met, Imput only Control via Art Met, Imput only Thumbnail Exchange via CITP 1.0 Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device) Warper for 3D mapping Video Out via Matrix, (Art-Net, parallel to first DVI output) 3 Objects on layers, x. files, objects and texture Softedge on outputs (left/right/top/bottom) (Jip to 100% Overlap-Region	YES YES YES YES YES YES YES YES	YES YES YES YES YES YES YES YES	YES YES YES YES YES YES YES YES



coolux Pandoras Box QUAD SERVER TECH SPECS



2. DV/LD Doel Link In (many 1 mater cells length at innut)				
2x DVI-D Dual Link-In (max. 1 meter cable length at input)				
4xDVI-D Single Link Out				
2x3G HD-SDI Outputs (parallel to 2xDVI Outputs)				
Supported resolutions: PAL, NTSC, 720p50, 720p59, 720p59.94,				
720p60, 1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97	',			
1080p30, 1080i50, 1080i60				
4K Display Synchronisation (4 x 2048 x 1080@60hz)				
Built-in EDID Management				
OPTIONAL INPUT CARDS				
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI				
OPTIONAL ACCESSORIES				
DMX Link In+Out,				
SMPTE-Link				
Sensor-Link				
Widget Designer (for interactive and sensor based applications)				
R3 SERVER HARDWARE PERFORMANCE OVERVIEW				
Mpeg Videos				
720p 1280x720p30 @14Mbit/s	16	20	20	
HD 1920x1080p30 @20Mbit/s	8	10	12	
4K* 4080x2160p30 @80Mbit/s	2	2	2	
4K* 4080x2160p60 @160Mbit/s	1	1	1	
F				
Pandoras Box DDS (Imageseq or MOV)				
HD 1920x1080p30	16	20	24	
4K* 4096x2160p30	2	2	2	
4K* 4096x2160p60	1	1	1	
4K 4030X2100P00	-	1	1	
Pandoras Box DDSA (Imageseq or MOV)				
HD 1920x1080p30	8	10	12	
4K* 4096x2160p30	1	1	1	
4K** 4096X2160P30	1	1	1	
D				
Pandoras Box YCoCg		40	40	
HD 1920x1080p30	8	10	12	
QT ProRes 422				
HD 1920x1080p30	2	2	2	
AVI Uncompressed				
HD 1920x1080p30	2	2	2	
Pandoras Box BMP imageseq				
HD 1920x1080p30 (SNP)	2	4	4	
HD-SDI Live Input				
1920x1080 i59.94 (De-interlaced, TopField)	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0	
or additional simultaneous DDS 1920x1080p30	2	4	4	
1920x1080 i59.94 (De-interlaced, TopField)	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
·				
3G Live Input				
3G Live Input				
	4	4	4	
1920x1080 p59.94	4 2	4	4	
1920x1080 p59.94 additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4	
1920x1080 p59.94				
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TOOLS	STD	STD	PRO	ULT
10023	5.5	PLAYBACK	i ko	02.
AirScan			YES	YES
Kinect (Win7 only!!!)			YES	YES
Web Server	YES	YES	YES	YES
- Synchronized Pages	NO	NO	YES	YES
- Multi Session	NO	NO	NO	YES
Connection Manager	YES	YES	YES	YES
ArtNet Monitor	YES	YES	YES	YES
Remoting	YES	YES	YES	YES
Events	YES	YES	YES	YES
	YES	YES	YES	
Keyboard Input	155	YES		YES
Macro	VEC		YES	YES
Midi Input	YES	YES	YES	YES
Variables		YES	YES	YES
Blacklist		YES	YES	YES
Email Settings		YES	YES	YES
RSS Settings		YES	YES	YES
SMS Settings		YES	YES	YES
Face Tracking			YES	YES
Motion Detector			YES	YES
Camera Point Tracker			YES	YES
Phidgets			YES	YES
Add Graphic Layer (PBV5 only)	YES	YES	YES	YES
Cue Generator	YES	YES	YES	YES
Video Logger			YES	YES
Default Image Settings	YES	YES	YES	YES
Image Resource Manager	YES	YES	YES	YES
CONTROLS				
Page	YES	YES	YES	YES
Nodes		YES	YES	YES
Buttons:				
Full/Half/Quarter size	YES, v4.7	YES, v4.7	YES, v4.7 only	YES
, , ,	,	,		
Custom Script	YES	YES	YES	YES
Script Timer			YES	YES
Media Control	YES	YES	YES	YES
Cue Control	YES	YES	YES	YES
ImageLoader	0	YES*	YES	YES
Video Snapshot		YES*	YES	YES
ArtNet Snapshot		YES*	YES	YES
ArtNet Recorder		YES*	YES	YES
Scroller Horizontal		ILJ	YES	YES
Scroller Vertical			YES	YES
Flip Switch Horizontal			YES	YES
·				
Flip Switch Vertical			YES	YES
Analog Clask	VEC	VEC	YES	YES
Analog Clock	YES	YES		
CueList	YES	YES	YES	YES
Digital Clock	YES	YES	YES	YES
Displays (general)		YES*	YES	YES
Displays Motion Mask			YES	YES
Drop Down List	YES	YES	YES	YES
Event Viewer	YES	YES	YES	YES
Fader:				





Horizontal	YES	YES	YES	YES
Vertical	YES	YES	YES	YES
ColourPicker	YES	YES	YES	YES
Encoder	YES	YES	YES	YES
Wheel horizontal	YES	YES	YES	YES
Wheel vertical	YES	YES	YES	YES
Wheel vertical	1123	163	TES	163
Image/Picture Box	YES	YES	YES	YES
Label	YES	YES	YES	YES
List View (MS Excel)	1.20	1.20	YES	YES
, ,				
Panels:			YES	YES
Multitouch			YES	YES
Drawing Canvas			YES	YES
XY Panel	YES	YES	YES	YES
Play list			YES	YES
Shapes	YES	YES	YES	YES
Text Input	YES	YES	YES	YES
Textbox	YES	YES	YES	YES
Timecode	YES	YES	YES	YES
Tree View	YES	YES	YES	YES
Video Player	1	YES*	YES	YES
VNC Panel	YES	YES	YES	YES
Web browser		YES*	YES	YES
Web Browser		1.25	1.25	123
* properties can be edited.				
properties can be career.				
NODES - PRO and ULT ONLY				
THE STATE OF THE S				
Input Nodes:				
Impac Houcoi				
AIRBAR				
AIRSCAN				
AIRSCAN MULTI-POINT				
ART-NET				
AUDIO				
AUDIO PROCESSOR				
BLACK BOX (BETA)				
CAMERA POINT TRACKER				
CLOCK				
COLOUR PICKER		- 		
COM PORT				
COM QUERY STRING				
COM STATUS				
COM ASCII STREAM				
COUNT DOWN				
COUNTER				
DMX LINK IN				
	+			
EMAIL	+			
ENCODER	+			
EVENTS				
EXCEL READER				
FACE TRACKING				
FADER				
FADER EXTENSION				
iPHONE REMOTE	i	1	I	ı
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KINESYS K2			
LABEL			
MEDIA CONTROL			
MIDI IN			
MIDI NOTE CATCH			
MOTION DETECTOR			
MOUSE			
MULTI-TOUCH ITEM (not available in PB Version 5)			
MULTI-TOUCH PANEL POINT			
NATURAL POINT MARKER			
ODSL 30			
0502.00			
Controls:			
OSC			
PAGE			
PB DEVICE PARAMETER			
PHIDGET HS ENCODER (1047)			
PING			
RANDOM			
REMOTE TOUCH ITEM			
RSS			
SENSOR LINK			
SERIAL LINK GPI			
SMS			
SPACE NAVIGATOR			
SMPTE LINK			
TEXTBOX			
TEXT READER			
TIMAX			
TCP STATUS			
TCP			
TCP ASCII STREAM			
TCP QUERY STRING			
TRACKSCAN			
TRACKSCAN SERIAL LINK			
UDP STATUS			
UDP			
UDP ASCII STREAM			
VALUE			
VARIABLE			
WATCH FOLDER			
WHEEL			
WII VV Panel			
XY Panel			
Filton Nodos			
Filter Nodes:			
ADD DELATIVE			
ADD RELATIVE			
ANGLE DISTANCE			
ANGLE TO POINT			
COMPARE			
DAMPING PREDICITION			
DAMPING TIMED			
DELAY			
DELTA			
DYNAMIC TRIGGER			
IF			
IS IN BOUNDING BOX			
IS IN RANGE			
JITTER REDUCE			
MAX			
I II VX	I.		





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PREDICTION		
RANGE ASSYMETRIC		
RANGE ASSIMETRIC		
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Math Nodes:		
ABS		
ACOS		
ADD		
ASIN		
ATAN		
CEILING		
COS		
DEGREE > RADIANS		
DIVIDE		
FLOOR		
LOG		
MODULO		
MULTIPLY		
PERCENT		
POWER X^Y		
RADIANS>DEGREE		
ROUND		
SIN		
SQRT		
SUBTRACT		
SUM		
TAN		
Text Nodes:		
COMPARE TEXT		
CONTAINS TEXT		
DATE TO TEXT		
LEADING ZEROS		
TEXT COMBINER		
TEXT NODES VECTOR:		
DISTANCE 1D		
DISTANCE 2D		
DISTANCE 3D		
210 17 11.102 02		
Output Nodes:		
output House		
ANGULAR DISPLAY		
ART-NET		
BAR GRAPH		
COM PORT MESSAGE		
COM PORT ASCII STREAM		
DIGITAL DISPLAY		
DMX LINK OUT		
EXCEL WRITER		
FADER		
LABEL		
MIDI NOTE ON/OFF		
MIDI RAW MESSAGE		
MIDI VALUE		
MOUSE		
PAGE		
PB DEVICE CONTROL	 	





PB LAYER				
PB LAYER SHUFFLE				
PB SEQUENCE CONTROL				
PB SEQUENCE SEEK				
PB TEXT				
PB TEXT UNICODE				
SCRIPT				
SERIAL LINK				
TCP MESSAGE				
TCP ASCII STREAM				
TEXTBOX				
UDP MESSAGE				
UDP ASCII STREAM				
VALUE				
VARIABLE				
VIDEO PLAYER TIME				
VIDEO PLAYER VOLUME				
Script Nodes:				
COM				
TCP				
UDP				
PHIDGET IR				
PHIDGET RFID				
Please note: STD PLAYBACK refers to the playback				
capabilities of the Widget Designer STD. It is not				
an additional product.				
All information contained within this document is su	biect to change v	without prior	notice.	



coolux Pandoras Box WORKSTATION TECH SHEET



GENERAL HARDWARE INFORMATION

Physical Dimensions, Workstation:

 $|428 \times 178 \times 596$ mm (W x H x D without handles)

 $482 \times 178 \times 649$ mm (W x H x D with handles)

Weight: appx. 30 kg

Case: 4 U 19" Rackmount (optional), Server grade hardware components, built for 24/7 use.

Hard Drive Capacity (usable space/RAID): 500 GB/1

Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.

Power Supply Voltage: 100-240 V Power Supply Wattage: 650 W

Mouse/Keyboard (German or English)

USB Ports (2.0): 2 on front +8 at the back

Intel Mainboard
Quad Core 3,2 GHz

Graphics Card: 1280MB RAM with Pixel Shader/Vertex Shader 3.0

4GB RAM

Maximum number of simultaneous video playback streams:

1x 4080x2160@30p as MXL

1920x1080@30/25p: 4 1280x720@30/25p: 4 SD PAL/NTSC Clips: 4

Maximum number of simultaneous video streams available for preview in Preview mode:

1920x1080@30/25p: 4 1280x720@30/25p: 4 SD PAL/NTSC Clips: 4

Outputs: 1xDVI-D, 1xDVI/VGA

GENERAL SOFTWARE INFORMATION

Operating System: Windows 8.1

DirectX 9

Quicktime player if mov files are used

All current Windows Updates

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