

type of solution	single projector					dual projector
						
	XPAND (formerly NuVision)	Dolby	RealD	masterImage	Sony CineAlta	2K-DLP-projectors
					supports specific RealD-variant	"do it yourself - 3D"
basic technology	active shutter glasses + triple flash	colour wavelength modulation + triple flash	active circular polarisation + triple flash	mechanical triple flash with rotating polarisation filters	simultaneous & parallel projection of 2 pictures from a single projector	polarisation / simultaneous & parallel projection of 2 pictures with 2 projectors
screen	matt white or perlux	matt white or perlux	"silver screen" (gain 2.6 or higher)	"silver screen" (gain 2.6 or higher)	"silver screen" (gain 2.6 or higher)	"silver screen" (gain 2.6 or higher)
max. screen size	15 meters	17 meters (with 2K-DLP)	25 meters	tbc	17 meters	30 meters
evaluation	Xpand also provide "alternative content" in 3D		business model is license model + issues with 2D-projection onto silverscreen ("hotspotting")	business model is license model + issues with 2D-projection onto silverscreen ("hotspotting")	business model is license model + issues with 2D-projection onto silverscreen ("hotspotting")	cost of 2 projectors + issues with 2D-projection onto silverscreen ("hotspotting")
	 old style (top), new style (bottom)					
type of glasses	active (with batteries)	passive Dolby-type	passive Real-D-type	passive	passive Real-D-type	passive
workflow	dispensation, collection after screening & cleaning mandatory	dispensation, collection after screening & cleaning mandatory	disposable-use or "Katzenberg"-clip, dispensation, collection after screening & cleaning imaginable, but not reality	disposable-use or "Katzenberg"-clip, dispensation, collection after screening & cleaning imaginable, but not reality	disposable-use or "Katzenberg"-clip, dispensation, collection after screening & cleaning imaginable, but not reality	disposable-use or "Katzenberg"-clip, dispensation, collection after screening & cleaning imaginable, but not reality
cost of glasses	high	high	low	low	low	low
evaluation	life expectancy limited by battery life / wear & tear, theft risk	small glasses, limited field of view, wear & tear, theft risk	environmental issue / collection & re-use of glasses preferred	environmental issue / collection & re-use of glasses preferred	environmental issue / collection & re-use of glasses preferred	environmental issue / collection & re-use of glasses preferred
devices						
	emitter to sync active shutter glasses	colorwheel to be installed inside PJ	"Z-screen" in front of projector lens + controller	(see above)	RealD-static circular polarisation filters to be installed in Sony 3D-adaptor	static polarisation filters (one in front of each projector's lens)
type of projector	2K-DLP	2K-DLP	2K-DLP	2K-DLP	4K-SXRD	4K-SXRD oder 2K-DLP
supported servers	all (but Sony)	Dolby, Doremi, XDC	all	tbc (will need to support triple-flash)	Sony media-block LMT-200	all (Sony would need two servers to be synced)
light efficiency	middle	low	high	tbc	rather high	superior
technical quality	in best case full 2K, 10 Bit, 4:2:2, old installations with lower resolution	in best case full 2K, 10 Bit, 4:2:2, old installations with lower resolution	in best case full 2K, 10 Bit, 4:2:2, old installations with lower resolution	in best case full 2K, 10 Bit, 4:2:2, old installations with lower resolution	true 2K, 12 Bit; 4:4:4	true 2K, 12 Bit; 4:4:4
quality evaluation	triple-flash-artefacts, sequential projection might cause eye- and brain-fatigue	triple-flash-artefacts, sequential projection might cause eye- and brain-fatigue + limited field of view limits 3D-experience in particular in the front rows	triple-flash-artefacts, sequential projection might cause eye- and brain-fatigue	triple-flash-artefacts, sequential projection might cause eye- and brain-fatigue	dual-projector quality from a single projector solution / "easy on the eye"	dual-projector-quality, might have visual geometry issues, head movements critical if only linear polarisation is used
particular requirements for DCP	none	needs "ghostbusting" (to compensate crosstalk between left- and right-eye-images)	needs "ghostbusting" (to compensate crosstalk between left- and right-eye-images)	tbc	needs "ghostbusting" (to compensate crosstalk between left- and right-eye-images)	none
subjective quality	good	fair (good)	good	good	excellent	excellent (in case of circular polarisation)
options	./.	./.	./.	./.	60HZ-playback for alternative content	60HZ-playback for alternative content
portability between screens	possible	no, colourwheel installed in individual projectors	possible (requires silver screen in all cinema auditoria)	possible (requires silver screen in all cinema auditoria)	possible (requires silver screen in all cinema auditoria)	no, needs 2 projectors
concerns	theft of glasses, workflow issues, limited life expectancy	theft of glasses, workflow issues, limited life expectancy, colorwheel might cause thermal issues inside projector	How long will distributors / studios supply glasses free of charge with the movie?	How long will distributors / studios supply glasses free of charge with the movie? Seems like a sort of adventurous / dangerous installation in projection room...	How long will distributors / studios supply glasses free of charge with the movie?	studio support might become an issue (in particular with Disney), geometrical distortion, reliability of setup
cost	glasses + emitter to be purchased, no license cost, no new screen required	projector modification (color wheel), glasses, license cost for server (one time only)	license model includes z-screen & software, requires silver screen	tbc (requires silver screen)	license model includes z-screen & software, requires silver screen (same as 2K-DLP)	2nd projector + filters + silverscreen required
remarks					SONY 3D-ADAPTOR CURRENTLY ONLY SUPPORTS REALD!	currently NOT SUPPORTED BY SONY WITH 4K-SXRD