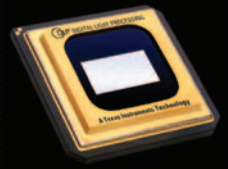
projectiondesign®

www.projectiondesign.com

Action! mk II home theatre projectors

The Action! series is a dedicated range of home theatre projectors from projectiondesign. The aim is to provide the best possible home theatre experience by providing image quality and integration possibilities in small and unobtrusive packages – easily fitting into most modern home theatres. With year long experience in designing projectors and display systems, the Action! mk II range is the culmination of projectiondesign technology, passion and enthusiasm. A team of dedicated enthusiasts bring you the Action! series.

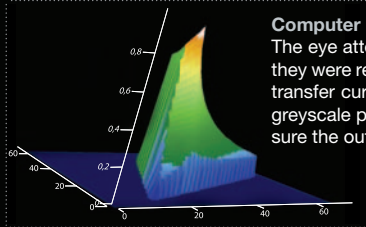


Single chip DLP™ technology
All Action! projectors use single chip DLP™ (Digital Light Processing™) technology from Texas Instruments®. Employing DarkChip2™ technology, the latest revision provides even higher contrast and better colour saturation than ever before, surpassing any other microdisplay for home theatre use. DLP™ features an unmatched combination of contrast, brightness and visual resolution, as well as perfect colour uniformity. The Action! model one mk II uses the Mustang HD2+ DMD™ (Digital Micromirror Device), whereas the model zero five features the Matterhorn version, both featuring extremely high contrast and excellent visual clarity, for the best possible video performance.

High performance optics improve image fidelity
The new, 7-segment colour wheel dramatically improves colour fidelity and low level resolution. Darkly produced movie scenes finally come to their right with full grey scale reproduction all the way down to the deepest blacks, enabling a much higher visible colour resolution than ever before. Colour reproduction is enhanced over other projectors with an extremely large gamut, covering all colour spaces and video standards. It makes sure that you get deeply saturated and truly natural colours.

Digital Dynamic Concept – unique projectiondesign thinking
One of the most important aspects projectors fail at time and time again is reproducing the wide dynamic contents of a movie. From the deepest blacks to the whitest whites, projectiondesign believes in providing both impacting black and white levels at the same time. This is why we have invented the Digital Dynamic Concept – DDC. By allowing the user to easily adjust output level through Dynamic Black Level Adjust, enabling Dynamic Contrast enhancement and making available a wide range of gamma curves, projectiondesign enables – for the first time – a projector that can be adapted to any size screen with the same impact as the theatre.

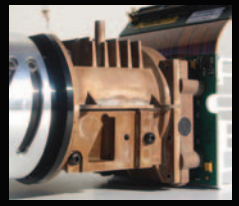
High contrast optical Field Lens architecture
Exclusivly using field lens optical architectures in the Action! model one and model zero five provides a much higher combination of brightness and contrast than most competing projector designs. By not using a prism in the light path, light scatter is prevented to create highly contrasted images, typically double that of competing prism based projectors. This ensures highly dynamic images when watching for instance dark or mixed exposure movies.



Computer modelled 3D gamma correction
The eye attempts to perceive colours and video displayed from a projector as if they were real life. To get the highest level of colour fidelity, we model the gamma transfer curves by computer. By calculating display properties, eye colour- and greyscale perception and video format properties in a single equation, we make sure the output colour on the screen is a close to real life as possible

DCDi™ by FAROUDJA

High performance video processing
All Action! projectors feature high precision components and video processing circuitry. All analogue video inputs feature full 10-bit A/D conversion and processing, and video sources are enhanced using the highly acclaimed and patented DCDi™ progressive scan engine by Faroudja®, with the FLI2310 processor. This provides full film and video mode processing, performs 3:2 and 2:2 pull down, and deploys several image enhancing filters such as noise reduction and motion detection and compensation. For HTPC users, all internal video processing is omitted when utilizing either the DVI or VGA input in 1:1 pixel mapping mode (at native resolution).



SOA - Sealed Optical Architecture
The Action! series is delivered with a Sealed Optical Architecture, preventing dust and smoke from entering and contaminating the core optical engine. A long and trouble free life of the projector is ensured, with practically no maintenance needs.

Unique UniBoard video processing
All video signal processing is kept on a single printed circuit board. This reduces electrical noise, keeps signal paths short, and introduces no loss or electrical interference through the use of connector cables between boards. Many high end projectors use very high grade components and boards, yet connect them with cheap multi lead cables, acting as antennas and picking up noise. All Action! signal processing boards use gold plated signal paths and connectors for optimum connection and purity.

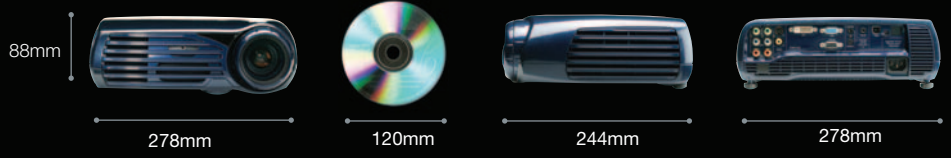
HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

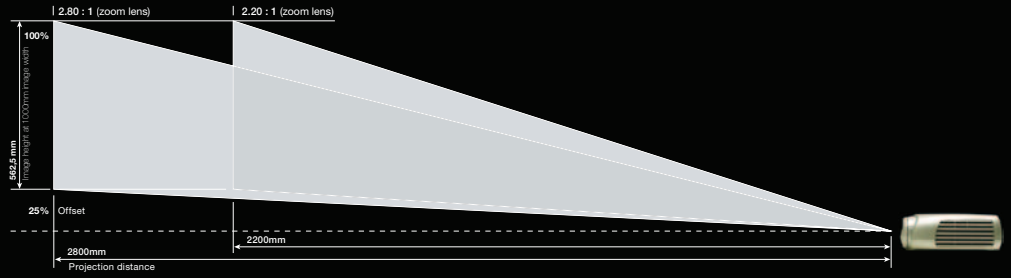
dvi digital visual interface

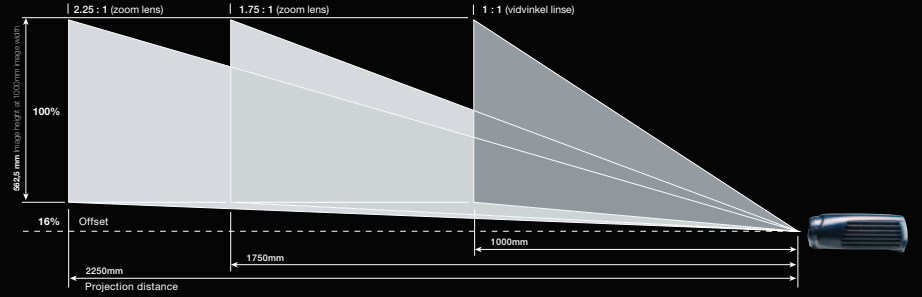
HDMI compatible DVI-D interface with HDCP
Ensuring full compatibility with HDCP (High-bandwidth Digital Content Protection) copy protected sources, such as DVD-players with HDMI or DVI outputs, HD set top boxes and digital satellite tuners, the Action! series is equipped with a DVI-D input. Supporting very high bandwidth, it accepts input sources up to fully uncompressed HDTV resolutions. Utilizing the DVI input keeps the signal in the digital domain digital at all times, provides a superior image over analogue connections in terms of stability, sharpness and colour fidelity, and is totally future proof.

Optimum Light Recovery optical assembly
The Action! series features proprietary Optimum Light Recovery technology, to make sure as much as possible of the pristine light from the lamp enters into the optical path, and can reproduce an image as dynamic as possible. With proprietary design lenses and optical components, light is collected and formatted for optimum usage. This provides the most dynamic projected image available anywhere.

Fully decoupled sub chassis
In order to reduce operating noise to a minimum, all moving mechanical parts are fully decoupled from the main magnesium chassis. Using a visco-elastic rubber material for optimum shock and vibration absorption, parts' movement is not interacting with the projector to create unwanted noise and resonances. Much like in a car's motor suspension, this is used to suspend all of the individually controlled fans, as well as the colour wheel, which spins at speeds up to 9,000 rpm.







Typical Image Sizes ACTION! model zero five mkII

Viewing Area - H x W		Screen Diagonal		Projection Distance (to lens in cm)			Offset (cm)
inches	centimeters	inches	centimeters	min	max	wide*	centimeters
63 x 35.5	160 x 90	72	184	352	448	205	22.5
72 x 40.5	182 x 103	82	208	400	510	233	26
80 x 45	203 x 114	92	234	446	568	260	28.5
87 x 49	221 x 125	100	254	486	619	283	31
92 x 52	234 x 132	106	269	515	655	300	33
96 x 54	244 x 137	110	280	537	683	312	34
104 x 58	264 x 147	119	302	581	739	338	37

Accuracy: +/- 5%

*) Wide angel lens is optional

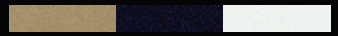
Typical Image Sizes ACTION! model one mkII

Viewing Area - H x W		Screen Diagonal		Projection Distance (to lens in cm)			Offset (cm)
inches	centimeters	inches	centimeters	min	max	wide*	centimeters
45 x 80	114 x 203	92	234	355	457	203	18
52 x 92	132 x 234	106	269	410	527	234	21
58 x 104	147 x 264	119	302	462	594	264	24
65 x 116	165 x 295	133	338	516	664	295	26
78 x 139	198 x 353	159	404	618	795	353	32

Accuracy: +/- 5%

*) Wide angel lens is optional

specifications	model one mk II	model zero five mk II
display concept	single chip HD2+ Mustang DLP™ technology 1280 x 720 resolution (16:9 wide screen) 7-segment, 5-speed NDG RGBRGBG colour wheel prism less Field Lens optical architecture	single chip ED2 Matterhorn DLP™ technology 1024 x 576 resolution (16:9 wide screen) 7-segment, 5-speed NDG RGBRGBG colour wheel prism less Field Lens optical architecture
input signal compatibility	1080i/p, 720p, 576i/p, 480i/p, PAL, SECAM, NTSC 3.58/4.43 digital and analogue RGB 1:1 pixel mapping and 48 – 62 Hz fully frame synchronous graphics display from HTPC	1080i/p, 720p, 576i/p, 480i/p, PAL, SECAM, NTSC 3.58/4.43 digital and analogue RGB 1:1 pixel mapping and 48 – 62 Hz fully frame synchronous graphics display from HTPC
projection lens	1.3x manual zoom all glass lens 1.75 - 2.25 : 1 throw ratio (distance : width)	1.3x manual zoom all glass lens 2.20 - 2.80 : 1 throw ratio
video processing	10it-ADC DCDi™ by Faroudja®FLI2310)	10it-ADC DCDi™ by Faroudja®FLI2310)
contrast	3000 : 1 (typical/max)	3000 : 1 (typical/max)
brightness	500 – 1000 continuously adjustable	500 – 900 continuously adjustable
connectivity	YPBPR x2 component video (RCAx3) S-Video (DIN) Video (RCA) DVI-D VGA (15-pin HDDSUB)	YPBPR x2 component video (RCAx3) S-Video (DIN) Video (RCA) DVI-D VGA
control	RS232 (9-pin DSUB) 12V trigger x2 (screen drop, aspect ratio) (3.5mm mini jack) IR repeater input (3.5mm mini jack) USB	RS232 (9-pin female DSUB) 12V trigger x2 (screen drop, aspect ratio) (3.5mm mini jack) IR repeater input (3.5mm mini jack) USB
projection modes	front / rear / tabletop / ceiling	front / rear / tabletop / ceiling
operating noise level	28 dB(A) (typical in room, 20°C/68°F, sea level)	28 dB(A) (typical in room, 20°C/68°F, sea level)
weight and dimensions	3.0kg / 6.5 lbs. 244 x 278 x 88 mm / 9.6 x 10.9 x 3.5 in (dwh)	3.0kg / 6.5 lbs. 244 x 278 x 88 mm / 9.6 x 10.9 x 3.5 in (dwh)
power	100 – 240VAC, 50/60Hz, +/-10% 350W max power consumption	100 – 240VAC, 50/60Hz, +/-10% 350W max power consumption
conformances	CE, CSA "C/US", FCC Class B	CE, CSA "C/US", FCC Class B
delivered accessories	IR remote control, installation cable cover	IR remote control, installation cable cover
other	optional 1:1 wide angle lens	optional 1.28:1 wide angle lens
available colours	satin gold, maranello blue, pearl white, custom colour upon request	vanquish grey, custom colour upon request



projectiondesign®

projectiondesign as
habornveien 53
N-1630 gamle fredrikstad
norway

www.projectiondesign.com