Specifications

Model name			HC7000
Projection system			Transmissive liquid crystal system
Panel specs	Panel size		0.74type x3, Aspect ratio 16:9
	Number of pixels		1920x1080
	Drive system		3 primary colour liquid-crystal shutter system
	Array		Stripe pattern
Optical specs	Zoom / focus operation		1.6-power zoom / motorised
	Lens shift		Motorised up-down 75% / right-left 5%
	Throw ratio		1.40-2.26
	Projection lens		f=23.5-37.6mm / 0.9°-1.5° F2.5-3.1
	Light source lamp**		160W (Shut Off Time 2000Hrs) with Low Mode (128W:Shut Off Time 5000Hrs)
	Optical system		Mirror colour separation / prism synthesis system
	Iris		Auto-iris
Projection screen size (inches)			50-300
Images	Brightness (maximum)		1000 lumens
	Contrast ratio		72000:1 (Auto-Iris) typ.
	Resolution	PC input	VGA*640x480 - UXGA*1600x1200
	Scan frequency	Horizontal (kHz)	15-100
		Vertical (Hz)	24, 50-120
Input signal system	Video		NTSC, NTSC4.43, PAL (including PAL-M and N), SECAM, PAL-60, Video input: 480i/p, 576i/p, 1080i 60/50, 1080p 60/50/24, 720p 60/50
	PC		PC/AT compatibles, Mac
Input	Video	PC input	Mini D-Sub 15 pin — 1 terminal
		HDMI input	HDMI terminal — 2 terminals
		Composite	RCA terminal — 1 terminal
		S	S-Video terminal — 1 terminal
		Component	RCA terminal — 1 terminal (component can also be input to Mini D-Sub 15 pin)
	Serial / RS-232C standard		1 terminal (D-Sub 9 pin)
Output	Trigger terminal		1 terminal
Functions	Digital keystone		Vertical 15 steps
	Fan noise		17dBA (at low mode)
	Power source voltage		AC100V 50/60Hz
	Power consumption (W)		250 (in standby 7W)
	Weight (kg / lbs)		7.5 / 16.5
	Main unit dimensions	WxHxD	427 x 159 x 440mm (excluding height adjustment)
Other	Supplied accessories		Power source cord (2.9m), Remote control, AA batteries (x2), RGB signal cable, RS-232C cable, Lens cap, Lamp replacement tray

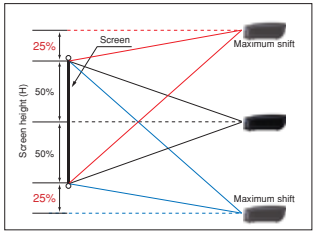
*: SVGA,XGA,WXGA,SXGA,UXGA are registered trademarks of IBM Corporation of the United States
**Approximate figure representing average operational life cycle

Projection distance

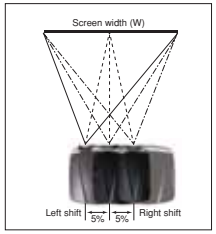
Screen size (16:9)				Projection distance		Up-down lens shift		Right-Left lens shift	
Diagonal		W (width)	H (height)	Max Zoom	Min Zoom	Down	Up	Left	Right
Inch	cm	cm	cm	m	m	cm	cm	cm	cm
50	127	111	62	1.5	2.5	47 ← 0 →	47	6 ← 0 →	6
60	152	133	75	1.8	3.0	56 ← 0 →	56	7 ← 0 →	7
70	178	155	87	2.2	3.5	65 ← 0 →	65	8 ← 0 →	8
80	203	177	100	2.5	4.0	75 ← 0 →	75	9 ← 0 →	9
90	229	199	112	2.8	4.5	84 ← 0 →	84	10 ← 0 →	10
100	254	221	125	3.1	5.0	93 ← 0 →	93	11 ← 0 →	11
110	279	244	137	3.4	5.5	103 ← 0 →	103	12 ← 0 →	12
120	305	266	149	3.8	6.0	112 ← 0 →	112	13 ← 0 →	13
130	330	288	162	4.1	6.5	121 ← 0 →	121	14 ← 0 →	14
140	356	310	174	4.4	7.0	131 ← 0 →	131	15 ← 0 →	15
150	381	332	187	4.7	7.6	140 ← 0 →	140	17 ← 0 →	17
200	508	443	249	6.3	10.1	187 ← 0 →	187	22 ← 0 →	22
250	635	553	311	7.9	12.6	233 ← 0 →	233	28 ← 0 →	28
300	762	664	374	9.5	15.2	280 ← 0 →	280	33 ← 0 →	33

Screen size (4:3)				Projection image size (16:9)				Projection distance		Up-down lens shift		Right-Left lens shift	
Diagonal		W (width)	H (height)	Diagonal	W (width)	H (height)	Black zone	Max Zoom	Min Zoom	Down	Up	Left	Right
Inch	cm	cm	cm	cm	cm	cm	cm	m	m	cm	cm	cm	cm
50	127	102	76	117	102	57	10	1.4	2.3	43 ← 0 →	43	5 ← 0 →	5
60	152	122	91	140	122	69	11	1.7	2.7	51 ← 0 →	51	6 ← 0 →	6
70	178	142	107	163	142	80	13	2.0	3.2	60 ← 0 →	60	7 ← 0 →	7
80	203	163	122	187	163	91	15	2.3	3.7	69 ← 0 →	69	8 ← 0 →	8
90	229	183	137	210	183	103	17	2.6	4.1	77 ← 0 →	77	9 ← 0 →	9
100	254	203	152	233	203	114	19	2.9	4.6	86 ← 0 →	86	10 ← 0 →	10
110	279	224	168	256	224	126	21	3.1	5.1	94 ← 0 →	94	11 ← 0 →	11
120	305	244	183	280	244	137	23	3.4	5.5	103 ← 0 →	103	12 ← 0 →	12
130	330	264	198	303	264	149	25	3.7	6.0	111 ← 0 →	111	13 ← 0 →	13
140	356	284	213	326	284	160	27	4.0	6.5	120 ← 0 →	120	14 ← 0 →	14
150	381	305	229	350	305	171	29	4.3	6.9	129 ← 0 →	129	15 ← 0 →	15
200	508	406	305	466	406	229	38	5.8	9.3	171 ← 0 →	171	20 ← 0 →	20
250	635	508	381	583	508	286	48	7.2	11.6	214 ← 0 →	214	25 ← 0 →	25
300	762	610	457	699	610	343	57	8.7	13.9	257 ← 0 →	257	30 ← 0 →	30

Vertical direction



Horizontal direction



Option

Colour domain expansion filter

CF6000

Replacement lamp

VLT-HC7000LP

MITSUBISHI ELECTRIC AUSTRALIA

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To find out more about HC7000 and our projectors, visit us at

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Changes for the Better

MITSUBISHI ELECTRIC

MITSUBISHI HOME THEATER PROJECTOR

HC7000

The beauty is the performance

Evolutionary in design and functionality,
its alluring presence expresses sheer pleasure in every way and form.
Utilising cutting-edge full high-definition technologies,
including advanced black colour reproduction techniques,
the HC7000 is setting standards for the industry.
Dynamic and intriguing, exciting the senses...
Just wait until you turn it on.

HC7000

Experiencing is Believing. The ultimate in black colour reproduction.

Newly Developed Diamond Black Iris with 1/60-second Iris Control

Evolutionary advancements in the HC7000 include the adoption of Mitsubishi's original Diamond Black Iris technology. The iris section takes on a "diamond-cut" shape that prevents light refraction for an enhanced level of contrast. True blacks are clearly depicted even during sequences of continual bright-dark scene intervals, ensuring the reproduction of every detail with vivid clarity. Combined with Mitsubishi's innovative contrast control, a perfect balance between blacks, the brightest whites and the full colour spectrum in between is achieved.

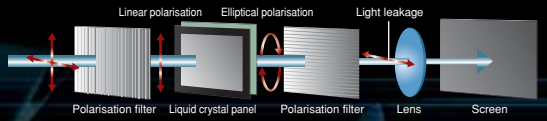
■New Auto-Iris (HC7000)

■Previous Auto-Iris (HC5000)

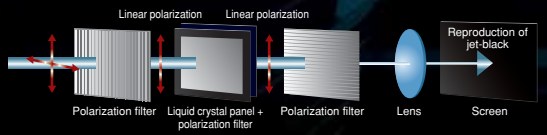
New Optics Compensation Panel Gives Precise Light Focusing and Amazing High-contrast Levels

Conventional projectors commonly have problems related to loss of light intensity; not so with the HC7000. Degraded polarisation results from the offset position of the liquid crystal elements. An optical compensation panel has been newly developed and installed between the liquid crystal panel and polarisation filter. This panel corrects the optical projection angle and prevents light leakage, thereby preserving the intensity for new heights in the level of contrast. Together with our high-speed Diamond Black Iris, a high contrast of 72000:1 is achieved with the HC7000.

■Conventional optical system



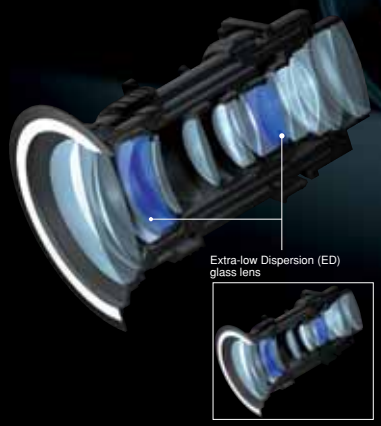
■New optical compensation panel



Extra-low Dispersion Glass Lens for Superior High-definition Resolution

Superior image reproduction is provided using a 17-piece/14 cluster optical system equipped with extra-low dispersion (ED) lenses. Far exceeding the performance of conventional glass lenses, chromatic aberration is virtually eliminated and resolution across the entire screen, including the peripheral edges, is improved. Equipped with a fixed aperture, reproduction of every shade, from grays to the deepest of blacks, is ensured.

■w/o aperture ■w/ aperture



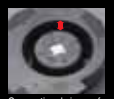
Innovative Liquid crystal Panel Cooling System Design Provides Industry-leading Quiet Operation - 17dBA (at low mode)

A new cooling system has been introduced for the liquid crystal panel. It includes a new cooling duct design for the new chassis, a smaller fan motor and a large (low-noise) sirocco fan. As a result, a larger air-intake area is secured and the fan operates at a slower speed, providing improved cooling efficiency owing to the hermetic performance of the new chassis. The end result is an industry-leading* quiet operation of just 17dBA (in low mode). Mitsubishi always aims to produce the quietest projectors in the market.

*as of July 2008, for projectors under 7.5kg (in-house study)

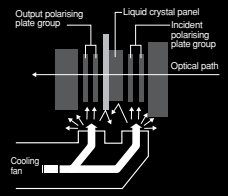
Cooling structure adopted to realise silent operation

HC7000 sirocco fan

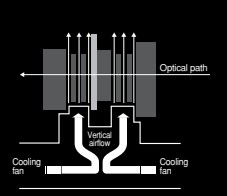


Conventional sirocco fan

■Conventional cooling structure



■New cooling structure



True-to-life Images that Excite the Senses

Precision Enhanced with the Addition of Fixed Film/Video Mode to the “Reon-VX” Processor from Silicon Optics Inc.

Reon-VX: Next-generation high-performance video processor
Successor to the REALTA processor manufactured by Silicon Optics Inc., renowned for its IC solutions that deliver Hollywood Quality Video (HQV) technology, this high-quality chip is the key to improved image reproduction.

High-precision I/P conversion for all signal sources
Precise and accurate rendering is what you get with Mitsubishi's 10-bit interlace/progressive (I/P) conversion image processing technology. Be it terrestrial digital, satellite broadcast movies, mixed video sources or even commercially packaged media, the end result is always the progressive reproduction of high picture quality.

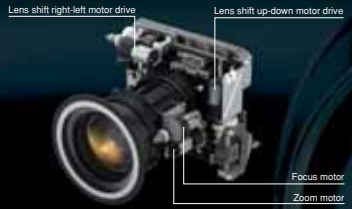
High-performance video scaler
This ultra-precise image scaling function guarantees superior pixel conversion processing when converting resolution up from 720x480p to 1920x1080p. A unique filtering technique enables adaptive switching to a total of 1024 filter tabs each horizontally and vertically, further contributing to the high-definition picture quality of the images. Our Fixed Film/Video Mode greatly improves conversion precision.

14-bit Digital Gamma Correction
Mitsubishi's original 14-bit gamma correction processing function expands gradation expression power 16-fold over the conventional 10-bit technology. This dramatically raises the projector's ability to reproduce the subtleties in dark images.

Full 10-bit 4:4:4 Signal Processing
HQV noise-reduction (TRNR, MNR/BAR) reduces buzzing and block noise.
Chromatic up-sampling errors reduced

1.6X Power Zoom/Focus Dramatically Improves High-definition Resolution and Set-up Ease

Impressive big-screen images can be enjoyed even in a small room with the 1.6x powered zoom and focus lens. In addition, the motorised lens shift simplifies vertical and horizontal adjustments, providing maximum flexibility wherever you place the HC7000.



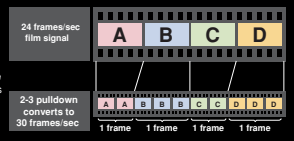
Full High-definition Liquid crystal Panel (1920x1080)

An inorganic liquid crystal panel is incorporated, creating deep rich blacks and eliminating the need for the rubbing process, for the reproduction of vivid high-definition images with no vertical lines. The rate panel service life is approximately tenfold that of organic film panels, translating into years of high picture quality viewing enjoyment.

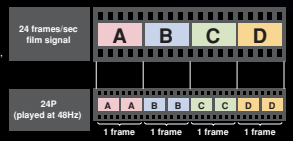
24P Blu-ray Direct Input Compatibility – Reproduction of Original Image Motion

The HC7000 is compatible with Blu-ray 24P direct output. Thanks to an output of up to 48P (96Hz liquid crystal panel driver), twice the speed of conventional movie signals (24 frames/sec), unbelievably life-like images are reproduced with a smoothness and texture detail that mirror the original.

■2-3 Pulldown
When processing 24 frames/sec images at 60 frames/sec, smooth motion becomes distorted because the signals in the 2- and 3-frame sequences cause overflow into the third B-frame.



■24P Direct Output
With a signal processing speed of 24 frames/sec increased to 48 frames/sec, the sequence created aligns the signal, providing a smoothness and textured detail that mirror the original.

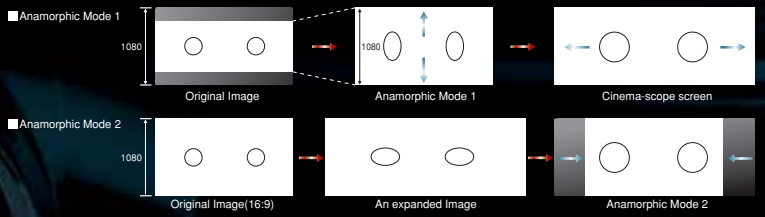


“Deep Colour” Compatible HDMI 1.3 Input Terminals

The HC7000 has two HDMI input terminals, and is capable of processing high-contrast images from 10- and 12-bit video signals in addition to the conventional 8-bit signal.

Anamorphic Lens Compatibility - Choose the Setting Based on the Media Played

The anamorphic lens compatibility of the HC7000 widens the projection range of cinema-scope images. Mode 1 proves extended projection, and Mode 2 is for images other than cinema-scope, which mirror the original with the anamorphic lens attached.



Amazingly Easy to Use Anytime, Anywhere

3D Micro-surface Air Filter
The HC7000 comes with an air filter that has a three-dimensional honeycomb structure, a microscopic filtering surface and a special electrostatic film for enhanced filtering efficiency. It attaches to the side of the projector and works as an air purification system to prevent dirt and other air-borne particulates from entering the chassis.

Trigger Terminal
The HC7000 is equipped with a projector power switch/screen extension/retraction trigger combination, creating a convenient one-touch operation function for cinema viewing. An anamorphic mode is also incorporated.

Long-life Lamp (up to 5000 hours)
The projection lamp has a long 5000-hour service life for months of uninterrupted viewing pleasure. When its time to clean or replace to lamp, a side-loading installation design ensures it can be done without having to move the projector. So regardless of installation – whether suspended from the ceiling or sitting on a shelf, lamp maintenance and replacement is simple and easy.

Illuminated Remote Controller
The buttons on the remote controller illuminate automatically, promising easy, trouble-free operation even in the darkest of rooms. Convenience is also improved with a function that enables the screen to be adjusted directly from the remote controller.