

# HC5000

HIGH DEFINITION HOME THEATER PROJECTOR

## 1080P Full HD



# HC5000 is pushing image quality to the next level

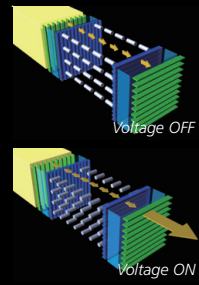
## High Definition (1920x1080) Equipped with the latest of new generation liquid crystal panel (C2 Fine™)\*

The C2 Fine™ new-generation LCD panel with inorganic orientation film shows the richest blacks and vividly colored, high definition images over a longer period because the life of the inorganic orientation film in the new C2 Fine panels is rated to last approximately 10 times longer than conventional organic orientation film. That translates to years of pure HD enjoyment with colors that stay vibrant and high-definition images that come alive every time you play your movies.

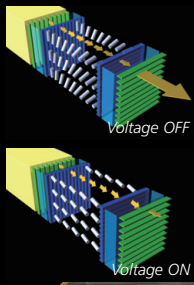
\*C2 Fine™ is a trademark of Seiko Epson.

C2 FINE

**C2 Fine™ (normally black)**  
When no voltage is applied, the liquid crystals line up vertically on the glass substrate, eliminating light leakage usually found in conventional LCD systems. This allows the HC5000 to project richer blacks and deeper contrast.



**Conventional system (normally white)**  
Even with voltage applied, liquid crystals don't usually fall into perfectly vertical lines on the glass substrate, and light leakage occurs.

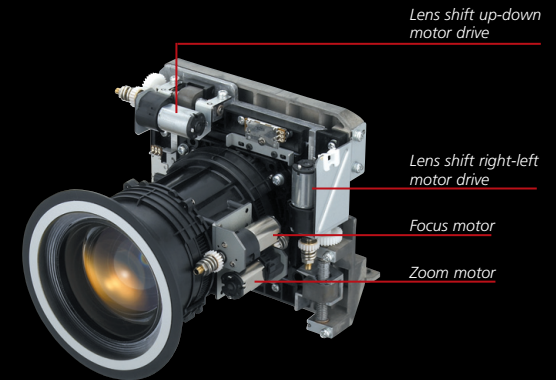


Inorganic orientation film/vertically orientation liquid crystal

Hybrid drive (D6)  
Mounting the high drive capacity liquid-crystal driver on the panel tape further curbs vertical stripe noise.

## Powered zoom and focus adjustments with lens shift function greatly enhances ease of set-up

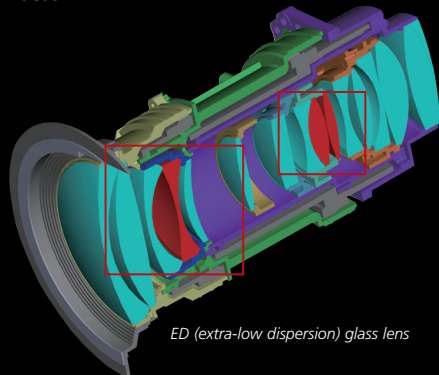
Impressive big-screen images can be enjoyed even in a small room with the 1.6x powered zoom and focus lens built into every HC5000. You can project a 100-inch diagonal (16:9) picture at just 10 feet away. In addition, the motorized lens shift simplifies vertical and horizontal adjustments, providing maximum flexibility wherever you place the HC5000 projector.



## Showcasing more subtle and dramatic colors

### Extra-low dispersion glass lenses showcases high-definition resolution in all its glory

The HC5000 is built with a lens system comprised of 17 elements in 14 groups, including three extra-low dispersion glass lenses, which deliver higher performance than conventional lenses. This lens system dramatically improves chromatic aberration and peripheral focus.



### With the Mitsubishi original auto-iris in place, high contrast soars to a maximum of 10,000:1

The auto-iris function automatically controls the level of light projection, tuned to the specific bright and dark spots in the picture being displayed. To complement conventional detection from brightness data, Mitsubishi has added its original color information recognition feature, resulting in more vivid color reproduction, even in darker scenes.



Auto Iris OFF

Auto Iris ON



# Unparalleled HQV™ next generation performance



## HQV

▶ Reon-VX

### Reon-VX next-generation high-performance processor

This high-performance chip carries on the legacy of the REALTA made popular by Silicon Optics, whose known for visual performance using the name HQV™ (Hollywood Quality Video). It excels behind the scenes as the genuine core of fine visual expression in our HC5000 HD projector.

### High-precision I/P conversion, serving all sources

With 10-bit image processing, I/P (interlace/progressive) conversion in the HC5000 is rendered extremely accurate. Even with video-film mixed sources, specific materials are detected and processed with top speed and precision. This ensures progressive reproduction of higher picture quality. For terrestrial or satellite digital movies broadcasts, 2-3 pull-down zaps out most jaggies, making the image look perfect. High-precision 3D processing and 24P new generation discs are also supported.

### High-performance video scaler

In addition to I/P conversion, the Reon-VX in the Mitsubishi HC5000 packs high-precision image scaling (pixel conversion) capabilities into a single chip. The result is impressive up-conversion of 720 X 480 display to 1920 X 1080 images.

### Reduced chroma up-sampling errors

With the Reon-VX chip, HC5000 properly compensates for color data compressed at the production level of most DVD titles. This results in a more faithful reproduction of high-definition images without color blur or loss, including subtle contours.

### Full 10-bit 4:4:4

Identical to broadcast-use Masters, the HC5000's 10-bit signal processing is an ideal level, which allows gradations to grow richer, and colors more numerous than general 8-bit types, thus setting a new standard in reproduction expression.

### HQV™ noise reduction for crystal clear image reproduction

The HQV™ in the HC5000 has a new function to measure noise and movement by pixel units. Analog and image compression noise, typical elements that affect picture quality in damaged DVD titles and broadcast content, are detected and reduced.

### HQV™ noise reduction present in the Mitsubishi HC5000 can be broken down into TRNR and MNR/BAR types.

#### TRNR

Use of a pixel unit movement adapted type time axis filter steers clear of artificial appearance and bugs that accompany conventional noise filters. With no unnecessary noise processing on moving pixels, it is possible to reproduce the high-definition details.

#### MNR/BAR

This is the state of the art in HQV™ noise reduction technology. Shuts down mosquito noise, block noise and other noise caused by the excessive image compression typically seen in DVD titles, satellite broadcasts, cable broadcasts and terrestrial broadcast content. With striking contours and smooth gradation, images are reproduced in startling clarity.



Without HQV™ noise reduction

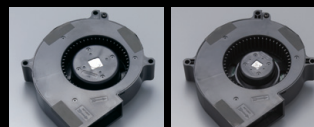


With HQV™ noise reduction

## Mitsubishi's HC5000 is simple and easy to use

### 19 dBA\* at Low Mode makes HC5000 the Quietest Projector in its Class

We've revamped the cooling structure and mounted a new whisper-quiet fan. The result is an impressively silent 19dBA operation, and we rewrite the new standard on projector fan noise.

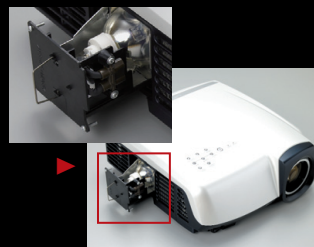


Conventional Fan

HC5000 Fan

### Equipped with Side-Loading 5000-hour\* Long-Life Lamp

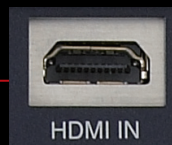
Improved temperature control plus Mitsubishi Electric's unique lighting timing extends the useful life of the HC5000 lamp to a maximum of 5000 hours. The side-loading design also offers maximum convenience during lamp replacement.



\* Maximum of 5000 hours at low mode and 2000 hours at standard mode. Lamp life is defined as the average time until brightness is reduced by half; it is not a guaranteed life for all lamps. Lamp-life will vary considerably depending on usage environment and conditions, and whether regular maintenance such as cleaning and proper cooling is performed.

### HDMI™ Support

The HC5000 simplifies connections to all DVD players or other digital equipment. Savor the move to full digital transmissions and enjoy visual pleasures free of picture degradation from AD/DA conversion.



HDMI IN

### Illuminated Handheld Remote Control Unit

With a backlit remote control, the button portion illuminates for easy operation even in darkened rooms. Picture adjustments, AV memory and other convenient feature can be accessed with a simple touch.



### 12-Volt Trigger Terminal

The HC5000 is designed with a screen trigger that links its power switch to a motorized screen. Detailed in the pursuit of user-friendliness and the ability to start the show at a finger's touch.

### Dust protection for the LCD panel

To prevent dust from adhering to the LCD panel, the LCD block inside the HC5000 is equipped with a dust protection cover.

▶ Dust protection cover

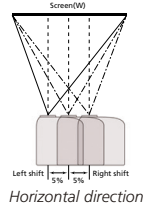
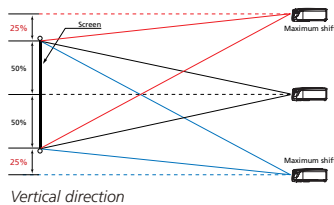




# HC5000 1080P Full HD

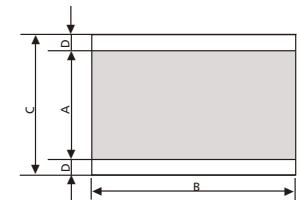


DISPLAY TECHNOLOGY	0.74" 3-LCD (with Micro Lens), Inorganic C <sup>2</sup> Fine™
RESOLUTION	1920 x 1080 (Total 2,073,600 pixels)
BRIGHTNESS	1000 ANSI Lumens
CONTRAST RATIO	10,000:1 over with IRIS Operation
ZOOM/FOCUS	Powered Focus & Zoom (Zoom Ratio 1.6:1)
PROJECTION LENS	F=23.5-37.6mm , F1.8-2.3 (3.1-5.0m@100")
THROW RATIO	1.52-2.46
OFF SET AXIS	(V) 4 : -1 - 4 : 1 (+/-75%) , (H) Screen Width +/-5% (with Variable H+V Powered Lens Shift)
PICTURE SIZE	50-300 (inch)
SOURCE LAMP	160W (Shut Off Time 2000Hrs) with Low Mode (128W:Shut Off Time 5000Hrs)
PC COMPATIBILITY	Resolution ; 640 x 480 (Expand) - 1920 x 1080 (Real) Sync on Green available
VIDEO COMPATIBILITY	NTSC / NTSC 4.43 / PAL (including PAL-M, N) / SECAM / PAL-60 Video; 480i/p(525i/p), 576i/p(625i/p), 720p(750p 50/60Hz), 1080i(1125i 50/60Hz), 1080p(1125p 50/60Hz), SCART (RGB + 1V sync)
INPUT TERMINALS	PC: Mini D-Sub 15pin x 1, DVI-D(with HDCP) x 1 Video: HDMI™ x 1, RCA x 1, S-VIDEO x 1, RCA (Y,P,B) x 1, DVI-D (HDCP) x 1 PC audio input not available. Video audio input not available.
OUTPUT TERMINAL	12V trigger Out (do not plug-in an earphone to this terminal, stereo mini jack 3.5 mm) x1
COMMUNICATION TERMINAL	RS-232C; D-Sub 9pin x 1 (Direct command is available)
SCANNING RATE	[H] 15 - 100 kHz, [V] 50 - 120 Hz, [Dot Clock] max 170 MHz
AUDIO SPEAKER	N/A
HEIGHT ADJUSTER	Two Push Front leg (-1 to 7 degree variable)
HAND REMOTE UNIT	Projector Fully Control, Back light key, Direct functions with AV memory
POWER CONSUMPTION	250W / 2.5 A
DIMENSION	13.1" x 4.9" x 13.8" inches (W x H x D) (exclude height adjuster)
WEIGHT	12.3 lbs.
POWER REQUIREMENTS	AC 100 - 240 V, 50/60Hz
FAN NOISE	24dB(A (Low Mode 19dB(A), sea-level
SUPPLIED ACCESSORIES	<ul style="list-style-type: none"> <li>• AC Power cable</li> <li>• Remote Unit (incl. battery)</li> <li>• Safety Manual</li> <li>• User Manual CD</li> <li>• RGB cable</li> <li>• RS-232C cable</li> <li>• User Manual</li> </ul>
OPTIONAL ACCESSORIES	Replacement Lamp (VLT-HC5000LP), PROJ-UCM, or PROJ-UCM-PRO
WARRANTY	2-Years Parts and Labor
OUTSTANDING FEATURES	<ul style="list-style-type: none"> <li>• Silicon Optix Reon VX HQV™ Image Processing</li> <li>• Inorganic C<sup>2</sup> Fine™ LCD panels</li> <li>• Side loading lamp design</li> <li>• Auto Iris design</li> <li>• Horizontal and Vertical Lens Shift</li> <li>• 3D Color Uniformity correction</li> <li>• 3D Y/C digital comb filter and 3D noise reduction</li> <li>• A/V memory function</li> <li>• User adjustable gamma correction</li> <li>• Digital keystone correction (Vertical)</li> <li>• Password Menu Lock</li> </ul>
MODEL PART NUMBER	HC5000(BL) – for standard, all black cabinet HC5000 projector HC5000U – for special-order white top cover HC5000 projector (allow 8-10 weeks lead time)



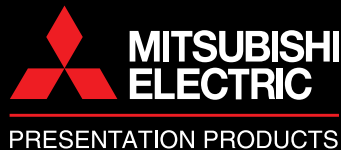
### When the aspect ratio of the screen is 4:3

When the aspect ratio of the screen is 4:3, the positional relation between the projected image and the screen is as shown on the right. Refer to the following table for installation.



SCREEN SIZE						PROJECTION DISTANCE [L]				LENS MOVABLE RANGE			
Diagonal Size		Height A		Width B		Min.Zoom		Max.Zoom		[H]		[V]	
inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm
50	127	25	62	44	111	60	1.5	98	2.5	18	47	2	6
60	152	29	75	52	133	73	1.8	118	3.0	22	56	3	7
70	178	34	87	61	155	85	2.2	138	3.5	26	65	3	8
80	203	39	100	70	177	98	2.5	157	4.0	29	75	3	9
100	254	49	125	87	221	123	3.1	197	5.0	37	93	4	11
150	381	74	187	131	332	185	4.7	297	7.6	55	140	7	17
200	508	98	249	174	443	248	6.3	397	10.1	74	187	9	22
250	635	123	311	218	553	311	7.9	497	12.6	92	233	11	28
300	762	147	374	261	664	373	9.5	597	15.2	110	280	13	33

SCREEN SIZE						SIZE OF THE PROJECTED IMAGE				BLACK SPACE [D]		PROJECTION DISTANCE [L]				LENS MOVABLE RANGE			
Diagonal Size		Height C		Width B		Height A		Width B		inch		Min.		Max.		[H]		[V]	
inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm
50	127	30	76	40	102	23	57	40	102	4	10	55	1.4	89	2.3	17	43	2	6
60	152	36	91	48	122	27	69	48	122	5	11	66	1.7	108	2.7	20	51	2	6
70	178	42	107	56	142	32	80	56	142	5	13	78	2.0	126	3.2	24	60	3	7
80	203	48	122	64	163	36	91	64	163	6	15	89	2.3	144	3.7	27	69	3	8
100	254	60	152	80	203	45	114	80	203	8	19	112	2.9	181	4.6	34	86	4	10
150	381	90	229	120	305	68	171	120	305	11	29	170	4.3	273	6.9	51	129	6	15
200	508	120	305	160	406	90	229	160	406	15	38	227	5.8	365	9.3	68	171	8	20
250	635	150	381	200	508	113	286	200	508	19	48	285	7.2	456	11.6	84	214	10	25
300	762	180	457	240	610	135	343	240	610	23	57	342	8.7	548	13.9	101	257	12	30



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