



**MITSUBISHI  
ELECTRIC**  
Display Solutions

*Changes for the Better*



Bringing movies to life



Introducing Affordable Full High-definition

**NEW**

**HC3800**  
Home Cinema



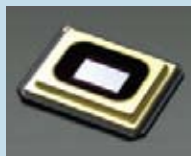
# Enjoy movies, TV programs, games and more on a 100"+ screen The HC3800 – a true, full HD home cinema experience

Imagine it...Mitsubishi technology that gives you hours of viewing pleasure in the comfort of your own home. Easy to set-up and operate – the HC3800 produces vibrant, high-definition (HD) imagery that bring movies and TV programmes to life. Even gaming enthusiasts will appreciate the stunningly sharp visuals on a large 100"+ screen.

The HC3800 is Mitsubishi's most cost effective projector that combines amazing beauty with advanced technological features. Designed specifically for film fans, this is a projector that offers a true home cinema experience.

## The latest 0.65 DLP™ chip

A key feature of the HC3800 is the latest Digital Light Processing (DLPTM) chip that incorporates a new digital micromirror device (DMD) comprised of densely embedded micromirrors. A smaller mirror cavity diameter and narrower gaps between the mirrors improve the aperture ratio of the innovative chip, while reflective light diffusion is greatly reduced by improving the wiring below the mirror section. The mirrors are controlled to tilt repeatedly several thousand times per second, for smooth, true reproduction of finely detailed images with no noise or deterioration.



Digital Micro-Mirror Device



DMD Pixel Composition Map

## High Brightness and High Contrast Ratio

A fixed iris provides both enhanced brightness and contrast for sharp images. Benefiting from 1300 lumens of brightness and a 3300:1 native contrast ratio, the HC3800 can be viewed even in relatively bright rooms. Movies, sports and other programs from high-definition broadcasting and Blu-ray sources can also be enjoyed in high-definition.

## 1.5x Short-throw HD Zoom Lens

The HC3800 benefits from a newly developed short-throw zoom lens. The 4-cluster, 13-piece all-glass lens guarantees an excellent focusing performance, with 1.5x magnification of high-definition images. Improvements have been made to the image depth and the lens aperture to ensure the reproduction of deeper blacks and more defined images.



## High-output, Long-life Lamp & Quiet performance

With a light source of 230W, the high-output lamp has an estimated lifetime of up to 5000 hours when operating in low mode. Mitsubishi have also developed a new low-noise fan that is specially designed for efficient cooling. Taking both the fan and colour wheel shape into consideration, the HC3800 operates at an impressive 25dBA in low mode, for undisturbed viewing.



## DDP3021 Full 10-bit Panel Driver

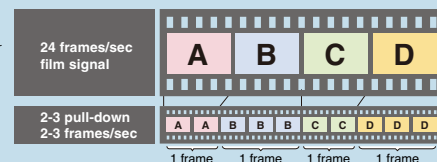
The built-in DDP3021 full 10-bit panel driver creates approximately four times the gradation of 8-bit models, providing smooth expression of dark gradation.

## Blu-ray 24P direct output compatible

The HC3800 is capable of handling an output of 48P, twice the speed of cinema film (24 frames per second). Precise timing ensures true-to-life reproduction with original smooth movements.

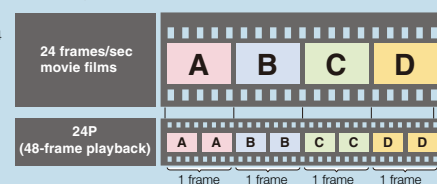
### 2-3 Pull-down

When converting 24 frames per second into 60 frames per second, lining up the second and third frames in sequence creates a surplus third B frame, which deteriorates movement smoothness.



### 24P direct output

With 24P direct output, the 24 frames per second is converted to a full 48 frames per second. This allows sequential matching of two frames at a time, thereby enabling image reproduction with the original smoothness.



## Richer, More True-to-life Colours

Equipped with a six-segment colour wheel, the HC3800 is capable of producing a standard illumination at the colour temperature of D65 (6.5 million). Signals from video sources are reproduced with more true-to-life colours and richer gradation.

## Colour Management for Preferred Colour Adjustment

You can now create the perfect picture by adjusting images to your colour preferences; R (red), G (green), B (blue), C (cyan), M (magenta), and Y (yellow) can each be adapted individually with the built-in colour management function.



Before adjustment



After adjustment



**HDMI™**  
HIGH DEFINITION MULTIMEDIA INTERFACE



HOME CINEMA

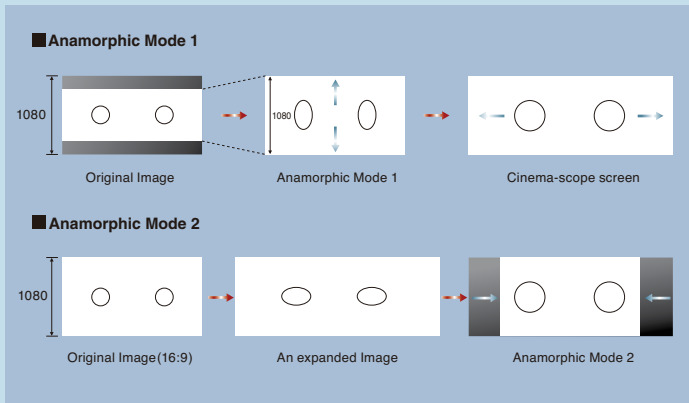
# NEW HC3800



Illuminated remote control unit

## Anamorphic Lens Compatibility

The anamorphic lens compatibility of the HC3800 widens the projection range of cinema-scope images. For flexible connectivity, Mode 1 offers an extended projection, whilst Mode 2 is for images other than cinema-scope which mirror the original with the anamorphic lens attached.



## BrilliantColour™

A new colour processing algorithm and improvements in system-level colour signal picture quality enable the reproduction of the many mid-range colours in video and natural scenery for rich, vibrant images.

## Adjustable Overscan

For images such as those from DVD sources, the overscan ratio can be varied between 90 and 100% in 1% intervals when HDMI/components are connected.

## One-touch projection

By linking the projector's power switch and electric screen (roll down/retract) control, a convenient one-touch operation trigger is provided.

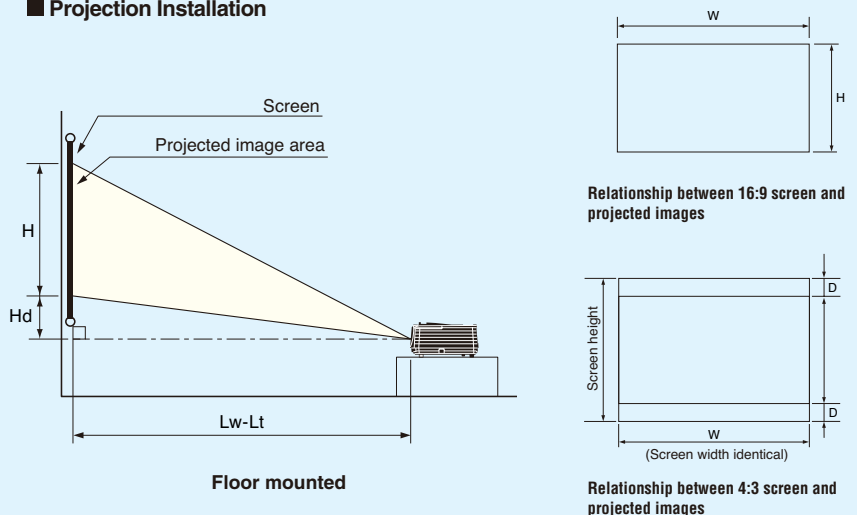
## Screen Distortion Correction

Correct screen distortion by using the shape distortion correction function for digital models. Vertical distortion correction of  $\pm 15$  steps (1 step approximately  $1^\circ$ ) is now possible.

## Projection Distance

Screen size (16:9)			Projection distance		
Diagonal	W (width)	H (height)	Hd(cm)	Max Zoom	Min Zoom
50	111	62	21	1.5	2.3
60	133	75	25	1.8	2.7
70	155	87	29	2.1	3.2
80	177	100	34	2.4	3.6
90	199	112	38	2.7	4.1
100	221	125	42	3.1	4.6
110	244	137	46	3.4	5.0
120	266	149	50	3.7	5.5
150	332	187	63	4.6	6.9
200	443	249	84	6.2	9.2
250	553	311	105	7.7	11.5
300	644	374	126	9.3	-

## Projection Installation



## Specifications

			DLP™ system
Panel size	Panel size		0.65 DMD, Aspect ratio 16:9
	Number of pixels		1920x1080
	Drive system		DMD reflection system
	Array		Stripe pattern
Lens	Zoom / focus operation		1.5-power zoom / manual operation
	f (mm)		20.6-30.1
Light source lamp			230W (at standard mode), 190W (at low mode)
Optical system			Time-division colour separation / composition system
			6 segment (RGB RGB) x4
Projection screen size (inches)			50-300
Brightness (lm)			1300 (Max), 1200 (typ)
Contrast ratio			3300:1
ANSI Contrast ratio			650:1
Resolution	PC input		VGA 640x480 - 1920x1080
	Scan frequency	Horizontal (kHz)	15-80
Vertical (Hz)		50-85	
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, PC98
Video	PC input	Mini D-Sub 15 pin	1 terminal
	HDMI input	HDMI terminal	1 terminal (Ver.1.3)
	Composites	RCA terminal	1 terminal
	S	S-Video terminal	1 terminal
	Components	RCA terminal	1 terminal (component can be also input to Mini D-Sub 15 pin)
Serial / RS-232C standard			1 terminal (Mini DIN 8 pin)
Gamma mode			3 patterns + 2 users
Digital keystone (Vertical)			±15 steps
Power source voltage			AC100-240V 50/60Hz
Power consumption (W)			340 (at waiting 0.5W)
Weight (kg / lbs)			3.5 / 7.7
Main unit dimensions (WxDxH)			345x129x270mm / 13.6"x5.1x10.6" (excluding height adjustment)
Supplied accessories			Power source cord (1.8m), Remote control, AA batteries (x2), RGB signal cable, Lens cap, Lamp replacement attachment

\*All brand and product names are trademarks or registered trademarks of their respective companies.

### ■ Input



### ■ Optional lamp



 **MITSUBISHI ELECTRIC EUROPE**

New publication, effective November 2009 Specifications subject to change without notice.