HITACHI
Inspire the Next

55PMA550E

High Performance 55″ Plasma Display

*Shown with optional table mount

www.hitachidigitalmedia.com

- 55″ 16:9 Aspect Ratio Plasma Display

- New H^3 Panel and I^2 Advanced Intelligent Image Chip

- High Resolution E-ALIS Technology

- Comprehensive Computer Inputs

- Life Extension Mode

ADVANCED I^2

Hitachi's Advanced I^2
Intelligent Image Chip

55PMA550E Features

Hitachi's new 55PMA550E plasma display incorporates a host of new technology features, which combine to produce the ultimate in picture performance. With 1366 x 768 pixel high-resolution, 16:9 aspect ratio screen and an extra-high peak white brightness level of 1000cd/m^2, this Plasma display provides a higher quality picture. Among other technical advances featured are Hitachi's I^2 Intelligent Image Chip, which enables high quality progressive scan processing and high speed digital processing. Capable of conveying the breathtaking beauty of high resolution images and the minute details and crisp colours of high resolution computer generated graphics, this slim and space saving wide-screen display is ideal for visual communication applications.

Hitachi's Plasma Display Promotes Effective Communication in a Wide Range of Situations

Information boards in reception areas

In store installation

Executive offices

Showroom displays

Fitness club displays

Visual art displays for spatial ambience

* Table mount and speakers shown are optional.

H³ Panel – Improved Brightness and Contrast

Designed to deliver outstanding picture quality, the 55PMA550E incorporates Hitachi's new E-ALIS Panel which delivers dynamic contrast and improved brightness. With a contrast ratio of 900:1 and panel brightness of 1000 cd/m², this display reproduces amazing quality pictures.

Refinements to the phosphors and drive system have raised the brightness, while new optical characteristics of the panel and front filter have improved both overall image brightness and made colour reproduction more natural.

I² Advanced Intelligent Image Chip

The 55PMA550E features Hitachi's new I² Advanced Intelligent Image Chip which enables high quality progressive scan processing and high speed digital processing. This ensures the best contrast level for all signals that are run through the display panel. The Digital colour management allows tint and black levels to be independently controlled so that vivid and natural pictures can be obtained without affecting other colours. With High Performance Signal Processor, this feature can overlap the fields to create more lines resulting in clearer, sharper picture quality, whilst also scanning pages/information far quicker to reduce flicker.

Life Extension Mode

The 55PMA550E is equipped with Life Extension Mode that limits the maximum brightness to either 75% or 60% and gradually increases the setting over time to keep the picture brightness constant. This can increase panel life by as much as 67%.

Video Upgrade Board*

Optional Video Upgrade Board provides the following inputs to accommodate today's wide variety of signal sources.
These include:
• Component/Composite Video for DVD/VCR
• Component or RGB/Composite for DVD/Set Top Box
• S-Video/Composite for VCR/Camcorder
• SCART (RGB/S-Video/Composite for DVD/ Set Top Box/VCR)

DVI Digital PC Input:
The 55PMA550E also accepts Digital PC Signal Format through 24pin DVI Connectors, common with all PC Graphics Cards. This Digital PC Signal is compatible with TDMS format ranging from Horizontal (31~60kHz) to Vertical (56~85Hz), allowing an XGA of up to 75Hz PC Signal Format.

Multi-Scanning from VGA to UXGA

The 55PMA550E accepts video signals with horizontal scanning frequencies from 31kHz to 106kHz and vertical scanning (or frame) frequencies of between 50Hz and 85Hz. As a result, this display is capable of producing high quality pictures from almost any type of PC video output signal ranging from VGA to UXGA. Three screen modes are available to suit particular signal sources and applications. These modes are NORMAL (no change in the aspect ratio), FULL (enlargement/reduction of the aspect ratio to make the image fill the 16:9 screen), and ZOOM (no change in the aspect ratio but with vertical scrolling of the image on the screen). On top of this, the 55PMA550E also has a full complement of features that makes this display ideal for use as a PC monitor including automatic adjustment functions for PC signal compatibility, phase and clock frequency.

Multi Picture Modes

To add to the flexibility for presentations, this new feature, Multi Picture Modes, allows you to show a split screen with two images. This can be a choice of Picture and Picture or Picture in PC and is ideal for visual communication applications. (Only available when optional KT Video Board fitted).

Manual Adjustable White Balance

This function allows you to set any desired colour temperature to achieve the correct white balance. In addition to four fixed modes, there is a selector/manual mode that allows the user to precisely set each of the RGB colours separately to produce the exact desired result.

Features for Reduced Image Retention

The 55PMA550E has sophisticated screen saver features that enable the user to shift the picture by a variable number of pixels and time to help prevent static images marking the screen.

If these functions are employed when high contrast elements are displayed, image retention effects can be substantially reduced. In addition, this model has an input signal reverse display function and a whole-screen white display that refreshes the screen if any temporarily retained images are visible.

Built-in Stereo Amplifier

Equipped with built-in 12W per channel stereo power amplifier, the 55PMA550E can be connected to a pair of optional external speakers to provide a dynamic audio accompaniment to viewing, presentations, etc.

Easy on the Environment

To make the 55PMA550E as environmentally friendly as possible, Hitachi has reduced the number of components contained within each Plasma, and make effective use of natural resources wherever possible. This has reduced the number of hazardous materials used by utilising lead free and non halogen resin, resulting in a more energy efficient panel.

Options

Table Stand
CMPAD16R
650(W) x 343(H) x 520(D) mm

Wall Mount
CMPAK5542P
536(W) x 575(H) x 22(D) mm

Optional Speakers
CMPAS15SS
80(W) x 857(H) x 105(D) mm

Hitachi's
I² Advanced
Intelligent
Image Chip

55PMA550E Plasma Monitor

Technical Specifications

Hitachi PDP (Plasma Display Panel) Monitor, which can only connect with PC.

PICTURE
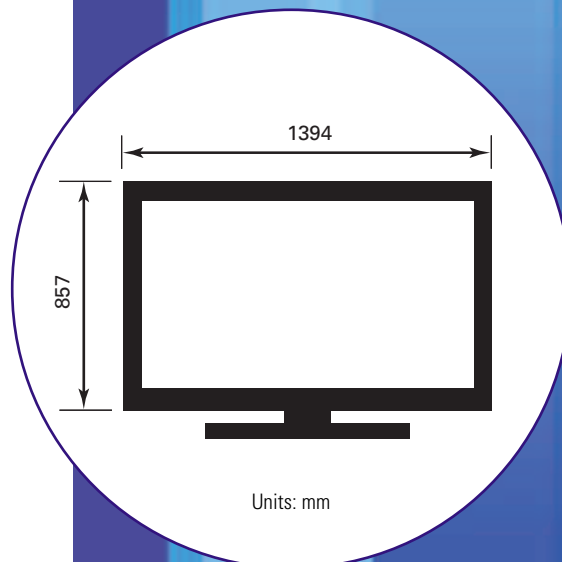
Screen size	55"/141cmV
Screen type	Plasma
Pixels	1366 x 768
Pixel pitch	0.90 (horizontal) x 0.90 (vertical) mm
Colours	16.7 Million
Gray level	256
Panel Luminance (Typical)	1000 cd/m^2
Contrast	900:1

AUDIO

RMS Output	2 x 12W
Surround Sound	Matrix
TRUBASS	•
1 bit AMP	•

CONNECTION

Connector RGB1 (digital)	24-pin DVI (1.0V+HDCP)
Connector RGB2 (analogue)	15-pin D-sub
Control (RS232C)	9-pin D-sub, RS232C 9600bps
Audio for RGB1	L/R mini-headphone jack
Audio for RGB2	L/R mini-headphone jack

COMPUTER INPUT

RGB1	24-pin DVI
Video Format	RGB digital, TMDS
Frequency	Horizontal: 31~60kHz, Vertical: 56~85Hz
Audio	Stereo, 470mV 270k Ω
RGB2	15-pin D-sub
Video Format	RGB analogue, 0.7V$_{P-P}$. 75 Ω
Sync level	H/V Separate Sync and H/V Composite Sync: TTL level
	Sync on Green: 0.3V$_{P-P}$, 75 Ω
Frequency	Horizontal: 31~106kHz, Vertical: 50~85Hz
Audio	Stereo, 470mV 270k Ω

CONTROLS

RGB	Contrast, Brightness, Display Size, Vertical Position, Horizontal Position, Clock, Phase
Colour Temperature	COOL: 12.000K, NORMAL: 9.300K, WARM: 6.500K, Black & White, 5.400K, USER: manual adjustment
Audio	Volume, Balance, Treble, Bass, Mute
Remote Control	Power, Volume Up/Down, Mute, Input Select, Adjustment Menu, ID select
RS232C	9-pin D-sub Control through PC

GENERAL

Voltage	AC 100~240V/50~60Hz
Power Consumption	530 W
Stand-by	<3W
Weight	63.5kg
Dimensions	1394 x 857 x 105 mm (WxHxD)
Stand	Optional (Swivel)

OPERATING CONDITION

Temperature	5 ~35°
Humidity	20 ~80% RH (non-condensing)
Pressure	800 ~1114 hPa (reference value: max altitude 1888m)

CERTIFICATION

Safety	EN60065
EMI	EN50013 class B
CE	EN55020, EN61000-3-2, EN61000-3-3

1394

857

Units: mm

Monitor Dimensions

105

Units: mm

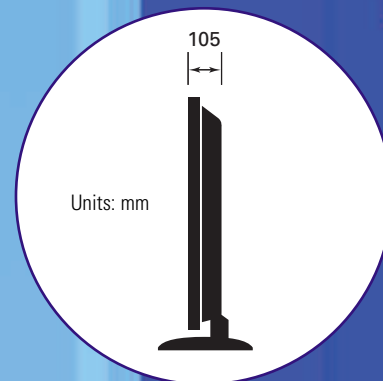## Optional Video Board

CONNECTORS

AV1	Phono x 4 (Component Input and Composite Input)
	Phono x 2 (Audio L and R Input)
AV2	Phono x 4 (Component or RGB Input and Composite Input)
	Phono x 2 (Audio L and R Input)
AV3	Phono x 2 (Composite Input and Composite Output)
	S-terminal Input (S-Video)
	Phono x 2 (Audio L and R Input)
AV4	SCART (RGB Input, Composite Input, Composite or TV Output, Audio L/R Input and Output, Mode Select, Fast Blanking)

INPUT SIGNAL FORMAT

Component	480i, 480p, 575i, 575p, 720p (60), 1080i (50/60)
Format	Y, P$_B$, P$_R$ or Y , C$_B$, C$_R$
Signal Level	Y=1.0V; P$_B$, C$_B$, P$_R$, C$_R$=0.7V$_{P-P}$, 75Ω Sync. on y
Composite/S-Video	PAL/SECAM/NTSC 3.58/NTSC 4.43
Signal Level	1.0V$_{P-P}$, 75Ω, Composite Sync
RGB	Normal Video RGB (50/60)

* Optional Video Board can be fitted prior to delivery.

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• When a plasma display is turned on, minute dots light up on the screen. Please be aware that in some parts ofthe screen may not light, while in other parts dots will always light. This is normal and is not a malfunction.
• To prevent overheating of the plasma panel an air cooling system is used. To assure proper operation of this system, the plasma display should be installed and operated in a vertical position. If the display is installed horizontally or at an excessive angle, heat may not be effectively dissipated and overheating could occur. This could lead to a malfunction.
• All on-screen images shown in this catalogue are simulated.
• Design and specifications are subject to change without notice.