

42-INCH HIGH DEFINITION

CMP4201U PLASMA DISPLAY



1080I HDTV FORMAT
(* 1024 VIEWABLE)

- OPTIONAL VIDEO CARD REQUIRED:
 - DIPP (Digital Imaging Pixel Processor) Technology
 - Programmable Video Inputs (up to 3 component inputs)
 - 2/2 (3/2 Pull Down for *NTSC) Motion Adaptive Processing
 - Dynamic Contrast
 - Digital Color Management
 - P in P (Picture in Picture in standard PC mode)
 - P & P (Picture and Picture in Video 1 & 2 mode)
- DISCRETE MONITOR ID FUNCTION (REMOTE FUNCTION)
- SLEEPTIMER FUNCTION
- FILTER FUNCTION TO REDUCE FLICKERING
- BUILT IN SCREEN SAVERS
- LIFE EXTENTION CONTROL (3 SETTINGS)
- 16:9 ASPECT RATIO
- 16.7 MILLION COLORS
- OPTIONAL TABLETOP STAND
- OPTIONAL SPEAKERS (10W)
- OPTIONAL WALL /CEILING MOUNT
- FCC-B

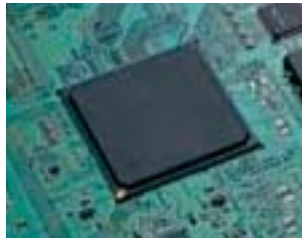
HITACHI
Inspire the Next

CMP4201U PLASMA DISPLAY

42-INCH HIGH DEFINITION

DIPP: HITACHI PROGRESSIVE TECHNOLOGY TAKEN TO A HIGHER LEVEL

Hitachi is the leader in high picture quality technology, as we continually improve our progressive technology and apply it to various kinds of image display devices. Recently, we have developed the DIPP (Digital Image Pixel Processor), a new concept in high-performance, high-speed processors that combines all of our digital image processing technologies. This processor performs high picture quality optimum pixel conversion that matches various types of image inputs with their respective image devices. It provides consistent digitally processed image conversion compatible with a 1,024 x 1,024 pixel high-definition panel. As a result, you enjoy images with a greater degree of detail than ever before.



DIPP (Digital Image Pixel Processor)

DYNAMIC CONTRAST FOR SHARPLY DEFINED IMAGES

Dynamic Contrast automatically detects the amplitude level of the digitally converted input signal in order to reproduce every scene with the finest contrast. Even very bright or dark scenes in movies are dynamically displayed.



Improved Contrast

DIGITAL COLOR MANAGEMENT FOR BRILLIANT COLOR IMAGES

By controlling the multiple designated colors, mutually independent color tones and color density without influencing other colors, Digital Color Management provides brilliant color images. It reproduces beautiful whites, deep blue skies, bright crimsons, and verdant greens.



Deep blue sky



Brilliant crimson



Verdant green

* Photos are intended to clarify the effect, so they differ from actual images.

COMPATIBLE WITH A WIDE RANGE OF INPUT SIGNALS FROM VGA TO UXGA

The CMP4201 is compatible with video signals having horizontal scanning frequencies from 15 to 106kHz (Preset Signal Timing Only) and vertical scanning (frame) frequencies from 50 to 85Hz. It can also accept computer signals ranging from VGA to UXGA. And with automatic adjustment functions*2 for PC signal compatibility, phase and clock frequency, it is fully equipped to function as a PC monitor. The Film Theater Mode lets you enjoy images that are free of jerky motion and no different from what you would see in a movie theater.

PERSONAL COMPUTER DISPLAY EXAMPLES

| Resolution | Overall Display | Perfectly Round Display | | | | |
|------------------|-----------------|-------------------------|--------|-------|-------|-------|
| Display | FULL | NORMAL | REAL*3 | ZOOM1 | ZOOM2 | ZOOM3 |
| 640 x 480 (VGA) | | | | | | |
| 800 x 600 (SVGA) | | | | | | |
| 1024x768 (XGA) | | | | | | |
| 1280x1024 (SXGA) | | | | | | |
| 1600x1200 (UXGA) | | | | | | |

* Compression (thinning), expansion, and other processes are carried out to display the above signals. Therefore in Zoom (1-3), depending on the image, flickering may be conspicuous. When this happens, you can reduce it by turning on the filter.

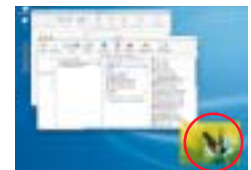
*2 Depending on the signal, perfect automatic adjustment may not be possible. In this case, perform manual adjustment.

*3 REAL display is not possible with certain signals (compatible only with VGA and W-VGA).

MULTI-SCREEN FUNCTIONS

P IN P (PICTURE IN PICTURE)

You can display a video image inside a PC display, and also simultaneously display a still picture and a moving image.



Video signal

P & P (PICTURE & PICTURE)

With an optionally available video card, you can simultaneously display Video 1 (composite input) and Video 2 (component input) images side by side.



Images are simulated

REMOTE CONTROL UNIT WITH ID FUNCTION



Auto adjust button

ID buttons

You can individually control up to seven monitors by assigning an ID number to each one. We've re-designed the remote control unit for easier use, including an Auto Adjust button that automatically adjusts the ideal screen size and position during PC signal input.

LOW POWER CONSUMPTION

• OPERATION MODE SELECTION

This function lowers power consumption and decreases panel degradation by controlling display brightness. You have a choice of three modes: Normal, LIFE EXTEN 1 and LIFE EXTEN 2.

• TIMER

Can be set to turn the power off in 30 minute intervals up to 120 minutes. This is useful when you only want to use the display for a pre-determined time.

• LOW POWER CONSUMPTION OF 350W

(When sound not input)

The display has a low power consumption design that restricts power consumption to 350W (2W in Standby mode), while providing high brightness and high contrast.

BUILT-IN STEREO AMPLIFIER

Incorporating a built-in 10W + 10W stereo power amplifier, the CMP4201 can be easily connected to a pair of separately available external speakers for dynamic audio accompaniment to video viewing, presentations, and so on.

CLASS-B COMPLIANCE

The CMP4201 is compliant with EMI Regulation FCC Class-B, which means it generates only minimal electrical interference that should not affect the operation of nearby TVs, VCRs, radios, etc.

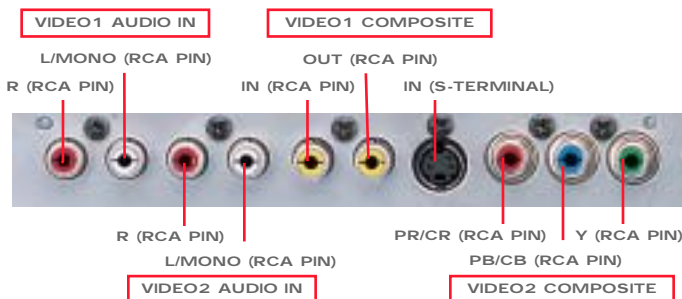
ENVIRONMENTALLY FRIENDLY

To protect the environment, the front frame is made from non-halogen resin and no polyvinyl chloride is used in the mechanical parts. In addition, we have reduced the quantity of buffer material used in packing.

INPUT TERMINALS

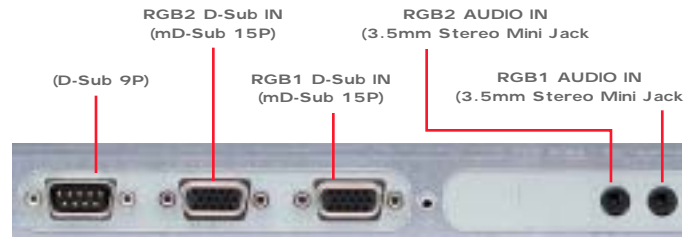
- The display is equipped with composite video, S-video, and component video terminals. It also has a composite video output terminal as a loop-through function.*
- Several AV devices can be connected.*
- Component input can be done using the D-sub terminals (RGB1, RGB2).*

*OPTIONAL VIDEO CARD MUST BE USED



PC INPUT TERMINALS

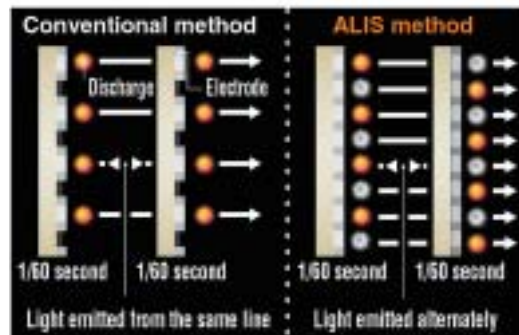
RGB analog signals from two systems can be input to the mD-Sub



NEW ALIS PANEL

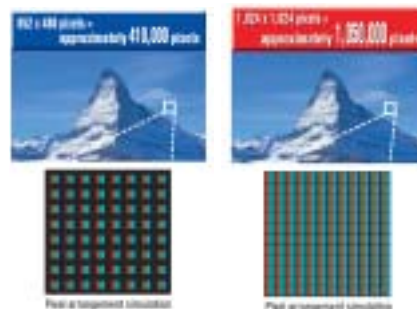
THE ALIS METHOD

By emitting light alternately from the even-numbered and odd-numbered lines of discharge electrodes, ALIS achieves a highly detailed vertical display of 1,024 pixels, as well as high brightness. This new version of the ALIS panel delivers the top level of brightness in the industry and clear high-definition images thanks to an improved drive method and new high-efficiency phosphors.



HIGH-DEFINITION DISPLAY

Employing the ALIS method results in fine pixel pitch of about 1.05 million pixels (1,024 by 1,024), the highest in the industry. The panel reproduces high quality high-definition image sources beautifully and with full detail.



*1 According to survey by Fujitsu Hitachi Plasma Display Co., Ltd.

• Photos are intended to clarify the effect, so they differ from actual images.

LONG LIFE

Because ALIS system panels have a smaller luminosity duty value than the previously used conventional system panels, this high quality display has a long life.

CMP4201U

PLASMA DISPLAY

42-INCH HIGH DEFINITION

MODEL **CMP4201U**

| | |
|-------------------|---|
| GENERAL | |
| Power supply | AC 100-120/200-240V |
| Frequency | 50/60Hz |
| Power consumption | 350W typical without sound (StandBy: 2.5 W) |
| Dimensions | 40.55" (W) x 25.5" (H) x 3.5" (D) |
| Weight | 68lbs, 3 ozs |

DISPLAY CHARACTERISTICS

| | |
|--------------------------------|---|
| Effective display area | 36.5/16" x 20.9/16" |
| Aspect ratio | 16:9 |
| Number of pixels | 1024 (horizontal) x 1024 (vertical) pixels |
| Pixel pitch | 0.90 (horizontal) x 0.51 (vertical) mm |
| Number of colors (gray levels) | 16.7 million colors (256 gray level) |
| Brightness | 1000 cd/m ² (at panel before filter) |
| Viewing angle | More than 160° |

SIGNAL INPUT AND TERMINALS

| | | |
|------------------|-------------------|--|
| Video | Analog (PC) RGB 1 | Format / frequency: R, G, B, H, V/fh: 15k to 106kHz (Preset timings only), fv: 50 to 85Hz Level/impedance: R, G, B=0.7Vp-p/75Ω Sync: H/V separate sync: TTL, H/V composite sync: TTL, G sync: 0.3Vp-p Connector: mD-Sub 15P x 1 |
| | Analog (PC) RGB 2 | Format / frequency: R, G, B, H, V/fh: 15k to 106kHz (Preset timings only), fv: 50 to 85Hz Level/impedance: R, G, B=0.7Vp-p/75Ω Sync: H/V separate sync: TTL, H/V composite sync: TTL, G sync: 0.3Vp-p Connector: BNC x 5 |
| | Video 1 composite | Format: video or S video (NTSC/PAL/SECAM) Level/impedance: 1.0Vp-p/75Ω Sync: Composite sync. signal Connector: BNC x 1, S terminal x 1 |
| | Video 2 component | Format: Y, Pb, Pr, or Y Cb, Cr Level/impedance: Y=1.0V, Pb/Cb, Pr/Cr=0.7Vp-p/75Ω Synchronization: Y signal Connector: BNC x 3 |
| Audio | 4 inputs | Stereo signal supplied with 2 video inputs and 2 RGB inputs: L/R 470mV high impedance RCA pin (L/R) x 4 |
| Control terminal | | Connector: D-sub 9p (compatible with RS-232C) |

SIGNAL OUTPUT

| | |
|-----------------|---|
| Speaker output | 10 Watt |
| Video (Video 1) | Connector BNC x 1 (Not compatible with S-video) |

CONTROLS

| | | |
|------------------|----------------------------|--|
| Switches/Buttons | | Adjustment button (Input change, Adjustment menu, Selection, Sound Volume adjustment) |
| Main adjustment | Video signal RGB signal | Contrast, brightness, color, color tone, sharpness Contrast, brightness, display size, vertical position, horizontal position, clock frequencies, clock phase |
| | Audio signal | Sound volume, balance, high, low, mute |
| Remote control | | Infrared remote control provided. |
| Power management | | ON/OFF control/VIA signal detection |

ENVIRONMENTAL CONDITIONS

| | |
|-------------|-------------------------------|
| Temperature | 5 - 35°C |
| Humidity | 20-80 % RH (non-condensation) |

REGULATIONS

| | |
|--------|---|
| Safety | UL1950, CSA C22.2 No.950 (C-UL), EN 60950 |
| EMI | FCC class B, EN55022 class B |

SUPPLIED ACCESSORIES

AC power cable (L = 5' 11"),
interface cable (D-Sub 15P connector; L = 5' 11")
infrared remote control unit (2x AA batteries included),
user manual

OPTIONAL ACCESSORIES

Video Input Card, Tabletop stand, Speakers,
Remote Control

CORRESPONDING PERSONAL COMPUTER SIGNALS

SIGNAL MODE

| Signal | Resolution | Vertical frequencies Hz | Horizontal frequencies KHz | Dot clock frequencies MHz |
|---|-------------|-------------------------|----------------------------|---------------------------|
| VGA | 640 x 400 | 70.08 | 31.47 | 25.18 |
| | 640 x 480 | 59.94 | 31.47 | 25.18 |
| WIDE VGA | 864 x 480 | 59.94 | 31.47 | 34.24 |
| VESA | 640 x 480 | 72.81 | 37.86 | 31.50 |
| | 640 x 480 | 75.00 | 37.50 | 31.50 |
| | 640 x 480 | 85.01 | 43.27 | 36.00 |
| | 800 x 600 | 60.32 | 37.88 | 40.00 |
| | 800 x 600 | 72.19 | 48.08 | 50.00 |
| | 800 x 600 | 75.00 | 46.88 | 49.50 |
| | 800 x 600 | 85.06 | 53.67 | 56.25 |
| | 1024 x 768 | 60.00 | 48.36 | 65.00 |
| | 1024 x 768 | 70.07 | 56.48 | 75.00 |
| | 1024 x 768 | 75.03 | 60.02 | 78.75 |
| | 1024 x 768 | 85.00 | 68.68 | 94.50 |
| | 1152 x 864 | 75.00 | 67.50 | 108.00 |
| | 1280 x 1024 | 60.02 | 63.98 | 108.00 |
| | 1280 x 1024 | 75.03 | 79.98 | 135.00 |
| 1280 x 1024 | 85.02 | 91.15 | 157.50 | |
| 1600 x 1200 | 60.00 | 75.00 | 162.00 | |
| 1600 x 1200 | 75.00 | 93.75 | 202.50 | |
| 1600 x 1200 | 85.00 | 106.25 | 229.50 | |
| W-PC BOARD | 1024 x 512 | 75.00 | 42.00 | 56.45 |
| 1080/60i (RGB) | (1080i) | 59.94 | 33.750 | 74.25 |
| 1080/50i (RGB) | (1080i) | 50.00 | 28.125 | 74.25 |
| Recommended cycle signal: H/V separate cycle signal | | | | |
| Apple | 640 x 480 | 66.67 | 35.00 | 30.24 |
| | 832 x 624 | 74.55 | 49.72 | 57.28 |
| | 1024 x 768 | 75.11 | 60.24 | 80.00 |
| | 1152 x 870 | 75.06 | 68.68 | 100.00 |

CORRESPONDING VIDEO SIGNALS

| Signal | SIGNAL MODE | | | Signal Input |
|--------------------------------|-------------------------|---------------------------|------------------------------|-----------------------------|
| | Effective scanning line | Vertical frequencies (Hz) | Horizontal frequencies (KHz) | |
| NTSC, NTSC-4.43, M-PAL (VIDEO) | 525 | 59.94 | 15.73 | Composite signal |
| PAL, N-PAL SECAM (VIDEO) | 625 | 50.00 | 15.63 | Composite signal |
| 480/60i | 480 | 59.94 | 15.73 | Composite signal, ITU601 |
| 575/50i | 575 | 50.00 | 15.63 | Composite signal, ITU601 |
| 480/60P | 480 | 59.94 | 31.47 | Composite signal, SMPTE293M |
| 720/60P | 720 | 59.94 | 44.96 | Composite signal, SMPTE296M |
| 1080/60i | 1080 | 59.94 | 33.72 | Composite signal, SMPTE274M |
| 1035/60i | 1035 | 60.00 | 33.75 | Composite signal, SMPTE240M |

*In some cases, the correct on-screen display may not be achieved due to incompatibilities between the display and the video board or connecting cable. In such cases, please adjust the H. POSITION, V. POSITION, CLOCK and/or PHASE settings. *Moving pictures may not be displayed correctly if the vertical component of the input signal has a frequency of more than 60Hz. *This device is designed to distinguish between signals representing horizontal frequency, vertical frequency, horizontal synchronous signal polarity and vertical synchronous signal polarity. However, in the case that all of these signals have identical or similar values, although they are different signals they may be treated as the same signal. *Please note that in some cases when straight-line pixels are displayed at a resolution of more than 512 lines, the thickness of characters and lines may become uneven.

*XGA and VGA are registered trademarks of IBM Corp. Macintosh is a registered trademark of Apple Computer, Inc. All other brand names and product names are trademarks, registered trademarks or trade names of their respective holders.

•When a plasma display is turned on, minute dots light up on the screen. Please be aware that in some parts of the screen may not light, while in other parts dots will always light. This is normal and is not a malfunction. •Please remember that existing images or programs that you display may be protected under copyright law. Compressing or enlarging images for commercial purposes or public display including in cafeterias, hotels, etc., without authorization could be a violation of the rights of the author or copyright holder. Please be sure to obtain any permission required from the copyright holder. •Do not expose this product to vibration or impact shock, as in some cases this may cause abnormal operation. •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. •Do not display the same image or characters continuously for a long period. If you do so, this may cause changes in the visual display elements, resulting in the formation of permanent afterimage. •In the case that this display is used in a location subject to external lighting, special consideration should be paid to the installation location, etc., in accordance with the situation. •All on-screen images shown in this catalog are simulated.

HITACHI

Inspire the Next

SALES CONTACT INFORMATION

HITACHI AMERICA LTD.
DIGITAL MEDIA DIVISION
2000 Sierra Point Parkway, MS:760
Brisbane, CA 94005-1835
Tel: 800.448.2244
Fax: 650.244.7776
Web Site: www.hitachi.com

HITACHI CANADA LTD.
6740 Campobello Road
Mississauga, Ontario L5N 2L8
Tel: 905.821.4545/800.906.4482
Fax: 905.814.0848
Web Site: www.hitachi.ca

Specifications and product offerings are subject to change without notice
©2003 Hitachi America, LTD. Printed in US 02/03

For information on all other Hitachi products: 1.800.HITACHI (1.800.448.2244)