

# CMP 4201 / CMP 4202U

42-inch high definition plasma display



**CMP 4201U**



**CMP 4202U**

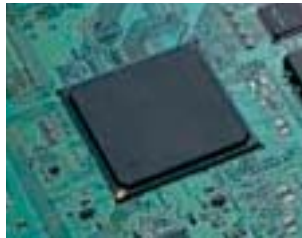
1080i HDTV FORMAT  
( \* 1024 VIEWABLE )

- 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 & P (Picture and Picture in Video 1 & 2 mode)
- P IN P (PICTURE IN PICTURE IN STANDARD PC 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

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### 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 CMP4202 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				
		FULL	NORMAL	REAL*3	ZOOM1	ZOOM2
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.

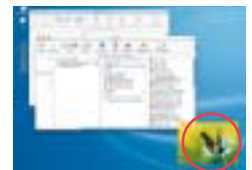
\*2 Depending on the signal, perfect automatic adjustment may not be possible. In this case, perform manual adjustment.

\*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 CMP4202 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 CMP4202 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.

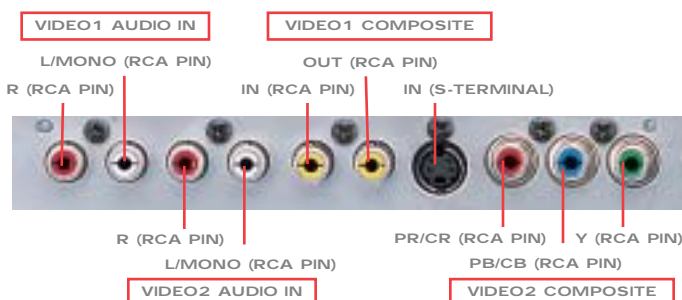
## ENVIRONMENTALLY FRIENDLY

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

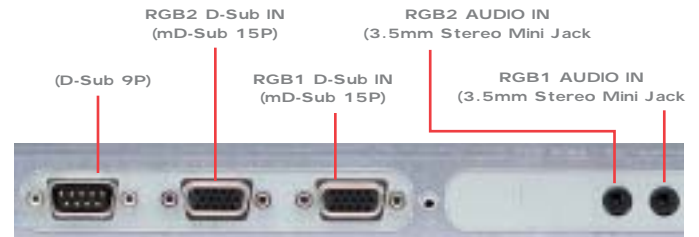
- The display is equipped with composite video, S-video, and component video terminals. It also has a composite video output terminal as a loop-through function.\*
- Several AV devices can be connected.\*
- Component input can be done using the D-sub terminals (RGB1, RGB2).\*

\*OPTIONAL VIDEO CARD MUST BE USED



## PC INPUT TERMINALS

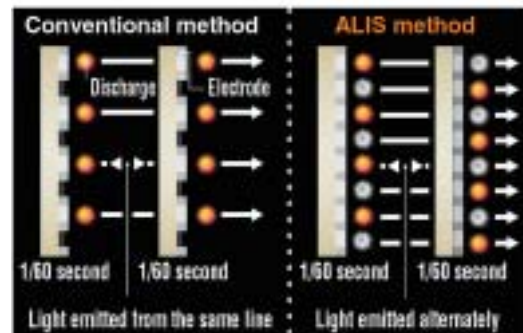
RGB analog signals from two systems can be input to the mD-Sub



## NEW ALIS PANEL

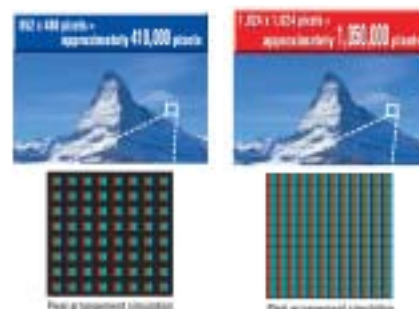
### THE ALIS METHOD

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.

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# CMP 4201 / CMP 4202U

## 42-inch high definition plasma display

### MODEL CMP4201U/CMP4202U

<b>GENERAL</b>	
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 <sup>2</sup> (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	Contrast, brightness, color, color tone, sharpness
	RGB signal	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
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### OPTIONAL ACCESSORIES

	Video Input Card, Tabletop stand, Speakers, Remote Control
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### 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	
<b>W-PC BOARD</b>	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 MODE				
Signal	Effective scanning line	Vertical frequencies (Hz)	Horizontal frequencies (KHz)	Signal Input
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.

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Fax: 905.814.0848  
Web Site: www.hitachi.ca

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