# Pioneer sound.vision.soul



## **Highest Quality and Performance for Professional Applications**

Pioneer plasma display panels have proven their worth in a wide variety of professional and public display applications, and the PDP-505CMX offers an even higher level of quality than previous models. In addition to Pure Drive™ technology and our unique cell structure, it incorporates a new color filter that enhances contrast and color performance in bright environments where PDP's are generally used. Along with its unrivaled image accuracy and clarity, this PDP offers exceptional expandability, reliability and functionality. You can be confident that the PDP-505CMX is a sensible investment from day one to years down the road.





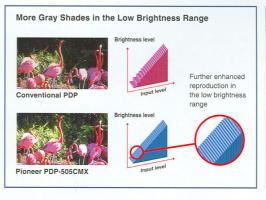
# **PURE DRIVE**

Plasma Ultimate Reference Exclusive Drive



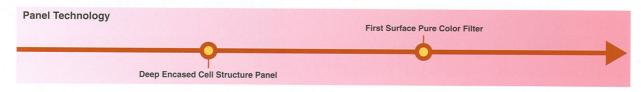
## Pure Drive Technology Delivers Stunningly Beautiful Images

Pioneer's Pure Drive technology encompasses the entire range of image generation and processing that gives the PDP-505CMX its astoundingly clear, smooth and natural picture. Unlike other PDP systems, Pure Drive maintains all signals in the digital domain, which eliminates image transmission loss, reduces distortion, and provides a far greater degree of control. An important step in this process is our ACE III (Advanced Continuous Emission III<sup>TM</sup>) technology, which uses 10-bit processing to create a palette of 1.07 billion hues for much greater color gradation accuracy and detail, ensuring that data and images are perfectly clear. Because of Pure Drive's outstanding capabilities, other flat panel displays simply can't match Pioneer's superb brightness, sharpness and color accuracy.



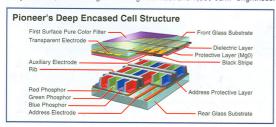






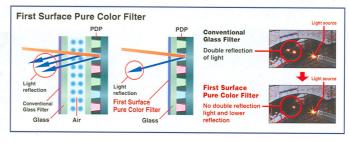
## **Deep Encased Cell Structure**

The cells of a plasma display panel, where light is generated, are the most important factor determining image quality. Pioneer has continually refined our cell technology, which is called the Deep Encased Cell Structure. The latest version used in the PDP-505CMX incorporates an additional green fluorescent body material, contributing to ultra-high contrast and 1,000 cd/m² brightness.



#### First Surface Pure Color Filter

This is a new filter that Pioneer developed to improve display performance in well-lit environments, which means most professional applications. It's a thin precision filter optically bonded directly to the glass panel covering the plasma cells. Not only does it reduce reflections and improve contrast, but each color is precisely balanced as it passes through, resulting in more accurate reproduction of all images.





## **Expandability to Meet a Wide Variety of Present and** Future Needs — ES\* Card Slot Interface · Expansion Solutions



The PDP-505CMX is designed to be ready for any type of application with the integration of two ES Card Slot interfaces, one for communication and one for enhanced data. It comes supplied with a removable communication card that includes RS-232C and combination I/O interfaces. The second slot may optionally be used to enable video capabilities through the input of a wide range of analog or digital signals, with additional control. This means that one PDP-505CMX can be used for multiple tasks, including various applications that other PDPs can't handle. You have extensive flexibility right out of the box, and it is also ready for additional needs that may arise in the future. Pioneer's "Expansion Solutions" are one more reason why the PDP-505CMX should be your first choice for a professional plasma display.





Communication Slot

Video Slot



Communication Slot

Optional BNC Connector Interface Card PDA-5003



Enables the display of High Definition video through RGB/component, s-video and composite input terminals.

Video Slot

Optional RCA Connector Interface Card PDA-5004



Enables the display of High Definition video through component, s-video and composite input terminals.

## Pioneer Certified Third Party Expansion Solution Cards\*

IP Link™ Interface Module Extron® Electronics IPL M PDP-ES



This compact ethernet control card enables IP-based remote control, proactive monitoring, and troubleshooting.

Integrated Analog CAT-5 Receiver Magenta Research MultiView™ AK1000PDP



Enables high resolution video distribution over CAT-5/UTP. Signals can be transmitted over longer distances.

HDSDI Digital Video Interface Alcorn McBride PDP HDSDI™



Connects the PDP directly to professional quality broadcast equipment or any other device with SMPTE-292M and SMPTE-259M input capability.

\*Third party expansion solution cards are not Pioneer products and are subject to each manufacturer's own warranty.

## PDP-505CMX



# More Than Just a Pretty Face. You'll Also Like the Outstanding Flexibility, Reliability and Operating Ease.

#### Compatibility with a Wide Range of PC Signals

With a native resolution of 1,280 x 768, this high precision panel can accurately display personal computer signals ranging from  $640 \times 400$  and  $640 \times 480$  (VGA) to  $1,024 \times 768$  (XGA) and  $1,280 \times 768$  (WXGA). It is also compatible with display resolutions of  $1,280 \times 1,024$  (SXGA) and  $1,600 \times 1,200$  (UXGA).

#### Intelligent Auto Setup

Intelligent Auto Setup improves both performance and convenience, allowing image adjustment via the remote control. It includes an Auto Adjust function, which can detect a PC signal and automatically adjust the position of the image, so there is no need to push the Auto Setup button.

#### Three Dual Picture Modes\*

These modes allow the simultaneous display of images from two connected sources. Split Screen shows two images side by side, Picture-In-Picture superimposes a small picture over the full-screen picture in any of the four corners, and Picture-Out-Picture displays the second image on the right side of the screen. \*Not compatible with all Expansion Solution cards.







Side by Side

Picture-In-Picture

Picture-Out-Picture

#### **Enhanced Point Zoom**

Enhanced Point Zoom instantly expands any portion of a PC image 1.5x, 2x or 3x. The Zoom Area sub-display makes it easy to confirm the expanded portion.

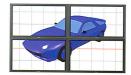




#### 2 x 2 Image Expansion

You can install four units as a 2x2 data wall without needing an image expansion device. Two display modes are available, one that makes all picture elements visible, and one that enlarges the whole image to retain its original shape.





#### Color Detail Adjustment

Color adjustment can be performed for any specific color without affecting the other colors.

### **Locking Function**

To make the system more secure, numerous controls can be locked: on/off, main unit buttons, remote control, main unit buttons plus remote control, and memory lock, which selects input and volume default settings when the unit is turned on.

#### Large GUI Display

A GUI display can make operation easier, but if it is too small to see when the unit is mounted, its usefulness is limited. The PDP-505CMX has an extra-large display that is visible even when the unit is mounted in a high location.



#### **Extremely Low Power Consumption**

This PDP-505CMX consumes only 360W of power in standard operating mode. This is extremely low for a 50-inch WXGA-class plasma display. Standby power is a mere 0.8W.

### Four Energy Save Modes

Four Energy Save modes can be used to further reduce power consumption. They are Power Save, Intermediate, Linear Brightness, which decreases the peak intensity of high-brightness images, and Auto Brightness Control, which automatically adjusts panel brightness depending upon room lighting.



#### Three Image Burn-In Management Modes

Three modes manage image burn-in: RGB separate full mask/side mask brightness adjustment; Orbiter mode, which moves the displayed image one pixel at a time; and Inverse mode, which displays negative images. Full mask and Inverse can be controlled by the on/off timer via the Screen Management function.

### Peak Pattern Detection System

This system also helps prevent burn-in by monitoring the prolonged display of still images and the concentration of brightness in any segment of the panel.

\* Even so, displaying the same images for long periods should be avoided.

## **Smart Cooling System**

Internal fans are activated only when needed, keeping fan noise to a minimum and conserving power.

### Display of Error Information

In order to minimize downtime, the PDP-505CMX displays comprehensive error information. Errors, their causes, and part serial numbers are displayed and identified by symbols. In addition, various errors are indicated by the two front LEDs, so even if the display malfunctions, the cause can be quickly identified and corrected.

#### **RS-232C Get Command**

The PDP-505CMX can transmit various information to a PC via the RS-232C link using the Get command, including power on/off, input number, signal detection and complete error data. This ensures that remote monitoring is worry-free.

#### WHQL Compatibility

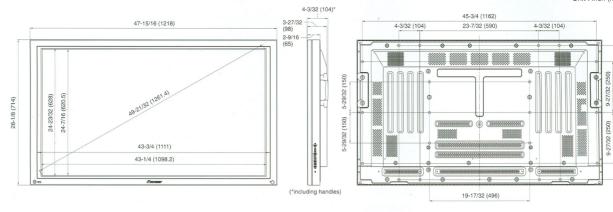
Pioneer's plasma displays were the industry's first to receive Microsoft's Windows Hardware Qualification Labs (WHQL) certification of compliance. The PDP-505CMX continues this tradition by providing Plug & Play drivers to support Microsoft® Windows® and other operating systems.



\*Compatible with Microsoft Plug & Play (VESA DDC 1/2B)

## **■** Dimensions

Unit : inch (mm)



## ■ Terminal Configuration I



## **■** Specifications I

Effective Screen Size (W x H)	43-1/4" x 24-7/16" (1098.2 x 620.5 mm) (50in. Diag.)
Aspect Ratio	16:9
Number of Pixels	1280(Hor.) x 768(Ver.)
Pixel Pitch	0.858(Hor./RGB trio) x 0.808(Ver.)mm
Color Resolution	1024 grey scale, 1.07billion colors
Brightness	1000cd/m2 (white peak)
Dimensions (W x H x D*)	47-15/16" x 28-1/8" x 3-27/32" (1218 x 714 x 98 mm)
Weight	78 lbs. 11 oz (35.7 kg)
Power Consumption	360W (0.8W at stand by)
Power Requirements	AC 100-120V ± 10%, 50/60Hz
Operating Temperature	32°F-104°F (0°C-40°C)
Operating Humidity	20%-80%
Safety Regulations	UL 1950, FCC 15B class B, C-UL

<sup>\*</sup>Not including handles

## ■Input/Output Terminals

		Connector	Signal	Level/Impedance
INPUT 1	IN	Mini D-sub	Analog RGB Signal	RGB: 0.7Vp-p/75Ω
		15-pin	(G on Sync compatible)	G on Sync : 1Vp-p/75Ω
				HD/CS,VD : TTL level/2.2kΩ
		Compatible with Microsoft	Plug & Play (VESA DDC 1/2B)	
	OUT	Mini D-sub	Analog RGB Signal	75Ω
		15-pin	(G on Sync compatible)	
INPUT 2	IN	DVI-D	Digital RGB Signal (DVI Standard)	
		24-pin	Compatible with Microsoft	Plug & Play (VESA DDC 2B) and HDCP*

<sup>\*</sup>Applies only when equipped with Pioneer Video Card PDA-5003 or PDA-5004

## ■ Audio Input/Output Terminals ■

		Connector	Level/Impedance
AUDIO INPUT(INPUT1)	IN	Stereo mini	L/R: 500mVrms/more than 10kΩ
AUDIO INPUT(INPUT2)	IN	Stereo mini	L/R: 500mVrms/more than 10kΩ
AUDIO OUTPUT	OUT	Stereo mini	L/R: 0-500mVrms/less than 5kΩ (VARIABLE)
SPEAKER	OUT		L/R: 8-16Ω/7W +7W(8Ω)

## **■ Control Terminals**

RS-232C	Connector	D-sub 9-pin
(for control by computer)	Baud Rate	1200, 2400, 4800, 9600, 19200, 38400 bps
Combination IN/OUT	Connector	Mini DIN 6-pin (x2)

## **■** Computer Input Signal I

Resolution	Vertical	Horizontal	Digital RGB	Usage
(dot x line)	Frequency	Frequency		
640×400	56.4Hz	24.8kHz		NEC PC-9800
720x400	70.1Hz	31.5kHz		NEC PC-9800
	85.1Hz	37.9kHz		
640x480	60Hz	31.5kHz	YES	
	66.7Hz	35.0kHz		Apple Macintosh 13"
	72.8Hz	37.9kHz		
	75Hz	37.5kHz		
	85Hz	43.3kHz		
848x480	60Hz	31.0kHz	YES	
800x600	56Hz	35.2kHz	YES	
	60Hz	37.9kHz	YES	
	72Hz	48.1kHz		
	75Hz	46.9kHz		
	85Hz	53.7kHz		
832x624	74.6Hz	49.7kHz		Apple Macintosh 16"
1024x768	60Hz	48.4kHz	YES	
	70Hz	56.5kHz		
	75Hz	60.0kHz	2	() Indicates Apple Macintosh 19
	(74.9Hz)	(60.2kHz)		
	85Hz	68.7kHz		
1280x768	56Hz	45.1kHz	YES	
	60Hz	47.8kHz	YES	
	70Hz	56.1kHz	-	
1152x864*	60Hz	53.7kHz	YES	
	72Hz	64.9kHz		
	75Hz	67.5kHz		
1152x870*	75.1Hz	68.7kHz		Apple Macintosh 21"
1152x900*	66Hz	61.8kHz		Sun Microsystems LO
	76Hz	71.7kHz		Sun Microsystems HI
1280x960*	60Hz	60.0kHz	YES	
1280x1024*	60Hz	64.0kHz	YES	
	75Hz	80.0kHz		
	85Hz	91.2kHz		
1400x1050*	60Hz	65.3kHz	YES	The state of the s
	75Hz	82.3kHz		
	85Hz	93.9kHz		
1600x1200*	60Hz	75.0kHz		
	65Hz	81.3kHz		
	70Hz	87.5kHz		
	75Hz	93.8kHz		
	85Hz	106.3kHz		

<sup>\*</sup>Compressed or partial display

#### ■ Accessories ■

Power Code x 1, Remote Control Unit x 1, Remote Control Unit Holder x 1, AA(R6) batteries x 2, Cleaning cloth(for screen) x 1, Speed clamps x 2, Bead bands x 2, Display stands x 2, Washers x 2, Hex hole bolts(M8x40) x 2, Operating Instructions x 1, Warranty x 1

#### Notice

• This equipment is sold on the condition that it will be installed by a competent professional engineer with sufficient training and skill to carry out proper installation. Be sure to entrust the installation and setup of this machine only to a competent professional or retail service engineer. Ploneer cannot accept liability in case where the equipment is damaged due to inappropriate installation location, improper assembly, installation, set-up, operation or renovation, or by natural disasters.

## 50-inch WXGA Professional Plasma Display PDP-505CMX

## Options

**BNC Connector Interface Card** 



Enables the display of High Definition video through RGB/component, s-video and composite input terminals.

## ■ VIDEO INPUT/OUTPUT 3.58NTSC, 4.43NTSC, PAL, SECAM, PAL-N, PAL-M

		Connector	Signal	Level/Impedance
INPUT3 IN		Mini DIN 4-pin	Y/C Separate Video Signal	Y: 1Vp-p/75 Ω
		(S terminal)		C: 0.286Vp-p/75 Ω (NTSC)
				0.3Vp-p/75 Ω (PAL)
INPUT4	IN	BNC	Composite Video Signal	1Vp-p/75 Ω
	OUT	BNC	Composite Video Signal	75Ω
INPUT5	IN -	BNC x 5	Analog RGB Signal	RGB: 0.7Vp-p/75 Ω
	(Compatible with G on Sync)	(Compatible with G on Sync)	G on Sync: 1Vp-p/75 Q	
			HD/CS,VD: TTL level/75 Ω or 2.2k Ω switchable	
		Component Video Signal	Y: 1Vp-p/75 Ω	
	1			Ph/Ch Pr/Cr 0.525Vp.p/75.0 (75% coturation)

#### ■ AUDIO INPUT/OUTPUT

	Connector	Level/Impedance
AUDIO INPUT(INPUT3/4)	RCA pin x 2	L/R: 500mVrms/more than 10kΩ
AUDIO INPUT(INPUT5)	RCA pin x 2	L/R: 500mVrms/more than 10kΩ

## RCA Connector Interface Card



Enables the display of High Definition video through component, s-video and composite input terminals.

#### ■ VIDEO INPUT/OUTPUT 3.58NTSC, 4.43NTSC, PAL, SECAM, PAL-N, PAL-M

		Connector	Signal	Level/Impedance
INPUT3	IN	Mini DIN 4-pin	Y/C Separate Video Signal	"Y: 1Vp-p/75Ω
		(S terminal)		C: 0.286Vp-p/75 Ω (NTSC)
				0.3Vp-p/75 Ω (PAL)*
INPUT4	IN	RCA	Composite Video Signal	1Vp-p/75 Ω
	OUT	RCA	Composite Video Signal	75Ω
INPUT5	IN	RCA x 3	Component Video Signal	Y: 1Vp-p/75 Ω
				Pb/Cb. Pr/Cr: 0.525Vp-p/75 O (75% saturation)

#### ■ AUDIO INPUT/OUTPUT

	Connector	Level/Impedance
AUDIO INPUT(INPUT3)	RCA pin x 2	L/R: 500mVrms/more than 10k O
AUDIO INPUT(INPUT4)	RCA pin x 2	L/R: 500mVrms/more than 10k Ω
AUDIO INPUT(INPUT5)	RCA pin x 2	L/R: 500mVrms/more than 10kΩ

## IP Link™ Interface Module Extron® Electronics IPL M PDP-ES

This compact ethernet control card enables IP-based remote control, proactive monitoring, and troubleshooting.



I/O	Connector	Signal
LAN	RJ-45	10Base-T, half/full duplex with autodetect
		1200, 2400, 4800, 9600, 19200, 38400 baud (adjustable)
RS-232	D-sub 9-pin	8data bits, 1 stop bit, no parity

For more information: Extron Electronics 1230 South Lewis Street Anaheim, CA 92805 USA Tel: 800-633-9876 or 714-491-1500 Fax: 714-491-1517 URL: http://www.extron.com

## Integrated Analog CAT-5 Receiver Magenta Research MultiView™ AK1000PDP

Enables high resolution video distribution over CAT-5/UTP. Signals can be transmitted over longer distances



Maximum resolution: 1920 × 1440 @ 70Hz (From 0 ft. to 1000 ft.) Video compatibility: RGBHV, RGsB, YUV, NTSC, PAL

1/0	Connector	Signal
Link IN	RJ-45	MultiView format Video and Serial Data
Link OUT	RJ-45	The UTP signal to be daisy-chained (6 PDP)
Optional OUT	HD9	Full Modem serial option
Ontional Audio	BC4 v 2 /1 - B)	Audio

For more information: Magenta Research,Inc 934 Federal Road, Brookfield, CT 06804 USA Tel: 203-740-0592 Fax: 203-740-0596 URL: http://www.magenta-research.com

## **HDSDI** Digital Video Interface Alcorn McBride



Connects the PDP directly to professional quality broadcast equipment or any other device with SMPTE-292M and SMPTE-259M input capability.



1/0	Connector	Signal
Input	BNC	SMPTE-292M and SMPTE-259M
Loop Through	BNC	Buffered & Re-clocked SMPTE-292M loop through
Analog Input	Mini D-sub 15-pin	RGBHV/YPbPr component Tri-level or Bi-level sync

For more information: Alcorn McBride Inc. 3300 S.Hiawassee Building 105 Orlando, FL 32835 USA Tel: 407-296-5800 Fax: 407-296-5801 URL: http://www.alcorn.com

Optional Side-Mount Speakers



PDP-S05-LR

Maximum output 12W/8 ohms Dimensions (WxHxD) 2-29/32"x 28-1/8"x 3-31/32" (74 x 714 x 101 mm) Table Top Stand PDK-TS01

Dimensions (WxHxD) 22-9/32" x 20" x 13-11/32" (566 x 508 x 339 mm)

Weight 8 lbs. 13 oz (4.0 kg)





ADJUSTABLE HEIGHT SUSPENSION ADAPTER



PSA-2 ADJUSTABLE HEIGHT SUSPENSION ADAPTER



PCA-1 1-1/2" NTP (SINGLE) CEILING ADAPTER



PCA-2 2" NTP (DUAL) CEILING ADAPTER





PDWB -5003 FLAT WALL MOUNTING BRACKET for 50" PLASMA



PWM -503 TILTING WALL MOUNTING BRACKET for 50" PLASMA

<sup>\*</sup>These products are offered for sale only in the US market. Pioneer cannot accept responsibility in the event that they are used in other regions. \*These items have been produced by Progressive Marketing Products, Inc. If you need further information please call 1-800-368-9700 or access to http://www.pmpi.com.

## **Choose Pioneer for Any Application**

Pioneer PDPs are ideal for a wide variety of applications, such as public information displays, visual displays at trade shows, industrial control and monitoring, trading room displays, electronic advertising and business presentations.









## The world leader in PDP quality and innovation.

Pioneer introduced the world's first 50-inch WXGA PDP in 1997 and continues its tradition of innovation with the fifth generation PDP-505CMX. We lead the industry not only in performance and functions, but also in the development of fundamental PDP technology. Because we manufacture everything in-house, from panels to electronics, we are able to adhere to the highest quality standards, proven by our rapid achievement of ISO 14001 certification.







Pioneer Corporation and
Pioneer Display Products Corporation
where PDP products are
developed have both achieved
ISO 14001 certification.







\*For more details, contact one of the addresses below. \*All product names and company names are registered trademarks of their respective owners.

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