## Pioneer sound.vision.soul



42-Inch XGA Professional Plasma Display

# PDP-427CMX



Not all displays are built the same.

# Look Deeper.



Top class picture quality and functionality designed for professional use.

Pioneer, the world leader in plasma display technology, introduces a new 42" PDP to complement its 60" and 50" models. The PDP-427CMX offers greater installation flexibility, making it convenient for in-house business presentations, the display of information and images at public and commercial facilities, and for educational and training activities. Pioneer's advanced imaging technologies ensure that text is optimally visible and that both still and moving images are bright and crisp. This high quality, combined with many handy functions such as Dual Screen, make the PDP-427CMX an extremely effective way to convey all types of important visual information.



60-Inch WXGA Professional Plasma Display PDP-607CMX





PDP-507CMX





42-Inch XGA Professional Plasma Display PDP-427CMX



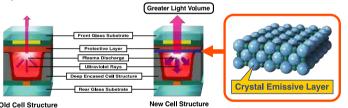
## Dynamic Imagery

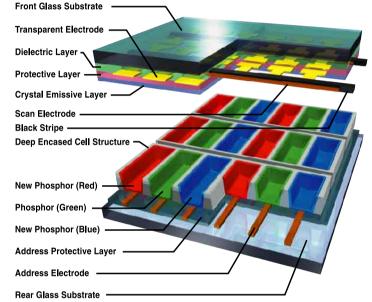
## **Exclusive Panel Technologies**

Achieves the dual goals of higher brightness and greater contrast.

PDP image quality takes another impressive step forward with Pioneer's new panel technologies. In addition to our exclusive Deep Encased Cell Structure, it uses another breakthrough technology called Crystal Emissive Layer to boost luminous efficiency beyond any previous model. The result is a first-of-its-kind level of high brightness and unprecedented dark-area contrast. Blacks are blacker, while light areas maintain their true brightness values. Bright-area contrast is also significantly higher, meaning that the PDP-427CMX will provide eye-catching imagery, even in bright places such as shopping malls, event venues and showrooms.

#### Comparison of Old and New Cell Structure

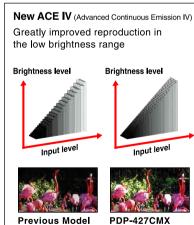




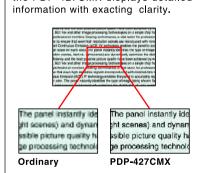
### New Pure Drive Pro

Superb picture quality designed for professional applications.

The best possible picture quality and most efficient PDP available is realized by combining color management, scaling, GUI and other image processing technologies on a single chip developed exclusively for Pioneer's professional plasma displays. Scaling performance, a vital factor for professional plasma displays, has been enhanced to ensure that even high-resolution signals are reproduced with minimal data loss. In addition, ACE IV technology enables the panel to accurately reproduce the full-range grayscale for each color. The panel instantly identifies the type of image being shown (fast- vs. slow-motion scenes, dark vs. light scenes) and intuitively optimizes the distribution of color gradation.



### Even when the image is expanded by video wall or point zoom functions. the PDP-427CMX displays detailed



Superior scaling performance

## Six Pro Use display modes allow image adjustment for professional applications

- •Under-Scan: Displays 100% of the image, including the outer edges that are normally cut off.
- •Color-Off: Removes color information for optimum display of black and white signals.
- •Still Image Processing: Displays still images accurately by varying movement detection processing.
- •Pure Image: Displays images as close as possible to the original signal with no image processing.
- High Contrast: Uses special dynamic range expansion to make images more vivid.
- •Blue Only: Used in broadcast and post production for display calibration.

## Powerful Functionality

## Dual Screen Function

### Standard Dual Screen Mode

IR remote and RS-232C control operations permit the use of Picture-in-Picture (P-in-P) and Side-by-Side modes. With P-in-P, the position of the sub-image can be shifted among four locations, or Side-by-Side images can be switched between the left and right positions. Audio can also be independently switched.









#### P-in-P Fade In/Out

This function allows an optional fade in/out transition of the sub-picture.

## Upgraded Side-by-Side Mode

Switch easily between Side-by-Side and P-out-P modes. It is also possible to select three horizontal aspect ratios for dual-image, full-screen display.









### P-in-P Display Variations

The P-in-P mode permits a number of display variations. There are multiple sizes of P-in-P sub-images which can be set in addition to the transparency of the sub-image from 0 to 80%.







### Sub-Image Detection

During P-in-P display, if the sub-image input signal is lost, the display will automatically switch to a full-screen image. P-in-P is automatically restored when the sub-image signal returns



Banner Mode





Easily display titles / captions prepared in PowerPoint® or other presentation software. There are ten positions for the titles / captions: eight horizontal settings and two portrait modes. The transparency of the on-screen titles can also be varied. \* PowerPoint is a registered trademark of Microsoft Corporation



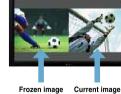


Dual Image Freeze

Dual Image Freeze temporarily freezes a displayed image. The still image can be the sub-image in P-in-P mode or the left-side image in Side-by-Side mode.



Current image



## Video Wall

### Use as Many as 25 PDPs

Pioneer makes it easy to configure multi-monitor video walls without any additional equipment. Possible configurations are 2x2, 3x3, 4x4 and 5x5.



## Two Display Modes



looking image across screen



### Power On Delay

This function automatically delays the powering up of each display to reduce the load on the power source.

### ABL Link

The ABL (Auto Brightness Limiter) Link function sets the brightness of each display at a uniform level (operates only with 2x2 and 3x3 configurations)







Auto ID Setting

Automatically sets an ID for each display connected via a combination control cable to permit simpler error-free setting (operates only with 2x2 and 3x3 configurations).

## Intelligent Serviceability

### RS-232C Status Feedback

When a command is transmitted from a control device to the PDP via the RS-232C interface, the PDP returns its status. This not only permits remote confirmation of current PDP status, it can also report the cause of errors, should they occur, expediting service response. The PDP-427CMX provides high-control capacity: combination (serial loop through) connections, variable baud rate setting, acknowledge function and more.

- Serial number information
- Product model name
- Hour meter
- Interior temperature information

## Power on/off information

- Input signal information
- Cause of error

## **Programmable Timer and Repeat Timer**

The PDP-427CMX has a high-performance, dual-image processing function that

switches from one input image to another at the high speed of approximately

0.4

Seconds

High Speed Image Switching

0.4 seconds, ensuring smooth displays and presentations

Control designated functions according to a schedule by using the weekly timer and ten programmable functions including power on/off, input selection, and activation of image retention alleviation modes. In addition, the Repeat Timer can be set to repeat various image states at prescribed times. (When using Video Wall, operates only with 2x2 and 3x3 configurations)



## AMX Duet™ Program Support

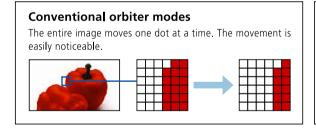
The PDP-427CMX makes use of AMX's Duet™ Partner technology to offer automatic and smooth system integration. By enabling two-way communication with the AMX controller via the RS-232C interface.

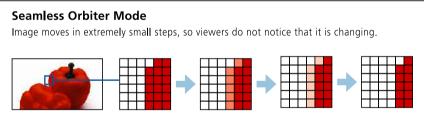
## Engineered Reliability

## Seamless Orbiter

Conventional orbiter modes reduce image retention by moving the displayed image by one pixel at regular intervals. Because some viewers may notice the movement, it interferes with a smooth picture quality. The Seamless Orbiter

function, however, moves the entire image in smaller steps of less than a pixel. Extensive Pioneer research determined the best image orbiting patterns without creating noticeable movement.





## Other Image Retention Management Modes

•Auto side mask: When a 4:3 image is displayed, the side masks are automatically applied. •Side mask brightness adjustment: Adjusts side mask brightness during 4:3 image display. •White signal display: Displays white over the entire screen.

•Screen reversal display: Reverses the display image colors to help manage image retention. •Soft focus: Slightly blurs the edges of displayed images, to minimize noticeable image retention.

## Energy Efficiency

## Low Power Consumption and Five Energy Saver Modes

This PDP-427CMX achieves the industry's lowest power consumption of 285 W peak thanks to the high light emission efficiency of Pioneer's latest exclusive panel technologies. Five energy saver modes contribute to further lowering power consumption: Power Save, Intermediate, Linear Brightness (which decreases

the peak intensity of high-brightness images), Auto Brightness Control (which automatically adjusts panel brightness depending upon room lighting), and Video Mute (which temporarily turns off the displayed image).

## Other Features

- Large GUI Display Frame Rate Conversion Mode Display Call Point Zoom Intelligent Auto Setup
- Color Detail Adjustment Smart Cooling System Vertical and Left to Right Mirror Modes Priority Input Mode
- Normal and Studio Color Modes OSD Off LED Off IR and Key Lock Memory Lock

## Expansive Flexibility

## Unlimited Expandability to Meet Present and Future Needs - ES\* Card Slot Interface \*Expansion Solutions

The PDP-427CMX is designed for virtually 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 capabilities via a wide range of analog or digital signals, with additional control. This means that one PDP-427CMX can be used for multiple tasks, including various applications that other PDPs can't handle. Extensive flexibility is available right out of the box, and stays ready for future needs. Pioneer's "Expansion Solutions" are one more reason why the PDP-427CMX should be your first choice for a professional plasma display.







### **Options**

## PDA-5003



#### ■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: 1 Vp-p/75 Ω
		(S terminal)		C: 0.286 Vp-p/75 Ω (NTSC)
				0.3 Vp-p/75 Ω (PAL)
INPUT4	IN	BNC	Composite Video Signal	1 Vp-p/75 Ω
	OUT	BNC	Composite Video Signal	75 Ω
INPUT5	IN	BNC x 5	Analog RGB Signal	RGB: 0.7 Vp-p/75 Ω
			(Compatible with G on Sync)	G on Sync: 1 Vp-p/75 Ω
				HD/CS,VD: TTL level/75 Ω or 2.2 kΩ switchable
			Component Video Signal	Y: 1 Vp-p/75 Ω
				Pb/Cb, Pr/Cr: 0.525 Vp-p/75 Ω (75% saturation)

#### ■ AUDIO INPUT/OUTPUT

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

## PDA-5004



#### ■ 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: 1 Vp-p/75 Ω
		(S terminal)		C: 0.286 Vp-p/75 Ω (NTSC)
				0.3 Vp-p/75 Ω (PAL)
INPUT4	IN	RCA	Composite Video Signal	1 Vp-p/75 Ω
	OUT	RCA	Composite Video Signal	75 Ω
INPUT5	IN	RCA x 3	Component Video Signal	Y: 1 Vp-p/75 Ω
				Pb/Cb, Pr/Cr: 0.525 Vp-p/75 Ω (75% saturation)

### ■ AUDIO INPUT/OUTPUT

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

## Pioneer's Certified Third Party Expansion Solution Cards

# Extron® Electronics IPL M PDP-ES

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



/0	Connector	Signal
_AN	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:  $1920 \times 1200 @ 60$  Hz (From 0 ft. to 1000 ft.) Video compatibility: RGBHV, RGsB, NTSC, PAL

I/O	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
Optional Audio	RCA x 2 (L+R)	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

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Allows the PDP to connect directly to professional quality broadcast equipment or any other device with SMPTE-292M and SMPTE-259M output 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

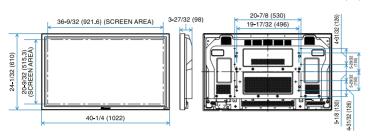
For more information: Alcorn McBride Inc. 3300 S.Hiawassee Road, #105, Orlando, FL 32835 USA Tel: 407-296-5800 Fax: 407-296-5801 URL: http://www.alcorn.com

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

## **DP-427CMX**

### ■ Dimensions ■

Unit: inch (mm)



## ■ Terminal Configuration I



### ■ Specifications

Effective Screen Size (WxH)	36-9/32" x 20-9/32" (921.6 mm x 515.3 mm) (42 in. Diag)
Aspect Ratio	16:9
Number of Pixels	1024 (Hor.) x 768 (Ver.)
Pixel Pitch	0.9 (Hor./RGB trio) mm x 0.671 (Ver.) mm
Dimensions (WxHxD)	40-1/4" x 24-1/32" x 3-27/32" (1022 mm x 610 mm x 98 mm)
Weight	67 lbs. 4 oz (30.5 kg)
Power Consumption	285 W
Power Requirements	AC 100 V to 120 V±10%, 50/60 Hz
Operating Temperature	32°F to 104°F (0°C to 40°C)
Operating Humidity	20% to 80%
Safety Regulations	UL 60950-1, FCC 15B class B, C-UL

### Input/Output Terminals

		Connector	Signal	Level/Impedance
INPUT 1	IN	Mini D-sub	Analog RGB Signal	RGB : 0.7 Vp-p/75 Ω
		15-pin	(G on Sync compatible)	G on Sync : 1 Vp-p/75 Ω
				HD/CS,VD : TTL level/2.2 kΩ
			Compatible with Microsoft	Plug & Play (VESA DDC 1/2B)
	OUT	Mini D-sub	Analog RGB Signal	75 Ω
		15-pin	(G on Sync compatible)	
INPUT 2	IN	DV <b>I-</b> D	Digital RGB Signal (DVI 1.	.0 Standard)
		24 <b>-</b> pin	Compatible with Microsoft	Plug & Play (VESA DDC 2B) and HDCP*

<sup>\*</sup>Applies only when equipped with PDA-5003/PDA-5004

### ■ Audio Input/Output Terminals

		Connector	Level/Impedance
AUDIO INPUT(INPUT1)	IN	Stereo mini	L/R: 500 mVrms/more than 10 kΩ
AUDIO INPUT(INPUT2)	IN	Stereo mini	L/R: 500 mVrms/more than 10 kΩ
AUDIO OUTPUT	OUT	Stereo mini	L/R: 500 mVrms/less than 5 kΩ(FIXED)
SPEAKER	OUT		L/R: 6 Ω to 16 Ω/8 W + 8 W(6 Ω)

### ■ 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

Model	Resolution (Dot x Line)	Vertical Frequency	Horizontal Frequency	Digita
IBM PC/AT	640 x 400	70.1 Hz	31.5 kHz	
Compatible	720 x 400	70.1 Hz	31.5 kHz	0
Computers		85.1 Hz	37.9 kHz	0
	640 x 480	59.9 Hz	31.5 kHz	0
		72.8 Hz	37.9 kHz	0
		75 Hz	37.5 kHz	0
		85 Hz	43.3 kHz	0
	1 -	100.4 Hz	51.1 kHz	0
		120.4 Hz	61.3 kHz	0
	848 x 480	60 Hz	31 kHz	0
	852 x 480	60 Hz	31.7 kHz	0
	800 x 600	56.3 Hz	35.2 kHz	0
	I	60.3 Hz	37.9 kHz	Ö
	I -	72.2 Hz	48.1 kHz	ŏ
	I	75 Hz	46.9 kHz	0
	I –	85.1 Hz	53.7 kHz	Ö
	I	99.8 Hz	63 kHz	0
	I	120 Hz	75.7 kHz	0
	1024 x 768	60 Hz	48.4 kHz	0
	1024 / 768	70.1 Hz	56.5 kHz	0
	H	75 Hz	60 kHz	0
	⊢	75 Hz 85 Hz		
	H	100.6 Hz	68.7 kHz 80.5 kHz	0
	⊢	100.6 Hz		- 0
	1152 x 864*		95.5 kHz	0
	1152 x 864	60 Hz	53.7 kHz	0
		72 Hz	64.9 kHz	0
		75 Hz	67.5 kHz	0
	1280 x 768*	56.2 Hz	45.1 kHz	0
	L	59.8 Hz	48 kHz	0
		69.8 Hz	56 kHz	0
	1280 x 800*	60 Hz	49.7 kHz	0
	1280 x 854*	60 Hz	53.1 kHz	0
	1280 x 960*	60 Hz	60 kHz	0
		85 Hz	85.9 kHz	0
	1360 x 765*	60 Hz	47.7 kHz	
	1360 x 768*	60 Hz	47.7 kHz	0
	1376 x 768*	59.9 Hz	48.3 kHz	0
	1280 x 1024*	60 Hz	64 kHz	0
		75 Hz	80 kHz	0
		85 Hz	91.1 kHz	0
		100.1 Hz	108.5 kHz	
	1400 x 1050*	60 Hz	65.3 kHz	0
		75 Hz	82,3 kHz	0
		85 Hz	93.9 kHz	
	1680 x 1050*	60 Hz	65.3 kHz	0
	1600 x 1200*	60 Hz	75 kHz	Ŏ
	1	65 Hz	81.3 kHz	
	H	70 Hz	87.5 kHz	
	H	75 Hz	93.8 kHz	_
	I	85 Hz	106.3 kHz	<del>                                     </del>
	1920 x 1080*	50 Hz	56.2 kHz	0
	(1920 x 1080 is Digital only)	60 Hz	67.5 kHz	
	1920 x 1080 is Digital only)	60 Hz	74.6 kHz	0
	1920 x 1200BB*	60 Hz	74.6 KHZ	-
pple Macintosh®	640 x 480	66.7 Hz	35 kHz	- 0
ppie macintosne	832 x 624	74.6 Hz	49.7 kHz	+
				+
	1024 x 768	74.9 Hz	60.2 kHz	
	1152 x 870*	75.1 Hz	68.7 kHz	-
	1440 x 900*	60 Hz	56 kHz	0
WS Series	Work Station	60 Hz	64.6 kHz	0
	1280 x 1024*	71.2 Hz	75.1 kHz	0
	1280 x 1024*	72 Hz	78.1 kHz	0
	1152 x 900*	66 Hz	61.8 kHz	0
	1152 x 900*	76 Hz	71.7 kHz	0
	1280 x 1024*	76.1 Hz	81.1 kHz	0
	1024 x 768	60 Hz	49.7 kHz	0
	1280 x 1024*	60 Hz	63.9 kHz	-

### Included Accessories

Power Cord x 1, Remote Control Unit x 1, AA batteries x 2, Cleaning Cloth x 1, Speed Clamps x 3, Cable Bands x 3, Ferrite Cores (for Audio Cable) x 3, Ferrite Cores (for Power Code) x 2, Cable Ties x 2, Display Stands x 2, Washers x 2, Hex Hole Bolts x 2, Remote Control Unit Holder x 1, Operating Instructions x 1, Warranty x 1



\*Apple Macintosh is a registered trademark of Apple Computer, Inc. \*IBM PC/AT is a registered trademark of IBM Corporation. \*Microsoft is a registered trademark of Microsoft Corporation. \*VESA is a registered trademark of Video Electronics Standards Association. Optional Accessories

## Optional Side-Mount Speakers PDP-S56-LR Maximum input 30 W/6 ohms

Dimensions (WxHxD) 3-17/32" x 24-1/32" x 3-23/32" (90 mm x 610 mm x 94.4 mm) Weight 8 lbs. 6 oz (3.8 kg) (2 speakers)

**Tabletop Stand** PDK-TS07

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)















PWM -503





PDWB -5003 FLAT WALL MOUNTING BRACKET TILTING WALL MOUNTING BRACKET These products are offered for sale only in the US market and may not be suitable for use in other regions. The products are not Pioneer products and are subject to the manufacturer's own warranty. 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.

• Specifications and design subject to modification without notice. • This equipment is sold on the condition it will be installed by a competent professional engineer with sufficient training and skill to carry out its proper to the professional or retail service engineer. Pioneer cannot accept liability for damage due to inappropriate installation location or improper handling, assembly, installation, set-up, operation or reteroitriting. • Plasma Display Systems display images consisting of hundreds of thought of the professional or retail service engineer. Pioneer cannot accept liability for damage due to inappropriate installation location or improper handling, assembly, installation, set-up, operation or reterior control in the profession of remote control is for other equipment or cannot be a simple set of the profession or remote control is for other equipment or cannot profession as a simple set of the profession of remote control is for other equipment or cannot profession as a simple set of the profession of remote control is for other equipment or cannot profession as a simple set of the profession of remote control is for other equipment or cannot profession as a simple set of the profession of the profes



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### PIONEER ELECTRONICS OF CANADA, INC.

300 Allstate Parkway, Markham, Ontario L3R OP2, Canada TEL: 877-283-5901 FAX: 877-746-4848 http://www.pioneerelectronics.ca







tion where PDP products are have both achieved ISO 14001 certification.