

**Pioneer** *sound.vision.soul*



**PDP-50MXE10**  
**PDP-50MXE11**  
50 inch WXGA  
Professional Plasma Displays



[www.pioneer-eur.com](http://www.pioneer-eur.com)





**Outstanding Brightness**  
**Ultra High Contrast**  
**Superior Colour Purity**  
**16:9 Aspect Ratio**  
**True XGA Compatibility**  
**Wide Range of Inputs**  
**High Reliability and Durability**

Introducing the most advanced industrial plasma displays on the market. Featuring the unique Pioneer Direct Colour Filter, the PDP-50MXE11 offers superb image clarity and reduces reflections in bright environments. The equally highly specified PDP-50MXE10 incorporates Pure Colour Filter II allowing for the most demanding of applications.

## Image Processing

### PURE Drive Technology

Pioneer's exclusive PURE Drive technology encompasses the entire range of image generation and processing that delivers the PDP-50MXE10 and PDP-50MXE11's astoundingly clear, smooth and natural picture. Unlike other PDP systems, PURE Drive maintains all video signals in the digital domain, which eliminates signal loss, reduces distortion and provides a far greater degree of image control.

### Super CLEAR Drive | FIG 1 |

An important innovation is Super CLEAR Drive technology. It processes the basic colour elements enabling the reproduction of an astonishing 7 billion colours. It also virtually eliminates false contouring and improves greyscale. A stunning 1792 greyscales can now be achieved and the overall effect ensures that alternative displays simply can not match the subtlety of colour and superb contrast – even in dark scenes – offered by Pioneer.

## Panel Technology

### True Matrix Imaging with Deep Encased Cell Structure | FIG 2 |

The cells of a plasma display panel are where the light is generated and are a crucial determinant of its image reproduction capabilities. Pioneer has developed the Deep Encased Cell Structure that eliminates light leakage from neighbouring cells to sharpen image clarity.

### Direct Colour Filter

For bold colour reproduction and the minimum reflection with maximum colour, the PDP-50MXE11 benefits from Pioneer's unique Direct Colour Filter, a film-type filter which is attached directly onto the front of the plasma panel. It significantly reduces reflection from outside light as well as reflection from the panel itself, this improves the contrast in bright environments.

### Pure Colour Filter II

For more rugged applications such as touchscreen and public areas the PDP-MXE10 benefits from the innovative Pure Colour Filter

II. This decreases external light reflectivity with the added benefits of a robust design. The result is higher contrast even in light intensive environments like shopping malls.

## Product Features

### Multi Picture Display | FIG 3 |

The PDPs offer a choice of three dual picture modes for simultaneous display of images from any of the connected inputs.

### Intelligent Auto Setup

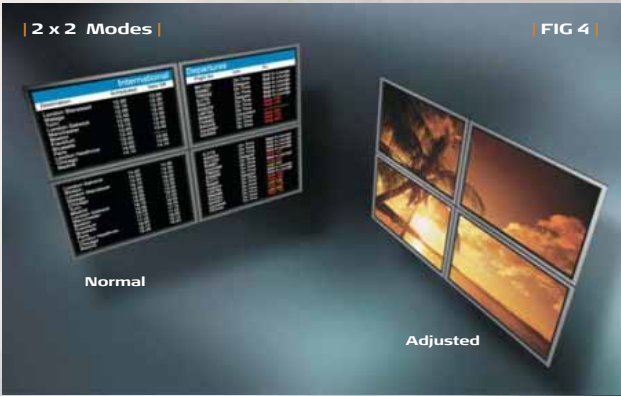
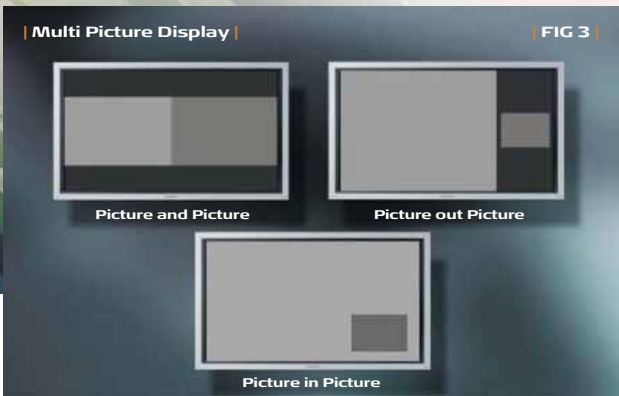
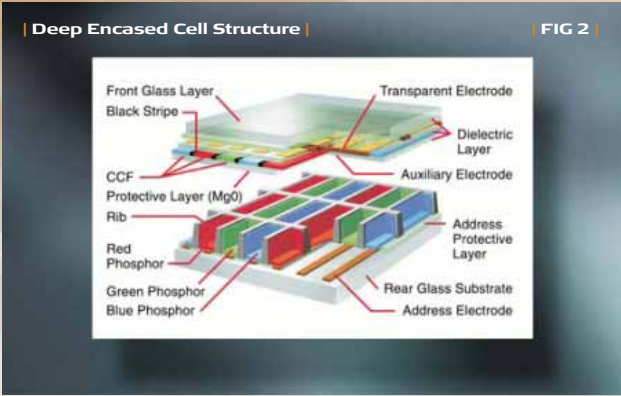
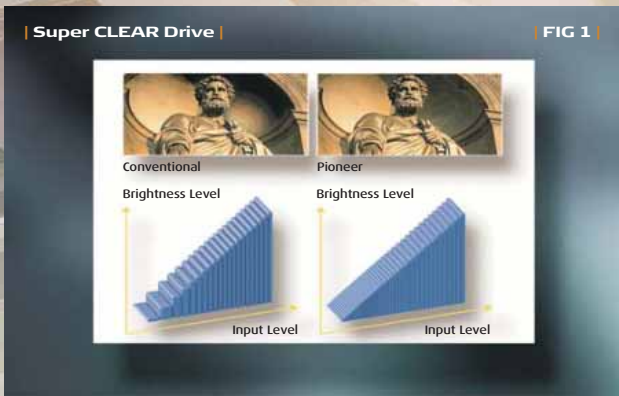
Auto Setup Mode allows instant 'one-touch' screen synchronisation with a PC. Auto Adjust Mode detects the PC signal and automatically adjusts the position of the image on screen.

### Colour Detail Adjustment

Colour adjustment can be performed to emphasise any specific colour without affecting other colours.

### Multi Language OSD

Easy to use GUI. (English, French, German, Italian,



Japanese, Spanish and Chinese).

**2 x 2 Video Wall | FIG 4 |**

2 x 2 Mode allows a 2 x 2 video wall using a total of four units without the need for an expensive video wall processor. Two modes are available. These are designed to accommodate both Data and Video Sources.

Normal Mode splits the image into 4 parts without losing any of the data that would normally be obscured by the PDP frame.

Adjusted Mode splits the image into 4 parts keeping the overall image complete as though looking through a window.

**Point Zoom**

The Enhanced Point Zoom function lets you instantly expand a PC image in three steps (1.5x, 2.0x, 3.0x), great for emphasising key points in presentations. The zoom navigation sub-display area makes it easy to confirm the expanded portion.

**Function Lock**

A number of functions can be locked, including operation keys, remote control and last memory. This makes the display system more secure for public environments.

**RS-232C Features**

A supplied expansion card provides an RS-232C external control interface and combination

terminals to allow monitoring and operation of the unit from a remote PC or control system.

**Integrator Menu**

Permits precise white balance adjustment, as well as control of various professional functions that enable the display to be perfectly tailored to its installed environment.

**Expansion Solutions**

Pioneer Plasma Displays provide unparalleled connectivity. In addition to the standard 15 Pin D-sub and DVI-D connector the displays include two open architecture expansion slots. One slot is dedicated for signal input with two optional Pioneer expansion cards available to handle all of the major video signals.

The second is a unique communications slot that includes an RS-232C expansion card as standard. With their open architecture, these slots enable interchangeable cards to be designed by third party developers to handle all current and future analogue, digital and communications signals.

**Outstanding Reliability and Durability**

**Extremely Low Power consumption**

The PDP-50MXE10 and PDP-50MXE11 only

consume a maximum of 360W whilst on and only 1W during stand-by mode.

**Four Energy Save Modes**

A choice of four energy save modes further reduce power consumption. These modes can be switched automatically by use of an ambient light sensor.

**Screen Management Modes**

To prevent burn-in both PDPs employ a number of advanced modes, RGB separate full mask, Side mask brightness adjustment, Orbiter and Inverse modes.

**Screen Management Timer Feature**

When activated several programmable functions are performed, such as power ON and OFF, Inverse mode and full mask.

**Smart Cooling System**

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

**Peak Pattern Detection System**

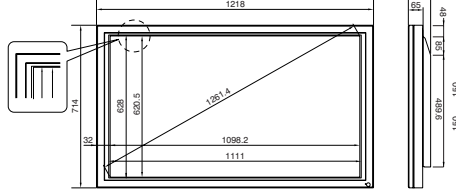
Helps to prevent burn-in by monitoring the prolonged display of static images.

**To find out more about Pioneer's PDP Range visit [www.pioneer-eur.com](http://www.pioneer-eur.com)**

## PDP-50MXE10/11 General Specifications

Effective Screen Size (W x H)	1098.2 x 620.5 mm
Aspect Ratio	16:9
Number of Pixels (Hor x Ver)	1280 x 768
Pixel Pitch (Hor,RGB trio x Ver)	0.858 x 0.808 mm
Dimensions (W x H x D)	1218 x 714 x 98 (Not including handles) mm
Weight	PDP-50MXE10 = 41.0 Kg PDP-50MXE11 = 35.7 Kg
Direct Colour Filter	PDP-50MXE11 Only
Pure Colour Filter	PDP-50MXE10 Only
Power Consumption	380W - 1W at stand by
Power Requirements	AC 100 - 240V ± 10% 50/60Hz
Operating Temperature	0°C - 40°C
Operating Humidity	20% - 80%
Safety Regulations	CE (EN60950, EN55022 classB EN55024, EN61000-3-2, EN61000-3-3), IEC950 C-Tick (AS/NZS3280, AS/NZS3548)

## Dimensions



## Optional Accessories

PDP-S05-LR	Speakers (Grey)	PDP-50MXE10
PDP-S15-LR	Speakers (Silver)	PDP-50MXE11
PKD-50HW3	Touchscreen Device	PDP-50MXE10 Only
PKD-TS01	Tabletop Stand	
PKD-5005	Bracket	
PKD-5011	Wall Bracket	
PKD-WM02	Flat Wall Bracket	
PKD-5012	Ceiling Bracket	
PKD-5014	Mobile Cart	

## Signal Input/Output Terminals

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

## Audio Input/Output Terminals

Audio Input/Output	Connector	Level / Impedance
Audio Input 1	IN	Stereo mini L / R: 500mVrms / more than 10kΩ
Audio Input 2	IN	Stereo mini L / R: 500mVrms / more than 10kΩ
Audio Output	OUT	Stereo mini L / R: 500mVrms / less than 5kΩ Fixed 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 from personal computer	Baud rate	1200, 2400, 4800, 9600, 19200, 38400 bps
Combination IN/OUT	Connector	Mini-DIN 6-pin (x2)

## PC Input Signal

Resolution dot x line	Vertical Frequency	Horizontal Frequency	Digital RGB	Usage
640 x 400	56.4Hz	24.8kHz		NEC PC-9800
720 x 400	70.1Hz	31.5kHz		NEC PC-9800
640 x 480	85.1Hz	37.9kHz		
	60Hz	31.5kHz	YES	
	66.7Hz	35.0kHz		Apple Macintosh 13*
	72.9Hz	37.9kHz		
	75Hz	37.5kHz		
848 x 480	85Hz	43.3kHz		
	60Hz	31.0kHz	YES	
	60Hz	35.2kHz	YES	
	72Hz	37.9kHz	YES	
	75Hz	48.1kHz		
800 x 600	75Hz	48.9kHz		
	85Hz	53.7kHz		
	60Hz	49.7kHz		Apple Macintosh 16*
	60Hz	48.4kHz	YES	
	70Hz	56.5kHz		
1024 x 768	75Hz	60.0kHz (60.2kHz)		( )Indicates Apple Macintosh 19*
	(74.9Hz)			
	85Hz	68.7kHz		
1280 x 720**	60Hz	44.7kHz		
	56Hz	45.1kHz	YES	
	60Hz	47.8kHz	YES	
1280 x 768**	70Hz	56.1kHz		
	60Hz	53.7kHz	YES	
	72Hz	64.9kHz		
1152 x 864*	75Hz	67.5kHz		
	75.1Hz	68.7kHz		Apple Macintosh 21*
	66Hz	61.8kHz		Sun Microsystems LO
1152 x 900*	76Hz	71.7kHz		Sun Microsystems HI
	60Hz	60.0kHz	YES	
	60Hz	64.0kHz	YES	
1280 x 1024*	75Hz	80.0kHz		
	85Hz	91.2kHz		
	60Hz	65.3kHz	YES	
	75Hz	82.3kHz		
	85Hz	93.9kHz		
1600 x 1200*	60Hz	75.0kHz		
	65Hz	81.3kHz		
	70Hz	87.5kHz		
	75Hz	93.8kHz		
	85Hz	106.3kHz		

\*Compressed or partial display  
\*\*Compressed or partial display on 43PDP

## Video Input Signal Compatibility Input 1 (Analogue 15 pin D-sub)

\* requires optional video card to be installed

Component / RGB	50Hz:	576i, 576p, 625i, 625p, 720p, 1080i
	60Hz:	480i, 480p, 525i, 525p, 720p, 1035i, 1080i

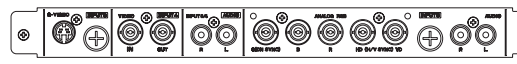
## Video Input Signal Compatibility Input 2 (DVI-D wHDCP)

\* requires optional video card to be installed

Ver Hz	Hor kHz	Signal Format	Screen Size				Remarks
			4:3	FULL	ZOOM	CINEMA	
50	15.625	Component	*	*	*	*	625i (576i) / SDTV
		RGB	*	*	*	*	
		Component	x	*	x	x	*
31.25	7.8125	Component	*	*	*	*	625p (576p) / SDTV
		RGB	*	*	*	*	
		Component	x	*	x	x	*
37.50	15.625	Component	*	*	*	*	750p (720p) / HDTV
		RGB	*	*	*	*	
		Component	x	*	x	x	*
60	15.734	Component	*	*	*	*	525i (480i) / SDTV
		RGB	*	*	*	*	
		Component	*	*	*	*	*
31.5	15.734	Component	*	*	*	*	525p (480p) / SDTV
		RGB	*	*	*	*	
		Component	x	**1	x	x	*
33.75	16.667	Component	x	**1	x	x	1125i (1035i) / HDTV
		RGB	x	**1	x	x	
		Component	x	*	x	x	*
45.0	15.734	Component	x	*	x	x	750p (720p) / HDTV
		RGB	x	*	x	x	
		Component	x	*	x	x	*

\* Can be selected from either FULL 1080i or FULL 1035i (x = Not Available)

## PDA-5003 Video Card



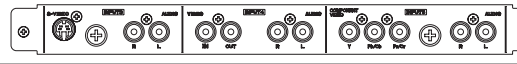
## PDA-5003 Video Input / Output (3.58/4.43 NTSC, PAL, PAL-M, PAL-N, SECAM)

Connector	Signal	Level / Impedance	Level / Impedance
Input 3	IN	Mini DIN 4 Pin S Terminal	Y/C Separate video signal Y: 1Vp-p / 75Ω C: 0.286Vp-p / 75Ω (NTSC) C: 0.3Vp-p / 75Ω (PAL)
	OUT	BNC	Composite video signal 1Vp-p / 75Ω
Input 4	IN	BNC	Composite video signal 75Ω
	OUT	BNC	Composite video signal 75Ω
Input 5	IN	BNC x 5	Analogue RGB Signal (Compatible with G on Sync) RGB: 0.7Vp-p / 75Ω G on Sync: 1Vp-p / 75Ω HD / CS, VD: TTL / 75Ω or 2.2kΩ switchable
	OUT	BNC x 5	Component Video Signal Y: 1Vp-p / 75Ω Pb / Cb, Pr / Cr: 0.525Vp-p / 75Ω

## PDA-5003 Audio Input/Output

Audio Input	Connector	Level / Impedance
Audio Input (Input 3/4)	RCA pin x 2	L / R: 500mVrms / more than 10kΩ
Audio Input (Input 5)	RCA pin x 2	L / R: 500mVrms / more than 10kΩ

## PDA-5004 Video Card



## PDA-5004 Video Input / Output (3.58/4.43 NTSC, PAL, PAL-M, PAL-N, SECAM)

Input	Connector	Signal	Level/Impedance
Input 3	IN	Mini DIN 4Pin S terminal	Y / C Separate video signal Y: 1Vp-p / 75Ω C: 0.286Vp-p / 75Ω (NTSC) C: 0.3Vp-p / 75Ω (PAL)
	OUT	RCA	Composite video signal 75Ω
Input 4	IN	RCA	Composite video signal 1Vp-p / 75Ω
	OUT	RCA	Composite video signal 75Ω
Input 5	IN	RCAx3	Component video signal Y: 1Vp-p / 75Ω Pb / Cb, Pr / Cr: 0.525Vp-p / 75Ω
	OUT	RCAx3	Component video signal 75Ω

## PDA-5004 Audio Input / Output

Audio Input	Connector	Level/Impedance
Audio Input (Input 3)	RCA pin x 2	L / R: 500mVrms / more than 10kΩ
Audio Input (Input 4)	RCA pin x 2	L / R: 500mVrms / more than 10kΩ
Audio Input (Input 5)	RCA pin x 2	L / R: 500mVrms / more than 10kΩ

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