Not all displays are built the same.
Look Deeper.

Advanced image processing increases efficiency while producing dynamic, vibrant content. Using breakthrough technologies, Pioneer provides unprecedented brightness and greatly improved dark-area contrast.

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 Emission Layer to boost luminous efficiency beyond any previous model. The result is a first-in-its-kind level of high brightness and unprecedented dark-area contrast. Black is blacker, while bright areas maintain their true brightness values. Brightness contrast is also significantly higher, meaning that the PDP-507CMX will provide spectacular imagery even in bright places such as shopping malls, event venues and showrooms.

Comparison of Old and New Cell Structure

New First-Surface Pure Color Filter

Another new technology developed for the PDP-507CMX, the New First-Surface Pure Color filter is an industrial grade filter optically bonded directly to the plasma glass to reduce light reflection. The result is higher color accuracy and better contrast in brightly lit spaces.

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, GIF and other image processing technologies on a single chip developed exclusively for Pioneer's plasma display models. 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 of grayscale for each color. The panel instantly identifies the type of image being shown (photo, animation scenes, dark vs. light scenes) and automatically optimizes the distribution of color prediction.

Superior scaling performance

Even when the image is expanded by video wall or point zoom functions, the PDP-507CMX displays detailed information with existing clarity.

New ACE IV (Advanced Continous Emittance IV) Greatly improved reproduction in the low brightness range.

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**
Remote and RS232 control operation permits 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 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%.

**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 Portrait modes. It is also possible to select three horizontal aspect ratios for dual-image, full-screen display.

**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**
Cards 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 title can also be set. *PowerPoint is registered trademark of Microsoft Corporation.

**Video Wall**

**Use as Many as 25 PDPs**
Fisher makes it easy to configure multi-monitor video walls without any additional equipment. Possible configurations are 2x2, 3x3, 4x4, and 5x5.

**Two Display Modes**
Adjusted mode for a more natural fixing image across screen monitors.

**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 Limited) 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 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. Exceeding service response, the PDA-502CMX provides high-controlled capacity combination (serial loop through) connections, variable baud rate setting, acknowledge function and more.

- Serial number information
- Power on/off information
- Product model name
- Input signal information
- Hour meter
- Error of error
- Interstellar temperature information

High Speed Image Switching
The PDA-502CMX has a high-performance, dual-input processing function that switches from one input image to another at the high speed of approximately 0.2 seconds, ensuring smooth display and presentations.

Programmable Timer and Repeat Timer
Control designated functions according to a schedule by using the weekly timer and programmable functions including power on/off input selection, and activation of image retention allocation modes. In addition, the Repeat Timer can be set to repeat various images at prescribed times. (When using digital wall, operates only with 250 and 333 configurations)

AMX Duett™ Program Support
The PDA-502CMX makes use of AMX’s Duett™ Partner technology to offer automatic and smooth system integration, by enabling seamless 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 not 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.

Conventional Orbiter modes
The entire image moves one dot at a time. The movement is easy to notice.

Seamless Orbiter Mode
The entire image moves in extremely small steps, so viewers do not notice that it is changing.

Other Image Retention Management Modes
- Auto slide mask: When a 4:3 image is displayed, the side masks are automatically adjusted. This adjusts the side brightness adjustment to be consistent with 4:3 image display. White signal display: Displays white over the entire screen.
- Store memory display: Stores the display image in the event of image retention, and returns the display image to the initial image when the power is turned on.
- Channel memory display: Displays the edges of the displayed image, to minimize noticeable image retention.

Energy Efficiency
Low Power Consumption and Five Energy Saver Modes
The PDA-502CMX achieves the industry's lowest power consumption of 340 W peak thanks to the high, light efficiency. Functions of the latest technologies contribute to lowering power consumption. Power Saver, Intermediate, Linear Brightness (which decreases the peak intensity of high-brightness images), Auto Brightness Control (which automatically adjusts the brightness depending on 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
The PDA-502CMX 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 is designed with a removable communication card that includes RS-232C and combination ID interfaces. The second slot may optionally be used to enable capabilities via a wide range of analog or digital signals, with additional control. The means that one PDA-502CMX can be used for multiple tasks, including various applications that other PDPs can handle. Extensive flexibility is available right out of the box, and state-of-the-art technology for future needs. Pioneer’s “Expansion Solutions” are one more reason why the PDA-502CMX should be your first choice for a professional display system.

Communication Slot
Options

BNC Connector Interface Card
PDA-5003

RCA Connector Interface Card
PDA-5004

Pioneer’s Certified Third Party Expansion Solution Cards

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

Integrated Analog CAT-5 Receiver
Magenta Research MultiView™ AK1000PDP

HDBSI Digital Video Interface
Alcorn McBride PDP-HDSBI™

*Third-party Expansion Solution cards are not Pioneer products and are subject to each manufacturer’s own warranty.