The New PlasmaSync integrates the most advanced technologies into multimedia presentation displays and public displays

As a result of our efforts to pursue high quality images in the practical imaging range, our PlasmaSync materializes the highest colour expression in the industry with 4,096 steps, which is equivalent to 68.7 billion colours. NEC’s unique signal processing circuit Digital AccuDevice and the CCF (Capsulated Colour Filter) method reproduce vivid colours and pure white as well as accurate data. Various functions for professionals, such as the Enhanced Split Screen function applied in the 61-inch and 50-inch monitors, and the enhanced Multi Screen function, introduced in all models, will exhibit its superior performance on various occasions, including conferences and presentations in offices or educational sites, electronic advertising displays and data displays in transport facilities, banks, security trading, and shops etc.

Fully digitized high-quality images

All image signals are fully digitized using NEC’s unique signal processing circuit Digital AccuDevice. High-definition progressive conversion produces comprehensive, high-quality images, and resolution conversion generates images with unmatched accuracy.

High-definition progressive expression

Progressive expression becomes more vivid. The MultiArea Superior Sampling Technology renders smooth image expression without jagged edges and colour bleeding. Furthermore, the new Scan Converter dramatically improves character readability.

The highest capability for colour expression in the industry with 4,096 steps equivalent to 68.7 billion colours

The “Gamma L2” technology for precisely expressing details in dimly-lit places achieves the highest colour expression in the industry with 4096 gradation steps, which is equivalent to 68.7 billion colours. With the rich, smooth gradation expression, images in dimly-lit rooms can be reproduced with accuracy. (As of July 2004)

Vivid, breathtaking colours

The CCF (Capsulated Colour Filter) method and the AccuCrescendo filter reproduce accurate and vivid colours and pure whites. The colour tuning function adjusts any single colour to enhance the overall display into a world of colours.

The highest ranking in the industry for contrast ratio in bright conditions

The new plasma display panel features the PX-50MX3 and PX-42VR3 monitors. They achieve the industry’s highest contrast ratio of 200:1 for bright conditions. High brightness is achieved in the practical imaging range and reduces power consumption. (As of July 2004)

Functions for professionals

The timer function and the most numerous input/output interfaces in the industry are standard, as well as the capability to configure a multi-screen system with a maximum of 25 (5 x 5) screens. The double screen function is provided in the 50-inch and 61-inch monitors for efficient support of your presentations.

Long life panel

A panel lifetime of 60,000 hours has been achieved for all models.
Digital AccuDevice, the unique signal-processing circuit developed by NEC

- Developed by NEC Digital AccuDevice, the unique signal-processing circuit
- LSIs packaged on the circuit are integrated into three circuits to achieve the full digital processing of all input signals without any omissions. Furthermore, all processing steps for video input signals are fully digitized. Since there is no analog conversion process involved and original video images can be processed digitally as they are, there is no deterioration of the signal, and the high-definition progressive expression and clear resolution conversion suppresses noise and produces breathtaking images.

Mass Area Superior Sampling Technology achieves high-definition progressive expression

- All input signals are displayed using progressive expression.
- In ordinary processing, interlaced signals are converted into progressive signals, and the sampling of interpolation lines are processed on the basis of brightness signals. With the newly developed Mass Area Superior Sampling Technology, color signals are sampled and interpolated together with the brightness signals. The new technology produces sharp expression without jagged edges or color bleeding.

Vivid, breathtaking colours

- Insatiable desire for vivid colour reproduction

The highest contrast ratio in the industry at 200:1 under bright conditions

- PX-SDM4X and PX-42 XM3 achieve the highest contrast ratio in bright conditions in the industry, as a result of efforts to pursue higher visibility under bright lights or in sunlight. Obtain vivid, sharp video images regardless of the environmental conditions of the locations. (As of July 2004)

AccuCrimson reproduces accurate red colour

- AccuCrimson, employed in the front filter, is a technology for attenuating the orange colour included in the wavelength for red, which is particular to the plasma display. AccuCrimson clearly expresses the delicate difference between cinnamon and red colours and reproduces natural skin tones—tasks which are difficult with ordinary plasma displays.

Before introducing AccuCrimson

- Before introducing AccuCrimson, the colour spectrum of phosphor
- After introducing AccuCrimson

The Colour Tuning function adjusts specific colours

- The Colour Tuning function adjusts specific colours, such as red, blue, or green, individually without affecting the white balance. Since the white balance remains stable, specific colours can be adjusted depending on the video source or the purpose of use. For instance, deepen the blue colour of the sea or the green color of leaves.

Long life panel

- A panel lifetime of 60,000 hours has been achieved for all models. 

Four kinds of Colour temperature setting modes are available

- The colour temperature setting adjusts the tone of the white colour. Four preset modes and a professional mode for advanced adjustment are provided for setting the colour temperature according to the purpose or preference.

External light

Cross-sectional view of the new cell structure

- Optimized red color
- Optimized red color
- Optimized red color
- Optimized red color

Optimized red color

- The CCF method, a unique NEC Technology, and black stripes reproduce vivid, accurate colour

- With the CCF (Capsulated Colour Filter) method, each pixel is capasculated and embedded with color filters for the three primary colours (RGB). The results are that the red, blue, and green colors are reproduced more accurately. By providing black stripes on the barriers between cells, a sharp black colour is also expressed. By employing NEC's unique technology, vivid colours are reproduced and a pure white color is expressed to reduce screen deflection.

Chromatically diverse

- The highest capability for colour expression in the industry with 4.0% steps equivalent to 68.7 billion colours

By introducing Gamma-12, rich and smooth expressions with 4.0% steps - the highest number in the industry - are achieved in the respective colours of R, G, and B to provide the industry's highest capability for color expression equivalent to 68.7 billion colours in the dark portion. The expression reproduces accurate, more faithful details. (As of July 2004)

- The newly designed Scan Converter dramatically improves character readability

The Scan Converter converts input signals in accordance with the resolution of the display. Since sampling accuracy for the interpolation of data has been improved by approximately 4 times, and its conversion accuracy has also been improved by approximately 4 times (compared to NEC's ordinary products), small characters can also be displayed uniformly with a dramatic improvement in readability. With the digital zooming function, enlarged characters will not bleed or become fuzzy.

The new module is employed for high brightness and low power consumption

- The plasma display expresses colours with the following mechanism. Certain voltage is applied to rare gas sealed in the inside and then the phosphors are excited with the UV rays generated at that time. In the new module, the phosphors are improved and the gas composition ratio is modified to drastically improve its luminous efficiency. Since a new cell structure is employed where the grid barrier between the cells prevents interference from the electrical discharge, and a new electrode structure expands the effective discharge area, lower power consumption, high brightness, high contrast, and a long lifetime are achieved at the same time.
Enhanced Split Screen materializes appealing presentations.*

**Side-By-Side Function**

The side-by-side screen mode demonstrates its ability to deliver an appealing display of information by evolving two different images, such as “text + image”, on the screen at the same time. In the new 61-inch PlasmaSync PX-61XM3 and the new 50-inch PlasmaSync PX-50XM4, this function is improved further, so that three aspect ratio patterns can be selected for optimum screen display with the simple operation of a cursor key on the remote control unit. In addition, one screen can display scrolling text while the other screen maintains a 4:3 display ratio when the monitor is installed vertically. Depending on the use or purpose, expand the variety of content expressions through combinations of images and text or time-varying images and text data. Propose new applications as information displays in restaurants or hotels and advertisement displays in stores or showrooms.

[Note: Please refer to the vertical display modes to arrange the content vertically.]

**Digital Zoom Function enforces both the main and sub screens up to 900%**

In the side-by-side screen mode, both screens can enlarge images up to 900% by 6.3 points in 64 steps. With two Digital AccuDevice systems, very high-definition quality, can be maintained even when the image is enlarged. Information with extremely high visibility can be displayed. Comparison studies during presentations can be made by enlarging each screen and changing the position of the enlarged images with a cursor key.

[For the picture-in-picture screen mode, only the main screen can enlarge images.]

**Available in two screen modes—Picture-in-Picture and Side-by-Side**

Since input signals from any system can be displayed together, provide appealing visual expressions by combining images from two personal computers or the images from a PC and video signals. Two screen modes – Picture-in-Picture and Side-by-Side – are available and both have several display methods: Enhanced Split Screen has new functions for efficient use in business and educational presentations; informational and advertising displays for transport facilities, financial institutions, and commercial facilities; and remote videoconference systems.

A full range of new functions for a variety of business needs

- New Picture-in-Picture
- New Side-by-Side

- [Image]

**SUB PICTURE DETECT Function turns the sub screen on/off automatically**

This function automatically turns off the display of the sub screen if input signals for the sub screen are interrupted and restores it automatically when signals for the sub screen are input again. This is effective for the picture-in-picture screen mode. Since it is not necessary to turn both screens on/off, control of the two screens is simplified, so you can concentrate on the presentation or lecture. When input signals for the sub-screen are interrupted, the display will shift to the single screen mode.

**PICTURE FREEZE Function displays a still image on the sub screen**

Store a page of data displayed on the main screen on the clipboard memory and display the page on the sub screen. When scrolling several images continuously during a presentation, this function effectively compiles the two images displayed separately.

[When input signals for the sub-screen are interrupt, the display will shift to the single screen mode.]

**ZOOM NAVIGATION Function indicates the area being enlarged**

Display an entire image on the sub screen, and display the enlargement on the main screen. The position enlarged in the main screen is indicated with a + symbol on the sub screens. This function is effective for enlarging an important point or a detailed drawing of a map or CAD data then confirming the entire image and the point being enlarged.

* This is available only for analog RGB input. * This is available in the side-by-side screen mode as well.

**Picture-In-Picture Function**

- [Image]

**Two Digital AccuDevice systems deliver accurate, high quality images on both the main and sub screens**

The signal processing circuit, Digital AccuDevice, achieves Full Digital Sampling without thinning out the input signals and fully digitizes every process for processing image input signals. The new 61-inch PlasmaSync PX-61XM3 and the new 50-inch PlasmaSync PX-50XM4 are equipped with two Digital AccuDevice. Clear, progressive high-definition images, in which signal deterioration and noise are suppressed, are displayed on both the main and sub screens by fully digitizing the original visual images without converting them into analogue signals. Furthermore, since the 61-inch wide monitor is one of the largest in the industry, images on the sub screen are easy to see. The advanced new PlasmaSync 61XM3 and 50XM4 feature high quality images and variegated functions and supports image evolutions for presentations and video conferences, where detailed information must be displayed, and electronic advertising systems, where vivid visual images are required.

*High quality images are available on both the main and sub screens by employing two Digital AccuDevice systems.
Functions for professionals

The full capabilities of the PlasmaSync expression are exhibited by the professional specifications.

**Programmable timer function**

This function is for setting the time not only for turning the display on/off but also for switching between image sources and the screen-off function. Scheduled operations can be registered and executed with the plasma monitor solely without using external controls such as a PC. It is also significantly effective for switching images in the multi-screen system.

**GAME MODE**

Mode 1              Mode 2              Mode 3

**Screen Orbiter function with six modes**

If the same image is displayed on the screen for several hours, colors of the displayed image may change. The Plasmaport® has six long life modes (1: PLE Link, 2: Reverse, 3: White, 4: Picture shift, 5: Screen wiper, 6: Soft focus) to prevent this phenomenon. Implement the appropriate measures depending on the occasion. Occurrence of this phenomenon is out of the scope of the guarantee.

**Automatic ID function**

*Optional option when the loop-through function is used (upper unit is recommended). 60 inches x 25 screens.

**Power-on delay**

In order to reduce the load on the power supply, the power-on delay inserts a time delay when multiple displays of a multi-screen system are turned on.

**PLE Link function**

If the PLE Link function is turned on, the respective PLE functions of the multiple displays of a multi-screen system can be aligned each other. With this function, easy-to-see, vivid video images with uniform brightness are displayed.

**Vertical Installations**

The PlasmaSync can be installed in portrait orientation for convenient display of advertising materials or when space is limited.

**Outstanding connectivity of multiple interfaces**

The PlasmaSync ports support a variety of devices, including DVD, Hi Vision, Video, and PCs. The DVI ports also support HDCP, the next generation digital interface standard. The monitor is designed for future expandability, where the BOWPC can be installed on the rear panel of the monitor.

**Digital Zoom function of 900% with 4032 patterns**

This function enlarges any portion of the screen at 63 points by remote control. Size of images can be adjusted smoothly and precisely and enlarged up to 900% of the original with 64 steps.

**PLE Lock function with three modes is available**

In order to reduce power consumption, the PLE function decreases peak brightness when the screen displays large areas of white color. In order to improve the contrast ratio, it increases peak brightness when displaying large areas of black color. The PLE Lock function offers three modes with different brightness levels for choosing between optimum brightness, reducing unnecessary power consumption, or activating the screen-off function.

**A multi-screen system can be configured with a maximum of 25 screens**

Configure a multi-screen system with up to 25 screens. With the built-in zoom function, multi-screen systems of 25, 16, 9, and 4 screens can be configured. Versatile support functions significantly improve the efficiency of the settings required when the system is configured.

**OPTION**

PlasmaSync Multimedia Display Accessories

The PlasmaSync Accessory Range gives you the ultimate installation solutions for almost every environment, including vertical and angled situations.

Wall Mount Unit (PX-W2U) For wall mount installations.

Wall Mount Unit (PX-W3U) For wall mount installations.

Ceiling Mount Unit (PX-C1U) Allows the monitor to tilt forward 0 to 10° (horizontal only).

Ceiling Mount Unit (PX-C2U) Allows the monitor to tilt forward 0 to 10° (horizontal only).

Tilt Mount Unit (PX-T2U) In horizontal plane the monitor will tilt forward 0 to 10°. In vertical plane the monitor will tilt forward 0 to 10° and can be locked at 0° to 10°.

Tilt Mount Unit (PX-T3U) In horizontal plane the monitor will tilt forward 0 to 20°. In vertical plane the monitor will tilt forward 0 to 20° and can be locked at 0° to 20°.

Stand (PX-55T1U) / (PX-55T1V) Silver For free standing installations.

Attachable Speakers (PX-42SP1UQ) / (PX-42SP1UQS) Silver 10-warning speakers, stand-alone or attach to the monitor.

Attachable Speakers (PX-50SP1UQ) / (PX-50SP1UQS) Silver 20-warning speakers, stand-alone or attach to the monitor.

Attachable Speakers (PX-61SP1UQ) / (PX-61SP1UQS) Silver 20-warning speakers, stand-alone or attach to the monitor.

Pole Unit (PX-63M3U-P) Allows multiple monitors to be mounted on a pole unit (made to order). Attachments to this allow for vertical and horizontal mounting. Vertical Wall Mount Unit (PX-63M3U-P-V) Horizontal Pole Mount Unit (PX-63M3U-P-H).

Multi Screen Mount Unit (PX-42VP1U-M8) Multi Screen Mount Unit (Made to Order).

Multi Screen Support Unit (PX-42VM1U-M8) Pitch for PX-42VM1U-M8 (Made to Order).

Terminal Cover (PX-CVU2) For covering the terminal cable.

Vertical Wall Mount Unit (PX-42VP1U-VW) For installing in portrait position.

Stand Base (PX-42VP1U-PSS) Tilt Stand (PX-50VP1U-PS) Set the screen horizontally on the floor at an angle of 70°. Or used vertically at 70° (Made to Order).
### What is HDCP/HDCP technology?

HDCP (High-bandwidth Digital Content Protection) is a system for protecting digital content from unauthorized copying. It is designed to prevent the unauthorized distribution of high-definition digital video formats. If you experience issues with HDCP support, please ensure your external equipment is compatible with HDCP. If the problem persists, contact support for further assistance.

### Table of Signals supported

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<thead>
<tr>
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<tbody>
<tr>
<td><strong>Input Terminals</strong></td>
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<tr>
<td>D-sub 9-pin x 1 (RS-232C)</td>
<td>DVD 3 / HD 3 DVI-D 24-pin x 4</td>
<td>RGB 3 (Digital) DVI-D 24-pin x 4</td>
<td>RGB 1 (Analog) mini D-sub 15-pin x 1</td>
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<tr>
<td><strong>Resolution</strong></td>
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<td>1600 x 900</td>
<td>1024 x 768</td>
<td>800 x 600</td>
<td>640 x 480</td>
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<td><strong>Video</strong></td>
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<td>60.0</td>
<td>59.8</td>
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<tr>
<td><strong>Dimensions</strong></td>
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<tr>
<td>1106 (H) x 622mm (V)</td>
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<td><strong>Screen Size</strong></td>
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<td>57.9 (W) x 34.7 (H) x 4.7 (D) inches</td>
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<td><strong>Weight</strong></td>
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<td>44kg / 97 lbs (without stand)</td>
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<td><strong>Humidity</strong></td>
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<td>20 to 80% (no condensation)</td>
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<td><strong>Power</strong></td>
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<tr>
<td>AC100-240V 50/60Hz</td>
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<tr>
<td><strong>Input Skip, Colour Tune, Low Tone</strong></td>
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<tr>
<td>(Auto, 3 mode), Gamma Correction (4 modes), Plug and Play, Colour Temperature select (high / mid / mid low / low, user has 4 memories), Auto Picture, Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), S1/S2 / Display OSM / OSM adjustment / All reset), Function (Power management / Input skip / Sub Picture / V-Height / H-Width / Auto picture / Fine picture / Picture adjustment), Set up (Language* / BNC input *English, German, French, Italian, Spanish, Swedish, Chinese, Russian)</td>
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<td>**Wall 4-25m multi screen, Self Diagnosis, Image Burn reduction tools: (PLE LOCK1<del>3, 2-2 pull down Converter: (NTSC, 480I, 525I), 2-3 pull down converter: (NTSC, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-2 pull down converter: (PAL, 576I, 625I), Digital Zoom Function: (100-900% Selectable), Self Diagnosis, Image Burn reduction tools: (PLE LOCK1</del>3, Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I)), 2-2 pull down converter: (PAL, 576I, 625I), Digital Zoom Function: (100-900% Selectable), Self Diagnosis, Image Burn reduction tools: (PLE LOCK1~3, Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I)), Input SW (single, Input source select (Video1, Video2, Video3, DVD / HD1, DVD / HD2, DVD / HD3, PC input / RGB Select / HD Select / Input Skip / All reset), Option 2 (Power management / Input Skip / Sub Video / V-Height / H-Width / Auto Picture / Fine Picture / Picture adjustment), Option 1 (OSM / BNC Input / D-sub 9-pin / Balance / Audio input), Image Adjust (Aspect Mode / V-Position / H-Position / V-Height / H-Width / Auto Picture / Fine Picture / Picture adjustment), Power on / Stand By, Off timer, Display, Wide, Cursor (UP, Down, Left, Right), Menu / Enter, PX-61XR3 / PX-61XM3W / PX-61XR3 / PX-61XM3</td>
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<td>**Diagnosis, PDP Saver: (PEAK BRIGHT [100% /75% /50% /25%], ORBITER (Auto 1, 2, 3), Auto Picture, Input Skip, Colour Tune, Low Tone (3 mode), Auto ID, Wall 4-25 multi screen, Self Diagnosis, Image Burn reduction tools: (PLE LOCK1<del>3, Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-2 pull down converter: (PAL, 576I, 625I), Digital Zoom Function: (100-900% Selectable), Self Diagnosis, Image Burn reduction tools: (PLE LOCK1</del>3, Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I)), 2-2 pull down converter: (PAL, 576I, 625I), Digital Zoom Function: (100-900% Selectable), Self Diagnosis, Image Burn reduction tools: (PLE LOCK1~3, Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I)), Input SW (single, Input source select (Video1, Video2, Video3, DVD / HD1, DVD / HD2, DVD / HD3, PC input / RGB Select / HD Select / Input Skip / All reset), Option 2 (Power management / Input Skip / Sub Video / V-Height / H-Width / Auto Picture / Fine Picture / Picture adjustment), Option 1 (OSM / BNC Input / D-sub 9-pin / Balance / Audio input), Image Adjust (Aspect Mode / V-Position / H-Position / V-Height / H-Width / Auto Picture / Fine Picture / Picture adjustment), Power on / Stand By, Off timer, Display, Wide, Cursor (UP, Down, Left, Right), Menu / Enter, PX-61XR3 / PX-61XM3W / PX-61XR3 / PX-61XM3</td>
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<tr>
<td><strong>Other Features</strong></td>
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<td>*The features and specifications may be subject to change without notice.</td>
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*The image quality of this display may not be displayed properly. The problem may be an interference with the phosphorescent material contained in the display. Please replace the product using a replacement display. This product is a replacement display. Please replace the product using a replacement display. This product is a replacement display. Please replace the product using a replacement display. This product is a replacement display. Please replace the product using a replacement display.