Empowered by Innovation

NEC

PlasmaSync Range

42VM5 / 42VP5 / 42VR5
42" Wide VGA Multimedia Display

42XM3 / 42XR3
42" XGA Multimedia Display

50XM4 / 50XR4
50" Wide XGA Multimedia Display

61XM3 / 61XR3
61" Wide XGA Multimedia Display

OPTION
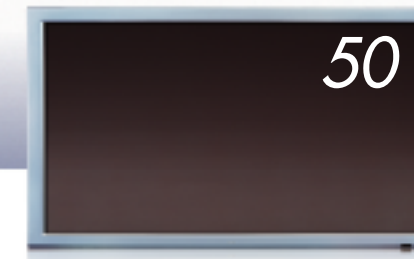
PlasmaSync

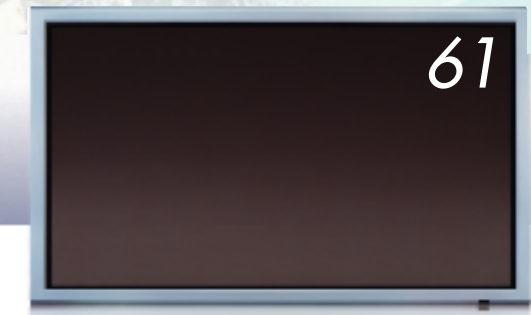PX-42VM5 / PX-42VP5 / PX-42XM3 PX-50XM4 PX-61XM3 PX-42VR5 / PX-42XR3 PX-50XR4 PX-61XR3

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 new 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 Mass Area 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-12" 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 this 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 AccuCrimson filter reproduce accurate, 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-50XM4 and PX-42XM3 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.

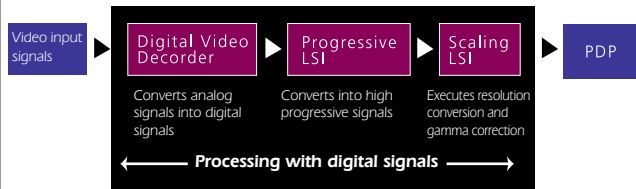# Fully digitized high-quality images elude all attempts

## Digital AccuDevice, the unique signal-processing circuit developed by NEC

Digital AccuDevice generates advanced vividness using a fully digitized signal-processing circuit. LSIs packaged on the circuit are integrated into three circuits to achieve the full digital sampling 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 suppress noise and produce breathtaking images.

- The introduction of new LSIs permit the fully digitized processing of video input signals

Video input signals ▶ **Digital Video Decoder** ▶ **Progressive LSI** ▶ **Scaling LSI** ▶ PDP

Converts analog signals into digital signals | Converts into high progressive signals | Executes resolution conversion and gamma correction

◀—— Processing with digital signals ——▶

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 colour bleeding.
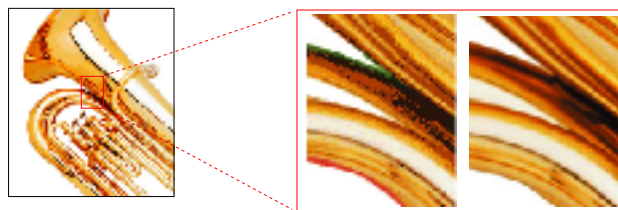
Ordinary expression   PlasmaSync

Vivid, breathtaking colours

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

PX-50XM4 and PX-42XM3 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 cinnabar and red colours and reproduces natural skin tones—tasks which are difficult with ordinary plasma displays.

Before introducing AccuCrimson
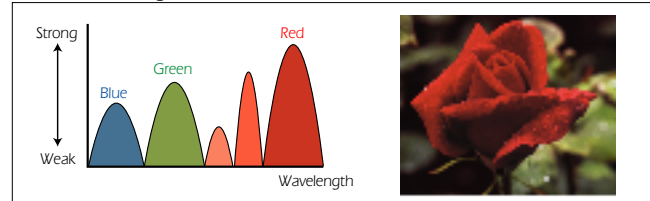
After introducing AccuCrimson®
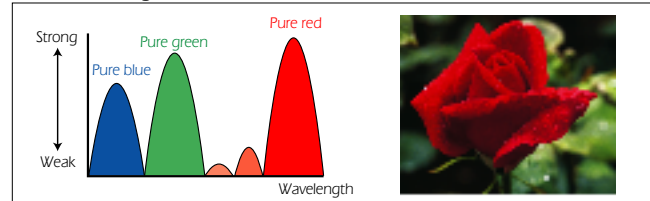
The CCF method, a unique NEC technology, and black stripes reproduce vivid, accurate colour

With the CCF (Capsulated Colour Filter) method, each pixel is capsulated 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.

CCF method and AccuCrimson — Black stripe
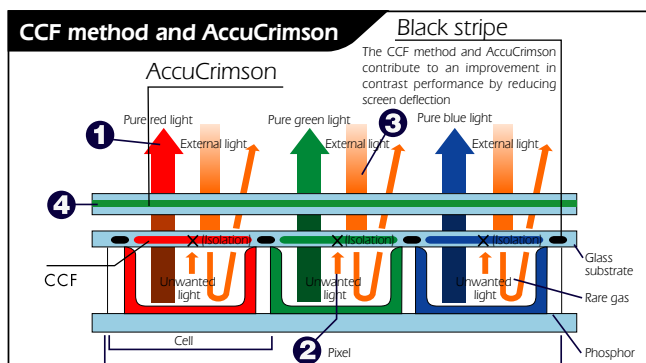
❶ Optimized colour spectrum of phosphor
The CCF improves the purity of colors by filtering the three primary colors (RGB).

❷ Removal of unwanted light
The CCF removes the orange color, particular to plasma displays, emitted by neon gas.

❸ Reduced screen deflection
The CCF and the black stripes reduce screen deflection to produce a high contrast ratio under bright conditions.

❹ Optimized red color
The CCF suppresses the wavelength of the orange colour included in red to reproduce a pure red color.

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

By introducing Gamma-12, rich and smooth expressions with 4,096 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)

■ **4 kinds of gamma correction modes**

Mode 1   Mode 2   Mode 3   Mode 4

◀— Brighter   Details of the dark portion   Darker —▶

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.

Ordinary expression   Expression with the Scan Converter
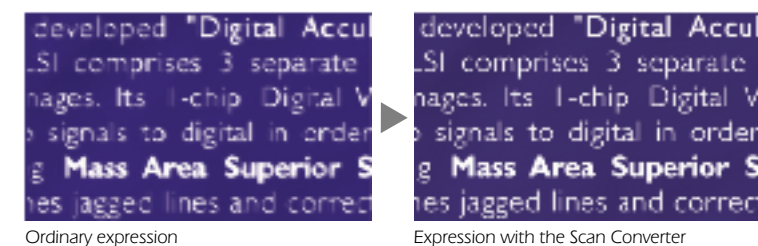
The Colour Tuning function adjusts specific colours

The Colour Tuning function adjusts specific colours, such as red, blue, or green, individually without influencing 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.

Chromaticity diagram

Colour PDP of the CCF method
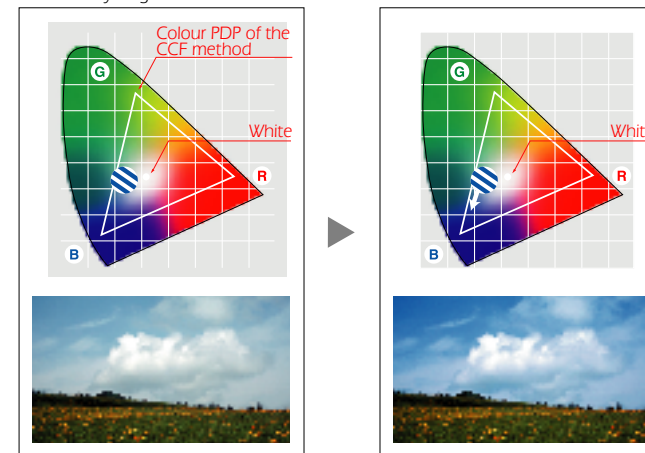
The new module is employed for high brightness and low power consumption

The plasma display expresses colours with the following mechanism. Certain voltage is applied to rare gas sealed on the inside and then the phosphors are irradiated with the UV rays generated at that time. In the new module, the phosphors are improved and the gas composition rate is reviewed 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, low power consumption, high brightness, high contrast, and a long lifetime are achieved at the same

○ **New cell structure**

Cross-sectional view of the new cell structure

Separation of cells with the grid barrier prevents interference from the electrical discharge and expands the discharge area.
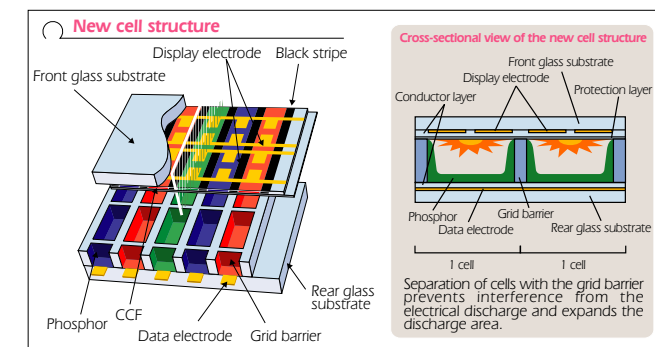
Long life panel

A panel lifetime of 60,000 hours has been achieved for all models.
*60,000 hour panel life is an approximate time for the display panel to reach half of it's original brightness. The panel life is based on motion video as the input source and all display settings at factory default. The time given does not imply any warranty beyond the products standard warranty.

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 adjustments are provided for setting the colour temperature according to the purpose or preference.

Low   Mid Low   Middle   High

◀— Red is stronger   Blue is stronger —▶
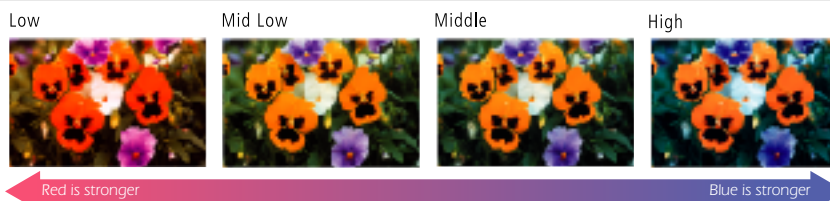
Enhanced Split Screen materializes appealing presentations*¹

*¹ Applied in PX-61XM3, PX-61XR3, PX-50XM4 and PX-50XR4
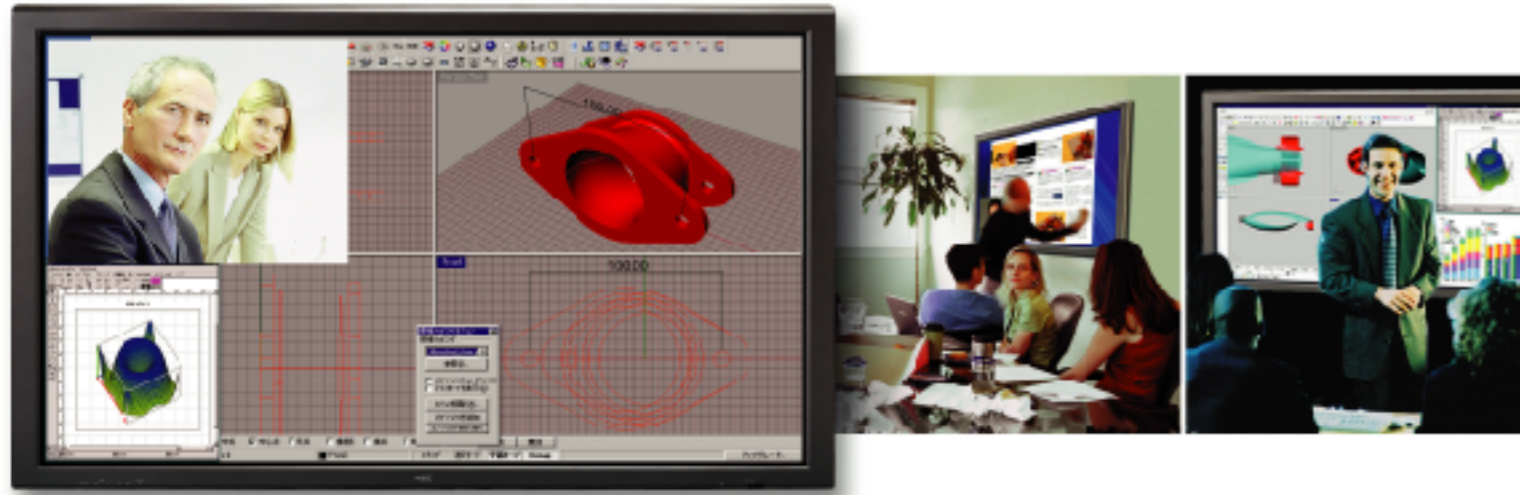
Two Digital AccuDevice systems deliver accurate, high quality images on both the main and sub screens
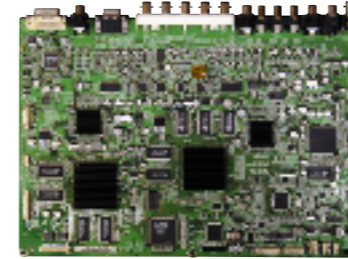
The signal processing circuit, Digital AccuDevice, achieves Full Digital Sampling without thinning out the input signals and fully digitizes every process for processing image input signals. The new 61-inch PlasmaSyncR PX-61XM3 and the new 50-inch PlasmaSyncR PX-50XM4 are equipped with two Digital AccuDevice. 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

Ordinary image　　　　New PlasmaSync

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

| 640 |
| 540 |
| 440 480 |
| 340 405 |
| 330 |
| 255 |

682 682
384 384 512
768 768

1024 340
576 768 192 225 768

640
540
440 360
340 304
248
192

1024 340
576 768 192 225 768

682 682
768 768

Normal Display　　Wide Display　　Main Screen　　Sub Screen　　(unit : pixel)

Side-By-Side Function

Side-By-Side Screen Mode for electronic advertisements and informational displays

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.
(*Please note that the vertical display needs to arrange the content vertically.)

Summer Resort
Fees schedule
Weekday
Adults　　$38
Children　　$28

Summer Resort
Fees schedule
Weekday
Adults　　$38
Children　　$28

Summer Resort
Fees schedule
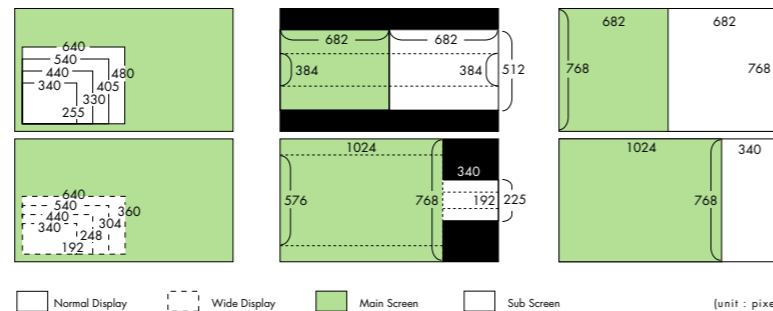Weekday
Adults　　$38
Children　　$28

You can choose one of three patterns for the horizontal aspect ratio.

Digital Zoom Function enlarges 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 63 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.)

Picture-In-Picture Function

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.

When signals for the sub screen are input again, the sub screen is restored.

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 compares the two images displayed separately.
(* This is available only for analogue RGB input. * This is available in the side-by-side screen mode as well.)

1st screen (previous image)　　　　2nd screen (current image)

SEAMLESS SWITCH Function instantly switches two input signals

An ordinary plasma monitor needs time to switch screens due to input signal processing. Because two signal processing circuits are employed in the new PlasmaSync 61XM3 and 50XM4, the speed for switching input signals has been dramatically improved. For instance, the monitor instantly processes the insertion of a CM image, information from video signals, or a signboard displaying information from video signals or PC signals, as well as immediately switching between a stadium score display (PC signals) and a video camera image display (video signals) or a reciprocal display between data and relayed images in a monitoring system. (It is not possible to switch input signals among video inputs.)

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 screen. 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 analogue RGB input. * This is available in the side-by-side screen mode as well.)

An enlarged image is displayed on the main screen

An entire image is displayed on the sub screen

Sub Screen Moving Function moves the sub screen to any one of four positions

Although the sub screen can be moved into two display positions on an ordinary plasma monitor, it can be moved into any one of four positions on the new PlasmaSync 61XM3 and 50XM4. Important information on the main screen may be hidden by the sub screen on an ordinary monitor. Since the sub screen can be moved more flexibly on the new monitor, important information on the main screen is always displayed.

The sub screen moves to any one of four positions on the display.

Functions for professionals
The full capabilities of the PlasmaSync expression are exhibited by the professional specifications

*2 Applied in PX-61XM3, PX-50XM4, PX-42XM3, PX-42VM5 and PX-42VP5

Programmable timer function*²

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 orbiter 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.

A multi-screen system can be configured with a maximum of 25 screens*²

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.

* If signals deteriorate when the loop-through function is used, a splitter is recommended.

61 inches x 25 screens

Approximately 305 inches

61 inches x 16 screens

Approximately 244 inches
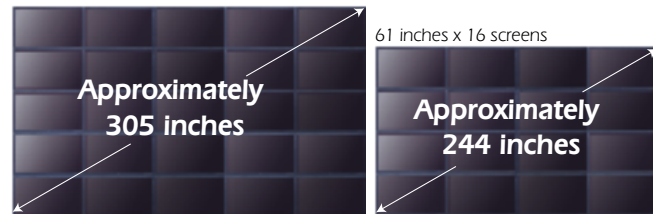
● Automatic ID function*²

In contrast with an ordinary system where IDs must be individually set through a remote controller for the respective displays comprising a multi-system, IDs are set automatically by connecting the respective display sets with wired cables (option) and setting the ID with the OSD function.
* Up to 9 screens

● Power-on delay*²

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.
* Up to 25 screens

● PLE Link function*²

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.
* Up to 9 screens

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 PlasmaSync® has six long life modes (1: PLE Lock, 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.)

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 colour. The PLE Lock function offers three modes with different brightness levels for choosing between optimum brightness, reducing unnecessary power consumption, or activating the screen orbiter function.

Mode 1   Mode 2   Mode 3

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.

Sales composition by model
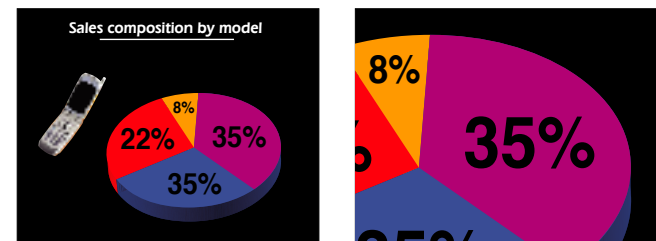
Vertical Installations*²

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 BOXPC can be installed on the rear panel of the monitor.

Video   PC
HD/DVD

Throughout*²   Throughout*²
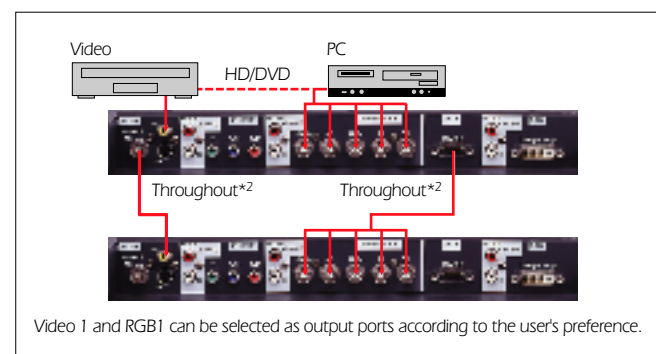
Video 1 and RGB1 can be selected as output ports according to the user's preference.

OPTION

PX-61XM3
PX-61XR3

PX-50XM4
PX-50XR4

PX-42XM3 / PX-42VM5
PX-42XR3 / PX-42VP5 / PX-42VR5

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-C2U)
Allows the monitors to tilt forward 0 to 30° (horizontal only).

Ceiling Mount Unit (PX-C3U)
In horizontal plane the monitors will tilt forward 0 to 30°.
In vertical plane allows 50XM4 to tilt forward 0 to 10°
and the 61XM3 to tilt forward 0 to 5°.

Tilt Mount Unit (PX-T2U)
Allows monitors to tilt forward 5 to 25° (horizontal only).

Tilt Mount Unit (PX-T3U)
In horizontal plane the monitors will tilt forward 0 to 30°.
In vertical plane allows 50XM4 to tilt forward 0 to 10°
and the 61XM3 to tilt forward 0 to 5°.

Stand
(PX-ST1U) / (PX-ST1U/S) Silver
For free standing installations.

Stand (PX-61ST1U) / (PX-61ST1U/S) Silver
For free standing installations.

Attachable Speakers
(PX-42SP1U) / (PX-42SP1U/S) Silver
10-watt speakers, stand-alone or attach to the monitor.

Attachable Speakers
(PX-50SP1U) / (PX-50SP1U/S) Silver
20-watt speakers, stand-alone or attach to the monitor.

Attachable Speakers
(PX-61SP1U) / (PX-61SP1U/S) Silver
20-watt speakers, stand-alone or attach to the monitor.

Pole Unit (PX-42M3U-P)
Allows multiple monitors to be mounted on a pole unit (made to order).
Attachments to this allow for vertical and horizontal mounting;
Vertical Mount Unit (PX-42M3U-P-V);
Horizontal Pole Mount Unit (PX-42M3U-P-H).

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

Multi Screen Support Unit
(PX-42VP1U-MW-S)
Plinth for PX-42VP1U-MW (Made to Order).

Terminal Cover (PX-CV2U)
For covering the terminal cabling.

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

Slant Stand (PX-42VP1U-PS)

Slant Stand (PX-50VP1U-PS)
Set the screen horizontally on the floor at an angle of 70°.
Or used vertically at 70° (Made to Order).

PX-W2U   PX-W3U   PX-C2U   PX-C3U

PX-T2U   PX-T3U   PX-ST1U   PX-ST1U/S

PX-61ST1U   PX-61ST1U/S   PX-42SP1U   PX-42SP1U/S

PX-50SP1U   PX-50SP1U/S   PX-61SP1U   PX-61SP1U/S

PX-42M3U-P   PX-42VP1U-MW / PX-42VP1U-MW-S   PX-CV2U

PX-42VP1U-VW   PX-42VP1U-PS   PX-50VP1U-PS

PX-61XM3 / PX-61XR3 — PX-50XM4 / PX50XR4

Model	Dots x lines	Vertical frequency (Hz)	Horizontal frequecy (kHz)	NORMAL	TRUE	FULL	DVI
IBM PC/AT[7] compatible computers	640x400	70.1	31.5	YES[2]	YES	YES	NO
	640x480	59.9	31.5	YES	YES	YES	YES
		72.8	37.9	YES	YES	YES	YES
		75.0	37.5	YES	YES	YES	YES
		85.0	43.3	YES	YES	YES	YES
		100.4	51.1	YES	YES	YES	YES
		120.4	61.3	YES	YES	YES	YES
	848x480	60.0	31.0	- -	YES	YES	YES
	852x480[1]	60.0	31.7	- -	YES	YES	YES
	800x600	56.3	35.2	YES	YES	YES	YES
		60.3	37.9	YES	YES	YES	YES
		72.2	48.1	YES	YES	YES	YES
		75.0	46.9	YES	YES	YES	YES
		85.1	53.7	YES	YES	YES	YES
		99.8	63.0	YES	YES	YES	YES
		120.0	75.7	YES	YES	YES	YES
	1024x768	60.0	48.4	YES[3]	- -	YES	YES
		70.1	56.5	YES[3]	- -	YES	YES
		75.0	60.0	YES[3]	- -	YES	YES
		85.0	68.7	YES[3]	- -	YES	YES
		100.6	80.5	YES[3]	- -	YES	YES
	1152x864	75.0	67.5	YES	- -	YES	YES
	1280x768	56.2	45.1	- -	- -	YES	YES
		59.8	48.0	- -	- -	YES	YES
		69.8[9]	56.0[9]	- -	- -	YES	YES
	1280x800[8]	60.0	49.7	- -	- -	YES	YES
	1280x854[8]	60.0	53.1	- -	- -	YES	YES
	1360x765	60.0	47.7	- -	- -	YES[3]	NO
	1360x768	60.0	47.7	- -	- -	YES[3]	NO
	1376x768	59.9	48.3	- -	- -	YES	NO
	1280x1024	60.0	64.0	YES[4]	- -	YES	YES
		75.0	80.0	YES[4]	- -	YES	YES
		85.0	91.1	YES[4]	- -	YES	YES
		100.1	108.5	YES[4]	- -	YES	NO
	1680x1050[8]	60.0	65.3	- -	- -	YES	NO
	1600x1200	60.0	75.0	YES	- -	YES	YES
		65.0	81.3	YES	- -	YES	NO
		70.0	87.5	YES	- -	YES	NO
		75.0	93.8	YES	- -	YES	NO
		85.0	106.3	YES	- -	YES	NO
	1920x1200[8]	60.0	74.6	- -	- -	YES	NO
	1920x1200RB[8]	60.0	74.0	- -	- -	YES	NO
Apple Macintosh[5,7]	640x480	66.7	35.0	YES	YES	YES	YES
	832x624	74.6	49.7	YES	YES	YES	YES
	1024x768	74.9	60.2	YES[3]	- -	YES	YES
	1152x870	75.1	68.7	YES	- -	YES	YES
	1440x900[8]	60.0	56.0	- -	- -	YES	YES
Work Station[7]	EWS4800 — 1280x1024	60.0	64.6	YES[4]	- -	YES	YES
		71.2	75.1	YES[4]	- -	YES	YES
	HP — 1280x1024	72.0	78.1	YES[4]	- -	YES	YES
	SUN — 1152x900	66.0	61.8	YES[4]	- -	YES	DVI
		76.0	71.7	YES	- -	YES	YES
		76.1	81.1	YES	- -	YES	YES
	1280x1024	60.0	64.0	YES[4]	- -	YES	YES
	SGI — 1024x768	60.0	49.7	YES[3]	- -	YES	YES
	1280x1024	60.0	63.9	YES[4]	- -	YES	YES
	IDC-3000G PAL625P — 768x576	50.0	31.4	YES[6]	- -	YES[6]	NO
	NTSC525P — 640x480	59.9	31.5	YES[6]	- -	YES[6]	NO

*1 Only when using a graphic accelerator board that is capable of displaying 852 X 480.
*2 This signal is converted to a 1024 dots X 640 lines signal.
*3 The picture is displayed in the original resolution.
*4 Aspect ratio is 5:4. This signal is Converted to a 960 dots X 768 lines signal.
*5 To connect the Macintosh computer, use the monitor adapter (D-Sub 15-pin) to your computer's video port.
*6 Other screen modes (ZOOM and STADIUM) are available as well.
*7 When viewing a moving picture at a vertical frequency greater than 65Hz, the picture may sometimes be unstable (jumpy). If this occurs, please set the refresh rate of external equipment to 60Hz.
To view 480i@60Hz (480 interlaced lines, 60Hz refresh rate) or 576i@50Hz (576 interlaced lines, 50Hz refresh rate) when sync polarity is "Sync on Green", set "RGB SELECT" to "MOTION".
*8 CVT standard compliant.

PX-42XM3 / PX-42XR3 — PX-42VM5 / PX-42VP5 / PX-42VR5

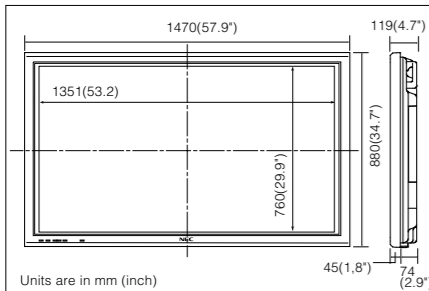| Model	Dots x lines	Vertical frequency (Hz)	Horizontal frequecy (kHz)	NORMAL	FULL	DVI
IBM PC/AT[8] compatible computers	640x400	70.1	31.5	YES[2][3]	YES	NO
	640x480	59.9	31.5	YES[3]	YES	YES
		72.8	37.9	YES[3]	YES	YES
		75.0	37.5	YES[3]	YES	YES
		85.0	43.3	YES[3]	YES	YES
		100.4	51.1	YES[3]	YES	YES
		120.4	61.3	YES[3]	YES	YES
	848x480	60.0	31.0	- -	YES[3]	YES
	852x480[1]	60.0	31.7	- -	YES[3]	YES
	800x600	56.3	35.2	YES	YES	YES
		60.3	37.9	YES	YES	YES
		72.2	48.1	YES	YES	YES
		75.0	46.9	YES	YES	YES
		85.1	53.7	YES	YES	YES
		99.8	63.0	YES	YES	YES
		120.0	75.7	YES	YES	YES
	1024x768	60.0	48.4	YES	YES[4]	YES
		70.1	56.5	YES	YES[4]	YES
		75.0	60.0	YES	YES[4]	YES
		85.0	68.7	YES	YES[4]	YES
		100.6	80.5	YES	YES[4]	YES
	1152x864	75.0	67.5	YES	YES	YES
	1280x768	56.2	45.1	- -	YES	NO
		59.8	48.0	- -	YES	YES
		69.8[9]	56.0[9]	- -	YES	YES
	1280x800[9]	60.0	49.7	- -	YES	YES
	1280x854[9]	60.0	53.1	- -	YES	YES
	1360x765	60.0	47.7	- -	YES	NO
	1360x768	60.0	47.7	- -	YES	NO
	1376x768	59.9	48.3	- -	YES	NO
	1280x1024	60.0	64.0	YES[5]	YES	YES
		75.0	80.0	YES[5]	YES	YES
		85.0	91.1	YES[5]	YES	YES
		100.1	108.5	YES[5]	YES	NO
	1680x1050[9]	60.0	65.3	- -	YES	NO
	1600x1200	60.0	75.0	YES	YES	NO
		65.0	81.3	YES	YES	NO
		70.0	87.5	YES	YES	NO
		75.0	93.8	YES	YES	NO
		85.0	106.3	YES	YES	NO
	1920x1200[9]	60.0	74.6	- -	YES	NO
	1920x1200RB[9]	60.0	74.0	- -	YES	NO
Apple Macintosh[6][8]	640x480	66.7	35.0	YES[3]	YES	YES
	832x624	74.6	49.7	YES	YES	YES
	1024x768	74.9	60.2	YES	YES[4]	YES
	1152x870	75.1	68.7	YES	YES	YES
	1440x900[8]	60.0	56.0	- -	YES	YES
Work Station	EWS4800[8] — 1280x1024	60.0	64.6	YES[5]	YES	YES
		71.2	75.1	YES[5]	YES	YES
	HP[8] — 1280x1024	72.0	78.1	YES[5]	YES	YES
	SUN[8] — 1152x900	66.0	61.8	YES[5]	YES	YES
		76.0	71.7	YES	YES	YES
	1280x1024	76.1	81.1	YES[5]	YES	YES
	SGI — 1024x768	60.0	49.7	YES	YES	YES
	1280x1024	60.0	63.9	YES[5]	YES	YES
	IDC-3000G PAL625P — 768x576	50.0	31.4	YES[7]	YES[7]	NO
	NTSC525P — 640x480	59.9	31.5	YES[7]	YES[7]	NO

*1 Only when using a graphic accelerator board that is capable of displaying 852 X 480.
*2 PX-42XM3 : This signal is converted to a 768 dots X 640 lines signal. PX-42VM5 : This signal is converted to a 640 dots X 400 lines signal.
*3 PX-42VM5 : The picture is displayed in the original resolution. The picture will be compressed for other signals.
*4 PX-42XM3 : The picture is displayed in the original resolution. The picture will be compressed for other signals.
*5 PX-42VM5 : Aspect ratio is 5:4. This signal is converted to a 600 dots X 480 lines signal. PX-42XM3 : Aspect ratio is 5:4. This signal is converted to a 720 dots X 768 lines signal.
*6 To connect the Macintosh computer, use the monitor adapter (D-Sub 15-pin) to your computer's video port.
*7 Other screen modes (ZOOM and STADIUM) are available as well.
*8 When viewing a moving picture at a vertical frequency greater than 65Hz, the picture may sometimes be unstable (jumpy). If this occurs, please set the refresh rate of external equipment to 60Hz.
To view 480i@60Hz (480 interlaced lines, 60Hz refresh rate) or 576i@50Hz (576 interlaced lines, 50Hz refresh rate) when sync polarity is "Sync on Green", set "RGB SELECT" to "MOTION".
*9 CVT standard compliant.

NOTE:
- While the input signals comply with the resolution listed in the table above, you may have to adjust the position and size of the picture or the fine picture because of errors in synchronization of your computer.
- When a 1280 dots X 1024 lines signal or 1600 dots X 1200 lines signal is input to the monitor, the picture will be compressed.
- The sync may be disturbed when a nonstandard signal other than the aforementioned is input.
- PX-61XM3 / PX-50XM4 : This monitor has a resolution of 1365 dots X 768 lines. It is recommended that the input signal should be XGA, wide XGA, or equivalent.
- PX-42XM3 : This monitor has a resolution of 1024 dots X 768 lines. It is recommended that the input signal should be XGA, or equivalent.
- PX-42VM5 : This monitor has a resolution of 853 dots X 480 lines. It is recommended that the input signal should be VGA, wide VGA, or equivalent.
- With digital input some signals are not accepted.
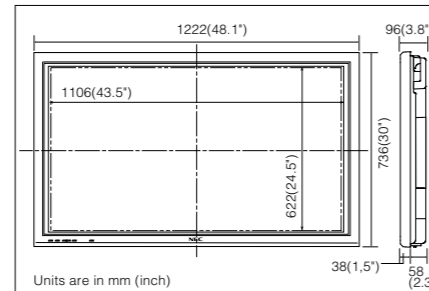- If you are connecting a composite sync signal, use the HD terminal.

What is HDCP/HDCP technology?
HDCP is an acronym for High-bandwidth Digital Content Protection. High bandwidth Digital Content Protection (HDCP) is a system for preventing illegal copying of video data sent over a Digital Visual Interface(DVI).
If you are unable to view material via the DVI input, this does not necessarily mean the PDP is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community(Digital Content Protection, LLC).
- "IBM PC/AT" and "XGA" are registered trademarks of International Business Machines, Inc. of the United States.
- "Apple Macintosh" is a registered trademark of Apple Computer, Inc. of the United States.

Dimensions
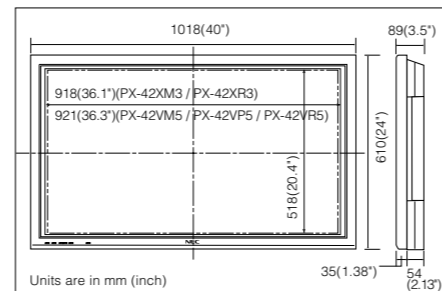
■ PX-61XM3 / PX-61XR3 — 1470(57.9") / 119(4.7") / 1351(53.2) / 880(34.7") / 76(29.9") / 45(1,8") / 74(2.9")
Units are in mm (inch)

■ PX-50XM4 / PX-50XR4 — 1222(48.1") / 96(3.8") / 1106(43.5") / 736(30") / 622(24.5") / 38(1,5") / 58(2.3")
Units are in mm (inch)

■ PX-42XM3 / PX-42XR3 / PX-42VM5 / PX-42VP5 / PX-42VR5 — 1018(40") / 89(3.5") / 918(36.1")(PX-42XM3 / PX-42XR3) / 921(36.3")(PX-42VM5 / PX-42VP5 / PX-42VR5) / 610(24") / 518(20.4") / 35(1.38") / 54(2.13")
Units are in mm (inch)

Specifications

	PX-61XM3 / PX-61XR3		PX-50XM4 / PX-50XR4		PX-42XM3 / PX-42XR3		PX-42VM5 / PX-42VP5 / PX-42VR5	
	PX-61XM3W	PX-61XR3W	PX-50XM4W	PX-50XR4W	PX-42XM3W	PX-42XR3W	PX-42VM5W / PX-42VP5W	PX-42VR5W
Screen Size	1351 (H) x 760mm (V) mm 53.2"(H) x 29.9"(V) inches diagonal 61"		1106 (H) x 622mm (V) mm 43.5"(H) x 24.5"(V) inches diagonal 50 "		918 (H) x 518mm (V) mm 36.1"(H) x 20.4"(V) inches diagonal 42"		921(H) x 518mm (V) mm 36.3"(H) x 20.4"(V) inches diagonal 42" 42VM5W:Installed AR (Anti-Reflection) Fitter 42VP5W:Installed AG (Anti-Glare) Fitter	
Aspect Ratio	16:9							
Resolution	1365 (H) x 768 (V) pixels				1024 (H) x 768 (V) pixels		853 (H) x 480 (V) pixels	
Pixel Pitch	0.99(H)x0.99(V)mm 0.039"(H)x0.039"(V)inches		0.81 (H) x 0.81 (V)mm 0.032"(H) x 0.032"(V)inches		0.897 (H) x 0.675 (V)mm 0.035"(H) x 0.027"(V)inches		1.08 (H) x 1.08 (V)mm 0.04"(H) x 0.04"(V)inches	
Colour Processing	4,096 steps, 68.7 billion colors							
Signals Synchronization Range	Horizontal: 15.5 to 110 kHz (automatic: step scan) Vertical: 50.0 to 120.0 Hz (automatic: step scan)							
Bezel colour	Gray	Silver	Gray	Silver	Gray	Silver	Gray	Silver
Input Signals	RGB, NTSC (3.58 / 4.43), PAL(B, G, M, N), PAL60, SECAM, HD[1], DVD[1], DTV[1]							
Input Terminals	(VIDEO1 and RGB1 can also be used as OUTPUT terminals)[2]							
RGB	RGB 1 (Analog) mini D-sub 15-pin x 1 / RGB 2 (Analog) BNC (R, G, B, H/CS, V)x 1[3] / RGB 3 (Digital) DVI-D 24-pin x 1[4]							
Video	Video 1 BNC x 1 / Video 2 RCA-pin x 1 / Video 3 S-Video: DIN 4-pin x 1							
DVD/HD/DTV	DVD 1 / HD 1 RCA-pin (Y, PB[CB], PR[CR]) x 1[1] / DVD 2 / HD 2 BNC (Y, PB[CB], PR[CR])x 1[1][3] / DVD 3 / HD 3 DVI-D 24-pin x 1[4]							
Audio	Stereo RCA x 3 (Selectable)							
External Control	D-sub 9-pin x 1 (RS-232C)							
Sound Output	9W+9W at 6 ohm				8W+8W at 6 ohm			
Power Supply	AC100-240V 50/60Hz							
Current Rating	8.0A (maximum)		7.6A (maximum)		5.2A (maximum)		4.5A (maximum)	
Power Consumption	540W (typical)		435W (typical)		305W (typical)		270W (typical)	
Dimensions	1470 (W) x 880 (H) x 119 (D) mm 57.9 (W) x 34.7 (H) x 4.7 (D) inches		1222 (W) x 736 (H) x 96 (D) mm 48.1 (W) x 30 (H) x 3.8 (D) inches		1018 (W) x 610 (H) x 89 (D) mm 40 (W) x 24 (H) x 3.5 (D) inches			
Weight	61.0kg / 134.5 lbs (without stand)		44kg / 97 lbs (without stand)		29.5kg / 65.0 lbs (without stand)		28.5kg / 62.8 lbs (without stand)	
Environmental Considerations	Operating Temperature 0˚c to 40˚c / 32˚F to 104˚F Humidity 20 to 80% (no condensation) Altitude 0 to 2800 m / 0 to 9180 feet / Storage Temperature -10˚c to 50˚c / 14˚F to 122˚F Humidity 10 to 90% (no condensation) Altitude 0 to 3000 m / 0 to 9840 feet							
Front Panel User Controls	Power on / off, Input source select, Volume up / down/ OSM control							
Remote Control Function	PX-61XM3 / PX-50XM4 (RP-114) Power on / Stand By, Input source select, OSM control, Volume up / down, Cursor (UP, Down, Left, Right), Pointer, Zoom up / down, Mute, Wide, Display, Off timer, Auto adjust, ID select, Clear, Side by side, Picture in picture, Single, Select / Freeze / PX-61XR3 / PX-50XR4 (RP-112) Power on / Stand By, Off timer, Display, Wide, Cursor (UP, Down, Left, Right), Menu / Enter, Volume up / down, Pointer, Zoom up / down, Side by side, Picture in picture, Single, Input source select (Video1, Video2, Video3, DVD / HD1, DVD / HD2, DVD / HD3, PC / RGB), Picture memory				PX-42XM3 / PX-42VM5 / PX-42VP5 (RP-109) Power on / Stand By, Input source select, OSM control, Volume up / down, Cursor (UP, Down, Left, Right), Pointer, Zoom up / down, Mute, Wide, Display, Off timer, Auto adjust, ID select, Clear / PX-42VR5 (RP-113) Power on / Stand By, Off timer, Display, Wide, Cursor (UP, Down, Left, Right), Menu / Enter, Volume up / down, Mute, Zoom up / down, Contrast, Brightness, Colour temp, Picture mode, Single, Input source select (Video1, Video2, Video3, DVD / HD1, DVD / HD2, DVD / HD3, PC / RGB), Picture memory			
OSM Functions	PX-61XM3 / PX-50XM4 Picture (Contrast / Brightness / Sharpness / Colour / Tint / Picture mode / Noise reduction / Colour temperature / White balance / Gamma / Low tone / Colour Tune), Audio (Bass / Treble / Balance / Audio input), Image Adjust (Aspect Mode / V-Position / H-Position / V-Height / H-Width / Auto Picture / Fine picture / Picture adjustment), Option 1 (OSM / BNC Input / D-Sub Input / RGB Select / HD Select / Input Skip / All reset), Option 2 (Power management / Cinema mode / Long life[PLE, Orbiter, Inverse, White, Screen wiper, Soft focus] / Gray level / S1/S2 / Picture set up), Option 3 *2 (Timer / Power on mode / Control lock / IR Remote / Loop out / ID number / Video wall[Divider, Position, Disp. mode, Auto ID, Image adjust, Power on delay, PLE link, Timer]), Option 4 (Sub.P detect / Zoom nav / Pic freeze / Seamless SW), Advanced OSM, Language*, Colour system, Source information *English, German, French, Italian, Spanish, Swedish, Chinese, Russian / PX-61XR3 / PX-50XR4 Picture (Contrast / Brightness / Sharpness / Colour / Tint / Picture mode / Noise reduction / Colour temperature / Low tone / Colour Tune / Cinema mode / Picture mode), Audio (Bass / Treble / Balance / Audio input), Image Adjust (Aspect mode / V-Position / H-Position / V-Height / H-Width / Auto picture / Fine picture / Picture adjustment), Set up (Language* / BNC input / D-sub input / HD select / RGB select / DVI set up / Colour system / Back ground / Gray level / P. detect / Zoom nav / Picture freeze / PDP saver: (PEAK BRIGHT, ORBITER, INVERSE/WHITE, SCREEN WIPER, SOFT FOCUS, OSM ORBITER, OSM CONTRAST)), Signal Information * English, German, French, Italian, Spanish, Swedish, Chinese, Russian				PX-42XM3 / PX-42VM5 / PX-42VP5 Picture (Contrast / Brightness / Sharpness / Colour / Tint / Picture mode / Noise reduction / Colour temperature / White balance / Gamma / Low tone / Colour Tune), Audio (Bass / Treble / Balance / Audio input), Image Adjust (Aspect Mode / V-Position / H-Position / V-Height / H-Width / Auto Picture / Fine picture / Picture adjustment), Option 1 (OSM / BNC Input / D-Sub Input / RGB Select / HD Select / Input Skip / All reset), Option 2 (Power management / Cinema mode / Long life[PLE, Orbiter, Inverse, White, Screen wiper, Soft focus] / Gray level / S1/S2 / DVI Set up), Option 3*2 (Timer / Power on mode / Control lock / IR Remote / Loop out / ID number / Colour Temp / Video wall[Divider, Position, Disp. mode, Auto ID, Image adjust, Power on delay, PLE link, Timer]), Advanced OSM, Language*, Colour system, Source information *English, German, French, Italian, Spanish, Swedish, Chinese, Russian / PX-42XR3 / PX-42VR5 Picture (Contrast / Brightness / Sharpness / Colour / Tint / Picture mode / Noise reduction / Colour temperature / Low tone / Colour tune), Audio (Bass / Treble / Balance / Audio input), Image Adjust (Aspect mode / V-Position / H-Position / V-Height / H-Width / Auto picture / Fine picture / Picture adjustment), Set up (Language* / BNC input / D-Sub input / HD select / RGB select / DVI set up / Colour system / Back ground / Gray level / S1/S2 / Display OSM / OSM adjustment / All reset), Function (Power management / Input skip / PDP saver: [PEAK BRIGHT, ORBITER, INVERSE/WHITE, SCREEN WIPER, SOFT FOCUS, OSM ORBITER, OSM CONTRAST]), Signal Information * English, German, French, Italian, Spanish, Swedish, Chinese, Russian			
Other Features	PX-61XM3 / PX-50XM4 Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I,1035I, 1080I), 2-3 pull down Converter: (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter: (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function: (100-900% Selectable), Video Wall 4-25multi screen, Self Diagnosis, Image Burn reduction tools: (PLE LOCK1~3, INVERSE, WHITE, ORBITER (Auto1,2 / Manual), SCREEN WIPER, SOFT FOCUS), Colour Temperature select (high / mid / mid low / low, user has 4 memories), Control lock: (Except power SW), Auto Picture, Input Skip, Colour Tune, Low Tone (3 mode), Auto ID, Programmable Timer, Gamma Correction (4 modes), Loop through interface, Plug and play (DDC1, DDC2b, RGB3: DDC2b only), Split screen operations, Sub picture detect, Picture freeze, Seamless switch, Zoom navigatuon / PX-61XR3 / PX-50XR4 Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-3 pull down Converter: (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter: (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function: (100-900% Selectable), Self Diagnosis, PDP Saver: (PEAK BRIGHT [100% /75% /50% /25%], ORBITER (Auto 1, 2), INVERSE, WHITE, SCREEN WIPER, SOFT FOCUS, OSM ORBITER, OSM CONTRAST), Colour Temperature select (high / mid / mid low / low, user has 4 memories), Auto Picture, Input Skip, Colour Tune, Low Tone (Auto, 3 mode), Gamma Correction (4 modes), Plug and Play (DDC1, DDC2b, RGB3: DDC2b only)				PX-42XM3 / PX-42VM5 / PX-42VP5 Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I,1035I, 1080I), 2-3 pull down Converter: (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter: (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function: (100-900% Selectable), Video Wall 4-25multi screen, Self Diagnosis, Image Burn reduction tools: (PLE LOCK1~3, INVERSE, WHITE, ORBITER (Auto1,2 / Manual), SCREEN WIPER, SOFT FOCUS), Colour Temperature select (high / mid / mid low / low, user has 4 memories), Control lock: (Except power SW), Auto Picture, Input Skip, Colour Tune, Low Tone (3 mode), Auto ID, Programmable Timer, Gamma Correction (4 modes), Loop through interface, Plug and play (DDC1, DDC2b, RGB3: DDC2b only) / PX-42XR3 / PX-42VR5 Motion compensated 3D Scan Converter: (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-3 pull down Converter: (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter: (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function: (100-900% Selectable), Self Diagnosis, PDP Saver: (PEAK BRIGHT [100% /75% /50% /25%], ORBITER (Auto 1, 2), INVERSE, WHITE, SCREEN WIPER, SOFT FOCUS, OSM ORBITER, OSM CONTRAST), Colour Temperature select (high / mid / mid low / low, user has 4 memories), Auto Picture, Input Skip, Colour Tune, Low Tone (Auto, 3 mode), Gamma Correction (4 modes), Plug and Play (DDC1, DDC2b, RGB3: DDC2b only)			
Accessories	Remote control with two AAA batteries, Power code, Manuals, Safety metal fittings, Ferrite cores, Bands, Cable clamps							
Regulations	PX-61XM3W / PX-50XM4W / PX-42XM3W / PX-42VM5W / PX-42VP5W Meets EMC Directive (EN55024 Class A, EN55024, EN61000-3-2, EN61000-3-3) Meets Low Voltage Directive (EN55024, IEC60950, SEMKO Approved) Meets AS / NZS CISPR 22:2002 Class A / PX-61XR3W / PX-50XR4W / PX-42XR3W / PX-42VR5W Meets EMC Directive (EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3) Meets Low Voltage Directive (EN60065, IEC60065, EN60950, IEC60950, SEMKO Approved) Meets AS / NZS CISPR 22:2002 Class B							

*1 HD/DVD/DTV input signals supported on this system
480P(60Hz) 480I(60Hz)
525P(60Hz) 525I(60Hz)
576P(50Hz) 576I(50Hz)
625P(50Hz) 625I(50Hz)
720P(60Hz) 1035I(60Hz)
1080I(50Hz) 1080I(60Hz)
*2 Applied in PX-61XM3/PX-50XM4/PX-42XM3/PX-42VM5/PX-42VP5
*3 The 5-BNC connectors are used as RGB/PC2 and HD/DVD2 input. Select one of them under "BNC INPUT".

*4 Compatible with HDCP.
Supported Signals
• 640x480P @59.94/60Hz • 1920x1080I @50Hz
• 1280x720P @59.94/60Hz • 720x576P @50Hz
• 1920x1080I @59.94/60Hz • 1440(720)x576P @50Hz
• 720x480P @59.94/60Hz
• 1440(720)x480I @59.94/60Hz

*The features and specifications may be subject to change without notice.

Note: In some cases a signal on the plasma monitor may not be displayed properly. The problem may be an inconsistency with standards from the source equipment (DVD, Set-top box, etc…). If you do experience such a problem please contact your dealer and also the manufacturer of the source equipment.

Empowered by Innovation

NEC

PlasmaSync