# PlasmaSync Plasma Monitor

# PlasmaSync<sup>™</sup> 42VM5/42VP5 (42Wide VGA) PX-42VM5A/42VP5A

# **Model Information**

For the operation of your plasma monitor, refer to "Operation Manual".



# **Important Information**

## **Warning**

Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/ Data Processing Equipment ANSI/NFPA 75.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

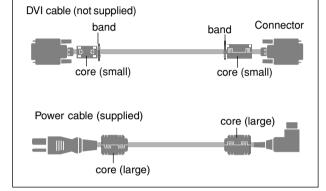
#### NOTE:

When you connect a computer to this monitor, use an RGB cable including the ferrite core on both ends of the cable. And regarding DVI and power cable, attach the supplied ferrite cores. If you do not do this, this monitor will not conform to mandatory FCC standards.

Attaching the ferrite cores:

Set the ferrite cores on both ends of the DVI cable (not supplied), and both ends of the power cable (supplied). Close the lid tightly until the clamps click.

Use the band to fasten the ferrite core (supplied) to the DVI cable.



# Recommandations importantes

### **Avertissement**

Ne pas utiliser dans une salle d'ordinateurs telle que définie dans la Norme pour la protection des ordinateurs électroniques/appareils de traitement des données ANSI/ NFPA75.

### **DOC** avis de conformation

Cet appareil numérigue de la Classe A respecte toutes les exigences du Réglement sur le Matériel Brouilleur du Canada.

### **REMARQUE:**

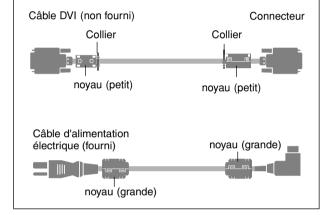
Pour raccorder un ordinateur à ce moniteur, procéder à l'aide d'un câble RGB à âme de ferrite aux deux extrémités. Sur les câbles DVI et les câbles d'alimentation électrique, fixer les âmes de ferrite fournies aux extrémités. Si vous ne le faîtes, le moniteur ne sera pas en conformité avec les exigences des standards FCC.

Fixation des noyaux en ferrite.

Monter les tores en ferrite aux deux extrêmités du câble DVI (non fourni) et aux deux extrêmités du câble d'alimentation électrique (fourni).

Fermez doucement le couvercle jusqu'à ce que les crans se clipsent.

Fixer le tore en ferrite (fourni) au câble DVI à l'aide d'un collier.



# **Specifications**

## ■ 42VM5A/42VP5A

Screen Size	36.3"(H) × 20.4"(V) inches					
	$921(H) \times 518(V) \text{ mm}$					
	diagonal 42"					
	42VM5A: Installed AR (Anti-Reflection) Filter					
	42VP5A: Installed AG (Anti-Glare) Filter					
Aspect Ratio	16:9					
Resolution	$853(H) \times 480(V)$ pixels					
Pixel Pitch	$0.04"(H) \times 0.04"(V)$ inches					
	$1.08(H) \times 1.08(V) \text{ mm}$					
Color 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 Hz					
	(automatic : step scan)					
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)					
RGB						
Visual 1 (Analog)	mini D-sub 15-pin×1					
Visual 2 (Analog)	BNC (R, G, B, H/CS, V) $\times$ 1*2					
Visual 3 (Digital)	DVI-I 24-pin×1*3					
Video						
Visual 1	$BNC \times 1$					
Visual 2	$RCA$ -pin $\times$ 1					
Visual 3	S-Video: DIN 4-pin×1					
DVD/HD/DTV						
Visual 1	RCA-pin (Y, PB[CB], PR[CR]) $\times 1^{*1}$					
Visual 2	BNC (Y, PB[CB], PR[CR]) $\times$ 1*1,*2					
Visual 3	DVI-D 24-pin×1*3					
Audio	Stereo RCA × 3(Selectable)					
External Control	D-sub 9-pin $\times$ 1(RS-232C)					
Sound output	8W+8W at 6 ohm					
Power Supply	AC100-240V 50/60Hz					
Current Rating	4.5A (maximum)					
Power Consumption	270W (typical)					
Dimensions	40 (W)×24 (H)×3.5 (D) inches					
	$1018 \text{ (W)} \times 610 \text{ (H)} \times 89 \text{(D)} \text{ mm}$					

**Environmental Considerations** 

Weight

Operating	j lelliperature	0°C to 40°C / 32°F to 104°F
	Humidity	20 to 80% (no condensation)
	Altitude	0 to 9180 feet / 0 to 2800 m
Storage	Temperature	-10°C to 50°C / 14°F to 122°F
	Humidity	10 to 90% (no condensation)
	Altitude	0 to 9840 feet / 0 to 3000 m

Front Panel User Controls Power on/off, Input source select,

Volume up/down, OSM control

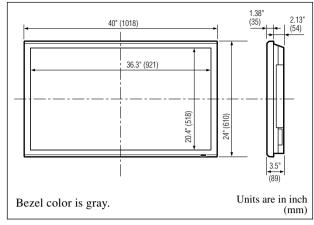
Remote Control Functions Power on/off. Input source select. OSM

control, Volume up/down, Cursor (UP, DOWN,LEFT, RIGHT), Pointer, Zoom up/down, Off timer, Wireless/Wired remote control

62.8 lbs / 28.5 kg (without stand)

OSM Functions Picture (Contr

Picture (Contrast/Brightness/Sharpness/ Color/Tint/ Picture mode/Noise reduction/Color temperature/White balance/Gamma/Low tone/Color 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), Option1 (OSM/ BNC Input/D-Sub Input/RGB Select/HD Select/Input Skip/All Reset), Option2 (Power management/Cinema mode/Long life [PLE, Orbiter, Inverse, White, Screen wiper, Soft focus]/Gray level/S1/S2/DVI Set up/ CloseCaption/Caption cont), Option3 (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]), Advanced OSM, Language\*, Color system, Source information



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

# \*1HD/DVD/DTV input signals supported on this system

480P (60 Hz) 480I (60 Hz) 525P (60 Hz) 525I (60 Hz) 576P (50 Hz) 576I (50 Hz) 625P (50 Hz) 625I (50 Hz) 720P (60 Hz) 1035I (60 Hz) 1080I (50 Hz) 1080I (60 Hz)

\*2The 5-BNC connectors are used as RGB/PC2 and HD/DVD2 input. Select one of them under "BNC INPUT".

### \*3 Compatable with HDCP.

## Supported Signals

- 640 × 480P @ 59.94/60Hz
- 1920 × 1080I @ 50Hz
- 1280 × 720P@ 59 94/60Hz
- 720 × 576P @ 50Hz
- 1920 × 1080I @ 59.94/60Hz
- 1440 (720) × 576P @ 50Hz
- $\bullet$  720  $\times$  480P @ 59.94/60Hz
- 1440 (720)  $\times$  480I @ 59.94/60Hz

**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 NEC Solutions (America), Inc. and also the manufacturer of the source equipment.

\*English, German, French, Italian, Spanish, Swedish, Chinese, Russian

#### Other Features

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 4-25 multi screen, Self Diagnosis, Image Burn reduction tools (PLE LOCK 1~3, INVERSE WHITE, ORBITER (Auto1,2/Manual), SCREEN WIPER), Color Temperature select (high/mid/mid low/low, user has 4 memories), Control lock (Except power SW), Auto Picture, Input Skip, Color Tune, Low Tone (3 mode), Auto ID, Programmable Timer, Gamma Correction (4 mode), Loop through interface, Plug and play (DDC1, DDC2b, RGB3: DDC2b only)

### Accessories

Remote control with two AAA batteries, Power cord, Manuals, Safety metal fittings, Ferrite cores, Bands, Cable clamps

### Regulations

UL Approved (UL 60950, CAN/CSA C22.2 No.60950-00) DOC Canada requirements Meets FCC Class A requirements

# **Table of Signals Supported**

## ■ 42Wide VGA Supported resolution

- When the screen mode is NORMAL, each signal is converted to a 640 dots × 480 lines signal (42Wide VGA). (Except for \*2, \*4)
- When the screen mode is FULL, each signal is converted to a 853 dots × 480 lines signal (42Wide VGA). (Except for \*3)

## Computer input signals supported by this system

Madal	Dots × lines		Horizontal	Sync Po		Presence		Screen	mode	RGB		
Model	Dots × lines	frequency		Horizontal	Vertical	Horizontal	Vertical	NORMAL	FULL	select*5	DVI	Memory
Signal Type		(Hz)	(kHz)					(4:3)	(16:9)			
	640×400	70.1	31.5	NEG	NEG	YES	YES	YES*2*3	YES		NO	4
	640×480	59.9	31.5	NEG	NEG	YES	YES	YES*3	YES	STILL	YES	5
		72.8	37.9	NEG	NEG	YES	YES	YES*3	YES		YES	7
		75.0	37.5	NEG	NEG	YES	YES	YES*3	YES	STILL	YES	8
		85.0	43.3	NEG	NEG	YES	YES	YES*3	YES		YES	9
		100.4	51.1	NEG	NEG	YES	YES	YES*3	YES		YES	41
		120.4	61.3	NEG	NEG	YES	YES	YES*3	YES		YES	42
	848×480	60.0	31.0	POS	POS	YES	YES		YES*3	WIDE2	YES	19
	852×480*1	60.0	31.7	NEG	NEG	YES	YES		YES*3	WIDE1	YES	17
	800×600	56.3	35.2	POS	POS	YES	YES	YES	YES	STILL	YES	11
		60.3	37.9	POS	POS	YES	YES	YES	YES	STILL	YES	12
		72.2	48.1	POS	POS	YES	YES	YES	YES		YES	13
		75.0	46.9	POS	POS	YES	YES	YES	YES		YES	14
		85.1	53.7	POS	POS	YES	YES	YES	YES		YES	15
		99.8	63.0	POS	POS	YES	YES	YES	YES		YES	43
		120.0	75.7	POS	POS	YES	YES	YES	YES		YES	44
IBM PC/AT	1024×768	60.0	48.4	NEG	NEG	YES	YES	YES	YES	STILL	YES	24
compatible		70.1	56.5	NEG	NEG	YES	YES	YES	YES		YES	25
computers*8		75.0	60.0	POS	POS	YES	YES	YES	YES	STILL	YES	26
		85.0	68.7	POS	POS	YES	YES	YES	YES		YES	27
		100.6	80.5	NEG	NEG	YES	YES	YES	YES		YES	45
	1152×864	75.0	67.5	POS	POS	YES	YES	YES	YES	STILL	YES	51
	1280×768	56.2	45.1	POS	POS	YES	YES		YES	WIDE1	NO	52
		59.8	48.0	POS	NEG	YES	YES		YES	WIDE3	YES	80
	1280×768*9	69.8	56.0	NEG	POS	YES	YES		YES	WIDE1	YES	66
	1280×800*9	60.0	49.7	NEG	NEG	YES	YES		YES	WIDE1	YES	21
	1280×854*9	60.0	53.1	NEG	NEG	YES	YES		YES	WIDE2	YES	37
	1360×765	60.0	47.7	POS	POS	YES	YES		YES	WIDE1	NO	22
	1360×768	60.0	47.7	POS	POS	YES	YES		YES	WIDE1	YES	22
	1376×768	59.9	48.3	NEG	POS	YES	YES		YES	WIDE2	YES	53
	1280×1024	60.0	64.0	POS	POS	YES	YES	YES*4	YES	STILL	YES	29
		75.0	80.0	POS	POS	YES	YES	YES*4	YES		YES	30
		85.0	91.1	POS	POS	YES	YES	YES*4	YES		YES	40
		100.1	108.5	POS	POS	YES	YES	YES*4	YES		NO	47
	1680×1050*9	60.0	65.3	NEG	NEG	YES	YES		YES	WIDE4	YES	38
	1600×1200	60.0	75.0	POS	POS	YES	YES	YES	YES		YES	54
		65.0	81.3	POS	POS	YES	YES	YES	YES		NO	55
		70.0	87.5	POS	POS	YES	YES	YES	YES		NO	56
		75.0	93.8	POS	POS	YES	YES	YES	YES		NO	57
		85.0	106.3	POS	POS	YES	YES	YES	YES		NO	58
	1920×1200*9	60.0	74.6	NEG	NEG	YES	YES		YES	WIDE2		81
	1920×1200RB*9		74.0	NEG	NEG	YES	YES		YES	WIDE3	YES	88
Apple	640×480	66.7	35.0	Sync on G	Sync on G			YES*3	YES		NO	6
Macintosh*6, *8	832×624	74.6	49.7	Sync on G	Sync on G			YES	YES		NO	16
	1024×768	74.9	60.2	Sync on G	Sync on G			YES	YES	WIDE1	NO	28
	1152×870	75.1	68.7		Sync on G			YES	YES	WIDE1		39
	1440×900*9	60.0	56.0	Sync on G NEG	NEG	YES	YES		YES		NO	89
Work Station	1280×1024	60.0	64.6					YES*4			YES	29
(EWS4800)*8	1200 / 1024	71.2	75.1	NEG	NEG	YES	YES	YES*4	YES		YES	48
Work Station (HP)*8	1000 × 1004			NEG	NEG	YES	YES		YES		YES	59
Work Station	1280×1024 1152×900	72.0	78.1					YES*4	YES		YES	
(SUN)*8	1152×900	66.0	61.8	C Sync	C Sync			YES	YES		YES	60
	1000 > 1001	76.0	71.7	C Sync	C Sync			YES	YES		YES	61
Work Station	1280×1024	76.1	81.1	C Sync	C Sync			YES*4	YES		YES	30
(SGI)	1024×768	60.0	49.7					YES	YES		YES	62
IDC-3000G	1280×1024	60.0	63.9					YES*4	YES		YES	29
l —	700 5==	F	6			\	\	\/F0:-	\/==:=			6.1
PAL625P	768×576	50.0	31.4	NEG	NEG	YES	YES	YES*7	YES*7		NO	31
NTSC525P	640×480	59.9	31.5	NEG	NEG	YES	YES	YES*7	YES*7	MOTION	NO	32

- \*1 Only when using a graphic accelerator board that is capable of displaying 852×480.
- \*2 Display only 400 lines with the screen center of the vertical orientation located at the center.
- \*3 The picture is displayed in the original resolution. The picture will be compressed for other signals.
- \*4 Aspect ratio is 5:4. This signal is converted to a 600 dots × 480 lines signal.
- \*5 Normally the RGB select mode suite for the input signals is set automatically. If the picture is not displayed properly, set the RGB mode prepared for the input signals listed in the table above.
- \*6 To connect the monitor to 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 the external equipment to 60Hz.
  - To view 480I@60Hz (480 interlaced lines, 60Hz refresh rate) or 576I@50Hz (567 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.
- This monitor has a resolution of 853 dots ×480 lines. It is recommended that the input signal should be VGA, wide VGA, or equivalent.
- · With digital input some signals are not accepted.
- The sync may be disturbed when a nonstandard signal other than the aforementioned is input.
- 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).

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