

PlasmaSync Plasma Monitor

***PlasmaSync™ 50XM4
PX-50XM4A***

Model Information

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

NEC

NEC Solutions (America), Inc.

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:

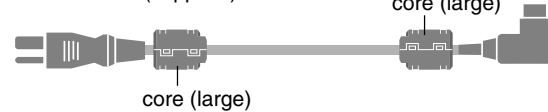
Set the ferrite cores on both ends of the DVI cable (not supplied), and both ends of the power cable (supplied). Close the lid tightly until the clamps click.

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

DVI cable (not supplied)



Power cable (supplied)



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 numérique de la Classe A respecte toutes les exigences du Règlement sur le Matériel Brouilleur du Canada.

REMARQUE:

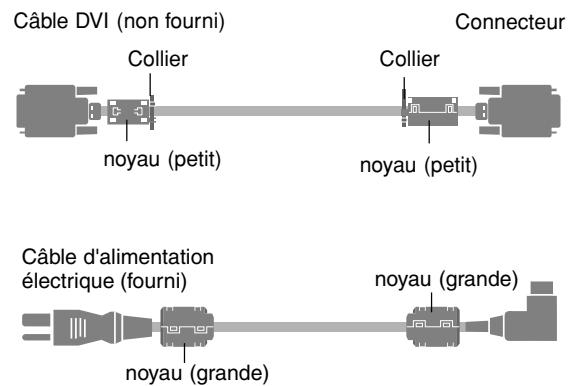
Pour raccorder un ordinateur à ce moniteur, procéder à l'aide d'un câble RGB à âme de ferrite aux deux extrémités. Sur les câbles DVI et les câbles d'alimentation électrique, fixer les âmes de ferrite fournies aux extrémités. Si vous ne le faites, le moniteur ne sera pas en conformité avec les exigences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

Fixation des noyaux en ferrite.

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

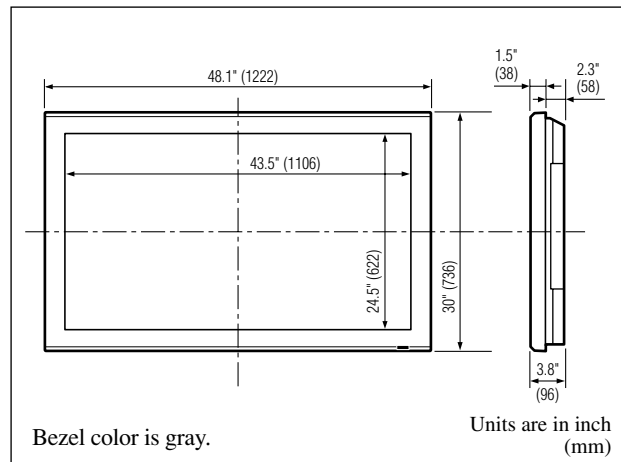
Fermez doucement le couvercle jusqu'à ce que les crans se clipsent.

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



Specifications

Screen Size	43.5"(H) × 24.5"(V) inches 1106(H) × 622(V) mm diagonal 50"
Aspect Ratio	16 : 9
Resolution	1365(H) × 768(V) pixels
Pixel Pitch	0.032"(H) × 0.032"(V) inches 0.81(H) × 0.81(V) 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) × 1*2
Visual 3 (Digital)	DVI-D 24-pin × 1*3
Video	
Visual 1	BNC × 1
Visual 2	RCA-pin × 1
Visual 3	S-Video: DIN 4-pin × 1
DVD/HD/DTV	
Visual 1	RCA-pin (Y, PB[CB], PR[CR]) × 1*1
Visual 2	BNC (Y, PB[CB], PR[CR]) × 1*1.*2
Visual 3	DVI-D 24-pin × 1*3
Audio	Stereo RCA × 3 (Selectable)
External Control	D-sub 9-pin × 1 (RS-232C)
Sound output	9W+9W at 6 ohm
Power Supply	AC100-240V 50/60Hz
Current Rating	7.6A (maximum)
Power Consumption	435W (typical)
Dimensions	48.1 (W) × 30 (H) × 3.8 (D) inches 1222 (W) × 736 (H) × 96(D) mm
Weight	97 lbs / 44 kg (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 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, Split screen buttons
OSM Functions	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/Picture size/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]), Option4 (Sub. P detect/Zoom nav/Pic freeze/Seamless SW), Advanced OSM, Language*, Color system, Source information *English, German, French, Italian, Spanish, Swedish, Chinese, Russian



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

*1 HD/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)
*2 The 5-BNC connectors are used as RGB/PC2 and HD/DVD2 input. Select one of them under "BNC INPUT".		
*3 Compatible 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	
• 720 × 480P @ 59.94/60Hz		
• 1440 (720) × 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.		

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 LOCK1~3, 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), Split screen operations
Accessories	Remote control with two AAA batteries, Power cord, Manuals, Safety metal fittings, Ferrite cores, Bands, Cable clamps
Regulations	UL Approved (UL 60950-1, CAN/CSA C22.2 No.60950-1) DOC Canada requirements Meets FCC Class A requirements

Table of Signals Supported

Supported resolution

- When the screen mode is NORMAL, each signal is converted to a 1024 dots×768 lines signal. (Except for *2,3,4)
- When the screen mode is TRUE, the picture is displayed in the original resolution.
- When the screen mode is FULL, each signal is converted to a 1365 dots×768 lines signal. (Except for *3)

Computer input signals supported by this system

Model Signal Type	Dots × lines	Vertical frequency (Hz)	Horizontal frequency (kHz)	Sync Polarity		Presence		Screen mode			RGB select*5	DVI	Memory	
				Horizontal	Vertical	Horizontal	Vertical	NORMAL (4:3)	TRUE	FULL (16:9)				
IBM PC/AT*8 compatible computers	640×400	70.1	31.5	NEG	NEG	YES	YES	YES*2	YES	YES	--	NO	4	
	640×480	59.9	31.5	NEG	NEG	YES	YES	YES	YES	YES	STILL	YES	5	
		72.8	37.9	NEG	NEG	YES	YES	YES	YES	YES	--	YES	7	
		75.0	37.5	NEG	NEG	YES	YES	YES	YES	YES	STILL	YES	8	
		85.0	43.3	NEG	NEG	YES	YES	YES	YES	YES	--	YES	9	
		100.4	51.1	NEG	NEG	YES	YES	YES	YES	YES	--	YES	41	
		120.4	61.3	NEG	NEG	YES	YES	YES	YES	YES	--	YES	42	
	848×480	60.0	31.0	POS	POS	YES	YES	--	YES	YES	WIDE2	YES	19	
	852×480*1	60.0	31.7	NEG	NEG	YES	YES	--	YES	YES	WIDE1	YES	17	
	800×600	56.3	35.2	POS	POS	YES	YES	YES	YES	YES	STILL	YES	11	
		60.3	37.9	POS	POS	YES	YES	YES	YES	YES	STILL	YES	12	
		72.2	48.1	POS	POS	YES	YES	YES	YES	YES	--	YES	13	
		75.0	46.9	POS	POS	YES	YES	YES	YES	YES	--	YES	14	
		85.1	53.7	POS	POS	YES	YES	YES	YES	YES	--	YES	15	
		99.8	63.0	POS	POS	YES	YES	YES	YES	YES	--	YES	43	
	1024×768	120.0	75.7	POS	POS	YES	YES	YES	YES	YES	--	YES	44	
		60.0	48.4	NEG	NEG	YES	YES	YES*3	--	YES	STILL	YES	24	
		70.1	56.5	NEG	NEG	YES	YES	YES*3	--	YES	--	YES	25	
		75.0	60.0	POS	POS	YES	YES	YES*3	--	YES	STILL	YES	26	
		85.0	68.7	POS	POS	YES	YES	YES*3	--	YES	--	YES	27	
	1152×864	100.6	80.5	NEG	NEG	YES	YES	YES*3	--	YES	--	YES	45	
		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	
		60.0	49.7	NEG	NEG	YES	YES	--	--	YES	WIDE1	YES	21	
	1280×800*9	60.0	47.7	POS	POS	YES	YES	--	--	YES*3	WIDE1	NO	22	
	1280×854*9	60.0	47.7	POS	POS	YES	YES	--	--	YES*3	WIDE1	YES	22	
	1360×768	59.9	48.3	NEG	POS	YES	YES	--	--	YES	WIDE2	YES	53	
		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	
1280×1024	100.1	108.5	POS	POS	YES	YES	YES*4	--	YES	--	NO	47		
	60.0	65.3	NEG	NEG	YES	YES	--	--	YES	WIDE4	YES	38		
	60.0	75.0	POS	POS	YES	YES	YES	--	YES	--	YES	54		
	65.0	81.3	POS	POS	YES	YES	YES	--	YES	--	NO	55		
1680×1050*9	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	60.0	74.0	NEG	NEG	YES	YES	--	--	YES	WIDE3	YES	88		
Apple Macintosh*6 *8	640×480	66.7	35.0	Sync on G	Sync on G	--	--	YES	YES	YES	--	NO	6	
	832×624	74.6	49.7	Sync on G	Sync on G	--	--	YES	YES	YES	--	NO	16	
	1024×768	74.9	60.2	Sync on G	Sync on G	--	--	YES*3	--	YES	WIDE1	NO	28	
	1152×870	75.1	68.7	Sync on G	Sync on G	--	--	YES	--	YES	WIDE1	NO	39	
	1440×900*9	60.0	56.0	NEG	NEG	YES	YES	--	--	YES	--	YES	89	
Work Station (EWS4800)*8	1280×1024	60.0	64.6	NEG	NEG	YES	YES	YES*4	--	YES	--	YES	29	
		71.2	75.1	NEG	NEG	YES	YES	YES*4	--	YES	--	YES	48	
Work Station (HP)*8	1280×1024	72.0	78.1	--	--	--	--	YES*4	--	YES	--	YES	59	
Work Station (SUN)*8	1152×900	66.0	61.8	C Sync	C Sync	--	--	YES	--	YES	--	YES	60	
		76.0	71.7	C Sync	C Sync	--	--	YES	--	YES	--	YES	61	
	1280×1024	76.1	81.1	C Sync	C Sync	--	--	YES*4	--	YES	--	YES	30	
Work Station (SGI)	1024×768	60.0	49.7	--	--	--	--	YES*3	--	YES	--	YES	62	
	1280×1024	60.0	63.9	--	--	--	--	YES*4	--	YES	--	YES	29	
IDC-3000G	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 This signal is converted to a 1024 dots × 640 lines signal.
- *3 The picture is displayed in the original resolution.
- *4 The aspect ratio is 5:4. This signal is converted to a 960 dots×768 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.*
 - *When a 1280 dots × 1024 lines signal or 1600 dots × 1200 lines signal is input to the monitor, the picture will be compressed.*
 - *This monitor has a resolution of 1365 dots × 768 lines. It is recommended that the input signal should be XGA, wide XGA, 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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NEC Solutions (America), Inc.
1250 N. Arlington Heights Road, Suite 400
Itasca, Illinois 60143-1248

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