Garnet GeForce 2 MX Twin View (Model No. : GV-4400)

User's Manual

GARNET SYSTEMS CO., LTD.

 \circ ° This equipment has been tested and found against harmful radio electromagnetic interference and can be installed and used in any residential areas as well as offices.

 $\ensuremath{\mathfrak{e}}$ ° Any copying or reproduction of this whole manual or part of contents is strictly prohibited.

 $\ensuremath{^\circ}$ °Information in this manual is subject to change without prior notice for improvement.

Copyright(C) 2000 GARNET SYSTEMS CO., LTD.

- ¿ ÚGeForce2 MX is a registered trademark of nVIDIA
- **ÚWindows 95/98/2000/NT is a registered trademark of Microsoft** Corporation.
- i ÚOther trademarks are registered properties by their respective holders.

Table of Contents

1. About Garnet GeForce2 MX Twin View	4
1.1 Features of Garnet GeForce2 MX Twin View	4
1.2 Recommended System Requirements	4
1.3 Delivery Check	5
1.4 Contents of Installing Program CD	5
2. Installation	6
2.1 To install the Graphic Card into PC	6
2.2 Driver Installation	6
2.2.1 Driver Installation in Windows 9x	6
2.2.1.1 When replace existing VGA Card with Garnet GeForce2 MX Twin View	7
2.2.1.2 When Windows 9x is re-installed after replacing Graphic card	11
2.2.2 Driver installation in Windows 2000	23
2.2.3 Driver update in Windows NT4.0	27
2.3 Installation of DirectX 7.0a	35
3. To Change Properties Set-up 4. To set up Twin View 5. To set up TV Out	36 37 38
6. Q & A	- 39

1. About GARNET GeForce2 MX Twin View

Thank you very much for purchasing GARNET GeForce2 MX Graphic Card. Please read carefully this manual in order to use this equipment right. The information in this book including program and driver is subject to change for updating and improvement of its performances.

1.1 Features of GARNET GeForce2 MX Twin View

This Graphic Card supports twin-view function with two D-SUB and execute its role for Twin View such as office purpose and game and other tasks at the same time.

- ¢ ÁExtended Mode
 - enables users to view with two monitors at the same time



- enables users to multitask with two different monitors.



¢ ÁClone Mode



- Mounted with High-speed GeForce MX chip, made by nVidia
- Supports AGP Execute Mode in AGP 4X or 2X, AGP Texturing, Fast Write
- Capable to process 20 Mil Triangles, 700 Mega Texels
- Supports 2 independent Pixel Rendering Pipelines
- Realize superb graphic with Digital Vibrance Control
- Perform perfect graphics with newly-equipped NSR(Nvidia Shading Rasterizer)
- Perform dynamic real image with 2nd generation T&L(Transform and Lighting) engine
- Supports superlative game conditions with DirextX 7.0a, OpenGL
- Smooth surface control with H/W FSAA (Full Scene Anti-Aliasing) function
- Supports stable 2048x1536 high resolution through 350MHz Ramdec
- Supports Video Acceleration function through such as Direct-Show, MPEG-I, MPEG-II(DVD) for moving picture
- High-speed 32MB SDRAM
- Supports TV-Out Functions(Optional)
- 2048x1536 @60Hz Support.

1.2 Recommended System Requirements

PC : Pentium/P-II/P-III-grade or compatible system with AGP Slot O/S : Windows 9x, Windows NT 4.0, Windows 2000 Memory : 64MB or more Monitor : VGA Monitor (800 x 600 or higher @ 60Hz) Hard Disk : 20MB or more

1.3 Delivery Check

- GARNET GeForce 2 MX Graphic Card 1 Piece

- Installation Program CD 1 Piece
- User's Manual 1 Piece
- composite Cable (TV-Out Model Only)

1.4 Contents of Installation Program CD

- DirectX 7.0a Microsoft DirectX 7.0a
- Win9x Driver Windows95/98 Driver
- Windows NT4.0 Driver Windows NT 4.0 Driver
- Win2000 Driver Windows 2000 Driver
- User's Manual GARNET GeForce2 MX Twin View User Manual

¢ \tilde{N} For your reference, this graphic card may not be compatible with some minor main boards, which do not perfectly support AGP 2.0-Compliant constant current 6A.

2. Installation

 $\ensuremath{^{\circ}}$ ÑThe pictures shown in this manual are based on Windows 98 SE and Windows 2000.

2.1 Installing Graphic Card into PC

Please read carefully and follow the instructions as below in order to install GARNET GeForce2 MX Twin View.

- " çTurn off power of your computer.
- " èUndress the cover of your computer by unleashing bolts.
- éCheck whether AGP Bus Slot is in place or not. If not, it is impossible to install. Remove and save the screw on the slot cover. You will need it to secure the card in place.
- " êHold the card upright by the metal edge, and carefully slide it into the expansion slot. Gently apply pressure to the upper metal edge only, making sure it snaps into AGP Bus Slot.
- " ëFasten securely the card into place with the screw that fits into the top notch of the metal bracket.
- " iDress the cover of your computer by leashing bolts.
- " 1Connect the Monitor with GARNET TNT2 Ultra Video Connector
- " îTurn power on and check whether display is O.K.

2.2 Driver Installation

This section is the explanation on driver installation. Minimum requirements for GARNET GeForce2 MX Twin View be Windows95 OSR2.1 or higher, Windows98, Windows NT4.0 (Service Pack 4), Windows 2000, as O/S. And also, after installing driver, DirectX 7.0a is recommended for correct display. (for DirectX installation, see page #24.)

2.2.1 Driver Installation in Windows 9x

GARNET GeForce2 MX Windows 9x driver is operate-able in both Windows 95 and 98. When operating system in your computer is Windows 95 or 98 and you would like to replace only graphic card with our Graphic Card, please review; 2.2.1.1; for driver installation. And when you would like to change O/S into Windows 9x after installing Geforce2 MX altogether, please review 2.2.1.2 for driver installation. 2.2.1.1 When you are to replace existing VGA card with Garnet GeForce2 MX

1) When Windows starts, PnP Bios recognized new VGA card and <Add New Hardware Wizard> will come out on screen automatically as below. Click <Next> in the following picture.



2) Click <Display a list--you want.> and <Next> in the following picture.



3) Click <Have Disk...> in the following picture.

re.			Have Disk
	re.	re.	ie.

4) Click <Browse...> and <OK> in the following picture.

Install Fr	om Disk	×
	Insert the manufacturer's installation disk into the drive selected, and then click OK.	ОК
		Cancel
	Copy manufacturer's files from:	
		<u>B</u> rowse

5) Put driver installation CD on your CD-Rom drive and select Win9x Driver and click <OK> in the following picture.

ile <u>n</u> ame:	Eolders:	OK
garnet.inf	t:\win9xd~2	Cancel
gameuni	win9xd~2	N <u>e</u> twork
	<u>_</u>	*
	Drives:	

6) Click <Browse> and <OK> in the following picture.

Install Fr	om Disk	×
_	Insert the manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel
	Copy manufacturer's files from: F:\WIN9XD~2	<u>B</u> rowse

7) Select Garnet GeForce2 MX and click <OK> in the following picture.

Select De	evice	<
	Display adapters: The following models are compatible with your hardware. Click the one you want to set up, and then click OK. If your model is not on the list, click Show All Devices. This list shows only what was found on the installation disk.	
Models:		
📮 Garn	iet GeForce2 MX	
Show	compatible devices	
C Show	v <u>a</u> ll devices	
	OK Cancel	

8) Click <Next> in the following picture.

Add New Hardware Wiz	ard
Add New Hardware Wiz	ard Windows driver file search for the device: Garnet GeForce2 MX Windows is now ready to install the selected driver for this device. Click Back to select a different driver, or click Next to continue. Location of driver: E:WINSKD~2\GARNET.INF
	< Back Next> Cancel

9) Click <Finish> in the following picture.



10) Click <Yes> in the following picture and driver installation is finished, re-starting your computer.

System 9	Settings Change 🛛 🔀
?	To finish setting up your new hardware, you must restart your computer.
	Do you want to restart your computer now?
	<u>Yes</u> <u>N</u> o

2.2.1.2 When Windows 9x is re-installed after replacing Graphic Card in the following picture.

1) Click <My Computer> in the <Desktop> and <Control Panel> in the following picture.



2) Double-click <Control Panel> in the <Display> in the following picture.



3) Click <Display Properties>, <Settings>, and <Advanced...> in the following picture.

splay Properti	es 🔛
Background 5	ceen Saver Appearance Effects Web Settings
	3 9 2 9 2
	S BAAX
	RALL
	and were special and provide and the
Display	
Unknown Mor	ntar) an (Unknown Device)
Televi	-
Income and	Less L More
He colory	
	640 by 480 pinels
E	Lateral Lateral Lateral L
No. Concuration	when we have a set of the rest
	The Farrel Arriv

4) Click <Adapter> and <Change> in the following picture.

encial Adapter Pe	formance	
🗐 Standard Die	play Adapter (VGA)	Durgi
Adapter / Driver into	enation	
Manufacturer	(Standard clipplay type ()	
Software version:	4.0	

5) Click <Next> at the <Update Device Driver Wizard> in the following picture.



6) Click <Display --- want.> and <Next> in the following picture.



7) Click <Have Disk...> in the following picture.

J	Select the manufacturer and model of your hardware device. If you have a click that contains the updated driver, click Have Disk. To install the updated driver, click Finish.
dogials Stands	id Diacev Adaptar (MSA) (S1111598)

8) Click <Browse...> and <OK> in the following picture.



9) Put driver installation CD, select Win9x driver in the related drive and click <OK> in the following picture.

pen		? >
File <u>n</u> ame:	<u>F</u> olders:	ОК
garnet.inf	f:\win9xd~2	Canaal
garnet.inf	🔁 🔂 🔁	
	😋 win9xd~2	N <u>e</u> twork
	<u> </u>	<u>~</u>
	Dri <u>v</u> es:	
	🕢 f:	-

10) Click <OK> in the following picture.



11) Select Garnet Geforce2 MX and click <OK> in the following picture.



12) Click <next> in the following picture.

Update Device Driver	Wizard
	Windows driver file search for the device:
	Garnet GeForce2 MX
	Windows is now ready to install the selected driver for this device. Click Back to select a different driver, or click Next to continue.
🗞 😵	Location of driver:
- A A A A A A A A A A A A A A A A A A A	F:\WIN9XD~2\GARNET.INF
	< <u>B</u> ack Next> Cancel

14) Click <Finish> in the following picture.



15) Click <Close> in the following picture



16) Please click <Close> in the following picture.

Background So	creen Saver Appearance Effects Web Settings
	Anna Anna Anna Anna Anna Anna Anna Anna
Display: (Unknown Mon	itor) on (Unknown Device)
Colors 16 Colors	Screen area Less More 640 by 480 pixels
	and another second and a

18) Please click <Yes> in the following picture.



2.2.2 Driver Installation in Windows 2000

☞ Windows 2000 installation driver is zipped. Please comply with following instructions.

1) Click <My Computer> in the <Desktop> and double-click CD Rom Drive in the following picture.



2) Double click <Win2000 DRIVER> folder in the following picture.



3) Double click setup.exe file in the following picture.

C Win2000 DRIVER					
jile Edik Yew Fayantas ⇔Badk + → - El @Sea	Teole Help rch (B-Folders	GHetory	e e x	ø 🖪-	
Address 🛄 Win2000 DREVER				×	200
- <mark>Fr</mark> Co	Nropidi	NYCPL	NvinstNT.dl	rwagint.dl	*
Win2000 DRIVER	•	3		4	
Select an item to view ite descriptions	NAQTHK.dll	05	Readmo	setup	
See also: My Doo ments	2	-			
My Natesark Places My Computer	Setup	SETUP	sapup	setup.ks	- 1
		1			- 1
	natup.lici	set up 16			
30 object(s)		4.87	MB L	V Computer	- 1

4) Driver installation is being set up in the following picture.



5) Click <Next> in the following picture.



6) Please click <Yes> in the following picture.

Digital Signature Not F	ound 🔀
	The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested. The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows
	Gamet GeForce2 MX
	If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available.
	Do you want to continue the installation?

7) Click <Finish> in the following picture.



8) Driver Installation is finished.

2.2.3 Driver update in Windows NT 4.0

In order to install GARNET GeForce2 MX Twin View in Windows NT 4.0, Service pack Version 4 or over is a must. Service Pack 4 can be downloaded in web site www.microsoft.com.

1) Click <My Computer>, <Control Panel>, <Display> and <Display type> in the following picture.

Display Properties	? ×
Background Screen Saver Appear	ance Plust Settings
Color Palette	Desktop Area
Eont Size	640 by 480 pixels Befresh Frequency Use hardware default setting
List All Modes T	est Display <u>T</u> ype
0	K Cancel Apply

2) Click <Change> in the following picture.

Display Type			? ×
Adapter Type			Cancel
vga compatible d	isplay adapter	<u>C</u> hange	<u>D</u> etect
Driver Information			
Manufacturer:	Microsoft Corporation		
Version Numbers:	4.00, 4.0.0		
Current Files:	vga.sys, vga.dll		
Adapter Information	on		
Chip Type:	<unavailable></unavailable>		
DAC Type:	<unavailable></unavailable>		
Memory Size:	<unavailable></unavailable>		
Adapter String:	<unavailable></unavailable>		
Bios Information:	<unavailable></unavailable>		

3) Click <Have disk.> in the following picture.

nange Display 🛛 🔀	(
Choose the manufacturer and model of your display adapter. If your display adapter came with an installation disk, click on HaveDisk.	
Manufacturers: Display:	
Cardex Dins & Technologies	
Cirrus Logic	
Have Disk	
Cancel	

4) Click <Browse.> in the following picture.

Install Fro	om Disk	×
_	Insert the manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel
	Copy manufacturer's files from:	Browse

5) Put Installation CD and Click <Browse> in the following picture.



6) Click <Garnet GeForce2 MX> and <OK> in the following picture.

Change I	Display	×
9	Choose the menufacturer and model of your display adapter. If your disp adapter came with an installation disk, olick on HarveDisk.	iap
Display Gamet Gamet Gamet Gamet Gamet	t 1 TVT2 1 TVT2 Modal 54 1 TVT2 Modal 54 1 GeForce 256 009 1 GeForce 256 009 1 GeForce 2 G TS 1 BeForce 200	1
	OK Caroo	-

7) Click <Yes> in the following picture.



8) Click <OK> in the following picture.



9) Click <Browse> in the following picture.

Files Nee	ded	×
	Some files on NVIDIA NT Driver Library Installation Disk 1 are needed.	OK
		Cancel
	Insert NVIDIA NT Driver Library Installation Disk 1 into the drive selected below, and then click OK.	
		<u>S</u> kip File
	Copy files from:	
	e:\winnt4~1.0dr	Browse

10) Click <Open> in the following picture.



11) Click <OK> in the following picture.



12) Click <Open> in the following picture.



13) Click <OK> in the following picture.



14) Click <Close> in the following picture.

Display Type	? ×
Adapter Type	Close
vga compatible di	splay adapter
	Detect
Driver Information	
Manufacturer:	Microsoft Corporation
Version Numbers:	4.00, 4.0.0
Current Files:	vga.sys, vga.dll
-Adapter Informatio	n
Chip Type:	<unavailable></unavailable>
DAC Type:	<unavailable></unavailable>
Memory Size:	<unavailable></unavailable>
Adapter String:	<unavailable></unavailable>
Bios Information:	<unavailable></unavailable>

15) Click <Yes> in the following picture.



16) Driver installation is finished.

2.3 Installation of DirectX 7.0a

If DirectX 7.0a is already installed in your PC, you may skip this section and do not have to re-install DirectX 7.0a. And if you have to install new DirectX 7.0a, Please follow below procedures.

1) Please double click dx7aeng.exe in \Dirctx7.0a\Directx directory and click <Yes> in the following picture.



2) Click <Yes> in the following picture and the system will restart booting automatically and installation will be finished.

Microsoft DirectX 7.0a Setup	_ 🗆 🗵
Please read the following license agreement. Press the PAG to see the rest of the agreement.	iE DOWN key
END-USER LICENSE AGREEMENT FOR MICROSOFT(r) DIRECTX(r) 7.0a RUNTIME	-
IMPORTANT READ CAREFULLY: This Microsoft End-Use Agreement ("EULA") is a legal agreement between you (eiti individual or a single entity) and Microsoft Corporation for th software product identified above, which includes compute and may include associated media, printed materials, and " electronic documentation ("SOFTWARE PRODUCT"). By copying, or otherwise using the SOFTWARE PRODUCT"), by copying, or otherwise using the SOFTWARE PRODUCT '', to be bound by the terms of this EULA. If you do not ag ree to the terms of this EULA, do not install or use the SOFT PRODUCT.	er License her an re Microsoft r software online" or installing, iou agree TWARE
Do you accept all of the terms of the preceding License Agr choose No, Install will close. To install you must accept this	eement? If you agreement.
Yes	No