User's Manual

for

PDI Capture Card + Xcard Combo

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1. Introduction:

PDI Capture Card:

The PDI (Parallel Digital Interface) Capture Card is designed to work with the Realmagic Xcard or 100% compatible MPEG2/MPEG4 decoder card. This solution combines the power of hardware MPEG decoding, sophisticated deinterlacing, video processing and scaling capability of the DScaler software, and represents a revolution in the HTPC (home theater PC) history. The result turns a personal computer into a high performance digital media player and video processor/scaler and delivers unprecedented high quality video in home theaters at a very reasonable price.

Xcard:

Sigma Designs' REALmagic Xcard[™] sets the new standard for multimedia playback on your PC, turning it into a state-of-art Home Theatre PC (HTPC). Experience viewing your DVD and DivX[™] video collection on your television or HDTV with the highest quality visual and audio experience possible and the convenience of remote control. Progressive DVD playback and our new Xmedia player navigation software completes the ultimate home theatre experience.

NOTE: The provided driver and software are under GNU General Public License (GPL). Software support is not provided by PMS Video Ltd.

2. Features:

PDI Capture Card:

-32-bit PCI bus mastering, Plug-n-Play compliant

- -26-pin connector compatible with the digital video output of Realmagic Xcard
- -PDI formats supported: 480i (NTSC) and 576i (PAL)

-Easy to install

-Fully compatible with the DScaler software

-Supports Microsoft Windows 98/ME/2000/XP

Xcard:

-Enjoy DVD-Video, DivX[™] video, and Superbit[™] DVD movies using your current television and surround sound system.

-Also plays Super VideoCD (SVCD), VideoCD (VCD) and MPEG-4, MPEG-2 and MPEG-1 files.

-Provides advanced audio output features such as Dolby® Digital or DTS® surround sound (through S/PDIF) for high fidelity sound reproduction.

-Includes our new Xmedia player software and remote control to provide familiar VCR-like controls to your DVD, DivX[™] video, SVCD and VCD movies.

-Compatible with Microsoft® Windows® 98SE, Me, 2000 and XP.

3. System Requirements for Optimum Performance:

-Intel Pentium 400MHz or higher, or compatible computer

- -1GHz or faster CPU is highly recommended for typical usages
- -One available PCI 2.1 compliant slot
- -An AGP video card
- -Plug and Play BIOS support

-Installation software requires DVD-ROM or CD-ROM drive

- -DVD-Video playback requires DVD-ROM drive
- -Remote control receiver requires available serial port
- -DRAM: 128MB or more
- -Amplified stereo speakers (surround sound receiver and speakers required for surround sound)
- -Extra disk space: 10MB or more
- -Microsoft Windows 98/ME/2000/XP (English version is highly recommended)
- -Graphic subsystem with DirectX 8.0 or higher

4. Specifications:

PDI Capture Card:

-One Parallel Digital Interface (PDI) Input

Xcard:

- -One Parallel Digital Interface (PDI) Input
- -S-video output (NTSC/PAL)

-VGA output

-Stereo analog line output (mini-jack)

-S/PDIF digital audio output (RCA)

5. Hardware Installation:

- 1. Turn off your computer FIRST. Remove the case cover and insert this PDI capture card and Xcard into your computer's PCI slot.
- 2. Connect the PDI Capture Card to the Realmagic Xcard through the 26-pin ribbon cable shipped with the PDI Capture Card + Xcard Combo. The red line of the ribbon cable should be at the left as shown in the following picture.
- 3. Make sure the adapter card is well seated in the slot before fasten it with screws. Finally, replace case.
- Connect the Remote Control Serial Port to one serial port at PC.
 After finishing the above procedure, you may begin to install the driver and software.



6. Software Installation:

- 6.1 REALmagic Xcard (Driver) Installation
 - 1. In Windows, go to "Control Panel", "System", "Hardware", then "Device Manager".
 - 2. Double "Multimedia Controller", Click "Reinstall Driver...".
 - Choose the option Driver from disk provided and then click "OK".
 - 3. 4. Make sure the dialog specifies the correct disk drive letter (for example, D:\) and location (use the Browse dialog), and click "OK" to install the appropriate drivers and software for the REALmagic Xcard to your hard disk. For example, installing to Windows 98SE will use the driver location: D:\Xcard-Driver & Applications\Windows 98SE & Me\Driver.
 - 5. When the installation is complete, the Windows desktop will appear.
- 6.2 REALmagic Xcard (Application) Installation
 - Run the appropriate REALmagic Xcard Application Setup program. For example, installing to 1. Windows 98SE will use the application location under: D:\Xcard-Driver & Applications\Windows 98SE & Me\Application\Disk1\ (where D: is the CD-ROM drive letter). The Welcome dialog box appears.
 - 2. Click the "Next" button. The REALmagic Xcard Setup dialog appears.



3. Click on the "Install the REALmagic applications" radio button (default) and then "OK".

REALmagic Xcard Setup				
Please select the like to perform:	operation you would			
Install the REALma	Install the REALmagic applications			
Change the DVD Region Code				
Uninstall application [and driver]				
Ok	Cancel			

4. Click on the COM1 radio button (or COM2, COM3, or COM4, depending on how your remote control is connected to the computer) and then click Next. The Choose Destination Location dialog appears.

Remote	e Control	Serial Port 🔀
	Select the Seri Control is attac	al Port to which the Remote hed :
	<u>N</u> ONE	
		COM <u>3</u>
		COM <u>4</u>
		< <u>B</u> ack <u>N</u> ext>

 Click "Next" unless you wish to specify an alternative destination folder in which to install files. To specify an alternative destination, click "Browse", and navigate to the desired folder and then click "Next".



6. REALmagic Setup installs the program files. When installation is completed, the Setup Complete dialog appears. Click "Finish".

Setup Complete	
	Setup has finished installing the REALmagic software.
	Click Finish to complete the REALmagic setup

6.4 DScaler 4.1.X Installation

- 1. After turn on your computer, place the Utility CD into the CD-ROM. If you don't have the CDROM, please download the driver from PMS Video's web site.
- 2. When the New Hardware Found message appears, choose "Cancel" for all. (i.e. Normally, we do not need to install the device driver because DScaler can drive the PDI card directly. Please refer to the appendix in case you want to install the driver for any reason.)

Note: To permanently stop the pop-up message of "New Hardware Found" each time boot-up, please go to "My Computer > Property > Hardware > Device Manager" and you should see the device with a ? mark. This is possibly the unknown devices of the PDI card. Right click the ? mark device and select Disable. Then right click it again and select Enable. Then Windows won't find the 2 devices again and ask for driver when next boot up.

- 3. Double Click the "DScaler.exe" program under "PMS_Video-Driver & Application". If you don't have the CDROM, please download the driver from PMS Video's web site.
- 4. Click "NEXT" to continue.



5. Click "YES" after reading the license agreement.



6. Click "NEXT" after reading the warning message.

🛿 Setup - DScaler 4.1.6	
Information Please read the following important information before continuing.	
When you are ready to continue with Setup, click Next.	
Warning	^
This program installs a temporary driver while it runs. This means that some of the code runs inside Ring0 along with the kernel. What this means is that if anything goes wrong this program can crash your whole system causing a BSOD in NT or a hanging 95/98. Please do not use kill task to stop DScaler except as a last resort.	100
In some cases a crash in DScaler can cause disk corruption. As a precaution sync the disks before running this program. Use the sync utility from <u><http: www.sysinternals.com=""></http:></u> for whichever operating system you are running.	
DScaler	
< <u>Back</u>	Cancel

7. Click "NEXT" after choosing the folder for installation.

Setup - DScaler 4.1.6	
Select Destination Directory Where should DScaler 4.1.6 be installed?	
Select the folliler where you would like DScaler 4.1.6	to be installed, then click Next.
C:\Program Files\DScaler	
🗁 C:\	~
🚰 Program Files	
ComPlus Applications	~
Sec.	~
The program requires at least 5.3 MB of disk space.	
caler	
<u> </u>	ack <u>N</u> ext > Cancel

8. Choose "Full installation", then Click "NEXT".

Setup - DScaler 4.1.6		
Select Components Which components should	be installed?	El la
Select the components you install. Click Next when you	u want to install; clear the component u are ready to continue.	s you do not want to
Full installation		~
Main Files	2020 - 22	5.2 MB
Rarely used or Historic	al Plug-ins	0.1 MB
Plug-ins in Development	nt	0.1 MB
Current selection requires a	at least 5.3 MB of disk space.	
caler	< <u>B</u> ack	Next > Cancel

9. Select or create the Start Menu folder for DScaler shortcuts, then Click "NEXT".

🗐 Setup - DScaler 4.1.6	
Select Start Menu Folder Where should Setup place the program's shortcuts?	
Select the Start Menu folder in which you would like Se shortcuts, then click Next.	tup to create the program's
DScaler	
Accessories Administrative Tools Adobe Ahead Nero ASUSTek ASUSDVD XP Filat Panel Adjust Games hp LaserJet 1150,1300 Microsoft Office ?? Norton AntWirus Philins LightFrame 3	
🔲 Don't create a Start Menu folder	
DScaler	
< Back	< Next > Cancel

10. Choose to/not to create desktop icon and quick launch icon, then Click "NEXT".

🕮 Setup - DScaler 4.1.6	
Select Additional Tasks Which additional tasks should be performed?	
Select the additional tasks you would like Setup to perform while installing 4.1.6, then click Next.	g DScaler
Create a Quick Launch icon	
DScaler	Cancel

11. Click "Install".

😴 Setup - DScaler 4.1.6	
Ready to Install Setup is now ready to begin installing DScaler 4.1.6 on your computer.	
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination directory: C:\Program Files\DScaler	^
Setup Type: Full installation	
Selected Components: Main Files Rarely used or Historical Plug-ins	
Start Menu folder: DScaler	>
<u>s</u>	<u>></u>
DScaler - C Back Install	Cancel

12. Choose to/not to launch DScaler program after finishing installation, then Click "Finish".



7. DScaler Setting:

1. Set CPU information after launching DScaler for desire performance.

General Hardwa	are Setap	
In order for DSca is. Please select setting. (This set	aler to give the best results it needs to know h the nearest speed range to your machine. If ting is not detected)	iow powerful your machine in doubt use the lower
Processor	Above 1 GHz	SSE2
For lower spec m Choose the optic	achines there is a tradeoff between picture q in below that best matches your preferences.	uality and frame rate.
Defaults	Best picture quality	~
DScaler can use the same time. C CPU using	your full CPU for best results or keep CPU fo hoose the option below that best matches yo Use full CPU for best results	r other applications running at ur preferences.
ОК	Cancel	

- 2. Select "BT Card" on the menu bar, then Choose "Setup Card / Tuner ...".
- 3. Select "RS BT Card", then Click "OK".

Setup card 1 with chip BT878				
Use this dialog to select the card closest to your card type. Some tuners are autodetected and will be selected here. Otherwise you must try and find out what tuner you have.				
The easiest way is by looking at the documentation that came with the card. Otherwise you will have to see if there is any marking on the silver tuner box on the card.				
Card	RS BT Card			~
Tuner	*No Tuner/Unknown*			~
Video Decoder:	Bt878	Vendor ID:	109E	
Auto Detect ID:	n/a	Device ID:	036E	
ОК	Cancel		Auto-Dete	ect

- 4. Select "BT Card" on the menu bar, Select "Video Input", then Choose ANY of the CCIR. (Note: Any of the CCIR can take the PDI input signal, but the video adjustment setting for each CCIR can be different. Therefore, the four CCIRs can be treated as four profiles.)
- 5. Then you need to set the "Video Adjustments" of DScaler to match your display. If you don't bother to fine tune the parameters by yourself, you may use this set of recommended setting: *Brightness*= 9, *Contract*= 116, *Hue*= -30, *Color U*= 126, *Color V*= 126. (Please set the Brightness in "Video Adjustment" of the Xcard player to 500 for optimal result, the default value is 600)

8. X-Card Setting:

You can set the "Video Adjustment" of XMedia to the following for optimal picture quality.

- 1. Brightness = 500
- Contrast = 500
 Saturation = 500

Also, please set the "TV Display Ratio" to "4:3 TV" and the "Preferred 16:9 Display mode" to "Wide". For best video quality, you are recommended to adjust the aspect ratio in DScaler, instead of XMP.

Configuration Properties	X
DVD Video Setup Video Adjustment Audio Setup Controls Controls 500 • 500 • Formation Brightness 500 • Formation Formation * Current Video Mode: TV Defaults Defaults	General TV Display Ratio 4:3 TV C 16:9 TV
	ОК

Configuration Properties		
DVD Video Setup Video Adjustment Audio Setup General		
Rating Control	Rating Control Password	Default Language:
СG	Apply	Original Language 💌
C PG		
C PG-13	Preferred 16:9 Display Mode	
CR	🖲 Wide	
C NC-17	🔿 Pan & Scan 🛛 🚮	
Disabled	C Letterbox	
		ОК

Now please sit back, relax and enjoy your favorite movies.

Appendix

Installation of the SweetSpot PDI Deluxe Driver

(Note: This driver is also valid for both SDI/PDI Capture Card. After installing this driver, the SDI/PDI/PDI Deluxe Card can be used for some video capture applications, instead of only for DScaler application)

- 1. After turn on your computer, place the Utility CD into the CD-ROM. If you don't have the CDROM, please download the driver from PMS Video's web site.
- 2. Double Click the "sweetspot_wdm_driver.exe" program to start the driver installation program.
- 3. Click "Install" to start the driver installation process.

SweetSpot and PDI Deluxe Dr	iver Installer 1.0 🛛 🛛 🔀
+ PDI Deluxe PMS weather plugged in ty NSTREE RTON	Welcome! This program will now install the WDM capture driver for the SweetSpot and PDI Deluxe video processors. For further information jilease contact www.pluggedin.tv/sweetspot or www.pmsvideo.com
	Install Cancel

4. Choose "Continue Anyway" to continue the installation.

Hardware Installation		
1	The software you are installing for this hardware: PMS SweetSpot PDI Deluxe WDM Video Capture has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.	
	Continue Anyway	

5. Choose "Continue Anyway" to continue the installation.

Hardware Installation		
1	The software you are installing for this hardware: PMS SweetSpot PDI Deluxe WDM Audio Capture has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.	
	Continue Anyway STOP Installation	

6. Click "OK" to complete the driver installation and reboot the computer.

