

Capture-to-GoTM and TV-to-GoTM

Video Capture / TV PC-Card

Installation and User's Guide

for

Windows 95 & Windows 98

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Special Configurations

NO SPECIAL CONFIGURATION IS REQUIRED FOR MOST SYSTEMS. ALL SYSTEMS MUST BE ZOOMED VIDEO (ZV) ENABLED.

- For ThinkPad systems running Windows 95 (OSR2) with SystemSoft CardWorks:
 Card and Socket Services will not recognize the MARGI Capture-to-Go as a Plug-and-Play PCMCIA card. Require to run "NOSYSOFT.EXE" utility (available on MARGI's web site <u>http://www.margi.com</u>).
- Special Configuration on specific platform:
 - ThinkPad 570 The ZV port mute must be unchecked in the Volume Control Properties.
 - ThinkPad 600E Ensure latest display (Neomagic 256AV) driver is updated.
 - ThinkPad 770 (E, X, Z) Currently not supported due to incompatible TRIDENT display drivers.

• Platforms without ZV enabled:

- ThinkPad 240.
- ThinkPad 560 & 560E.
- ThinkPad 760 Series.

SPECIAL NOTE:

Follow the directions carefully in the following pages for the difference between :

- (1) Windows 95-OSR2 [4.0095B or 4.00.95C] / Windows 98 [4.10.1998 or SE 4.10.2222A]
- (2) Windows 95-OSR2 [4.00.95B or 4.00.95C] with SystemSoft CardWorks.
- (3) Windows 95-OSR1 [4.00.95 or 4.00.95A] with SystemSoft CardWorks.

Skipping any step may result in improper operation:

Windows 95 - OSR2 / Windows 98

Windows 95 - OSR2 [4.00.95B or 4.00.95C] / Windows 98 [4.10.1998 or Second Edition - 4.10.2222A] : Card and socket services provider (*SUPPORTS Plug-and-Play*):

◊ Run PC Card Property from the **Control Panel** to detect new card (*see Figure below*).

Figure - PC Card displays both empty slots.

PC Card (PCMCIA) Properties
Socket Status Global Settings
I o remove a PC card, select it from the list, and then click Stop.
(Empty) - Socket 1
Normal (Empty) - Socket 2
Stop
 Show control on taskbar Display warning if card is removed before it is stopped
OK Cancel Apply

Simply insert the **Capture-to-Go**TM card into the ZV slot. (*see Figure below*)

Figure - New Hardware Found with OSR2 - PC Card

1	New Hardware Found		
	52	MARGI_Systems-Capture_Card	
	Window	is has found new hardware and is installing the software for it.	

- **IMPORTANT**: Windows 95 / Windows 98 will prompt for the location of the file 'MargiHW.vxd' since it could not be found. At this point, simply type **A**:\ (or the location of the installation floppy diskette in which this file is located), and click **OK**. The drivers will then be automatically installed.
- After the installation is complete, there will be 2 loud beeps once the card is recognized (*see Figure below*)

Figure - PC Card displays configured card

PC Card (PCMCIA) Properties	? ×
Socket Status Global Settings	
I o remove a PC card, select it from the click Stop.	list, and then
MARGI_Systems-Capture_Card - Socket 1	
New (Empty) - Socket 2	
Stop	
Show control on taskbar	
Display warning if card is removed before it is a	stopped
OK Cancel	Apply

Windows 95 - OSR2 with SystemSoft CardWorks

Windows 95 [4.00.95B or 4.00.95C] with SystemSoft CardWorks : Card and socket services (*DOES NOT SUPPORT Plug-and-Play*):

- Download the "NOSYSOFT.EXE" utility from MARGI's web site (<u>www.margi.com</u>) ...SUPPORT ...Systems Compatibility for MARGI Products ...IBM
- ♦ Run the "NOSYSOFT.EXE" utility to enable Plug-and-Play installation (Ensure to close all applications prior running the utility).
- \diamond Reboot the system for the change to take place.
- ♦ Follow the installation procedure for Windows 95 -OSR2 / Windows 98 from previous page.

Windows 95 - OSR1 with SystemSoft CardWorks

Windows 95 [4.00.950 or 4.00.95A] with SystemSoft CardWorks : Card and socket services (*DOES NOT SUPPORT Plug-and-Play*):

- Run the SystemSoft CardWizard to detect the card information. (*refer to the notebook documentation for launching the application*).
- Simply insert **Capture-to-Go**TM card into the ZV slot (*see Figure 1*).

Figure 1 - CardWizard	displays	unconfigured	card
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SystemSoft CardWizard - [Card Information] Elie View Actions Options Window Help	
Capture Card Margi Systems 0 [CardSoft Mode] Bottom Slot Tempty Socket No Card Installed 1 Top Slot Wizard	
For Help, press F1	///

- ◊ Run A:\SETUP from the driver diskette. After the installation is complete, restart Windows for the settings to take place.
- ♦ There will 2 loud beeps once the card is recognized and the "?" will be removed (*see Figure 2*).

Figure 2 - CardWizard displays configured card

SystemSoft CardWizard - [Card Information] Set Elle View Actions Options Window Help □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
Capture Card Margi Systems 0 [CardSoft Mode] Bottom Slot	
Empty Socket No Card Installed 1 Top Slot	
Wizard	
For Help, press F1	

VIDEO CAPTURE Application

- After installing the **Capture-to-Go**[™] drivers, choose <u>Programs Capture to Go</u> from the **Start** menu. 1.
- 2. Choose CaptureToGo to launch the Video Capture application (see Figure 10)



Figure 10 - MARGI's Video Capture Application

- Starts Capturing video into working file (ex. Capture.avi). Click anywhere on the screen to stop the Capturing process.
- Captures a "Still" frame / image into the Clipboard. ò
- Displays the video in Full Screen (press "Esc" or click anywhere on the screen to resume).
 - Displays TV Remote Dialog Box. (requires a special TV antenna adapter)
- Move to the first frame of a captured video file. K
 - Play / Pause the current captured video file. Ш
- Move to the last frame of a captured video file. M



►



Change the Playback Direction [Forward / Backward]

Understanding the Video/Audio Cable

The **Capture-to-Go**[™] card is equipped with a Video (Video Source & S-video Inputs) and Audio (Right & Left Inputs) cable (*see Figure 11*).



SOURCE Inputs

Figure 12 - Source Inputs

🔤 MARG	Capture To Go	_	
<u>F</u> ile <u>E</u> dit	Source View Capture PlayBa	ack Help	
<u>•</u> ⊜⊏	<u>C</u> amera <u>I</u> V Remote		
	⊻ideo Controls (Line In) ⊻olume Controls		

- <u>Camera</u>: Power on the connected camera
- **<u>T</u>V Remote...** : Enable TV Control Dialog box (required special TV antenna to operate)
- Video Controls (Line In)...: Enable Video Source Dialog box (see Figure 13 for more details)
- <u>Volume Controls</u>...: Launch the Volume Control Dialog Box (refer to Microsoft Windows 95 User's Guide for instructions on how to set the volume controls)

Selecting Between Different Video Connector and Video Signal

- 1. Connect the video signals to the **Capture-to-Go**[™] card
- 2. From the *Source* menu, choose *Video Controls* (*Line In*).... (see Figure 13)
- 3. Select which video source you wish to view; Compisite or S-Video. Click OK.
- The Capture-to-Go[™] card is capable of processing video inputs using either the NTSC (American/Asian) or PAL (European/Asian) video standards. Select the format of the video input signal (the default is the NTSC standard). Click OK.
- 5. By clicking the Auto-Detect button, video input signal will be automatically configured.

Adjusting the Video Source Controls

- 1. Connect the video signals to the **Capture-to-Go**[™] card
- 2. From the *Source* menu, choose *Video Controls* (*Line In*).... (see Figure 13)
- 3. Make the necessary adjustment for the Brightness, Contrast, Hue and Saturation.
- 4. By clicking the **Default** button, all changes will be set back to factory default settings.

Figure 13 - Video Source Controls			
Video Source Controls 🛛 🗙			
Video Source Connector Composite C S-Video	Signal © NTSC © PAL Detect Now	MARGI Systems Inc.	
Color Controls			
Brightness		▶0%	
Contrast 🔳		▶ 100 %	
Hue		▶ 0 Deg	
Saturation		▶ 101 %	
		Default	

VIDEO Options

Figure 14 - View Options				
🔤 MARGI Capture	e To Go			
<u>File E</u> dit <u>S</u> ource	View Capture PlayBack Help			
	✓ <u>O</u> verlay	4		
	 ✓ <u>P</u>lay ToolBar ✓ <u>S</u>tatus Bar 			
	 ✓ Scale To <u>W</u>indow <u>F</u>ull Screen 			
	Video Window <u>A</u> djustments			
├────				

- **Overlay** : Show video in Overlay mode at 30 frames per second.
- **<u>P</u>lay ToolBar** : Show / hide Capture Play ToolBar.
- <u>Status Bar</u> : Show / hide Status Bar for details and displaying number of frames captured.
- Scale to <u>Window</u> : Scale / un-scale video to the Main Window.
- **<u>Full Screen</u>** : Show video in full screen. Press "Esc" to resume.

CAPTURE Options

Figure 15 - Capture Options

🔤 MARGI (Capture To G	0	_ 🗆 ×
Eile Edit <u>S</u>	≩ource ⊻iew	Capture PlayBack Capture Video Capture Frame Settings Audio Format Video Format	<u>></u>

- <u>Capture Video</u> : Start capturing video into working file (*.AVI).
- Capture Frame : Capture a still frame / image.
- <u>Settings...</u>: Modify general capture parameters (*see Figure 16*)
- <u>Audio Format...</u> : Modify capture audio parameters.
- **<u>V</u>ideo Format...** : Modify capture video parameters.

Modifying the Video Capture Parameters

- 1. Connect the video signals to the **Capture-to-Go**[™] card.
- 2. From the <u>Capture menu</u>, choose <u>Settings</u> (see Figure 16)
- 3. Select the desired frame rate of the captured video. Full motion video is 30 frames/second, but the higher the frame rate, the more disk space is required for storing the captured video.
- 4. If desired, set the maximum amount of time that should be captured. The longer the video is captured, the more disk space required to store the captured video.
- 5. The means to terminate the video capture process can also be set. Both the keyboard and mouse can be used to end the process.

Figure 16 - Video Capture Parameters

Capture Parameters	×		
Erame Rate: 15 Video Buffers: 50 Max Drop Rate: 10 Enable Capture Time Limit Seconds:	OK Cancel Key to Abort Capture ⊙Eso Key ⊙Space Bar Key ⊙F <u>8</u> Key		
Capture Audio Capture Audio Hit OK to Capture Use DOS Memory	Mouse to Abort Capture © Left Mouse Button © Right Mouse Button		
Enter the amount of disk space to set aside for the Capture File. Existing video data in the file will be lost. Free Disk Space: 414 MB Capture File Size: 0 MB			

Selecting the Video Format

- 1. Connect the video signals to the **Capture-to-Go[™]** card.
- 2. From the <u>Capture</u> menu choose <u>Video Format</u> (see Figure 17)
- 3. Select the desired Capture Dimensions from the list provided. <u>Note</u>: All dimensions are given in pixels.

Figure 17 - Video Format			
Video Format	×		
Capture Dimensions	-7		
	video		
Pixel Format			
YUV422 T	Capture To Go & zVideo are trademarks of		
OK Cancel	MARGI Systems Inc.		

Uninstalling the Capture-to-Go[™]Drivers

The instructions are for the removal of the Capture-to-Go[™] drivers.

Windows 95:

Method #1:

- 1. Start Windows normally.
- 2. Open the Start menu, then open the Settings sub-menu. Click on Control Panel.
- 3. After the Control Panel opens, double click on the Add/Remove Programs icon.
- 4. From the list of software titles, choose "CaptureToGo", then click on Add/Remove
- 5. Follow the onscreen instructions for removal of the drivers.

Method #2:

- 1. Start Windows normally.
- 2. Open the *Start* menu, *Programs* sub-menu, and then Capture To Go sub-menu. Click on *Uninstall*. Follow the onscreen instructions for removal of the drivers.

Plug and Play

• The *Card Services* should recognize the **Capture-to-Go**[™] card as follows:

Capture Card Margi Systems

• The Capture driver supports *hot unplugging* of the Capture card. If a captured file is playing and the **Capture-to-Go**[™] card is removed, the file being played will stop. When the card is reinserted, pressing play will continue playback from the current position. If the play is pressed when the Capture card is extracted then the driver will prompt for card insertion.

Appendix A: Product Specifications

Product Characteristics

- ٠ Type II PCMCIA card compatible with the Zoomed Video (ZV) Standard
- ٠ High resolution for real-time video
- Provides full-screen, full-motion, and stereo audio capture ٠

Hardware Specifications

- NTSC or PAL video input •
- ٠ 16 bit YUV Video Interface providing TrueColor Quality
- ٠ 16 bit digital Audio Interface providing CD Quality Sound

Software Specifications

٠

Hot Plug & Play with Card and Socket Services Compatible for Windows 95, Windows 3.11 •

Normal Operating Specifications

- Typical Operation Power dissipation: 1.22 Watts ٠
- Operating Voltage: ٠
 - 5 Volts Operating Temperature Range: 5°C~30°C
- Operating Relative Humidity Range: 30%~80%

Appendix B: Troubleshooting

Frequently Asked Questions

- Q. I could not able to scan more channels.
- A. The scanning delay can be set to obtain more channels by editing a file called "MARGIVID.INI" in c:\Windows folder and type in the following line under [TunerSelect] section. AutoScanDelay=200 /* Scanning delay is set to 200 mSecs.
- **Q.** After installing the 'drivers' and rebooting, I get a blue screen error "The PCcard driver MARGIPNP.VXD requires a Zoomed Video Card Service Provider version 5.0 or greater..."?
- A. Without Card and Socket Services, standard Windows 95 (4.00.950 and 4.00.95a) OSR1 will not recognize the card through the ZV port (*refer to the section "What if you don't have Card and Socket Services" on page #4 for more information*). Another way to resolve this matter is to install a third party Card and Socket Services either SystemSoft CardWorks or Phoenix CardAgent (*contact your notebook manufacturer or distributor for the updated version of Card and Socket Services*). Most of the current release ZV notebooks are equipped with the latest Windows 95 (4.00.95B) OSR2.
- Q. Why do I get a GREEN screen once I start the Video Capture application?
- **A.** Ensure that the Capture-to-Go card is inserted into the Zoomed Video (ZV) slot which is the BOTTOM slot for the ThinkPad platforms (*refer to the notebook User's Guide to verify which slot is linked to the ZV port*).
- **Q.** Why do I get a BLUE screen once I start the Video Capture application?
- **A.** Ensure that (1) The Video/Audio is connected to the Capture card, (2) the camera is plugged into the card, (3) the video stream is coming from the source .
- **Q.** How can I find out which version of Windows 95 or Windows 98 is installed in my notebook?
- A. You can easily find out the current version of Windows 95 by going into the Control Panel System Properties -General. Under the System section, 4.00.950 or 4.00.95a for Windows 95 - OSR1, 4.00.95B for Windows 95 -OSR2.
- **Q.** Why do I get an error message "PNP Driver Failure"?
- A. If your notebook have the latest version of Windows 95 [4.00.950B] OSR2, then by installing our driver "A:\SETUP.EXE" from the floppy disk will create a setting for non-Plug-and -Play support inside the SYSTEM.INI file. To fix this problem by going into the SYSTEM.INI and remove the line "device=MargiPNP.vxd" under the [386Enh] section.
- Q. My modem / Ethernet PC card is no longer working after installing MARGI Capture-to-Go PC card.
- **A.** The MARGI Capture-to-Go PC card requires an IRQ in order for it to function. Ensure that both PC cards are not sharing the same IRQ.
- Q. Why reasons would cause my laptop to completely lock up after installing the card and what actions should I take.
- **A.** Sometimes the laptop is trying to determine if the card is ZV PC card or not by locking up during the boot up. It is recommended to boot up the system without the card pre-inserted.
- Q. I want a TV Card that runs PAL-i, how do I change the PCMCIA Card to accept PAL-i as an input.
- A. The Capture-to-Go PC Card accepts both NTSC and PAL-i formats. Ensure to obtain the TV Tuner to support PAL-i.
- **Q.** What is the maximum still pixel resolution that can be captured?
- **A.** Up to 720x480.
- **Q.** Is this device TWAIN compliant?
- A. No, our current driver does not support TWAIN.
- Q. Is this device Windows NT4.0 compatible?
- A. No, our current driver does not support NT40 due to NON Plug-and-Play support for Zoomed Video. We will support Windows 2000 once it is released.

Error Message Text and Solutions

If you encounter any error messages that are not included in this User's Guide, please write down the details of the message and contact technical support.

Unable to load the Video Capture Driver : This is a known BUG in our current version 1.18 version. **Solution** — Simply uninstall the Capture-to-Go driver and reinstall it by choosing the "default" location (C:\Video\Vidcap) for the drivers.

Error #1 "Please insert video card in a ZoomVideo slot".

Solution — Ensure that the Capture-to-Go card is inserted into the Zoomed Video (ZV) slot (*refer to the notebook User's Guide to verify which slot supports the Zoomed Video*).

Error #10 "Unable to set requested format. Insufficient frame buffer memory. Try reducing the display pixel depth or the display resolution".

Solution — This is due to the limitation on the memory buffer available for the video to playback. Try to reduce down (1) Capture Dimensions inside Video Format dialog box (*see Figure 17*) or (2) the desktop resolution and color mode.

Error #261 "Unable to initialize VPM provider. No VPM= entry in SYSTEM.INI".

Solution — There should be a line to enable the video VPM provider inside the SYSTEM.INI under [drivers] section. Example: If the notebook have a Neomagic 256AV video controller built-in, then a line "VPM=NMGC5VPM.DRV" should be added by updating the latest VGA driver. By updating to the latest display driver available from IBM's web site, the will be automatically entered.

Error #262 "Unable to load hardware driver. MMSYSTEM262 There is a problem with your media device. Make sure it is working properly or contact the device manufacturer."

Solution: The error message indicates the MARGI Capture-to-Go Card (hardware device) is not configured correctly. It is recommended to REMOVE the MARGI-Systems_Capture-device device in either "(?) Other devices" or "Sound, video and game Controllers".

1- From the Control Panel, go into System Properties.

2- Go into the Device Manager and search for MARGI-Systems_Capture-device device. This should appear either under (?) Other devices or Sound, video and game Controllers.

3- Click on the device and choose REMOVE.

4- Click on REFRESH button for Windows 95/98 to locate the device again.

5- Browse into the location of the MARGI installation disk so that the file (MargiHW.VXD) can be located.

BUG Reporting

Before filling out the BUG Report Format below, please try to resolve the problem by using the help guide. Also, check the "**Readme.doc**" file for information that has changed since the Help file was created.

- Reported by
- Reported date
- OS version
- Capture software version number
- Laptop model
- VGA controller make/model
- VGA / VPM driver version
- VGA resolution and pixel depth
- Detailed description of the problem
- Steps to duplicate the problem

Send to support@margi.com

Glossary of Terms

- *Card and Socket Services* A set of software interfaces that automatically detect insertion and removal on PCMCIA cards and allocates the appropriate computer resources.
- *Hot Plugging/Unplugging* The insertion/removal of the **Capture-to-go**[™] card while the card is playing a file. This feature allows the card to be removed and reinserted without termination of the file being played.
- *OEM Service Release (OSR)* A version of Windows 95 released to PC vendors that included a variety of bug fixes as well as support for enhanced devices. OSR1 applies for Windows 95 version [4.00.950 and 4.00.95a] and OSR2 applies for the latest version [4.00.950B].
- *PCMCIA Personal Computer Memory Card International Association -* This is the organization responsible setting the standards followed by any card that bears this name. These standards describe things like physical characteristics and electrical specifications.
- *ZV* (*Zoomed Video*) A video standard that allows full motion, full-frame video display on notebook computers.
- Zoomed Video (ZV) Port An extension to the PC Card (PCMCIA) standard that provides a high transfer rate for video applications on notebooks. Video data goes directly to the display controller, bypassing the CPU and system bus, allowing full-screen, full-motion (30 frames per second) playback of digital video. The ZV Port is activated by plugging in a PC Card that is ZV Port-compliant.