

User Guide

Digital Book Scanner

Magic Visual Table-320

Ver. 4.0

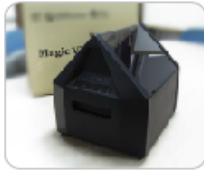
Contents

1	<i>Introduction</i>	2
1-1	Components	2
1-2	Hardware Specifications	2
1-3	Software specifications	3
1-4	Using Hardware	3
2	<i>Installation</i>	5
2-1	The Installation Process	5
2-2	Installation of Software Version 4.0	6
2-3	Automatic Installation of Hardware (Windows XP)	11
2-4	Manual Installation of Driver in Windows XP	13
2-5	Manual Installation of Driver in Windows Vista	19
3	<i>Using Viewer Program</i>	25
3-1	Getting Started	25
3-2	Name of Each Part of User Interface	27
3-3	Program Function	30
3-4	Using Configuration	31
4	<i>Troubleshooting</i>	33
5	<i>Precautions</i>	35
6	<i>Did you know?</i>	36
	<i>System Organization & Field Applications</i>	37

The specifications and information herein are subject to change without prior notice.

1-1 Components

Model Magic VT-320



Magic Visual Table



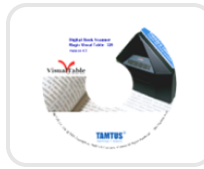
Power Adapter



USB Cable



Power Cable



Installation CD



User Guide

1-2 Hardware Specifications

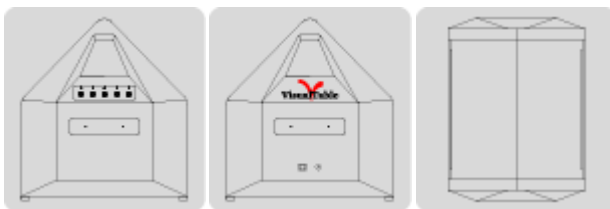
Operating Method	Face down scanning on the Λ-shaped scanning glass. Real time display on the screen.	
Type	Can be used as a fixed or movable digital visualizer. Must be connected to a computer for use	
Material	Main body – steel & ABS, Reflecting mirror – glass, Transparent shooting platform – PVC, Control button – push panel	
Measurements	12.4 W * 16 H * 13.6 D Inch	
Connection Port	Power input port, USB connection port	
Control Button	Power, Auto, Right, Left, Scan	
Image Sensor	3.2 Megapixels ½” CMOS sensor	
Scan Mode	Progressive	
Optical Resolution	1024 * 768, 2048* 1536	
Max. Input Resolution	2048 * 1536	
Output Format	24 bit digital RGB	
Display Area	216 * 297 mm (A4 size)	
Scan Speed	About 1 second per scan	
PC Environment	<i>Operating System</i>	Windows XP or higher
	<i>Min. Specifications</i>	Pentium IV 2.6GHz, 1GB RAM, 10GB HDD or Higher
	<i>Connection</i>	USB 2.0, 480Mbps
Power	<i>Main Body</i>	Ghost Power (Use PC USB 5 volts power , Max. 400mA)
	<i>Lighting</i>	DC 12V
Accessories	USB 2.0 cable, Installation CD, User guide	

1-3 Software Specifications

Characteristics	Simple, easy-to-use GUI
Basic Functions	<ul style="list-style-type: none"> • Navigate • Image Enlarge/Shrink • Image rotate by 90 degrees • Whole image save • Partial image save/cut • Change Image size • Adjustment of brightness, contrast, hue, saturation, sharpness and exposure • Text-to-Speech support
Camera Controls	<ul style="list-style-type: none"> • Color or B/W • Restoration • Control frame rate, color space/compression and print size
Pen Tools (Handwriting Annotations)	<ul style="list-style-type: none"> • Image import • Image save • Select color and line width • Erase annotations • Image move • Image cut & copy

1-4 Using the Hardware

1-4-1 Name of Each Part



- Mirror** Deliver image to camera
- USB** Connect to USB port of PC
- Power** Supply of DC 12V
- Camera** 3.2 megapixel digital camera
- Button Panel** Various functional buttons



- Power** Power on/off
- Auto** Auto scanning of both sides
- Left** View left side
- Right** View right side
- Scan** Scan page

1-4-2 Steps to Scan



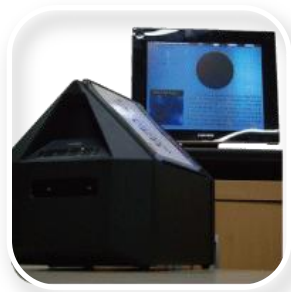
1. Put the item to be viewed on the top of V-table with its visible side facing down



2. Turn on power by pressing power button, red LED indicates "on."



3. By choosing the screen for display, press Left or Right button. Then, light is on inside the Magic VT scanner



4. Execute by double clicking the V-Table icon at desktop display.



5. Start using the page image being displayed on the screen

2-1 The Installation Process

The following steps will lead you through the auto installation process, which installs the driver and viewer software automatically. Alternatively, you can install or uninstall the individual programs manually. For manual installation, refer to page 13-23.

1. Insert the V-Table version 4.0 set-up CD.



2. The auto installation program will start automatically.



3. Click the auto-installation button to continue the installation.



4. Connect the USB cable of the digital presenter to a PC.

Contents of Installation CD

The set-up CD contains the following:

DirectX 9.0	DirectX 9.0 Runtime Software
Magic VT Driver	MagicView OC-300 Driver Software
V-Table	V-Table Software
WM Encoder	Window Media Encoder
Magic VT-320 Ver. 4.0 Manual	MagicView Software User Manual (PDF Acrobat Reader file)

Note

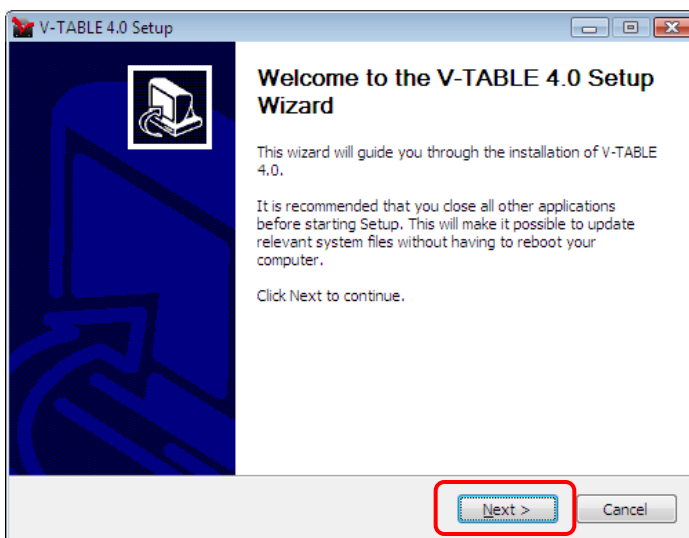
Do not connect the Magic VT-320 to the PC before driver and programs are installed. Otherwise, it may cause driver installation failure. OS supports Windows XP and Vista only.

2-2 Installation of Software Version 4.0

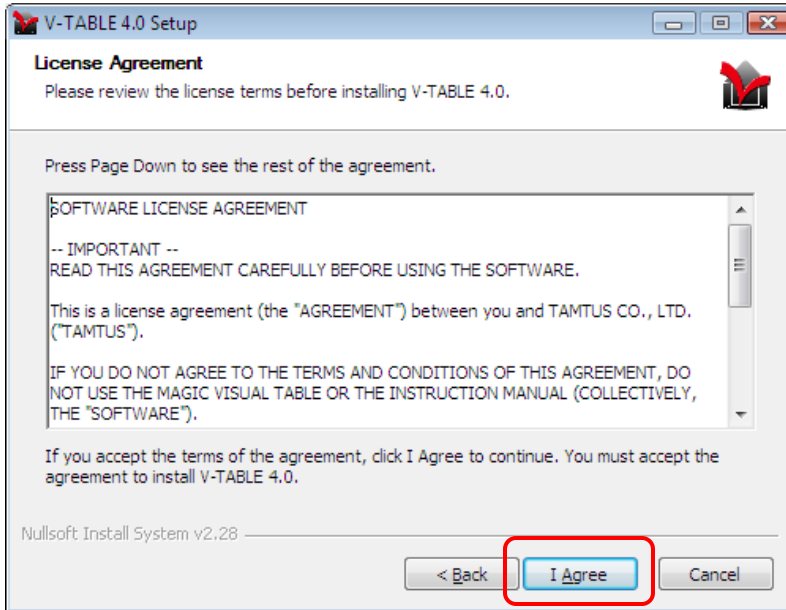
2-2-1 Insert the V-Table 4.0 Set-up CD, the auto-installation program will start automatically. Click the auto-installation button to continue the installation. If it does not run automatically, execute V-Table Setup.exe directly.



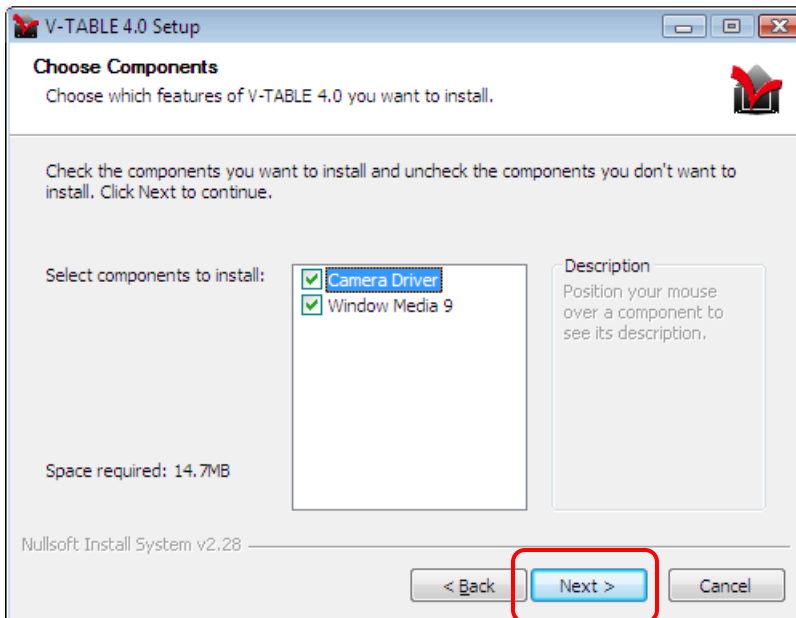
2-2-2 After the InstallShield Wizard appears, click “Next.”



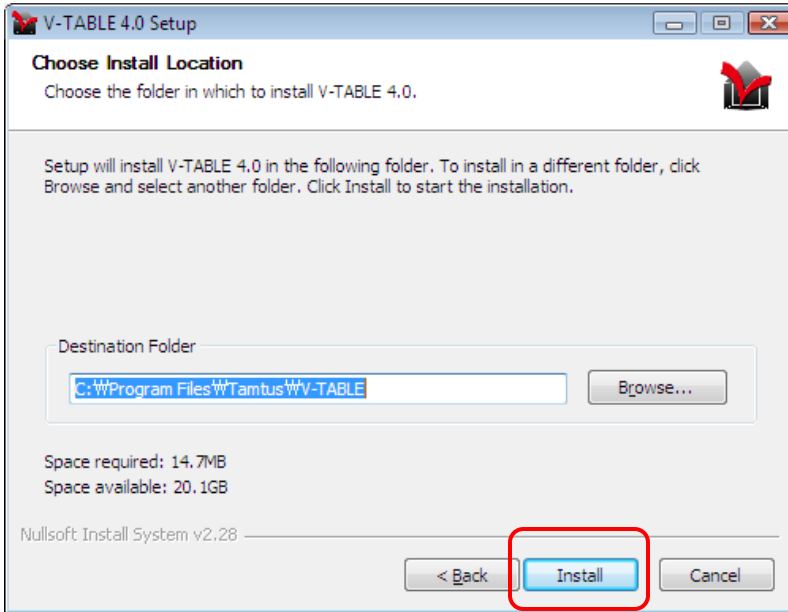
2-2-3 Read through the terms of the 'License Agreement' and click the "I Agree" button.



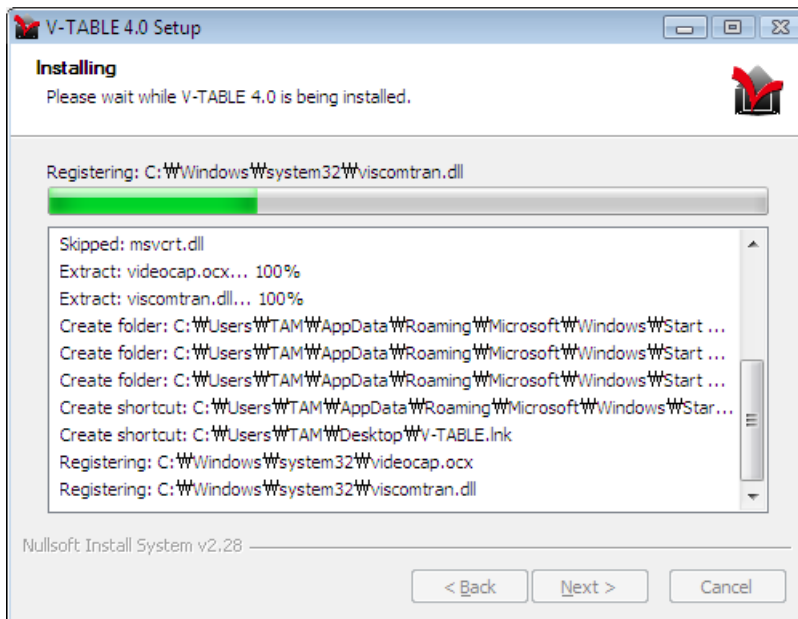
2-2-4 Choose the components you would like to install and click "Next" to continue. If the driver or Windows Media 9 has already been installed on your PC, uncheck the component(s) already installed and click "Next."



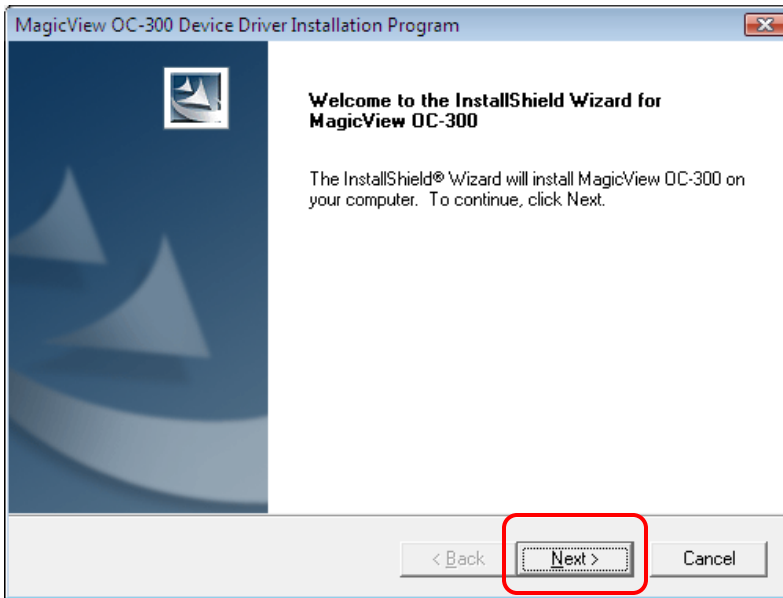
2-2-5 Choose a folder to install the software in and click “Install.”



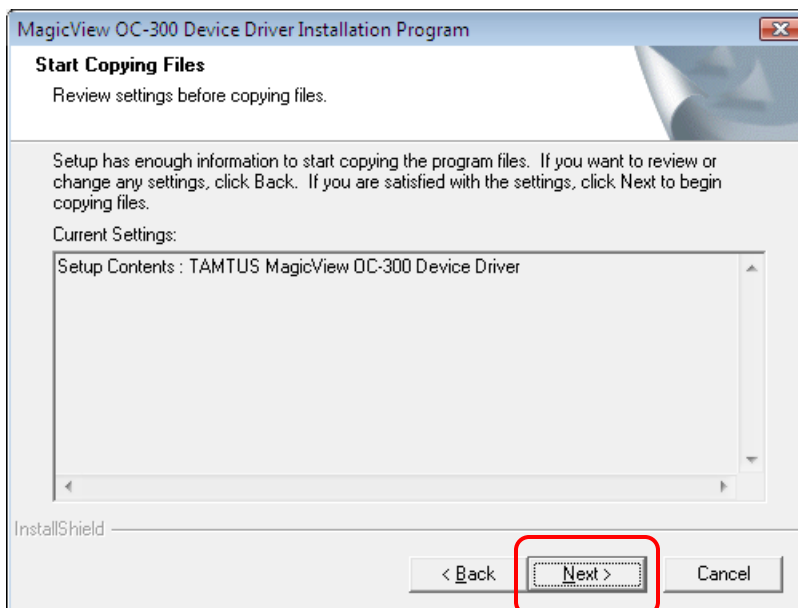
2-2-6 Installation starts.



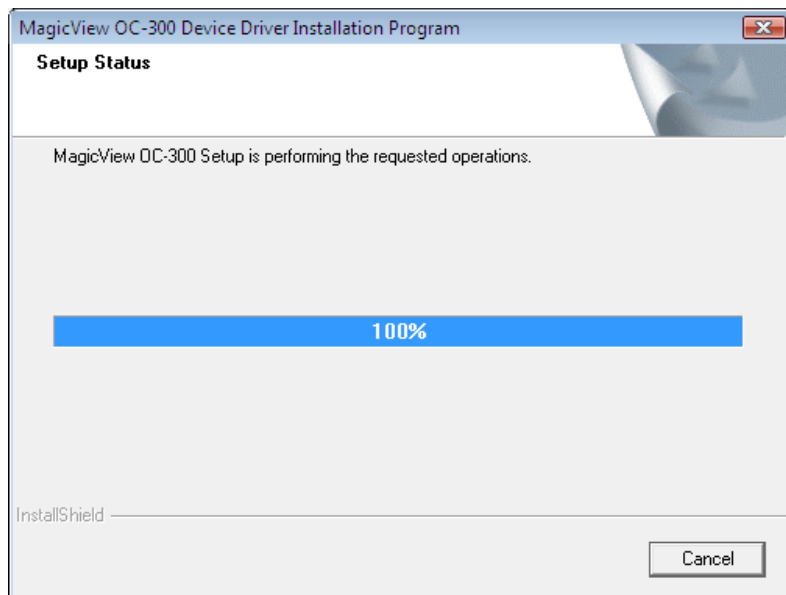
2-2-7 To continue through the installation process, click “Next.”



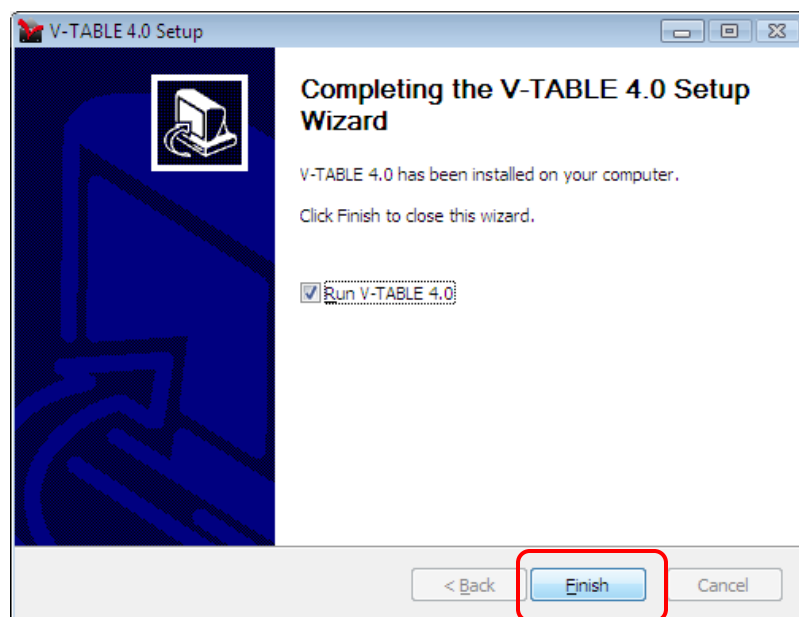
2-2-8 Click “Next.”



2-2-9 The installation process continues



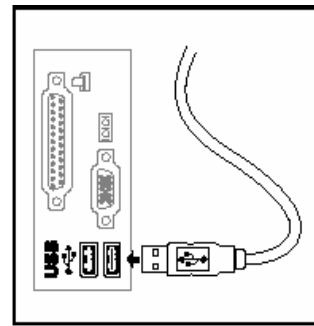
2-2-10 When the entire installation process is complete, click "Finish."



2-3 Automatic Installation of Hardware (Windows XP)

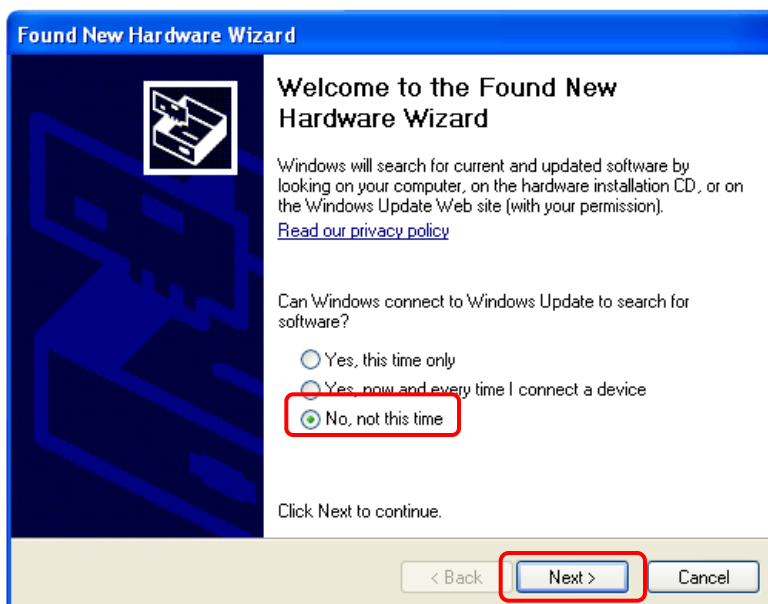
2-3-1 After installing the V-Table 4.0 Program, connect the USB cable of the Magic Visual Table to the USB port on your PC.

USB ports at the rear of the PC.

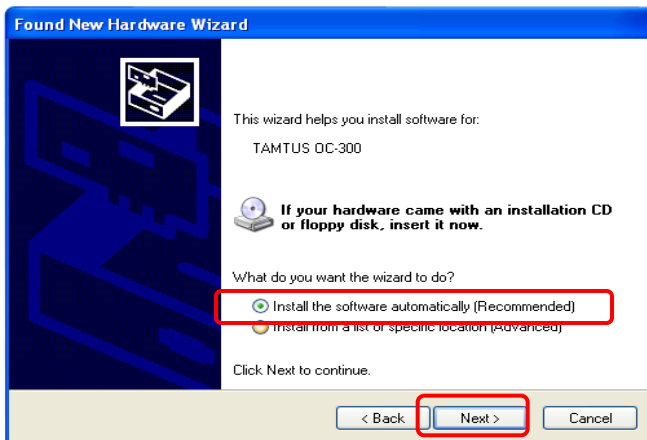


Note *The Magic Visual Table -320 can only be used in USB 2.0 mode. Check the PC's specifications to determine whether it supports USB 2.0.*

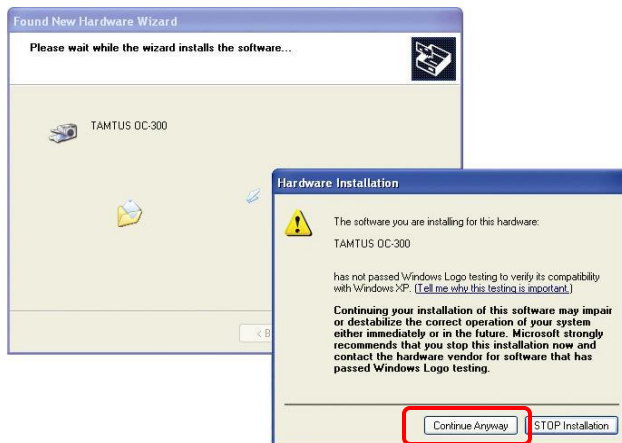
2-3-2 When the 'Found New Hardware Wizard' comes up choose the "No, not this time" option, and then click "Next" to continue installation.



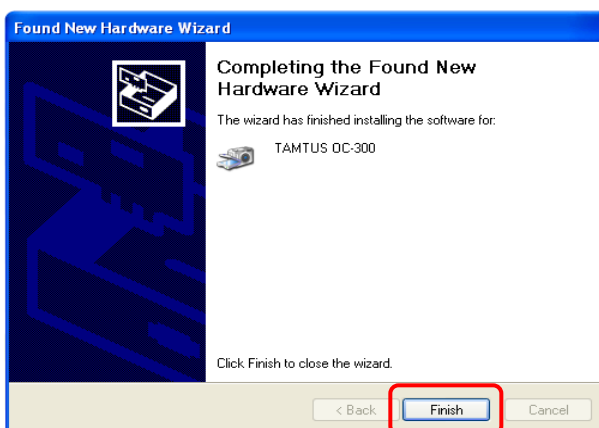
2-3-3 Select the “Install the software automatically (Recommended)” and click “Next”.




2-3-4 A security warning window will come up. Click the “Continue” button.



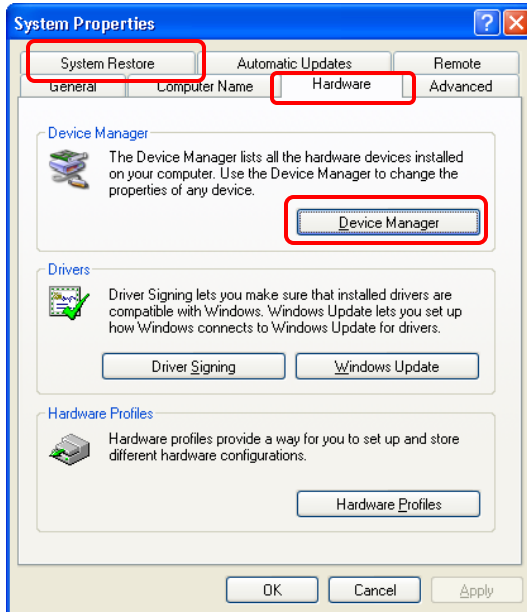
2-3-5 When the “Install Complete” dialogue window comes up click “Finish” to complete the installation. If the installation has been completed successfully, “New Hardware Found” will appear on the bottom right hand side of the PC screen.



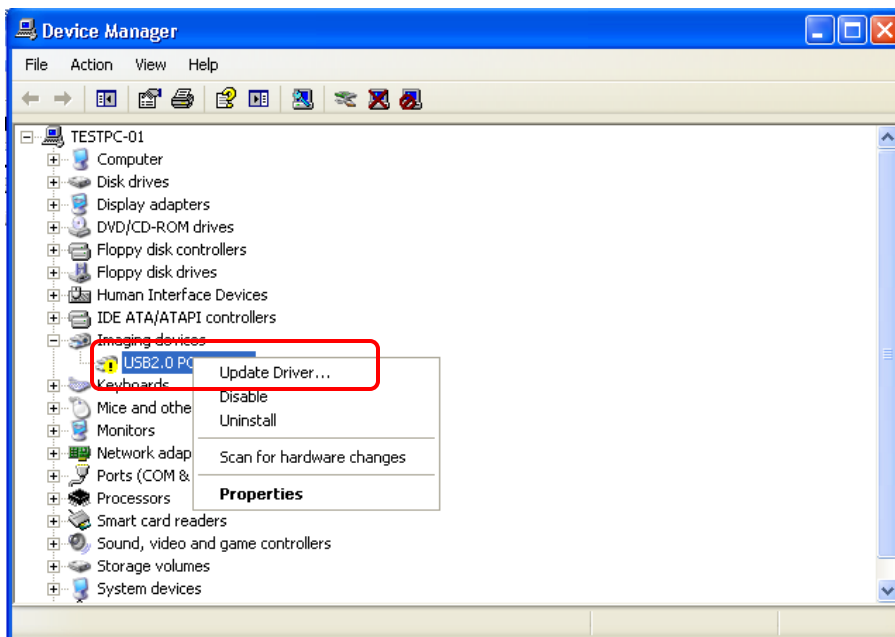
Note  Driver may not be installed automatically depending upon your computer. In this case, please refer to “Manual Installation of Driver” (page 13)

2-4 Manual Installation of Driver in Windows XP

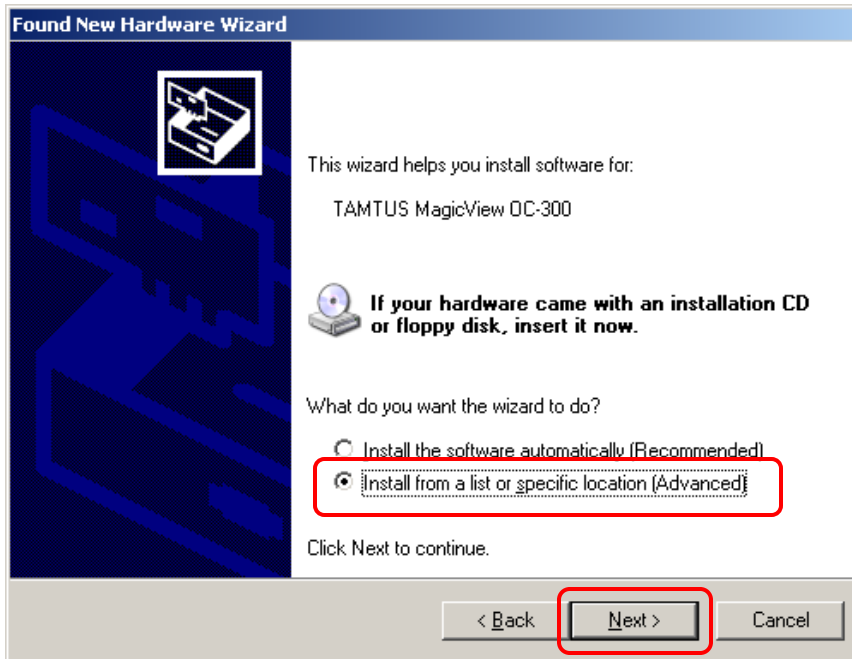
2-4-1 Connect the Magic Visual Table to your computer using the USB cable. Open the Device Manager : Control Panel → System → Hardware → Device manager.



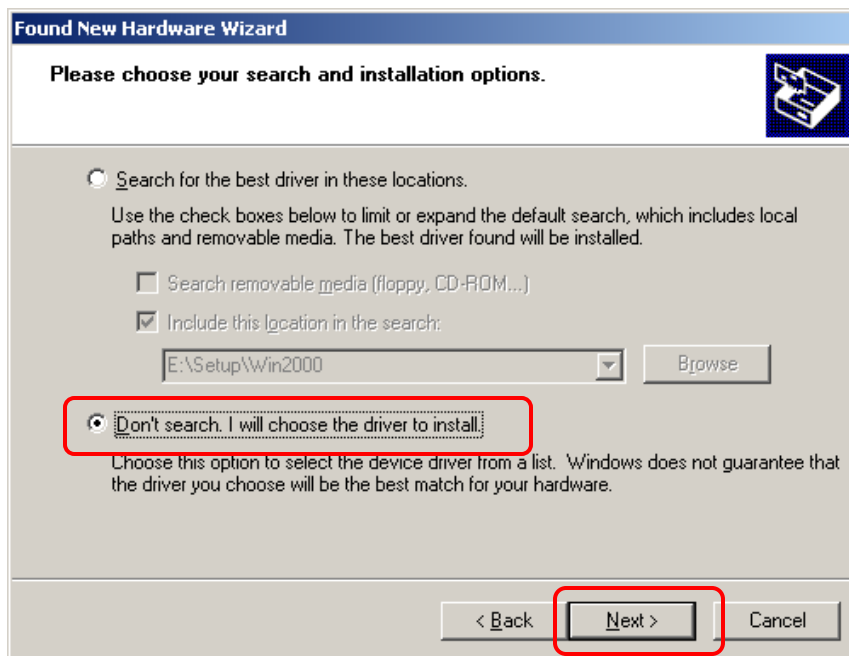
2-4-2 Right click the mouse on USB 2.0 Camera or Omnivision Supercam and choose “Update Driver...”



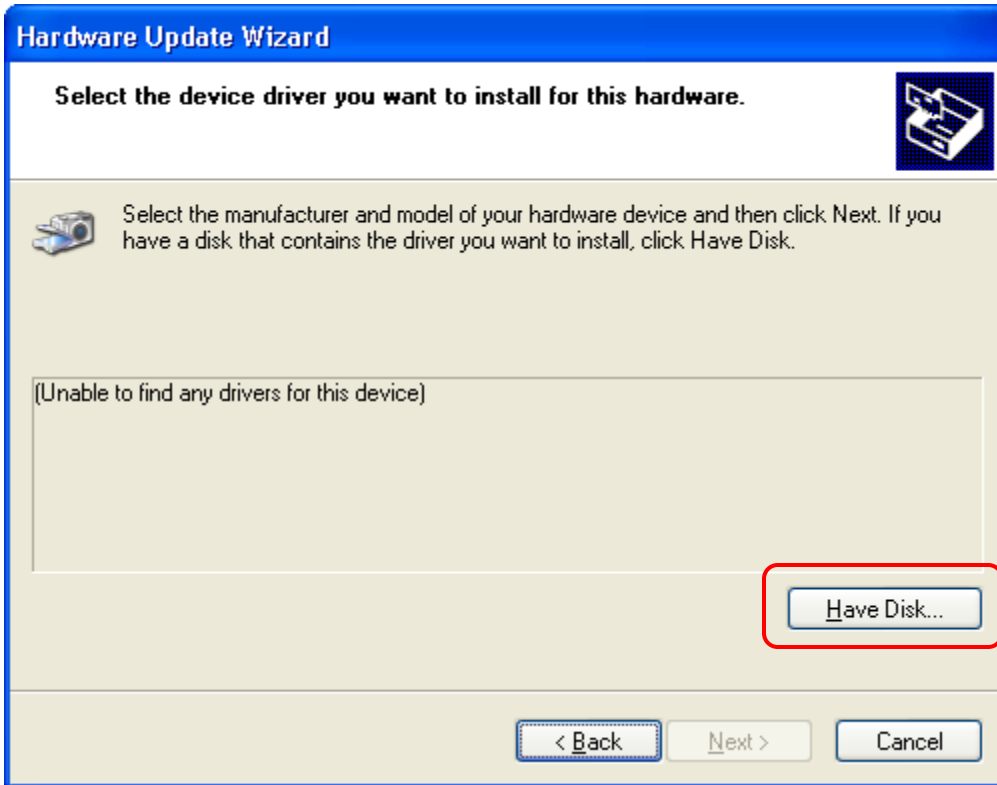
2-4-3 Choose “Install from a list or specific location (Advanced)” and click “Next.”.



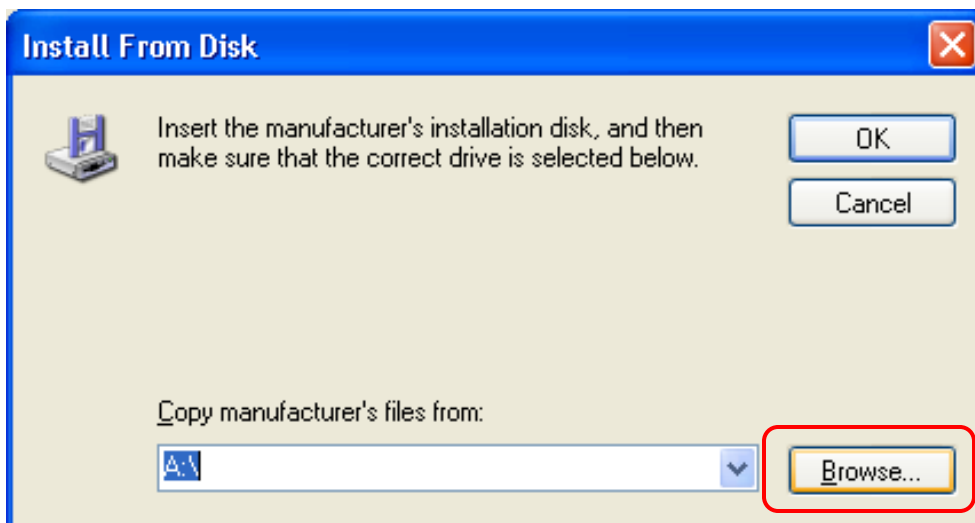
2-4-4 Choose “Don’t search, I will choose the driver to install” and click “Next.”



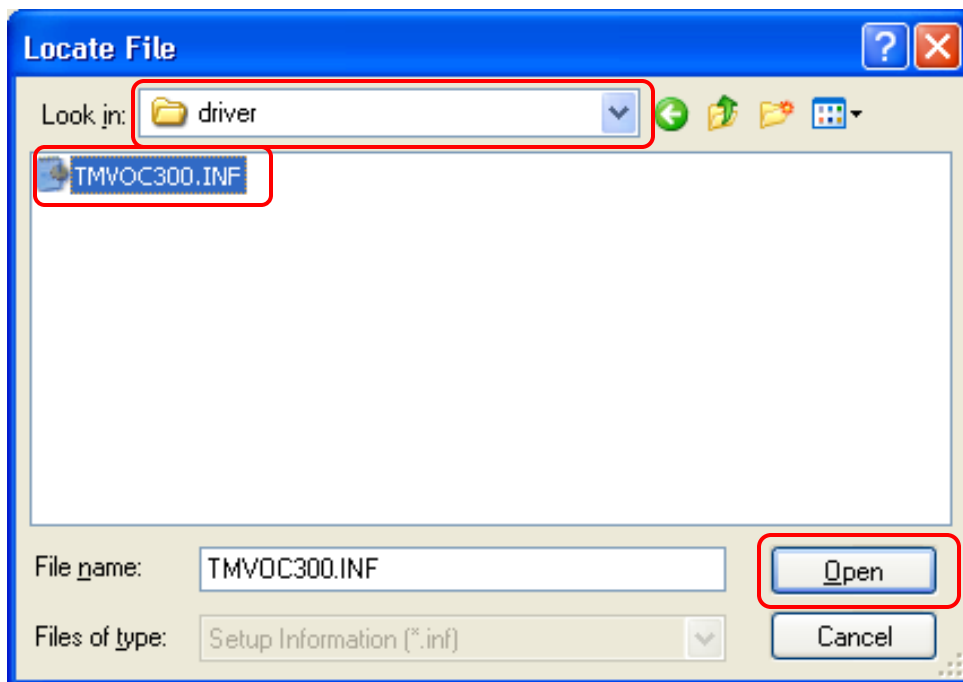
2-4-5 Choose "Have disk..."



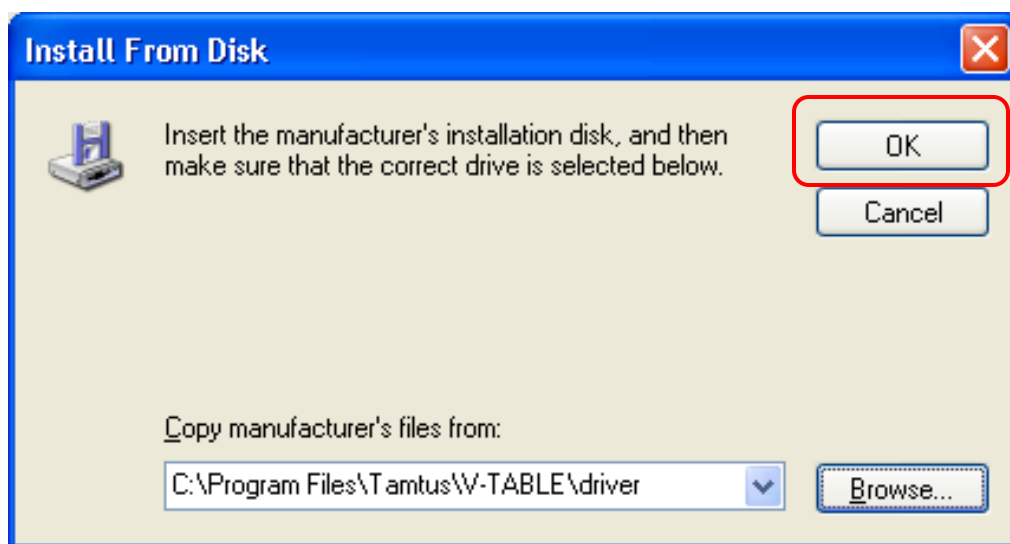
2-4-6 Choose "Browse..."



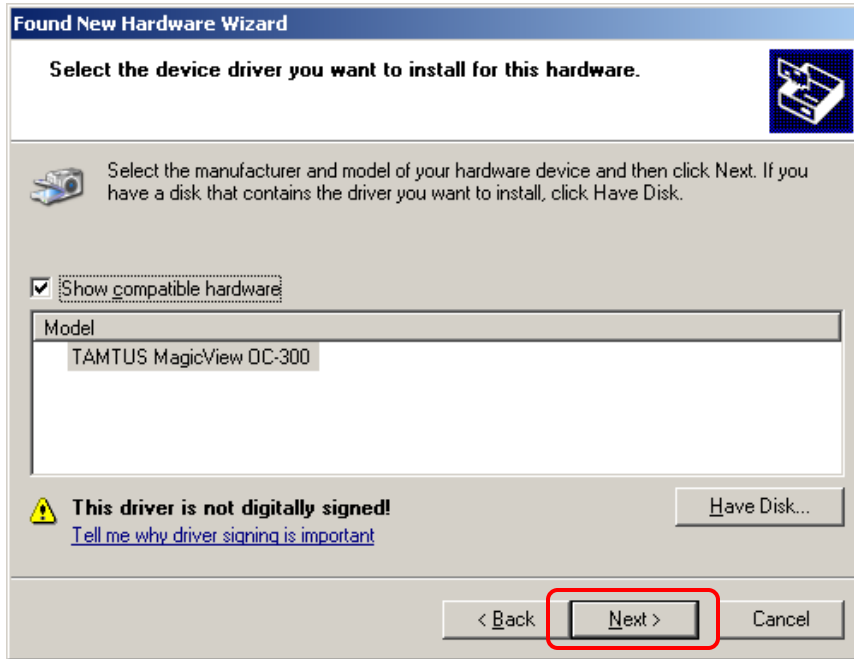
2-4-7 Choose “My computer → C:W → Program Files → Tamtus → MagicView → Driver folder.”



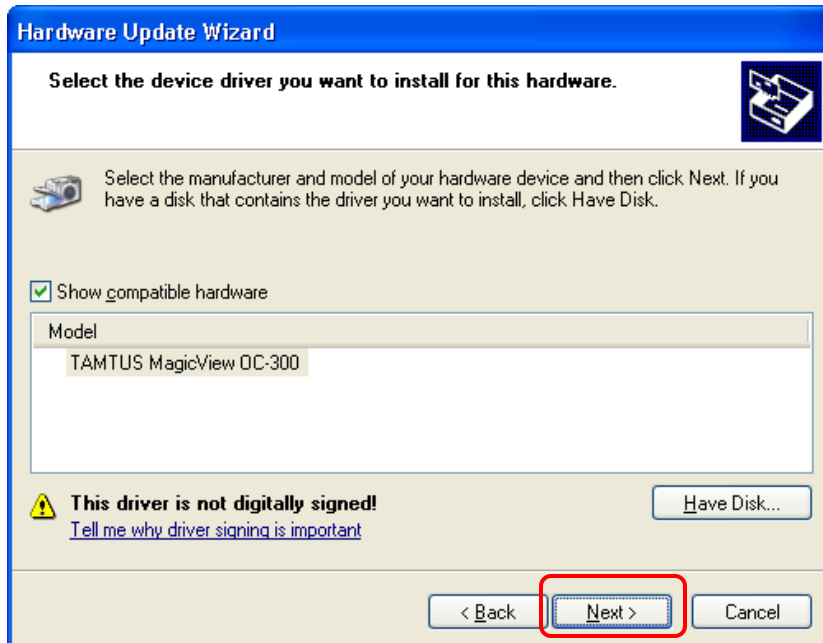
2-4-8 Choose “OK.”



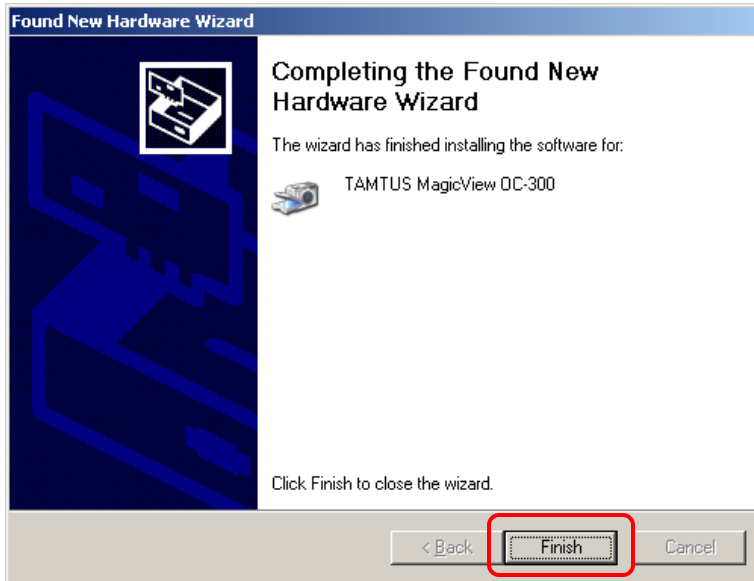
2-4-9 Click “Next” to run the installation.



2-4-10 Click “Next” to continue.

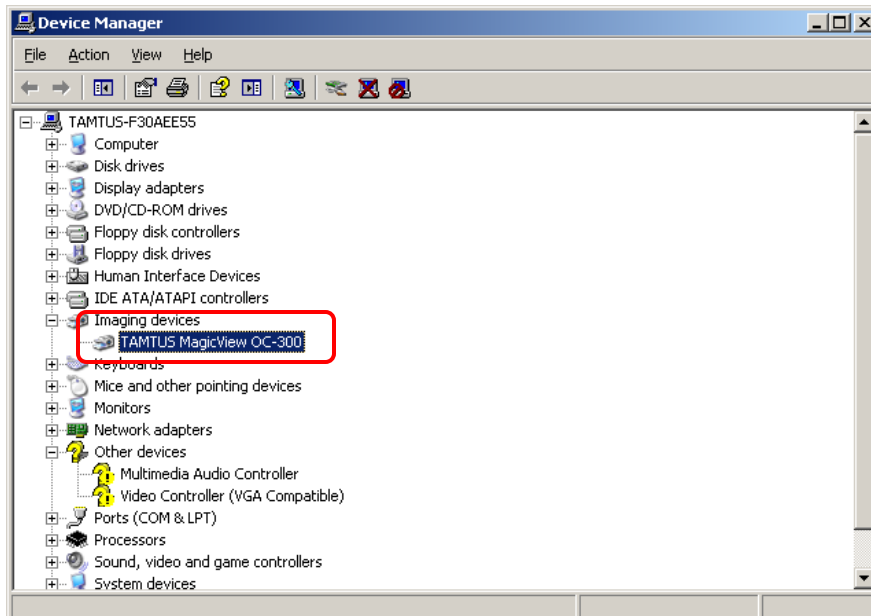


2-4-11 If you click “Finish,” device installation is complete.



2-4-12 How to confirm whether driver has been installed successfully:

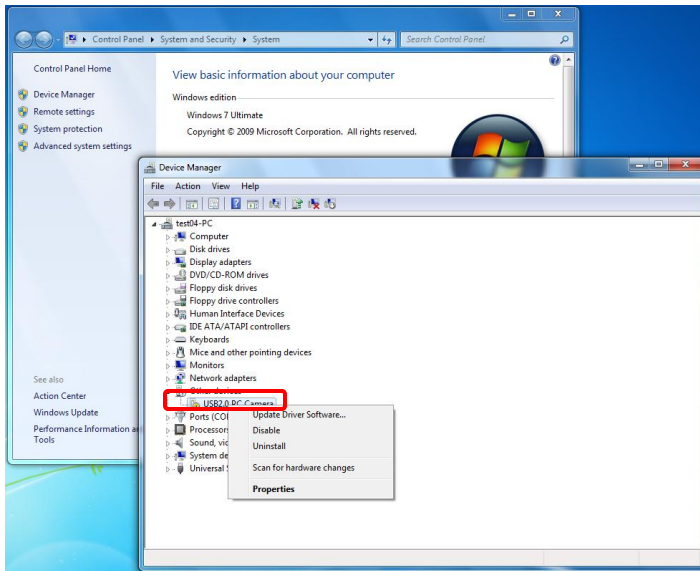
If TAMTUS MagicView OC-300 is listed under Imaging Devices in Device Manager, the driver has been successfully installed.



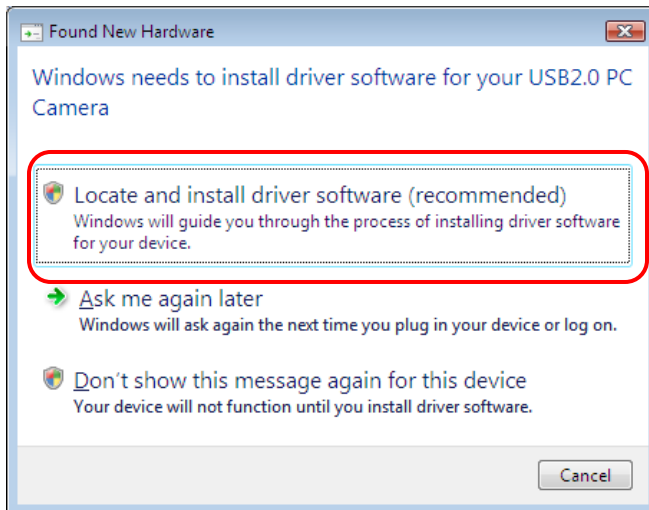
2-5 Manual Installation of Driver in Windows Vista

Windows Vista does not support automatic installation of the Tamtus MagicView OC-300 Driver Ver. 4. 0. The following is how to install driver manually in Vista.

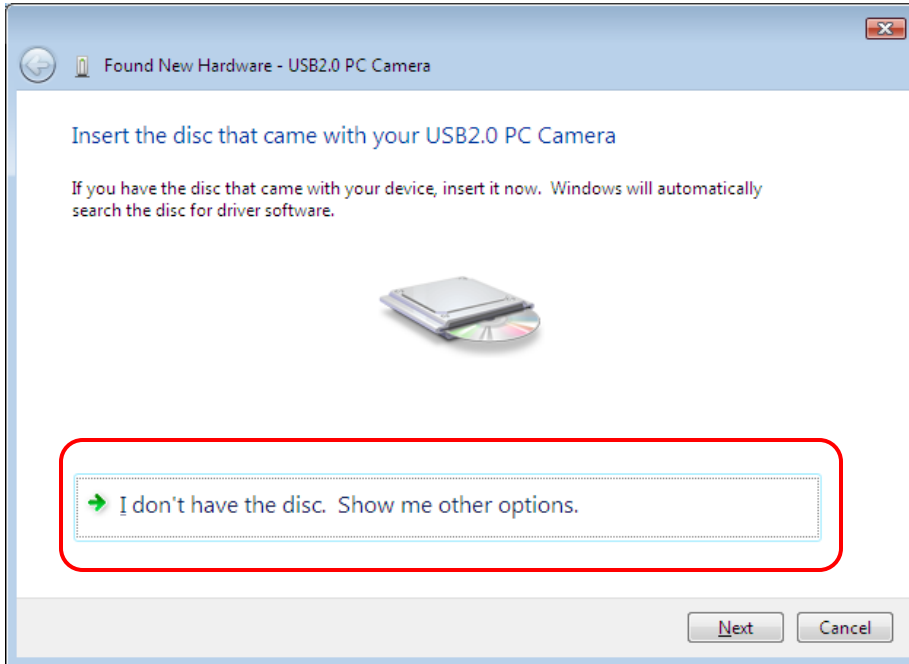
2-5-1 Insert MagicView USB port into computer. Open the Device Manager: Control Panel → System → Hard Ware → Device manager . Right click the mouse on USB 2.0 Camera and choose “Driver Update.”



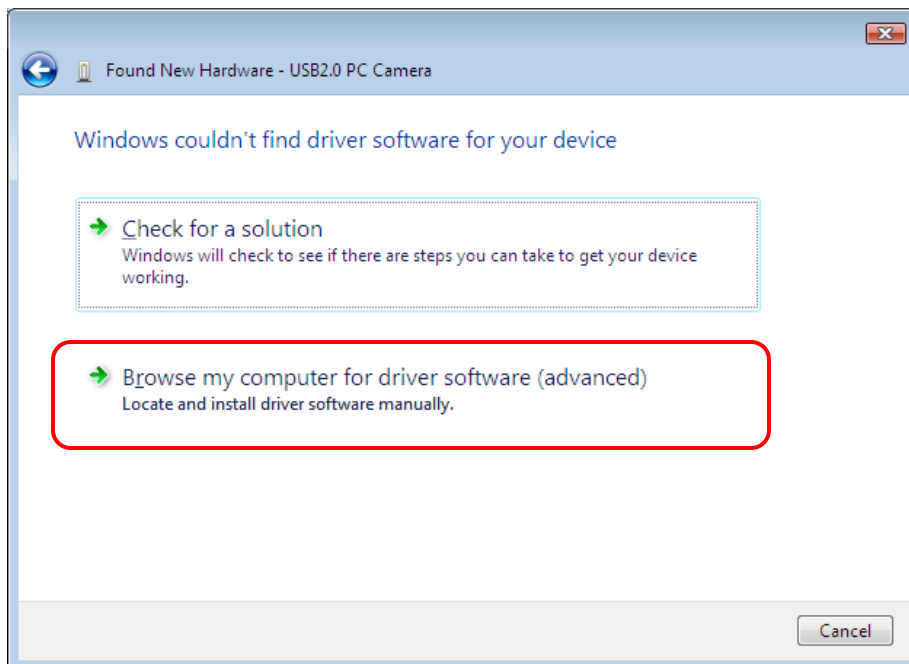
2-5-2 “Found New Hardware” window comes up. Click “Locate and install driver software (recommended)”



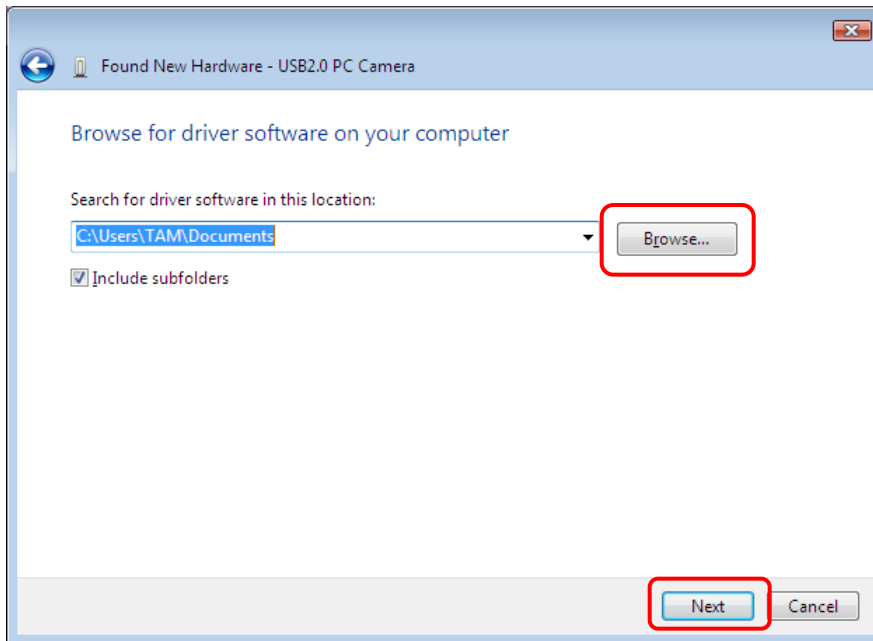
2-5-3 Click “I don’t have the disc. Show me other options.”



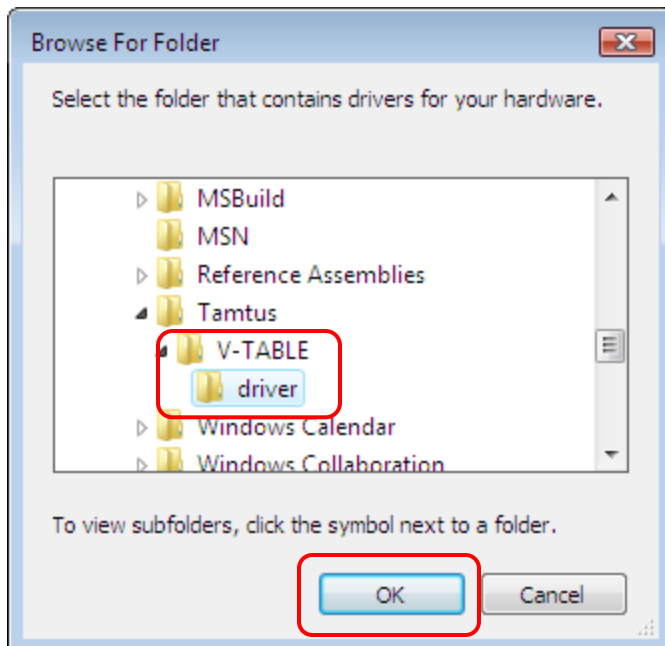
2-5-4 Click “Browse my computer for driver software (advanced).”



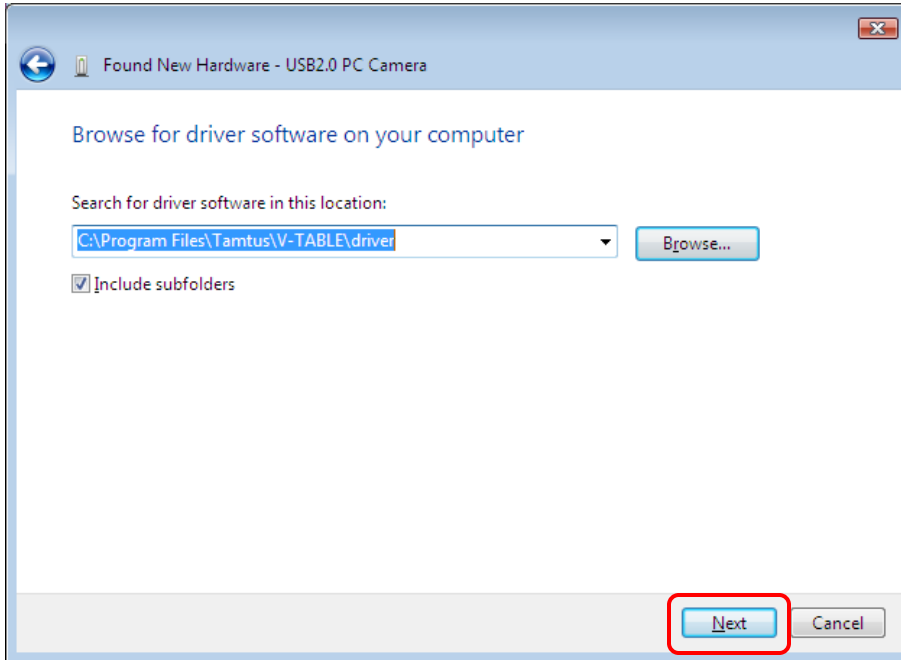
2-5-6 Click “Browse”, and then click “Next.”



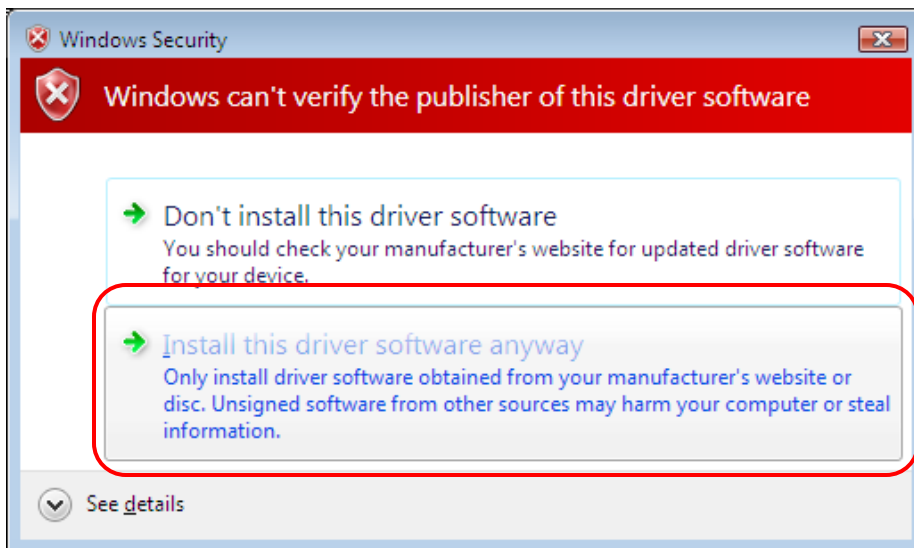
2-5-7 Choose ~~c:\w~~ → Program Files → Tamtus → MagicView → driver and click “OK.”



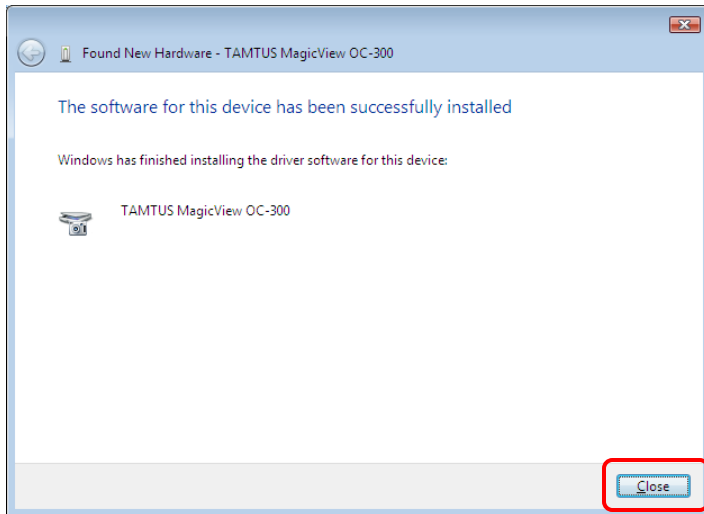
2-5-8 Click “next” to run the installation.



2-5-9 Click “Install this driver software.”

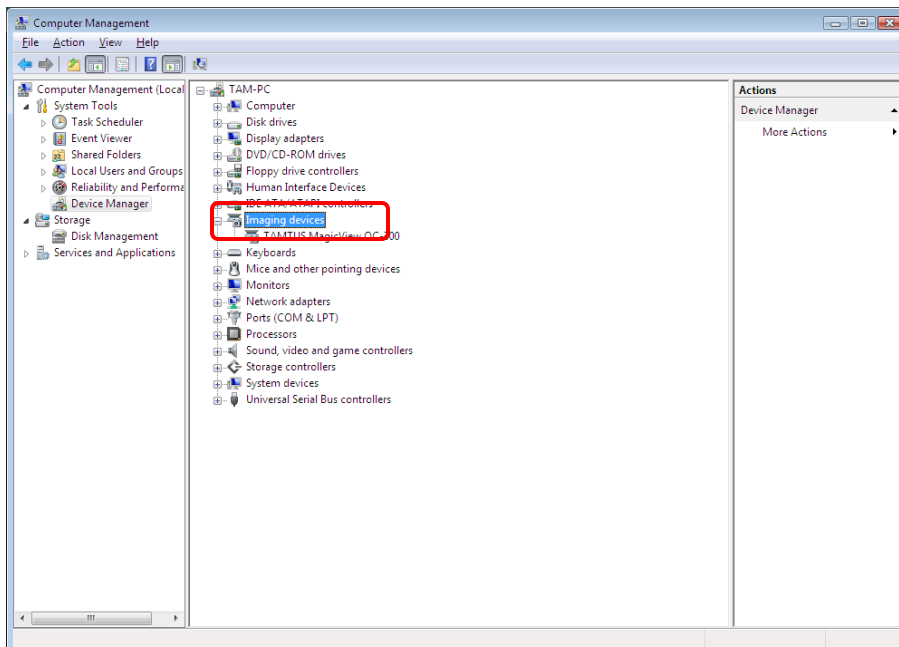


2-5-10 Installation is complete. Click “Close.”



2-5-11 You can confirm whether the driver is installed properly in the Device Manager . How to confirm Device Manager in Vista is as follows:

- Click Control Panel → System and Maintenance → Device Manager
- If TAMTUS MagicView OC-300 displays under “Imaging Device,” driver has been successfully installed.
- Now, double click the MagicView icon on desktop display and use digital presenter.



2-6 Precautions on Installation

MagicView 4.0 requires a high-power computer. If any problem occurs after installation, install MagicView 3.0

Operating Systems

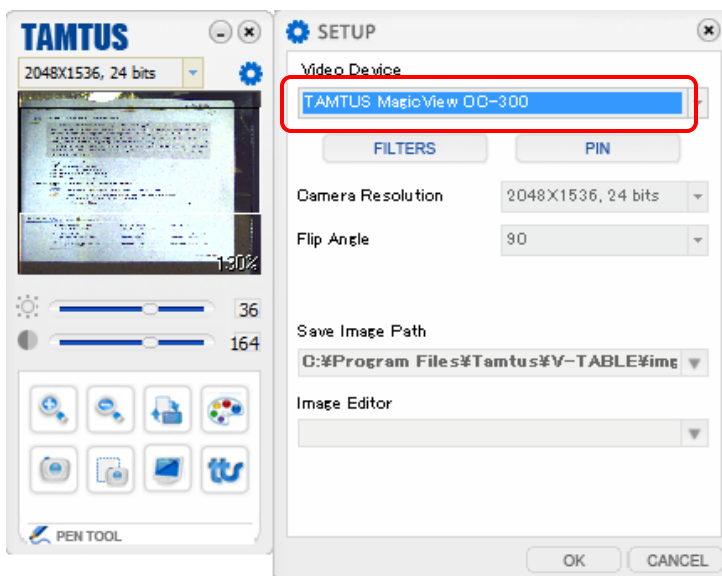
MagicView 4.0 can run only on Windows XP, Windows Vista and Windows 7. Windows 98 users should install MagicView 3.0.

Changing USB Ports

If you connect your digital presenter to a different USB port after installing the MagicView Digital Presenter on your PC, the auto-recognition process will be repeated. This is not an installation error. In the case of Windows XP, the driver should be installed again by running “Add New Hardware Wizard.” It can be done manually or automatically.

No Video Display After Full Installation

If you do not get a video display after the completion of installation, click “Environment setup”. Camera device must be “TAMTUS MagicView OC-300.” If it is not, click on the right arrow and make the proper selection. If ‘TAMTUS MagicView OC-300’ does not come up as a option, the USB is not connected or driver is not installed properly.



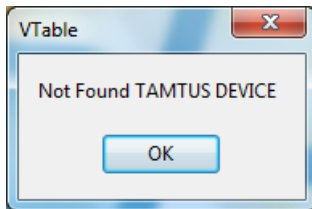
3-1 Getting Started

3-1-1 First, connect the Magic Visual Table to your computer.

Note



USB must be connected to your computer before the program runs in order to use the Magic VT.



This is the message on the screen in case the USB is not connected.



<The Execute Icon appearing on the PC Screen>

Double click the execute icon on the PC screen

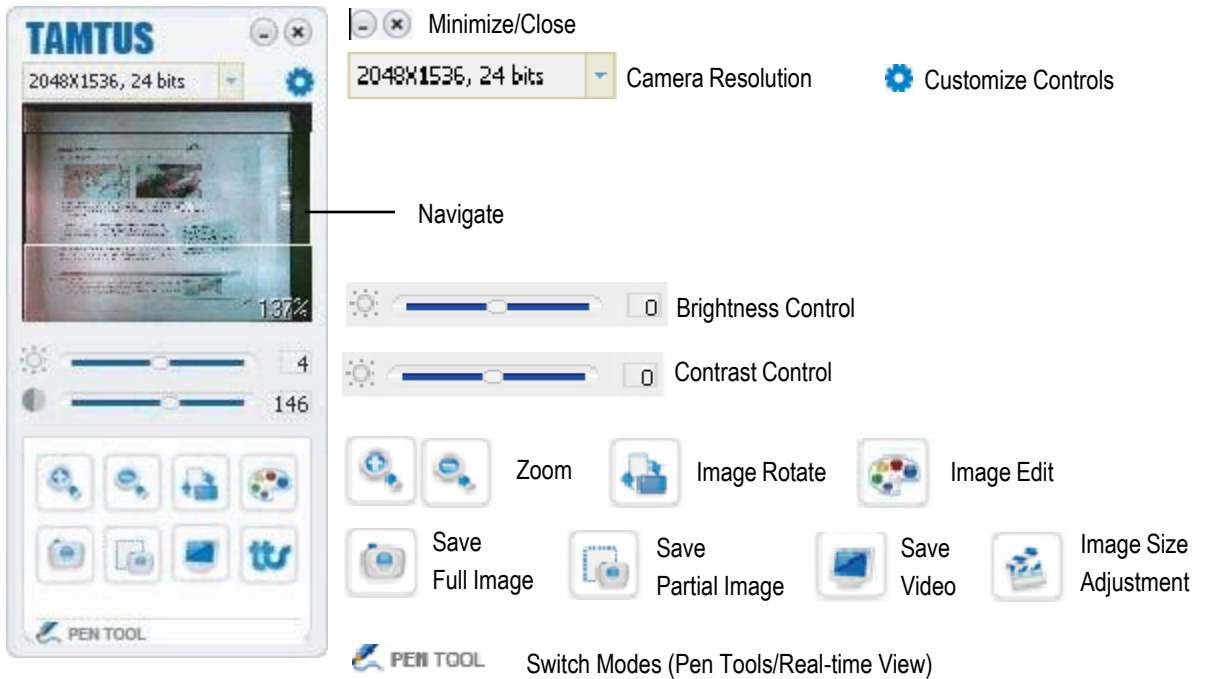
Magic VT -320 supports two GUI modes:

They are Real-Time Display Mode and Pen Tool (Writing) Mode.

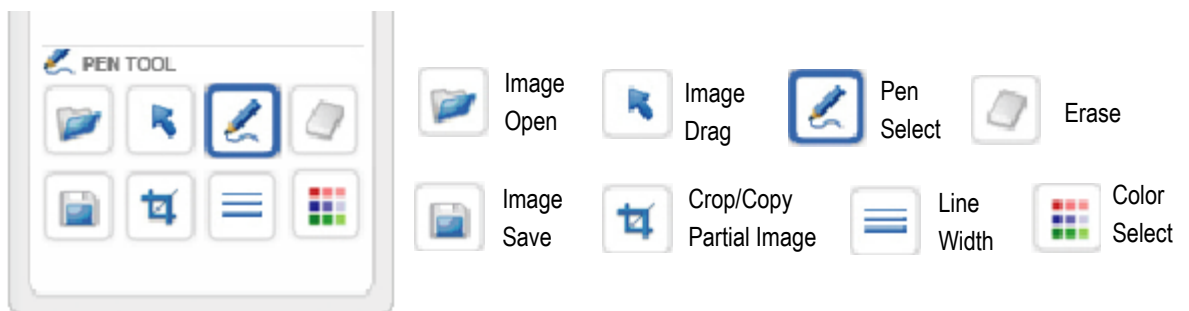
The icons at each mode are explained on the next page (page 26) :

3-2 Name of Each Part of User Interface

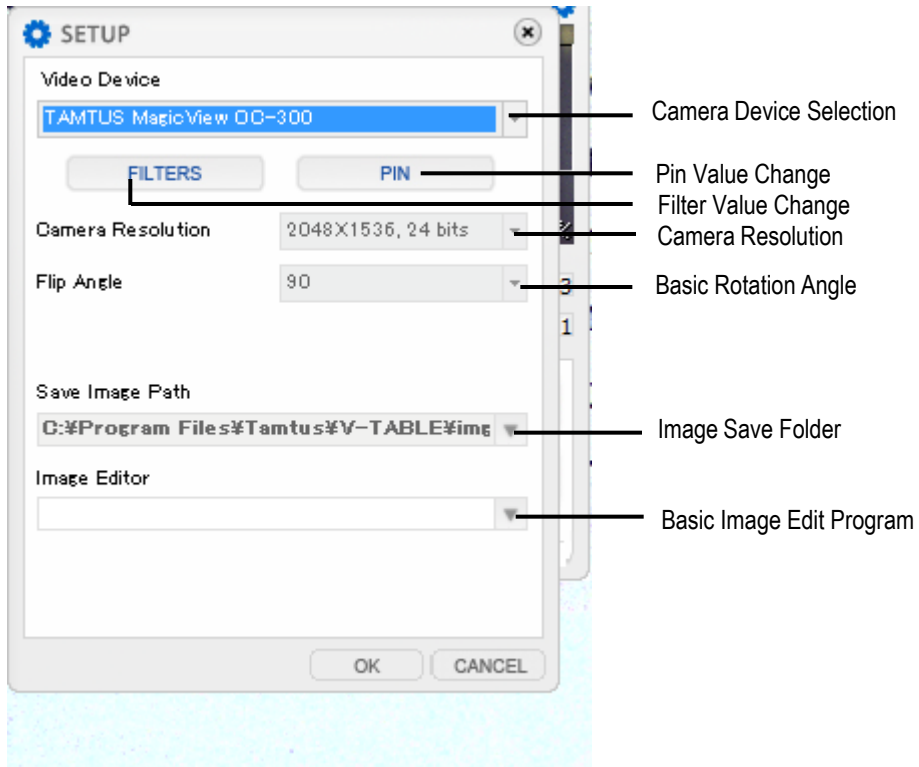
3-2-1 Real-Time Display Mode Display



3-2-2 Pen Tool Mode Display



3-2-3 Configuration Display



3-3 Program Function

3-3-1 Real Time Image Display

Move program menu

You can move freely through your open programs, using the Magic VT icon to return.



Hide program menu

If you double click the screen image, the menu disappears. If you double click again, menu appears.




3-3 Program Function

Icons and Functions









	Minimize	Minimizes the program without closing.
	Navigator	Displays visible parts of total images . After clicking navigator window, you can move visible display.
	Camera Resolution	Camera resolution.
	Customize Controls	Customizes controls.
	Brightness Control	Changes the brightness of the images in real time. If slide bar is moved the right, the image gets darker, if to the left, the image gets brighter. Adjustment is possible at configuration's filter.
	Contrast Control	Changes contrast ratio of the image in real time. If slide bar is moved to the right, contrast ratio gets lower, and if to the left, it gets higher. Adjustment is possible at configuration's filter.
	Enlargement	Enlarges the real-time image display up to the maximum 200%. The enlarge/shrink ratio is displayed in the lower left of the screen. Enlargement is made by holding mouse wheel upward and dragging.
	Reduction	Reduces the enlarged image. Reduction is made by holding mouse wheel downward and dragging.
	Rotation	If you click the button, the image rotates by 90 degrees.
	Image Edit	Open image edit program registered at configuration. Then, save currently displayed image automatically and import from edit program. (Please check "edit program" registration at configuration.)
	Whole Image Save	If you click the button, the whole image reflected by the Magic VT is automatically saved as a file. "Save" is made with automatic name (date and hour with save folder registered in configuration). e. g. 20090724-093656.jpg
	Partial Image Save	Cuts or saves the selected area as file by dragging mouse. Click the button → Drag the area of the image Save: Saves selected image as file . Cut: Cuts selected image and attaches it to screen.
	Image Size Convert	Without pressing enlarge/shrink button, you can change the image size into one of the three pre-determined three types of sizes.
	Video Save	Saves video with the file name automatically by composing date and hour. It requires a high specification computer with a large memory. WM Encoder must be on the computer. Save Format: WMV
	Mode Switch	Minimizes/Closes the program.

3-3 Program Function

3-3-2 Pen Tools

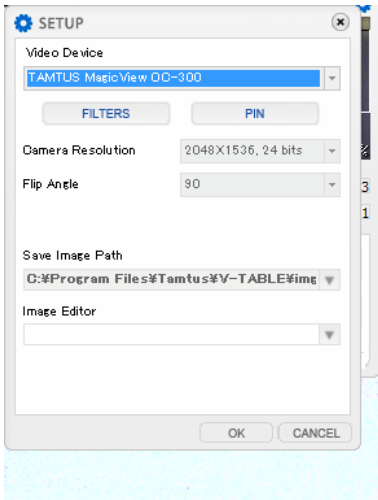
You can use the Pen Tool by pressing “partial image save” button in real time image or clicking “Pen Tool”  PEN TOOL button.

Icons and functions

	Image Import - Imports new image for handwriting on board
	Move – Moves the location of image by dragging mouse. Note: you can use only if image size is bigger than the screen size
	Handwriting Pen – Can do handwriting directly over image. In case of Pen Tool change, it is automatically changed.
	Eraser – Erases handwriting. General Eraser: Erases mouse-moving parts only. Section Eraser: Deletes designated area by dragging mouse. Whole Eraser: Deletes all handwriting.
	Save – Saves currently edited image
	Cut/Copy – Cuts the designated area by dragging mouse or copies to clipboard.
	Line Thickness – Selects the line thickness of handwriting pen.
	Color Selection – Selects the color of handwriting pen.

3-4 Using Configuration

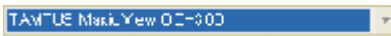
3-4-1 Choose “Camera Device Driver.”



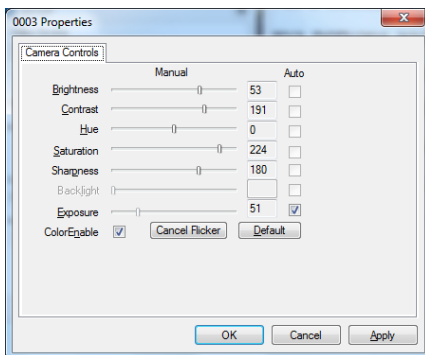
Camera Device

TAMTUS MagicView OC-300 driver should be chosen without fail. Otherwise, you cannot use a visual presenter.

3-4-2 Icons and Functions



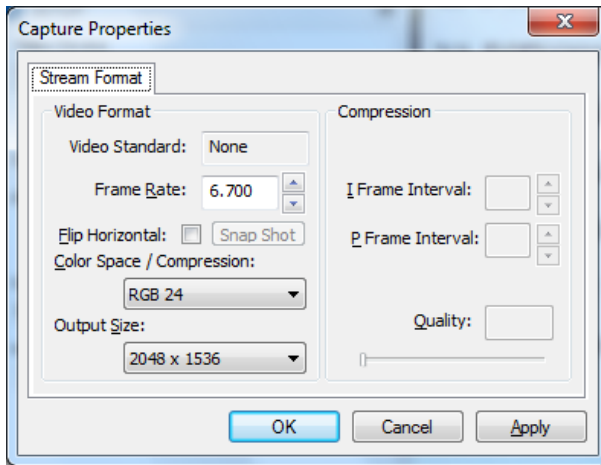
Controls camera’s filter value.



- Brightness** Adjusts image brightness.
- Contrast** Controls image contrast.
- Hue** Controls image hue.
- Saturation** Controls image saturation.
- Sharpness** Controls image sharpness.
- Exposure** Controls camera’s exposure to light. If it is checked at ‘auto setting,’ it controls exposure automatically.
- Choosing Colors** If you check, color image displays. No check displays black and white image.
- Removing Flicker** If image flickers continuously, click this button and press “apply” to remove flicker.
- Restoration** Enables return to default value.

3-4-2 Icons and Functions

PIN Adjusts camera's pin value.



Frame Rate

Adjusts camera's frame speed. The default value is set to maximum .

Flip Horizontal

Adjusts image symmetry.

Color Space/Compression

Sets up codec.

Output Size

Sets up resolution of imaging printing.



Camera Resolution sets up resolution of imaging printing.



Flip Angle adjusts rotation angle of visible images by 90 degrees.



Image Editor you can register image edit programs you use frequently such as Adobe Photoshop.



Save Image Path sets up the route for the image to be saved. It saves image with creation of file name by composing date and hour with the designated folder.

If you have problems while using the MagicView Digital Presenter or installing the driver and program see below for the checklist and troubleshooting guide:

- **Running V-Table 4.0 Program – what to do if the picture screen does not appear**
After you connect the USB cable to your PC.

If you don't see 'Device Name' unchecked on the program default screen, the driver has not been installed or the Windows program does not recognize the Magic VT hardware. If the video and camera drivers are unchecked or you see an exclamation mark or a question mark, right click the mouse and choose the 'Driver Update' menu to locate the driver that has already been installed on the PC. If other drivers are installed on the PC, the V-Table 4.0 will recognize them first. Press the 'Change Device' button and choose 'V-Table.'

- **What to do if the 'Digital Presenter' screen does not appear while you shoot video or you get an error message saying 'Error 80040154' : What to do if you cannot initialize 'Video Mixing Renderer 9' or 'Error 80040273' : What to do if you cannot initialize 'Video Mixing Rendering'**

First, verify whether DirectX9.0 or a previous version has been installed on the PC. To verify your DirectX version, go to the menu, click 'Start\Execute', enter 'Dxdiag' in the text window. Once the information window is open, click on the 'system tab' and you'll see the DirectX version that is installed on your computer. If you do not have DirectX9.0 on your PC, install the DirectX9.0 available on the CD.

- What to do if you have confirmed Direct X9.0 is on your PC, but you are still having problems accessing the functions.

Set the graphic accelerator to maximum - go to the control panel, 'Display', 'Setting', 'Advanced', 'Troubleshooting' and set to 'Maximum.' Or, go into the DirectX diagnosis tool and go into the display tab and enable 'DirectDraw', 'Direct3D' and 'AGP.'

- What to do if the graphic card does not properly support Direct3D acceleration, and you can't start the Magic VT.

You need a graphic card that supports Direct3D acceleration.

- What to do if you get an error when pressing the 'Shot' button, due to a lack of video RAM.

If the graphic card video memory is too weak, you will get an error when capturing a image. Set the hardware acceleration to minimum, or update the graphics card.

- What to do if you can't shoot.

You need Windows Media Encoder to store video files. If you don't have it installed on your PC or you get an error message saying 'Cannot set output file' when recording, install the 'WM Encoder.exe' file available on the CD.

- What to do if you can't record voice when shooting video.

Verify that there is a sound card on the PC and the driver is installed properly. If this is the case, check the sound setting and audio device in the control panel.

Here are some care tips to follow when using this product:

- Use a clean, soft cloth to remove any dust from around the body of your camera.
- Do not use a cloth that contains methane alcohol or ammonia to wipe the camera.
- Do not let water run into the camera head.
- Do not leave fingerprints or other smudges on the camera lens.
- Use a soft cloth or cotton swabs to wipe off any dust on the camera lens.
- Avoid storing or using the camera in a humid or dusty environment.
- Do not expose the camera to direct sunlight or excessive heat.
- Do not point the camera lens directly at the sun.

Plug and Play

The “Plug and Play” function is a mix of hardware and software that automatically senses if the camera is loaded or unloaded onto your PC. If you have unloaded the camera from the PC, the Magic VT software stops its image flow, disables the connection between the camera and the PC and closes the Preview window.

Exposure

The exposure setting determines the amount of lighting that will fall onto the image-sensing chip. In auto exposure mode, the camera automatically determines the amount of lighting to adjust the exposure level and shutter speed. In manual exposure mode, you may adjust manually the exposure level and shutter speed. By default, the Magic VT camera is set to the auto exposure setting and you are recommended to use the auto exposure setting.

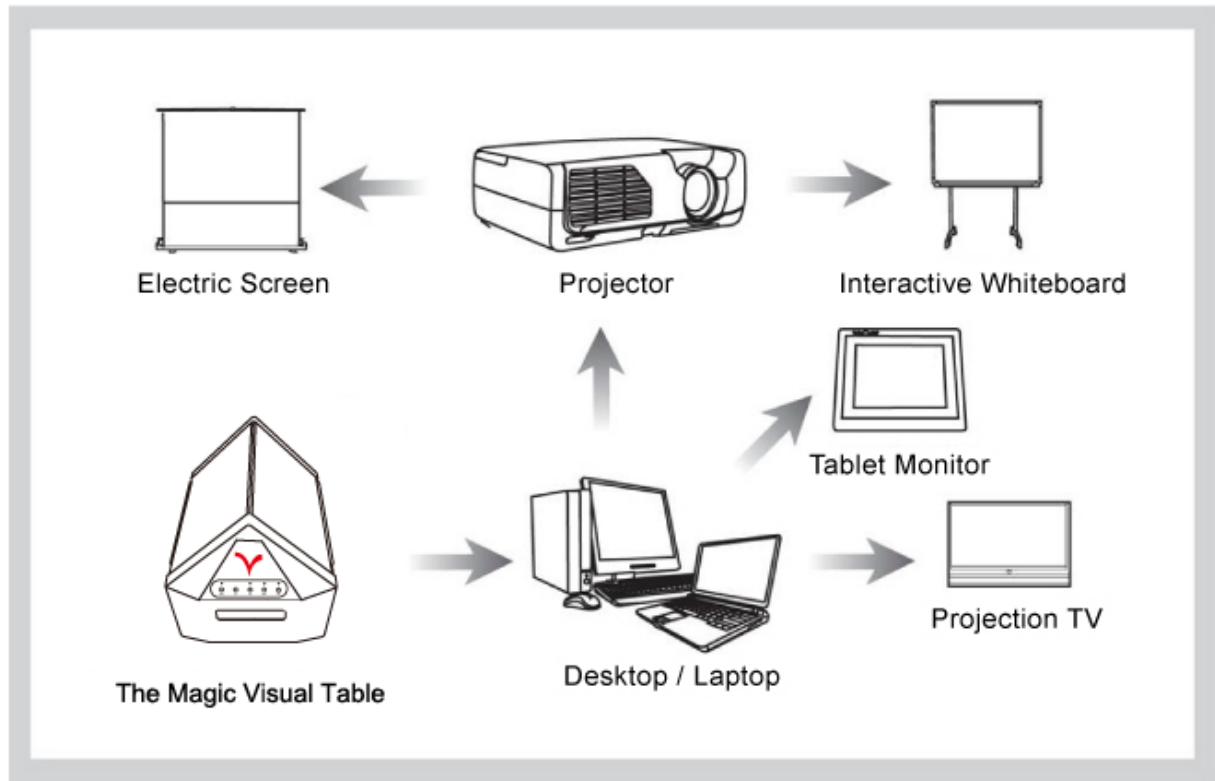
Frame Rate

The frame rate setting determines the number of pictures per second in the video stream. The set of frame rates from which you can choose depends on the currently selected video format (resolution) and the available bandwidth on the USB bus (the number of devices connected to your USB port and the amount of data they transport).

How to verify proper installation of the driver

You may verify whether or not the camera is recognized by Windows. Go to the ‘Control Panel’ and click ‘System’. Click the ‘Properties’ button and the ‘Hardware Device’ tap, and then the ‘Device Manager’ button. If the camera is recognized correctly by Windows, you will see ‘TAMTUS MagicView OC-300’ in the Imaging Equipment List. If you unplug the camera from the USB port, you will see that the camera disappears from the list.

System Organization



The Field of Applications

- Presentations in Classrooms and Conference Rooms
- Libraries
- Copy Centers
- Publicists
- Government agencies and offices
- Academics and educational organizations
- Suitable for creating E-book, E-library, E-document



TAMTUS[®]
Total Unique IT Solutions

Korean Headquarters

Tamtus Co., Ltd.

301-1406, Bucheon Technopark, 365, Samjeong-dong, Ojeong-gu

Bucheon-si, Gyeonggi-do 421-741, Korea

T +82-32-328-0244 F +82-32-328-0242

<http://tamtus.co.kr> marina.lee@tamtus.co.kr

U.S Headquarters

American Business Alliance, Inc.

1014 S. Westlake Blvd. Suite 14-153 Westlake Village, CA 91361

T 626-676-8961 F 626-628-3853 jmadvin@earthlink.net