445329_paste.tiff ¬ OPTOSCANdrum

This OneVision-Image tool enables you to import images from peripheral devices. For scanning pictures with the OPTOSCANdrum, select this scanner from the *Import* options list in OneVision-Image's *Import and Export* panel. If this option is not in the list, you first have to load the module, a procedure described in the chapter <Add Modules to Configuration> (;../OneVision/MainMenu/Info/ModuleController.rtfd;ModulLaden;¬).

There are two ways of loading an image with this tool:
1. Importing images as new OneVision elements.
2. Importing images into existing (and selected) element frames

Import Image as New Element
To import an image as a new element:
- Select the appropriate scanner from the <*Import*> pop-up list. The *Import and Export* panel will include settings for the selected scanner.
- Scan your image as described in the <Scanning> section (;TMSAgfaArcus.rtfd;Bedienung;¬) below.
- Draw a new element frame. An attention panel will ask you to confirm whether or not you want the scanned image to be transferred into this frame.

Import Image into Existing Element
To import an image into an existing element, select its frame and scan the image as described in the <Scanning> (;TMSAgfaArcus.rtfd;Bedienung;¬) section below. Click <*Transfer*

Image> to place the scanned image into the element. Any existing image in the selected element will be discarded. You can only transfer images into OneVision-Image elements.

Scanner Installation

Connecting the Scanner

The OPTOSCANdrum is connected to your NEXTSTEP computer by a SCSI interface. You will need the correct cable and (depending on your system configuration) possibly a SCSI terminator (available from your OneVision dealer). After you have connected the scanner, enter the SCSI address with which the scanner will communicate. Please see your scanner manual for more information on how to set the SCSI address.

Note: If you switch on your scanner before starting the computer, the scanner won't be initialized correctly and a scanner error may occur. Always switch on your scanner after your computer, or switch your scanner off and on again after starting your computer.

Installing the Scanner Driver

The OPTOSCANdrum driver is included in OneVision and will automatically be installed when you install OneVision and load the OPTOSCANdrum module. For details, see the section <Add Modules to Configuration> (;../OneVision/MainMenu/Info/ModuleController.rtfd;ModulLaden;¬) in the <Module Controller> chapter. The driver's file name is *TMSOptoDrum.1Vmod* and it is located in the *OneVision.app* folder.

Note: You must have a license for the scanner driver to use it successfully; for details, see <Licensing OneVision and Modules> (;../OneVision/MainMenu/Info/Licensing.rtfd;;¬).

If you try to scan when all of your SCSI drivers are already in use, the following attention panel will appear:

655470_paste.tiff ¬*Figure: Attention panel, indicating a SCSI error.*

Clicking <*Cancel*> in the panel will abort the scan operation. You can also choose to stop the program that is currently using the SCSI driver and click <*Retry*> to restart the scan operation.

Bedienung;¬Scanning
After selecting a scanner from the <*Import*> pop-up list, the *Import and Export* panel displays additional scanning options and controls.

Scanbereich;¬Scan Area
paste.tiff ¬*Figure: Portion of the scanner panel for defining the scan area.*

In these four entry fields, you can define the rectangle that will be scanned.

561319_paste.tiff ¬ and 641501_paste.tiff ¬ specify the position of the upper left corner.

719048_paste.tiff ¬ and 796729_paste.tiff ¬ specify the width and height of the scan area.

You can also use the mouse to draw a rectangle in the scan window (visible if you have already performed a scan operation) or in the prescan window. The position and size of the rectangle are displayed in the scan area while you draw the frame. You can change the scan area by holding down the mouse button while dragging a frame handle.

The entire scan area frame can be moved by holding down the

Shift key while dragging the frame with the mouse.

Note: The maximum width of the scan area depends on the horizontal resolution. The following limits are valid:

Resolution	Color Depth	Width
4,000 dpi	8 Bit	10.4 inches (264 mm)
31-2,000 dpi	8 Bit	11 inches (279 mm)
4,000 dpi	12 Bit	5.2 inches (132 mm)
2,000 dpi	12 Bit	10.4 inches (264 mm)
31-1,333 dpi	12 Bit	11 inches (279 mm)

Units of Measurement
As always in OneVision, you can choose your preferred units of measurement (;../OneVision/WorkingIntro/Units.rtfd;;¬).

Fokus;¬Focus
55730_paste.tiff ¬Selecting the correct focus defines the sharpness of your scan. The <*Autofocus*> command lets the scanner determine the best focus for the scan area. The line in the center of the defined scan area is used as a reference. The result of the focusing is displayed in the entry field on the right.

The OPTOSCANdrum also lets you manually set the focus by using the <*Current Position*> command, which accepts the current focus position of the scanner.

You can also manually change the focus value by entering a different number in the entry field.

LUT;¬LUT

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Figure: The settings of the scanner panel, affecting the Look-Up Table.

In this portion of the scanner panel, you can make setting affecting the LUT (Look-Up Table).

Minimum
With this slider or entry field, you can define which value will be interpreted as black. The higher this value, the darker the scanned image will appear. If there are values in the image that are lower then the minimum, they will be lost.

Maximum
This slider or entry field defines the value for white. The higher the value, the lighter the scanned image will appear. Values in the image that are higher than the maximum will be lost.

Gamma
This parameter is also used to lighten or darken the scanned image. Unlike when using the <*Minimum*> and <*Maximum*>, settings no values will be lost. Setting the gamma value lower than 1.0 will lighten the image, values higher than 1.0 will darken it.

Auflðsung;¬Resolution
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This entry field lets you specify the resolution of the scanner. All entries must be registered with the *Return* key. Resolutions in the range from 31 dpi to 4,000 dpi are possible. The OPTOSCANdrum doesn't support arbitrary resolutions, so your entries will be adjusted to the nearest possible fixed value.

Scanmodus;¬s/w;¬s/w gerastert;¬Graustufen;¬Farbe;¬**Scan Mode**

The scan mode provides a pop-up list where you can select how to scan an image:

Grayscale:
Each pixel will be converted to a gray value. 1 or 2 bytes of memory is required, depending on the image type.

Color:
24 bits are used to describe the color of each pixel. For each pixel, 3 or 6 bytes of memory are required, depending on the image type.

Rahmenfarbe;¬Frame Color
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This color well icon allows you to set the color of the frame surrounding the scan area.

Aktion;¬Commands
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Prescan
This command provides a fast scan to give you a rough impression of the scanned image. This is useful for determining exactly the area you want for your final scan. When using <*Prescan*>, your copy will be scanned with a fixed resolution of 50 dpi and a zoom factor of 100%, and the image will be displayed in a special prescan window. The following settings are used with the prescan command:
- Scan Mode
- Focus
- LUT-settings
- Extended Mode
- Data Conversion
- Color Channel for Grayscale

- Color Depth
- Aperture
- Inverse (from the *OPTOSCANdrum Specials* panel)

Scan
The specified portion of the image will be scanned, and the scanned image will be displayed in a new window.

Werte sichern;¬Save Settings
This command saves the current settings and parameters, making them available the next time you start OneVision.

Spezial...;¬Special
This panel contains scanning options and controls that rarely need to be changed.

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Figure: The panel for the special settings for scanning.

Extended Mode
The OPTOSCANdrum's extended modes offer the choice between <*Reflective*> (for opaque media such as photographs) and <*Transparent*> (for transparent media such as film).

Data Conversion
Here you can decide whether the brightness of the scan should be calculated liner (usually used for reflective scans) or logarithmic (usually used for transparent scans).

Color Channel for Grayscale
From this pop-up list you can choose the color channel that you want to use for grayscale scans. Usually this is the green channel. If you are scanning color images, the channel you should use

depends on the predominant color in the image.

Color Depth
This parameter determines how many gray values or colors can be differentiated while scanning. If you select <*8 Bit*>, 256 grays or 16.7 million colors are available. <*12 Bit*> offers 4,096 grays or 68.7 billion colors.

Note: When using 12 bit, OneVision always works with 16 bit, internally.

Aperture
The OPTOSCANdrum offers 12 apertures for scanning, corresponding to 12 different resolutions. For special effects, the aperture can be set manually. If you use a smaller aperture than that set automatically, the image will become sharper. Using larger apertures will soften the focus of the scanned image. This effect can be used to avoid MoirÝ patterns when scanning screened documents. You can also let the scanner driver choose the aperture automatically.

Inverse
If this option is activated, all data from the scanner will be inverted.