

## miroWINTOOLS

The miroWINTOOLS are software tools which allow you, among other things, to configure your graphics system to your liking: Using the miroWINTOOLS, you can select your monitor, set the resolution and the number of colors, fine-adjust the monitor's tint, set the DPI number and a virtual desktop.

miro offers the following miroWINTOOLS:



[miroSUPERSCREEN](#)



[miroTINT CONTROL](#)



[miroSIZE CALIBRATION](#)



[miroSCOPE](#)



[miroPINBOARD](#)



## **miroSUPERSCREEN**

### Installation

miroSUPERSCREEN is installed using the miro-win diskettes. After the installation the miroWINTOOLS program group contains the miroSUPERSCREEN icon.

miroSUPERSCREEN is automatically launched each time Windows is started.

The miroSUPERSCREEN window appears.



The window is divided into four sections:

[Windows Desktop](#)

[Card](#)

[Monitor Type](#)

[miroPINBOARD](#)

## Windows Desktop

In the *Windows Desktop* section you see the current settings.

- To change the settings, use the mouse to click the *Windows Desktop* section. The *Windows Desktop* window appears.

Here you can change the [Color Depth/Resolution](#) and enable/disable the virtual resolution. In addition, you can set the [Font Size](#) and the [Cursor Color](#).

**Resolution**

Specify the *Color Depth* and the *Resolution*. Resolutions and color depth which are not available are dimmed.

**Font Size**

Specify whether you want to use *Small* fonts (for low resolutions) or *Large* fonts (for high resolutions).

**Cursor Color**

The *Red*, *Green* and *Blue* sliders let you adjust the mouse cursor. The changes take effect immediately.

**Card**

The *Card* section gives you information about the driver version, the BIOS version, the memory size and the bus type of the graphics board. This section does not branch off to another window.

## Monitor Type

The *Monitor Type* section shows the selected monitor. If you want to select another monitor, click into this section. The *Display* window appears.

- Select another monitor in the *Monitor Type* list box.

Select the desired image refresh rate. Please use high image refresh rates.



## **miroPINBOARD**

The *miroPINBOARD* section shows you whether the [miroPINBOARD](#) tool is loaded or not.

Click this section, to specify whether you want to load the miroPINBOARD automatically (mark in the check box) or not (no mark in the check box).



## miroTINT CONTROL

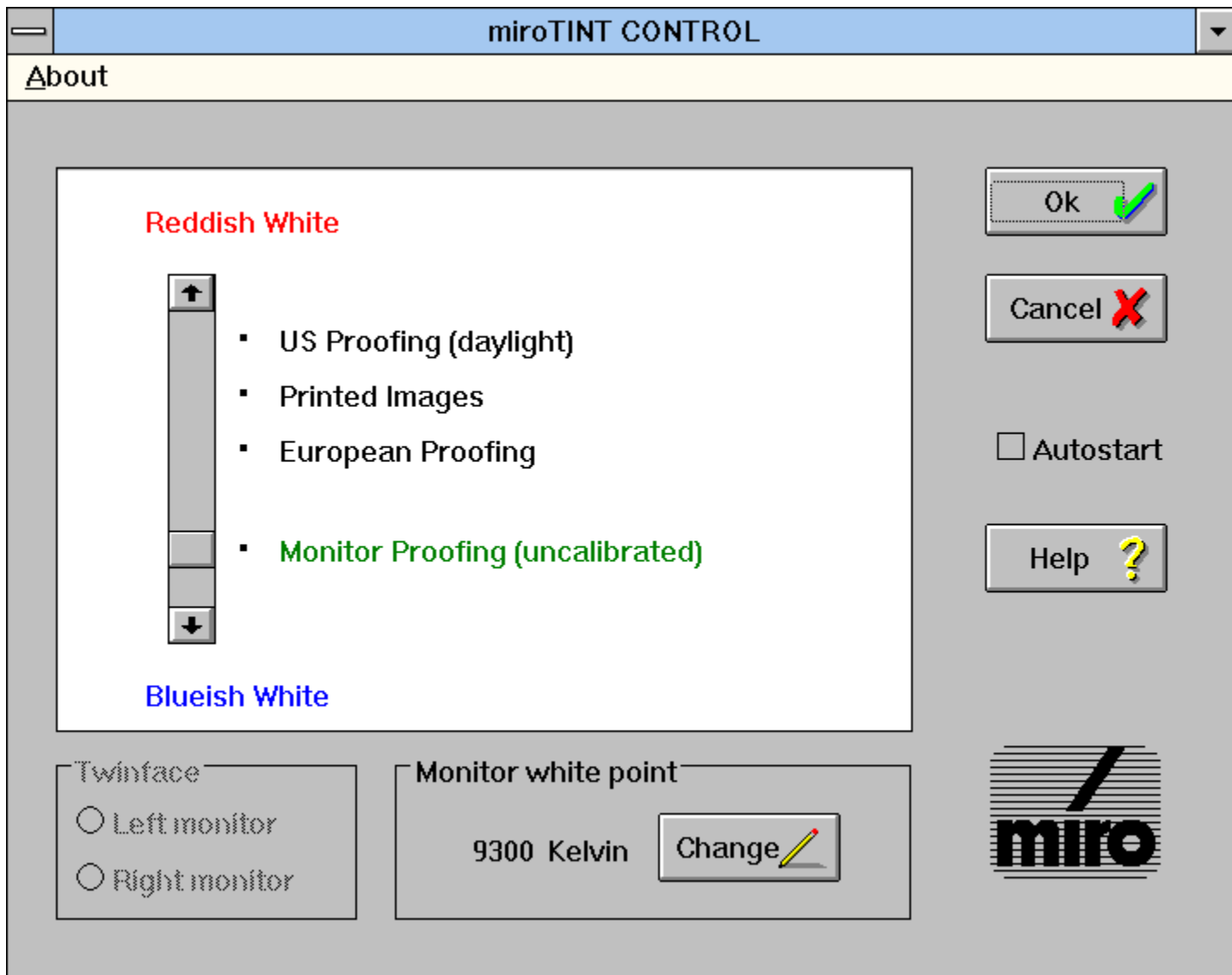
miroTINT CONTROL changes the monitor's tint.

### [Explanations](#)

### Starting miroTINT CONTROL

To start miroTINT CONTROL ...

- ... click miroTINT CONTROL under *Settings* in miroSUPERSCREEN.  
or
  - ... click the miroTINT CONTROL icon in the Windows Program Group miroWINTOOLS.
- Then, the miroTINT CONTROL dialog box appears.



miroTINT CONTROL offers the following settings:

[Slider](#)

[Presettings](#)

[Color temperature of the monitor's white point](#)

[Twinface](#)

[Change](#)

[OK](#)

[Cancel](#)

[Autostart](#)

[System menu](#)

[Help](#)

**Slider**

The slider adjusts the monitor's tint continuously (color temperature) between a bluish and a reddish white.

## **Presettings**

The presettings listed on the right hand side of the slider are reference points for controlling the tint and can be directly clicked. The selected presetting appears green.

*US Proofing (Daylight)* corresponds to alternate daylight.

*Printed Images* corresponds to the color temperature used in the photo reproduction of color images.

*European Proofing* corresponds to the color temperature often used for European color proofing boxes.

*Monitor Proofing* corresponds to the color temperature computer monitors are usually adjusted to, thus allowing for a brilliant color representation.

### **Color temperature of the monitor's white point**

Here the color temperature of the monitor's white point is given, which is usually factory-set to 9300 K. If your monitor has another white point click *Change*.

**Twinface**

Selects whether you want to adjust left or the right monitor.

**Change**

After clicking *Change* a dialog box appears. Here you can specify the monitor's white point to a value between 5500 K and 10.000 K. To quit this dialog box click *OK*.



**OK**

Clicking *OK*, shrinks *miroTINT CONTROL* to an icon. The current settings remain active.

**Cancel**

By clicking *Cancel* the last setting made in miroTINT CONTROL is cancelled. miroTINT CONTROL is shrunked to an icon.

**Autostart**

When checking the Autostart check box the settings are activated every time Windows is started.

**System menu**

miroTINT CONTROL can be closed using the system menu (top left window corner). When closing the tool the settings are not active anymore.

The miroTINT CONTROL settings are only active as long as the tool is opened.

**Help**

*Help* starts the miroSCREEN-Adjust help function.

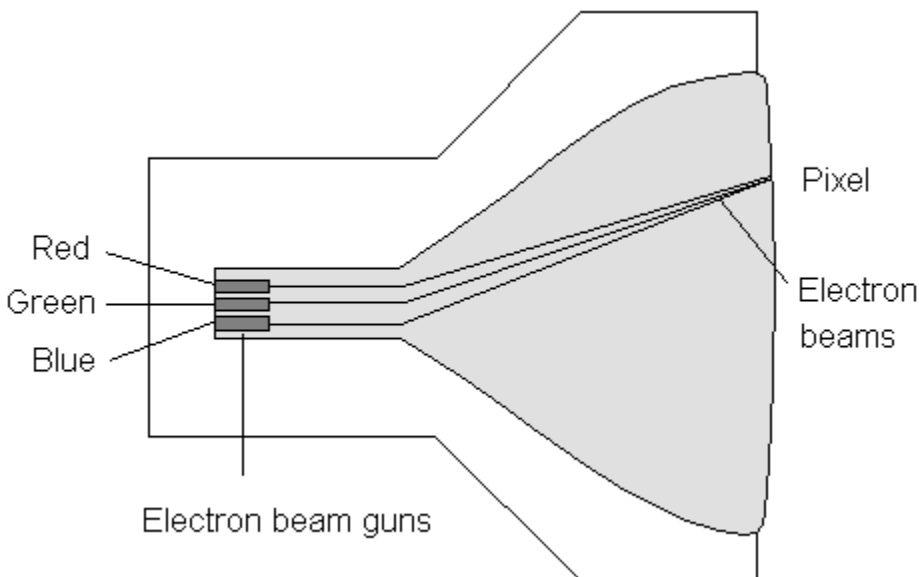
## Explanations

### How is a color image created on your monitor?

The inside of a color monitor CRT is coated with a fluorescent coating consisting of different phosphor substances (red, green, and blue).

Three electron guns generate electron beams controlling one color (red, green, and blue). The electron beams scan the screen line by line, when hitting the phosphors they emit light.

Switching the electron beam on and off creates a dot matrix which creates a monitor image. The individual dots are called pixels (=picture element). Each pixel has a red, a green, and a blue phosphor, a so-called triple. If all three phosphors are illuminated with equal intensity, the pixel appears white.



[What is the white point?](#)

[What is color temperature?](#)

## **What is the white point?**

White is created when the red, green and blue pixel areas are illuminated with equal intensity.

Due to internal monitor tolerances and the phosphor used for the picture tube a pure "white" input signal of the monitor ( $R = G = B = 100\%$ ) does not result in a white image. The light intensity of blue may for example be weaker as the intensity of red and white thus appears reddish.

Also the spectral components of daylight are not constant. At different places on earth and at different daytimes the daylight may be more toward red or toward blue.

Instead of describing the monitor's white point using the intensities of the primary colors (red, green and blue) (e.g.  $R = G = 100\%$ ;  $B = 95\%$ ), the color shift is described as color temperature. Thus the white point is described as single number without specifying all components individually.

**What is color temperature?**

The term color temperature describes the relation between a color of a body and its temperature (for example white-hot iron is hotter than red-hot iron). The concept of color temperature is based on a "black radiator", the color of which changes in proportion to its temperature. The color temperature is given in Kelvins. A high color temperature results in a color more towards blue, while a low color temperature results in a color more towards red.





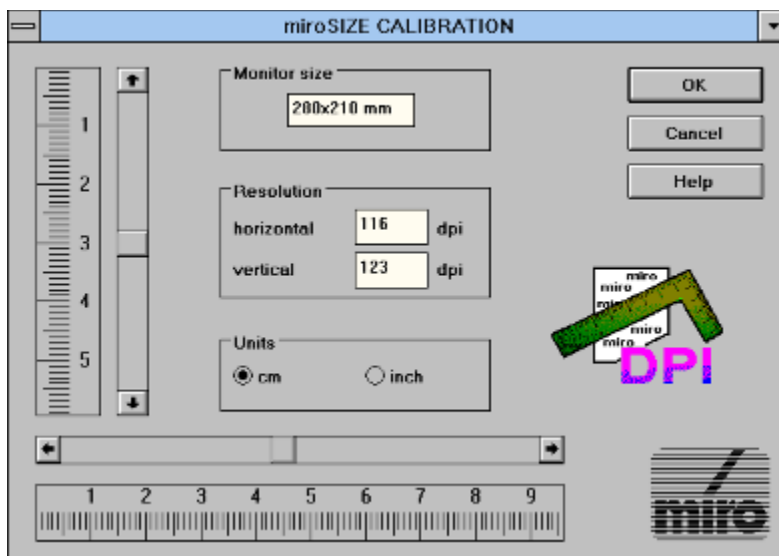
## miroSIZE CALIBRATION

miroSIZE CALIBRATION adjusts the dots per inch (DPI) on your monitor so that one inch or one centimeter on the monitor matches exactly one inch or one centimeter on the print-out. miroSIZE CALIBRATION is especially useful when a true-to-scale display is necessary: DTP and CAD applications.

### Starting miroSIZE CALIBRATION

- Click the miroSIZE CALIBRATION icon in the miroWINTOOLS Program Group.

The miroSIZE CALIBRATION dialog box appears.



To adjust the DPI number on your monitor, do the following:

- Select the desired measurement unit (inch or centimeter).
- Hold a normal ruler beside the ruler in the dialog box to the left of the horizontal sliders. Adjust the ruler in the dialog box using the scroll bars so that it matches your ruler.
- Repeat this for the vertical ruler.
- Click OK.

While you adjust the rulers the values under *Resolution* and *Monitor size* change automatically.

The miroSIZE CALIBRATION settings are only valid for applications which are started after using miroSIZE CALIBRATION.

To activate the settings each time after Windows has been started:

- Drag the miroSIZE CALIBRATION icon into the Windows-Start-up group. In the Program Manager under *Properties...*, select *Run Minimized* for the miroSIZE CALIBRATION icon.

If the resolution has been changed, miroSIZE CALIBRATION has to be readjusted.



## miroSCOPE

miroSCOPE is a kind of magnifying glass. miroSCOPE enlarges the area around the current cursor position. This function is especially useful if you want to view an enlarged section of an image when editing drawings and images. In addition, you can copy a zoomed detail into the Windows Clipboard.

During the Windows driver installation the miroSCOPE program has been copied to the hard disk automatically and has been located in the miroWINTOOLS Program group.

### Starting miroSCOPE

- Double-click the icon to start miroSCOPE.

The miroSCOPE window appears.



If you move the cursor out of the miroSCOPE window, the miroSCOPE window shows the current cursor position. If the cursor is moved within the miroSCOPE window, the mouse cursor changes its shape and becomes a magnifying glass. Clicking the left mouse key magnifies the window content, clicking the right mouse key makes the windows contents smaller.

### Using miroSCOPE

miroSCOPE offers the following menu items:

[File](#)

[Edit](#)

[View](#)

## **File**

### *Save under*

Saves the current miroSCOPE window content in the bitmap format.

### *Close*

Closes miroSCOPE.

## Edit

### *Copy*

Copies the current window content into the Windows Clipboard. From the Clipboard you can paste the window content into other programs, e.g. Paintbrush.

### *Freeze*

If you move the mouse cursor outside the miroSCOPE window, the window content moves constantly because it always shows the area around the current cursor position. If you want to avoid this,

- click the *Edit* menu and the *Freezw* command or press the <Strg> + <F> hotkey.

The miroSCOPE window content will not change until you click again on *Edit* and *Freeze* or if you press the <Strg> + <F> key combination again.

⇒ You can only enable the *Freeze* command, when miroSCOPE is enabled and located on top of all windows. When another program is active, you can use the [hotkey](#) instead of the *Freeze* command to freeze the area around the cursor in the miroSCOPE window.

### *Refresh*

If you enabled the *Refresh* command, the *Refresh* command is available in the *Edit* menu. Usually, when you enabled the *Freeze* command the miroSCOPE window content does not change. As soon as you enable *Refresh*, the miroSCOPE window will display the current area around the cursor. The window content will not change until you select *Refresh* again or if you disable the *Freeze* command.

The hotkey for the *Refresh* command is <Ctrl> + <R>.

## **View**

Under View you find the menu items [Configuration](#), [Saving window position](#), and [Always on Top](#).

## **Configuration**

### *Refresh rate*

Adjusts how often the zoomed miroSCOPE window content will be refreshed. The minimum value is 50 milliseconds which refreshes the image 20 times per seconds. The maximum value is 2,000 milliseconds. We recommend the default value 100 milliseconds.

### *Zoom factor*

Adjusts the zoom factor. The higher the zoom factor, the more will the area around the current cursor position be enlarged. The minimum zoom factor is 50, the maximum is 1,600.

### *Hotkey*

Selects the hotkey you can use for freezing the current part of the desktop in the miroSCOPE window. To disable the zoom function, use the same hotkey. To disable the hotkey function, click *Off*.

### **Saving window position**

If you enable the *Store window position* command, miroSCOPE will be located at exactly the position on the screen where you have saved it before.



## **Always on top**

When enabling *Always on top* the miroSCOPE window will be always on top even if another application is active. When *Always on top* is enabled, the *Freeze* command from the [Edit](#) menu is always available.



## miroPINBOARD

miroPINBOARD facilitates working on the Windows Desktop.

During the Windows driver installation the miroPINBOARD has been copied automatically to your hard disk and located in the miroWINTOOLS program group.

### Starting the miroPINBOARD

- If you specified under miroSUPERSCEEN that miroPINBOARD has to be loaded automatically you do not have to start the tool.
- If you disabled the autoload function under miroPINBOARD, double-click the icon to start miroPINBOARD.

miroPINBOARD offers eight buttons.



This button arranges the windows horizontally on the desktop.



This button puts the windows on top of each other.



This button switches the virtual resolution off.



This button switches the virtual resolution on.



This button prevents that windows can be moved horizontally.



This button prevents that windows can be moved vertically.



This button zooms into the current image.



This button zooms out of the current image.

