



## Display Effect

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### Explanation of Start Up Icon of Display Effects

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### Explanation of Marks

- : Display items on 1st level.
- : Display items on more than 2nd level.
-  : Explanation for Windows95.
-  : Explanation for WindowsNT4.0.
-  : Information you should remember.
-  : Information you should be care with.

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 The bitmap images shown on this HELP are using the pictures of

I-O DATA's card "GA-PII8/PCI"

Thus, the bitmap images will be different from actual images of your card.



### **About Display Effects**

- Display Effects is a 32 bit application compatible with Windows95 and WindowsNT4.0.
- Display Effects has the function of altering resolution, setting cursors, adjusting color adjustment and much more.
- Using Display Effects, some boards can output to LCD monitor and TV.



## Run Display Effects

- To startup Display Effects, click with the right mouse button on the wallpaper of
- ☞ Windows, and select "Properties". (Figure 1)
- ☞ Select the tab "Display Effects" from "Display Properties". (Figure 2)



Figure 1 : Popup menu

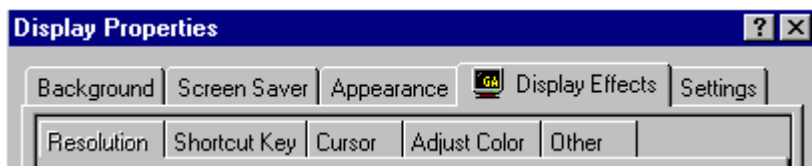


Figure 2 : Tab of Display Effects

- ☞ If you use the Start Up Icon of Display Effectson Task Tray (Figure 3),
- ☞ you can open Display Effects quickly with clicking with the left mouse button.



Figure 3 : Start Up Icon of Display Effects



### **About Start Up Icon of Display Effects**

- ➡ Start Up Icon of Display Effects is a 32 bit application compatible with Windows95
- ➡ and WindowsNT4.0.
- ➡ Making Start Up Icon of Display Effects stay resident, you can enjoy Shortcut Keys to
- ➡ use various linefunction of Display Effects.
- ➡ If you use Start Up Icon of Display Effects on Task Tray, the speed of graphics may
- ➡ sometimes slows down.



## Run Start Up Icon of Display Effects

- ☞ In order to start "Start Up Icon of Display Effects", after starting Display Effects,
- ☞ select "Resolution" --> "Configuration" --> "Add to Task Tray".
- ☞ Start Up Icon of Display Effects stays on Task Tray with checking "Add to Task Tray".
- ☞ (Figure 4)



Figure 4 : Start Up Icon of Display Effects

- ☞ To start it automatically at the startup of Windows, select "Resolution"
- ☞ --> "Configuration" --> "Run at starting Windows" after starting Display Effects.
- ☞ "Run at starting Windows" is enable at the startup of Windows.
- ☞ If you want it to be resident at any time, check "Add to Task Tray".
- ☞ Popup menu (Figure 5) is opened by clicking with the right mouse button on Start Up
- ☞ Icon of Display Effects.

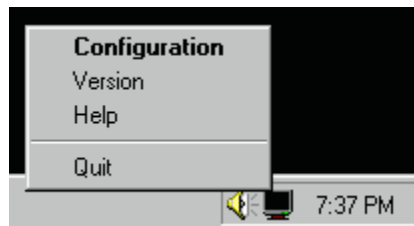


Figure 5 : Popup menu


## **Quit**

Quit Start Up Icon of Display Effects.



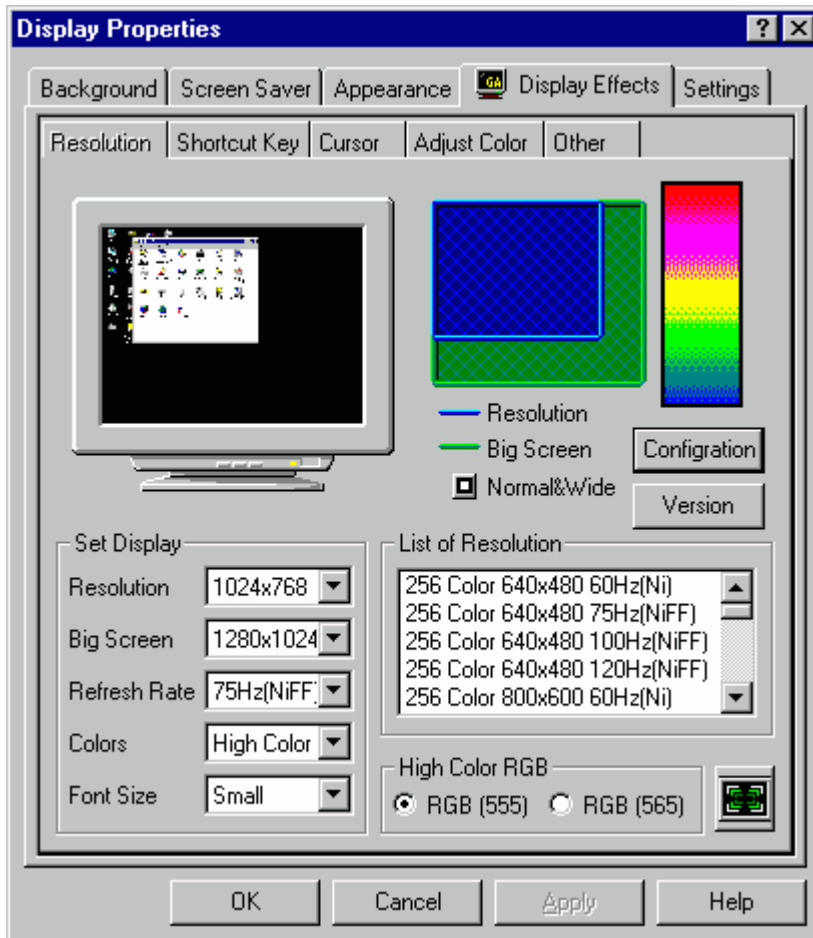
## Resolution


 This tab is used to alter resolutions and colors.


 Click the place you want to look in.



 You need to install DirectDraw (DirectX3 or later version).



 [Configuration](#)

 [Version](#)

## Resolution Image

It can display image of the resolution selected.

You can change a bitmap to be shown in Configuration.

[Desktop] : It displays an image which is a reduced image of actual desktop.

☞ This mode consumes lots of memory.

☞ Sometimes swapping occurs and the speed shows down.

[Sample Image] : It displays a fixed image. The speed is faster than "Desktop".

[None] : There is no image to be shown. Fastest speed is attained.



## **Big Screen Image**

It displays image of ratio between actual resolution and Big Screen when Big Screen is changed.

## **Color Image**

It displays color image when colors are changed.

## **CRT Size**

If there are data for both normal and wide size, you can use this button to specify the type(s) of resolution in the resolution list.

- \* Normal & Wide : Both normal and wide are listed.
- \* Normal Only: Only normal is listed.
- \* Wide Only : Only wide is listed.

## **Normal Size**

The size which has an aspect rate of resolution 4 : 3.  
For example, 640x480, 1024x768, and so on.

## Wide Size

The size whose horizontal rate of resolution exceeds that of normal size. For example, 1027x600, 1376x768, and so on.

☞ The typical rate of wide size is about 16:9.

## **Alter Resolution**

It lists the alternative resolutions under the colors currently selected.  
Select from this list the resolution you want to change.

## **Change Big Screen**

It lists the attainable Big Screens under the resolution currently selected.  
Select from this list the big screen you want to change.

## **Change Refresh Rates**

It lists the attainable refresh rates under the resolution currently selected.  
Select from this list the refresh rate you want to change.



## **Change Colors**

It lists the attainable colors for the card currently used.  
Select from this list colors you want to change.

## Change Font Size

It lists the attainable font sizes under the Windows currently used.  
Select font size from this list.

- ☞ If small font or big font isn't registered, you may not be able to select the font size.
- ☞ Fonts is registered through the following process; "Displays Properties" -->
- ☞ "Settings" --> "Fonts Sizes"

## **List of Resolution**

It lists alternative resolutions for the card currently used.  
You can change resolutions, refresh rates and colors at the same time.


## High Color RGB


When high color is selected, you can also choose either (555)32768 colors or high colors (565)65536 colors.

☞ Depending on your board (driver), only one of them



☞ may be selected.

## Decide to change resolution

 If you use function on this tab like resolutions and

 colors on WindowsNT4.0, decide by this button.

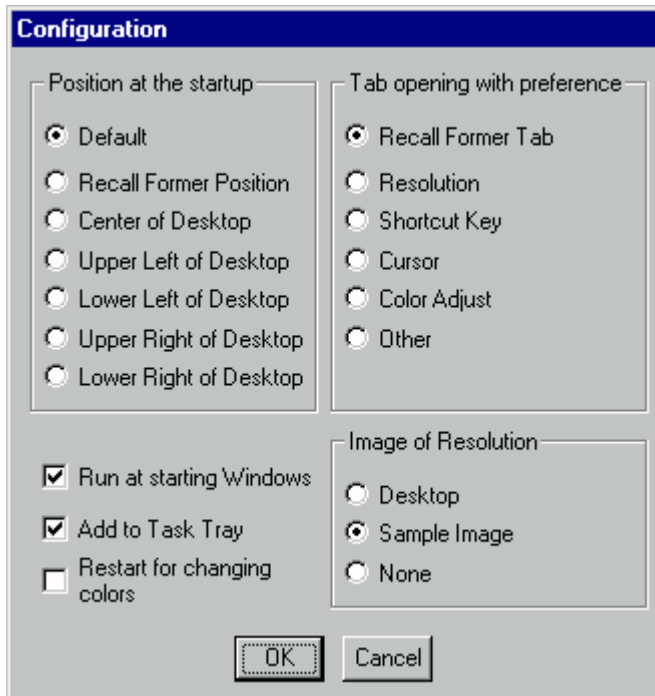
  
 Can't change resolution on the "Apply" or "OK" button.

  
 This button doesn't appear in Windows95.



## Configuration

- You can change setting of Display Effects in this dialog.
- Click the place you want to look in.



## Position at the startup

You can start Display Effects by clicking with the left mouse button on Start Up Icon of Display Effects.

You can select the starting up position.

- ➡ If you open "Display Properties" from Pop up menu by
- ➡ clicking with the right mouse button on the wallpaper
- ➡ of Windows, the tab isn't automatically changed.
- ➡ The previous tab is memorized by only clicking "Apply"
- ➡ or "OK" button in Display Effects.
- ➡ (If you click "Cancel", the tab isn't memorized.)

## Tab opening with preference

You can start Display Effects by clicking with the left mouse button on Start Up Icon of Display Effects.

You can select tab to automatically be opened.

- ☞ If you open "Display Properties" from Pop up menu by
- ☞ clicking with the right mouse button on the wallpaper
- ☞ of Windows, the tab isn't automatically changed.
- ☞ The previous tab is memorized by only clicking "Apply"
- ☞ or "OK" button in Display Effects.
- ☞ (If you click "Cancel", the tab isn't memorized.)



## Resolution Image

You can select bitmap image of resolution.

[Desktop] : Displays smaller image of actual desktop.  
☒ This mode consumes lots of memory.

☒ Sometimes swapping occurs and the speed shows down.

[Sample Image] : It displays a fixed image. The speed is faster than "Desktop".

[None] : There is no image to be shown. Faster speed is attained.

## Run at starting Windows

Check with this box, then Start up Icon is automatically started at starting Windows.

"Run at starting Windows" is enable only at the startup of Windows.

Check "Add to Task Tray" if you want it to be resident at any time.

## Add to Task Tray

Start up icon is resident on Task Tray with checking this box.  
Removing the check of this item, start up icon quits.

- "Add to Task Tray " is in effect only at that time.
- If you want it to be resident at the startup of Windows,
- check "Run at starting Windows".
- This can't be selected if you open this dialog from Start up Icon.

## Restart for changing colors

With checking this box, it restarts Windows95 when altering colors on changing resolutions. If you change colors without restarting, colors of icon, a part of displays may not be changed correctly.



You can select this item only for Windows95.



You can't change colors using Shortcut Key with

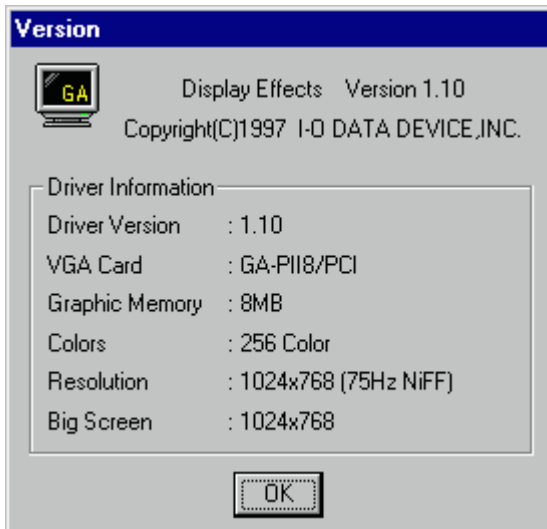


a check in this box.



## Version

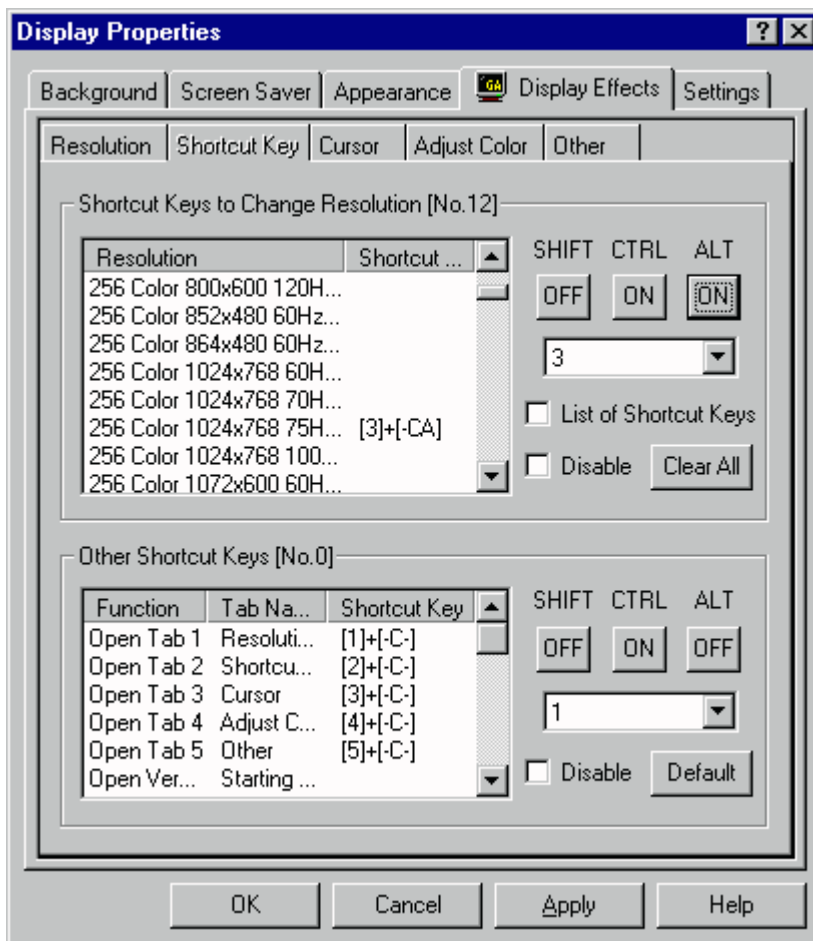
- ☞ In this dialog you can find the version of Display Effects and
- ☞ the current information for display driver.





## Shortcut Key

- This tab is used to assign Shortcut Key to altering resolutions and others.
- For PC-98 series [ALT] key is [GRPH] key, [F11] key is [VF1] key, [F12] is [VF2] key respectively.
- **Shortcut Key can't be used for the following cases:**
  - \* Startup icon of Display Effects isn't resident.
  - \* Display Effects ("Display Properties") is opened.
  - \* It ignores the Shortcut Keys, when changing colors with altering resolution, in the case you check "Restart for changing colors" on Configuration.
  - \* In the case that an application is active, which can't accept from Shortcut Keys like (MS-DOS prompt, and so on).



## Shortcut Key

Shortcut Key (also called Hot Key) is used to execute some actions by pressing some assigned keys. For example, if you assign [3]+[CTRL]+[ALT] to the resolution "256colors 1024x768 75Hz(NiFF)", press [3],[CTRL],[ALT] at the same time, makes resolution "256colors 1024x768 75Hz(NiFF)".

## Shortcut Keys to Change Resolution

Select form this list a resolution you want to assign to a Shortcut Key.

- ☞ The Shortcut Key started as [TAB]+[SCA] means as follows:
  - ☞ \* [TAB] : The Main Key is [TAB] key.
  - ☞ \* [SCA] : The Sub Keys are [SHIFT],[CTRL],[ALT] keys.
- ☞ If Sub Keys are only [SHIFT] and [ALT], it is started as [S-A].
- ☞ The location of Sub Keys which is not used is appeared as "-".



## Other Shortcut Keys

Select from this list other items you want to assign to a Shortcut Key.

- The Shortcut Key started as [TAB]+[SCA] means as follows:
  - \* [TAB] : The Main Key is [TAB] key.
  - \* [SCA] : The Sub Keys are [SHIFT],[CTRL],[ALT] keys.
- If Sub Keys are only [SHIFT] and [ALT], it is started as [S-A].
- The location of Sub Keys which is not used is appeared as "-".

## **Sub Keys**

Select keys which should be pressed with a main key (keys such as [TAB],[A-Z],[0-9])

If you want to set Shortcut Key to [TAB],[SHIFT],[CTRL],

select [TAB] from the main key list, and turn ON [SHIFT] and [CTRL] buttons, and turn OFF [ALT] button.

## Main Key

It is a main key for Shortcut Key, such as [TAB],[A-Z],[0-9] and so on.  
Select [None] to disable Shortcut Key.

In PC-98 series [ALT] key is [GRPH] key, [F11] key is [VF1] key,

[F12] is [VF2] key.

## **List of Shortcut Keys**

It displays only the Shortcut Keys set forth in the resolution list shown left.

**Disable**

Shortcut Key is disable temporarily by checking this box.

**Clear All**

Shortcut Key is disable temporarily by checking this box.

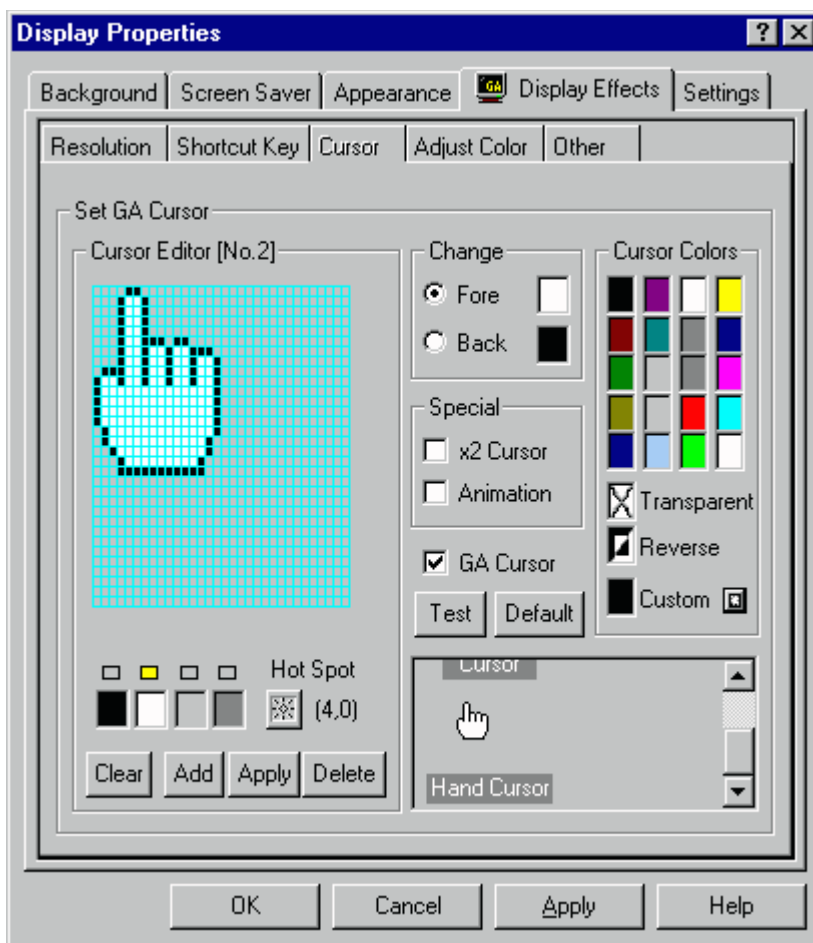
**Default**

Clicking this button clears all Shortcut Keys previously assigned to altering resolution.



## Cursors

- This tab is for changing a Hardware Cursor.
- Click the place you want to look in.
  - If cursor is a Software Cursor [Change], [Special], [Cursor Colors],
- [Default] buttons can't be used.
  - If there is no check on "GA Cursor", [Change], [Special], [Cursor Colors],
- [Test] button and [Default] button can't be used.



- Custom



## Hardware Cursors

It is a cursor that a graphics card outputs directly to a display.

There is no relation with drawing pictures. Drawing is not be affected.

- ☞ To make the current cursor a hardware cursor, click "Start" on the left bottom of display.
- ☞ Select [Setting] --> [Control Panel].
- ☞ Start up "Mouse Properties" with double click on "Mouse" in "Control Panel"
- ☞ Open "Pointer" tab, and change "Design" to "Windows Standard".
- ☞ Next open "Action" tab, and remove the check from "Display" in "Pointer Locus".
- ☞ Now, you get a hardware cursor.

## **Software Cursor**

It is the cursor that Windows draws to a display.

Moving the cursor causes redrawing the cursor, it affects drawing of all parts of display.

Compared with a hardware cursor, the drawing speed is slow.

## **Cursor Editor**

You can edit the style of cursor.

You can draw dot by clicking with the left mouse button on the display.

You can write lines by dragging with the left mouse button clicked.

The number is the current cursor number you select.

This cursor number is saved by clicking "Apply" and "OK" buttons.

## Pen Type

The color you selected here is used to paint in "Cursor Editor".  
Clicking "Clear" button, "Cursor Editor" is filled with the selected color.

- ☞ The explanation of colors is as follows:
- ☞ \* Black : Part to affect Background color.
- ☞ \* White : Part to affect Foreground color.
- ☞ \* Clear gray : Transparent part.
- ☞ \* Dark gray : Reversed color part.

## Hot Spot

Decide a hot spot of a cursor.  
Press the button, click any place on "Cursor Editor".

**Clear**

Fill "Cursor Editor" with the color selected in the above box("Pen Type").

## **Add**

Register cursor data located on "Cursor Editor", at the end of cursor data currently registered. The cursor number becomes an additional data number by pressing "Add".

## **Apply**

Apply the current cursor number to the data on "Cursor Editor".  
The standard cursor(No.0) can't be changed.



## **Delete**

Delete the data of cursor number you select.  
The standard cursor(No.0) can't be deleted.

## Change

Specify the place you want to use "Cursor Color"

First, select either foreground color or background color. Then select "Cursor Color".

 Can't use it if there is no check in [GA Cursor], or in case of software cursor.

## x2 Cursor

Make cursor size double.

☞ Can't use it if there is no check in [GA Cursor],

☞ or in case of software cursor.

## Animation Cursor

Continuously change cursor color.

☞ Can't use it if there is no check in [GA Cursor],

☞ or in case of software cursor.

## **GA Cursor**

It forces a cursor to GA cursor, when Display Effects is in active, or Start Up Icon is resident.

It doesn't make a cursor GA cursor without a check.

You can't use "Changing", "Special Function", "Cursor Color", "Decide", "Default" button without a check.

## Test

Change temporary cursor style to the one displayed in "Cursor Editor".

- This decision is temporary.
- If you finish Display Effects without "Add" or "Apply" data,
- data is cleared.
- Can't use it if there is no check in [GA Cursor].

## Default

Return to default setting. It sets Foreground color to white, Background color to black respectively remove the check from "x2 Cursor" and "Animation Cursor". The cursor figure will not change to the default.

 Can't use it if there is no check in [GA Cursor],

 or in case of software cursor.

## System Colors

Display 20 system colors (16 colors according to your card).  
You can set colors of "Foreground Color" and "Background Color" from them.

- ☞ Can't use it if there is no check in [GA Cursor], or in case of software cursor.
- ☞ Depending on your board and colors, the actual color
- ☞ may be different from the system color.



## Transparent Color

Make either "Foreground Color" or "Background Color" transparent.

- ☞ Can't make both colors transparent.
- ☞ Can't use it if there is no check in [GA Cursor],
- ☞ or in case of software cursor.

## Reverse Color

Make "Foreground Color" or "Background Color" reversed.

☞ Can't use it if there is no check in [GA Cursor],


☞ or in case of software cursor.

## Color you create in Custom Color

It displayed the color you create in "Custom Color".

"Foreground color" and "Background color" can be changed by clicking this box.

 Can't use it if there is no check in [GA Cursor],




 or in case of software cursor.

## **Cursor List**

Select from this list the cursor you want to edit.  
The name can be changed by clicking on the cursor name.






### Create cursor color

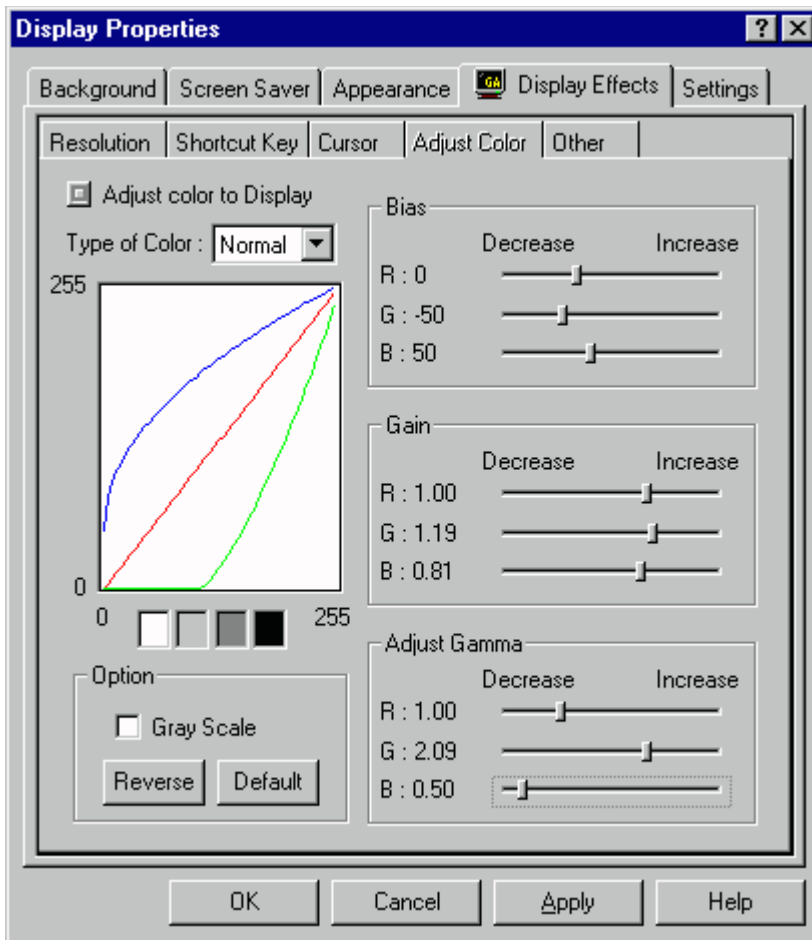
-  This dialog is a Windows standard dialog to create colors.
-  You can create and decide colors.
-  This function may not be able to use on some cards or specific colors.





## Adjust Color

-  This tab is used to adjust colors for display.
-  Click the place you want to look in.
-  This function can't be used for some cards and specific colors.



## Type of Adjust Color

If the elements of "Adjust Color" are changeable, use this button to change them. Depending on your board, overlay colors may be adjusted.

 This function may not be used for some boards and colors.

## **Type of Color**

Can save 4 values of color adjustment.

Select from this list the type in which you want to register color adjustment.



## **Color adjustment graph**

This graph shows the input / output of colors you adjust using on the right bars.

If it is hard to see it, change the background color in the Background Color Box located below.

## **Background Color of graph**

Change the background color by clicking this box if it is hard to see the above color adjustment graph.

## Gray Scale

Change display to Gray Scale.

 This function can't be used for same card and specific colors.

**Reverse**

Reverse the current color.

**Default**

Turn all values of selected color type to default.

## **Bias**

Adjust bias (brightness) values of display.  
Move the bars to adjust RGB (Red, Green, Blue).

## **Gain**

Adjust gain (Contrast) values of display.  
Move the bars to adjust RGB (Red, Green, Blue).




## **Gamma**

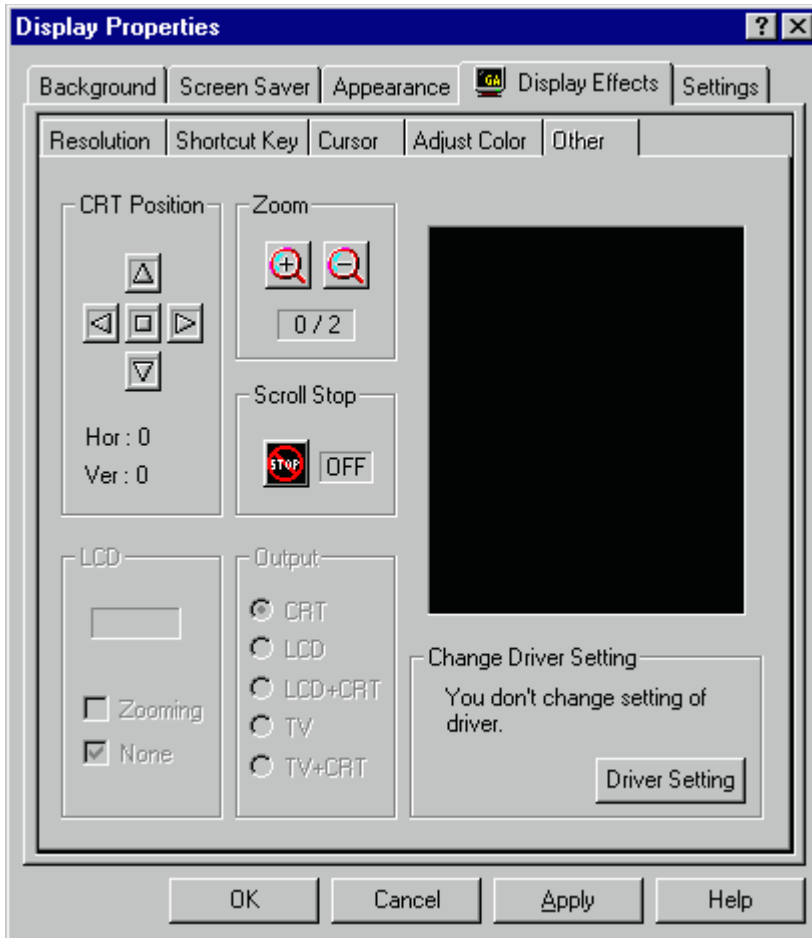
Adjust gamma (brightness in the center) values of display.  
Move the bars to adjust RGB (Red, Green, Blue).





## Others

-  This tab is used for executing Position and Zoom of display.
-  Click the place you want to look in.
-  **Some functions of this tab can't be used for some cards and OS's.**



## Position

Adjust display position.

Adjust display position from left to right by using the left and right button.

Adjust display position from upper to bottom by using the upper and bottom button.

The center button fixes the adjustment to 0(No adjustment).

- ➡ The maximum amount of adjustment depends on your card.
- ➡ If you press the buttons but the position, that is limit values.
- ➡ Depending your monitor, an adjusted display may be distorted or the edges may be
- ➡ black out. If it happens, do not move the position any more.

## Zoom

Zoom in and out display with [+] and [-] buttons.

 This function can't be used for some cards and resolutions.

## **Scroll Stop**

In the case of Zoom or Big Screen that the display is scrollable, pressing [Scroll Stop] button disables scrolling.

## Type of LCD Panel

If the board currently used is compatible with a LCD monitor, it shows your monitor type(TFT, DSTN) here.

 The LCD function may not be used for some boards.

## Zooming

If the board currently used is compatible with zooming feature, checking this box enables zooming.

The LCD function may not be used for some boards.

## **FRC / Dither / TMED**

If the board currently used is compatible with display enrichment technology, the type of enrichment (FRC, Dither, TMED and so on) is shown. That adjustment can be used with checking this box.

**The LCD function may not be used for some boards.**

## Output

You can select an output monitor here  
if the current board can output to other than CRT.

 **Output may not be used for some boards.**




## Driver Setting


You can open the dialog to set the driver with "Driver Setting" button if it is possible to set the driver of the currently used.

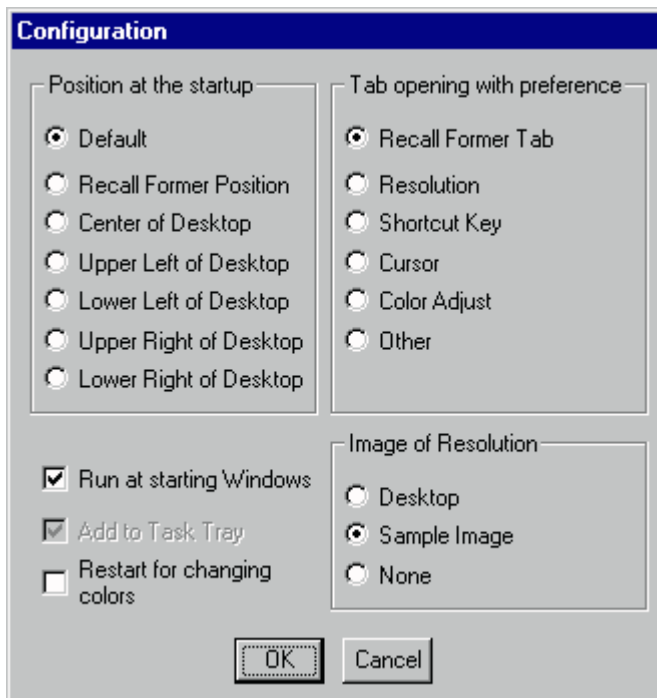
- ☞ Driver setting may not be used for some boards and OS's.
- ☞ Even if you can set your driver, a dialog may be unique depending on your board.



## Configuration

 In this dialog you can configure the environment of Display Effects.

 Click the place you want to look in.





The screenshot shows a dialog box titled "Configuration" with a blue header bar. The dialog is divided into three main sections:

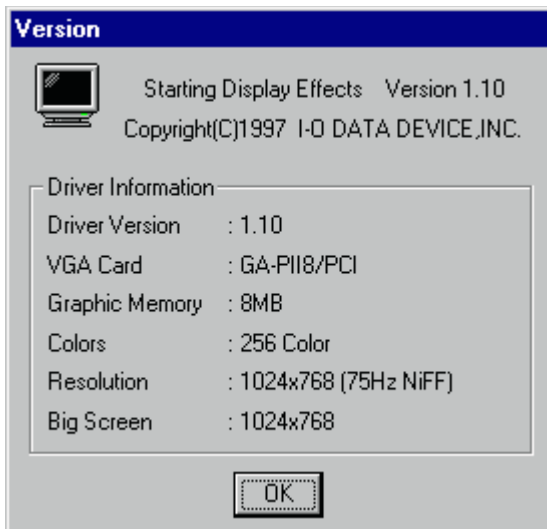
- Position at the startup:** A group box containing seven radio button options: "Default" (selected), "Recall Former Position", "Center of Desktop", "Upper Left of Desktop", "Lower Left of Desktop", "Upper Right of Desktop", and "Lower Right of Desktop".
- Tab opening with preference:** A group box containing five radio button options: "Recall Former Tab" (selected), "Resolution", "Shortcut Key", "Cursor", "Color Adjust", and "Other".
- Image of Resolution:** A group box containing three radio button options: "Desktop", "Sample Image" (selected), and "None".

At the bottom left, there are three checked checkboxes: "Run at starting Windows", "Add to Task Tray", and "Restart for changing colors". At the bottom right, there are two buttons: "OK" and "Cancel".



## Version

-  This dialog shows for the version information of Start Up Icon of Display Effects,
-  and the current display driver.



## Resolution

This tab is used to alter resolutions and colors.

- ☞ You have to restart Windows in changing colors,
- ☞ font size, high color RGB.
- ☞ (Colors can be changed without restarting Windows.)
- ☞ Changing font size needs to restart Windows.

## **Shortcut Key**

This tab is used to assign Shortcut Key to altering resolutions and others.

## **Cursors**

This tab is for changing a Hardware Cursor.

## Adjust Color

This tab is used to adjust colors for display.

 It may not be used for some boards and colors.

## Others

Set Position, Zoom, Scroll Stop.

 Some functions may not be used for some conditions of boards and colors.



## **Configuration**

Configure the environment of Display Effects.

## **Version**

Show the version information of Display Effects and the information of the board.

## **CRT Size**

If there are data for both normal and wide size, you can use this button to specify the type(s) of resolution in the resolution list.

- \* Normal & Wide : Both normal and wide are listed.
- \* Normal Only: Only normal is listed.
- \* Wide Only : Only wide is listed.

## **Resolution**

It lists the alternative resolutions under the color currently selected.  
Select resolution from this list.

## **Big Screen**

It lists the attainable Big screens under the resolution currently selected.  
Select big screen from this list.

## **Refresh Rates**

It lists the attainable refresh rates under the resolution currently selected.  
Select refresh rate from this list.

## **Colors**

It lists the attainable colors for the card currently used.  
Select color from this list.

## Font Size

It lists the attainable font sizes under the Windows currently used.  
Select font size from this list.

- ☞ If small font and big font aren't registered in Windows, you may not be able to change the font size.
- ☞ Font is registered through the following process; "Display Properties" --> "Settings" --> "Font Size".




## **Resolution Lists**

It lists alternative resolutions for the board currently used.  
You can change resolutions, refresh rates, colors at the same time.


## High Colors(555)

If you select High Colors in changing colors, select high colors (555) 32768 colors.

 Depending on your board (driver), only one of them may be selected.

## High Colors(565)

If you select High Colors in changing colors, select high colors (565) 65536 colors.

 Depending on your board (driver), only one of them may be selected.

## Decide to change resolution

- ☞ If you use such functions on this tab as resolutions and colors on Windows NT4.0,
- ☞ use this button for your decision.
- ☞ Can't change resolution by the "Apply" or "OK" button.
- ☞
- ☞ This button doesn't appear in Windows95.

## List of Shortcut Key to alter resolutions

Select from this list resolution you want to assign to a Shortcut Key.

☞ The Shortcut Key stated as [TAB]+[SCA] means as follows:

☞ \* [TAB] : The main key is [TAB] key.

☞ \* [SCA] : The sub keys are [SHIFT],[CTRL],[ALT] keys.

☞ If sub keys are only [SHIFT] and [ALT] keys, it is stated as [S-A].

☞ The location of sub key which is not used is appeared as "-".

## List of other Shortcut Keys

Select from this list other items you want to assign to a Shortcut Key.

- The Shortcut Key stated as [TAB]+[SCA] means as follows:
  - \* [TAB] : The main key is [TAB] key.
  - \* [SCA] : The sub keys are [SHIFT],[CTRL],[ALT] keys.
- If sub keys are only [SHIFT] and [ALT] keys, it is stated as [S-A].
- The location of sub key which is not used is appeared as "-".

## Sub Keys

Select keys which should be pressed with a main key (keys such as [TAB],[A-Z],[0-9])

If you want to set Shortcut Key to [TAB],[SHIFT],[CTRL],

select [TAB] from the main key list, and turn ON [SHIFT] and [CTRL] buttons, and turn OFF [ALT] button.

## Main Key

It is a main key for Shortcut Key, such as [TAB],[A`Z],[0`9] and so on.  
Select [None] to disable Shortcut Key.

- For PC-98 series [ALT] key is [GRPH] key, [F11] key is [VF1] key,
- [F12] is [VF2] key respectively.



## **List of Shortcut Keys**

It displays only the Shortcut Keys set forth in the resolution list shown left.

**Disable**

Shortcut Key is disable temporarily by checking this box.

**Clear All**

Clicking this button clears all Shortcut Keys previously assigned to altering resolution.

**Default**

Clicking this button sets to default all Shortcut Keys assigned to others.

## Pen Type

The color you selected here is used to paint in "Cursor Editor".  
Clicking "Clear" button, "Cursor Editor" is filled with the selected color.

☞ The explanation of colors is as follows:

☞ \* Black : Part to affect Background color.

☞ \* White : Part to affect Foreground color.

☞ \* Clear gray : Transparent part.

☞ \* Dark gray : Reversed color part.

## Hot Spot

Decide a hot spot of a cursor.  
Press the button, click any place on "Cursor Editor".

**Clear**

Fill "Cursor Editor" with the color selected in the above box("Pen Type").

## **Add**

Register cursor data located on "Cursor Editor", at the end of cursor data currently registered. The cursor number becomes an additional data number by pressing "Add".



## **Apply**

Apply the current cursor number to the data on "Cursor Editor".  
The standard cursor(No.0) can't be changed.

## **Delete**

Delete the data of cursor number you select.  
The standard cursor(No.0) can't be deleted.

## Change

Specify the place you want to use "Cursor Color"

First, select either foreground color or background color. Then select "Cursor Color".

 Can't use it if there is no check in [GA Cursor], or in case of software cursor.

## x2 Cursor

Make cursor size double.

☞ Can't use it if there is no check in [GA Cursor],

☞ or in case of software cursor.

## Animation Cursor

Continuously change cursor color.

☞ Can't use it if there is no check in [GA Cursor],

☞ or in case of software cursor.

## **GA Cursor**

It forces a cursor to GA cursor, when Display Effects is in active, or Start Up Icon is resident.

It doesn't make a cursor GA cursor without a check.

You can't use "Changing", "Special Function", "Cursor Color", "Decide", "Default" button without a check.

## Test

Change temporary cursor style to the one displayed in "Cursor Editor".

- This decision is temporary.
- If you finish Display Effects without "Add" or "Apply" data,
- data is cleared.
- Can't use it if there is no check in [GA Cursor].

## Default

Return to default setting. It sets Foreground color to white, Background color to black respectively remove the check from "x2 Cursor" and "Animation Cursor". The cursor figure will not change to the default.

 Can't use it if there is no check in [GA Cursor],

 or in case of software cursor.



## **Cursor List**

Select from this list the cursor you want to edit.  
The name can be changed by clicking on the cursor name.

## System Colors

Display 20 system colors (16 colors according to your card).  
You can set colors of "Foreground Color" and "Background Color" from them.

- ☞ Can't use it if there is no check in [GA Cursor], or in case of software cursor.
- ☞ Depending on your board and colors, the actual color
  
- ☞ may be different from the system color.

## Transparent Color


Make either "Foreground Color" or "Background Color" transparent.

- ☞ Can't make both colors transparent.
- ☞ Can't use it if there is no check in [GA Cursor],
- ☞ or in case of software cursor.

## Reverse Color

Make "Foreground Color" or "Background Color" reversed.

 Can't use it if there is no check in [GA Cursor],


 or in case of software cursor.

## Color you create in Custom Color

It displayed the color you create in "Custom Color".

"Foreground color" and "Background color" can be changed by clicking this box.

 Can't use it if there is no check in [GA Cursor],

 or in case of software cursor.

## Custom

Create cursor color.

- ☞ Can't use according to boards and colors.
- ☞ Can't use it if there is no check in [Using GA cursor],
- ☞ or in the case of software cursor.

## Type of Adjust Color

If the elements of "Adjust Color" are changeable, use this button to change them. Depending on your board, overlay colors may be adjusted.

 This function may not be used for some boards and colors.

## **Type of Color**

Can save 4 values of color adjustment.

Select from this list the type in which you want to register color adjustment.



## **Background Color of graph**

Change the background color by clicking this box if it is hard to see the above color adjustment graph.

## Gray Scale

Change display to Gray Scale.

 This function can't be used for same card and specific colors.

**Reverse**

Reverse the current color.

**Default**

Turn all values of selected color type to default.

## **Bias**

Adjust bias (brightness) values of display.  
Move the bars to adjust RGB (Red, Green, Blue).

## **Gain**

Adjust gain (Contrast) values of display.  
Move the bars to adjust RGB (Red, Green, Blue).

## **Gamma**

Adjust gamma (brightness in the center) values of display.  
Move the bars to adjust RGB (Red, Green, Blue).

## Position

Adjust display position.

Adjust display position from left to right by using the left and right button.

Adjust display position from upper to bottom by using the upper and bottom button.


The center button fixes the adjustment to 0(No adjustment).

- ➡ The maximum amount of adjustment depends on your card.
- ➡ If you press the buttons but the position, that is limit values.
- ➡ Depending your monitor, an adjusted display may be distorted or the edges may be
- ➡ black out. If it happens, do not move the position any more.



## Zoom

Zoom in and out display with [+] and [-] buttons.

 This function can't be used for some cards and resolutions.

## **Scroll Stop**

In the case of Zoom or Big Screen that the display is scrollable, pressing [Scroll Stop] button disables scrolling.

## Zooming

If the board currently used is compatible with zooming feature, checking this box enables zooming.

The LCD function may not be used for some boards.

## **FRC / Dither / TMED**

If the board currently used is compatible with display enrichment technology, the type of enrichment (FRC, Dither, TMED and so on) is shown. That adjustment can be used with checking this box.

The LCD function may not be used for some boards.

## Output

You can select an output monitor here  
if the current board can output to other than CRT.

 Output may not be used for some boards.

## Driver Setting

You can open the dialog to set the driver with "Driver Setting" button if it is possible to set the driver of the currently used.

- ☞ Driver setting may not be used for some boards and OS's.
- ☞ Even if you can set your driver, a dialog may be unique depending on your board.



