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- Run Start Up Icon of Display Effects

Explanation of Display Effects

- **■** Explanation of Resolution
- Explanation of Shortcut Key
- **■** Explanation of Cursor
- Explanation of Adjust Color
- Explanation of Other

Explanation of Start Up Icon of Display Effects

- Configuration
- Version
- Information

Explanation of Marks

: Display items on 1st level.

Display items on more than 2nd level.

Explanation for Windows95.
Explanation for Windows98.

Explanation for Windows95 or 98.
Explanation for WindowsNT4.0.
Information you should remember.
Information you should be care with.

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

I-O DATA's card "LCD-D15T2"

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 Effects on Task Tray (Figure 3),



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(98)
- 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 <u>Display Effects</u>,
- 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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. To start it automatically at the startup of

Windows, select "Resolution"



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC --> "Configuration" --> "Run at starting Windows" after starting Display Effects.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. "Run at starting Windows" is enable at the startup of Windows.



Display Effect

"Add to Task Tray".



Display Effect

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Popup menu (Figure 5) is opened by clicking

with the right mouse button on Start Up



Display Effect

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Icon of Display Effects.

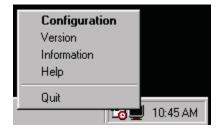


Figure 5 : Popup menu

Quit

Quit Start Up Icon of Display Effects.



Resolution



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This tab is used to alter resolutions and

colors.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Click the place you want to look in.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

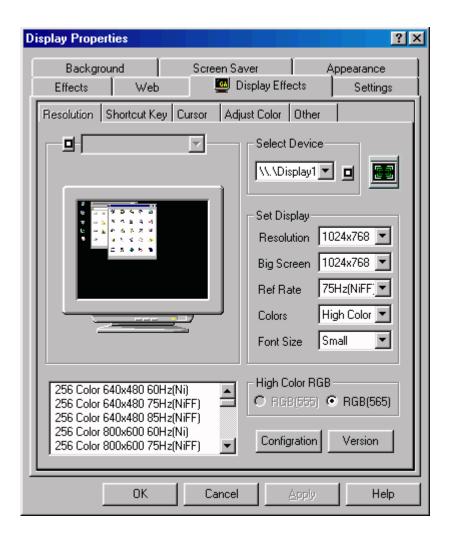


Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

You need to install DirectDraw (DirectX3 or later

version).





Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Configuration



Display Effect

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Resolution



Display Effect

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colors.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Click the place you want to look in.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

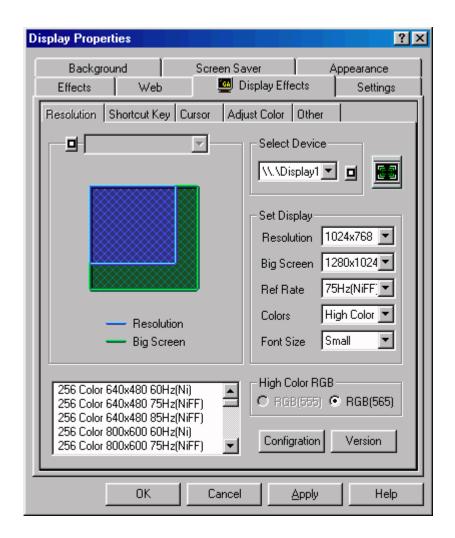


Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

You need to install DirectDraw (DirectX3 or later

version).





Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Configuration



Display Effect

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Resolution Image

It can display image of the resolution selected. You can change a bitmap to be shown in <u>Configuration</u>.

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This mode consumes lots of

memory.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.

Select CRT Type

Select CRT type.

Select Device

Select display device.



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Display Effect

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Test Device

This button is testting device.



Display Effect

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Display Effect

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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.



Display Effect

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If small font or big font isn't registered, you may

not be able to select the font size.



Display Effect

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Fonts is registered through the following

process; "Displays Properties" -->



Display Effect

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"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.



Display Effect

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Depending on your board (driver), only one of

them



Display Effect

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may be selected.

Decide to change resolution



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If you use function on this tab like resolutions

and



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colors on WindowsNT4.0, decide by this button.



Display Effect

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Display Effect

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

button.



Display Effect

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Display Effect

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This button doesn't appear in Windows95.



Configuration



Display Effect

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You can change setting of Display Effects in

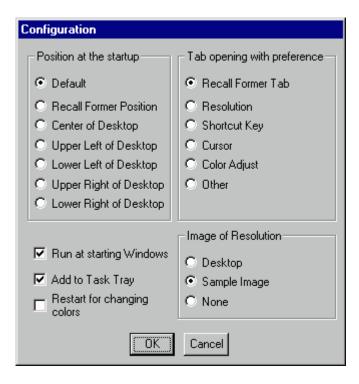
this dialog.



Display Effect

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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 <u>Start Up Icon of Display Effects</u>. You can select the starting up position.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If you open "Display Properties" from Pop up

menu by



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

clicking with the right mouse button on the

wallpaper



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

of Windows, the tab isn't automatically changed.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The previous tab is memorized by only clicking

"Apply"



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

or "OK" button in Display Effects.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

(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 <u>Start Up Icon of Display Effects</u>.

You can select tab to automatically be opened.



Display Effect

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If you open "Display Properties" from Pop up

menu by



Display Effect

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clicking with the right mouse button on the

wallpaper



Display Effect

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of Windows, the tab isn't automatically changed.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The previous tab is memorized by only clicking

"Apply"



Display Effect

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or "OK" button in Display Effects.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

(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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This mode consumes lots of

memory.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

"Run at starting Windows" is enable only at the

startup of Windows.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

"Add to Task Tray " is in effect only at that time.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If you want it to be resident at the startup of

Windows,



Display Effect

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check "Run at starting Windows".



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

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Display Effect

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You can select this item only for Windows95.



Display Effect

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Display Effect

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You can't change colors using Shortcut Key with



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Display Effect

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a check in this box.



Version



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

In this dialog you can find the version of

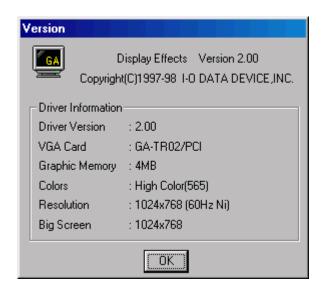
Display Effects and



Display Effect

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the current information for display driver.





Shortcut Key



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This tab is used to assign Shortcut Key to altering resolutions and others.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. For PC-98 series [ALT] key is [GRPH] key, [F11] key is [VF1] key,



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. [F12] is [VF2] key respectively.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Shortcut Key can't be used for the following

cases:



Display Effect

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* Startup icon of Display Effects isn't resident.

GA

Display Effect

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opened.

* Display Effects ("Display Properties") is



Display Effect

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colors with altering resolution,

* It ignores the Shortcut Keys, when changing



Display Effect

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in the case you check "Restart for changing

colors" on <u>Configuration</u>.



Display Effect

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which can't accept from Shortcut Keys

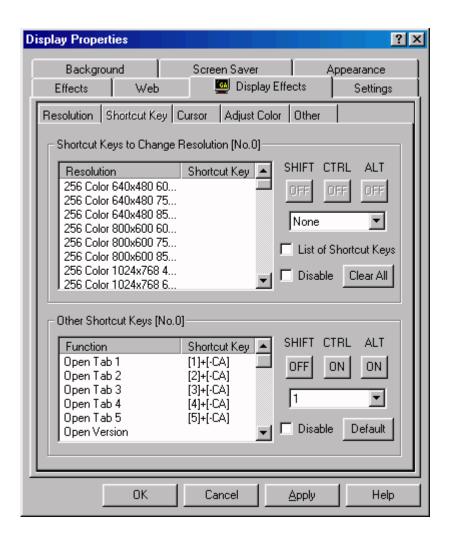
* In the case that an application is active,



Display Effect

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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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The Shortcut Key started as [TAB]+[SCA] means

as follows:



Display Effect

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* [TAB]: The Main Key is [TAB] key.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

* [SCA] : The Sub Keys are [SHIFT],[CTRL],

[ALT] keys.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If Sub Keys are only [SHIFT] and [ALT], it is

started as [S-A].



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

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The Shortcut Key started as [TAB]+[SCA] means

as follows:



Display Effect

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* [TAB] : The Main Key is [TAB] key.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

* [SCA]: The Sub Keys are [SHIFT],[CTRL],

[ALT] keys.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If Sub Keys are only [SHIFT] and [ALT], it is

started as [S-A].



Display Effect

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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.



Display Effect

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

key is [VF1] key,



Display Effect

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[F12] is [VF2] key.

List of Shortcut Keys

Ιt	displays	only	the	Shortcut	Kevs	set	forth	in the	e 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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This tab is for changing a Hardware Cursor.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Click the place you want to look in.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. If cursor is a Software Cursor [Change],

[Special], [Cursor Colors],



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. [Default] buttons can't be used.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. If there is no check on "GA Cursor",

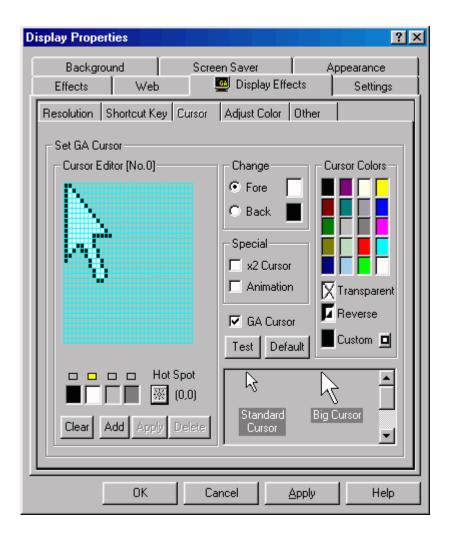
[Change], [Special], [Cursor Colors],



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

[Test] button and [Default] button can't be used.





Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. 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.



Display Effect

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To make the current cursor a hardware cursor,

click "Start" on the left bottom of display.



Display Effect

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Select [Setting] --> [Control Panel].



Display Effect

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Start up "Mouse Properties" with double click on

"Mouse" in "Control Panel"



Display Effect

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Open "Pointer" tab, and change "Design" to

"Windows Standard".



Display Effect

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Next open "Action" tab, and remove the check

from "Display" in "Pointer Locus".



Display Effect

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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.



Display Effect

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The explanation of colors is as follows:



Display Effect

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* Black : Part to affect Background

color.



Display Effect

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* White : Part to affect Foreground

color.



Display Effect

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* Clear gray: Transparent part.



Display Effect

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* 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".



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

x2 Cursor

Make cursor size double.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Can't use it if there is no check in [GA Cursor],



Display Effect

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Animation Cursor

Continuously change cursor color.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Can't use it if there is no check in [GA Cursor],



Display Effect

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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".



Display Effect

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Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If you finish Display Effects without "Add" or

"Apply" data,



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data is cleared.



Display Effect

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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.



Display Effect

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



Display Effect

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System Colors

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



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

in case of software cursor.



Display Effect

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Depending on your board and colors, the actual

color



Display Effect

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may be different from the system color.

Transparent Color

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



Display Effect

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Can't make both colors transparent.



Display Effect

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



Display Effect

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Reverse Color

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



Display Effect

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Display Effect

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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.



Display Effect

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



Display Effect

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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



Display Effect

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This dialog is a Windows standard dialog to create colors.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

You can create and decide colors.



OΚ

Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This function may not be able to use on some cards or specific colors.

Color

Basic colors:

Custom colors:

Define Custom Colors >>

Cancel



Adjust Color



Display Effect

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This tab is used to adjust colors for display.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Click the place you want to look in.

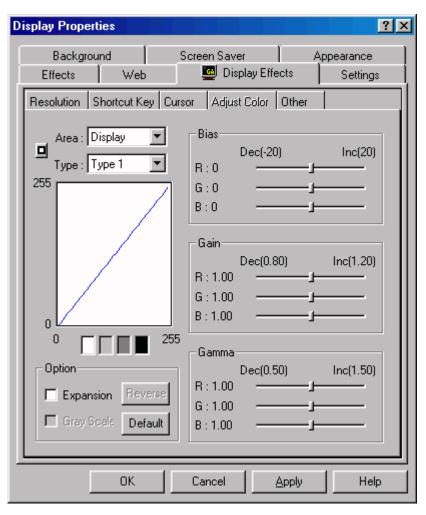


Display Effect

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This function can't be used for some cards

and specific colors.



Adjust Color Area

Select adjust color area.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This function may not be used for some boards

and colors.

Type of Color

Can save 5 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 colo	by clicking this box if it is ha	ard to see the above color	adjustment graph.
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Expansion

Color adjust area to expansion.

Gray Scale

Change display to Gray Scale.



Copyright(C) 1997-99 I-O DATA DEVICE,INC. 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).

Test Program

Run start up test program.



Others



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

This tab is used for executing Position and Zoom of display.



Display Effect

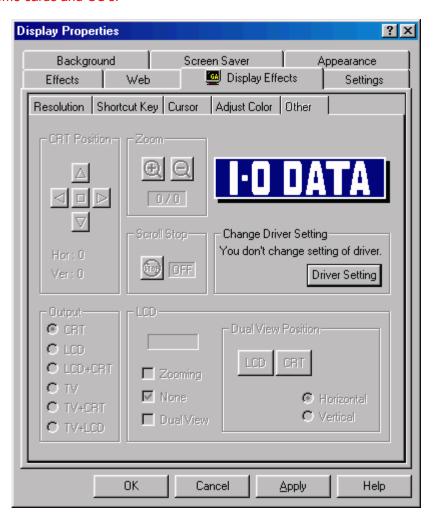
Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Click the place you want to look in.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. 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).



Display Effect

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The maximum amount of adjustment depends on

your card.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If you press the buttons but the position, that is

limit values.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Depending your monitor, an adjusted display

may be distorted or the edges may be



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

black out. If it happens, do not move the

position any more.

Zoom

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



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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The LCD function may not be used for some

Zooming

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The LCD function may not be used for some

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The LCD function may not be used for some

DualView

Switch to Dual View feature. Dual View doubles the work area by displaying a consecutive image on both LCD and CRT.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The LCD function may not be used for some

DualView Position

Reverse CRT and LCD monitor position.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. The LCD function may not be used for some

DualView Position

Select horizontal or vertical monitor position.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. The LCD function may not be used for some

Output

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Driver setting may not be used for some boards

and OS's.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Even if you can set your driver, a dialog may be

unique depending on your board.



Configuration



Display Effect

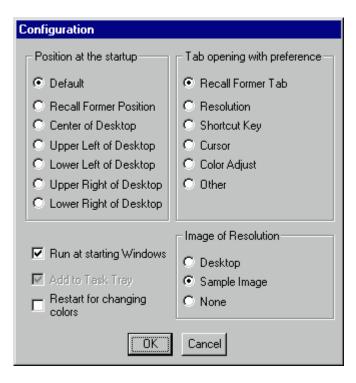
Copyright(C) 1997-99 I-O DATA DEVICE,INC. In this dialog you can configure the environment of Display Effects.



Display Effect

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Click the place you want to look in.





Version



Display Effect

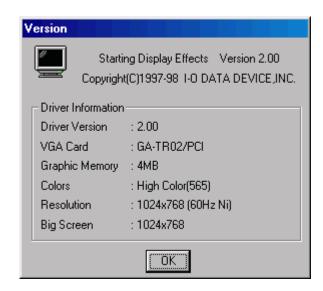
Copyright(C) 1997-99 I-O DATA DEVICE,INC. This dialog shows for the version information of Start Up Icon of Display Effects,



Display Effect

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and the current display driver.





Information



Display Effect

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This dialog shows for the device information

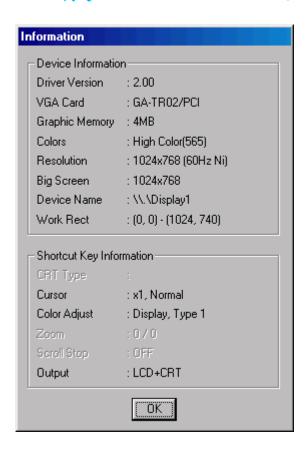
and



Display Effect

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shortcut key information.



Resolution

This tab is used to alter resolutions and colors.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

You have to restart Windows in changing colors,



Display Effect

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font size, high color RGB.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

(Colors can be changed without restarting

Windows.)



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Copyright(C) 1997-99 I-O DATA DEVICE,INC. It may not

It may not be used for some boards and colors.

Others

Set Position, Zoom, Scroll Stop.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. 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.

Change Image

Change image to Display or Big Screen.

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.



Display Effect

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If small font and big font aren't registered in

Windows, you may not be able to change the font size.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Depending on your board (driver), only one of

them may be selected.

Decide to change resolution



Display Effect

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If you use such functions on this tab as

resolutions and colors on Windows NT4.0,



Display Effect

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use this button for your decision.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Can't change resolution by the "Apply" or "OK"

button.



Display Effect

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Display Effect

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This button doesn't appear in Windows95.

Select CRT Type

Select CRT type.

Select Device

Select display device.



Display Effect

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Display Effect

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Test Device

This button is testting device.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Windows98 only.

List of Shortcut Key to alter resolutions

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The Shortcut Key stated as [TAB]+[SCA] means

as follows:



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

* [SCA]: The sub keys are [SHIFT],[CTRL],

[ALT] keys.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If sub keys are only [SHIFT] and [ALT] keys, it is

stated as [S-A].



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The Shortcut Key stated as [TAB]+[SCA] means

as follows:



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

* [SCA] : The sub keys are [SHIFT],[CTRL],

[ALT] keys.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If sub keys are only [SHIFT] and [ALT] keys, it is

stated as [S-A].



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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 \square `Z],[0 \square `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 \square `Z],[0 \square `9] and so on. Select [None] to disable Shortcut Key.



Display Effect

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

key is [VF1] key,



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[F12] is [VF2] key respectively.

List of Shortcut Keys

lt	displays	only	the	Shortcut	Kevs	set	forth	in the	e 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.



Display Effect

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The explanation of colors is as follows:



Display Effect

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* Black : Part to affect Background

color.



Display Effect

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* White : Part to affect Foreground

color.



Display Effect

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* Clear gray : Transparent part.



Display Effect

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* 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".



Display Effect

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

x2 Cursor

Make cursor size double.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Can't use it if there is no check in [GA Cursor],



Display Effect

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Animation Cursor

Continuously change cursor color.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Can't use it if there is no check in [GA Cursor],



Display Effect

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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".



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. This decision is temporary.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If you finish Display Effects without "Add" or

"Apply" data,



Display Effect

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data is cleared.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

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

in case of software cursor.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Depending on your board and colors, the actual

color



Display Effect

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may be different from the system color.

Transparent Color

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



Display Effect

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Can't make both colors transparent.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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



Display Effect

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Reverse Color

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. Can't use it if there is no check in [GA Cursor],



Display Effect

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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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Custom

Create cursor color.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Can't use according to boards and colors.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Can't use it if there is no check in [Using GA

cursor],



Display Effect

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Test Program

Run start up test program.

Adjust Color Area

Select adjust color area.



Display Effect

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and colors.

Type of Color

Can save 5 values of color adjustment. Select from this list the type in which you want to register color adjustment.

Background Color of graph

|--|

Expansion

Color adjust area to expansion.

Gray Scale

Change display to Gray Scale.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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).



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The maximum amount of adjustment depends on

your card.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

If you press the buttons but the position, that is

limit values.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Depending your monitor, an adjusted display

may be distorted or the edges may be



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

black out. If it happens, do not move the

position any more.

Zoom

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



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. The LCD function may not be used for some

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The LCD function may not be used for some

DualView

Switch to Dual View feature. Dual View doubles the work area by displaying a consecutive image on both LCD and CRT.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

The LCD function may not be used for some

DualView Position

Select horizontal or vertical monitor position.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. The LCD function may not be used for some

DualView Position

Reverse CRT and LCD monitor position.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC. The LCD function may not be used for some

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.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Driver setting may not be used for some boards

and OS's.



Display Effect

Copyright(C) 1997-99 I-O DATA DEVICE,INC.

Even if you can set your driver, a dialog may be

unique depending on your board.