

SP-8024

Instruction Manual

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ASTRODESIGN, Inc.



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1 FORWARD

This manual provides details on how to use the SP-8024 software program to edit, create, send and receive data used for the programmable video signal generator (hereafter abbreviated to "VG"). (The figures and diagrams referred to in this manual show what applies when the VG-851 has been connected, and there may be differences when connections are made with another VG. Refer to the help provided for each editing program. The basic operating methods are the same no matter which model VG has been connected.)

This manual describes how to use the SP-8024. For details on specific setting items, settings or other such aspects, refer to the SP-8024 help or the instruction manual of the VG concerned.

After reading through this manual, keep it in a safe place for future reference.

2 OPERATING ENVIRONMENT

Operating system:	Microsoft Windows 95, 98, Me, NT4.0 2000 or XP
Preprocessor:	Pentium 133 MHz or faster recommended
Memory:	32 MB or more recommended
Free space on hard disk:	32 MB or more
Display resolution:	800 x 600 or more recommended

A restriction on communication with the VG applies with one of the operating systems.

Operating systems capable of communication with VG (as of May 14, 2003)

OS	95	98	ME	NT4.0	2000	XP
Serial	O	O	O	O	O	O
Parallel	O	O	O	X	X	X
USB	X	O	O	X	O	O

(O: Communication possible; x: communication not possible)

* Communication is also subject to restrictions with some VG models. For further details, refer to the operating instructions of the VG model concerned.

3 INSTALL AND UNINSTALL

Please refer to "SP-8024 (VG Control Software) Installation Manual" or "ReadMe.txt" file in the SP-8024 Installation CD, about how to install and uninstall of SP-8024.

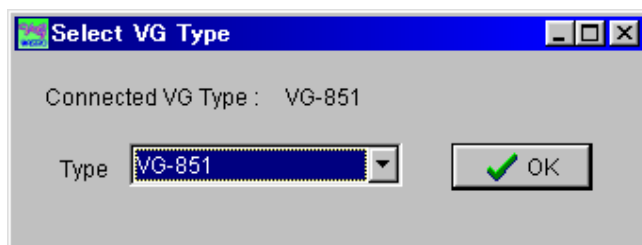
4 OPERATION

The basic operations consist of starting up "VGBase," creating and editing data, sending the data to and receiving it from the VG, and storing the created data in the memory. The layout data used by "VGBase" is grouped together in sets, and the data, data numbers, codes, etc. sent to the VG are retained in the memory. (For details on how to create and edit the sets of data, refer to the help sections in the editing programs concerned.)

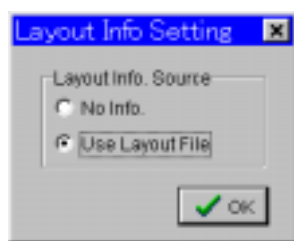
4-1 STARTING UP VGBASE

Procedure for starting up "VGBase"

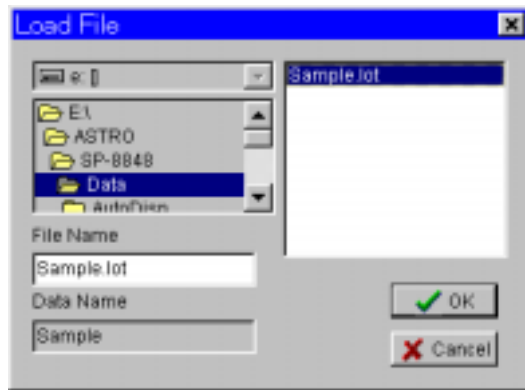
- (1) Select [Start] → [Programs] → [SP-8024] → [VGBase].
- (2) The "Select VG Type" dialog box for setting the VG type now appears. Select the VG Type from the options given in the [Type] combo box, and click the [OK] button. (Once the VG Type is selected, the selection is stored in the memory, and the dialog box will no longer be displayed when the software program is next started up.) Before the "Select VG Type" dialog box appears, a "Warning" message (Com Port Open Error) may be displayed. This means that communication with the VG has not been established: after starting up "VGBase," perform the configuration settings. (See "Configuration settings" in Section 4-3.)



- (3) The "Layout Info Setting" (layout data setting) dialog box for setting the data at startup appears. If layout data is to be used, select [Use Layout File], and click the [OK] button. Otherwise, select [No Info], and click the [OK] button. If the no data layout will be used, "VGBase" is started up here.



- (4) When the layout data is going to be used, the "Load File" file selection dialog box appears. (It does not appear when the layout data is not going to be used.) Select the "Sample.lot" file in the Data directory (default: "C:\Astro\SP-8024\Data"), and click the [OK] button. (When a new file is to be created, enter its filename in the [File Name] box.)



- (5) The sample layout data is now loaded into "VGBase" and "VGBase" is started up.



In order to perform the interface and other settings, the configuration settings must be performed once when the VG is started up. (See "Configuration settings" in Section 4-3.)

4-2 CLOSING VGBASE

Procedure for closing "VGBase"

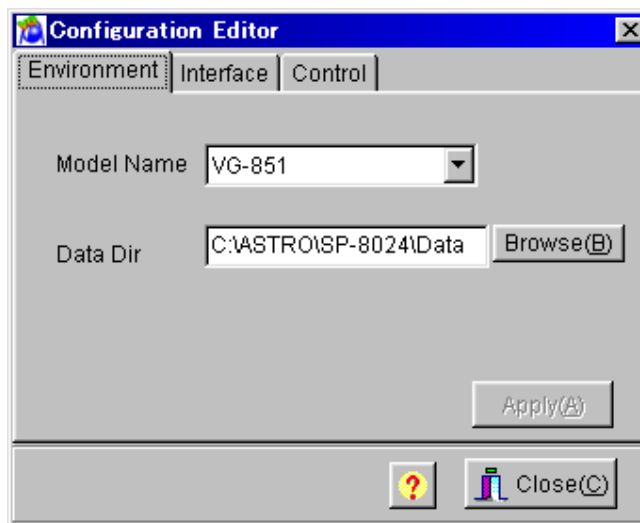
Click the [Close] button.

4-3 CONFIGURATION SETTINGS

Procedure for changing the VG execution mode and other configuration settings

(1)

Click the [Config] button of "VGBase." This starts up the "Configuration Editor" program which performs the configuration settings.



(2) **Environment page**

Environment	
Model Name	The VG model name is indicated here.
Data Dir	The directory in which the data is stored is set here. Under normal circumstances, no changes should be made to the directory since it requires a specific structure.
Interface	
Enable	This setting enables communication and allows "VG (Serial)," "VG (LAN)" or "PC" to be set. The setting items differ depending on the VG model.
Serial	This setting selects the RS-232C port to be used as the communication method.
Parallel	The setting selects the centronics port to be used as the communication method.
USB	The setting selects the USB port to be used as the communication method.
Current Serial Setting	The setting can be changed when selecting [Serial]
Sense	The setting of [Current Serial Setting] is matched with the VG.
Control	
Display	"Direct Display" or "Group Display" can be selected here as the display mode. When the "Group Display" mode has been selected, the "Group" number must be specified
ROM / Card	Selects the device, Panel ROM or Memory card, to be used in the

	VG main unit. When communication with VG is available, the memory size is same as the device attached. When the communication is not available, the memory size can be set optionally.
--	--

All the settings must match the communication parameters which are set for the VG unit. As such, special care is required when setting or changing the items on the [Interface] page.

(3) Click [Apply] so that the configuration settings will take effect and the actual changes will be made. When this button is clicked on the [Interface] page, the commands are sent to the VG unit and the settings are changed only if communication is enabled. If communication is disabled, only the configuration data managed by the PC will be updated.

Bear in mind that even when the settings have been changed, these changes will be lost if the software is closed without clicking the [Apply] button first.

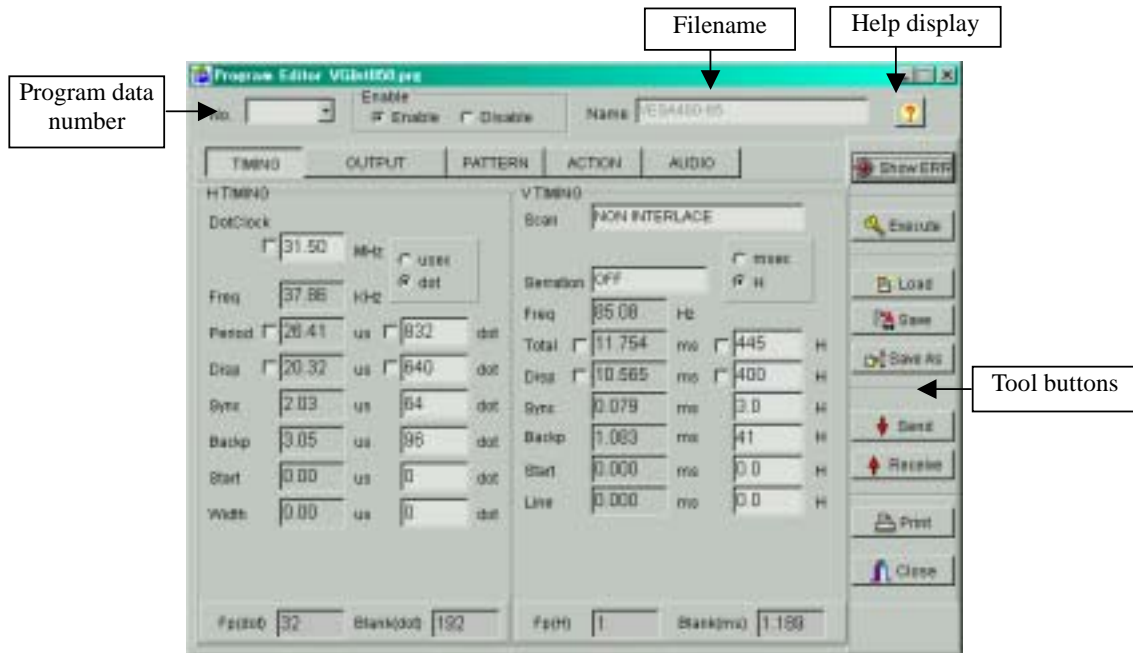
(4) Click [Close] to close the configuration setting program.

4-4 CREATING AND EDITING THE PROGRAM DATA

This section describes how the VG program data is set. Program data can be created, edited, sent to the VG, registered on the panel ROM or memory card, executed and received from the VG.

(1)

Click the [Program] button of "VGBase" to start up the "Program Editor."



(2) Loading a file

Before creating new data, proceed with "Creating and editing the program data" in (3) on the next page.

- 1) Press the [Load] button to open the "Load File" file selection dialog box.
- 2) Select the filename.
- 3) Select the type of the program data ([Timing], [Output], [Pattern] or [Action]) to be loaded, and press the [OK] button. Only the selected data is now loaded. The data which has not been selected is not updated.
- 4) The data of the selected file is displayed in the program data editing program.

- If the layout has been set

The number of the program data registered in the layout is displayed at [No.].

- If the layout has not been set

[No.] is cleared.

(*) When [Internal Program] has been checked

Load the file containing the program data registered in the ROM inside the VG.

Filename	Program data No.
VGInt850.prg	850
:	:
VGInt999.prg	999

(3) Creating and editing the program data

To set the timing data (horizontal timing, vertical timing):

→ Click the [TIMING] button.

To set the output conditions (analog output, digital output):

→ Click the [OUTPUT] or [ANALOG OUTPUT] or [DIGITAL OUTPUT] button.

To set the pattern data (selecting the display pattern, setting the pattern data):

→ Click the [PATTERN] button.

To set the action data:

→ Click the [ACTION] button.

To set the audio data:

→ Click the [AUDIO] button.

(*) A setting with an error is displayed in red. A list of setting errors can be viewed by pressing [Show ERR].

With some VG models, changes have been made to the screens, setting items, setting value ranges, etc. For details, refer to the SP-8024 help or the instruction manual of the VG concerned.

(4) Saving the file

After changing the program data, click the [Save] button or [Save As] button to save the data in the file.

● When the [Save] button is clicked:

The data is saved in the file and any existing data in that file is overwritten.

● When the [Save As] button is clicked:

- 1 The "Save File" file selection dialog box appears.
- 2 Input the filename, and select the [OK] button. The displayed data is now saved in the new file.

(5) Sending the program data

1) Select the [Send] button. The "Send to VG" number selection dialog box appears.

2) Set the number (0 to 849) of the program data.

Data number	
0	After the data is sent, it is executed

		immediately without being registered.
1 - 849	[with Execute] checked	After the data is sent, it is registered and executed immediately.
	[with Execute] unchecked	After the data is sent, it is not executed but only registered.

- 3) Click the [OK] button. The data is now sent to the VG. (The number of the data sent now replaces the previous number appearing in [No.].)
- (*) The name of the program data can be set by inputting it into [Program Name] of the [NAME] program data name setting tab on the pattern data setting screen.

(6) Receiving the program data

- 1) Select the [Receive] button. The "Receive from VG" number selection dialog box appears.
- 2) Set the number (1 to 999) of the program data.
- 3) Select the data (Timing, Output, Pattern or Action) to be received, and click the [OK] button. Only the data selected is loaded. Unselected data is not updated.
- 4) The data is received from the VG. (The number of the data received now replaces the previous number appearing in [No.].)

(7) Printing the program data

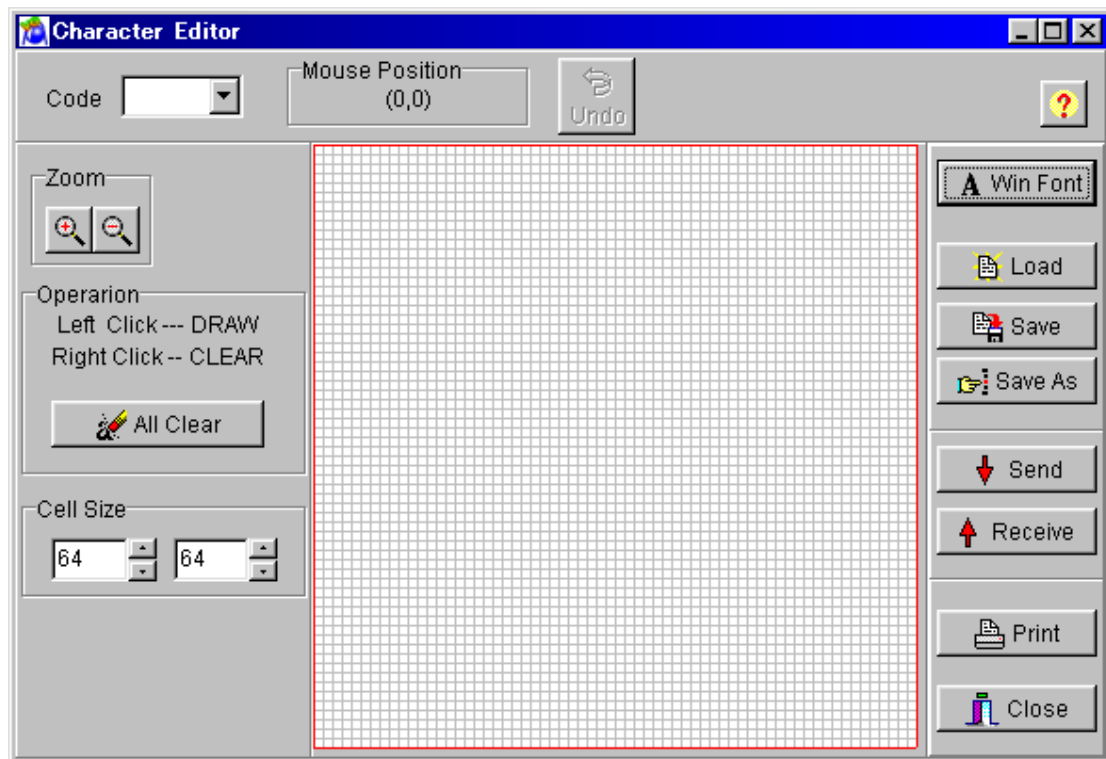
- 1) Click the [Print] button to print the data prepared.
- 2) The "Print" dialog box appears. Set the margins here.
- 3) Click the [OK] button. The displayed data is now printed.
- 4) To change the printer which has been set, click the [Set Printer...] button.
- 5) The printer setting dialog box appears. Perform the printer settings. For details on how the items on this dialog box are set, refer to the instruction manual for Windows or for the printer which will be used.

4-5 CREATING AND EDITING THE USER CHARACTERS

This section describes how the VG's user characters (hereafter referred to as the "characters") are set. The VG characters can be created and edited, edited characters can be sent to the VG and registered on the panel ROM or memory card, and characters from the VG can be received.

(1)

Click the [Char] button of "VGBase" to start up the "Character Editor."



(2) Loading the file

Before creating new characters, proceed with "Creating and editing the character data" in (3) below.

- 1) Press the [Load] button to open the "Load File" file selection dialog box.
- 2) Select the file. When [Display Image] is checked, the selected file is previewed.
- 3) Click the [OK] button. The character of the selected file is now displayed in the editing area.

- If the layout has been set

The character code registered in the layout is displayed at [Code].

- If the layout has not been set
[Code] is cleared.

(3) Creating and editing the character data

- 1) If the grid section of the editing area is clicked with the right button of the mouse, it is set to ON; if it is clicked with the left button, it is set to OFF. (One grid section in the editing area corresponds to one dot of the character font. In the editing area, the ON state is indicated in black and the OFF state in white.)
- 2) To set a multiple number of consecutive dots, drag the mouse and all the dots of the character along the line of movement will be set to ON if the right button of the mouse is clicked and to OFF if the left button is clicked.
- 3) To clear the entire character created in the editing area, click the [All Clear] button.
- 4) To undo the last operation, click the [Undo] button.

(*) The numbers shown by [Cell Size] serve as a general guideline when editing by changing the line color of the set position.

(*) The position of the cursor in the editing area is indicated at [Mouse Position].

(4) Loading the Windows font data

The font data already installed in Windows is converted into the character format and loaded.

- 1) Click the [Win Font] button. The "Select Windows Font" font selection dialog box appears.
- 2) Specify the text to be loaded in [Text].
- 3) To change the text font, size or style, click the [Set Font...] button.
- 4) To change the position or size of the text display, use [Start Position] or [Size].
- 5) To specify alignment of the text position, use [Align].
- 6) Click the [OK] button. The specified text is now displayed in the editing area.

(5) Saving the file

The displayed data is saved in the file.

Click the [Save] button. → The data is saved in the selected file and any existing data in that file is overwritten.

Click the [Save As] button. → The data is saved in a new file.

(*) If [Display Image] is checked, the selected file is previewed.

(6) Sending the characters

- 1) Click the [Send] button. The "Send to VG" code selection dialog box appears.
- 2) Set the character code (0xE0 to 0xEF in hexadecimal format).
- 3) Click the [OK] button. The character is now sent to the VG and registered. (The code shown at [Code] now changes to that of the sent character.)

(7) Receiving the characters

- 1) Click the [Receive] button. The "Receive from VG" code selection dialog

box appears.

- 2) Set the character code (0xE0 to 0xEF in hexadecimal format).
- 3) Click the [OK] button. The reception of the character is now started.
- 4) The received character is displayed in the editing area. (The code shown at [Code] now changes to that of the received character.)

(8) Printing the characters

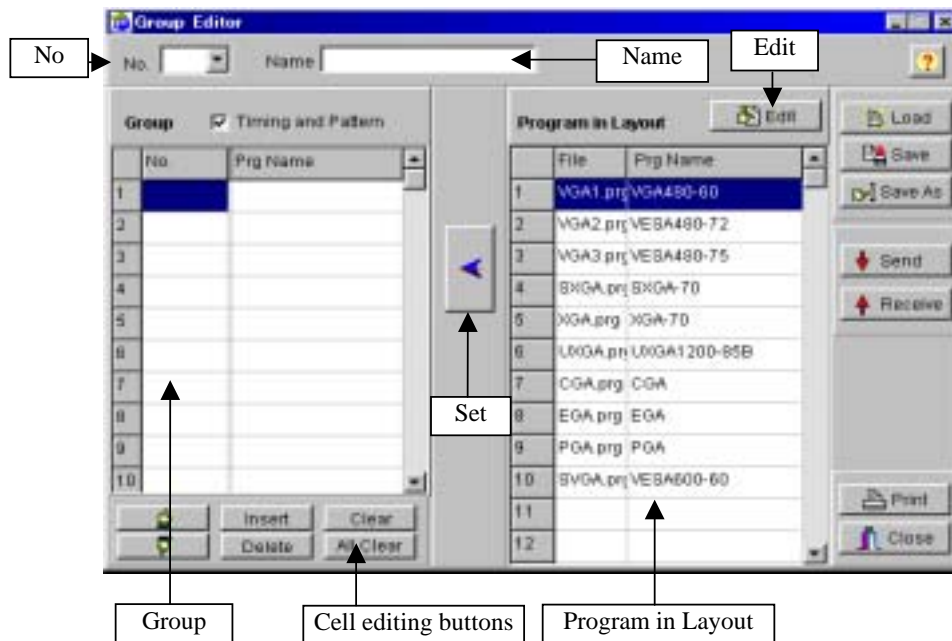
- 1) Click the [Print] button to print the characters which have been created.
- 2) The "Print" dialog box appears. Set the margins here.
- 3) Click the [OK] button. The displayed character is now printed.
- 4) To change the printer which has been set, click the [Set Printer...] button.
- 5) The printer setting dialog box appears. Proceed with the printer settings. For details on how the items on this dialog box are set, refer to the instruction manual for Windows or for the printer which will be used.

4-6 CREATING AND EDITING THE GROUP DATA

This section describes how the VG's group data is set. The VG group data can be created and edited, edited group data can be sent to the VG and registered on the panel ROM or memory card, and group data from the VG can be received. Different program display screens are displayed depending on the VG model which is connected.

(1)

Click the [Group] button of "VGBase" to start up the "Group Editor."



(2) Loading the file

Before creating new group data, proceed with "Creating and editing the group data" in (3) below. The group data is loaded from one of the files which have been saved.

- 1) Press the [Load] button to open the "Load from File" file selection dialog box.
- 2) Select the file, and click the [OK] button.
- 3) The data of the selected file is now displayed on the [Group] group data list.

- If the layout has been set

The number of the group data registered in the layout is displayed at [No.].

- If the layout has not been set

[No.] is cleared.

(3) Creating and editing the group data

- 1) When the "Group Editor" is started up, the program registered in the layout is displayed on the [Program in Layout] program data list.

- 2) Select the program data to be registered from [Program in Layout].
- 3) Select the line to be set from among the lines on the [Group] group data list, and click the [<-] (left arrow) button. The program data number ([No.]) and program name ([Prg Name]) are set and displayed on the line selected in [Group]. (When a multiple number of programs has been selected, lines for the data to be registered are added below the line selected on the group data list.)
- 4) Change the group data which has been set in [Group].

To move the group data up or down, click the [up] or [down] button.

- To delete the group data, click the [Clear] button or [All Clear] button.
- Use the [Delete] button to delete a line, after which the group data below the deleted line moves up to fill the gap left.

(*) If no data files in the layout have been loaded, no programs are displayed in [Program in Layout]. Input and set only the program data numbers. As above, select the line in [Program in Layout], and click the [<-] button. Only the program data number is now set. Alternatively, using the mouse, click the [No.] field of the group data list where the program data number is to be input. The number can be keyed in.

(4) Saving the file

The displayed data is saved in the file.

Click the [Save] button. → The data is saved in the selected file and any existing data in that file is overwritten.

Click the [Save As] button. → The data is saved in a new file.

(*) The group data name can be set by inputting it into [Name] of the "Group Editor." This name is stored in the file when a panel ROM is used but it will not be sent to the VG.

(5) Sending the group data

- 1) Click the [Send] button. The "Send to VG" code selection dialog box appears.
- 2) Set the group number (1 to 32).
- 3) Click the [OK] button. The group data is now sent to the VG and registered. (The number of the data sent now replaces the previous number appearing in [No.])
- 4) The group data name can be set by inputting it into [Name] on the group data setting tab of the group data setting window. This name is stored in the file when a panel ROM is used but it will not be sent to the VG.

(*) When program data is sent to the panel ROM (HN58C65P only), it has a 2-digit number.

(6) Receiving the group data

- 1) Click the [Receive] button. The "Receive from VG" number selection dialog box appears.
- 2) Set the group number (1 to 32).
- 3) Click the [OK] button. The reception of the group data is now started. (The number of the received group data now replaces the previous number appearing in [No.])

(*) When program data is received from the panel ROM (HN58C65P only), it has a 2-digit number.

(7) Printing the group data

- 1) Click the [Print] button to print the group data which has been created.
- 2) The "Print" dialog box appears. Set the margins here.
- 3) Click the [OK] button. The displayed data is now printed.
- 4) To change the printer which has been set, click the [Set Printer...] button.
- 5) The printer setting dialog box appears. Proceed with the printer settings. For details on how the items on this dialog box are set, refer to the instruction manual for Windows or for the printer which will be used.

(8) Registering the program

The program data files in the directory are registered on the layout data list. (If layout data files have not been loaded, they cannot be registered.)

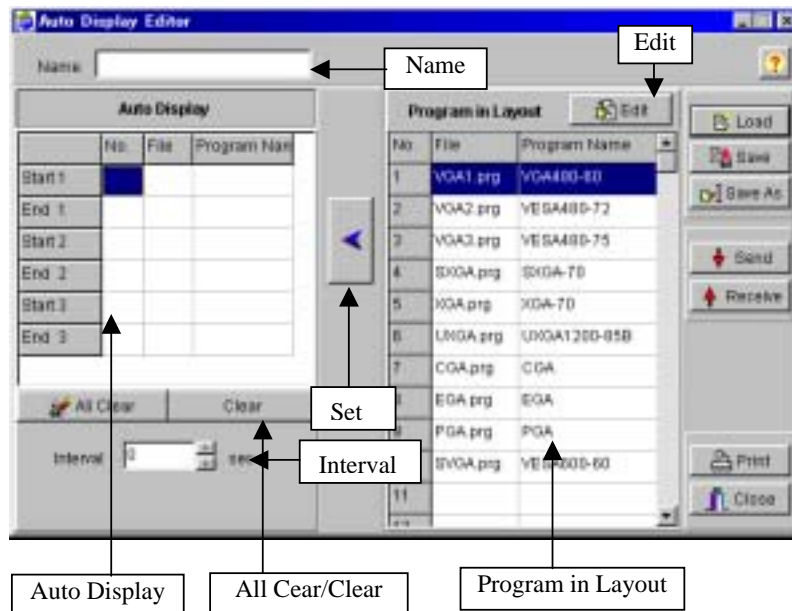
- 1) Click the [Edit] button.
- 2) The "Program Layout Editor" program data registration dialog box appears. For details on the registration method, refer to "Selecting and editing the layout data files" in Section 4-10.

4-7 CREATING AND EDITING THE AUTO DISPLAY DATA

This section describes how the VG's auto display data is set. The VG auto display data can be created and edited, edited auto display data can be sent to the VG and registered on the panel ROM or memory card, and auto display data from the VG can be received.

(1)

Click the [Auto Disp] button of "VGBase" to start up the "Auto Display Editor."



(2) Loading the file

Before creating new auto display data, proceed with "Creating and editing the auto display data" in (3) below.

The auto display data is loaded from a file in which it was saved.

- 1) Click the [Load] button. The "Load File" file selection dialog box now appears.
- 2) Select the file, and click the [OK] button. The auto display data of the selected file is now displayed on the [Auto Display] auto display data list.

(3) Creating and editing the auto display data

- 1) Select the program data to be set from the [Program in Layout] program data list.
- 2) Before proceeding any further, select the line on the [Auto Display] auto display data list to be set for registering the data.
- 3) Click the [←] button, and register the selected program data on the [Auto Display] line selected.
 - To clear the auto display data, click the [Clear] button or [All Clear]

button.

- 4) Set the number of interval seconds in [Interval].
- (*) If no data files in the layout have been loaded, no programs are displayed in [Program in Layout]. Input and set only the program data numbers. As above, select the line in [Program in Layout], and click the [←] button. Only the program data number is now set. Alternatively, use the mouse to click the [No.] field of the auto display data list where the program data number is to be input. The number can now be keyed in.
- (*) In registering the auto display data, set the program data for both [Start] and [End]. Set the program data from the top without leaving any gaps. (In other words, do not enter a setting for [Start] or [End] only or leave any blank lines between data settings.)

(4) Saving the file

The displayed data is saved in the file.

Click the [Save] button. ⇒ The data is saved in the selected file and any existing data in that file is overwritten.

Click the [Save As] button. ⇒ The data is saved in a new file.

- (*) The auto display data name can be set by inputting it into [Name] of the "Auto Display Editor." This name is stored in the file but it will not be sent to the VG.

(5) Sending the auto display data

When the [Send] button is clicked, the sending of the auto display data is started. The name which was input in [Name] is stored in the file but it will not be sent to the VG.

- (*) When program data is sent to the panel ROM (HN58C65P only), it has a 2-digit number.

(6) Receiving the auto display data

Click the [Receive] button. The auto display data is now received. [Name] is cleared since the name of the auto display data is not registered in the VG.

(*) When auto display data is received from the panel ROM (HN58C65P only), it has a 2-digit number.

Auto display data can be received using an old VG model but they cannot be sent to one.

(7) Printing the auto display data

- 1) Click the [Print] button.
- 2) The "Print" dialog box appears. Set the margins here.
- 3) Click the [OK] button. The displayed data is now printed.
- 4) To change the printer which has been set, click the [Set Printer...] button.
- 5) The printer setting dialog box appears. Proceed with the printer settings. For details on how the items on this dialog box are set, refer to the instruction manual for Windows or for the printer which will be used.

(8) Registering the program

The program data files in the data directory are registered on the layout data list. If layout data files have not been loaded, they cannot be registered.

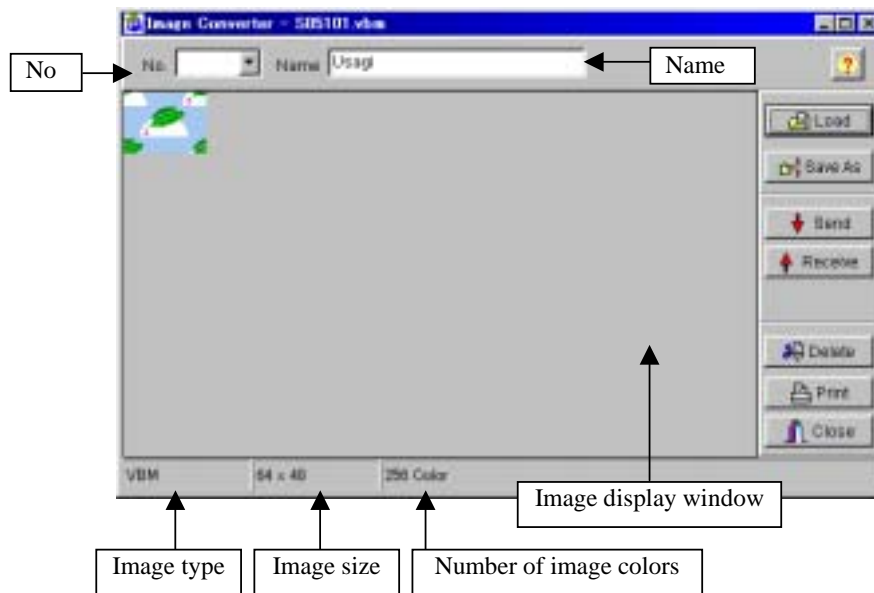
- 1) Click the [Edit] button.
- 2) The "Program Layout Editor" program data registration dialog box appears. For details on the registration method, refer to "Selecting and editing the layout data files" in Section 4-10.

4-8 CONVERTING THE IMAGE DATA

This section describes how the VG's image data is set. BMP data or JPG data can be converted into VBM data for use by the VG, VBM data can be sent to the VG and registered on the memory card, VBM data from the VG can be received, and this data can be saved as VBM files.

(1)

Click the [Image] button of "VGBase" to start up the "Image Converter."



(2) Loading the image file

BMP files, JPG files and VBM files are loaded and displayed.

- 1) Click the [Load] button.
- 2) The "Load Image File" file selection dialog box is opened. Select the file type (BMP, JPG or VBM data), and select the file. If [Display Image] is checked, the selected file is previewed.
- 3) Click the [OK] button to load the selected image file.
 - If the layout has been set
In the case of a VBM file, the number of the VBM data registered in the layout is displayed at [No.]. In the case of any other type of file, [No.] is cleared.
 - If the layout has not been set
[No.] is cleared.

(3) Saving a VBM file

The displayed data is saved as a VBM file. It cannot be saved as a BMP or JPG file.

- 1) Click the [Save As] button.
 - 2) The "Save VBM File" file selection dialog box appears.
 - 3) Input the filename, and click the [OK] button. The displayed VBM data is now saved in a new file.
- (*) The image data name can be set by inputting it into [Name].

(4) Sending the VBM data

The displayed data is converted into VBM data and sent to the VG.

- 1) Click the [Send] button. The "Send to VG" number selection dialog box appears.
 - 2) Set the number (1 to 64) or optional code (0x80 to 0xBF). (Both of these are supported. When data is set in either the number or the code, the corresponding data will be set in the other.) (The number of the sent VBM data now replaces the previous number appearing in [No.])
 - 3) Click the [OK] button. The VBM data is now sent to the VG and registered.
- (*) The image data name can be set by inputting it into [Name] on the VBM display screen.

(5) Receiving the VBM data

The VBM data is received from the VG and displayed.

- 1) Click the [Receive] button. The "Receive from VG" number selection dialog box appears.
- 2) Set the number (1 to 64) or optional code (0x80 to 0xBF). (Both of these are supported. When data is set in either the number or the code, the corresponding data will be set in the other.) Click the [OK] button.
- 3) The VBM data is received and displayed. (The number of the received VBM data sent now replaces the previous number appearing in [No.])

(6) Printing the image data

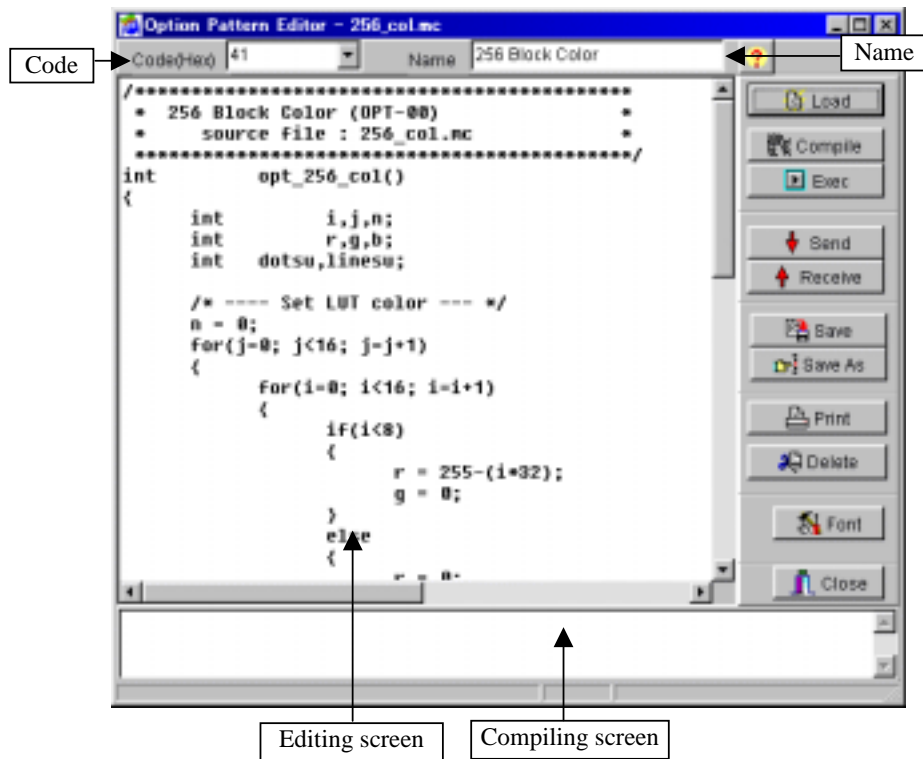
- 1) Click the [Print] button.
- 2) The "Print" dialog box appears. Set the margins here.
- 3) Click the [OK] button. The displayed data is now printed.
- 4) To change the printer which has been set, click the [Set Printer...] button.
- 5) The printer setting dialog box appears. Proceed with the printer settings. For details on how the items on this dialog box are set, refer to the instruction manual for Windows or for the printer which will be used.

4-9 CREATING AND EDITING THE OPTIONAL PATTERNS

This section describes how the VG user-created optional patterns (hereafter abbreviated to "optional patterns") are set. The VG optional patterns can be created and edited, edited optional pattern source codes can be compiled, optional pattern data can be sent to the VG and registered on the memory card, and optional patterns from the VG can be received.

(1)

Click the [Opt-Ptn] button of "VGBase" to start up the "Option Pattern Editor."



(2) **Loading the file**

Before creating new optional pattern data, proceed with "Creating and editing the optional patterns" in (3) below. The source code is loaded from a file which has already been saved.

- 1) Click the [Load] button.
- 2) The "Load File" file selection dialog box is opened. Select the file, and click the [OK] button.
- 3) The source code of the selected file is now displayed in the editing area.
 - If the layout data has been set
The code registered in the layout is displayed at [Code].
 - If the layout data has not been set
[Code] is cleared.

(3) Creating and editing the optional patterns

- 1) Load the source code into the editing area. For details on creating these codes, refer to "make_opt.txt" or to the "Help for creating optional patterns" (OptionPatternRef.Help).
- 2) Click the [Compile] button to start compiling.
- 3) When "Compile OK." appears on the compiling screen, it means that the compiling has been successfully completed. The optional pattern language, which is an intermediate language, is now created from the source code.
- 4) To execute a simulation on the window screen, click the [Exec] button. A simulated image of the compiled optional pattern data is now displayed on the "Execute Image" simulation window. Check the operation.

(4) Saving the file

The displayed source code is saved in the file.

Click the [Save] button. ⇒ The data is saved in the selected file and any existing data in that file is overwritten.

Click the [Save As] button. ⇒ The data is saved in a new file.

(5) Sending the optional pattern

- 1) Click the [Send] button. The "Send to VG" code selection dialog box appears.
- 2) Set the optional pattern code (0x40 to 0x7F in hexadecimal format).
- 3) Click the [OK] button. The data is now sent to the VG and registered. (The code shown at [Code] now changes to that of the sent character.)

(*) When [Set File Name] is checked, the dialog box for selecting the data to be sent is opened after the [OK] button has been clicked. By selecting the data, it is possible to send optional pattern data regardless of the optional pattern being edited.

(6) Receiving the optional patterns

- 1) Click the [Receive] button. The "Receive from VG" code selection dialog box now appears.
- 2) Set the optional pattern code (0x40 to 0x7F in hexadecimal format).
- 3) In [Write File Name], input the name of the file in which the optional pattern data is to be written.
- 4) Click the [OK] button. The reception of the character is now started. (The code shown at [Code] now changes to that of the received character.)

(*) The received optional patterns cannot be displayed in the editing area since they are in the form of the optional pattern language which is an intermediate language. Neither can they be edited.

(7) Printing the optional patterns

- 1) Click the [Print] button.
- 2) The "Print" printer setting dialog box appears. Set the margins here.
- 3) Click the [OK] button. The displayed optional pattern source code is now printed.
- 4) To change the printer environment which has been set, click the [Set

Printer...] button.

- 5) The printer setting dialog box appears. Proceed with the printer settings. For details on how the items on this dialog box are set, refer to the instruction manual for Windows or for the printer which will be used.

(8) Changing the font

Take the following steps to change the font. When the [Font] button is clicked, the font change dialog box appears. The resulting settings are saved and used on the next and subsequent occasions.

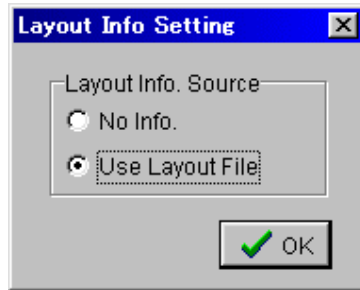
Only the font displayed in the editing area and the font for printing are affected by the settings.

4-10 SELECTING AND EDITING THE LAYOUT DATA FILES

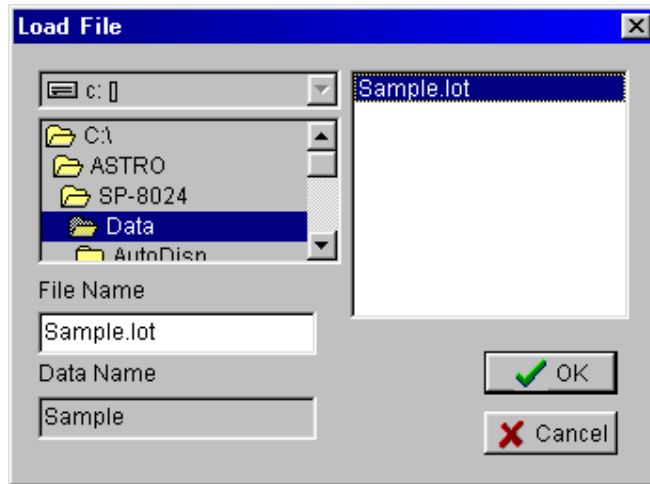
This section explains how to select and edit the layout data files used by "VGBase."

(1)

Click the [Select] button of "VGBase" to start up the "Layout Info Setting."

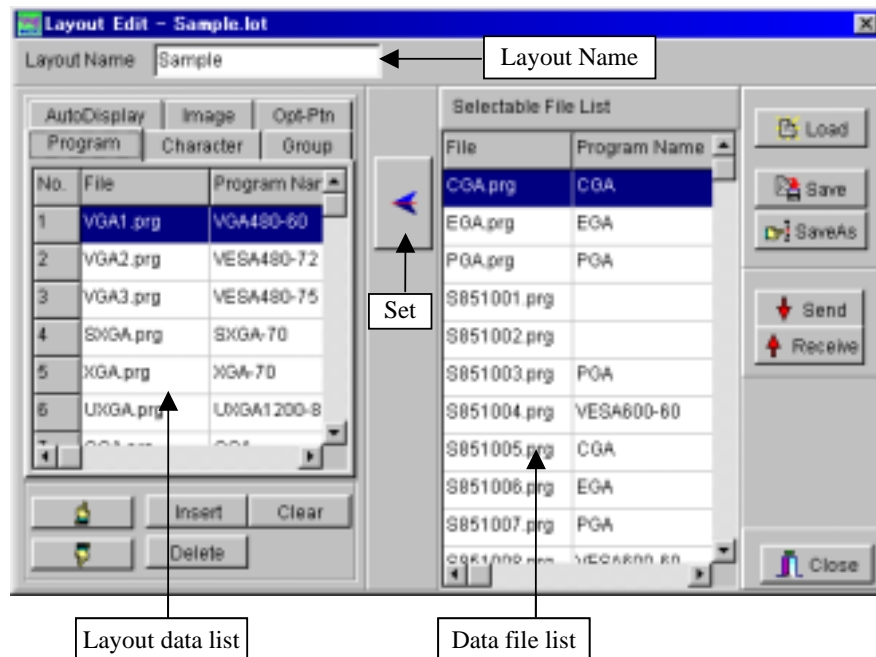


(2) Select "No Info" when no layout data files are going to be used and [Use Layout File] when they are going to be used. When [No Info] is selected, operation returns to "VGBase" straight away. In this case, the layout data cannot be edited. When [Use Layout File] is selected, the "Load File" file selection dialog box is displayed.



(3) Select the layout data file to be used, and select [OK]. (To create a new file, set the filename in the [File Name] box.) Operation now returns to "VGBase."

(4) Click the [Edit] button of "VGBase," and start up the "Layout Edit."



(5) Editing the layout data

- 1) Click the tab ([AutoDisplay], [Image], [Opt-Ptn], [Program], [Character] or [Group]) corresponding to the type of data which is to be registered as the layout data. The [Selectable File List] of the data file which corresponds to the selected tab is displayed.
- 2) Select the data to be registered from the [Selectable File List].
- 3) Place the cursor at the cell of the position where the data is to be registered in the layout data list.
- 4) When the [←] button is clicked, the data is registered from the [Selectable File List] into the layout data list. Repeat these steps to create the layout data. Use the respective editing programs to create the data files on the data file list.

(6) Saving the layout data

The displayed layout data is saved in the file.

Click the [Save] button. ⇒ The data is saved in the selected file and any existing data in that file is overwritten.

Click the [Save As] button. ⇒ The data is saved in a new file.

(*) When the data is to be used temporarily:

When the edited layout data is to be tested or when the layout data is to be used temporarily in the editing programs started up from "VGBase," simply select the Close button and close the editing screen. If an attempt is made to close "VGBase" without saving the data, a message which warns the operator of the loss of the post-edited layout data will appear. At this time, save the data again.

(7) Sending the data

- 1) Click the [Send] button. The "Transfer Data" data selection dialog box appears.
 - 2) Select the data to be sent. Before sending it, check the data. (It takes time for all the data to be sent. To test sending the data quickly, check [Character Data] or [Auto Display Data], and send it.)
 - 3) Click the [OK] button.
 - 4) The selected data is sent to the VG.
- (*) The data is sent on the basis of the layout data information. Data numbers and code data which have not been set in the layout data will not be sent. This means that the sent data will be registered and updated by the VG, but the statuses of the data numbers and code data which are not sent will remain unchanged from the pre-transmission statuses.

(8) Receiving the data

- 1) Click the [Receive] button. The "Transfer Data" data selection dialog box appears.
- 2) Select the data to be received. Before receiving it, check the data. (It takes time for all the data to be received. To test receiving the data quickly, check [Character Data] or [Auto Display Data], and receive it.)
- 3) Click the [OK] button.
- 4) The progress display starts, and the selected data is received from the VG.

- 5) The layout data list is updated in accordance with the data which has been received.
- (*) Bear in mind that since the layout data will be overwritten in accordance with the data which has been received, some of the layout data being edited will be rewritten.
- (*) Before receiving the data, check whether or not the data has been registered in the VG, and receive only data which has been registered. The layout data is updated only on the basis of the numbers of the data registered in the VG. Layout data with the numbers of the data not registered in the VG will not be updated, and their pre-reception contents will remain unchanged. Therefore, to create new layout data by data reception, the first step to be taken is to specify a new file by performing the steps for selecting a layout data file or clear the layout data being edited.
- (*) Precaution when groups are to be received separately

Groups are managed in the VG by program data numbers, and these numbers are received also when the data is received from the VG. If layout data has been used, steps are taken to ensure that the program data numbers correspond to the program files on the basis of the layout data information. A correct correspondence will be established if the layout data of a program matches what has been registered in a program inside the VG. If they do not match, the program name and program file will not be found, and data will not be saved in the file. This means that the program data number and program name will not be displayed even when the group contents are checked using the group editing program. To ensure that this problem does not occur, before receiving groups, either receive a program or select the layout data setting which does not call for the layout data to be used.

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