

**Cut Simply and Directly From Illustrator**

Adobe Illustrator CS2 are supported.

**MIMAKI**

# OPERATION MANUAL

Plug-in Cutting Software

**fine Cut 6** *for Illustrator®*

Windows®/Macintosh®

**MIMAKI ENGINEERING CO., LTD.**

<http://www.mimaki.co.jp/english/>

E-mail: [trading@mimaki.co.jp](mailto:trading@mimaki.co.jp)

D201254

## About FineCut

Thank you very much for purchasing a product of Mimaki.

FineCut, a plug-in software for Adobe®Illustrator®, offers simple operation and stable cutting environment which have never been realized by other cutting software.

### Notes:

- Do not copy this manual in whole or parts in any form without prior approval from Mimaki.
- Do not copy this software to any other disk for the purpose of other than making a backup disk or load it in memory for the purpose of other than execution.
- Except for the damages prescribed in Warranty Notes of Mimaki Engineering Co., Ltd. assumes no responsibility for effects (including loss of income, indirect damages, special damages, or other financial damages) resulting from the use or non-use of the product. This also applies to the case when Mimaki Engineering is notified of the possibility of damages. For example, Mimaki Engineering Co., Ltd. assumes no responsibility for damages of media (work) caused by using this product and indirect damages caused by a product created using the media.

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Apple and Macintosh are registered trademarks of Apple Computer, Inc. of the U.S.A. and each country.

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## System Requirements

The following conditions are required to use FineCut6.

### Windows:

- IBM PC or compatible mounting Pentium processor or compatible CPU  
(Except 64bit CPU)
- Microsoft® Windows®98, Windows®ME  
Windows®2000, Windows®XP  
(When connected to a plotter by USB, Windows2000 Service-Pack3, WindowsXP Service-Pack1,  
or later version is required.)

### Macintosh:

- Macintosh mounting Power PC or Intel CPU
- Mac OS 9.2.2, Mac OS X 10.1 to 10.4  
(When connected to a plotter by USB, Mac OS 9.2.2, Mac OS 10.2.6, or later version is required.)

### Monitor:

- 800 x 600 pixels, or higher resolution is required

### Software:

- Adobe®Illustrator® 8 to 10, CS, CS2 (English Version)

### Plotter:

- Mimaki CG series, Mimaki CF-0912 series, Mimaki CF2 series, Mimaki DC series

## Setting of the plotter side

Before using FineCut6, perform the settings on the plotter side.

	Items	Set values	
CG-EX Series	ORIGIN SELECT	LOW RIGHT	
CG-FX Series	ORIGIN SELECT	LOW RIGHT	
CG-75ML	Register Mark setting	MARK DETECT	1Pt
		DIST REVI	AFTER
		offset A	0.0mm
		offset B	0.0mm
		COPIES A ( ↑ )	1 (sheet)
		COPIES B ( ← )	1 (sheet)
	ROTATION	OFF	
CF-09/12 Series	PRIORITY	HOST	
	CMD SW	Enable	
	ORIGIN	LOW-LEFT	
	CIRCLE $\theta$ CORRECTION	Enter plus angle	
CF2 Series DC Series	CMD SW	Enable	
	ORIGIN	LOW-LEFT	
	CIRCLE $\theta$ CORRECTION	Enter plus angle	
	EXPAND	OFF	
	MARK DETECT	1pt • Register Mark detection cannot be set unless the Expand is set to OFF.	

# New functions of FineCut6

The following functions are newly added.

**1 Outline Extraction function (Refer to page 29)**  
This is a function to create the outline of bitmap images and extract the outline easily.

**2 Line Edit Tool (Refer to page 32)**  
This is a tool to edit easily the outline created with Outline Extraction function.

**3 Fill around the Register Mark (Refer to page 53)**  
Use this function when register mark is not recognized using the media color other than white.  
(Register mark may not be recognized depending on kinds of media inks)

**4 Recognition of continuous cut data with pattern information (Refer to page 67)**  
This function is supported with CG-75ML plotter. This function enables to cut the outline of multiple different data continuously. Furthermore the pattern information includes media rotate information. This allows to set the media any direction when data was rotated for print or when setting the media without take up.

**5 Mark Separation (Refer to page 76)**  
This function is available only for CF2/DC series.  
This is a function to put Mark Separation on a large-size object not fit into the cut area and cut it in several times (2 to 5 times).

**6 Reverse Cut Mode (Refer to page 78)**  
This function is available only for CF2/DC series.  
You can cut corrugated cardboard, etc. from the back surface and obtain a beautiful finish.

**7 Circular arc approximation output function (Refer to page 88)**  
When you cut curved portion of an object if you have selected "Arc", you can cut the curved portion more smoothly.

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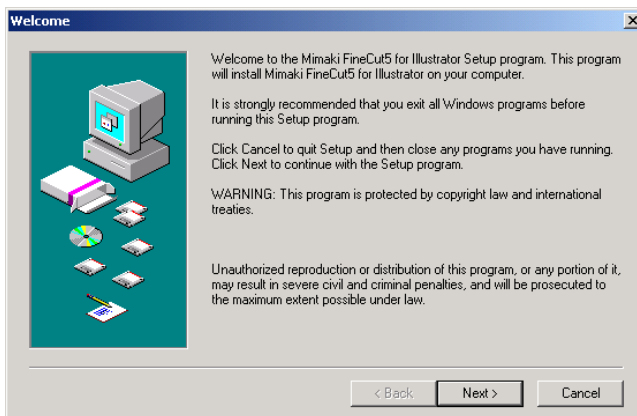
## Installation procedure (Windows)

- 1 Turn on the computer.
- 2 Set the CD-ROM of FineCut into the disk drive.



Click **FineCut6 for Illustrator Setup** .

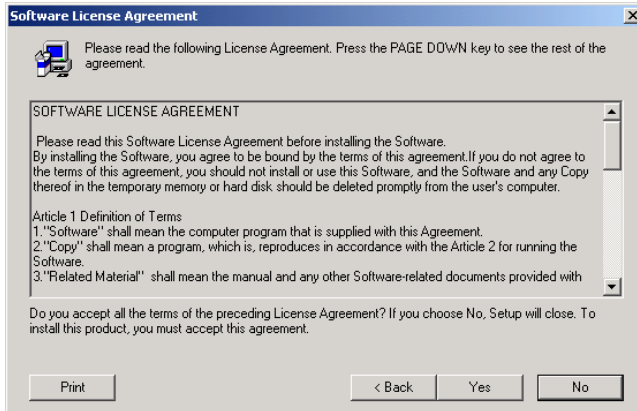
- 3 Set up screen is activated.



Click **Next** .

4

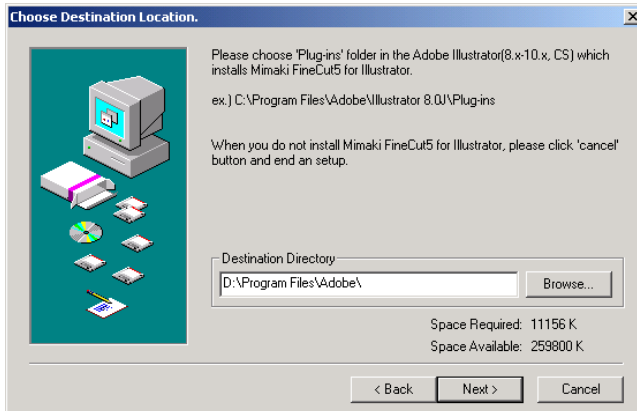
The Software License Agreement screen appears.



Read this thoroughly and then click **Yes**

5

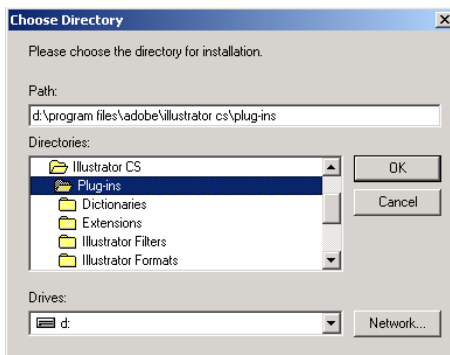
Select the location to which the software is to be installed.



Click **Browse**

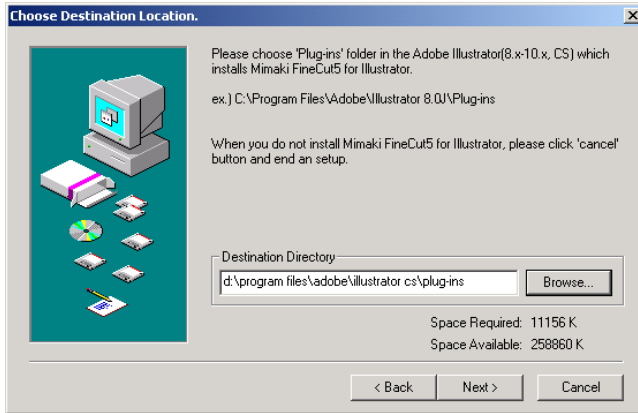
6

Select the target plug-in folder in the target Illustrator, and then click **OK**.



7

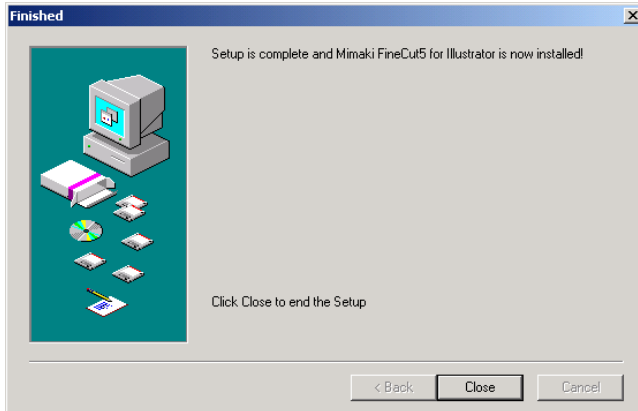
Return to the Choose Destination Location screen.



Click **Next** . Installation starts.

8

Setup procedure completes.



Click **Close** .

Installation of the FineCut completes.



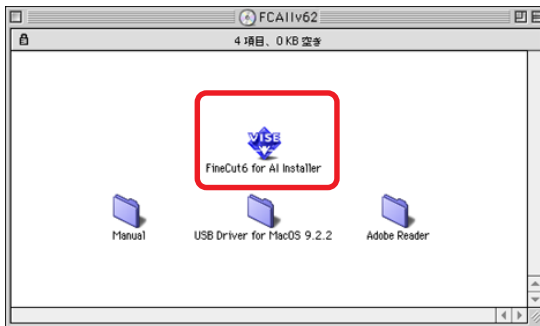
## Installation procedure (Macintosh)

- 1 Turn on the computer.
- 2 Set the CD-ROM of FineCut into the disk drive.
- 3 Double-click on the FineCut CD icon.



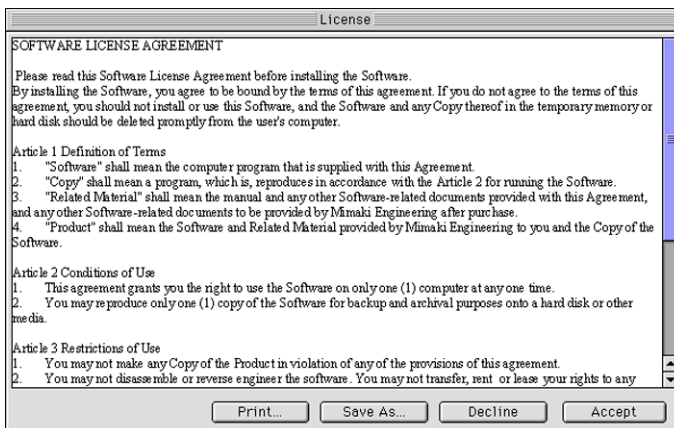
- 4 Below screen appears.

Click on the installer icon



- 5 Software license agreement screen appears.

Read through the agreement, and click Agree for consent the agreement.



6

## Select the install method and location.

Select [Standard Install], then select the disk where Illustrator has been installed.

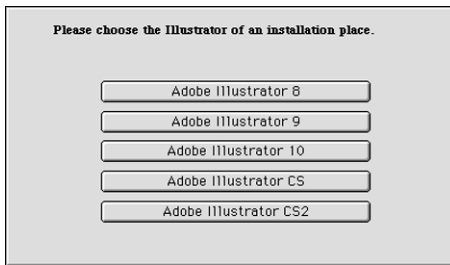
To change the install location, click [Switch Disk] and select the disk.



Click **Install**

7

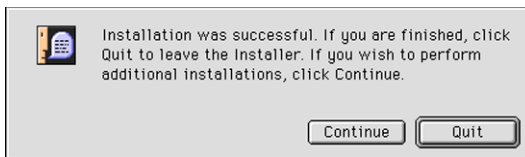
## Select the Illustrator version of install location.



Installation starts by click the button.

8

## Installation completes.



Click **Quit**

To continue the installation, click **Continue**

## **USB Serial Adapter for Macintosh**

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A USB-serial adapter is required to use FineCut with the application of Macintosh USB port.

Mimaki recommends the optional USB-serial adapter (with a model number of OPT-SS036).


The USB-serial conversion adapter may not operate normally because of a problem between the adapter and the operating system of the computer. Before using an adapter from other manufacturers, contact the manufacture of the USB-serial adapter for existence of problems between the adapter and OS in use.

## **About This Manual**

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FineCut Operating Manual describes the FineCut functions.

### Notations

Menu items are enclosed in square brackets like [File] menu. Buttons displayed in a dialog are framed like .

### Symbols



Indicates a procedure you must perform and a caution you must observe when operating the product.

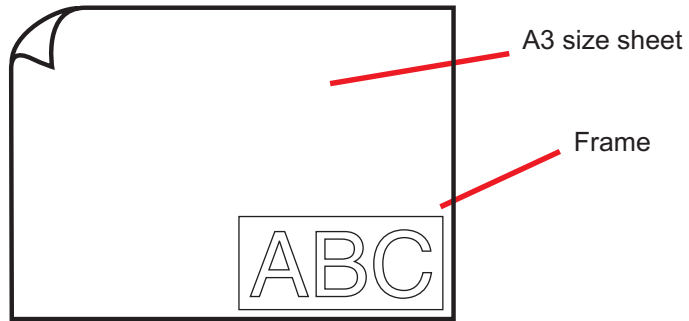


Describes a useful procedure.

## ▶ Let's cut !

The following process shows how to cut ABC at the lower right of the A3 size sheet using Mimaki CG cutting plotter series.

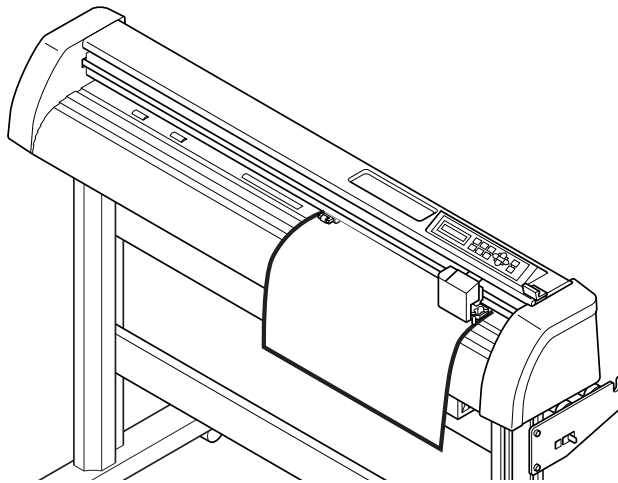
Additionally, make a frame around the ABC, and cut it 5 mm away from the characters.



1 Load a A3 size sheet into a plotter as shown below.

**NOTE!**

For the plotter operation procedures, refer to the Operation Guide attached to the plotter.



2 Set the plotter to REMOTE mode.

**NOTE!**

Be sure to set the plotter to REMOTE mode. In case the LOCAL mode, FineCut cannot load the sheet length.

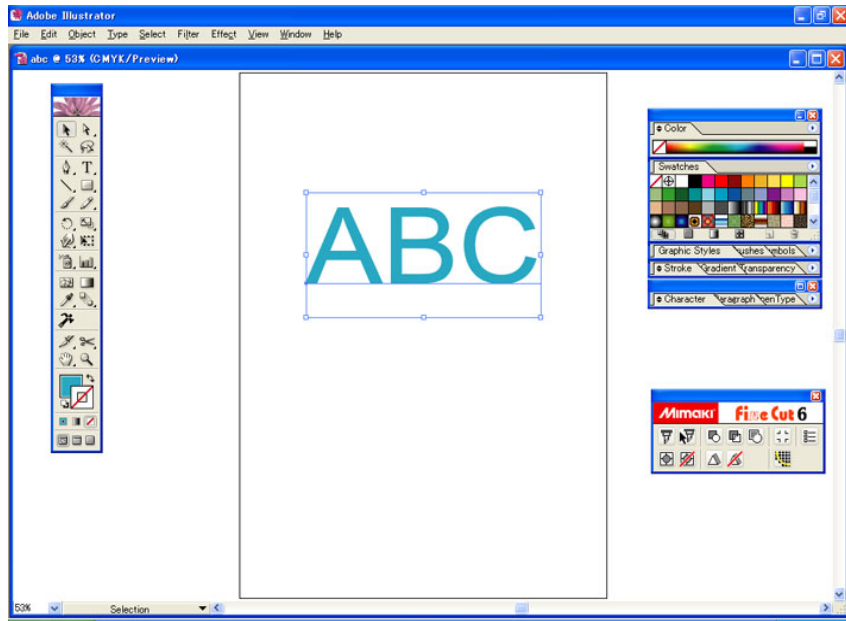
3

### Activate Illustrator.

No need to set the paper size to A3 size.

4

### Use the Lettering Tool to enter “ABC”.



“FineCut menu” is displayed automatically. If “FineCut menu” is not displayed, Select [Show FineCut Menu] from the [Window] menu in the Illustrator.



5 Click **Plotter / User Setup...** button in the FineCut menu.

Alternatively, select [Plotter/User Setup..] from the [File]-[FineCut] menu.

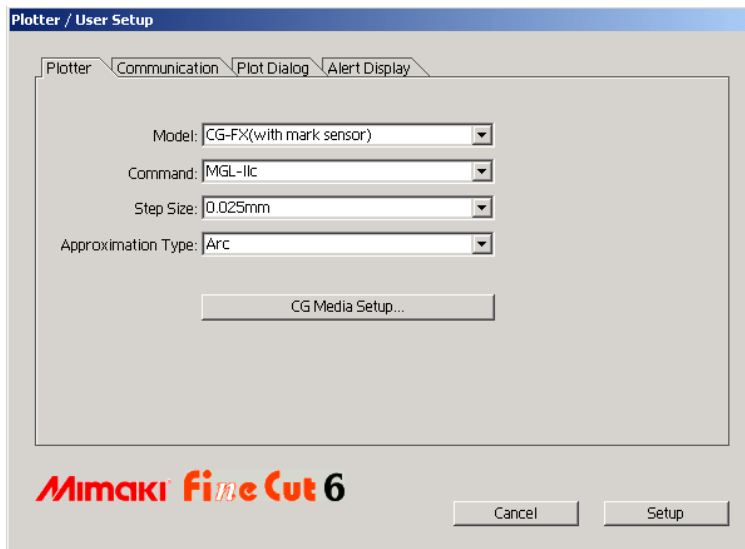


6 Set the plotter.

Be sure to set the same values for Plotter and Communication as the settings on the plotter. (Refer to page 88)

**NOTE!**

If the entered values differ from the settings on the plotter, the object will not be output normally.

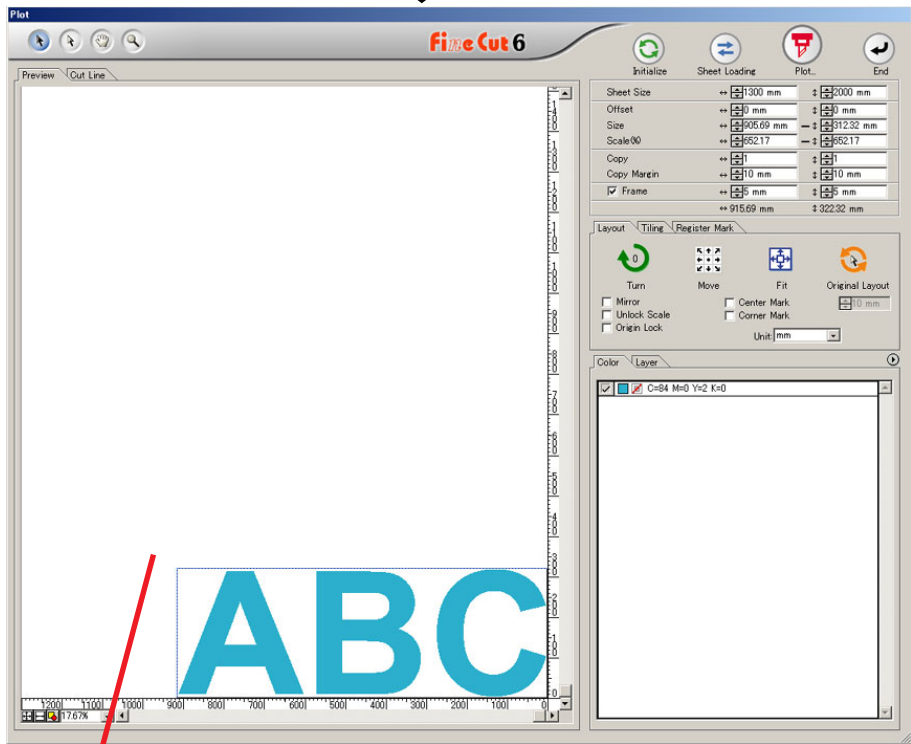


Click **Setup**.

7

Click **Plot** button in the FineCut menu.

Alternatively, select [Plot] from the [File]-[FineCut] menu.






#### The effective cutting area

(Mimaki CF/CF2/DC Series set the origin point to the bottom left of a sheet.

Therefore, ABC characters are displayed at the bottom left.)

#### NOTE!

If the  mark is displayed on the left of  Sheet Loading button, the plotter sheet size cannot be loaded. Set the plotter to REMOTE mode and then click  Sheet Loading button to load the sheet size.



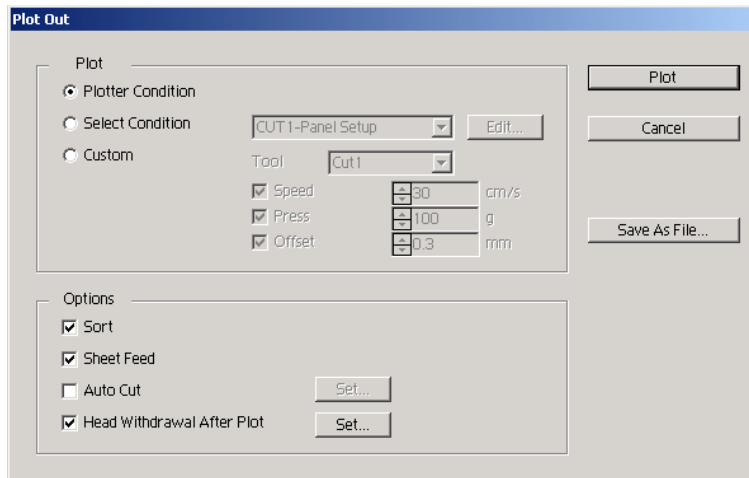
## 8 Setting a frame.

Set a frame at 5 mm around the object. Check the [Frame] check box and enter value 5 as the frame space.

Sheet Size	↔ 635 mm	↓ 810 mm
Offset	↔ 0 mm	↓ 0 mm
Size	↔ 333.2 mm	↓ 115.53 mm
Scale(%)	↔ 100	↓ 100
Copy	↔ 1	↓ 1
Copy Margin	↔ 10 mm	↓ 10 mm
<input checked="" type="checkbox"/> Frame	↔ 5 mm	↓ 5 mm
	↔ 343.2 mm	↓ 125.53 mm

## 9 Click Plot button.

Plot Out dialog appears.



The Plot Out dialog box is shown with the following settings:

- Plot**
  - Plotter Condition
  - Select Condition (CUT1-Panel Setup)
  - Custom (Tool: Cut1)
- Options**
  - Speed (30 cm/s)
  - Press (100 g)
  - Offset (0.3 mm)
  - Sort
  - Sheet Feed
  - Auto Cut (Set...)
  - Head Withdrawal After Plot (Set...)

Buttons: Plot, Cancel, Save As File...

Set the cut condition. (Refer to page 101)

Select “Plotter Condition” to use the preset cut conditions on the plotter.

### NOTE!

Make sure to match the media conditions to the preset values on the plotter. If the entered values differ from the plotter settings, the object will not be cut normally.

## 10 Click Plot button to start plotting.

The origin point is set to the bottom right of the sheet. Therefore, the object cutting is performed from the bottom right (bottom left with Mimaki CF/CF2/DC Series).

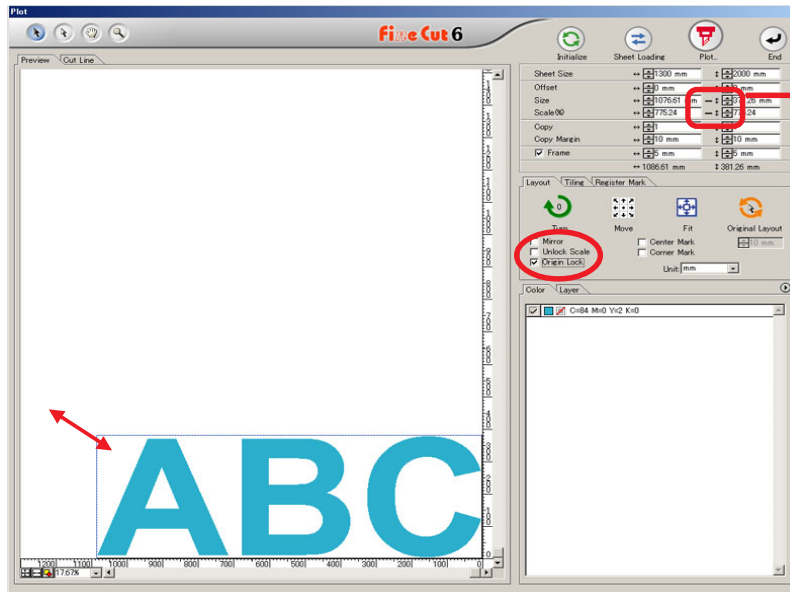
# ▶ Advanced Operations

## Enlarge and Reduce an Object

Enlarge or reduce an object. Move the mouse cursor to a corner of the object and then drag it.

### 1. Enlarge or reduce the object with a fixed aspect ratio.

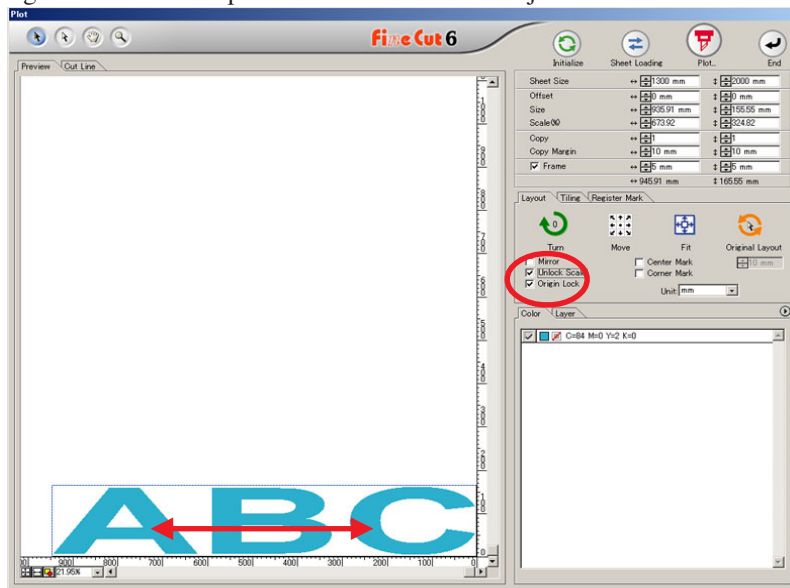
Click [Unlock Scale] on the Option menu, and uncheck [Unlock Scale]. Enlarge or reduce the object as dragging a corner of the object.

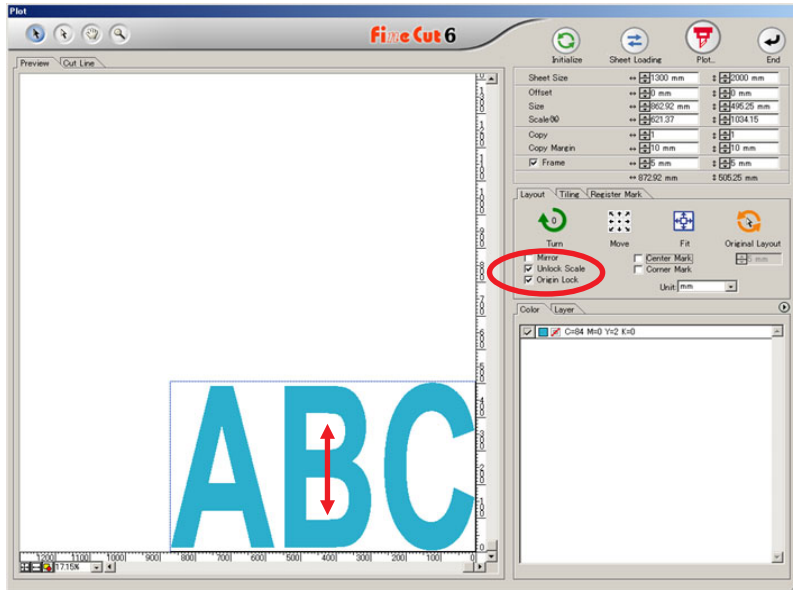


It indicates the ratio is fixed.  
(Refer to page 95)

### 2. Enlarge or reduce the object only along horizontal or vertical direction.

Click [Unlock Scale] on the Option menu. Enlarge or reduce the object as dragging the left or right corner or the top or bottom corner of the object.





- Drag the mouse as holding down the Shift key of the keyboard to enlarge or reduce the object with the aspect ratio retained.
- Change the horizontal and vertical sizes separately before invalidating Un-lock Scale to enlarge or reduce the object with the new aspect ratio retained.

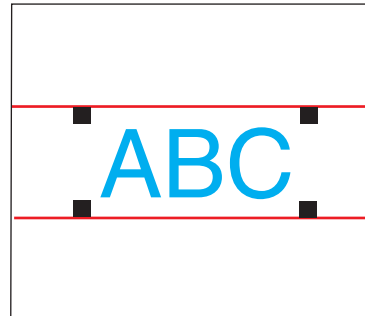
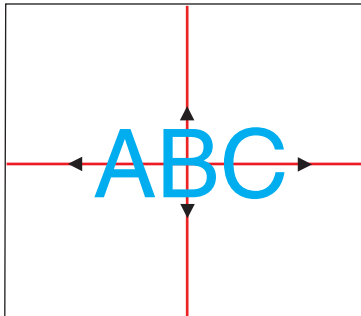
Enter the values of the Size and Scale on the Size Enter Box to enlarge or reduce the object more precisely.

Sheet Size	↔ 635 mm	↓ 810 mm
Offset	↔ 0 mm	↓ 0 mm
Size	↔ 333.2 mm	↓ 115.53 mm
Scale(%)	↔ 100	↓ 100
Copy	↔ 1	↓ 1
Copy Margin	↔ 10 mm	↓ 10 mm
<input checked="" type="checkbox"/> Frame	↔ 5 mm	↓ 5 mm
	↔ 343.2 mm	↓ 125.53 mm

## Mark the center and corners

Marking an object frame to align the position for affixing a cut seal.

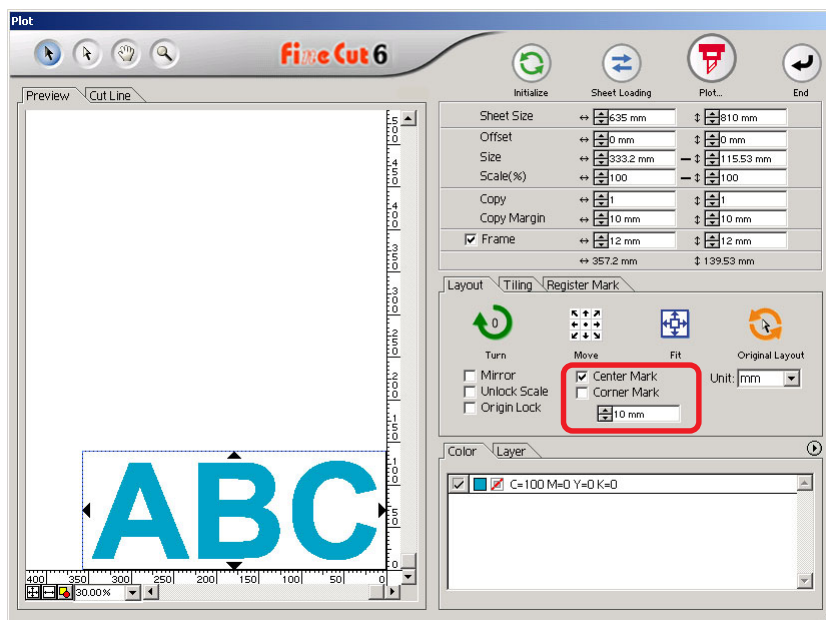
Cut seal can be affixed by aligning the mark on the ruled lines as shown below.



1. Determine the center position of the seal affixing area and draw ruled lines.
  2. Align the center mark with the ruled lines; Enables to affix to the expected position.
1. Draw ruled lines.
  2. Align the corner marks on the ruled lines or pre-drawn ruled lines; Enables to affix horizontally.

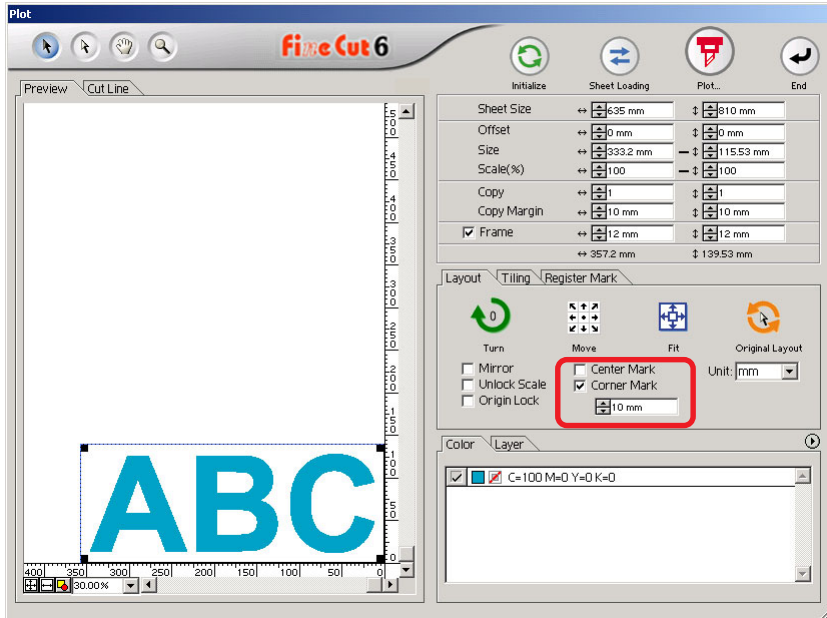
Mark the center.

Check [Center Mark] checkbox on the Options menu. Enter the marking size.



Mark the corners.

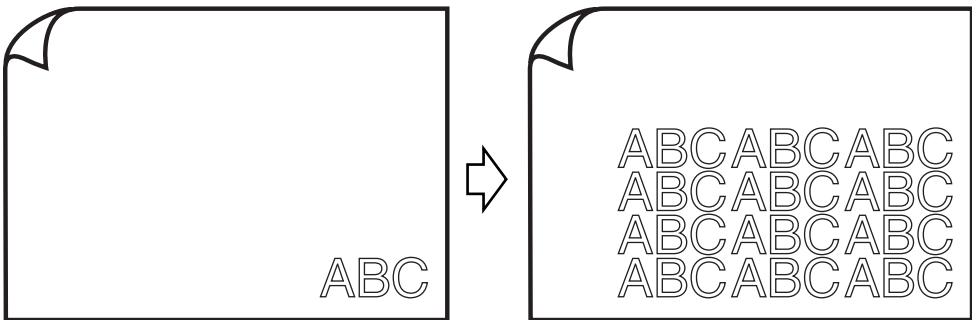
Check [Corner Mark] checkbox on the Options menu. Enter the marking size.



## Cut an Object Multiple Times (Copy)

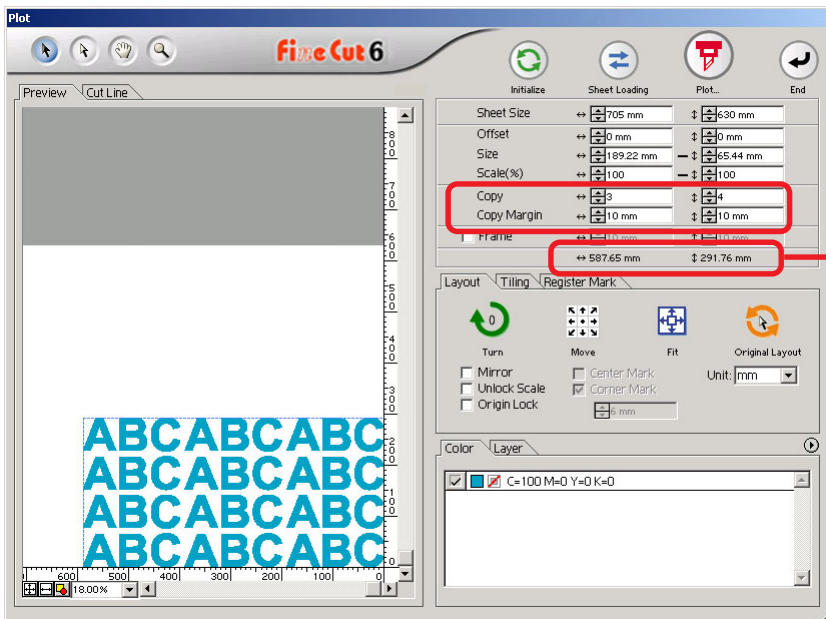
Use the copy function to cut an object multiple times vertically and horizontally, Use the copy function.

The following example shows how to cut ABC on the A3 size sheet.



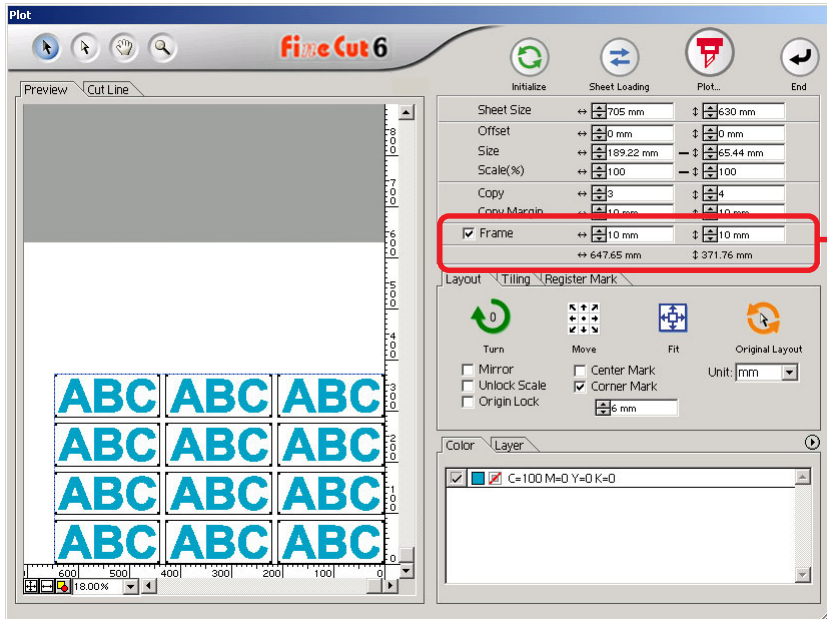
Enter value 3 for horizontal and value 4 for vertical on the [Copy].

Set the margin between objects (horizontally and vertically) to 10 mm.



The total length indicates the size including all margins of the object.

Set the frame at 10 mm around the object.



The total length indicates the size including the frame size.

**NOTE!**

When setting a frame, it is set for each object. Cannot enclose all the copied objects with a single frame.

## Divide and cut an object (Tiling)

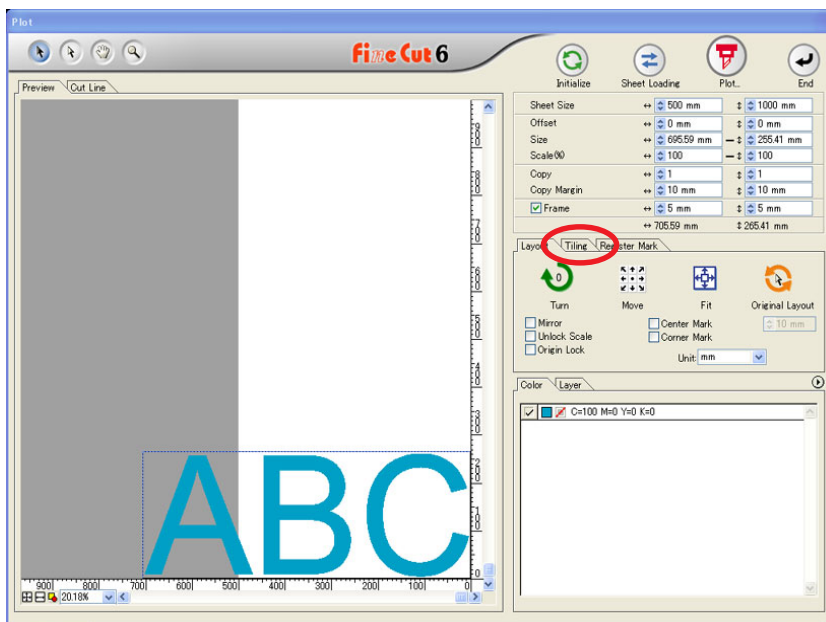
Use the tiling function to cut the object divided into pieces.

This function enables to create a signboard greater than the sheet width.

In this section, each divided object is called as “Tile”.

Divide an object.

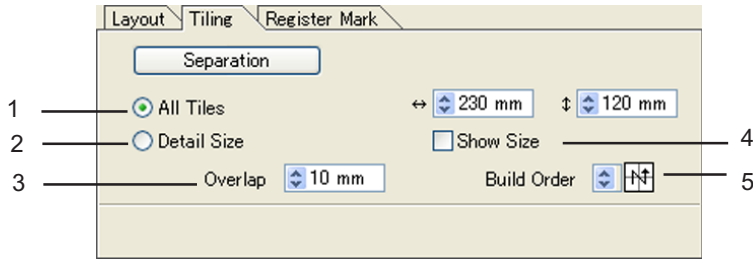
- 1 Click [Tiling] tab.





## 2

### Set the tiling pattern.



(1) **All Tiles:** Enter the tile size. Divide into same tile size.

(2) **Detail Size:** Shift the division line of the cut area to define the tiling position.

(3) **Show Size:** Displays the size of each divided tile.

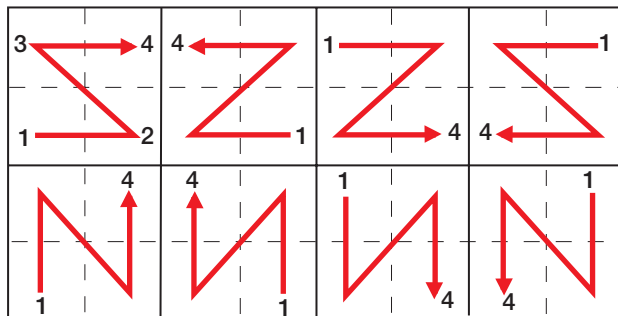
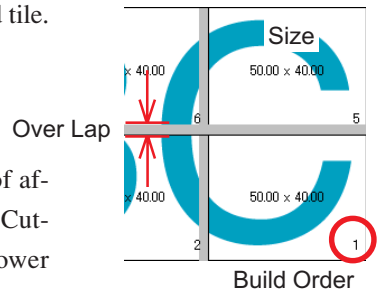
(4) **Overlap:** Set the tile overlapping margin.

(5) **Build Order:** Set the object cutting order.

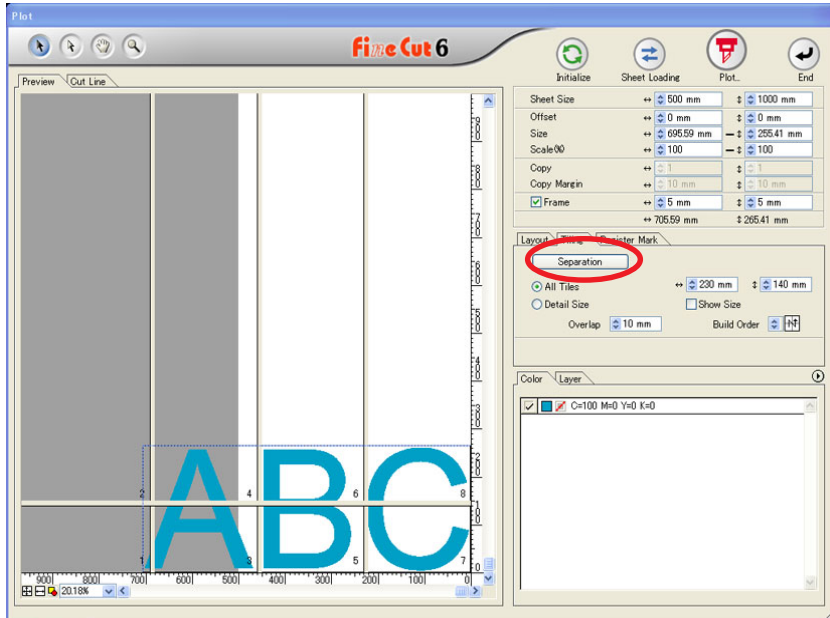
This cutting order is the order of affixing cut tiles to a sign board. Cutting order is displayed at the lower right of each object.

It determines the tile numbers and the overlapping direction.

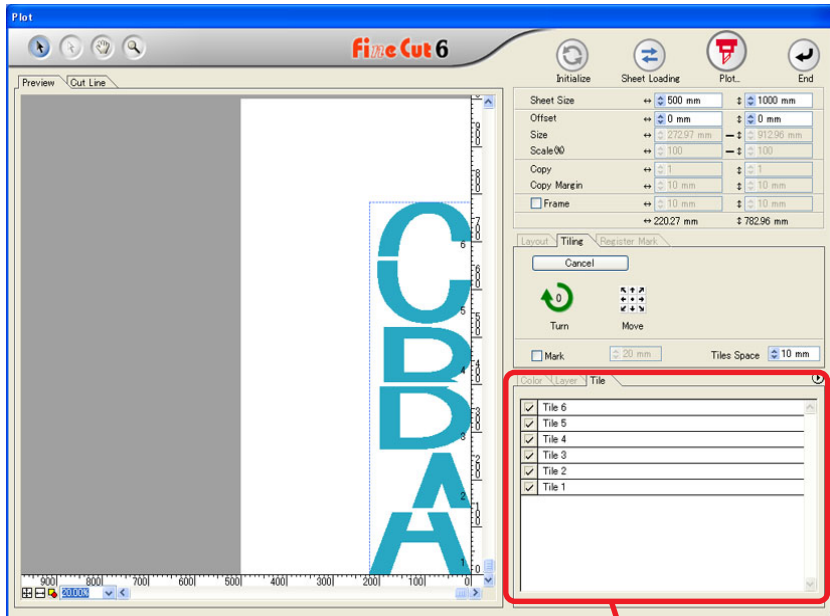
“Build Order” can be selected from the following eight patterns:



3 Click **Separation** button.

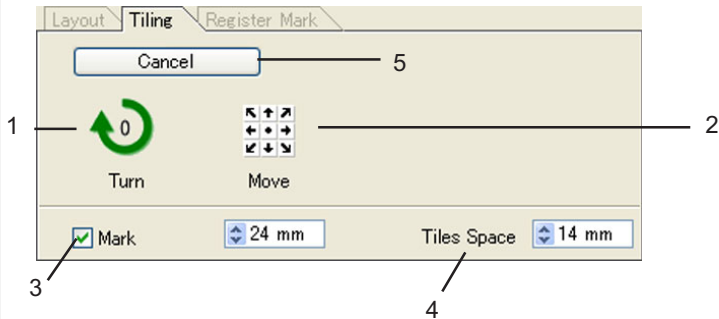


4 The divided object is displayed.



A tile list is displayed.

## 5 Set [Mark] and [Tile Space] of Tiling option.



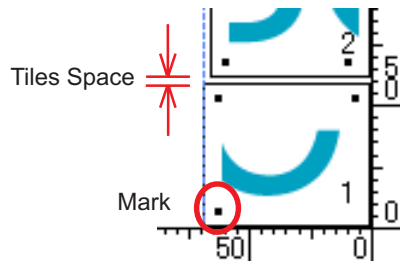
(1) **Turn:** Turn the divided object.

(2) **Move:** Move the object inside of the sheet.

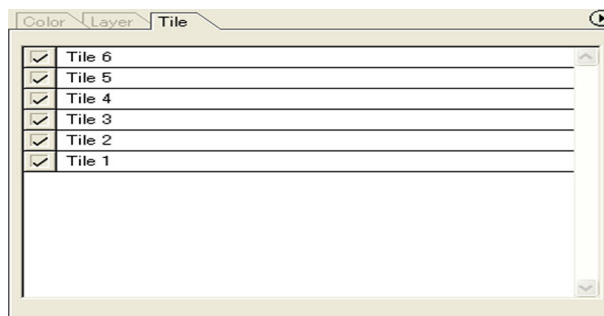
(3) **Mark :** Mark the divided object. The marked object can be built up easily by matching the marks.

(4) **Tiles Space:** Enter the cutting space for the continuous cutting of divided tiles.

(5) **Cancel:** Cancel the tile separation.



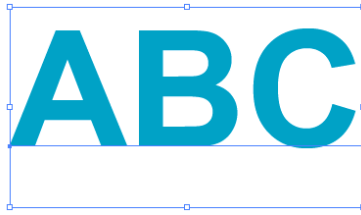
## 6 Select the tile to plot from the tile list.



## Create Shadow/ Edge

Create a shadowed/edged object. FineCut enables the various shadowing/edging functions with ease operation.

- 1 Select the object.



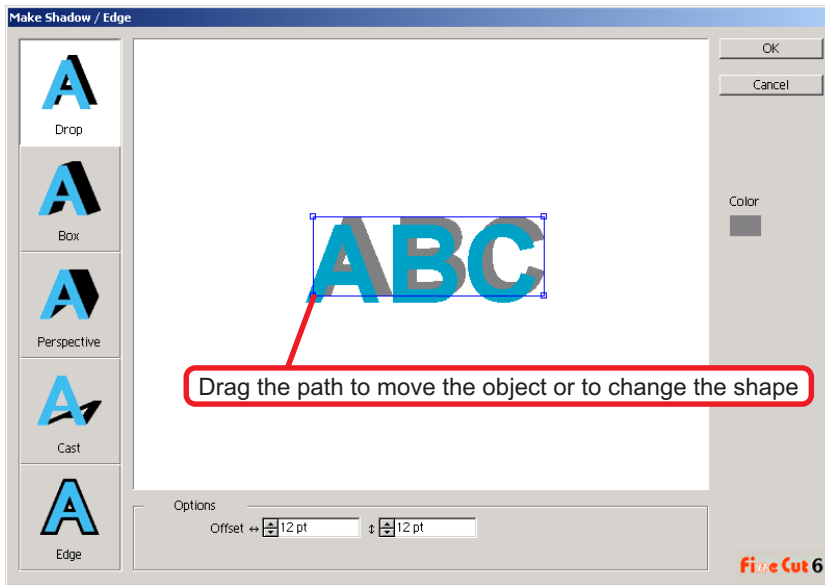
- 2 Click **Create Shadow/Edge** button in the FineCut menu.

Alternatively, select [Create Shadow/Edge] from the [File]-[FineCut] menu.



### 3

Set the shadowing/edging details on the object.

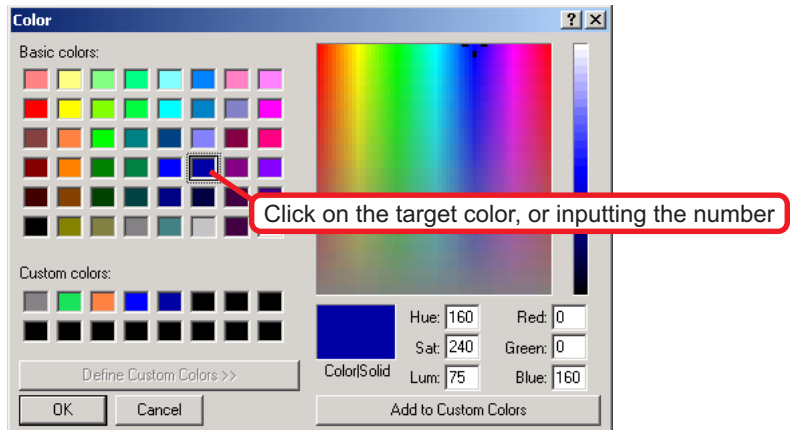


1) Shape : Select the shadow type (4types) or edge.



2) Options : Set the offset distance between the object and shadow.  
If selected “Perspective”, set the perspective by %.  
For the “Edge”, set the corner shape and ratio.  
(For details, refer to “Attaching a Frame” on page 51.)

3) Color : Set the shadow color.  
Click on **Color** to display the following setting dialog.



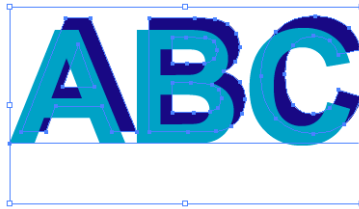
Click **OK** after selecting a color or inputting the number.



Make sure to specify the RGB colors for the shadow/edge. If the document color mode is CMYK, it may not be able to display by the specified RGB colors. In the case, it is converted to the nearest CMYK colors.

4

Click **OK** to create a shadow or edge.



(Color of the shadow:Black/four-by-four Offset/Drop shadow)



If the multi anchor points are contained within the shadow or edge, execute Illustrator-[Object]-[Path]-[Simplify...].

To remove the created shadow or edge, click **Remove the shadow/edge** from the FineCut menu.



**NOTE!**

Note, in case editing the created shadow or edge on the Illustrator, it may not be able to delete.

## Extract the outline

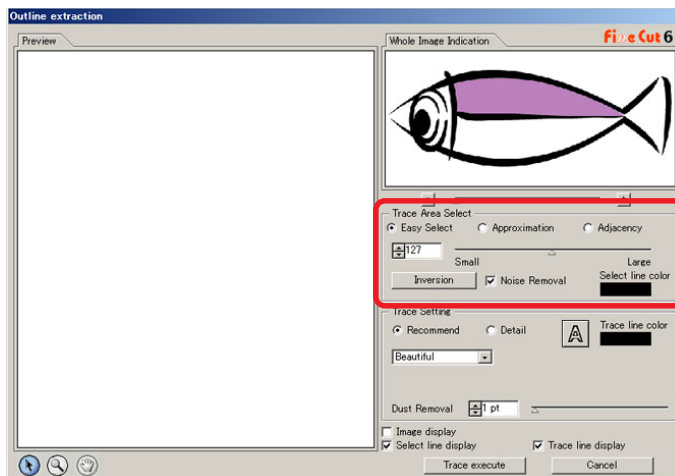
Create the outline to cut the bitmap image. And specify a color available for creation of the outline only in the same color area.

- 1 Open the image with Illustrator.
- 2 Select the object and Click **Outline extraction** button in [FineCut menu].

Alternatively, select[Outline Extraction] from [FineCut] in [File] menu of Illustrator.

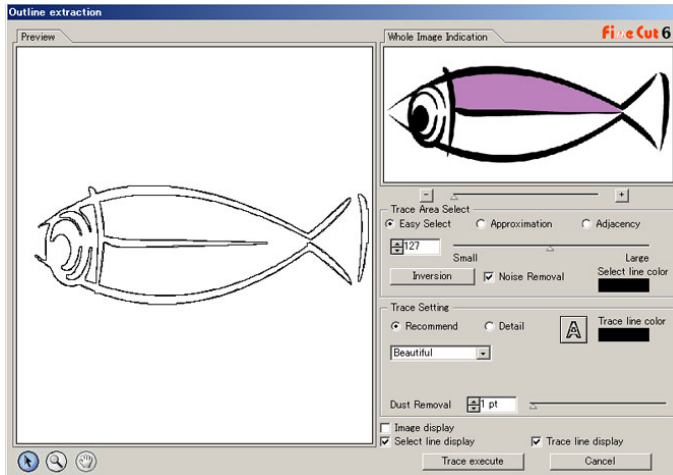


- 3 Set up the selection method of the area to be extracted.  
(As for the dialog box, refer to page 104)



4

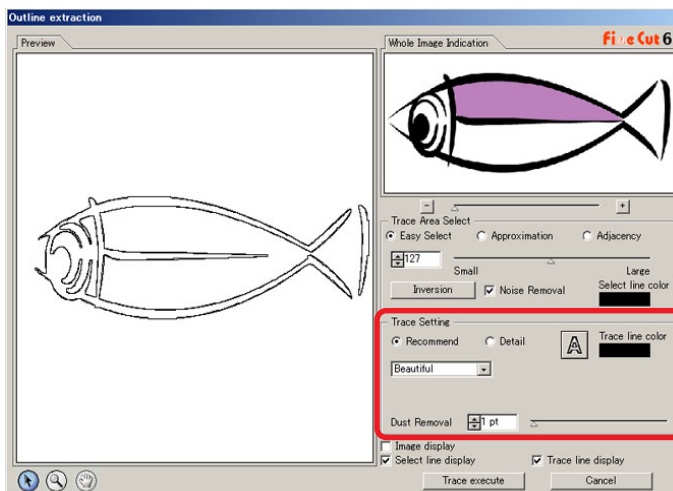
Adjust the extraction area with using the slider or input a value while previewing the image.



5

## Execute Trace setup

(As for the dialog box, refer to page 105)

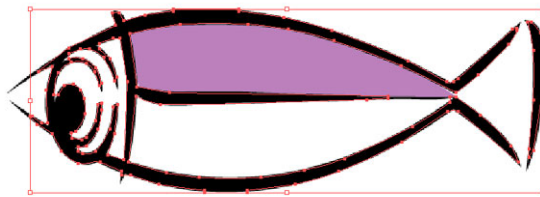
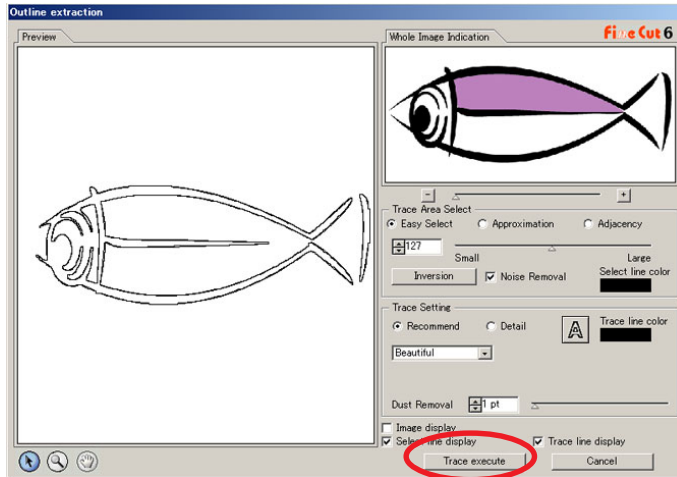




6

Click **Trace Execute** button.

Outline is created on the [FC Trace layer]

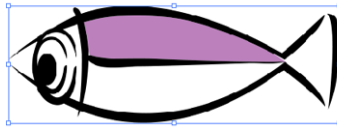


## Edit the line

It is a function to modify or change easily the outline created by Outline Extraction.

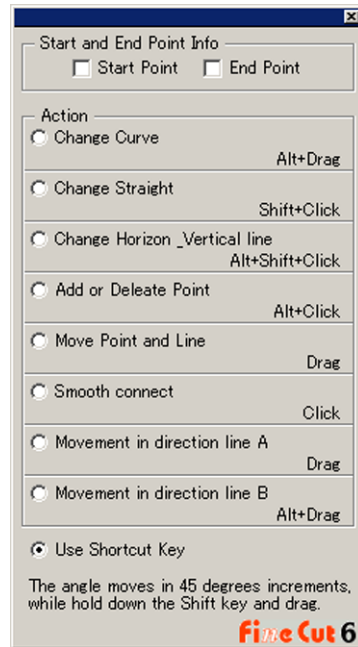
- 1 Open the image created by Outline Extraction with Illustrator.

Enlarge the line to be edited with the zoom tool of Illustrator, if necessary.



- 2 Click **Line Edit Tool** button of [Illustrator Tool Palette]

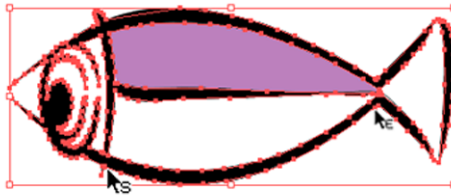
The line edit tools are displayed.



### 3 Specify Start Point and End Point.

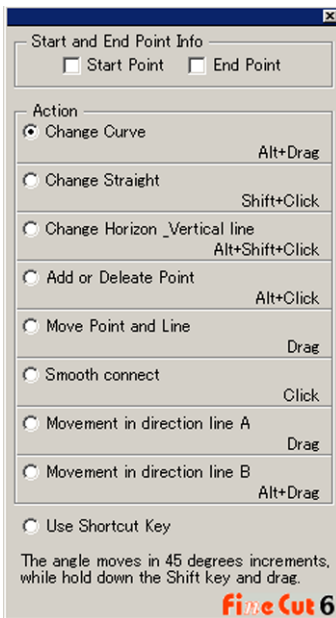
Start Point: Put the cursor close to the anchor point, “S” is shown. Start point is settled by clicking the anchor point.

End Point: Put the cursor close to the anchor point, “E” is shown if the Start point has been settled. End point is settled by clicking the anchor point.



### 4 Check a radio button for the operation method.

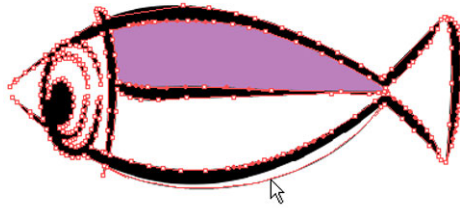
Take the description on [Change curve] for example here. (Refer to page 106 for dialog box.)



Check a radio button for [Use shortcut key] to edit the operation with the mouse and keyboard. Use Alt key for Windows and Option key for Macintosh respectively.

5

Drag on the line to change to the curvilinear line.



## Create a precut line [Weed Line]

Precut line around the object enables to cut the object with ease.

In this section, the precut line is called as “Weed Line”. Weed line function enables to create the precut line and frame.

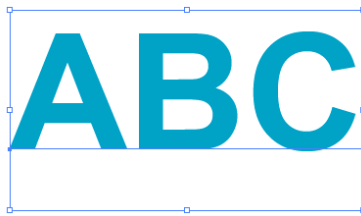


The unit used in the Weed Line dialog refers to the Illustrator setting. If changing the unit, reset the unit in the Illustrator-[File]-[Preferences]-[Units & Undo].

### NOTE!

Do not set a precut line (Weed Line) on a thick sheet. If performing precut line (Weed Line) cutting on a thick sheet, it may damage the work.

- 1 Select the object.



- 2 Click **Create Weed Line** button in the FineCut menu.

Alternatively, select [Create Weed Line] from the [File]-[FineCut] menu.

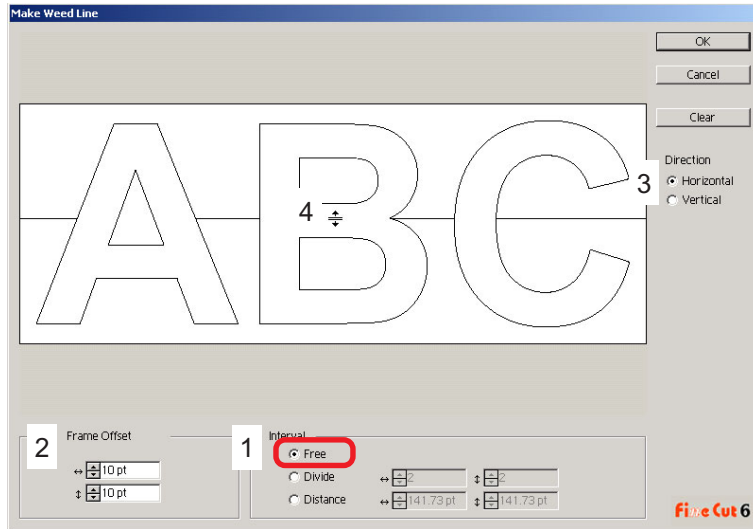


- 3 Set the Weed Line.

There are 3 ways of setting procedure.

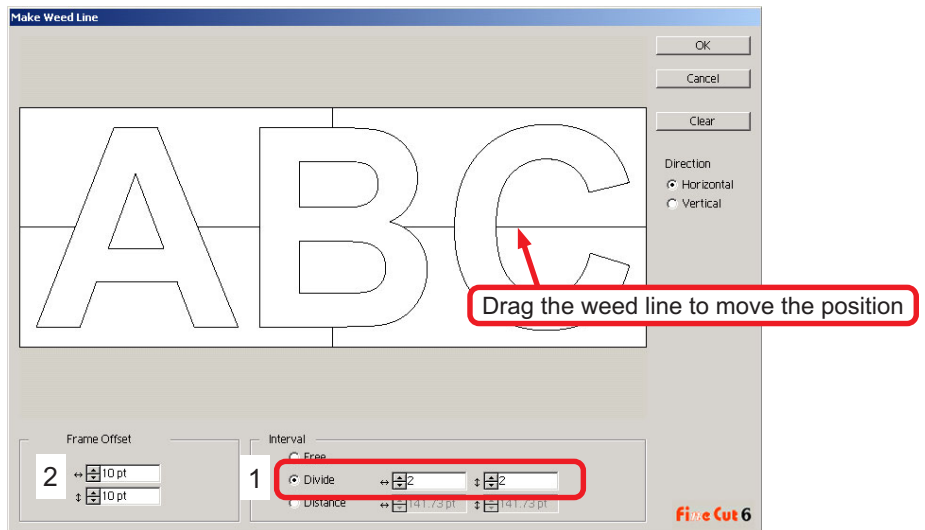
## 1. Free

- 1) Select [Interval]-[Free].
- 2) In the [Frame Offset], set the distance between the object and frame.  
(In the dialog below, the distance is set to 10 pt, vertically.)
- 3) Select the Weed line direction (Horizontal or Vertical) in the [Direction].
- 4) Click on the target position to create a Weed line.



## 2. Divide

- 1) Select [Interval]-[Divide].  
Select or input the divide number to both horizontal and vertical directions.
- 2) In the [Frame Offset], set the distance between the object and frame.  
(In the dialog below, the distance is set to 10 pt, vertically.)



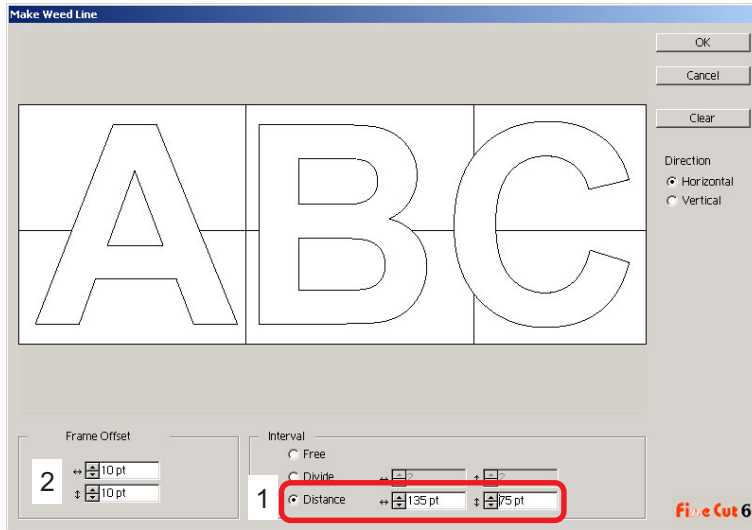
### 3. Distance

1) Select [Interval]-[Distance].

Select or input the distance in between the objects to both horizontal and vertical directions.

2) In the [Frame Offset], set the distance between the object and frame.

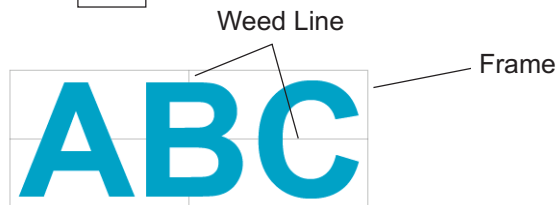
(In the dialog below, the distance is set to 10 pt, vertically.)



Click on **Cancel** to return to the Illustrator without creating any weed line on the object. Click on **Clear** to delete all weed lines.

When removing a precut line (Weed Line) one by one, click on the target line, and drag it up to the edge of the screen.

4 After setting, click **OK** .



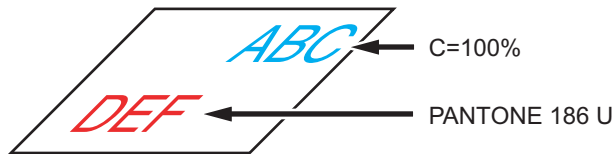
To delete the created weed line, click **Remove the weed line** in the FineCut menu.



## Cut an Object by Color

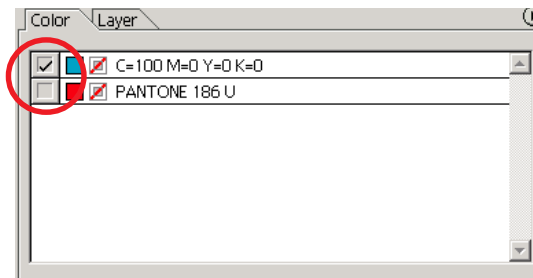
If an object consists of multiple colors on Illustrator, you can cut out the specified color object.

The following example shows how to cut out the Cyan (C=100%) colored ABC.



The color list of the Plot dialog indicates the color configuration of the object.

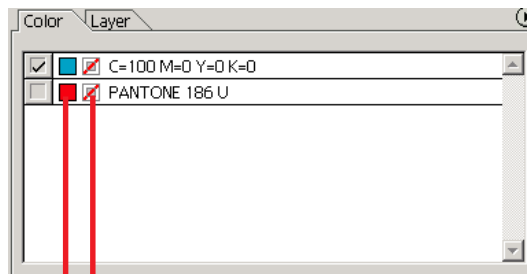
Uncheck the check box of the color set of object DEF. Object DEF disappears from the cutting area.



### Color List

The color list displays all the colors (including PANTONE and other characteristics) used for the object. It also displays the color of fill and stroke colors of the object.

By clicking the above right button, able to specify the plot condition.



**Stroke color :** Click the color preview of the stroke color to display the information on the stroke color.

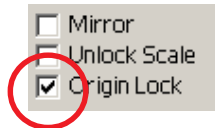
**Fill color :** Click the color preview of the fill color to display the information on the fill color.



## To keep the layout (Origin Lock)

Origin Lock setting

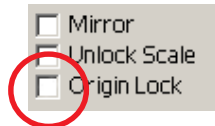
Check the [Origin Lock] check box to cut out the object (ABC) retaining the layout position.



Cut result



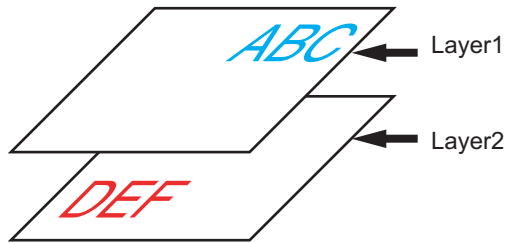
Uncheck the check box to cut out the object at the bottom right of the sheet (bottom left for Mimaki CF/CF2/DC series) base on the origin.



## Cut an Object by Layer

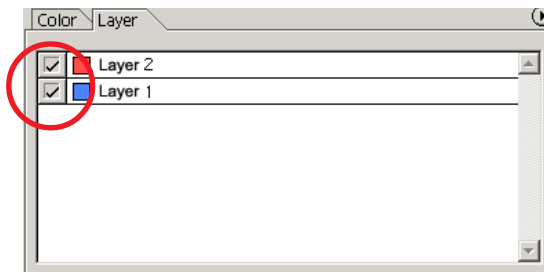
If the objects exist on multiple layers on Illustrator, you can cut out the object on the specified layer.

The following example shows how to cut out ABC on layer 1.



Change the Plot dialog to the layer list.

Uncheck the Layer 2 check box.



Object DEF on the layer 2 disappears from the cutting area.

Check [Origin Lock] check box to cut out the object retaining the layout position of ABC. (Refer to page 39)

## Set Cut Conditions

**NOTE!**

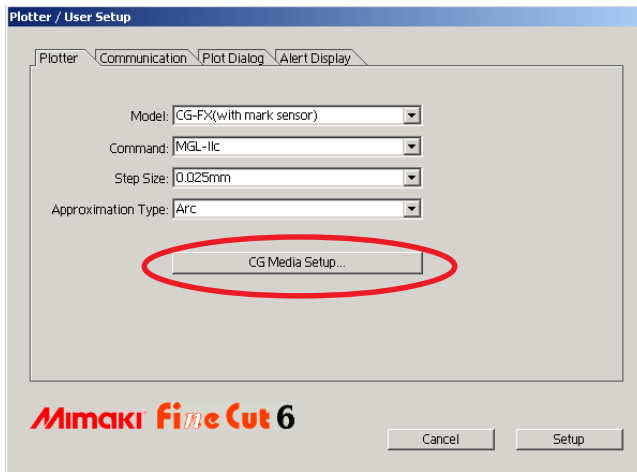
This function is effective only for the MGL-IIc commands.

FineCut enables to register up to 50 sets of cut conditions for the plotter.

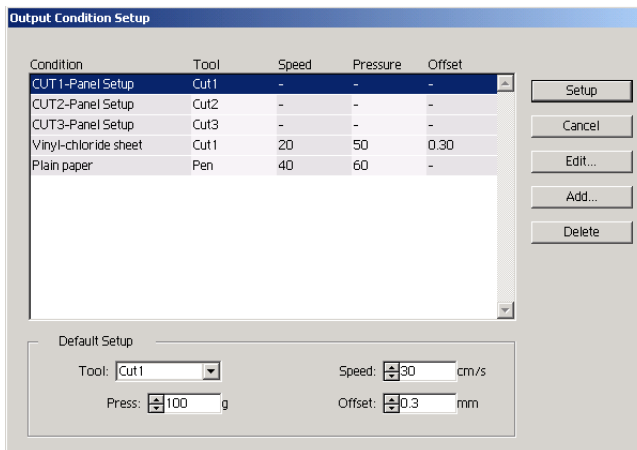
When plotting, you can change the cut conditions depending on the media to be used.

- 1 Click **Media Setup...** button on the [Plotter/User Setup...] menu.

Alternatively, click **Edit** button in the Plot dialog. (Refer to page 101)



- 2 The edit dialog appears.



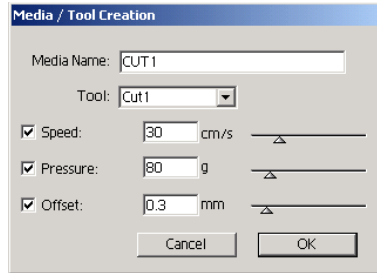
1. Change the output condition.

Select the target tool and click or double-click on **Edit** button.

2. Add media.

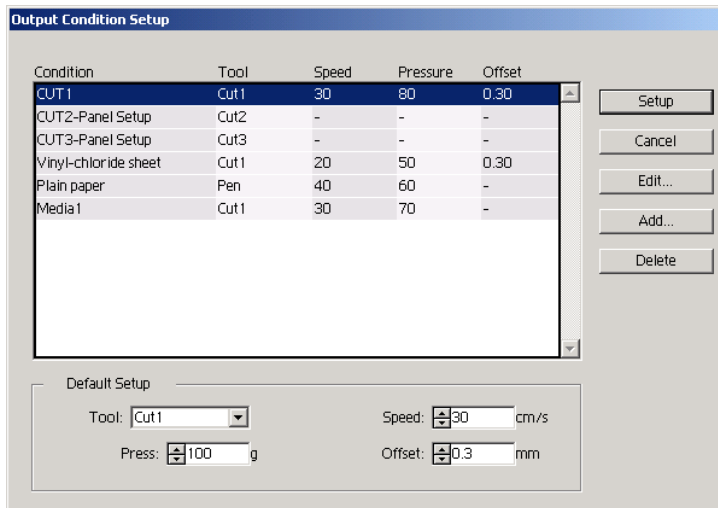
Click **Add** button.

- 3 Check the parameters to set the values for the plotter and then enter the setup information.



For the unchecked parameters, plotting is performed based on the plotter setting.

- 4 Click **OK** button to add the media to the list in the Output Condition Setup dialog.



- 5 Click **Setup** button.

**NOTE!**

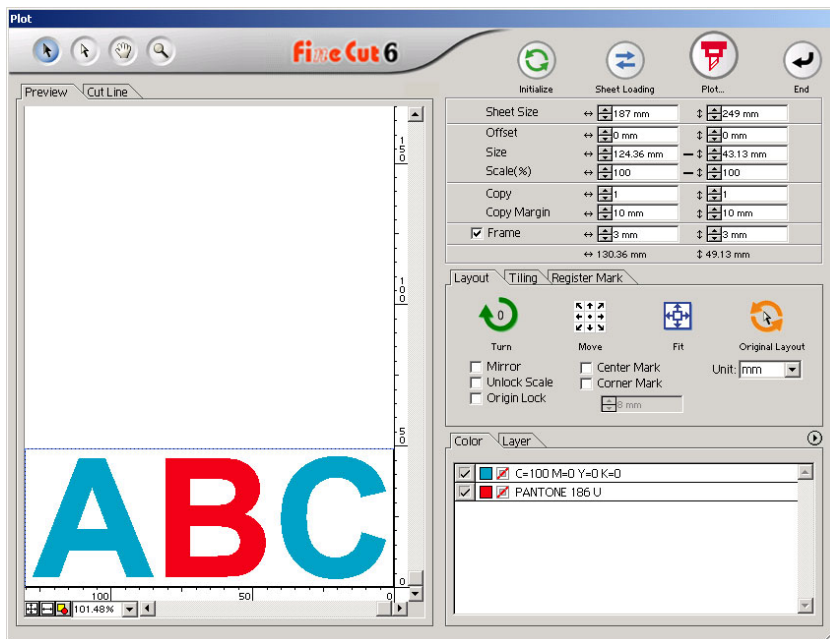
In case any setting value exceeds the limit value on the plotter, plotting is performed based on the limit value of the plotter. For the limit values, refer to the Operating Manual.

## 6

Plot the data to cut.

Click **Plot** button in the FineCut menu.

Alternatively, select [Plot] from the [File]-[FineCut] menu.



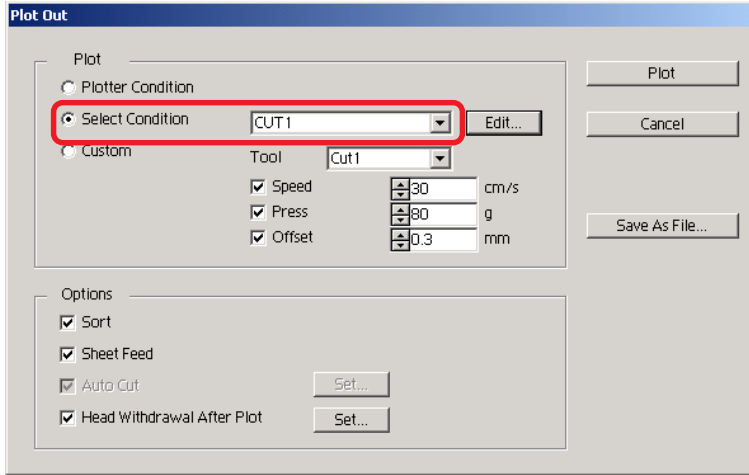
(In case setting the output condition on each color or layer -> Refer to page 45)

7

Click  Plot button.

PlotOut dialog appears.

Check the [Select Condition] to select the output condition which has been set in the “Output Condition Setup” dialog. (Refer to page 41)



Click **Edit** to shift to the “Output Condition Setup” dialog to edit the output condition.



Specify the output condition in [Custom]. It enables to plot with the specified output condition without registering in the “Output Condition Setup” dialog.

8

Click **Plot** button.

**NOTE!**

In case, plot with “Select Condition” or “Custom” setting, the setting temporarily reflect the value of speed/pressure/offset setting in Plotter. To restore the value back in previous setting value in plotter, Push the TOOL jog key when plotter in LOCAL mode.

## <Set the output condition on each color/layer>

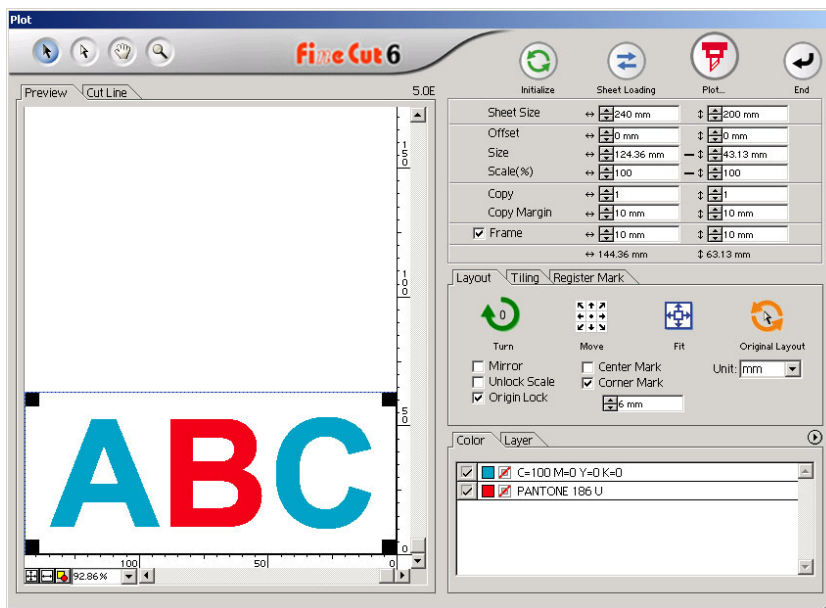
Output condition is settable on each color list or layer list. For a fine object or small characters, create an object on each color or layer, and set the appropriate output condition (lower cutting speed, etc.) for each to perform neat cutting operation.

Further, in CF/CF2/DC series, you can perform the cutting and ruled line making at one time by specifying tools on each color or layer, individually.

Cut a red “B” as changing the output condition.

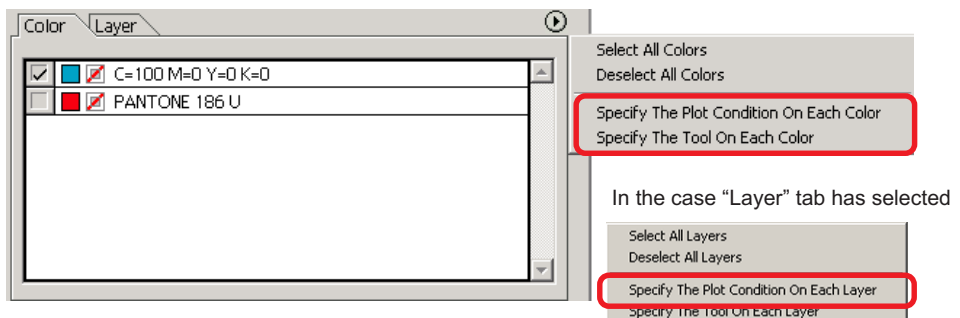
1

Click the button on the upper right of the color list (layer list).



2

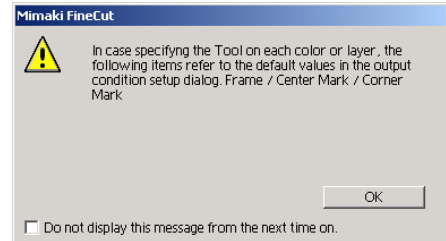
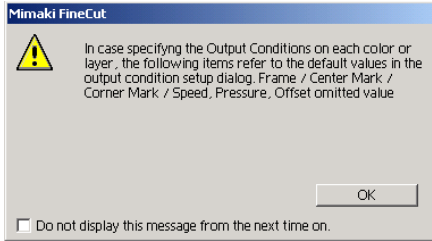
Select [Specify The Plot Condition On Each Color (Layer)].



### 3

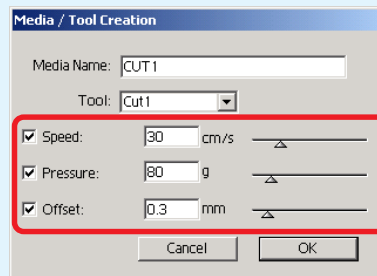
Display the following dialog.

Click **OK**.

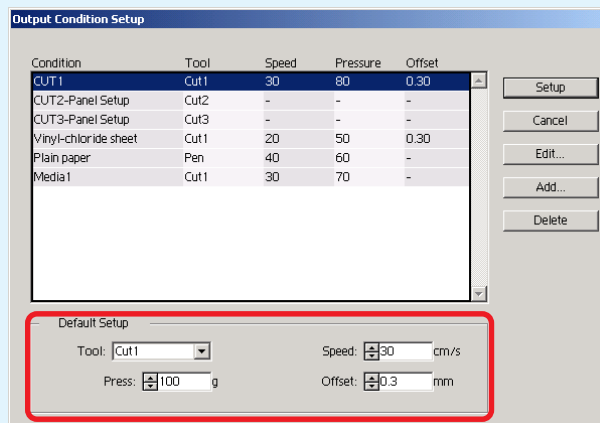


#### NOTE!

In case [Specify the output conditions on each color or layer] is selected, you can not use the set value on the plotter side. Make sure to check the all condition (Speed/Pressure/Offset) in the check box.



In case no check box is checked, plot operation is performed by the default setting value.

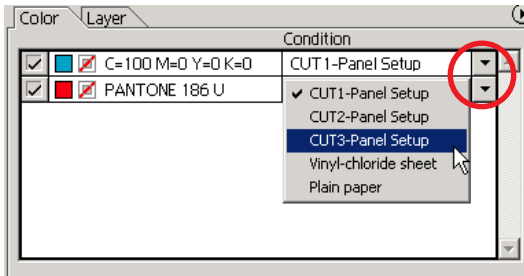


When specifying a frame, center mark, corner mark, the plot operation is performed by the default setting value as well.



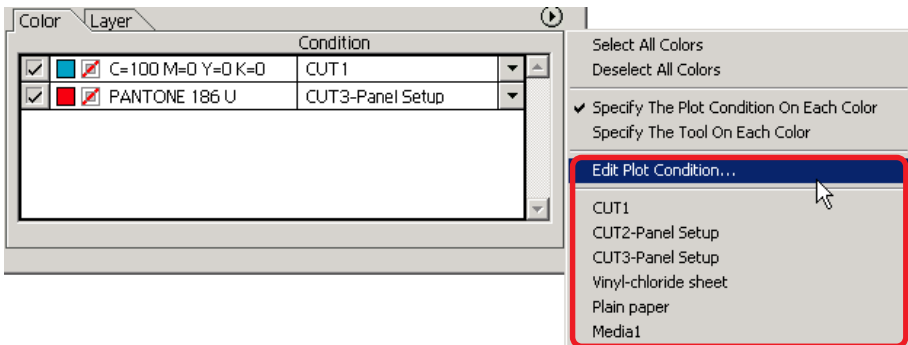
#### 4 The set output condition is displayed on the right side.

Click on the right button  to set the color list output condition of “B” to the “CUT3” output condition. (In the case Layer tab has selected, the procedure is same)



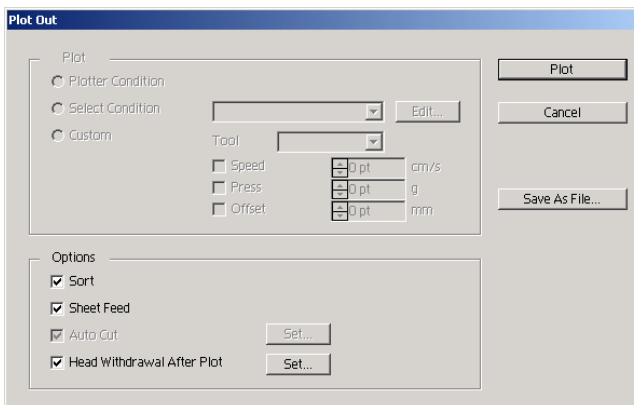
#### 5 When changing output conditions, click upper right button and select [Edit Plot Condition...]

The screen moves to [Plot Condition Setting] dialog where you can edit plot conditions.



When selecting [Specify The Plot Condition On Each Color] or [Specify The Tool On Each Color], the preset output condition is displayed. All lists settings refer to the selected output condition here.

#### 6 Click Plot button to display Plot Out dialog.



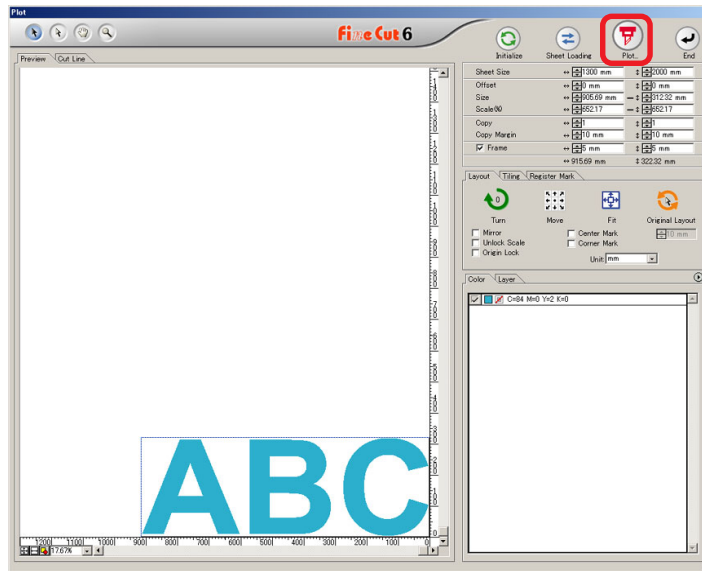
Click  Plot .

## Set Head Withdraw Position and Origin

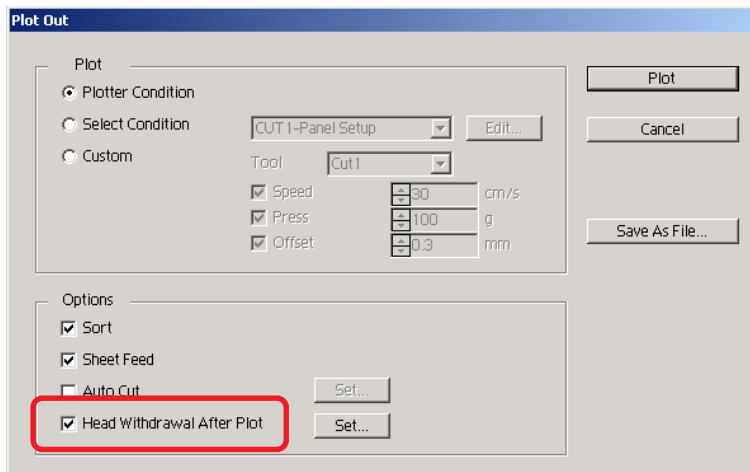
You can set up the head position after plot.

Set the head position/origin as automatically renew the origin after plot operation to prevent from cutting on the same position with the previous cut.

- 1 Click  Plot button in Plot dialog to display the Plot Out dialog.

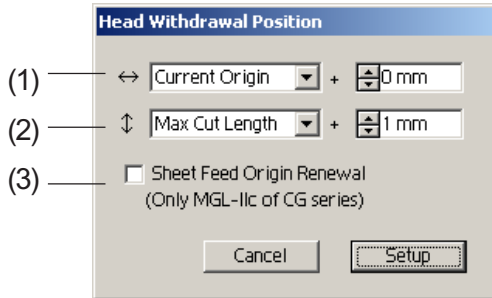


- 2 Check [Head Withdrawal After Plot] check box.



### 3

When changing the head withdrawal position or set the origin to the withdrawal position, click **Set** button to display the [Head Withdrawal Position] dialog.



#### Default setting

Current Origin  
: +0mm to the horizontal direction  
from the current origin  
Max Cut Length  
: +10mm to the length direction  
from the maximum cut length  
Sheet Feed Origin Renewal  
: No

(1) Set the head withdrawal position for the horizontal direction.

Reference position selectable from either [Current Origin] or [Max Cut Length].

For example, the head is withdrawn to the position at 0 mm from Current Origin for the horizontal direction in the figure above.

(2) Set the head withdrawal position for the length direction.

Reference position selectable from either [Current Origin] or [Max Cut Length].

For example, the head is withdrawn to the position at +1 mm from the Max Cut Length along the length direction in the figure above.

(3) Set the head withdrawal position as the origin position.

(This function is effective only for the MGL-IIc commands on Mimaki CG series.)

Check this option for the useful operations like continuous output.

#### NOTE!

When checking "Sheet Feed Origin Renewal", [No. COPIES] or [DIVISION CUT] function on the plotter will not perform normally. Uncheck "Sheet Feed Origin Renewal" before using [No. COPIES] or [DIVISION CUT] function.

Click **Setup** to return to the Plot Out dialog in step 2.

### 4

Click **Plot** button to perform plotting.

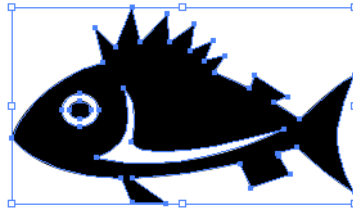
The plotter head will move to the specified position after plotting the data.



## 2. Attaching a Frame

This function enables to make outlines automatically.

- 1 Select the object to attach a frame.

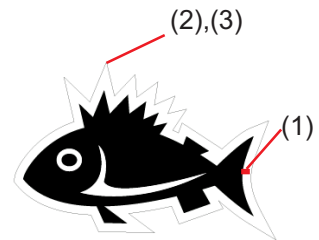
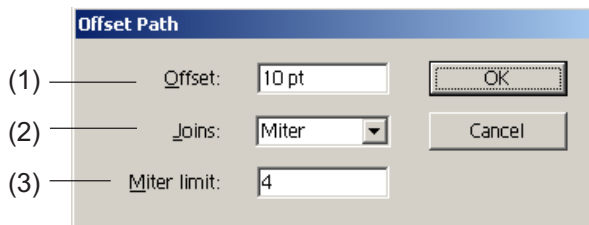


- 2 Click **Frame Extraction** button in the FineCut menu.

Alternatively, select [Frame Extraction...] from the [File]-[FineCut] menu.



- 3 Make path setting for the frame.

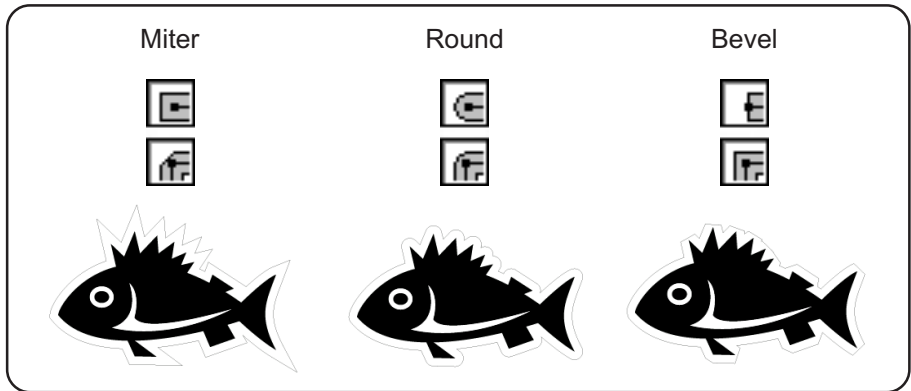


(1) Offset : Set the distance from the object to the frame.  
When entering a negative value to the offset value, enables to perform off-cut.

(2) Joins : Set the shape of frame corners.



If the frame shape is not natural, change the “Joins” to improve it. Generally, the more acute corner and the larger offset value, the less accuracy.

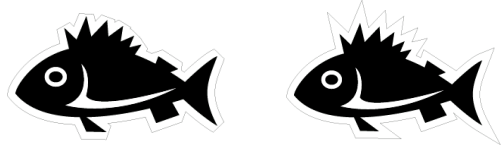


(3) Miter limit : Set the ratio up to the two line ends crossed position.  
(Effective only for the Miter shape.)

Example

1 mm

10 mm



A larger value makes the corner more acute.

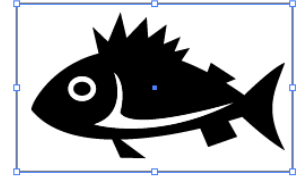
Click  after a setup.

The frame is extracted and then a path is created on FC Frame Layer.

### 3-1. Making Register Mark with CG series

- 1 Point the position to create a register mark. Enclose the object with the rectangle tool.

After selecting the layer where there is an object to be printed, make rectangular square for making Register Mark using rectangle tool.



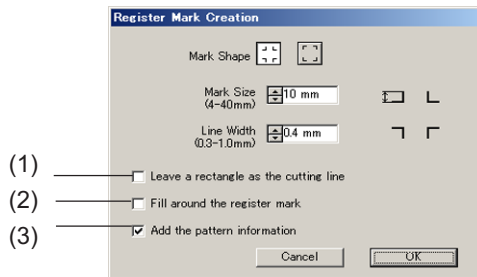
- 2 Click **Register Mark Creation** button in the FineCut menu.

Alternatively, select [Register Mark Creation] from the [File]-[FineCut] menu.



- 3 Set the shape and size of the register mark.

The Register Mark is created on the layer where there is the object.



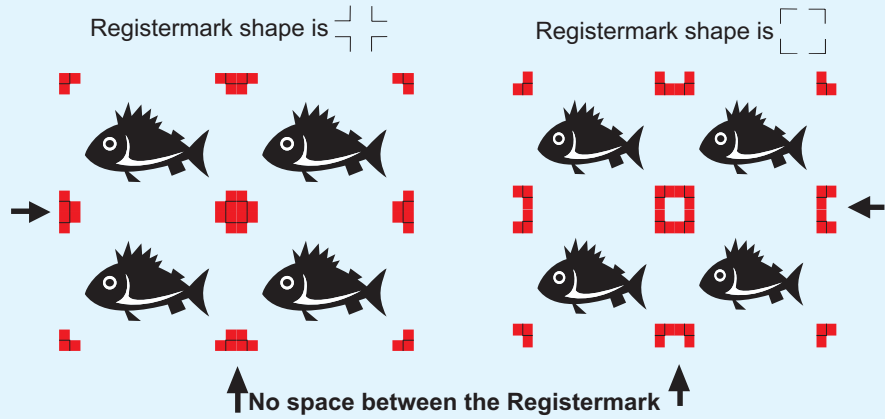
- (1) Check the check box to cut a rectangle. (The rectangle created in step 1.)
- (2) Check the check box to fill around the register mark with spot color red. When using the media color other than white, register mark may not be recognized. In this case, check this check box for better recognition. Recommend color for fill around is red(default) or white. To print with white color, refer to the printer manual for procedure.

#### NOTE!

- When register mark were not recognized with fill around red or white, other color will obtain the same result.
- Register mark may not be recognized depending on types of media, inks even if the color around the register mark is changed.

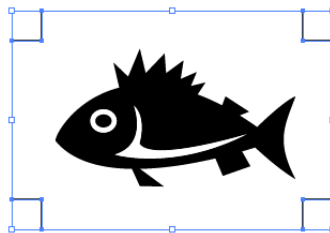
**NOTE!**

- When execute the continuous cut (Refer to 4-2, 4-3) with this function, be sure to print that there is no space between the registermark.



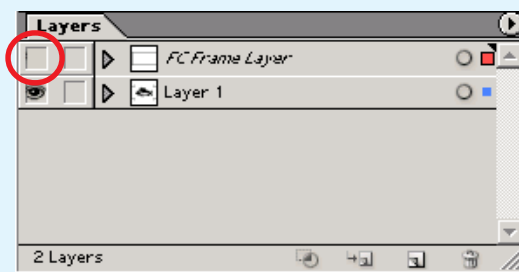
- (3) Check the check box to add a bar-code shaped pattern information to the register mark. This enables to cut the outline of multiple different data continuously. Furthermore the pattern information includes media rotate information. This allows to set the media any direction when data was rotated for print or when setting the media without take up.

#### 4 The register mark is created. Output to the printer.



**NOTE!**

Make sure to uncheck the [FC Frame Layer] before outputting a data. In case outputting a data which has been created as checking [Frame Extraction] or [Leave a rectangle as the cutting line].

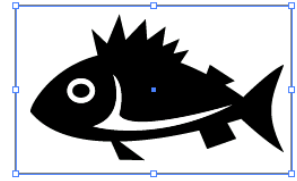




### 3-2. Making Mark with CF2/DC series

- 1 Point the position to create a Mark.  
Enclose the object with the rectangle tool.

After selecting the layer where there is an object to be printed, make rectangular square for making Mark using rectangle tool.



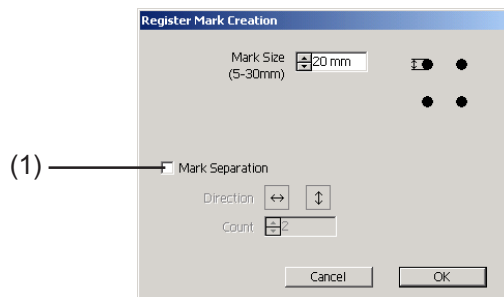
- 2 Click **Register Mark Creation** button in the FineCut menu.

Alternatively, select [Register Mark Creation] from the [File]-[FineCut] menu.



- 3 Set the size. (5 to 30 mm)

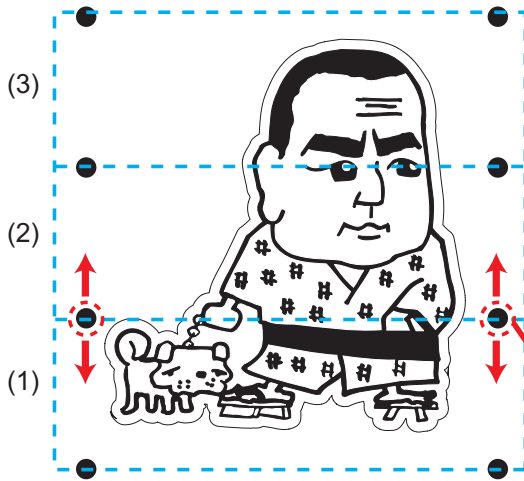
The mark is created on the layer where there is the object.



(1) **Mark Separation**

Check when the object is too big to accommodate in the cut area.

When Mark Separation is checked, cutting is performed for each separated Register Mark area.



The position of the created Mark Separation can be moved by selecting with [Direct selection tool] of Illustrator.

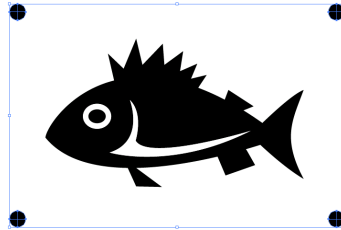
- When the position of the Marks is changed, it is necessary that they are positioned coherently along the direction of separation (vertical direction in the case of the drawing in the left).
- Marks of left and right (or above and below) make a pair. When you change the position, make sure to change together.

Cutting is performed in 3 times of (1) to (3).

(For details, refer to Page 76, "Mark Separation".)

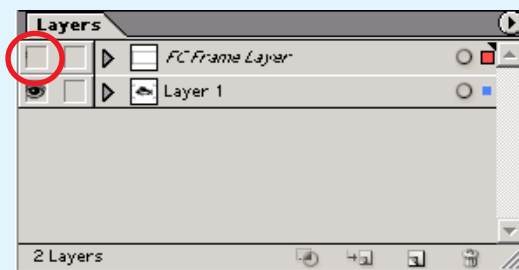
4

The Mark is created. Output to the printer.



**NOTE!**

Make sure to uncheck the [FC Frame Layer] before outputting a data. In case outputting a data which has been created as checking [Frame Extraction].

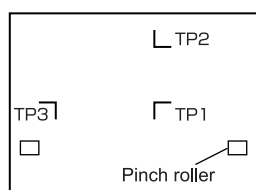
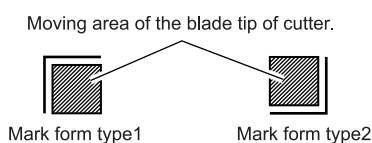


## 4-1. Recognize and cut Register Mark (in use of CG-EX series)

### 1 Set the output result on the plotter to perform register mark detection.

For the procedure of register mark detection, refer to the operation manual.

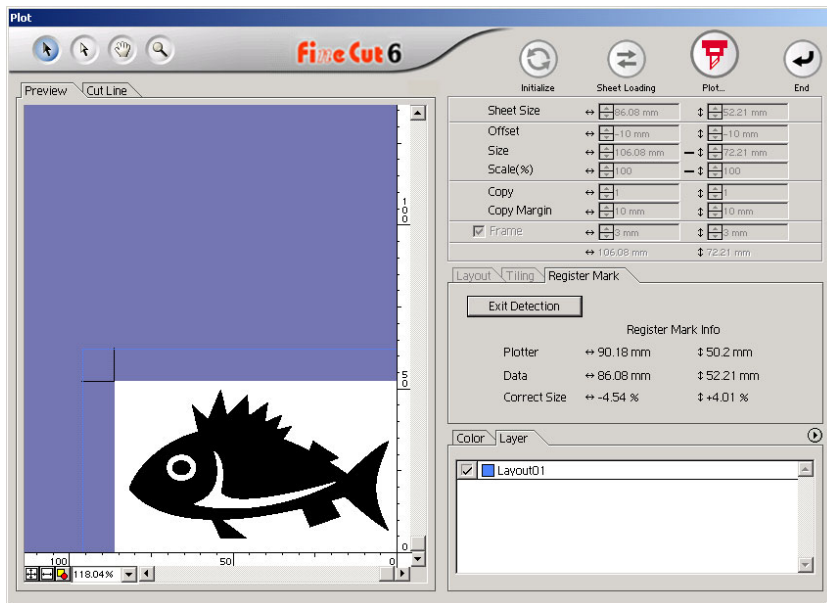
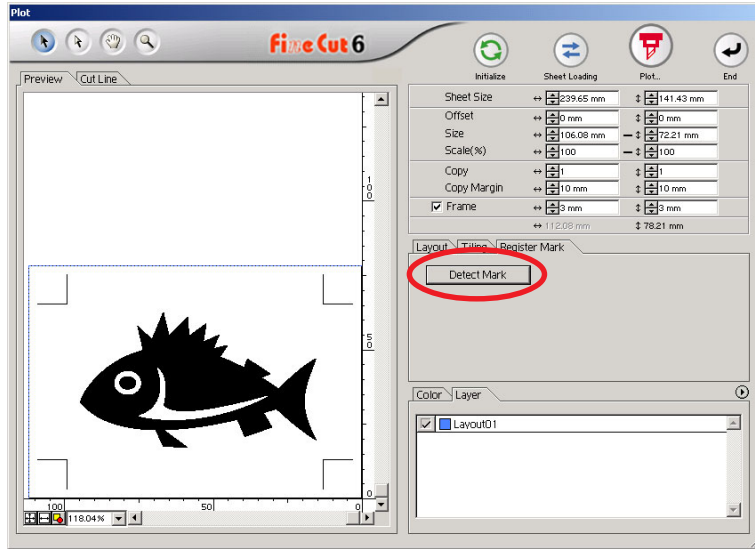
#### Detection of register mark (Semi-automatic mode)




1. Place the sheet on the device and turn the sheet set lever toward you.
2. Press or key to perform the sheet detection.
3. Move the cutter blade tip with the Jog key until it rests in the area illustrated on the left.
4. Press key.  
Register mark detection starts.
5. After the detected register marks, length (A) provided between TP1 and TP2 will be shown on the LCD. Press key.  
The size is calibrated automatically in Fine Cut mode. No need to register the actual size with the jog key.
6. After detected the register marks, length (B) provided between TP1 and TP3 will be shown on the LCD. Press key.
7. The origin is set.
8. Press key to turn to Remote Mode.

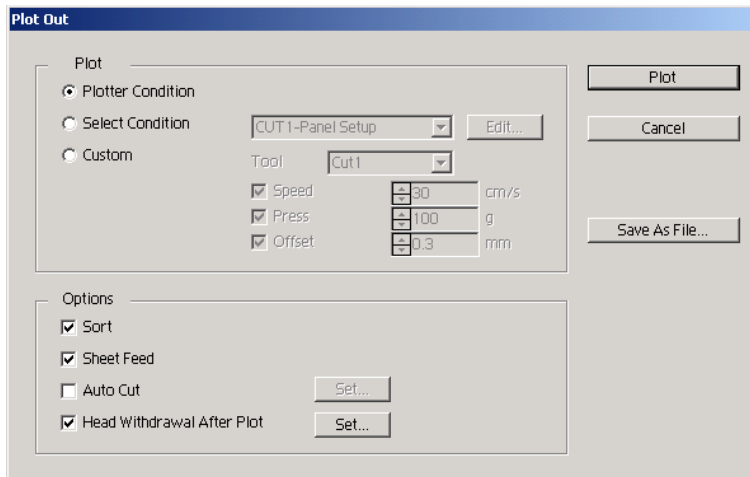
2

Click **Detect Mark** button in the Plot dialog to identify the register mark.



Click **Exit Detection** button to cancel register mark recognition.

3 Click  Plot button to display the Plot Out dialog.



4 Click  Plot button.

## 4-2. Recognize and cut a Register Mark (in use of CG-FX series, and CG-75ML)

CG-FX series and CG-75 ML plotter support this function.

FineCut enables to detect the multiple register mark at high speed.

Perform two cutting patterns : continuous multiple same data cutting on a roll sheet, and continuous multiple same data cutting as exchanging a leaf sheet.

### < Cut on a roll sheet continuously >

#### NOTE!

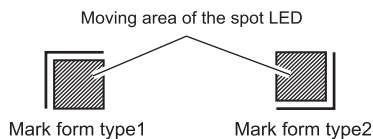
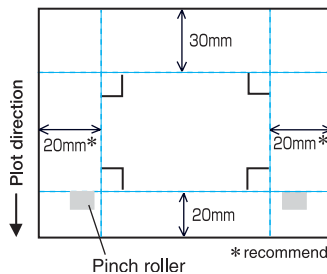
- Place only one set of the register mark on the Illustrator data. To print the multiple same data, use the copy function of print soft ware(RIP).
- Set the same size and position between the output leaf sheet size and the print position.

### 1

## Set the output result on a plotter to perform register mark detection.

For the procedure of register mark detection, refer to the operation manual.

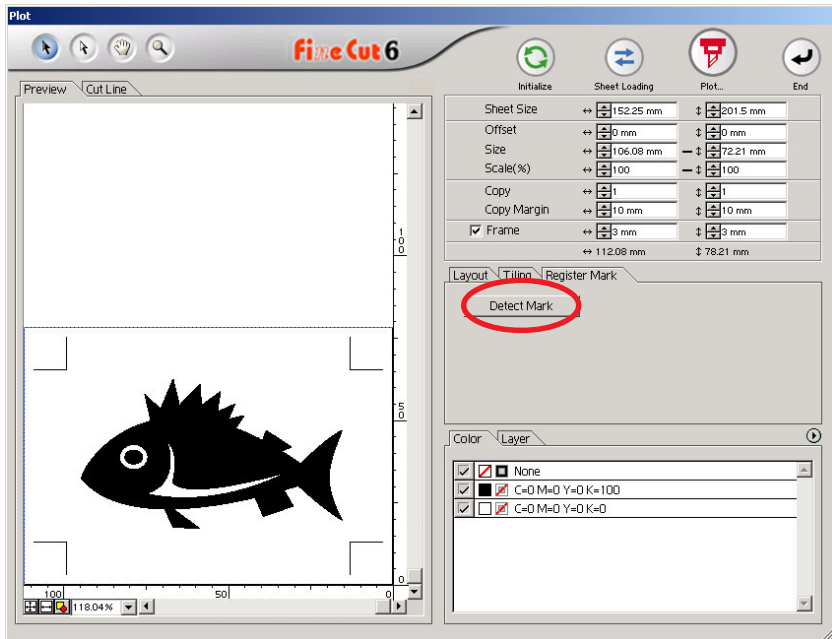
### Detection of register mark (Semi-automatic mode)



1. Enable “MARK DETECT” function on the plotter. Set the register mark information: size, shape, and so on. Select “1 pt” as detecting mark number.
2. Place the sheet on the plotter turn the sheet set lever toward you.
3. Press Jog key to detect the placed sheet.
4. Move the spot LED into the area illustrated on the left figure.
5. Press  key.
6. Return to LOCAL mode after detecting the register mark.
7. Press  key to turn to Remote Mode.

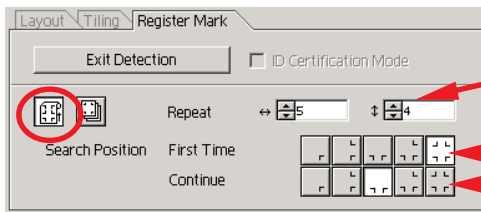
2

Click **Detect Mark** button in the Plot dialog.



3

Set the register mark to recognize continuously.



Select "Roll Sheet" (left) icon.

Set the continuous numbers to each direction, vertical and horizontal.

In case the continuous number is indeterminacy, input the maximum numbers, "9999".

Select the first detect points of the register mark.

Select the second and the subsequent detect points of the register mark.

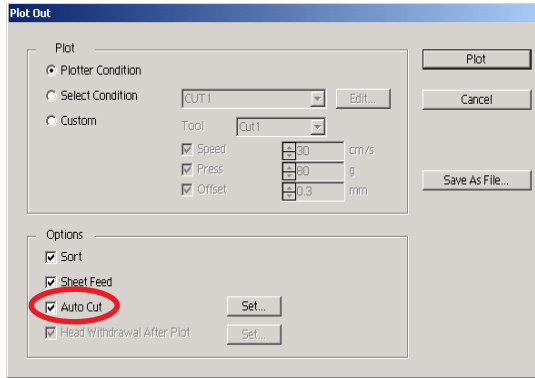



When detecting a larger data, set more detect points to cut more precisely.  
 When detecting a smaller data, set less detect points on the second and the subsequent detect points to reduce the detecting time.

Click **Exit Detection** button to cancel register mark recognition.

4 Click  Plot button.

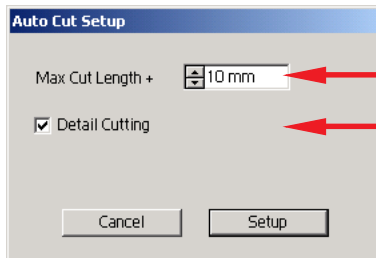
Plot Out dialog appears. (Refer to page 101)



Check [Auto Cut] to enable sheet cut automatically after completing each cutting operation. Click  to set the Auto Cut Setup information.

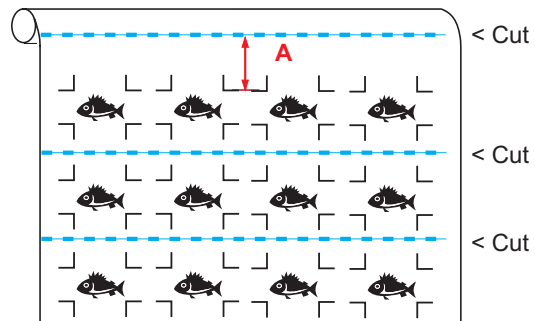
**NOTE!**

Make sure to check the check box before performing auto cut. Even if the plotter is set to ON, no cut operation is performed until check box is checked. Setting on the check box prior to setting on the plotter.



Set the maximum length from the last line to the cutting point. (See the figure A below).

Check [Detail Cutting] to cut a data at every line.



Click .

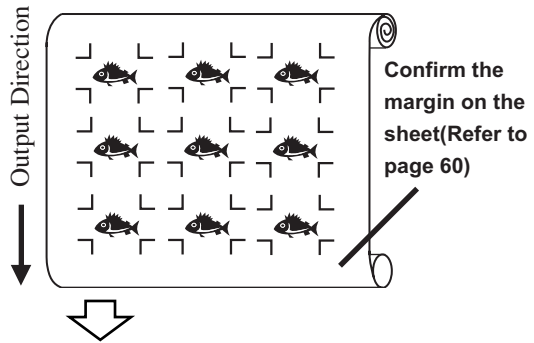
5 Click  in the Plot Out dialog to start plotting.



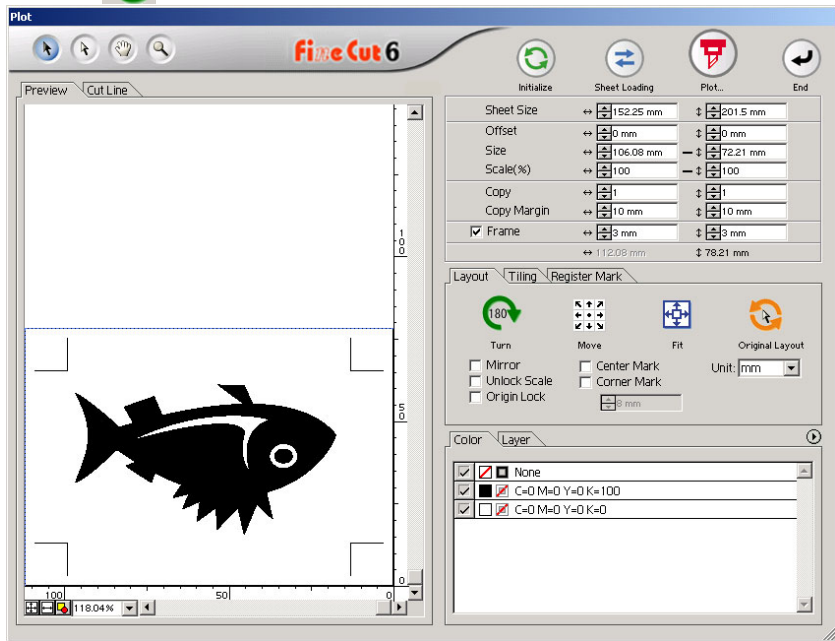
- In case the printed data by a take-up functioned plotter (Mimaki JV series etc.) rolled as a paper tube

Rotate the data to 180-degree in the FineCut, and set the paper tube on the plotter directly:  
 Enables to cut the data continuously. (No need for rewinding the roll)

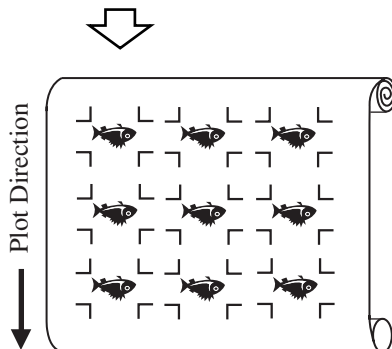
Output to the printer



Set the rotate button  to 180-degree before recognizing a register mark in the FineCut.

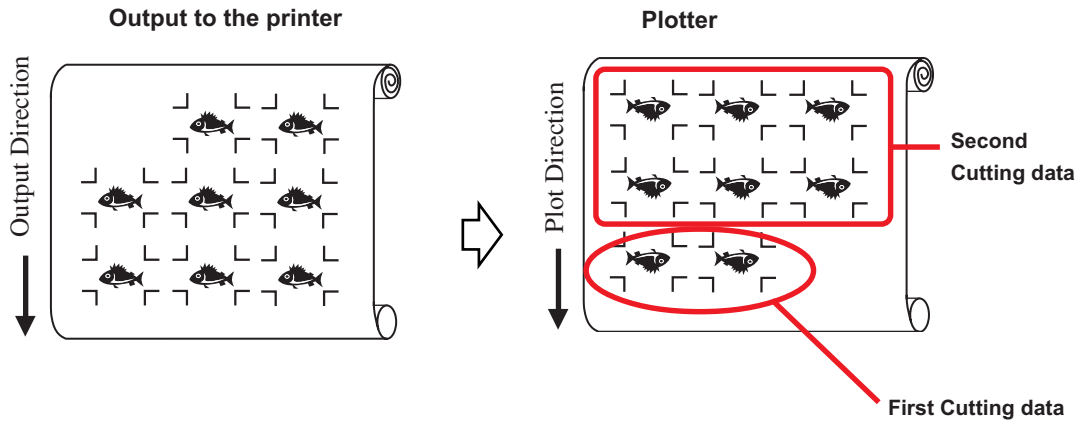


Plotter



- In case the continuous printed data exist to the middle of the line

Perform cutting in twice to cut all the data.



## < Cutting Leaf sheet continuously >

**NOTE!**

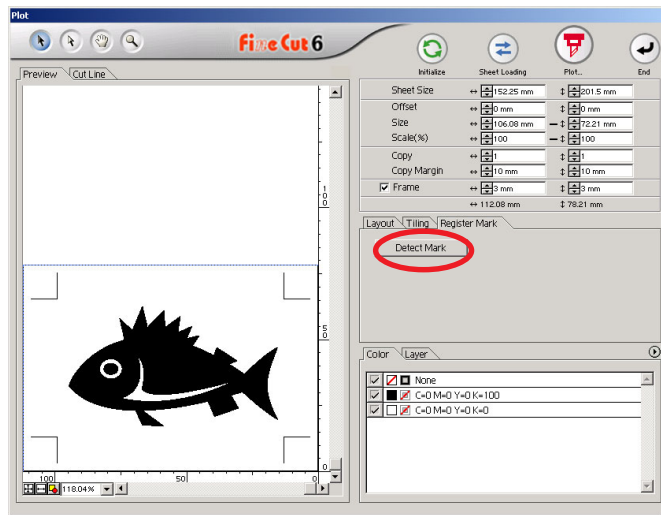
- Only one set of the register marked data is available to cut continuously. In case two or more sets of the register marked data exists in a sheet, cannot cut continuously.
- Set the same size and position between the output leaf sheet size and the print position.output leaf sheet size and the print position.

### 1 Set a output result on a plotter to detect register marks.

(Refer to page 60)

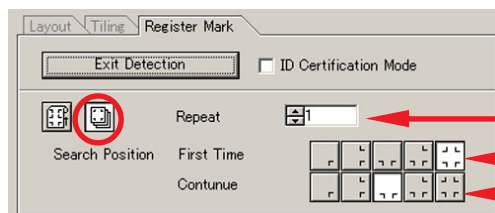
For the procedure of register mark detection, refer to the operation manual for plotter.

### 2 Click **Detect Mark** button in the Plot dialog.



### 3 Set the register mark to recognize continuously.

Click **Exit Detection** button to cancel register mark recognition.



Select "Leaf Sheet" (right) icon.

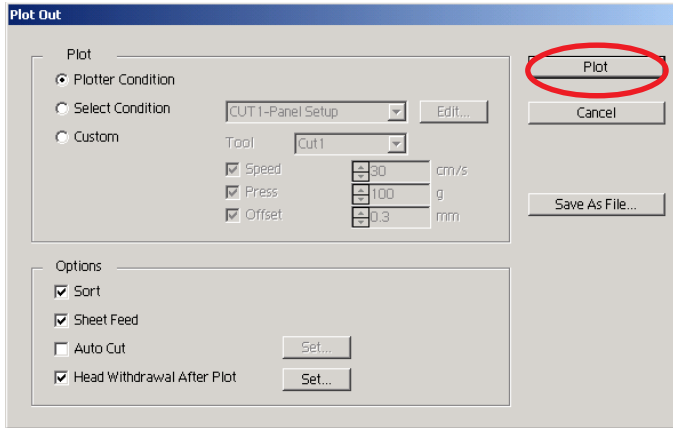
Set the continuous numbers.  
(numbers of repeating sheets.)

Select the first detect points of the register mark.

Select the second and the subsequent detect points of the register mark.

4 Click  Plot button.

Plot Out dialog appears. (Refer to page 101)

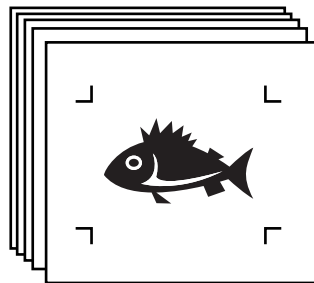


5 Click Plot button to start plotting.

6 The following message appears on the plotter panel after cutting the first sheet.

**CHANGE SHEET**

7 Set the next sheet. Detects the register mark automatically and performs cutting.



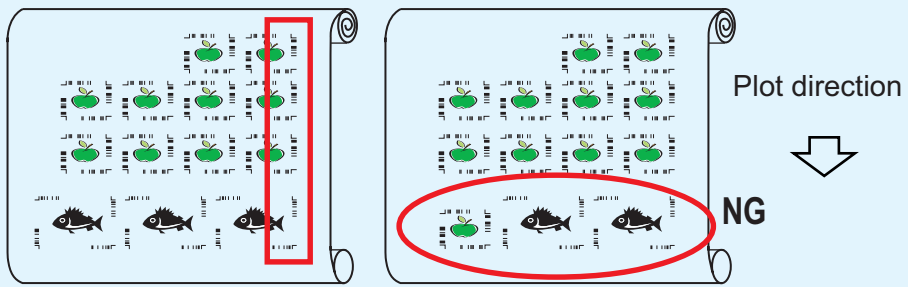
### 4-3. Continuous cut with ID certification mode (CG-75ML)

CG-75 ML plotter support this function.

FineCut enables to automatically cut the multiple different data with the ID pattern register mark.

**NOTE!**

- Place only one set of the register mark on the Illustrator data. To print the multiple same data, use the copy function of print soft ware(RIP).
- Standardize a shape of the register mark. In case a different shape of the register mark mixed, cannot detect the register mark precisely.
- To use the ID pattern register mark, be sure to select “1pt” as detecting mark number.
- Set the plotter origin(“ORGN SELECT”) to “LOWERrightORIGIN”
- Align the registermark at right side(Origin side)
- Do not locate the different data to Y (horizontal) direction



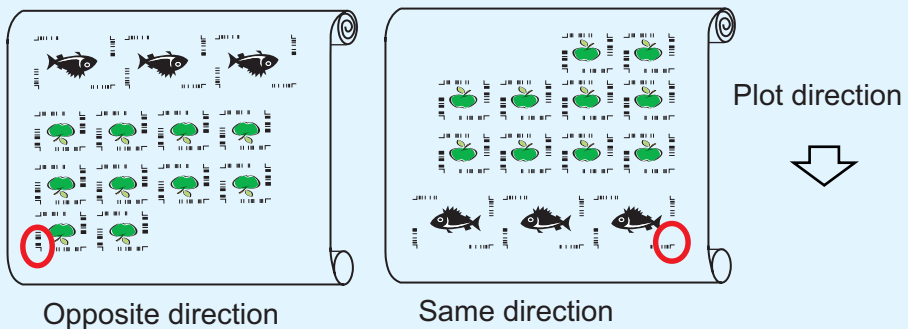
1

Set the output result on a plotter to perform register mark detection.

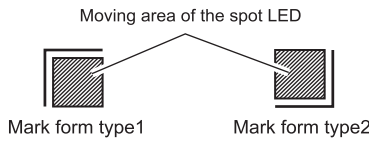
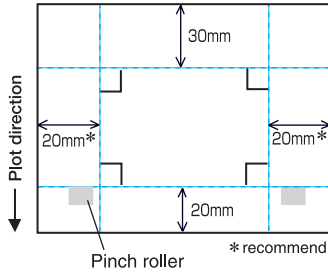
For the procedure of register mark detection, refer to the operation manual for plotter.

**NOTE!**

When loading the media in a direction opposite to the print, be sure to detect the register mark at the lower left.



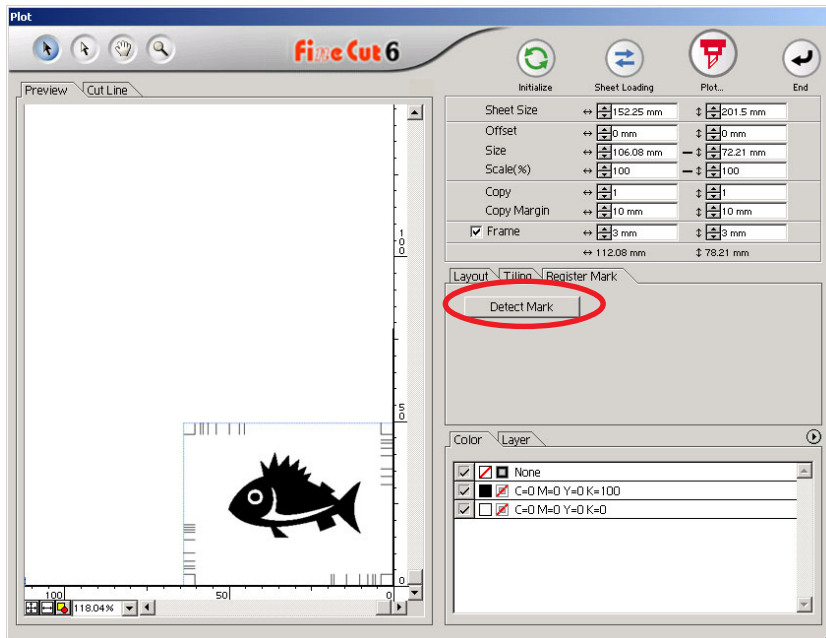
## Detection of register mark (Semi-automatic mode)



1. Enable “MARK DETECT” function on the plotter. Set the register mark information: size, shape, and so on. Select “1 pt” as detecting mark number.
2. Place the sheet on the plotter turn the sheet set lever toward you.
3. Press Jog key to detect the placed sheet.
4. Move the spot LED into the area illustrated on the left figure.
5. Press  key.
6. Return to LOCAL mode after detecting the register mark.
7. Press  key to turn to Remote Mode.

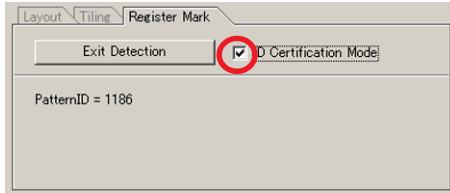
2

Click  button in the Plot dialog.



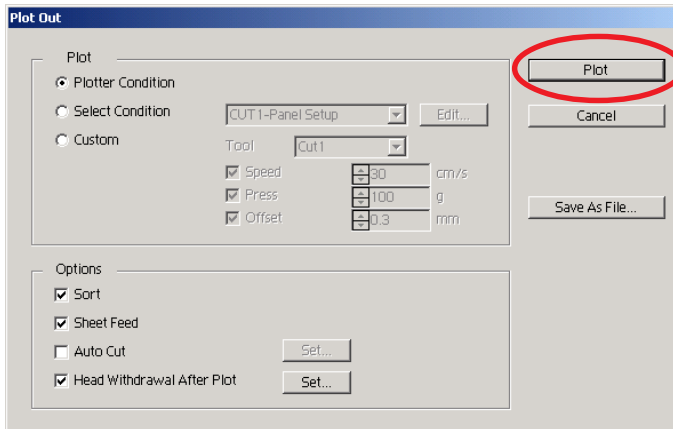
In case of cutting with ID certification mode, rotate direction is recognized automatically.

3 Confirm that ID certification mode is checked.



4 Click  Plot button.

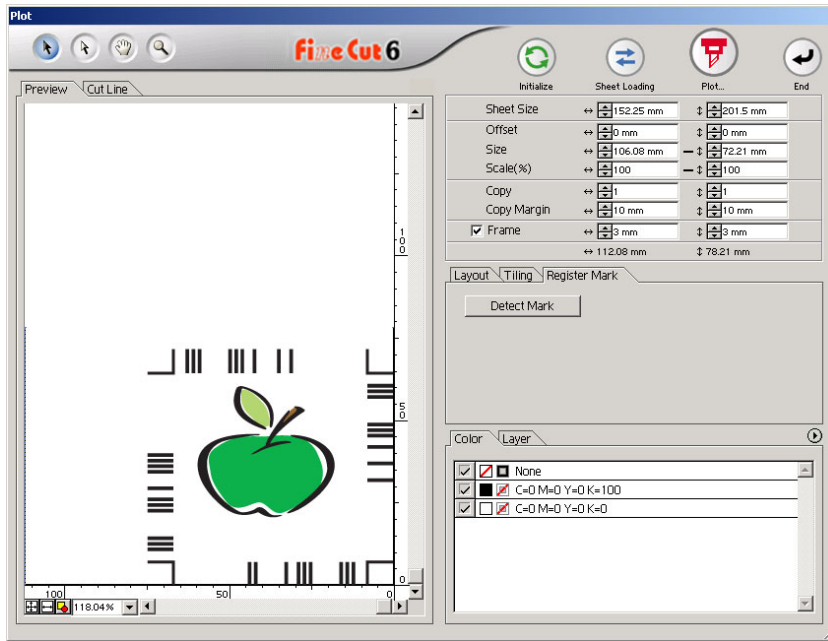
Plot Out dialog appears. (Refer to page 101)



5 Click **Plot** to send the data.

Plotter enters Local mode.

- 6 Repeat the procedure 2 to 5 for the other data to be cut continuously at a time.



The order of sending data is not necessary to be same as the order of print out .

- 7 Click **REMOTE** button on the plotter.

Plot starts.



## 4-4. Cut the Outline and base sheet at a time (CG-75ML)

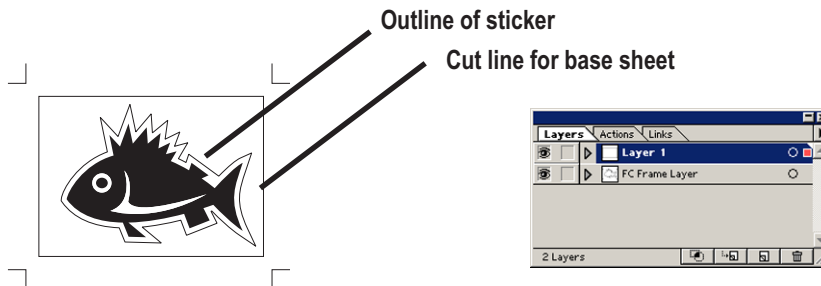
CG-75 ML plotter support this function.

This function enables cutting the outline of sticker and the base sheet ,called HALF cut, at a time.

### 1 Create the data in Layer divided on the Illustrator.

FC frame layer --> Outline of sticker

Layer1 --> The line for separate among the base sheet



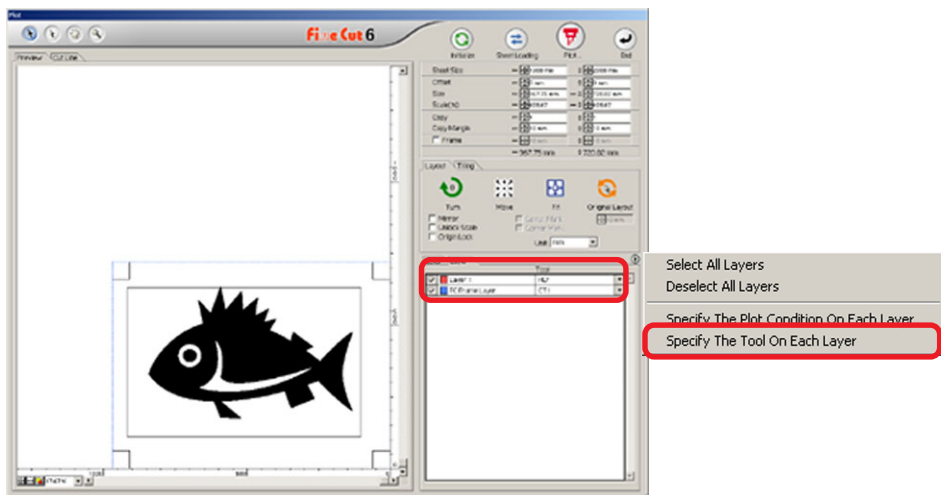
### 2 Set the cud condition for each layer

Refer to <Set the output condition on each color/layer> Page45-47

Select [Specify the tool on each layer]

Select FC frame layer --> [CT1]

Select Layer 1 --> [HLF]



### 3 Adjust the protrusion of the cutter blade and cut pressure for each tool.

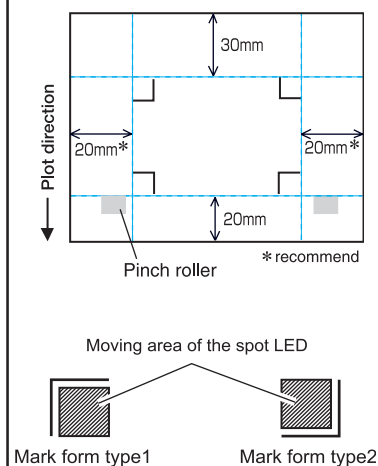
- Refer to [Adjustomg the protrusion of the cutter blade] on plotter operation manual
- Cut pressure according to each tool

[CT1] --> Pressure where cutter blade track remains on the base sheet

[HLF] --> Pressure to cut out the base sheet

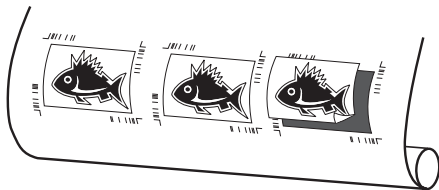
### 4 Detect the register mark and execute the cutting.

Detection of register mark (Semi-automatic mode)



1. Enable “MARK DETECT” function on the plotter. Set the register mark information: size, shape, and so on. Select “1 pt” as detecting mark number.
2. Place the sheet on the plotter turn the sheet set lever toward you.
3. Press Jog key to detect the placed sheet.
4. Move the spot LED into the area illustrated on the left figure.
5. Press  key.
6. Return to LOCAL mode after detecting the register mark.
7. Press  key to turn to Remote Mode.

### 5 Separate the base sheet once cut has done.

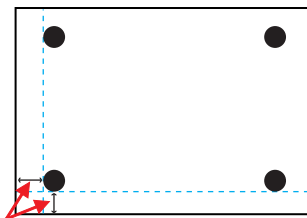


## 4-5. Cutting with CF2/DC series

- 1 Set the output result on a plotter to perform Mark detection.

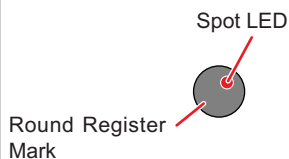
For the procedure of register mark detection, refer to the operation manual for plotter.

### Detection of register mark (Semi-automatic mode)



Make open space nearly of the size of the Register Mark.

#### Moving area of spot LED




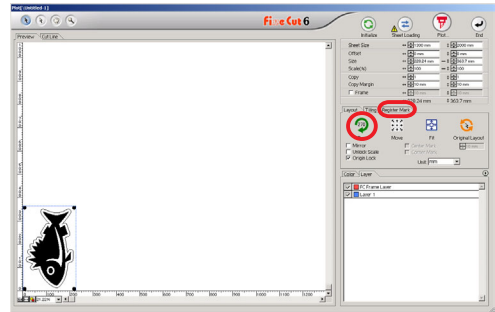
1. On the plotter, set the [MARK DETECT] to [1 pt].  
Perform setting of the Mark Size.  
(Adjust to the Mark Size set in accordance with Page 55, Step 3.)
2. Load the printed media to the plotter.
3. Press **END** key to detect the Marks.
4. With the jog keys, move the spot LED to the area indicated in the left drawing.
5. Press **END** key.
6. Marks are detected and the mode will turn to Local Mode.
7. Press **REMOTE LOCAL** key to turn to Remote Mode.

- 2 Display the data set by Step 1 with Illustrator, and click [Plot] button of [FineCut Menu].

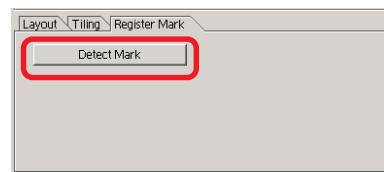
Alternatively, select [Plot] from the [File]-[FineCut] menu.



3  Click rotation button to adjust the direction of printed media loaded on the plotter with the direction of dialog display of FineCut.



4 Click [Register Mark] tab.

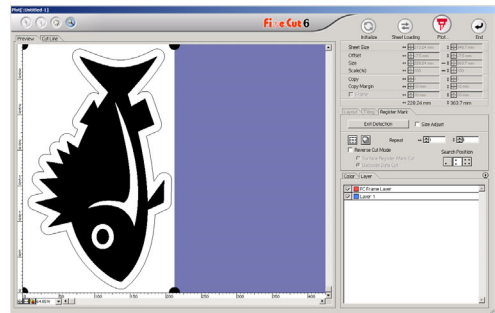



5 Click Detect Mark button to recognize the Marks.



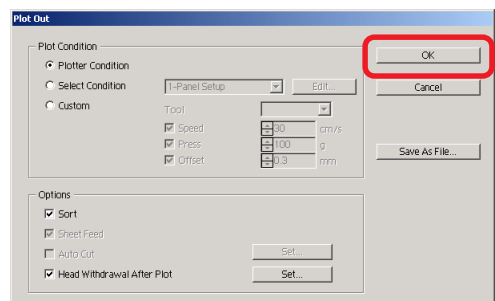
6 Select the kind of cutting.

- Recognize Mark and cut. (Refer to Page 75)
- Perform continuous cutting under [Multi Mode]. (Refer to Page 75)
- Perform continuous cut under [Single Mode]. (Refer to Page 75)
- Size Adjust. (Refer to Page 76)
- Mark Separation. (Refer to Page 76)
- Reverse Cut Mode. (Refer to Page 78)



7 Leaving only the check of [FC Frame Layer], click the  plot button.

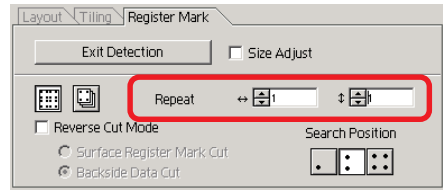
8 Click OK to start plotting.



## <<Kinds of cutting>>

### <Recognize Mark and cut>

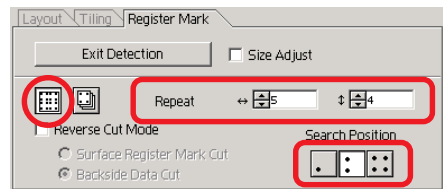
- 1 Make sure that Repeat is set as [1].
- 2 Proceed to Page 74, Step 7.



### <Perform continuous cut under [Multi Mode].>

Data printed continuously on one sheet of media is cut.

- 1 Select [Multi Mode].
- 2 Set the repeated number of data to each direction on the media.
- 3 Select Search Position (1 point, 2 points or 4 points).
- 4 Proceed to Page 74, Step 7.



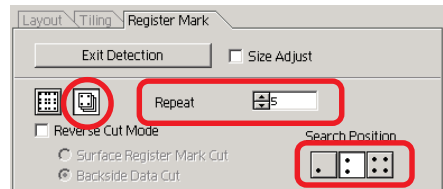
#### NOTE!

- Make the Mark only 1 set on the Illustrator.  
For printing the same data repeatedly, use copying function of your software (RIP) instead of arranging the same data on Illustrator.
- Make the output result adjusting the XY (vertical and horizontal) directions.

### <Perform continuous cut under [Single Mode].>

Cut continuously the media on which the Register Mark data is arranged only on 1 set.

- 1 Select [Single Mode].
- 2 Set the number of times to be continued (number of sheets to be repeated).
- 3 Select Search Position (1 point, 2 points or 4 points).
- 4 Proceed to page 74, Step 7 and plot the first media.
- 5 When the plot is completed, then set to the plotter the next sheet to be plotted.
- 6 Press (VACUUM) key of the plotter and select [Resume].  
•When CE key is pressed, the continuous cut is stopped.
- 7 Referring to Page 73, detect the Mark.
- 8 Repeat 5 to 7, for the number of times equal to number of sheets.



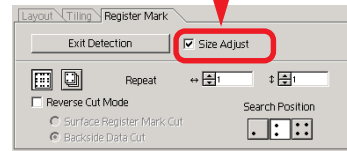
#### NOTE!

- Make the Mark only 1 set.If there are several sets of Marks in the media, cutting cannot be performed continuously.

### <Size Adjust>

Even if the size of the actual data and the output results are different due to the kind of media and printing environment, the frame cutting is made adjusted with the output result.

Check here when you wish to perform distance correction.



#### NOTE!

- When the items with fixed shape such as paper packs are cut, if Size Adjust is made, the size could become unaligned. In this case, check off the Size Adjust.

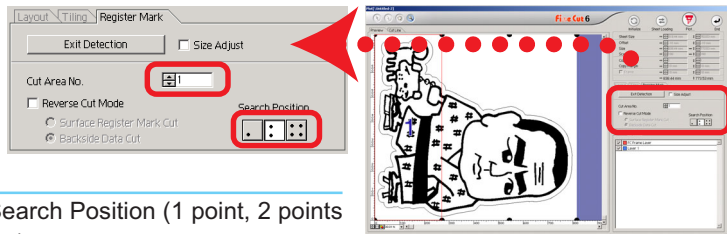
### <Mark Separation>

The large size data that cannot be cut in one time can be cut in several times.

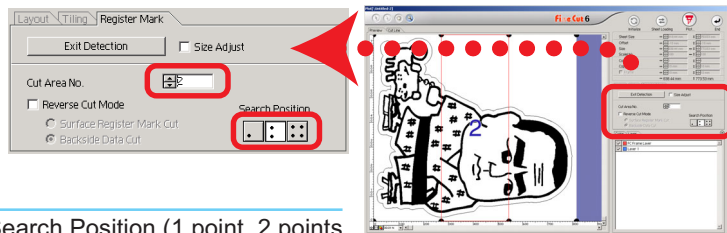
#### NOTE!

- When making Mark, be sure to select Mark Separation. (Refer to Page 56)  
The data to which Mark Separation is not set cannot be cut separately.

- 1 Display the data created Mark Separation on the Illustrator and click [Plot] button of [FineCut] Menu.
- 2 Click [Register Mark] tab and then click **Detect Mark** Recognition.
- 3 Make sure that the Cut Area No. is [1].



- 4 Select Search Position (1 point, 2 points or 4points).
- 5 Proceed to Page 74 Step7 and plot.
- 6 When the plot is completed, move the media. (Refer to Page 81)
- 7 Referring to Page 73, detect the Register Mark of Cut Area [2].
- 8 Change the cut area of FineCut to [2].



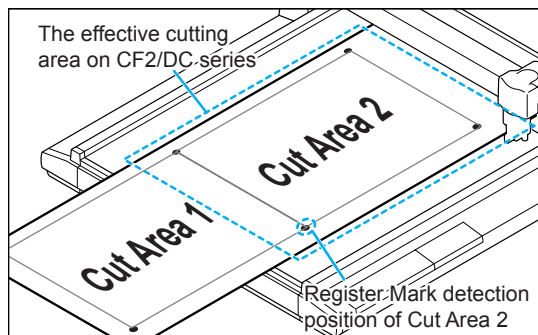
- 9 Select Search Position (1 point, 2 points or 4points).

10 Proceed to Page 74 Step7 and plot.

11 Repeat 6 to 10 for the number of separation.

**<<When moving the media>>**

Move the media in the manner that all the Marks in the area come within the cutting area of the plotter.



**NOTE!**

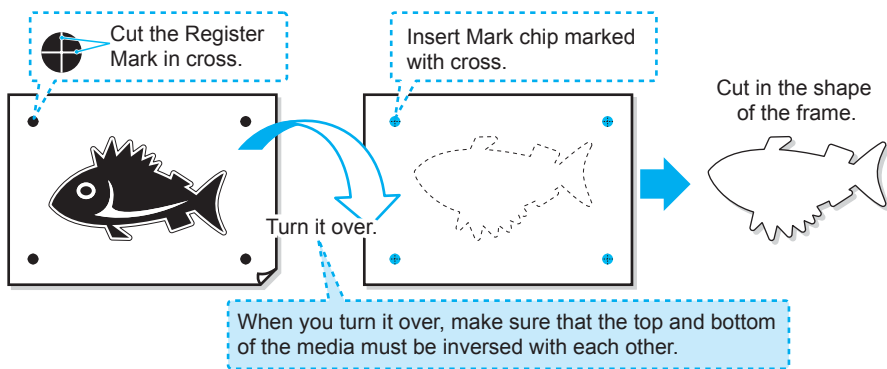
- When Mark Separation Cut is performed, the Plotter displays [\*\*\*OFF SCALE\*\*\*], but this does not pose any problem to the movement, etc.

### <Reverse Cut Mode>

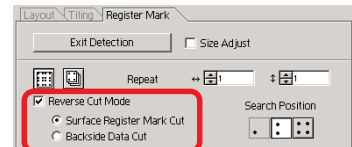
Cutting can be performed not from the printed (front) surface but from the back. Use this function for a media such as cardboard where the beautiful finish is not achieved if cut from the front surface.

#### NOTE!

- Under the Reverse Cut Mode, set the Mark size adjusting to the Mark chip you are going to use. If the Mark is too small, you may not be able to insert the Mark chip.



- 1 Set the media to the plotter making the printed surface to the top and detect the Mark.
- 2 Display the data to cut on illustrator, and click [Plot] button of [FineCut] Menu.
- 3 Click [Register Mark] tab and click **Detect Mark** button.
- 4 Put the check on [Reverse Cut Mode].
- 5 Select [Surface Register Mark Cut].
- 6 Select Search Position (2 points or 4points).
- 7 Proceed to Page 74 Step7 and perform plotting.
  - The detected Mark is cut in cross.



#### NOTE!

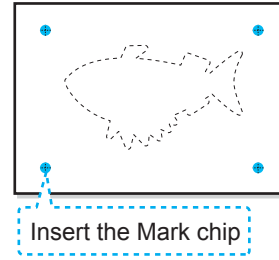
- Before performing [Surface Register Mark Cut], make sure that there is no Mark chip on the position of the Mark. If the Mark is cut when there is Mark chip, it is very dangerous as the Mark chip could come off by the cutter.
- When performing [Surface Register Mark Cut], you can not select Search position  (1 point).



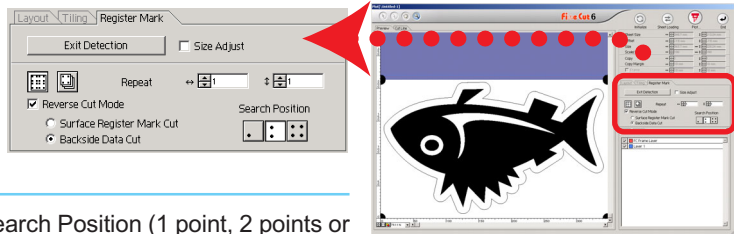
8 Invert the top and bottom of the media, and set it to the plotter.

9 Insert the Mark chip using cross cut.  
• The Mark chip will substitute the Mark.

10 Detect Mark by the Plotter.



11 Select [Backside Data Cut].  
• The data read into will be displayed upside down.



12 Select Search Position (1 point, 2 points or 4 points).

13 Proceed to Page 74 Step 7 to perform plotting.

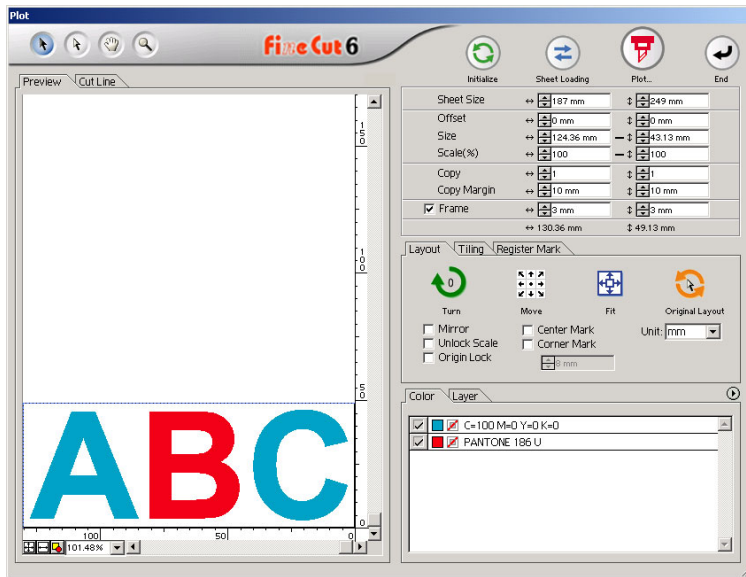
**NOTE!**

- Make the media to be cut 3 mm or more in thickness.

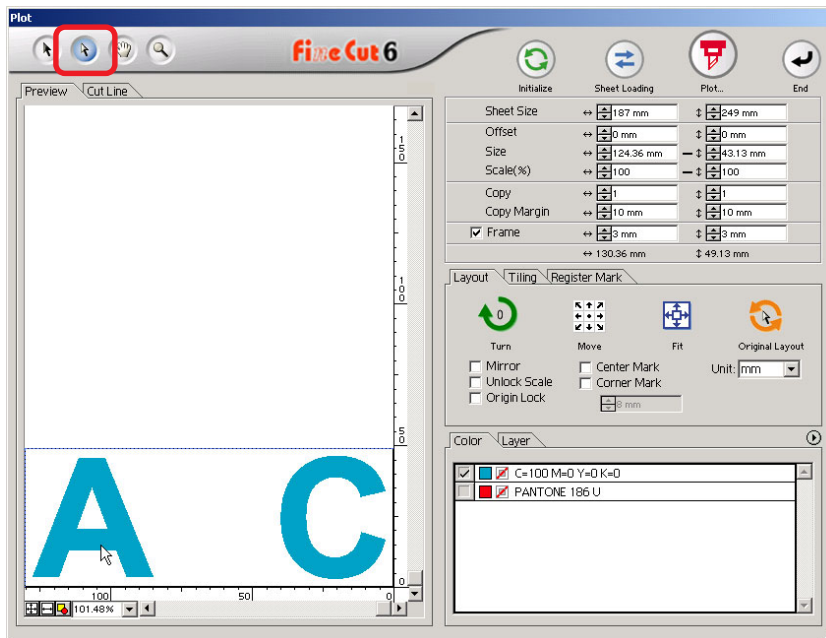
## Make an effective use of sheets

Move the object to avoid waste of sheet.

The following is an example. If B is a different color from A and C, B becomes blank because of the different color. Move the object to the blank part to perform cutting.

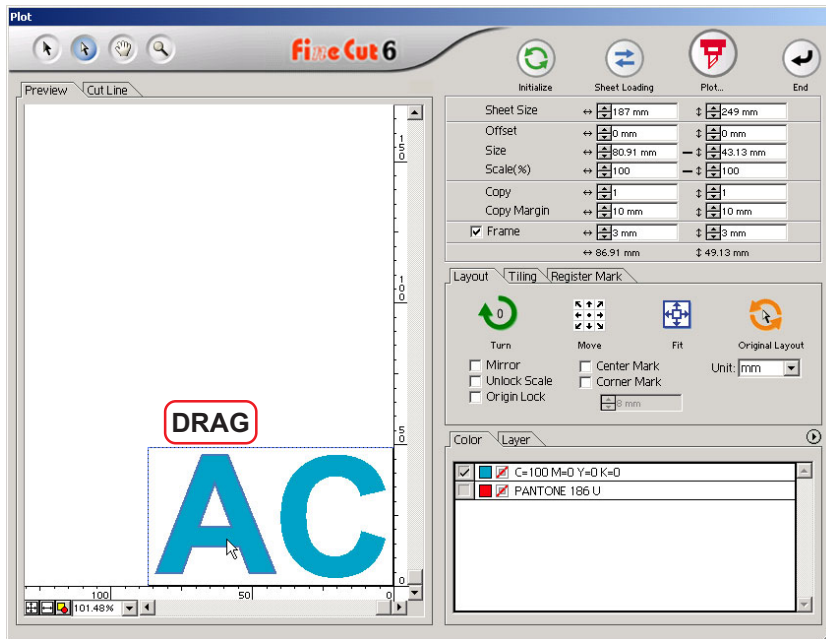



- 1 Select an object to move using the direct selection tool.



2

Drag the selected object to the desired position.



To replace the object to the original position, click  Original Layout button.

## Trapping

On the overlapping objects, a gap may be generated where the colors are overlapping. Trapping function can prevent this problem.

**(NOTE!)**

when execute Trapping on complicated data, error or Illustrator crash may occur and loose the data. Be sure to execute Trapping once save the data.

- 1 Select an object to be identified.

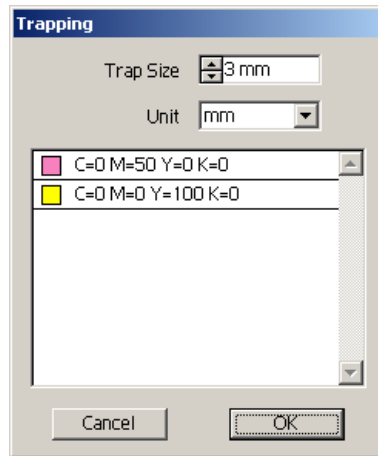


- 2 Click **Trapping** button in the FineCut menu.

Alternatively, select [Trapping] from the [File]-[FineCut] menu.

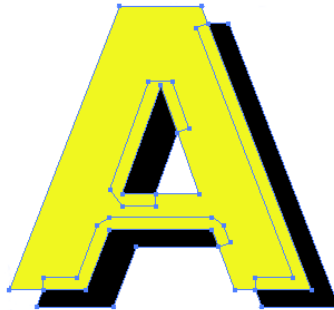


3 Set the trap size and overlapping order.



Drag the list to change the overlapping order.  
Click **OK** after setting.

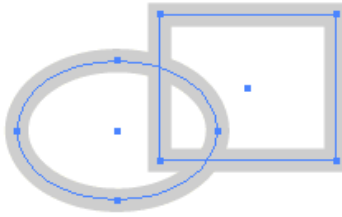
4 Overlap space are created according to the specified size.



## Identify the Stroke Weight and Overlap

Identify the stroke weight and overlap of objects to cut it as a figure as displayed on the monitor.

- 1 Select the object to be identified.

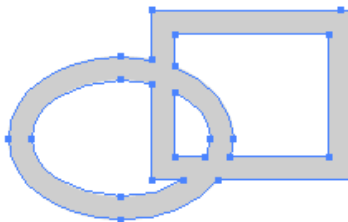


- 2 Click **Recognize Stroke Weight And Overlap** button in the FineCut menu.

Alternatively, select [Recognize Stroke Weight And Overlap] from the [File]- [FineCut] menu.



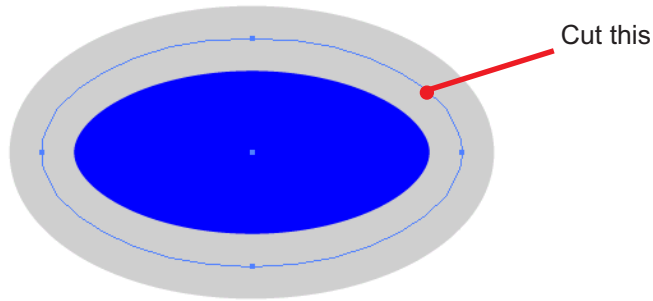
- 3 The stroke weight and overlap are identified.



## ▶ **Function Description**

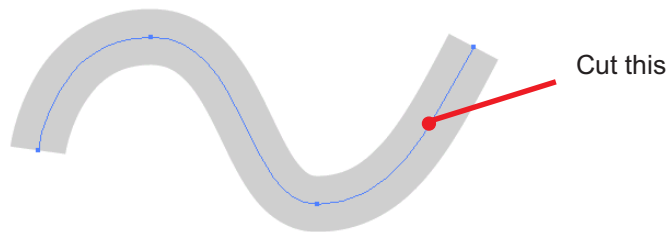
### **Fill and Stroke of an Object**

In the figure below, the fill of the ellipse is set and stroke are made thicker. Cutting is performed not by the outline of stroke but the outline of fill.



In case an object is not filled with a color, the stroke path is cut.

In this case, stroke path is cut regardless of the thickness. Check the path when selecting the object or in the Artwork mode (Outline mode) of Illustrator.



#### **Path**

A path refers to a line which is created using the drawing tool of Illustrator. The outline of a graphic object also consists of a path. The outline of a straight line or rectangle created by Illustrator is also a typical example of a path.



Refer to "Recognize Stroke Weight And Overlap" to cut an object with the stroke weight recognized or with stroke and fill separated. (page 84)

## FineCut Menus

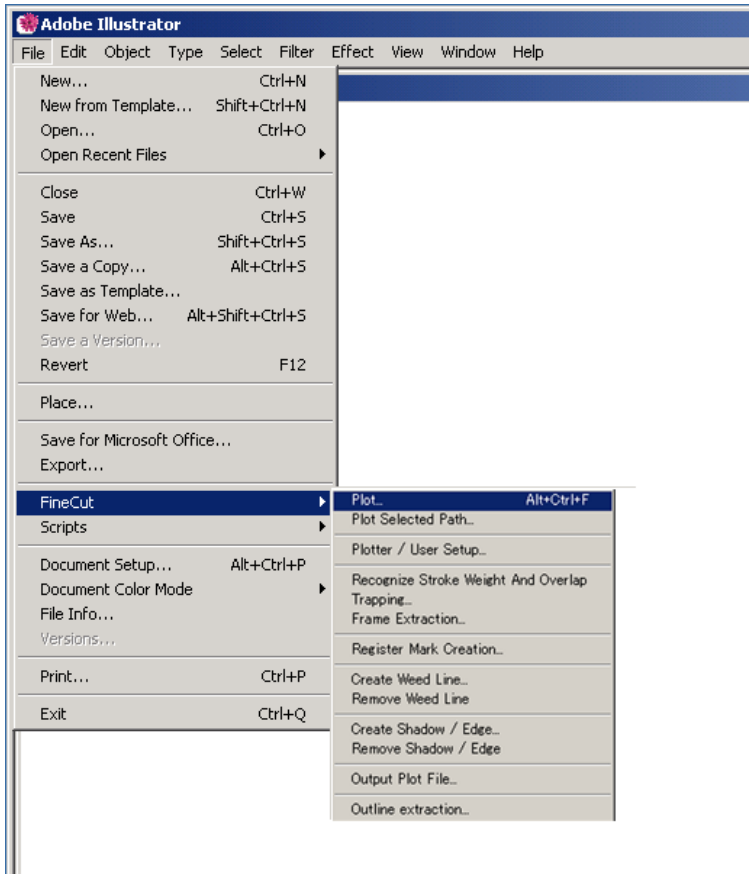
The following procedure describes on the FineCut menu.

There are two ways to select the menu.

- 1 Select [Show FineCut menu] from the [Window] menu of Illustrator.  
The following display appears.



- 2 Select [FineCut] from the [File] menu.







**Plot... :**

Displays the cutting area and sets the object layout and various options. It also sends an object to the plotter for object cutting.



**Plot Selected Path... :**

Plots only the selected object.



**Plotter/User Setup... :**

Sets the communication conditions with the plotter used. (Refer to page 88)



**Recognize Stroke Weight And Overlap :**

Recognizes the stroke weight and overlap of the selected object. (Refer to page 84)



**Trapping... :**

Traps the selected object.  
(Refer to page 82)



**Frame Extraction... :**

Creates a frame for the selected object.  
(Refer to page 51)



**Register Mark Creation :**

Creates a register mark to be recognized by the plotter. (Refer to pages 53 and 55)



**Create Weed Line... :**

Creates a Weed Line as the precut line around the object. (Refer to page 35)



**Remove Weed Line :**

Remove the created Weed Line.  
(Refer to page 37)



**Create Shadow / Edge... :**

Create a Shadow /Edge on the object.  
(Refer to page 26)



**Remove Shadow / Edge :**

Remove the created Shadow /Edge on the object.  
(Refer to page 28)

**Output Plot File... :**

Output the saved plot command file to a plotter.  
(Refer to page 103)



**Outline Extract...:**

Create the outline to cut the bitmap data.  
(Refer to page 29)

## Plotter/User Setup

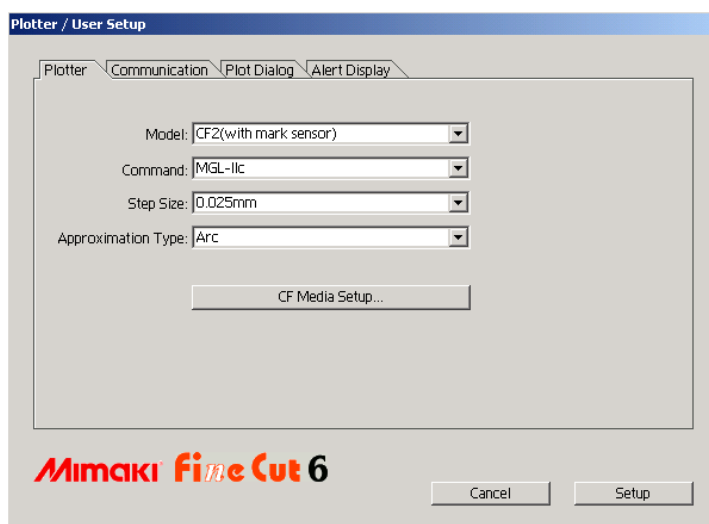
Set the communication conditions to enable communication between FineCut and the plotter.



If the entry value differs from the setting on the plotter, the object is not output normally.

Click  **Plotter/User Setup** button in the FineCut menu.

Alternatively, select [Plotter/User Setup...] from the [File]-[FineCut] menu.



### 1) Plotter

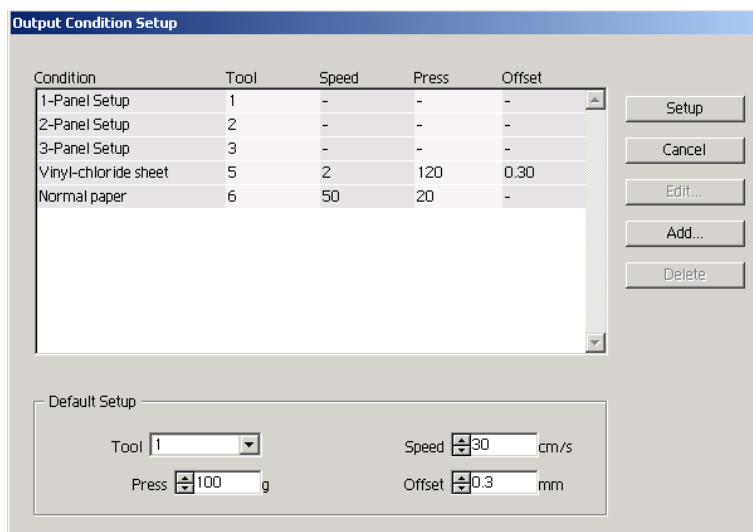
Set up the plotter connected. Refer to the operation manual of the plotter for details.

- Model:** Select the plotter model connected.
- Command:** Select the command set by the plotter.
- Step Size:** Select the step size set by the plotter.
- Approximation Type:** Select the approximation type when cutting Bezie curve of the object.(In CF/CF2/DC, select [Arc].)



In the case Approximate Type is set to "Arc", be sure to readjust the cut condition. Depending on the media, excessive pressure may applied and damage the cutter.

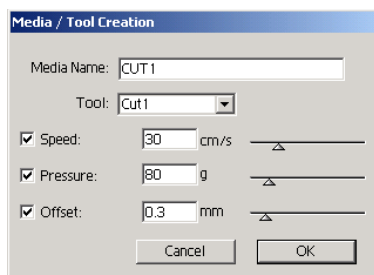
- \*\*Media Setup:** Click this button to display the Output Condition Setup dialog . (Refer to page 89)



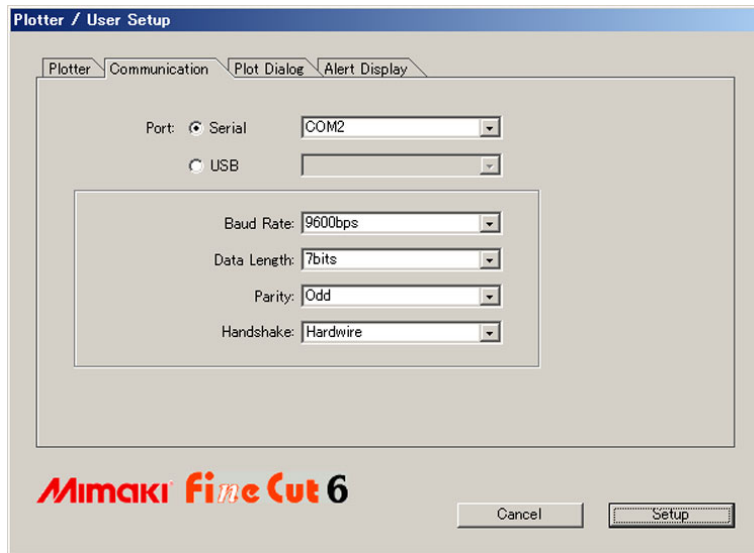
### <Output Condition Setup>

Click **Media Setup** button in the “Plotter” setup dialog to display the Output Condition Setup. (Refer to page 88)

**Condition :** Displays the registered output condition (Speed/Pressure/Offset).  
 When changing the setting, select the target condition, and then click **Edit** . (Refer to page 41)  
 For adding the output condition, click **Add** . (Refer to page 41)



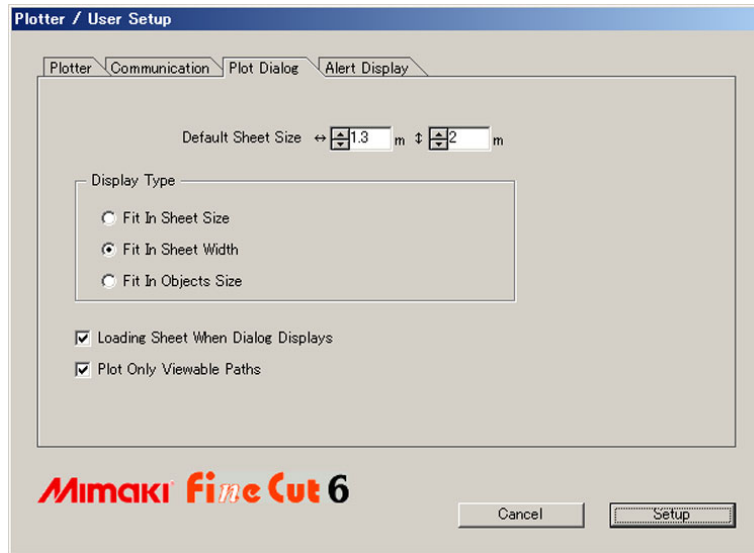
**Default Setup :** If setting the output condition for each color or layer, set the output condition for a frame and mark as the default setup.



## 2) Communication

Select communication conditions for the interface.

- Port :** Select a port connected to the plotter.  
 \* When in use of Mimaki CG-FX series, or Mimaki CG-75ML USB connection is available (in case connected to a plotter and the power is ON). Select [USB], and click on the right side of pop-up menu to confirm "CG-FX-xx".
- Baud Rate :** Select the transfer rate. (Serial)
- Data Length :** Select the number of data bits. (Serial)
- Parity :** Select the parity check method. (Serial)
- Handshake :** Select the handshake method. (Serial)



### 3) Plot Dialog

#### Default Sheet Size :

In FineCut, if [Loading Sheet When Dialog Displays] is checked, the sheet size is automatically read from the plotter and preview is displayed.

However, if the reading is not performed properly, or check is not made to [Loading Sheet When Dialog Displays] is checked off, the preview is made by the size designated here.

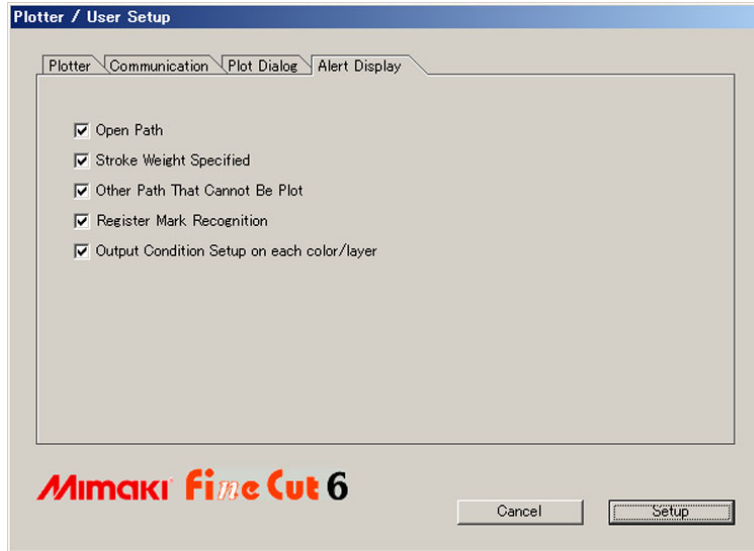
#### Display Type :

Select the display type for displaying the Plot dialog.

**Loading Sheet When Dialog Displays :** When this option is checked, it loads the sheet size when the plot dialog is displayed.

#### Plot Only Viewable Paths :

When this option is checked, plot only viewable paths.



#### 4) Alert Display

Check this option to display the following warnings.

**Open Path :**

The path is not closed.  
(The start and stop points are not set to the same point.)

**Stroke Weight Specified :**

There is a path that the stroke weight is specified.

**Other Path That Cannot Be Plot :**

The object may be drawn with the Gradient Mesh tool, brush tool, or other tools of Illustrator. The object may be masked or is a raster image.

**Register Mark Recognition :**

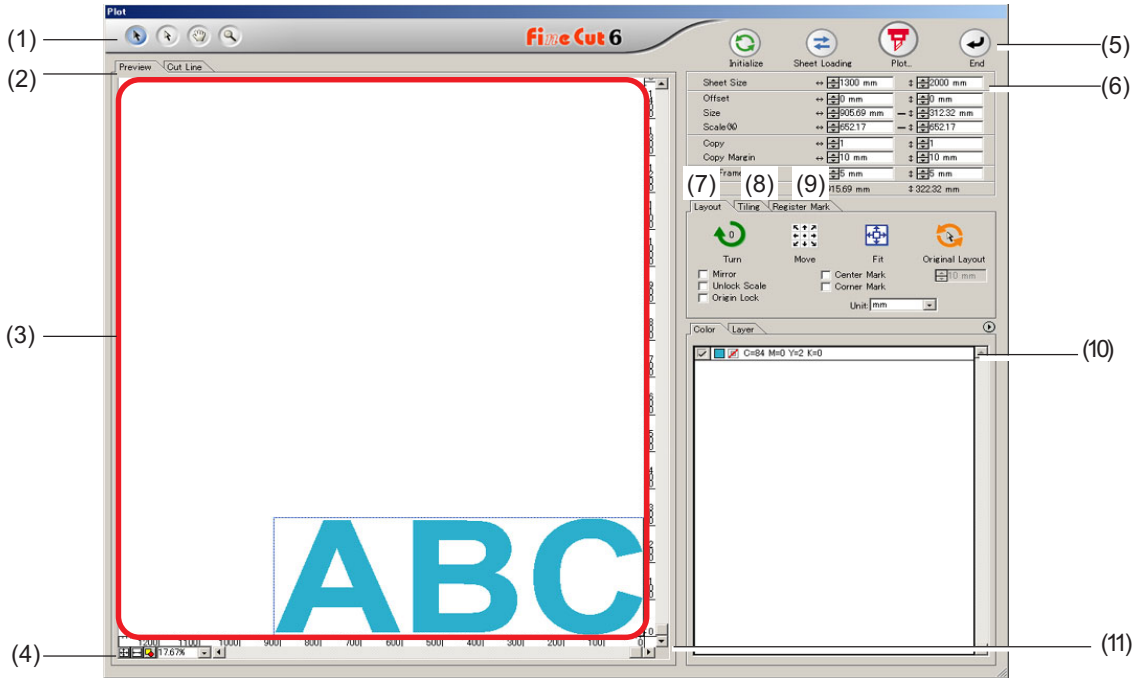
Two-point correction is performed at the time of register mark recognition.

**Output Condition Setup on each color/layer :**

The set output conditions are different on each color or layer.

## Plot Dialog

The following describes the Plot dialog.



### (1) Tool Box



Selection Tool:

Move or resize an entire object displayed currently.  
Shift the division line to tiling.



Direct Select Tool:

You can select part of an object and move it.  
It enables you to move an object to a blank position on the sheet for an effective use of the sheet.  
(Refer to page 80)



Move Preview Area Tool:

Change the object display area.



Zoom Tool:

Enlarge or reduce a window.

Click in the cut area to get the larger view. To get the smaller view, click in the cut area as pushing down the **Alt** key (Windows) or **Option** key (Macintosh).

## (2) Screen Display Mode

Enable to change the display mode. Objects are displayed in color in preview mode and as paths in artwork mode.




**Preview Mode :** Preview the color display.

**Cutline Mode :** Display the object with the path (outline).

It enables to confirm a white object and cutting-line with ease.

## (3) Layout Area

The white portion is the effective cutting area loaded from the sheet. In this area, the sheet width is displayed along the horizontal axis and the sheet length along the vertical axis.

If the object overflows from the cutting area, the  mark appears to the left of  Plot button. Click the  mark to display the contents of the error.

## (4) Zoom Size

The Current zoom size is displayed.




**Fit In Sheet Size :** Displays the entire sheet.



**Fit In Sheet Width :** Displays the sheet width.



**Fit In Objects Size :** Displays the enlarged object to fill the screen.

100.00% 

% :

Enable to change display size to select or enter percentage value.



## (5) Button



**Initialize :** Reserve the original layout as selecting with direct selection tool.



**Sheet Loading :** Loads the sheet size set to the plotter.



When the  mark is displayed to the left of  button, the sheet size of the plotter cannot be loaded.

Set the plotter to the REMOTE mode as clicking  button to load the sheet size.



**Plot :**

Display “Plot Out” dialog. (Refer to page 101)

When the  mark is displayed to the left of  button, the object overflows from the cutting area. Move the object to fit it into the cutting area.



**End :**

Closes the Plot dialog.



## (6) Size input area

Sheet Size	↔ 635 mm	↓ 810 mm
Offset	↔ 0 mm	↓ 0 mm
Size	↔ 333.2 mm	↔ 115.53 mm
Scale(%)	↔ 100	↔ 100
Copy	↔ 1	↓ 1
Copy Margin	↔ 10 mm	↓ 10 mm
<input checked="" type="checkbox"/> Frame	↔ 5 mm	↓ 5 mm
	↔ 343.2 mm	↓ 125.53 mm

### Sheet Size

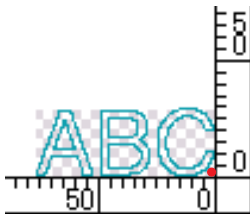
Displays the cutting area based on the size of the sheet set in the plotter.

Click on the sheet loading button to display the loaded sheet size. Alternatively, input the sheet size (width and length of the cutting area).

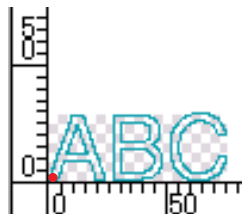
### Offset

The origin is set at the bottom right corner (Mimaki CG series) or the bottom left corner (Mimaki CF/CF2/DC series) of the layout area. The default origin is positioned at 0 mm (both vertically and horizontally) of the layout area. Change the value of the origin to move the object.

Mimaki CG Series



Mimaki CF/CF2/DC Series



### Size

Enable to change the vertical and horizontal lengths of an object.

When the values of the vertical and horizontal lengths are interlocked (the - mark is supplied to the bottom of Size), the aspect ratio is retained. Check the [Unlock Scale] check box to change the vertical and horizontal lengths separately.

### Scale (Refer to page 16)

Set the magnification of the vertical and horizontal lengths. When the value of vertical and horizontal lengths are interlocked (the - mark is supplied to the bottom of Size), the aspect ratio is retained. Check the [Unlock Scale] check box to change the vertical and horizontal lengths separately.

### Copy (Refer to page 20)

Enter the number of copies along the vertical and horizontal directions.

### Copy Margin (Refer to page 20)

Set the margin between objects along the vertical and horizontal directions.

### Frame

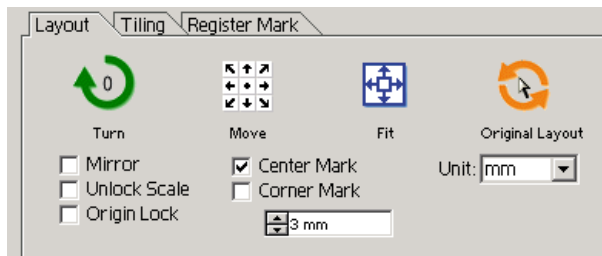
Cut a frame around the target object. In addition, settable the distance between the object and the frame. It enables to peel the purpose portion of the cutting sheet easily.

Marking the center and corners to align easily for affixing a cut seal. (Refer to page 18)

### Total Length

Usually the width and the height of an object are displayed. When entering the number copies for the copy function, the total lengths along the vertical and horizontal directions for all the copies are displayed. If margins and frames are set, the length values of them are included.

## (7) Layout Option



**Turn :** Rotates the object clockwise in unit of 90 degrees.



**Move :** Click on the desired direction of arrow to move the object to the target position.



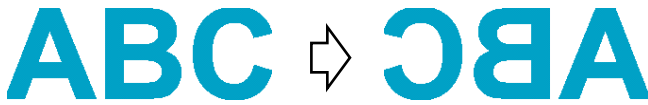
**Fit :** Fit the object to the detected sheet width.



**Original Layout :** Reserve the original layout by the direct selection tool.  
(Refer to page 81)

## Mirror

Inverts the object in mirror image to cut it.



## Unlock Scale (Refer to page 16)

The size of the object can be changed with variable aspect ratio.

## Origin Lock (Refer to page 39)

Lock the origin to retain the object position. Unlock the origin to cut an object with the selected color (or layer) without wasting sheets.

## Center Mark (Refer to page 18)

When setting a frame, puts a mark in the center of the frame in every direction. Use the mark to put the cut seal on the desired position.

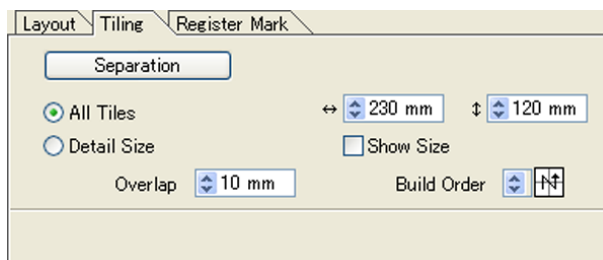
## Corner Mark (Refer to page 19)

When setting a frame, puts marks on all corners of the frame. Use the mark to put the cut seal in a horizontal position.

## Unit

Set the display unit in the plot dialog.  
Set the unit any of cm, mm, inch, or pt.

## (8)Tiling (Refer to page 22)



### Separation

After dividing an object, click this button to separate the divided block.

### All Tiles

Enter the tile size here.  
Divide the object into the same size.

### Detail Size

Click here to operate tiling optionally.

Shift the division line using  the selection tool.

### Show Size

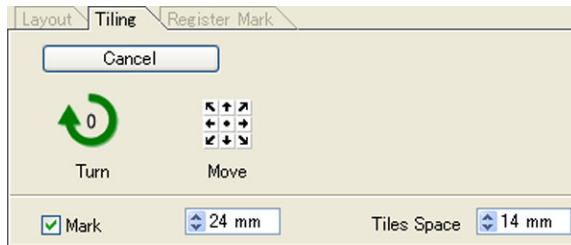
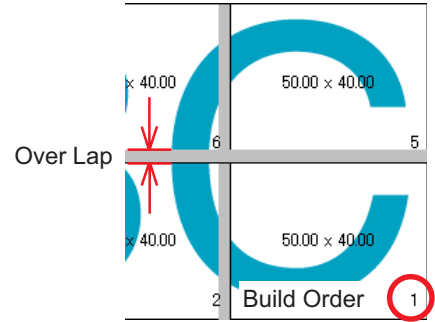
Click here to display the each tile size.

### Over lap

Set the tile overlapping margin.

### Build Order

Select the order to glue together the cut objects.



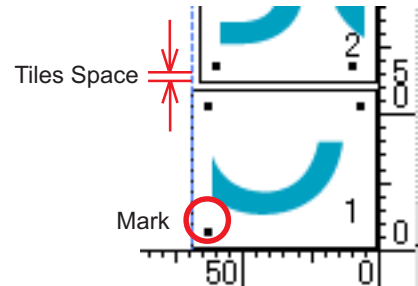
### Mark

Mark the divided object.

Match the marks to build up the object.

### Tiles Space

Set the tile cutting interval.



## (9) Register Mark

### Detect Mark Button

This function becomes effective only when a plotter indicated as [(with mark sensor)] in the [Model] of [Plotter/User Set up] screen.

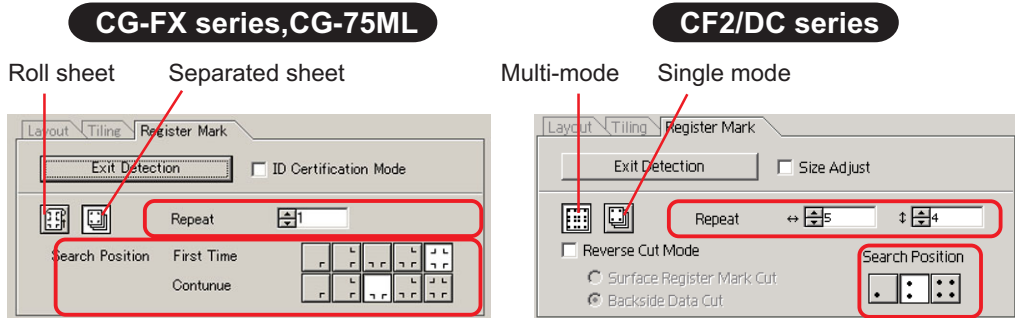
When Register Mark detect is performed on the cutting plotters with mark sensor, i. e. Mimaki CG-EX series, Mimaki CG-FX series, Mimaki CG-75ML or Mimaki CF2/DC series, the correction of angle and correction of size will be performed to the result of the Register Mark reading.

### Exit Detection Button

Cancel a register mark recognition.

### <Setting of continuous cutting>

When Mimaki CG-FX series, or Mimaki CG-75ML, Mimaki CF2/DC series are used, you can set the respective detection method of roll sheet (multi-mode) and separated sheet (single mode). (Refer to Pages 60 and 75)



#### Repeat

Set the number of times to detect continuously.

For roll sheet or multi-mode, set the number of data to each direction of 1 sheet. (Refer to Pages 61 and 75)

In the case of separated sheet or single mode, set the number of sheet to exchange. (Refer to Pages 65 and 75)

#### Search Position (1, 2, or 4 points for CF2/DC)

Select the place to detect the Register Mark of the first data.

Select the place to detect the Register Mark of the second and subsequent data. (You cannot set made with CF2/DC series).

#### Reverse Cut Mode (Refer to Page 78)

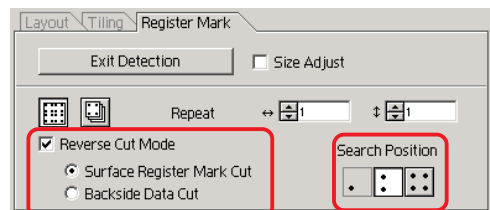
In case you use Mimaki CF2/DC series, you can select Reverse Cut Mode in which the media can be cut from the backside.

##### Surface Register Mark Cut

The Register Mark is cut in cross from the front surface.

##### Backside Data Cut

Data is cut from the back.



#### Search Position

Select the position to search the Register Mark.

In the case of [Surface Register Mark Cut], you can select 2 points or 4 points, and in the case of Backside Data Cut, you may select 1 point, 2 points or 4 points.

### Mark Separation (Refer to Page 76)

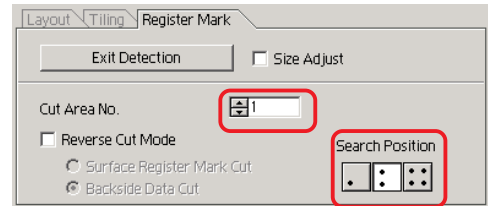
In case you use Mimaki CF2/DC series, you can use [Mark Separation] which will cut data in multiple times ( 2 - 5 times) separately.

#### Cut Area

Select the area to cut.

#### Search Position

Select the position to search the Register Mark.

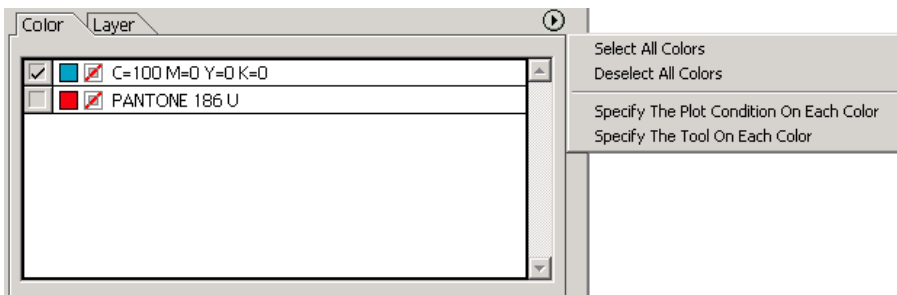


### (10) Selection List (Refer to page 38)

Select color-based or layer-based object cutting pattern. The selected option is displayed in the bottom list. Execute the tiling function to display the tile list.

Only the checked objects are cut. In the color list, select the fill color and stroke color to display each object information.

Click on the button on the upper right to specify the output condition. (Refer to page 45)

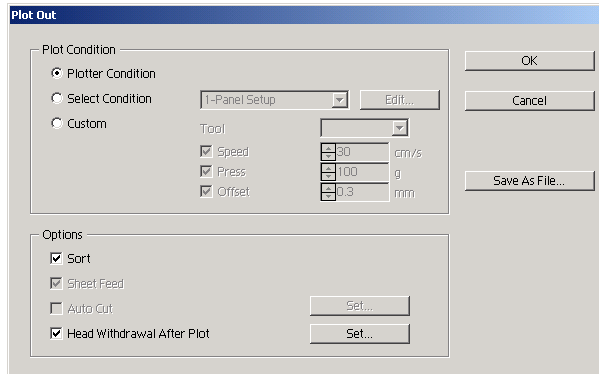


### (11) Resize

When changing the dialog size, drag the dialog to a desired size while holding down the mouse button.

## Plot Out Dialog

When clicking  Plot button, the Plot Out dialog appears.



### 1) Plot Condition

Select the output condition.

**Plotter Condition :** Plots by the output condition on the plotter.

**Select Condition :** Plots by the output condition on the FineCut.

Click **Edit** button to add media, or set cutting conditions by media types. (Refer to Pages 41 and 89)

**Custom :** Enables to specify the output condition without registering the conditions.

#### NOTE!

In the case of specifying output conditions or tools on each color or layer, you can not edit in this screen.

### (2) Option

#### Sort

Mimaki CG series performs sorting for efficient cutting with minimum useless head movement. In the case of Mimaki CF/CF2/DC series, sorting is made to reduce the waste movement of the head as much as possible and to cut the objects located inside in preference. Moreover, in the case of specifying output conditions or tools on each color or layer, the sorting will be performed for each color and layer and cut sequentially from the color and layer upper listed.

#### Sheet Feed (MGL-IIc for Mimaki CG series only)

Before cutting, confirm the performance as feeding the sheet to check whether the entire data can be cut.

#### NOTE!

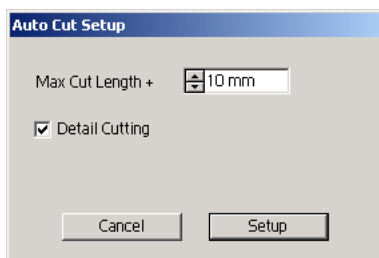
If plotting fails, an error is displayed on the plotter. Stop plotting, reset the sheet, then restart plotting.

## Auto Cut

When in use of Mimaki CG-FX series, the function is effective.

When performing continuous cutting on a roll sheet, cut off the sheet automatically after completing the performance.

Click **Set** button to set the following information. (Refer to page 62)



### Max Cut Length

Set the maximum length from the last plotted line to the cutting point.

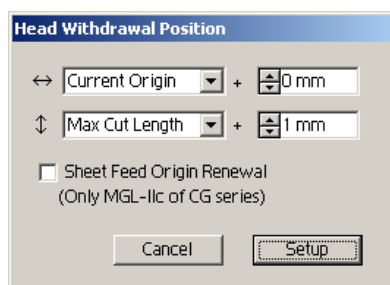
### Detail cutting

Check the box to cut a data at every line.

## Head Withdrawal After Plot

After data output, the head moves to make it easier to check data.

Click **Set** button to set the following information. (Refer to page 49)



### Head withdrawal position for the horizontal direction

Set the head withdrawal position for the horizontal direction.

Reference position selectable from either [Current Origin] or [Max Cut Width].

### Head withdrawal position for the length direction

Set the head withdrawal position for the length direction.

Reference position selectable from either [Current Origin] or [Max Cut Length].

### Head withdrawal position as the origin position

Set the head withdrawal position for the length direction.

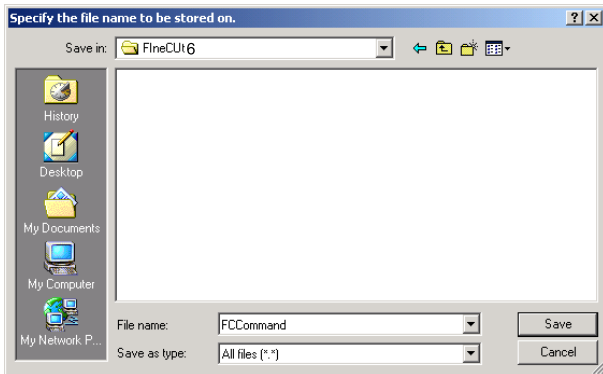
**NOTE!**

Origin Update is effective only with MGL-IIc for Mimaki CG series.



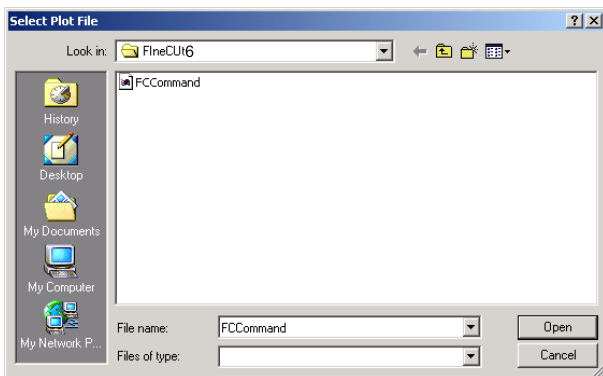
### 3) Save As File

Select **Save As File** to save the plot data as a plot file.



Select the folder, and then click **Save** to save the file.

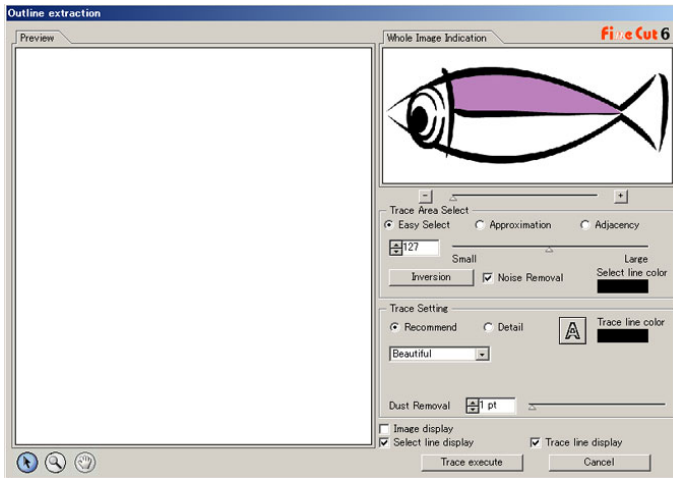
The saved plot file is able to output from [FineCut] in the [file] menu and select [Output Plot File].



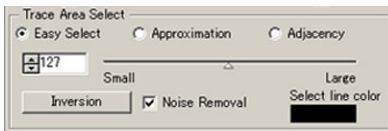
Select the file, and then click **Open** to plot start.

## Extract the out line Dialog

Refer to the following description on Outline Extraction dialog box.



### 1) TraceArea Select



**EasySelect:** Select the trace area based on luminance of image. (Select range: 2-255)

**Approximation:**

Select an approximate color of the color specified on the preview screen from Whole Image Indication.

**Adjacency:** Select the same color area as connected to the location specified on the preview screen.

**Selectlinecolor:**

Select the line color shown on the preview.



More accuracy can be extracted by decreasing the slider value for approximation and adjacency in Trace Area Select.



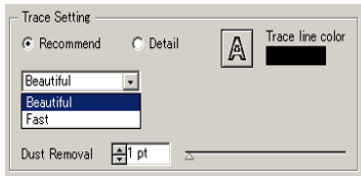
In order to make a smooth line, check a checkbox for Noise Removal.



To inverse the select area, click Inversion button.

## 2) TraceArea Setting

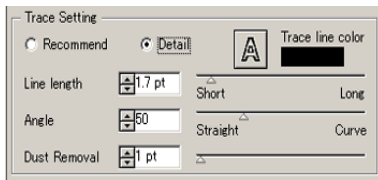
### Recommended setting



**Beautiful:** Outline is elaborated in detail.

**Fast :** Extraction processing time is fast but it causes rough outline in detail.

### Detail setting



**Line length:** Specify a length for one line. The shorter the line becomes, the more elaborated it turns out in detail.

**Angle:** Specify an angle for the top shape of the line. The lower the angle becomes, the straighter the line turns out, and the higher angle, the more curvilinear the line turns out.

**Dust removal:** The line is deleted by the shorter part than the specified length. Remove the extra lines created by scanning.

**Image display:** Display the image to be traced. Able to compare the image and trace result.

**Select line display:** Display the selected line area to be traced.

**Trace line display:** Display the trace result.



In case only the outline is required instead of trace, click A button.



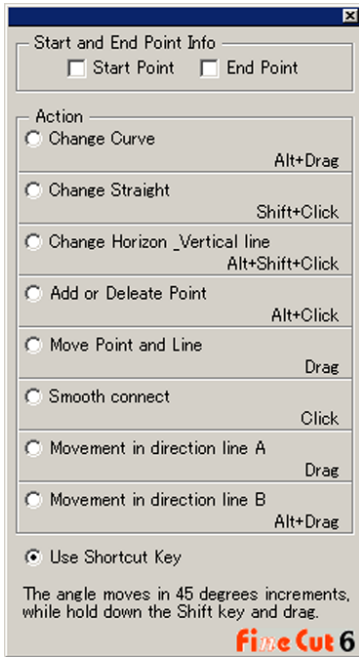
Checking [A Image is displayed] enables to confirm the outlines with the preview image of [Trace Result].

## Line Edit Tool dialog

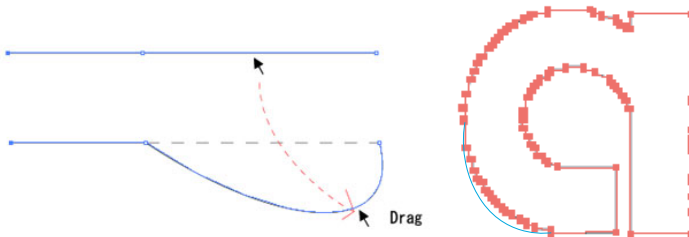
Refer to the following description on Line Edit dialog box.

Specify Start Point and End Point and edit the existing multiple lines altogether at once. And it is also possible to edit the lines one by one.

After specifying the Star Point and End Point, perform the edit operation.

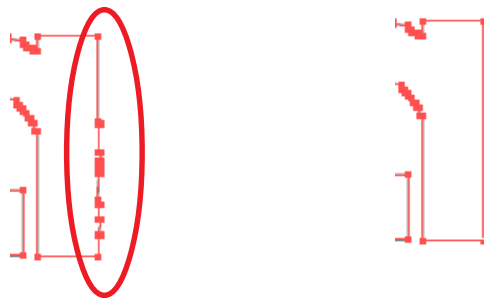
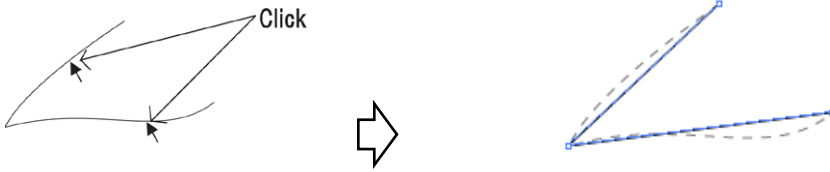


**Change Curve:** Change the line between the Start Point and End Point to curve. Select the Start Point and End Point and drag the line.



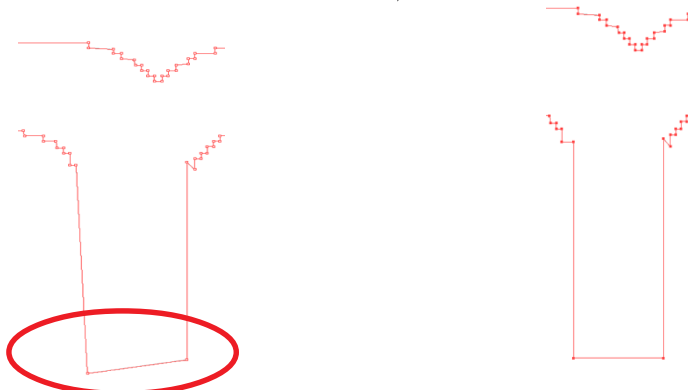
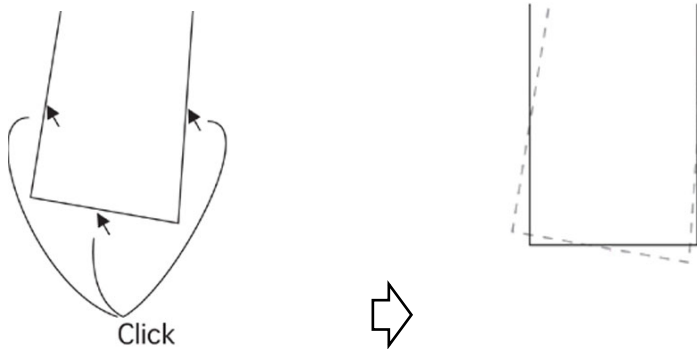
DRAG

**Change Straight:** Change the line between the Start Point and End Point to Straight line.  
Select the Start Point and End Point and click along the line.



**Change Horizontal or Vertical line:**

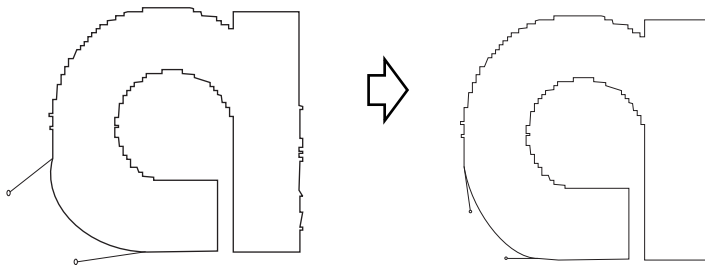
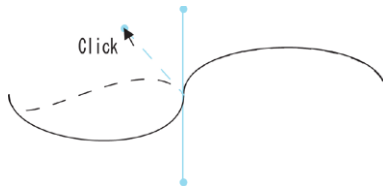
Click along the line to change to a horizontal line or a vertical line. The line can be measured as a horizontal line or a vertical line from an angle of the clicked line.



**Add or Delete Point:** To add the anchor point, click the position on the line where the anchor point is added. To delete the anchor point, click on the relevant anchor point.

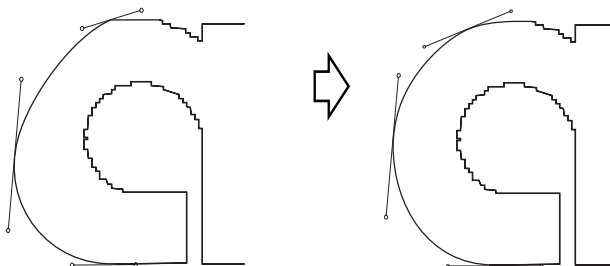
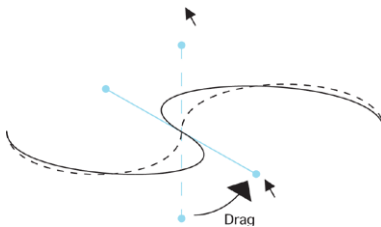
**Move Point and Line:** Move the line while maintaining the shape between Start Point and End Point.

**Smooth correct:** Set the control point at identical tilt and smooth the joint of the line.

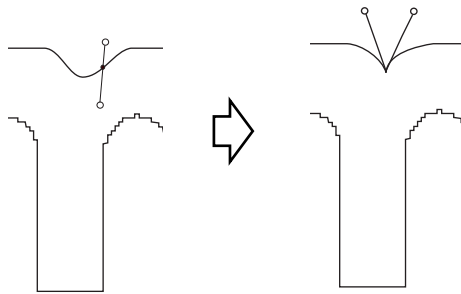
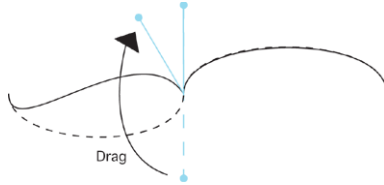


#### **Movement in direction line A:**


Move the control point to change the curvilinear shape. In this case, move the control point also in opposite side to smooth the joint of the line.



**Movement in direction line B:** Move only the selected control point to change the curvilinear shape.



## Cannot change the sheet size

- When the MGL-IIc commands are used, the sheet size remains unchanged even if shifting the origin on the plotter and click  Sheet Loading button. In this case, the sheet size set in the plotter is always displayed. Even if the data fits into the cutting area in the layout area, the data may cut overflowed.
- When the MGL-Ic commands are used, the effective cutting area is displayed. Therefore, even if shifting the origin on the plotter side, it can be cut normally so long as the data fits into the cutting area.

## Memory runs out during stroke weight and overlap recognition frame extraction and Outline extraction

Stroke weight and overlap recognition, frame extraction, and outline extraction requires large amount of memory for the complicated objects. Depending on the specifications of the machine, the target object may not be processed because of insufficient memory. In this case, depending on the object type, you may avoid insufficient memory error by splitting the object into several pieces and executing the processing multiple times, instead of selecting the entire object and executing the process at one time.

For Outline extraction, you may avoid insufficient memory error by lower the resolution.

Example 1: Select each component and execute the processing separately to recognize the stroke weight and overlap for a complicated object with a separate title, instead of selecting the entire object. In case any overlaid portion exists, select only overlaid portion to execute the process.

Example 2: Select only outer frame to perform frame extraction to extract the frame a complicated object with an outer frame. It enables to process without wasting memory rapidly.




## Communication port error or Error No.1 occurs while plotting

The following error message appears as clicking  Plot button during FineCut in use.



- On the Windows version, a communication port error or Error No.1 occurs if using a driver software for the tablet, printer driver, or other peripheral devices which uses the serial port. In this case, change the setting to use other port.
- On the Macintosh, the plotter-command port may have already been used by AppleTalk. In this case, disable AppleTalk from the selector. Alternatively, select a plotter-unconnected port, from the AppleTalk control panel document. When the plotter is connected to the printer port, select the modem port or Ethernet.



### **Inferior plotting when executing [Frame Extraction],[Create Weed Line], or [Create Shadow/Edge] on the wrap-around text which created by the wrap-around text**

If executing [Frame Extraction],[Create Weed Line], or [Create Shadow/Edge] on the wrap-around text which created by the IllustratorCS/CS2 -[Object]-[Text Wrap]-[Make Text Wrap], it results in inferior plotting. Make sure to create out-line text by the [Type]-[Create Outlines] to obtain the good result.

### **Invalid path created in the object when creating edge**

Depends on the shape of the path, invalid path may be created in the created edge. In the case, set the smaller offset value for creating edge, or change the shape of the angle.

### **Cannot delete the shadow or edge created in [Create Shadow/Edge]**

If editing a shadowed or edged path created in [Create Shadow/Edge], it may not be able to delete even if executing [Remove Shadow/Edge]. In the case, execute [group] of the shadowed/edged path, and then manually delete the shadow/edge.



