Changes in Ver.1.9.5

The following features have been added or changed in Clip Studio Paint Ver.1.9.5.

New functions to Clip Studio Paint in Ver.1.9.5 are marked with a * in the text.

New interface

The User interface has been completely overhauled. All icons and user interface colors have been renewed.

Changes to Clip Studio Paint DEBUT, PRO and EX

Settings List (Alphabetical Order)

- "Object *"
  The [Object] category has been added. It allows you to configure the display method of the 3D Object when a 3D material is selected with the [Object] sub tool.

- "Camera"
  The position of items have changed. You can use the same functions as before.

- "Reference"
  [Exclude from reference] can be set from the pull-down menu.

- "Select layer"
  [Exclude from reference] can be set from the pull-down menu.

Tools and Sub Tool Categories

- "Object (3D object material) *"
  The [Object] category has been added.

Changes made to Clip Studio Paint PRO/EX

Settings List (Alphabetical Order)

- "Preference"
  [Physical Simulation] has been added. Enables/disables physical operation for 3D character materials.

- "Body shape"
  [Register Material] has been added. Registers the configured 3D drawing figure's body shape in the [Material] palette.

- "Allocate"
  - [Reset] has been added to [Object Scale]. This resets a 3D material to its initial state if it has had its size changed using the [Object Scale] or root manipulator.
  - [Reset] has been added to [Whole rotation]. This resets the rotation of a 3D material to its initial state if rotated by the movement manipulator or root manipulator.

- "Font"
  [Color] has been added. You can change the color of selected text.

- "Pose"
  - [Lock/release joint] has been added. You can lock the joint of the selected part.
  - [Lock/release joint] has been added. All joints set for 3D drawing figures and 3D character materials are released.
[Register full body pose as material], [Register left hand pose as material] and [Register right hand pose as material] have been added. Poses created for 3D drawing figures and 3D character materials can be registered to the [Material] palette.
Before You Read This Guide

Thank you for choosing CLIP STUDIO PAINT. The following describes points to keep in mind when reading this guide.

About This Guide

This guide is an introduction to the settings of tools and sub tools of CLIP STUDIO PAINT. It describes each of the items on the [Tool Property] palette, including the [Sub Tool Detail] palette.

See the “Clip Studio Paint Instruction Manual” for more details.

Notations in This Guide

This guide (including data) has been prepared and edited based on the product program available as of January 2020 and may differ from the actual product program specifications.

Signs

This guide uses signs to indicate explanations related to operations. The signs have the following meanings.

- **Important**: Indicates items that may be easily mistaken or matters to be aware of when using CLIP STUDIO PAINT.

- **Memo**: Indicates tips and supplementary information useful when using CLIP STUDIO PAINT.

About Operations Described in This Guide

Operations in this guide are described based on the Windows version unless otherwise noted.

If you are a mac OS user or iPad user, replace and read as indicated below. When replaced, operation on both Windows, mac OS, and iPad have the same meaning.

For key controls on an iPad, the edge keyboard is available. See the “Clip Studio Paint Instruction Manual” for more details.

<table>
<thead>
<tr>
<th>Windows</th>
<th>macOS</th>
<th>iPad</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Alt] key</td>
<td>[Option] key</td>
<td>[Option] key</td>
</tr>
<tr>
<td>[Ctrl] key</td>
<td>[Command] key</td>
<td>[Command] key</td>
</tr>
<tr>
<td>[Enter] key</td>
<td>[Return] key</td>
<td>[Return] key</td>
</tr>
<tr>
<td>[Backspace] key</td>
<td>[Delete] key</td>
<td>[Delete] key</td>
</tr>
</tbody>
</table>
| Right click (mouse button) | Mouse click with the [Control] key down | ● Tap while pressing the [Control] key  
|                     |                      | ● Long press with finger. |

References

References to other parts of this guide as well as other documents are indicated by using “” (double quotation marks).
**About product edition**

CLIP STUDIO PAINT is available in three editions: DEBUT, PRO, and EX. This guide describes the operating procedures of all three editions. Functions restricted to an edition are marked with a symbol indicating the edition.

<table>
<thead>
<tr>
<th>Unmarked</th>
<th>Indicates a function common to CLIP STUDIO PAINT DEBUT, PRO and EX.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[DEBUT]</td>
<td>Indicates a function available only in CLIP STUDIO PAINT DEBUT.</td>
</tr>
<tr>
<td>[PRO]</td>
<td>Indicates a function available only in CLIP STUDIO PAINT PRO.</td>
</tr>
<tr>
<td>[EX]</td>
<td>Indicates a function available only in CLIP STUDIO PAINT EX.</td>
</tr>
</tbody>
</table>

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**About AI features**

When using the pose scanner, the image data is uploaded to an AI server that interprets the data and processes the image.

Data is managed in the following way when using AI features.

- When using these features, personal information such as the product serial number or Clip Studio account will not be uploaded to the server.
- After the process is complete, the uploaded data and the generated data are completely deleted from the server, and Celsys does not retain any such data.
- Celsys temporarily retains the User data and resulting data until the function’s process is complete and the data is deleted. During this period, all intellectual rights to the data is retained by the user. The image data is not released outside of Celsys.
### Initial Configuration of Tools

The initial configuration of the tools has been changed from Ver.1.6.2. If you are using a previous version of Clip Studio Paint, the tool configuration in your version may differ from this manual. If you cannot find a tool, see the table below.

<table>
<thead>
<tr>
<th>Ver.1.5.4 and earlier</th>
<th>Ver.1.6.0 and later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contour line paint</td>
<td>&quot;Gradient (Contour line paint)&quot;</td>
</tr>
<tr>
<td>Figure (Rectangle frame) [PRO/EX]</td>
<td>&quot;Frame Border (Rectangle frame) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Polyline frame) [PRO/EX]</td>
<td>&quot;Frame Border (Polyline frame) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Frame border pen) [PRO/EX]</td>
<td>&quot;Frame Border (Frame border pen) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Divide frame folder, Divide frame border)</td>
<td>&quot;Frame Border (Cut frame border) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Linear ruler) [PRO/EX]</td>
<td>&quot;Ruler (Linear ruler) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Curve ruler) [PRO/EX]</td>
<td>&quot;Ruler (Curve ruler) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Figure ruler) [PRO/EX]</td>
<td>&quot;Ruler (Figure ruler) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Ruler pen) [PRO/EX]</td>
<td>&quot;Ruler (Ruler pen) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Special ruler/Guide) [PRO/EX]</td>
<td>&quot;Ruler (Special ruler/Guide) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Perspective ruler) [PRO/EX]</td>
<td>&quot;Ruler (Perspective ruler) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Figure (Symmetrical ruler) [PRO/EX]</td>
<td>&quot;Ruler (Symmetrical ruler) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Text (Ellipse balloon) [PRO/EX]</td>
<td>&quot;Balloon (Ellipse balloon) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Text (Curve balloon) [PRO/EX]</td>
<td>&quot;Balloon (Curve balloon) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Text (Balloon pen) [PRO/EX]</td>
<td>&quot;Balloon (Balloon pen) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Text (Balloon tail/Thought balloon tail) [PRO/EX]</td>
<td>&quot;Balloon (Balloon tail/Thought balloon tail) [PRO/EX]&quot;</td>
</tr>
<tr>
<td>Text (Flash) [PRO/EX]</td>
<td>&quot;Balloon (Flash) [PRO/EX]&quot;</td>
</tr>
</tbody>
</table>
How to Use the Manual

This chapter describes how to find the desired information using the manual. There are two methods to find information in the manual: using the Table of Contents and using the search function.
Finding Information from the Table of Contents

The description of the setting items of the [Sub Tool Detail] palette are described in "Settings List (Alphabetical Order)". The items are sorted by category and arranged in alphabetical order. If you click the item of the information you want to see, the information is displayed on the right.

About the Table of Contents of this Document

This document introduces functions for each category of the [Sub Tool Detail] palette and the [Tool Property] palette. To find information from the Table of Contents, it is recommended to find the category name first.

The settable categories vary according to the tool or sub tool. For the settable categories for each tool and sub tool, see "Tools and Sub Tool Categories".
If you press [Ctrl]+[F] key, the search field is displayed in the window of the manual. If you enter the character string to search and press the [Enter] key, a page including the matched term is displayed.

If no information you want to find is included, click the [Find next] icon on the right of the search field and then another page will be displayed.

A page including the input term displays.
Settings List (Alphabetical Order)

This chapter is a list of on the [Sub Tool Detail] palette, described by category. The items are arranged in alphabetical order.
Adjust line width [PRO/EX]

Allows you to configure how to increase or reduce line width when a [Vector layer] or [Balloon layer] is selected with the [Adjust line width] sub tool.

1. **Thicken width**
   Adds the numerically specified line width to the current line width.

2. **Narrow**
   Subtracts the numerically specified line width from the current line width.

3. **At least 1 pixel**
   Leaves only the central one-pixel line without erasing the line when setting [Narrow] to [Raster layer].

4. **Scale up width**
   Specifies scale up as a ratio of the current line width.

5. **Scale down width**
   Specifies scale down as a ratio of the current line width.

6. **Fix width**
   Changes the line width to the specified value.

7. **Process whole line**
   When turned on, clicking a point on the line applies [Adjust line width] to the entire line.

8. **Add control point**
   When turned on, adds a control point when correcting line width to smoothen the line width.

   **Memo**
   [Add control point and correct] cannot be set when [Process whole line] is turned on.

9. **Smoothening range**
   Allows you to set the range in which to smoothen the line width when correcting line width with [Add control point and correct] turned on.

![Smoothening range diagram](image.png)
Allocate

Allows you to configure the position of the 3D material when a 3D material is selected with the [Object] sub tool.

Some settings may not display depending on the selected 3D material.

(1) Object List

A list of 3D materials included in the same layer as the 3D material being edited. You can also switch to the camera or light source settings window by selecting a setting item.

- [Parallel light] and [Ambient light] cannot be configured if a 3D material compatible with Version 1.5 is selected. To configure a light source, see “Light Source”.
- You can scroll through the Object list by dragging on the [Object list] while holding down the [Space] bar.
- In PRO or EX, you can also use the [Object list] category. The [Object list] in the [Object List] category can be enlarged. This is useful when you need to select 3D objects with many parts. For details, see “Object List [PRO/EX]”.

When a 3D Character Material Is Selected.

When 3D object material or 3D background is selected.
## Settings List (Alphabetical Order) > A > Allocate

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) <strong>Show/Hide</strong></td>
<td>Toggles between showing/hiding 3D materials and parts included in 3D materials. Hidden 3D materials and parts cannot be edited. [Camera] cannot be configured.</td>
</tr>
<tr>
<td>(2) <strong>Lock</strong></td>
<td>Locks 3D materials so that they cannot be edited. Clicking toggles the lock on and off. Please note that even when the lock is On, the camera angle of the entire 3D layer, etc. can still be changed.</td>
</tr>
<tr>
<td>(3) <strong>Toggle selection</strong></td>
<td>This enables or disables selection on a 3D material. When selection is enabled, you can select individual parts of 3D materials that contain multiple parts.</td>
</tr>
</tbody>
</table>
| (4) **Camera** | Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Camera related settings list. For details on settings that can be configured when [Camera] is selected, see “Settings that can be configured when [Camera] is selected”.

Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Ambient light related settings list. For details on settings that can be configured when [Ambient light] is selected, see “Settings that can be configured when [Ambient light] is selected”.

Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Parallel light related settings list. For details on settings that can be configured when [Parallel light 1] is selected, see “Settings that can be configured when [Parallel light] is selected”.

Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Parallel light related settings list. For details on settings that can be configured when [Parallel light 2] is selected, see “Settings that can be configured when [Parallel light] is selected”.

**Material name**
Name of the 3D material. Click the material name to switch the edit target to the clicked 3D material.

**Open/Close Parts**
Sets whether to display the names of parts included in materials in the [Object List] when loading 3D object materials containing pose parts and 3D materials in LWS format.

**Part Name**
Displays the names of parts included in 3D materials when loading 3D object materials containing pose parts and 3D materials in LWS format. Click the part name to switch the edit target to the clicked part. You can change the position and orientation of parts using the drag operation or [Tool Property] palette.

---

**(2) Reset**

Resets a 3D material to its initial state if it has had its size changed using the [Object Scale] or root manipulator.
(3) **Object scale**

Scales up/down the selected 3D material. Moving the slider to the right scales up the 3D material.

![Object scale image](image)

When [Object scale] for the 3D character material is increased.

(4) **Ground**

Grounds the 3D material to the base (floor) of the 3D space.

**Memo**

Base of the 3D space means the grid displayed when a 3D material is clicked. It is equivalent to the floor of the 3D space.

(5) **Position**

Moves the position of the 3D material. This function moves the position of the selected part in a 3D material when 3D object materials containing pose parts or 3D materials in LWS format are loaded.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Moves the 3D material horizontally.</td>
</tr>
<tr>
<td>Y</td>
<td>Moves the 3D material vertically.</td>
</tr>
<tr>
<td>Z</td>
<td>Moves the 3D material back and forth.</td>
</tr>
</tbody>
</table>

(6) **Reset** *

Resets the rotation of a 3D material to its initial state if rotated by the movement manipulator or root manipulator. You can also reset them to their initial state with [Rotate] or [Rotate all].

(7) **Whole rotation**

Rotates 3D drawing figures and 3D character materials.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Rotates 3D drawing figures and 3D character materials along the X axis.</td>
</tr>
<tr>
<td>Y</td>
<td>Rotates 3D drawing figures and 3D character materials along the Y axis.</td>
</tr>
<tr>
<td>Z</td>
<td>Rotates 3D drawing figures and 3D character materials along the Z axis.</td>
</tr>
</tbody>
</table>
(8) Partial rotation
Rotates the selected part of a 3D drawing figure or a 3D character material.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Rotates the selected part in the X-axis direction.</td>
</tr>
<tr>
<td>Y</td>
<td>Rotates the selected part in the Y-axis direction.</td>
</tr>
<tr>
<td>Z</td>
<td>Rotates the selected part in the Z-axis direction.</td>
</tr>
</tbody>
</table>

Memo
If [Joint angle limit] is turned on for [Pose] on the [Sub Tool Detail] palette, the rotation of a part may be limited.

(9) Rotate[PRO/EX]
Rotates a 3D object material. If you import a 3D object material containing pose parts or a 3D material in certain formats such as LWS format, you can select a and rotate individual parts.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Rotates a 3D object material or a selected part around the X axis.</td>
</tr>
<tr>
<td>Y</td>
<td>Rotates a 3D object material or a selected part around the Y axis.</td>
</tr>
<tr>
<td>Z</td>
<td>Rotates a 3D object material or a selected part around the Z axis.</td>
</tr>
</tbody>
</table>

Settings that can be configured when [Camera] is selected
When [Camera] is selected from the [Object List], you can configure settings such as the camera angle of 3D layers. To return to the original settings, select the 3D material in the [Object List].

(1) Angle
This setting cannot be configured in this window.

Memo
[Angle] can be set by selecting the [Camera] category of the [Sub Tool Detail] palette. For details, see "Camera".

(2) Perspective
Adds perspective to the 3D material.
The larger the value, the larger the angle of view will be. The smaller the value, the smaller the angle of view will be.

Memo
Turn on [Link camera advancing/retreating] to link camera movements with a fixed focal point and focal frame.

(3) Link camera advancing/retreating
When turned on, this links camera movements when adjusting the perspective.
When turned off, with the camera position fixed, only the angle of view of the canvas camera changes even when the perspective is adjusted.

Memo
In EX, you can check the position of the camera and focal point on the [All sides view] palette.

(4) Roll
Rotates the camera with its position fixed.

(5) Camera position
Moving the [X], [Y] and [Z] sliders allows you to move the camera position with the focal point fixed.
(6) **Focal point Position**
Moving the [X], [Y] and [Z] sliders allows you to move the focal point position with the camera position fixed.

### Settings that can be configured when [Ambient light] is selected
When [Ambient light] is selected from the [Object List], you can configure settings for the ambient light on 3D layers. Ambient light is light that evenly covers a 3D material from all directions. To return to the original settings, select the 3D material in the [Object List].

1. **Color**
   Configures the color of the ambient light. Clicking the color indicator displays the [Color settings] dialog box.

2. **Intensity**
   Configures the intensity of the ambient light. The larger the value, the brighter the light will be.

### Settings that can be configured when [Parallel light] is selected
When [Parallel light 1] or [Parallel light 2] is selected from the [Object List], you can configure settings for the parallel light on 3D layers. Parallel light is light that covers a 3D material from a specific direction. Up to two parallel light items, [Parallel light 1] and [Parallel light 2], can be configured. To return to the original settings, select the 3D material in the [Object List].

1. **Parallel light direction**
   Allows you to configure the orientation of the light source of the parallel light by dragging a circle.

2. **Diffused light color**
   Configures the color of the diffused light. Clicking the color indicator displays the [Color settings] dialog box.

3. **Diffused light intensity**
   Configures the intensity of the diffused light. The larger the value, the stronger the diffused light will be.
Anti-aliasing

Allows you to configure anti-aliasing for lines, borders, and so on.

The [Anti-aliasing] category may not be available for layers whose [Expression color] is [Monochrome].

(1) Anti-aliasing

Applies anti-aliasing to lines. With anti-aliased lines, you can draw smoother outlines as jags are smoothed. Select [None] when not applying anti-aliasing. When applying, you can select its strength from [Little], [Moderate] and [Strong].

In addition, the following tools and sub tools are provided with a check box to specify whether or not to enable anti-aliasing.

- Marquee (Shrink selection)
- Auto select
- Fill tool (Refer only to editing layer, Refer other layers, Close and fill, Fill leftover areas)
- Gradient

Anti-overflow

 Allows you to draw without running over the lines drawn on the reference layers.

(1) Do not cross lines of reference layer

Draws by referring to the reference layers to not run over the lines.

When the brush tip runs over a line, only the side that includes the brush tip center is drawn.

(2) Stop filling up to vector path [PRO/EX]

When vector layers are referred to, the vector center lines are referred to stop filling.

(3) Color margin

Configures the color margin (tolerance) to recognize a color as the same as that of a line drawn on the reference layer. The larger the value, the larger is the tolerance to include areas in different colors.

(4) Area scaling

Draws an area enlarged or reduced from the original by the number of specified pixels.
(5) **Scaling mode**

Configures the shape of corners of the scaled area when [Area scaling] is turned on.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectangle</td>
<td>Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area often becomes rectangular.</td>
</tr>
<tr>
<td>Round</td>
<td>Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area becomes round as angles are rounded off.</td>
</tr>
<tr>
<td>To darkest pixel</td>
<td>Recognizes the area with the darkest color (area with highest opacity) and draws up to that area.</td>
</tr>
</tbody>
</table>

---

**Audio**

You can adjust the following settings in the [Sub Tool Detail] palette when an audio layer is selected with the [Object] sub tool.

(1) **Start time**

You can adjust the start time of audio files. This is useful when you want to start playing part-way through an audio clip.

Set the time using the frame value using the same frame rate as the [Timeline] palette. Set the [Start time] to 0 to play the audio file from the beginning.

You can register a [Start time] setting to an audio clip on the [Timeline] palette. This setting cannot be registered to keyframes.

(2) **Volume**

You can adjust the playback volume of audio files. Volume settings will be registered to the [Timeline] palette as keyframes.

(3) **Previous keyframe**

Moves to the previous keyframe for the [Volume] setting.

(4) **Add/delete volume keyframe**

Adds or deletes keyframes for volume.

- Click this to add a keyframe to the [Timeline] palette.
- If you change [Volume] settings, a diamond icon (♦) will appear and a keyframe will be added to the [Timeline] palette.
- If you click the box when it has a diamond (♦), the icon will disappear and the keyframe will be deleted from the [Timeline] palette.

(5) **Next keyframe**

Moves to the next keyframe for the [Volume] setting.
Balloon [PRO/EX]

Allows you to configure a color for the balloon's line and the fill color when a balloon is selected with the [Object] sub tool.

(1) Line/Fill

Configure whether to draw the balloon's line and/or ground.

<table>
<thead>
<tr>
<th>Create fill</th>
<th>Fills the balloon's ground. No outline is drawn for the balloon.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create line</td>
<td>Draws the balloon using only outline.</td>
</tr>
<tr>
<td>Create line and fill</td>
<td>Draws the balloon's outline and fills the ground. The drawing colors for the outline and ground can be specified by [Line color] and [Fill color].</td>
</tr>
</tbody>
</table>

(2) Line color

Configures the color for the balloon's line. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

(3) Fill color

Configures the color for painting the inside of the balloon. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

(4) Fill opacity

Configures the balloon’s fill opacity.

[Fill opacity] is not available for balloon layers whose [Expression color] is [Monochrome].
Balloon tail [PRO/EX]

Allows you to configure the type of tail, its width and the like when using a tool or sub tool for creating a balloon tail.

(1) **Type of balloon tail**

Configures the type of tail. You can select from [Normal] and [Rounded].

<table>
<thead>
<tr>
<th>Type of balloon tail</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Draws a linear tail that does not bend.</td>
</tr>
<tr>
<td>Rounded</td>
<td>Draws a linear tail connecting multiple points.</td>
</tr>
<tr>
<td>Spline</td>
<td>Draws a curved tail connecting multiple points.</td>
</tr>
</tbody>
</table>

(2) **How to bend**

Configure how to bend the balloon tail.

- **Straight line**: Draws a linear tail that does not bend.
- **Polyline**: Draws a linear tail connecting multiple points.
- **Spline**: Draws a curved tail connecting multiple points.

For how to draw a tail, see "Explanation: Balloons and Text" in "CLIP STUDIO PAINT Instruction Manual".

(3) **Width of tail**

Using the slider, configure the width of the tail at its base.
Body shape
You can now change the body shape of 3D drawing figures.

1. **Initial body shape**
   This button resets the 3D drawing figure to its initial body shape and dimensions.

2. **Register Material [PRO/EX] ***
   Registers the configured 3D drawing figure's body shape in the [Material] palette.

3. **Height**
   You can change the height of the 3D drawing figure.

4. **Head to body ratio**
   You can change the head-to-body ratio of the 3D drawing figure.

5. **Adjust head to body ratio with height**
   When this is turned on, the head-to-body ratio automatically changes when you adjust the height. When you adjust the head to body ratio manually, this option turns off.

6. **Select parts**
   You can select the body parts of the 3D drawing figure that you want to adjust. You can select the full body, head, neck, shoulders, torso, waist, arms, hands, legs, and feet.
   - If the display area of the [Tool Property] palette is too small, the parts selection area will not display. In that case, click a part name to pop up the parts selection area.
   - To select the shoulders or waist, use the 3D drawing figure Ver.2.

7. **Part name**
   The name of the selected part shows here.

8. **Reset**
   This resets the 2D sliders to the initial settings.
   The settings of the currently selected part will be reset.
   If the full body is selected, the full body will revert to its initial settings. However, settings for individual parts will remain the same.

   **Memo**
   Settings for [Height] and [Head to body ratio] will not return to the initial settings even if you select the reset button. Click [Initial body shape] to reset the height and head-to-body ratio.
(9) **2D sliders**

Drag the “+” symbol to adjust the body shape.

**When the full body is selected**

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Drag the slider up to make male drawing figures more muscular and female drawing models more curvaceous. Drag the slider down to make the body shape flatter.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>Drag the slider left to make the body shape thinner. Drag the slider right to make the body shape fatter.</td>
</tr>
</tbody>
</table>
When a single part is selected

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Adjust the length of the selected part.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>Adjust the width of the selected part.</td>
</tr>
</tbody>
</table>

When selecting the shoulders or waist, the vertical value cannot be changed.

(10) Vertical
The value of the vertical 2D slider is shown here. Click the number to directly input a value. The number you enter will change the body shape of the 3D drawing figure.

(11) Horizontal
The value of the horizontal 2D slider is shown here. Click the number to directly input a value. The number you enter will change the body shape of the 3D drawing figure.

(12) Maintain ratio
When this is turned on, the length and width ratio of the selected part will stay the same when you adjust it using the 2D slider. This option is not available when adjusting the full body, shoulders, or waist.
**Brush shape**

Lines on the canvas are drawn by connecting countless number of brush tip drawings.

Each of the items in [Brush shape] configures the following settings related to the drawing/shape of the brush tip and stroke.

<table>
<thead>
<tr>
<th>Brush tip</th>
<th>Configures the shape of the brush tip. Some brush shapes allows you to combine multiple tip shapes to create a multi-brush. Also configures the density, hardness, thickness, direction and the like for the brush tip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spraying effect</td>
<td>Configures the setting applicable when spreading the brush tip drawing, as when drawing with a spray.</td>
</tr>
<tr>
<td>Stroke</td>
<td>Configures how to arrange the brush tip drawing to create the stroke.</td>
</tr>
<tr>
<td>Texture</td>
<td>Configures settings related to the texture of the drawing. Specifies the texture of the paper, strength and how to apply effects, and so on.</td>
</tr>
</tbody>
</table>

Furthermore, setting of the items below can be registered as default brush shape selection.

![Memo](image)

*When items are displayed on the [Tool Property] palette, you can only select preconfigured brush shapes.*

![Image](image)

*Some settings may not display depending on the selected tool or sub tool.*

1. **Register to preset**
   Adds the information configured in [Brush tip], [Spraying effect], [Stroke], and [Texture] in [Preset brush shape].

2. **Preview**
   Previews the stroke by the current [Brush shape] settings.

3. **Preset of brush shape**
   Displays the list of preconfigured brush shapes.

![Memo](image)

*You can scroll through the brush shape presets by dragging on the brush shape presets while holding down the space bar.*

4. **Apply brush shape**
   Clicking the button replaces the [Brush tip], [Spraying effect], [Stroke], and [Texture] settings to those configured for the brush shape selected in [Preset of brush shape].
5. **Rename brush shape**
   Clicking the icon allows you to rename the brush shape currently selected in [Preset of brush shape].

6. **Delete brush shape**
   Clicking the icon allows you to delete the brush shape currently selected in [Preset of brush shape].

### Brush shape → Brush tip
Configures the shape of the brush tip. Some brush shapes allow you to combine multiple tip shapes to create a multi-brush.

### [Select brush tip shape] Dialog Box

<table>
<thead>
<tr>
<th>(1) Search box</th>
<th>Allows you to input a keyword and search for a brush tip shape.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Tag list</td>
<td>A list of tags assigned to materials displayed as buttons. Clicking a button displays brush shapes meeting the specified information in [Brush tip shape list].</td>
</tr>
<tr>
<td>(3) Brush tip shape list</td>
<td>Displays the list of brush tip shapes.</td>
</tr>
<tr>
<td>(4) Show item checkbox</td>
<td>Shows a checkbox for each thumbnail of the materials shown in [Material list]. You can select a material by turning on the checkbox.</td>
</tr>
<tr>
<td>(5) Thumbnail [Large]</td>
<td>Shows the large thumbnails of the brush tip shapes shown in [Brush tip shape list].</td>
</tr>
<tr>
<td>(6) Thumbnail [Small]</td>
<td>Shows the small thumbnails of the brush tip shapes shown in [Brush tip shape list].</td>
</tr>
<tr>
<td>(7) Thumbnail [Detail]</td>
<td>Shows the thumbnails as well as information of the brush tip shapes shown in [Brush tip shape list].</td>
</tr>
</tbody>
</table>

### Add brush tip shape
Adds a material to [Brush tip].
Clicking displays the [Select brush tip shape] dialog box. Select the brush tip shape to add from the list of brush materials. Clicking [OK] adds the material to [Brush tip].

### Delete brush tip shape
Deletes the brush tip shape selected in [Brush tip].

---

Some settings may not display depending on the selected tool or sub tool.

Memo: You can scroll through the brush tips by dragging left and right through the brush shape tips while holding down the space bar.

Memo: Selecting materials while holding down the [Ctrl] key or [Shift] key allows you to select multiple materials.
(5) **Hardness**
Configures the effect of the hardness. The smaller the value, the more blurred will be the lines.

(6) **Thickness**
Adjusts the thickness of the brush tip. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the thickness of the brush tip.
For more information on dynamics, see "Dynamics settings".

(7) **Direction of applying**
Configure the direction to which the brush thickness will apply.

<table>
<thead>
<tr>
<th>Horizontal</th>
<th>The thickness changes in the horizontal direction.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical</td>
<td>The thickness changes in the vertical direction.</td>
</tr>
</tbody>
</table>

When [Horizontal] is selected When [Vertical] is selected

(8) **Direction**
Allows you to configure the direction of the brush tip. Moving the slider changes the direction of the brush tip from 0 to 360 degrees. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the direction of the brush.
For more information on dynamics, see "Dynamics settings (Direction)".

(9) **Brush density**
Configures the opacity of each tip hair of the selected brush. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the brush density. For example, configuring [Pen pressure] for [Dynamics] makes it easier to vary the tone in accordance with the pen pressure.
For more information on dynamics, see "Dynamics settings".

(10) **Adjust brush density by gap**
When turned on, the brush density is configured to decrease when gap becomes narrow. The density is automatically adjusted so that opacity in the selected area is approximately constant.

For brush [Gap], see "Brush shape → Stroke".
**Brush shape $\rightarrow$ Spraying effect**

Configures settings related to the spread of the brush tip hair. Configuring [Spraying effect] allows you to spread the brush tip hair as if it were a spray.

1. **Spraying effect**
   
   When turned on, spreads the tip hair of the selected brush as if it were a spray.

2. **Particle size**
   
   When [Spraying effect] is turned on, you can configure the size of each brush tip hair.
   
   The [Dynamics] button allows you to select the settings of the tablet and the like which affect the particle size.
   
   For more information on dynamics, see "Dynamics settings".

3. **Particle density**
   
   When [Spraying effect] is turned on, you can configure the number of brush patterns to spread when spraying from the brush tip hair.
   
   The [Dynamics] button allows you to select the settings of the tablet and the like which affect the particle density.
   
   For more information on dynamics, see "Dynamics settings".

4. **Spray deviation**
   
   When [Spraying effect] is turned on, you can configure the degree of concentration of the spraying effect by the brush tip hair.

5. **Direction of particle**
   
   When [Spraying effect] is turned on, you can configure the angle of each brush tip hair.
   
   The [Dynamics] button allows you to select the settings of the tablet and the like which affect the direction of the particles.
   
   For more information on dynamics, see "Dynamics settings (Direction of particle)".

**Brush shape $\rightarrow$ Stroke**

Configures settings related to the stroke such as the space between brush tips.

---

![Important](image)

Some settings may not display depending on the selected tool or sub tool.

1. **Interval**
   
   Specifies the interval between drawings. Select an interval from [Fixed], [Wide], [Normal] and [Narrow].
   
   **Gap (Wide, Normal, Narrow)**
   
   The gap is automatically adjusted based on other settings (e.g., hardness).
   
   **Fixed**
   
   Allows you to specify the drawing interval numerically from the [Fixed] values listed below.

2. **Fixed value**
   
   When [Fixed] is specified for [Gap], you can numerically specify the gap between tips of the selected brush. The larger the value, the more gap will be each of the brush tip drawings. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the fixed value.
   
   For more information on dynamics, see "Dynamics settings".

---

![Fixed] to 100

![Fixed] to 10
(3) **Continuous spraying**
When turned on, pressing a pen on the same position overpaints the selected brush tip. This setting allows you to easily draw lines of varied tones by varying the speed of the stroke. Slow strokes allow you to draw dark lines while fast strokes allow you to draw pale lines.

**Important** [Continuous spraying] is not available when [Post correction] is turned on in the [Correction] category.

(4) **Ribbon**
When turned on, the shape of the brush tip changes along the pen stroke. It creates a selection with a natural sequence of patterns.

![Ribbon: ON](image)
![Ribbon: OFF](image)

**Important** [Ribbon] is not available in the following cases:
- When [Spraying effect] is turned on
- When [Tip shape] is [Circle]

(5) **Repeat method**
Configure the order for using the materials when using a brush tip composed of multiple materials. This setting is available when multiple materials are present in the [Brush tip].

<table>
<thead>
<tr>
<th>Repetition</th>
<th>Uses the series of brush tip shapes repeatedly in order from left to right.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse</td>
<td>Uses the series of brush tip shapes in alternate order from left to right and then from right to left.</td>
</tr>
<tr>
<td>Do not repeat</td>
<td>Once the series of brush tip shapes is used in order from left to right, continues with the rightmost brush tip shape in [Brush tip].</td>
</tr>
<tr>
<td>Random</td>
<td>Uses the brush tip shapes in random order.</td>
</tr>
<tr>
<td>One time only</td>
<td>Uses the series of brush tip shapes in order from left to right. Nothing is drawn during one stroke of the brush tip shape.</td>
</tr>
<tr>
<td>One random cycle</td>
<td>Uses the brush tip shapes in random order. Nothing is drawn during one stroke of the brush tip shape.</td>
</tr>
</tbody>
</table>

(6) **Blend brush tips with Darken**
Allows you to configure how to overlap drawings. When turned on, the darker color is reflected. When turned off, the darkness of the color used first and that of the color afterwards are simply overlapped.
**Brush shape → Texture**

Configures settings related to the texture of the drawing. Specifies the texture of the paper, strength and how to apply effects, and so on.

1. **Texture**
   Selects the texture to configure for the brush. Allows you to draw with the touch of the selected texture.
   Clicking the button displays the [Select paper texture material] dialog box where you can change the texture image.
   
   **[Select paper texture material] Dialog Box**
   
   | (1) Search box | Allows you to input a keyword and search for a texture image. |
   | (2) Tag list | A list of tags assigned to materials displayed as buttons. Clicking a button displays brush shapes meeting the specified information in [Texture image list]. |
   | (3) Texture image list | Displays a list of texture images. |
   | (4) Thumbnail [Large] | Shows the large thumbnails of the texture images shown in [Material list]. |
   | (5) Thumbnail [Small] | Shows the small thumbnails of the texture images shown in [Material list]. |
   | (6) Thumbnail [Detail] | Shows the thumbnails as well as information of the texture images shown in [Material list]. |

2. **Texture density**
   Allows you to specify the strength for applying texture.
   The [Dynamics] button allows you to select the settings of the tablet and the like which affect the strength of texture to apply. You can set the [Dynamics] button when [Apply by each plot] is turned on. For more information on dynamics, see "Dynamics settings".

3. **Invert texture**
   Inverts the texture gradient.

4. **Emphasized density**
   Makes the difference in density in the texture image to be displayed clearly.
   
   - Turning on [Emphasize density] draws the texture with a touch close to IllustStudio.
   - Turning on both [Emphasize density] and [Apply by each plot] when a relatively high value is configured for [Brush shape] → [Brush tip] → [Hardness] makes the center of the plot be drawn thicker.

5. **Scale ratio**
   Specifies the scale ratio to apply to the texture image.

6. **Rotation angle**
   Specifies the rotation angle to apply to the texture image.

7. **Texture mode**
   Select how to combine the drawn line with the texture selected in [Texture]. The result of the combine varies depending on the selected texture and hardness and the brush density.
   
   | Normal | Keeps the overall stroke density as much as possible. |
   | Multiply | Multiplies the density of the texture by the density of the stroke. |
   | Subtract | Subtracts the density of the texture. |
   | Compare | Compares the density of the texture and that of the stroke and draws using the brighter one. |
   | Outline | The texture outline is sharpened. The effect is visible around lines where the hardness of the brush is low. |
(8) Apply by each plot
When turned on, texture is applied to the brush pattern (brush tip drawing) of the drawing tool. In this case, since the brush pattern overlaps in the central area of the stroke, the texture is also displayed overlapped.
When turned off, texture is applied on a stroke basis.

**Brush size**

Allows you to configure the tool size when using drawing-type tools or figure tools.

- **Important**: Some settings may not display depending on the selected tool or sub tool.

(1) **Brush size**
Configures the drawing size. A slider allows you to change the setting. You can also change the setting by using the up and down arrow icons next to the value box. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the drawing size.
For more information on dynamics, see "Dynamics settings".

(2) **Specify by size on screen**
Makes the tool size displayed on a scaled up/down canvas appear the same as when the canvas is displayed at 100%.

(3) **At least 1 pixel**
Makes the tool draw lines of at least 1 pixel when drawing thin lines using Starting and Ending by pen pressure, for example.

(4) **Disarray [PRO/EX]**
When turned on, changes the brush size for each line when drawing with the [Stream line] tool or [Saturated line] tool. Configure the degree of variation in the brush size with an indicator or slider.

(5) **Brush preview**
Previews the brush shape by reflecting settings such as brush size and anti-aliasing.
**Camera**

Allows you to configure the camera angle for 3D materials and the like when you have a 3D material selected with the [Object] sub tool, for example.

**Important**

Some settings may not display depending on the selected 3D material.

**Memo**

Settings in this category affect all 3D materials included in the selected 3D layer.

(1) **Angle**

Clicking [Preset] displays a list of camera angles. Select the desired camera angle to apply to the selected 3D material.

(2) **Focus on editing target**

Moves the camera in such a way that the selected 3D material is displayed in the center. When 3D drawing figures and 3D character materials are selected, results will differ depending on the selection.

**When a part is selected**

Moves the camera in such a way that the selected part is displayed in the center.
When a part is not selected

Moves the camera in such a way that the selected 3D character material is displayed in the center.

(3) Perspective

Adds perspective to the 3D material.

The larger the value, the larger the angle of view will be. The smaller the value, the smaller the angle of view will be.

[Image showing the effect of perspective on camera movements]

Memo

Turn on [Link camera advancing/retreating] to link camera movements with a fixed focal point and focal frame.
(4) **Link camera advancing/retreating**

When turned on, this links camera movements with the focal point and focal frame remaining fixed when adjusting the perspective.

When turned off, with the camera position fixed, only the angle of view of the canvas camera changes even when the perspective is adjusted.

---

**Memo**

In EX, you can check the position of the camera and focal point on the [All sides view] palette.
(5) Roll
Rotates the camera with its position fixed.
(6) **Camera position**

Moving the [X], [Y] and [Z] sliders allows you to move the camera position with the focal point fixed.

In EX, you can check the position of the camera and focal point on the [All sides view] palette.
(7) **Focal point Position**

Moving the [X], [Y] and [Z] sliders allows you to move the focal point position with the camera position fixed.

**Memo**

In EX, you can check the position of the camera and focal point on the [All sides view] palette.
**Character**

Allows you to configure facial expression, clothes, hair style and the like when you have a 3D character material selected with the [Object] sub tool, for example.

The [Character] category does not display when a 3D pose model material is selected.

(1) **Face parts**
   
   Select a face part for the 3D character material from the list.

(2) **Hair**
   
   Select a hair style for the 3D character material from preconfigured hair styles.

(3) **Body**
   
   Select a body for the 3D character material from preconfigured bodies. Changing the body allows you to change the 3D character material's clothes.
(4) **Accessories**
Select the desired accessory(accessories) for the selected 3D character material to wear, such as a ribbon. You may select multiple items for Accessories.

(5) **Settings of expression**
Click to display a list of facial expressions for 3D character materials. Select the desired facial expression for the selected 3D character material.

(6) **Expression in eyes**
Click to change the eye expression.

Memo: [Expression in eyes] is available when eye expressions are configured in CLIP STUDIO MODELER.

(7) **Expression in mouth**
Click to change the mouth expression.

Memo: [Expression in mouth] is available when mouth expressions are configured in CLIP STUDIO MODELER.
Closed area fill

Allows you to configure how to fill in detail when using the [Close and fill] sub tool or [Envelop and paint] sub tool. Allows you to configure the area to fill, reduce/expand the selected area, and so on.

Important

Closed area fill settings for a selected area are the same as for fill closed area. However, the output of closed area fill is a selection. The following describes each item using the Closed area fill as an example.

1. Target color

Refers to the specified color to decide whether to fill or not to fill. The effect of this item on fill will be described using the following figure as an example.

![Diagram showing Target color settings]

Memo

Changing the [Target color] setting or adjusting the [Color margin] value may improve run over of the fill color.

Target all colors

Fills closed areas of all colors.

![Diagram showing Target all colors]

Lines outside the specified area are not filled.
**Only transparent**
Fills transparent areas.

Closed areas that are transparent are filled.
Areas that are filled in a color such as white are not filled.

**Area surrounded by transparent**
Fills areas surrounded by transparent.

Transparent closed areas are filled.
Lines and figures outside the specified area are not filled.

**Only black**
Fills areas drawn in black.

Black areas within the specified area are filled.
Lines outside the specified area are not filled.
**Area surrounded by black**
Fills areas surrounded by black.

![Diagram of area surrounded by black]

Only areas enclosed in black and within the specified area are filled.

**Only white and transparent**
Fills areas drawn in white and transparent areas.

![Diagram of only white and transparent]

Enclosed areas that are white or transparent are filled.

**Area surrounded by white and transparent**
Fills areas surrounded by white and areas surrounded by transparent.

![Diagram of area surrounded by white and transparent]

White and transparent closed areas are filled. Lines and figures outside the specified area are not filled.
**Treat semi-transparent as transparent**
Treats translucent areas created by anti-aliasing and the like as transparent to fill.

Areas of all colors are filled.
Selecting this item allows you to prevent unfilled pale, translucent areas created by anti-aliasing and the line.

**All enclosed areas except transparency**
When the outer perimeter is completely included in the selected area, fills the inside of the outer perimeter.

Figures within the specified area, including lines, are filled.
Lines and figures outside the specified area are not filled.

**All enclosed areas including transparency**
Fills drawn lines and transparent areas enclosed by drawn lines.

Lines and closed transparent areas within the specified area are filled.
Areas outside the specified area are not filled.
(2) **Close gap**

When gaps are present in the area to fill, fills by closing gaps of up to a specified number of pixels. The indicator or slider on the right allows you to specify the size of the gap.

![Close gap: ON](image)

Fills by closing the gap to recognize closed area.

![Close gap: OFF](image)

Closed area cannot be recognized as the gap is not closed.

(3) **Color margin**

Specifies the color margin (tolerance) to recognize an area as the same when filling. The larger the value, the larger will be the tolerance to include areas in other colors than the target.

(4) **Area scaling**

Enlarges or reduces the area to fill by the specified number of pixels.

(5) **Scaling mode**

Configures the shape of corners of the scaled area when [Area scaling] is turned on.

**Rectangle**

Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area often becomes rectangular.
**Round**
Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area becomes round as angles are rounded off.

![Fill by Round](image)

**To darkest pixel**
Recognizes the area of the line with the darkest color and fills up to that area. If configured when enlarging the area with [Area scaling], it will prevent runovers to the outside of line pixels with maximum opacity.

![Draw at canvas edge OFF](image) ![Draw at canvas edge ON](image)

**Continuous curve**
Allows you to configure how to draw a curve, the angle step for rotation and the like when using tools or sub tools for drawing continuous curves.

---

**Important** Some settings may not display depending on the selected tool or sub tool.

**1) Line/Fill**
Select whether to draw the figure using only lines or paint.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create fill</td>
<td>Fills with drawing color the closed area in the figure. No outline is drawn for the figure.</td>
</tr>
<tr>
<td>Create line</td>
<td>Draws the figure using only lines.</td>
</tr>
<tr>
<td>Create both line and fill</td>
<td>Draws the outline of the figure and fills the closed area. The drawing colors for the outline and the closed area can be specified by [Line color] and [Fill color].</td>
</tr>
</tbody>
</table>

---

**Important** [Line/Fill] is not available for [Vector layer].
(2) **Line color**  
Specifies the color for the lines.

<table>
<thead>
<tr>
<th><strong>Main color</strong></th>
<th>Configures the main drawing color as line color.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub color</strong></td>
<td>Configures the sub drawing color as line color.</td>
</tr>
</tbody>
</table>
| **User color**          | Configures the color specified by the user as line color.  
Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn. |
| **Select user color**   | The [Color settings] dialog box is displayed, where you can select the line color. This item does not display as icon. |

(3) **Fill color**  
Specifies the color for filling the figure.

<table>
<thead>
<tr>
<th><strong>Main color</strong></th>
<th>The fill color is the main drawing color.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub color</strong></td>
<td>The fill color is the sub drawing color.</td>
</tr>
</tbody>
</table>
| **User color**          | The fill color is that specified by the user.  
Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn. |
| **Select user color**   | The [Color settings] dialog box is displayed, where you can select the fill color. This item does not display as icon. |

(4) **Curve**  
Specifies how to create a selection. Select from [Straight line], [Spline], [Quadratic Bezier] and [Cubic Bezier]. For how to draw, see "Drawing Continuous Curves" .

(5) **Close line**  
Connects the starting point and ending point to create a closed curve.

(6) **How to specify**  
Set how to specify control point when selecting [Cubic bezier] for [Curve]. Select from [By click] and [By drag].

**Memo**  
How a line is drawn varies depending on the [How to specify] setting. For details, see "Drawing a Line Using [Cubic Bezier]" .

(7) **Step of angle**  
Configures the angle by which the polyline bends each time. Lines are created by connecting segments that bend by the configured angle step.
**Drawing Continuous Curves**

To draw continuous curves, select the drawing method for the [Continuous curve] tool from [Curve] on the [Sub Tool Detail] palette. The following describes how to draw continuous curves for each drawing method.

**Drawing a Line Using [Straight line]**

Specify the points that will be connected by the polyline. Double click to commit the drawn line.

**Drawing a Line Using [Spline]**

Specify the points that will be connected by the curve. Double click to commit the drawn line.
Drawing a Line Using [Quadratic Bezier]

Specify multiple points to be connected by the curve. Click to add a direction point. Drag the end point to draw a curve as if it were dragged by the Control point. Double click to commit the drawn line.
Drawing a Line Using [Cubic Bezier]

When drawing a line with [Cubic Bezier], how it is drawn depends on the [How to specify] setting on the [Sub Tool Detail] palette.

**When [How to specify] is [By click]**

Click on the canvas to add a direction point. The curve is determined based on the location of the direction points. Double click to commit the drawn line.

**When [How to specify] is [By drag]**

Specify the points to be connected by the curve by clicking on the canvas and drag the mouse. The control points move and adjust the curve. Double click to commit the drawn line.

Dragging while specifying the points allows you to adjust the shape of the curve.
Contour line paint
When the [Contour line paint] tool is selected, you can configure the processing method for black and transparency and output of the created gradient.

(1) Black
Sets how to process black lines drawn in the layer for painting.

<table>
<thead>
<tr>
<th>Do not cover black</th>
<th>Cover black</th>
<th>Replace black with drawing color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black lines are recognized as the area, but are not recognized as a color.</td>
<td>Black is recognized as a drawing color. Creates gradient that includes black.</td>
<td>Black lines are recognized as the area, but are replaced with the selected drawing color in the created gradient. The color gradiates closer to the drawing color the closer it gets to the black line.</td>
</tr>
</tbody>
</table>
(2) **Transparent color**

When painting in an area filled with one color, set an operation for the transparent part around it.

**Memo**

If referring to another layer, even parts where a line is drawn in another layer will be regarded as a transparency if there is no drawing the paint layer.

<table>
<thead>
<tr>
<th>Do not cover transparency</th>
<th>Transparent sections are recognized as the area, but are not recognized as a color.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover transparency</td>
<td>Transparent sections are recognized as a drawing color. Create gradient that includes transparency.</td>
</tr>
<tr>
<td>Replace transparency with drawing color</td>
<td>Transparent sections are recognized as the area, but are replaced with the selected drawing color in the created gradient. The drawing color becomes closer the closer you get to the transparent section.</td>
</tr>
</tbody>
</table>

(3) **Output Settings**

Clicking allows you to configure the density changes of the gradient using the displayed [Output Settings].

Clicking on the curve allows you to add points, Dragging a point allows you to adjust the density of the gradient. The color becomes more dense above the point, and less dense below the point. Also, dragging the point horizontally allows you to adjust the gap of the gradient. Drag the point out of the graph to delete the point. The results of adjusting the gradient are displayed in the preview below the graph.
Control point [PRO/EX]

Allows you to configure control points on a drawn line when a [Vector layer] or [Balloon layer] is selected with the [Control point] sub tool and the like.

(1) Process

Configures how to edit control points. Allows you to move, add, delete, switch corners, change the line width and density, and so on.

**Move control point**

Dragging a control point allows you to transform the shape of the line near the control point.

**Add control point**

Clicking on the line allows you to add a control point. Furthermore, dragging the control point allows you to transform the shape of the line near the control point.
**Delete control point**
Clicking a control point allows you to delete it.

**Switch corner**
Clicking a control point allows you to switch the type of corner at the clicked point. The corner toggles between angled corner and round corner on each click.
**Adjust line width**

Dragging a control point allows you to change the width of the line near the control point.

Correct line width (Thicker)

Correct line width (Thinner)
Correct density
Dragging a control point allows you to change the density of the line near the control point.

Cut line
Clicking on a line, cuts the line by the clicked point.

(2) All layers
When turned on, allows you to operate all lines drawn on all displayed vector/balloon/frame border/ruler layers. Clicking a line drawn on another layer switches the edited layer.
When turned off, operation is enabled only for lines drawn on the vector/balloon/frame border/ruler layer being edited.
Copy stamp [PRO/EX]

Allows you configure how to refer to an image when the [Copy stamp] sub tool is selected.

(1) Adjust reference position each time

When turned on, the image is drawn by keeping constant the relative position from the reference point. The position does not change even when the stroke changes. When turned off, the image is drawn by referring to the reference point each time the stroke changes.

(2) Mode for specifying reference position

When turned on, the mode changes to reference point specification mode, where the clicked point becomes the reference point. When drawing, be sure to turn off [Mode for specifying reference position]. You will not be able to draw if it is turned on.
Create frame [PRO/EX]

Allows you to configure settings related to frame border drawing when using a sub tool that creates frame borders.

**1) Draw border**
Draws border lines in the frame border folder.

**2) How to add**
Configures the method to add frame folder.

| Create a new folder | Add a new frame folder when drawing a frame border. |
| Add to selected folder | If a frame folder or a layer in a frame folder is selected, add a frame border to the selected frame folder. |
| If a layer other than those is selected, add a new frame folder. |

**3) Raster layer**
When turned on at the time of creating the frame border, creates a [Raster layer] inside the frame border folder.

**Memo**
The expression color of the created [Raster layer] is the same as that configured in [Basic expression color] on the [New] dialog box used when creating the canvas.

**4) Fill inside the frame**
When turned on at the time of creating the frame border, creates a white [Fill in monochrome] layer inside the frame border folder.

**Correction**
Allows you to configure how to correct a pen touch.

**Important**
Some settings may not display depending on the selected tool or sub tool.

**1) Sharp angles**
When turned on, drawing a line with corners makes the corners pointed.

**2) Stabilization**
Set control over blur of tablet. The larger value is, line gets smoother. The smaller value is, line is drawn as you draw.

**3) Adjust by speed**
When on, stabilization will be applied after a certain speed threshold.

**4) Correction method**
When [Adjust stabilization by speed] is turned on, you can choose a stabilization mode.

| Increase stabilization when drawing slowly | Increases stabilization the slower the pen moves. This will stabilize small shakes when drawing slowly. |
| Reduce stabilization when drawing quickly | Decreases stabilization the faster the pen moves. This will fix lagging lines. |

**Memo**
Setting [Stabilization] to 30 or higher will disable the [Increase stabilization when drawing slowly] setting under [Stabilization mode].

**5) Post correction**
Toggles post correction on and off, and adjusts the strength of post correction. Post correction is a correction made after a line is drawn. Smooths the line after it is stabilized.
(6) Adjust by speed
Adjusts the strength of [Post correction] by the speed of the stroke.

(7) Adjust by scale
Adjusts the strength of [Post correction] by the display ratio of the canvas.

(8) Bezier curve
When turned on, the line after post correction becomes a quadratic Bezier curve. When turned off, the line after post correction becomes a spline curve.

- When [Bezier curve] is turned on, line correction becomes similar to that used in Manga Studio or IllustStudio.
- When [Bezier curve] is turned on and a line is drawn on a vector layer, the control points and direction points on the [Bezier curve] can be displayed by selecting the line with the [Object] sub tool or [Control point] sub tool.

(9) Taper
Changes the length by which a line is continued when drawn by gradually decreasing the pen pressure.
When the value is large, the line follows the pen by becoming thinner even after the pen is released from the tablet as if it were drawn with a brush with long tip.

(10) Enable snapping
When turned on, drawing snaps to a ruler. Snap to ruler can be toggled on/off only for certain sub tools.

- When using a drawing-type tool, snap to special ruler other than guide is not possible.

(11) Vector magnet
When turned on, drawing on a vector layer snaps the drawing to a line drawn before. Depending on the type of line, lines are consolidated into one. An indicator or slider allows you to adjust the strength of the snap.

(12) Snap to default border
When turned on, drawing a figure and the like snaps it to the default border.

Create a symmetrical ruler [PRO/EX]
Allows you to configure the number of the lines of a symmetrical ruler and how to make it symmetric when using the [Symmetrical ruler] sub tool.

1) Number of lines
Configures the number of lines which can be drawn concurrently when drawing by snapping to the symmetrical ruler.

2) Line symmetry
When turned on, the line symmetry ruler is created. When turned off, the rotation symmetry ruler is created.

3) Step of angle
Allows you to configure the angle by which the object will rotate each time.

4) Create at editing layer
When turned on, the ruler is created on the layer being edited. When turned off, a new layer for rulers is created.
**Create Balloon [PRO/EX]**

Allows you to configure how to create a layer when creating a [Balloon layer] with a tool or sub tool for creating a balloon.

1) **Line/Fill**
Configure whether to draw the balloon's line and/or fill the balloon.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create fill</td>
<td>Fills the balloon's ground. No outline is drawn for the balloon.</td>
</tr>
<tr>
<td>Create line</td>
<td>Draws the balloon using only outline.</td>
</tr>
<tr>
<td>Create both line and fill</td>
<td>Draws the balloon's outline and fills the ground. The drawing colors for the outline and ground can be specified by [Line color] and [Fill color].</td>
</tr>
</tbody>
</table>

2) **Line color**
Specify the color for the balloon's line. This setting is available when [Create both line and fill] is selected for [Line/Fill].

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main color</td>
<td>Configures the main drawing color as line color.</td>
</tr>
<tr>
<td>Sub color</td>
<td>Configures the sub drawing color as line color.</td>
</tr>
<tr>
<td>User color</td>
<td>Configures the color specified by the user as line color. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.</td>
</tr>
<tr>
<td>Select user color</td>
<td>The [Color settings] dialog box is displayed, where you can select the line color. This item does not display as icon.</td>
</tr>
</tbody>
</table>

3) **Fill color**
Configure the color for painting the inside of the balloon. This setting is available when [Create both line and fill] is selected for [Line/Fill].

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main color</td>
<td>Configures the main drawing color as the color for painting the inside of the balloon.</td>
</tr>
<tr>
<td>Sub color</td>
<td>Configures the sub drawing color as the color for painting the inside of the balloon.</td>
</tr>
<tr>
<td>User color</td>
<td>Configures the color specified by the user as the color for painting the inside of the balloon. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.</td>
</tr>
<tr>
<td>Select user color</td>
<td>The [Color settings] dialog box is displayed, where you can select the balloon interior color. This item does not display as icon.</td>
</tr>
</tbody>
</table>

4) **Fill opacity**
Configure the opacity of the color for painting the inside of the balloon.
(5) **How to add**  
Configure how to create the balloon layer.

When the balloon is created in such a way that it overlaps with a text, the balloon is added to the layer including the text independently of what is configured in [How to add].

<table>
<thead>
<tr>
<th>Create new layer</th>
<th>When a balloon is created, creates a new balloon layer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add to selected layer</td>
<td>If a balloon is created when a text layer or balloon layer is selected, the balloon is added to the selected layer.</td>
</tr>
</tbody>
</table>

(6) **Tone**  
When turned on, the [Balloon layer] is created with the tone applied. Furthermore, the [Balloon layer] will be [Gray] and the [Drawing color], [Black] and [White] independently of the [Basic expression color].
When turned off, the [Balloon layer] is created with [Expression color] configured to [Basic expression color].


(7) **Combine with the text in the drawing area**  
When turned on, drawing a balloon in an area with text combines the drawn balloon layer with the text layer. Moving the balloon with the [Object] sub tool also moves the text along with it.

**Create ruler [PRO/EX]**

Allows you to configure how to create a ruler when using a tool or sub tool for creating a ruler.

(1) **Create at editing layer**  
When turned on, the ruler is created on the layer being edited.
When turned off, a new layer for rulers is created. However, if a layer named "Ruler" is present, the ruler is created there.

(2) **Scale**  
When turned on, a scale is displayed on the ruler. A scale unit can be set from the pull down menu.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>px</td>
<td>The scale is displayed in pixels.</td>
</tr>
<tr>
<td>cm</td>
<td>The scale is displayed in centimeters.</td>
</tr>
<tr>
<td>mm</td>
<td>The scale is displayed in millimeters.</td>
</tr>
<tr>
<td>in</td>
<td>The scale is displayed in inches.</td>
</tr>
<tr>
<td>pt</td>
<td>The scale is displayed in points.</td>
</tr>
<tr>
<td>Q</td>
<td>The scale is displayed in Q numbers.</td>
</tr>
<tr>
<td>Equal division</td>
<td>The scale is displayed with the divisions specified in [Number of divisions].</td>
</tr>
<tr>
<td>Golden ratio</td>
<td>The scale is displayed at the positions determined when the entire ruler is divided by the golden ratio.</td>
</tr>
</tbody>
</table>

(3) **Number of divisions**  
Set the spaces allocated in the scale of the ruler. This setting is available when [Equal division] is selected for [Scale].
Create special ruler [PRO/EX]
Allows you to configure the shape and how to create a special ruler when using the [Special ruler] sub tool.

(1) **Special ruler**
Selects the ruler shape. Select from [Parallel line], [Parallel curve line], [Multiple curve], [Radial line], [Radial curve], [Concentric circle] and [Guide].

- **Parallel line ruler**
- **Parallel curve ruler**
- **Multiple curve ruler**
- **Focus line ruler**
(2) Curve
Specifies how to create a ruler curve. Select from [Straight line], [Spline], or [Quadratic Bezier]. This can be set when [Parallel curve line], [Multiple curve], or [Radial curve] is selected in [Special ruler].

For details on how to draw a curve, see “Drawing Continuous Curves”.

(3) Keep aspect ratio
When turned on, fixes the aspect ratio when creating a ruler. This setting is available when [Concentric circle] is selected for [Special ruler].

(4) Horizontal
Configures the width ratio when [Keep aspect ratio] is turned on.

(5) Vertical
Configures the height ratio when [Keep aspect ratio] is turned on.

(6) Adjust angle after fixed
When turned on, rotates the ruler after its size is fixed. This setting is available when [Concentric circle] is selected for [Special ruler].
(7) **Step of angle**

Allows you to configure the angle by which the ruler will rotate when [Adjust angle after fixed] is turned on, or [Parallel line] is selected for [Special ruler].

(8) **Create at editing layer**

When turned on, the ruler is created on the layer being edited.

When turned off, a new layer for rulers is created. When creating a [Guide], if a layer named "Guide" is present, the guide is created there.

---

**Cut border [PRO/EX]**

Allows you to configure how to divide frame borders when using a sub tool to divide frame borders, such as the [Divide frame folder] sub tool.

(1) **Shape of division**

Configure the shape and method for dividing when dividing a frame border.

**Divide by straight line**

Divides the frame border using a straight line. To divide, drag over the frame border to divide.

**Divide by polyline**

Divides the frame border using a polyline. Click the points where you want to place corners and commit the frame border cut by double clicking.
**Divide by spline**

Divides the frame border using a spline curve. Click the points to be connected by the curve and commit the frame border cut by double clicking.

**Step of angle**

Configures the angle by which the line will bend each time. When turned on, divides the frame border with a line that bends by the configured angle.

**Dividing method**

Configures how to divide the layer folder when the frame border is divided.

| Divide frame folder and duplicate inside layer | Creates as many new frame border folders as divided frame borders. Each frame border folder includes a copy of the layer inside the frame border folder before being divided. |
| Divide frame folder and create empty folder | Creates as many new frame border folders as divided frame borders. |
| Divide not folder but frame border | Creates neither a frame border folder nor a raster layer when dividing the frame border. |

**Space of frame border in preference**

When turned on, divides by spacing the border lines by the value configured in [Frame border] under [Ruler/Unit] on the [Preferences] dialog box.

**Vertical gutter**

Configures the space between border lines when dividing a frame border.

When [Divide by straight line] is selected for [Shape of division], configure the space between border lines when dividing a frame border vertically. This setting is not available when [Space of frame border in preference] is turned on.

**Horizontal gutter**

When [Divide by straight line] is selected for [Shape of division], configures the space between border lines when dividing a frame border horizontally. This setting is not available when other than [Divide by straight line] is selected for [Shape of division], or [Space of frame border in preference] is turned on.

**Memo**

When "0" is configured for [Vertical gutter] and [Horizontal gutter], only one line will be used for dividing a frame border.
**Dot pen**

Allows you to configure brush density when using the [Dot pen] sub tool.

*Important* The [Dot pen] category is not available for layers whose [Expression color] is [Monochrome].

(1) **Brush density**

Configures the opacity of each brush tip hair. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the brush density. For example, configuring [Pen pressure] for [Dynamics] makes it easier to vary the tone in accordance with the pen pressure.

For more information on dynamics, see "Dynamics settings".

**Drawing interval [PRO/EX]**

Allows you to configure the gap between adjacent lines when drawing or editing a stream line, saturated line, or flash.

(1) **Gap of line**

Configures the gap between adjacent lines when drawing or editing a stream line, saturated line, or flash.

(2) **Gap of line (angle)**

Configures the gap between adjacent lines with reference to the center point when drawing or editing a stream line, saturated line, or flash. This item is not available when [Gap of line (distance)] is selected.

Space of line (angle): 10  
Space of line (angle): 35
(3) **Gap of line (distance)**

Configures the gap between adjacent lines with reference to the reference line when drawing or editing a stream line, saturated line, or flash. This item is not available when [Gap of line (angle)] is selected.

![Reference line](image)

**Space of line (distance): 10**

![Reference line](image)

**Space of line (distance): 35**

(4) **Disarray**

When turned on, allows you to draw by varying the gap between lines. An indicator allows you to configure the degree of variation in the space between lines.

![Disarray: OFF](image)

**Disarray: OFF**

![Disarray: ON](image)

**Disarray: ON**
(5) **Grouping**

When turned on, creates [Grouping] of lines. The gap separating one [Grouping] from the next is wider than the normal space. A slider allows you to configure the number of lines per one group.

![Grouping: OFF](image1)

![Grouping: ON](image2)

(6) **Grouping disarray**

When turned on, allows you to vary the number of lines drawn from one [Grouping] to the other. An indicator allows you to configure the degree of variation in the number of lines.

![Disarray: OFF](image3)

![Disarray: ON](image4)

(7) **Gap**

Allows you to configure the space between two adjacent [Grouping]. Specify the gap by the number of lines that can be drawn in it.

(8) **Maximum number of lines**

Configures the maximum number of lines that can be drawn. The number of lines configured in this item will be the upper limit even when the stream line is drawn in a wide range.
Drawing position [PRO/EX]

Allows you to configure the line length, drawing position and the like when drawing or editing a stream line, saturated line, or flash.

1. **Length**
   Configures the line length.

2. **Disarray**
   When turned on, allows you to draw lines of different lengths. An indicator allows you to configure the degree of variation in the number of lines.

3. **Extend lines**
   Extends the lines so that they reach the outside of the frame. The lines extend up to crop mark or canvas edge if a frame folder is not present.

4. **Reference position**
   Configures the point of the line to be on the reference line.

**Memo**
Reference line is a line specified when drawing a saturated line, and is displayed in blue. It serves as a position to refer to and the like when drawing a saturated line or stream line.
(5) Gap from reference position
When turned on, allows you to vary the configured [Reference position]. A slider allows you to configure the degree of variation in the reference position.

(6) Make the reference position jags
When turned on, allows you to add mountains from jags in the drawing position of the saturated line.

Memo
Turning on [Make the reference position jags] does not make the reference line be displayed jagged on the canvas.
(7) **Number**

Configures the number of mountains from jags to be added in the drawing position when [Make the reference position jags] is turned on.

![Image of number 0 and number 12 configurations](image)

Number: 0
Number: 12

As many mountains from jags as the configured Number.

(8) **Height**

Configures the height of the mountains from jags added in the drawing position. The larger the value, the larger will be the height of the mountain from jags.

![Image of height 35 and height 100 configurations](image)

Height: 35
Height: 100
**Edit line [PRO/EX]**

Allows you to configure how much control points to reduce, or the shape of corners when a [Vector layer] or [Balloon layer] is selected with the [Simplify vector line] sub tool.

(1) **Simplify**

When turned on, allows you to simplify a line by reducing the number of control points. A slider allows you to configure how much control points to reduce. The larger the value, the more control points will be removed.

(2) **Smooth corner**

Allows you to configure the shape of corners when a line has corners.

When turned on, smooths the shape of corners. When turned off, the shape of the corners remain as they are (angled).

(3) **Process whole line**

When turned on, clicking a point on the line simplifies the entire line.

(4) **Connect line**

When turned on, connects lines drawn separately. A slider allows you to adjust the strength of the effect. The larger the value, the stronger will be the effect.

(5) **Connect lines with different properties**

When turned on, allows you to connect lines with different colors, hardness, thickness, tip shape, and so on.

(6) **Delete shorter line**

When turned on, allows you to erase short lines within a processing area. A slider allows you to configure the length of lines to erase.
**Edit settings**

Allows you to configure the text color, or how to add a layer and the like when using the [Text] sub tool, or when the [Text layer] is selected with the [Object] sub tool.

![Important] Some settings may not display depending on the selected tool or sub tool.

<table>
<thead>
<tr>
<th>(1) Text color</th>
<th>Allows you to specify the color for the additional text.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main color</strong></td>
<td>Configures the main drawing color as text color.</td>
</tr>
<tr>
<td><strong>Sub color</strong></td>
<td>Configures the sub drawing color as text color.</td>
</tr>
<tr>
<td><strong>User color</strong></td>
<td>Configures the color specified by the user as text color. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.</td>
</tr>
<tr>
<td><strong>Select user color</strong></td>
<td>The [Color settings] dialog box is displayed, where you can select the text color. This item does not display as icon.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2) How to add</th>
<th>Configures the method for adding text layers during text input. This item is available only when a [Text] layer or [Balloon layer] is selected.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Create layer always</strong></td>
<td>When text is input, creates a new [Text] layer.</td>
</tr>
<tr>
<td><strong>Add to selected text</strong></td>
<td>If text is input when a [Text] layer is selected, adds text to the selected text layer.</td>
</tr>
<tr>
<td><strong>Auto detect where to insert</strong></td>
<td>Creates a new [Text] layer depending on where the text is input. When text is input inside a balloon or near the selected text, adds text to the existing text layer or balloon layer.</td>
</tr>
</tbody>
</table>

**Edit timeline**

You can configure how to operate the timeline on the canvas.

(1) Click

Configure the operation performed when the canvas is clicked. Select [Previous] to go to the previous frame. Select [Next] to go to the next frame.

(2) Drag

Configure the operation to perform when dragging on the canvas. When [Left for previous, right for next] is on, drag to the left to move to the left frame, and drag to the right to move to the right frame.
Erase

Allows you to configure how to erase lines drawn on a [Vector layer], or the layer(s) to refer to erase when using the [Eraser] tool and the like.

(1) Vector eraser [PRO/EX]

Specify how to erase a line drawn on a [Vector layer] using the tool.

**Erase touched areas**

Erases only the parts of the line touched with the tool.

**Erase up to intersection**

Erases a line up to the intersection with another line drawn on the [Vector layer].
**Whole line**

Completely erases the line touched with the tool.

---

**Eyedropper**

Allows you to configure the source for acquiring a color and the like when using the [Eyedropper] tool.

**Reference**

Allows you to configure the layer(s) the tool will refer to.

<table>
<thead>
<tr>
<th>Current layer</th>
<th>Refers to the layer on the [Layer] palette that is being edited.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top layer</td>
<td>Refers to the uppermost layer on which the clicked point is not transparent.</td>
</tr>
<tr>
<td>Image</td>
<td>Allows you to acquire a color displayed on the screen independently of the layer where it is used.</td>
</tr>
</tbody>
</table>

---

**Exclude from reference**

Toggles non-reference to a layer between on and off.

<table>
<thead>
<tr>
<th>Exclude draft layers [PRO/EX]</th>
<th>Excludes the [Draft layer] from the targets of reference.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclude text</td>
<td>[Text layer]s and [Balloon layer]s are excluded from the reference targets.</td>
</tr>
<tr>
<td>Exclude paper layer</td>
<td>Excludes the [Paper layer] from the targets of reference.</td>
</tr>
<tr>
<td>Exclude locked layers</td>
<td>Excludes locked layer(s) from the targets of reference.</td>
</tr>
</tbody>
</table>

---

**Surrounding color**

Acquires a color average of the specified area including its surrounding. A slider allows you to configure the size of the surrounding area.
Figure

Allows you to configure a shape for a figure when creating a selection using a figure, or drawing a figure.

Some settings may not display depending on the selected tool or sub tool.

1. Figure
   Specifies the shape of the figure to create. Selects from [Rectangle], [Ellipse] and [Polygon].

2. Number of corners
   Specifies the number of vertexes of the polygon when [Polygon] is selected for [Figure].

3. Roundness of corner
   When turned on, the corners of the figure are rounded off. A slider allows you to configure the roundness. The larger the value, the more rounded will be the corner. You can select how to configure the roundness of the corner from [How to specify].

4. How to specify
   Configure the method for specifying the roundness of the corner.

<table>
<thead>
<tr>
<th>Specified ratio</th>
<th>Specifies the area to round off as a ratio (%) of the side of the figure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify length</td>
<td>Specifies the area to round off as a distance from the vertex.</td>
</tr>
</tbody>
</table>

5. Line/Fill
   Select whether to draw the figure using only lines or paint.

   | Create fill | Fills the created closed figure with the drawing color. No outline is drawn for the figure. |
   | Create line | Draws the figure using only lines.                                              |
   | Create both line and fill | Draws the outline of the figure and fills the closed area. The drawing colors for the outline and the closed area can be specified by [Line color] and [Fill color]. |

   [Line/Fill] is not available for [Vector layer].

6. Line color
   Specifies the color for the lines of the figure.

   | Main color | Configures the main drawing color as line color.                           |
   | Sub color  | Configures the sub drawing color as line color.                            |
   | User color | Configures the color specified by the user as line color. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn. |
   | Select user color | The [Color settings] dialog box is displayed, where you can select the line color. This item does not display as icon. |
(7) **Fill color**

Specifies the color for filling the figure.

| **Main color** | The fill color is the main drawing color. |
| **Sub color**  | The fill color is the sub drawing color. |
| **User color** | The fill color is that specified by the user. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn. |
| **Select user color** | The [Color settings] dialog box is displayed, where you can select the fill color. This item does not display as icon. |

(8) **Aspect type**

When turned on, allows you to specify the aspect ratio for the figure. You can select how to configure the aspect ratio from the following options.

| **Specified ratio** | The aspect ratio is fixed. |
| **Specify length**  | The figure is created using the sizes configured in [Width] and [Height]. |

(9) **Width**

Configures the figure width when [Aspect type] is turned on.

(10) **Height**

Configures the figure height when [Aspect type] is turned on.
Fill
Displayed items vary depending on the selected tool or sub tool.

→ "When the Fill Tool or Auto Select Tool Is Selected"
→ "When the Gradient layer or Fill in monochrome layer is selected [PRO/EX]"

**When the Fill Tool or Auto Select Tool Is Selected**
Allows you to configure the area to fill and the border of the selected area in detail.

---

![Important]

The [Fill] tool and [Fill] category of the [Auto select] tool are the same function. However, the output results are different depending on the tool. The following describes each item using the creation of a selection as an example.

1. **Apply to connected pixels only**
   Creates a selection by tracing pixels of the same color as that of the clicked point. When turned off, creates a selection that includes all pixels of the same color on the canvas. The following figure shows the selection in green.

   - Follow adjacent pixel: ON
   - Follow adjacent pixel: OFF

   Only adjacent pixels of the same color from the clicked point onward are included in the selection area.

   All pixels of the same color are included in the selection area.
(2) **Close gap**

When gaps are present in the area to select, the selected area is created by closing gaps up to a specified number of pixels. Use the indicator or slider to specify the size of the gap. The figure below shows an example when fill is executed. The area to fill and the selection are the same.

![Close gap ON/OFF](image)

**Memo** Depending on your environment, configuring a large value for [Close gap] may take time to complete creating the selection.

(3) **Fill narrow areas**

When a gap smaller than the value configured in [Close gap] is found, the gap is included in the selection if the continuation of the line is closed. This setting is available when [Close gap] is turned on.

![Fill narrow areas ON/OFF](image)

(4) **Color margin**

Configures the tolerance in the difference of colors when creating a selection. The larger the value, the larger is the tolerance to include different colors than that of the clicked point in the selection area.

(5) **Area scaling**

When creating a selection, the selection to create is enlarged or reduced from the original by the specified pixels.
(6) Scaling mode

Configures the shape of corners of the scaled area when [Area scaling] is turned on.

**Rectangle**

Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area often becomes rectangular.

Without area scaling  
Rectangle

**Round**

Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area becomes round as angles are rounded off.

Without area scaling  
Round area scaling

**To darkest pixel**

Recognizes the area with the darkest color (area with highest opacity) and extends the selection up to that area.

Before Advanced fill  
Area scaling up to darkest pixel

Area scaling stops where the line color is darkest.
(7) Snap to symmetry ruler [PRO/EX]
When turned on, the [Fill] tool or [Auto select] tool snaps to the [Symmetrical ruler].

When the Gradient layer or Fill in monochrome layer is selected [PRO/EX]
Allows you to edit the [Gradient] layer or [Fill in monochrome] layer. It also allows you to switch the layer type.

(1) Fill settings
Configure how to fill. Settings displayed subsequently vary depending on the option selected for this item.

<table>
<thead>
<tr>
<th>Gradient</th>
<th>The selected layer is converted into a [Gradient] layer and filled with gradient.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill</td>
<td>The selected layer is converted into a [Fill in monochrome] layer and filled with one color.</td>
</tr>
</tbody>
</table>

(2) Fill color
Configures the color in which to fill the Fill in monochrome layer. Clicking the color indicator displays the [Color settings] dialog box. You can also select a color from the color palettes.

Memo: For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

(3) Color bar
Previews the configured gradient. When clicked, displays the [Edit gradient] dialog box where you will be able to configure the gradient in detail. For the [Edit gradient] dialog box, see "[Edit gradient] Dialog Box".

(4) Advanced settings
When clicked, displays the [Edit gradient] dialog box where you will be able to configure the gradient in detail. For the [Edit gradient] dialog box, see "[Edit gradient] Dialog Box".
(5) **Shape**
Configure the shape for the gradient.

<table>
<thead>
<tr>
<th>Shape</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight line</td>
<td>Draws a linear gradient in accordance with the dragged length.</td>
</tr>
<tr>
<td>Circle</td>
<td>Draws a gradient in accordance with the circular shape created by dragging the tool.</td>
</tr>
<tr>
<td>Ellipse</td>
<td>Draws a gradient in accordance with the elliptical shape created by dragging the tool.</td>
</tr>
</tbody>
</table>

(6) **Size**
Re-configures the shape for the gradient.

(7) **Angle**
Re-configures the angle for the gradient. This setting is available when [Shape] is [Line] or [Ellipse].

(8) **Thickness**
Re-configures the thickness for the gradient. This setting is available when [Shape] is [Ellipse].

(9) **Edge process**
Configure the drawing outside the dragged area.

<table>
<thead>
<tr>
<th>Edge process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not repeat</td>
<td>Draws gradient in the dragged area. Fills the area before the starting point in the starting color of the gradient, and the area after the ending point, in the end color of the gradient.</td>
</tr>
<tr>
<td>Repetition</td>
<td>Repeats the gradient in the same direction.</td>
</tr>
<tr>
<td>Reverse</td>
<td>Repeats the gradient by alternating the direction.</td>
</tr>
<tr>
<td>Not draw</td>
<td>Draws gradient in the dragged area. Does not draw anything in the areas before the starting point and after the ending point.</td>
</tr>
</tbody>
</table>

(10) **Dithering**
When turned on, fine noise is added to gradient to obscure the color boundaries. This makes the gradient look smooth.

---

**Font**

Allows you to configure the type and size of letters and the like when using the [Text] sub tool, or when the [Text layer] is selected with the [Object] sub tool.

*Important* Some settings may not display depending on the selected tool or sub tool.

(1) **Font**
Displays a font list from where you can select the one to use. For the font list, see "Font List".

*Memo* Windows fonts (extension: fon) cannot be selected from the font list.
(2) **Mixing font [PRO/EX]**

Configures addition and deletion of mixing fonts. Mixing font is a combination of font and size configured for each type of letter.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) New</td>
<td>Creates a new mixing font. Clicking the item displays the [Create mixing font] dialog box. For [Create mixing font] dialog box, see &quot;[Create mixing font] Dialog Box [PRO/EX]&quot;.</td>
</tr>
<tr>
<td>(2) Change</td>
<td>Changes the settings for the mixing font selected in [Font]. Clicking the item displays the [Create mixing font] dialog box. The item is not displayed if there is a text being edited. Changes in the mixing font settings are not reflected in texts with mixing fonts input before the changes were made. For [Create mixing font] dialog box, see &quot;[Create mixing font] Dialog Box [PRO/EX]&quot;.</td>
</tr>
<tr>
<td>(3) Delete</td>
<td>Deletes the mixing font selected in [Font]. The item is not displayed if there is a text being edited.</td>
</tr>
</tbody>
</table>

(3) **Size**

Adjusts the letter size in points or Q.

(4) **Horizontal ratio**

Scales the size of text up/down in the horizontal direction. Specifies the horizontal direction size as a percentage.

(5) **Vertical ratio**

Scales the size of text up/down in the vertical direction. Specifies the vertical direction size as a percentage.

(6) **Word space**

Configures the space between letters in points or Q.

The unit of [Size] and [Word space] can be toggled between points (pt) and Q. It is configured by [Text unit] under [Ruler/Unit] → [Unit] on the [Preferences] dialog box that displays when [File] menu ([CLIP STUDIO PAINT] menu in mac OS version) → [Preferences] is selected.

(7) **Character spacing**

Sets a blank space at the front and back of text. The larger the value, the closer together text is spaced.

(8) **Style**

Configure one of the following styles.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bold</strong></td>
<td>Makes the letters thick.</td>
</tr>
<tr>
<td><strong>Italic</strong></td>
<td>Leans the letters to the right.</td>
</tr>
<tr>
<td><strong>Underline</strong></td>
<td>Adds an underline to the text. This item does not display for vertical text.</td>
</tr>
<tr>
<td><strong>Strikeout</strong></td>
<td>Adds a strikeout to the letters. This item does not display for vertical text.</td>
</tr>
</tbody>
</table>

Horizontal text and vertical text can be switched with [Text direction] in the [Text] category. For details, see "Text".

(9) **Open face**

When turned on, converts letters into open face. The thickness of the open face may be selected from [Open face (light)] and [Open face (bold)].

(11) **Color** *

You can change the color of the selected text. Clicking color shows the [Color Change] dialog box where you can change the color of the text.

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".
(12) TateChuYoko (Horizontal in Vertical)

When using vertical input, only the selected text is set to horizontal. Select half width alphanumeric characters one character at a time to display them in the same orientation as vertical characters.

Memo

[TateChuYoko (Horizontal in Vertical)] can be set only for the entered text by setting [Auto TateChuYoko (Horizontal in Vertical)] to [None]. For details on [Auto TateChuYoko (Horizontal in Vertical)], see “Text”.

Font List

This is a screen displayed when selecting a font. It allows you to configure settings such as switching of the [Font list] to display, method of displaying the fonts, and so on.

(1) Font list

Displays a list of available fonts.

Memo

To display more fonts in the [Font list], resize the list of [Font list] dialog box by dragging one of the edges.

(2) Display font name

Displays only the font name on the [Font list].

(3) Display font name in specific font

Displays each font name on the [Font list] using the corresponding font.

(4) Display text in specific font

Previews the selected text on the [Font list]. Sample alphanumeric characters and hiragana are displayed if a text is not selected.

(5) Switch font list

Switches the [Font list] to display. You can create and edit the [Font list] with the [Settings of font list] dialog box that displays when you click [Settings of font list]. For details on the [Settings of font list] dialog box, see “[Settings of font list] Dialog Box”.

(6) Settings of font list

Displays the [Settings of font list] dialog box, which allows you to configure a [Font list]. For details on the [Settings of font list] dialog box, see “[Settings of font list] Dialog Box”.

(7) Search for fonts not in this list [iPad/iPhone]

If the fonts installed on your device are not listed in the font list, you can add them here.

Tap to display the OS’s FontPicker. When you select the font you want to use, it is added to the font list.

Memo

[Search for fonts not in this list] shows on iPad iOS 13 or later. This will not display on other devices.

[Settings of font list] Dialog Box

A dialog box that displays when [Settings of font list] is clicked. Allows you to manage, such as create, edit, and delete [Font list].

(1) Font list

Displays a list of [Font list].

(2) Create new

Creates a new [Font list]. When clicked, adds a [Font list] to the list of [Font list] and at the same time, enables the selection of fonts from [Available font].

(3) Change name

Changes the name of the [Font list] selected on the list of [Font list].
You can also change the name of a [Font list] by double clicking its name on the list of [Font list].

(4) Duplicate
Makes a copy of the [Font list] selected on the list of [Font list].

(5) Delete
Deletas the [Font list] selected on the list of [Font list].

(6) Available fonts
Allows you to select a font to display on the [Font list]. Selecting the font to display from [Available fonts] and turning on its check box adds the font to the [Font list].

- If [Available fonts] is displayed empty, select the [Font list] from the list of [Font list].
- To display more fonts in [Available fonts], resize the [Settings of font list] dialog box by dragging one of the edges.

(7) Display font name
Displays only the font names on [Available fonts].

(8) Display font name in specific font
Displays each font name on [Available fonts] using the corresponding font.

(9) Select all
Selects all fonts displayed on [Available fonts].

(10) Deselect all
Deselects the selection of all of the fonts displayed on [Available fonts].

[Create mixing font] Dialog Box [PRO/EX]
Use this dialog box to configure a mixing font.

(1) Mixing font
Input a name for the mixing font. This item cannot be input when the dialog is displayed as a result of clicking [Change] for [Mixing font].

(2) Default
Configures the default font. The default font applies when the font and letter size settings are disabled.
By default, the font configured in [Font] on the [Tool Property] palette or [Sub tool detail] palette displays.

(3) Font
Configures the font type and size for each letter type.

<table>
<thead>
<tr>
<th>(1) Enable/Disable</th>
<th>Enables/disables the font and size settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Letter type</td>
<td>Type of letter to which a mixing font can be configured. The following options are available: [Hiragana/Katakana], [Chinese character], [Signs], [Single-byte numbers], [Singly-byte alphabet], [Punctuation mark] and [External character].</td>
</tr>
<tr>
<td>(3) Font</td>
<td>Displays a font list from where you can configure the one to use. For the font list, see &quot;Font List&quot;.</td>
</tr>
</tbody>
</table>
Frame border [PRO/EX]

Allows you to configure settings related to the frame border drawing when a [Frame Border folder] is selected with the [Object] sub tool.

1. **Draw border**
   Displays border lines in the frame border folder.

2. **Main color**
   Configures a color for the frame border. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.

   For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

3. **Sub color**
   Allows you to specify a sub drawing color for the frame border. Clicking the color indicator displays the [Color settings] dialog box where you can set the color. This setting is available when the frame border is to be drawn by mixing the sub drawing color, for example.

   For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

4. **Snap**
   When turned on, you can draw lines along the frame borders by a drawing tool.

5. **Hide overlapping frame borders**
   When turned on, the lower frame border lines of overlapping parts in the same frame border folder are hidden.

[Advanced settings of color] Dialog Box

Use this dialog box to set the color. In addition to selecting a color from a palette, you can change the color by entering a value or acquire a color from the screen.

1. **How to set**
   A color setting method can be selected from [Default], [Color Wheel 1], [Color Wheel 2], [Color Set] and [History]. The display of the [Color settings] dialog box varies depending on the selected item.

   [History] cannot be selected in Debut.

2. **Hue Circle**
   The hue circle in [Color settings] can be switched between [HLS] and [HSV]. This is displayed when [Default], [Color Wheel 1] or [Color Wheel 2] is selected.

3. **Color settings**
   At the color selection screen, you can verify the actual color of the color that is currently being selected. The display differs depending on the item selected in [Selection method].

   For the content displayed in [Color settings], refer to "Color Palettes" → "Color Wheel Palette" → "Color settings dialog box" in the CLIP STUDIO PAINT Instruction Manual.

4. **Original color**
   The set color displayed immediately after opening the [Color settings] dialog. Clicking this reverts [Color settings] to the original color.

5. **Set color**
   Displays the color set in [Color settings].
(6) **Obtain screen color [Windows/macOS]**

Clicking this changes the mouse cursor to an eyedropper. It is possible to reference a color on the screen using the eyedropper and set it as the color.

(7) **HSV/HLS**

A color can be set by inputting a value.

If [HSV] is set for [Hue Circle], values for Hue, Saturation and Value can be entered. If [HLS] is set for [Hue Circle], values for Hue, Luminance and Saturation can be entered.

If [Default] is set for [Selection method], radio buttons are displayed to the left of each item name. These allow you to select the default value for the [Color Slider] in the [Color settings].

---

**Memo**

One value (HSV, HLS or RGB) can be selected as the default value for the [Color Slider].

(8) **RGB**

A color can be set by inputting an RGB value.

If [Default] is set for [Selection method], radio buttons are displayed to the left of each item name. These allow you to select the default value for the [Color Slider] in the [Color settings].

---

**Memo**

One value (HSV, HLS or RGB) can be selected as the default value for the [Color Slider].

(9) **HEX**

Colors can be set by inputting a hexadecimal color code.

(10) **L*a*b* [PRO/EX]**

A color can be set by inputting an L*a*b* value.

(11) **CMYK [PRO/EX]**

A color can be set by inputting a CMYK value.
Gradient

Allows you to configure a gradient pattern when using the [Gradient] tool.

(1) Color bar
Previews the configured gradient. When clicked, displays the [Edit gradient] dialog box where you will be able to configure the gradient in detail. For the [Edit gradient] dialog box, see “[Edit gradient] Dialog Box”.

(2) Advanced settings
When clicked, displays the [Edit gradient] dialog box where you will be able to configure the gradient in detail. For the [Edit gradient] dialog box, see “[Edit gradient] Dialog Box”.

(3) Shape
Allows you to configure the shape for the gradient.

<table>
<thead>
<tr>
<th>Shape</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight line</td>
<td>Draws a linear gradient in accordance with the dragged length.</td>
</tr>
<tr>
<td>Circle</td>
<td>Draws a gradient in accordance with the circular shape created by dragging the tool.</td>
</tr>
<tr>
<td>Ellipse</td>
<td>Draws a gradient in accordance with the elliptical shape created by dragging the tool.</td>
</tr>
</tbody>
</table>

(4) Edge process
Allows you to configure the drawing outside the dragged area.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not repeat</td>
<td>Draws gradient in the dragged area. Fills the area before the starting point in the starting color of the gradient, and the area after the ending point, in the end color of the gradient.</td>
</tr>
<tr>
<td>Repetition</td>
<td>Repeats the gradient in the same direction.</td>
</tr>
<tr>
<td>Reverse</td>
<td>Repeats the gradient by alternating the direction.</td>
</tr>
<tr>
<td>Not draw</td>
<td>Draws gradient in the dragged area. Does not draw anything in the areas before the starting point and after the ending point.</td>
</tr>
</tbody>
</table>

(5) Dithering
When turned on, fine noise is added to gradient to obscure the color boundaries. This makes the gradient look smooth.

(6) Start from center
When turned on, gradient is drawn centered in the point where you started dragging. This setting is available only when [Shape] is [Circle] or [Ellipse].

(7) Step of angle
Allows you to configure the angle step for adjusting the gradient angle.

[Edit gradient] Dialog Box

A. Gradient settings
Create gradient by moving the nodes.

(1) Color bar
Previews the configured gradient.
(2) **Node**
Allows you to configure the color for the gradient. You may create multiple nodes. Clicking an empty space adds a [Δ]. Dragging a node horizontally allows you to adjust the tone of the gradient. A selected node is indicated by a colored [Δ]. To delete a node, drag [Δ] vertically.

(3) **Select left node**
Switches the selected node to the next node on the left.

(4) **Select right node**
Switches the selected node to the next node on the right.

(5) **Reverse gradient**
Inverts the gradient settings.

(6) **Delete node**
Deletes the selected node.

**B. Gradient set**
Manage gradient settings.

(1) **Show Gradient Sets**
Allows you to view the [Gradient set] list and make a selection.

(2) **Show Menu**
Displays the gradient set menu.

<table>
<thead>
<tr>
<th>Create new set</th>
<th>Create a new color gradient data set.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete set</td>
<td>Deletes the selected gradient set.</td>
</tr>
<tr>
<td>Duplicate set</td>
<td>Duplicates the selected gradient set.</td>
</tr>
<tr>
<td>Settings of set</td>
<td>Change the name of the selected gradient set.</td>
</tr>
<tr>
<td>Register set as material [PRO/EX]</td>
<td>Displays the [Material property] dialog box and allows you to register the selected gradient set in the [Materials] palette. For details on the [Material property] dialog box, see &quot;[Material property] Dialog Box [PRO/EX]&quot;.</td>
</tr>
<tr>
<td>Import material set [PRO/EX]</td>
<td>Displays the [Import material set] dialog box and allows you to import a gradient set registered to the [Materials] palette. For details on the [Import material set] dialog box, see &quot;[Import material set] dialog box [PRO/EX]&quot;.</td>
</tr>
<tr>
<td>Add Gradient</td>
<td>Add the settings of the gradient displayed on the color bar to the list. The added gradient settings are displayed at the bottom of the list.</td>
</tr>
<tr>
<td>Delete Gradient</td>
<td>Deletes the gradient settings selected in the list.</td>
</tr>
<tr>
<td>Duplicate Gradient</td>
<td>Duplicates the selected gradient settings.</td>
</tr>
<tr>
<td>Change Gradient Name</td>
<td>Change the name of the selected gradient settings.</td>
</tr>
<tr>
<td>Replace Gradient</td>
<td>Overwrites the settings selected in the list with the settings of a gradient displayed on the color bar.</td>
</tr>
<tr>
<td>Apply to Gradient Settings</td>
<td>Imports the gradient settings selected from the list into the color bar.</td>
</tr>
<tr>
<td>Import Gradient</td>
<td>Import a gradient settings file from IllustStudio (extension: cgs).</td>
</tr>
</tbody>
</table>
(3) **Gradient List**
A list of gradient settings included in the gradient set currently being viewed.

(4) **Up/Down**
Move the display position of the gradient settings selected in the list up or down.

(5) **Replace Gradient**
Overwrites the settings selected in the list with the settings of a gradient displayed on the color bar.

(6) **Apply to Gradient Settings**
Imports the gradient settings selected from the list into the color bar.

(7) **Duplicate Gradient**
Duplicates the selected gradient settings.

(8) **Add Gradient**
Add the settings of the gradient displayed on the color bar to the list. The added gradient settings are displayed at the bottom of the list.

(9) **Delete Gradient**
Deletes the gradient settings selected in the list.

**C. Position**
Allows you to configure the position of the selected node.

**D. Opacity**
Allows you to configure the opacity of the selected node.

**E. Color**
Configures a color for the selected node.

(1) **Main drawing color**
Configures the main drawing color for node color. Changing the main drawing color with a color palette also changes the node color.

(2) **Sub drawing color**
Configures the sub drawing color for node color. Changing the sub drawing color with a color palette also changes the node color.

(3) **Specified color**
Allows you to configure a specified color for node color. The [Color settings] dialog box can be displayed by clicking the color indicator.

**Memo**
For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

(4) **Obtain screen color [Windows/macOS]**
Allows you to reference a color on the screen using the eyedropper and set it as a [Specified color].

**F. Mixing rate curve**
Allows you to adjust the change in color between the selected node and that to the right.

- The horizontal axis of the graph indicates the position of the nodes.
- The vertical axis of the graph indicates the color mixing rate with respect to the node at the right. The larger the value, the more proximate is the color of the node to that of the node at the right. The smaller the value, the more proximate is to the color of the selected node.
Clicking on the curve allows you to add up to 16 points, which you can drag to adjust the mixing rate curve. Dragging a point out of the graph allows you to delete the point.

**[Material property] Dialog Box [PRO/EX]**

1. **Material name**
   Input a name for the material.

2. **Location to save material**
   Click a folder to specify the location to save the material. The specified location is applied to the [Tree view] on the [Materials] palette.

3. **Search tag**
   Click the tag list and specify a search tag displayed in the [Tag list].
   New tags can be created by clicking the "+" tag at the bottom right.

**[Import material set] dialog box [PRO/EX]**

1. **Search box**
   Allows you to input a keyword and search for a gradient set image.

2. **Tag list**
   A list of tags assigned to materials displayed as buttons. Clicking a button displays brush shapes meeting the specified information in [Gradient set list].

3. **Gradient set list**
   Displays the list of gradient sets.

4. **Show item check box**
   Shows a check box for each thumbnail of the gradient sets shown in [Gradient set list]. You can select a material by turning on the check box.

5. **Thumbnail [Large]**
   Shows the large thumbnails of the gradient sets shown in [Gradient set list].

6. **Thumbnail [Small]**
   Shows the small thumbnails of the gradient set images shown in [Gradient set image list].

7. **Thumbnail [Detail]**
   Shows the thumbnails as well as information of the gradient set images shown in [Gradient set image list].
Image material

Allows you to configure the size of an image material when the [Image material] layer is selected with the [Object] sub tool.

(1) Scale ratio (Horizontal)
Specifies the horizontal width of an imported image as a percentage of the original image (%).

(2) Scale ratio (Vertical)
Specifies the vertical width of an imported image as a percentage of the original image (%).

(3) Keep aspect ratio
When this is on, the image will keep its original aspect ratio (proportions) when scaled up or down.

(4) Rotation angle
Specifies the image rotation angle with respect to the horizontal position.

(5) Adjust position
Allows you to adjust the size of an image material being edited automatically. The size is specified by the size of the [Guide line] of the image material.

<table>
<thead>
<tr>
<th>Canvas</th>
<th>The size of [Guide line] of an image material is adjusted so that it is included in [Canvas].</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleed border</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Bleed border].</td>
</tr>
<tr>
<td>Cropped border</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Cropped border].</td>
</tr>
<tr>
<td>Default border</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Default border].</td>
</tr>
<tr>
<td>Free position</td>
<td>The size of [Guide line] of an image material is not adjusted.</td>
</tr>
</tbody>
</table>

Memo
When [Bleed border], [Cropped border], or [Default border] is selected on a canvas on which [Bleed border], [Cropped border], and [Default border] are not configured, the size of [Guide] is adjusted so that it is included in [Canvas].
(6) **Interpolation method**
You can select the method for interpolating the colors of pixels when transforming images.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth edges (bilinear)</td>
<td>This method blends the colors of neighboring pixels to create smooth outlines (boundaries between colors). However, outlines may become blurred depending on the image.</td>
</tr>
<tr>
<td>Hard edges (nearest neighbor)</td>
<td>When interpolating the image, the pixels in the image are duplicated. Since the colors are not affected by neighboring pixels, outlines (boundaries between colors) remain sharp. However, outlines may become jagged depending on the image.</td>
</tr>
<tr>
<td>Clear edges (bicubic)</td>
<td>This method blends the colors of neighboring pixels to create smooth outlines (boundaries between colors). This method results in stronger outlines compared to the [Smooth outline (bilinear method)] setting. However, white noise may appear around outlines depending on the image.</td>
</tr>
<tr>
<td>High accuracy (average colors)</td>
<td>The average colors of the original pixels are strictly calculated and contained for each pixel after the transformation. Scaling up makes the line sharper and scaling down makes the line smoother. Even detailed lines can be transformed smoothly when scaling the image down. However, this method can result in blurred outlines and can take a long time to process depending on the image.</td>
</tr>
</tbody>
</table>

### Image settings

Allows you to configure the size of an image to transform when an item is selected from the [Edit] menu → [Transform].

- **Important** Some settings may not display depending on the selected command.

1. **Scale ratio (Horizontal)**
   Specifies the horizontal width of an imported image as a percentage of the original image (%).

2. **Scale ratio (Vertical)**
   Specifies the vertical width of an imported image as a percentage of the original image (%).

3. **Keep ratio of original image**
   Scales up/down with the original aspect ratio kept unchanged.

4. **Rotation angle**
   Specifies the image rotation angle with respect to the horizontal position.

5. **Adjust position**
   Allows you to adjust the size of an image being transformed automatically. The size is specified by the size of the [Guide line] of the image to transform.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canvas</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Canvas].</td>
</tr>
<tr>
<td>Bleed border</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Bleed border].</td>
</tr>
<tr>
<td>Cropped border</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Cropped border].</td>
</tr>
<tr>
<td>Default border</td>
<td>The size of [Guide line] of an image material is adjusted so that it is included in [Default border].</td>
</tr>
<tr>
<td>Free position</td>
<td>The size of [Guide line] of an image material is not adjusted.</td>
</tr>
</tbody>
</table>
(6) Interpolation method
You can select the method for interpolating the colors of pixels when transforming images.

The displayed items may vary depending on the content to be transformed.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth edges (bilinear)</td>
<td>This method blends the colors of neighboring pixels to create smooth outlines (boundaries between colors). However, outlines may become blurred depending on the image.</td>
</tr>
<tr>
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<td>When interpolating the image, the pixels in the image are duplicated. Since the colors are not affected by neighboring pixels, outlines (boundaries between colors) remain sharp. However, outlines may become jagged depending on the image.</td>
</tr>
<tr>
<td>Clear edges (bicubic)</td>
<td>This method blends the colors of neighboring pixels to create smooth outlines (boundaries between colors). This method results in stronger outlines compared to the [Smooth outline (bilinear method)] setting. However, white noise may appear around outlines depending on the image.</td>
</tr>
<tr>
<td>High accuracy (average colors)</td>
<td>The average colors of the original pixels are strictly calculated and contained for each pixel after the transformation. Scaling up makes the line sharper and scaling down makes the line smoother. Even detailed lines can be transformed smoothly when scaling the image down. However, this method can result in blurred outlines and can take a long time to process.</td>
</tr>
<tr>
<td>Smooth (oversampling)</td>
<td>Each pixel is divided into multiple pixels and calculated as an average of the original pixel colors before transformation. This method makes outlines smoother, but may take a long time to process.</td>
</tr>
</tbody>
</table>

**Memo**
- When [Bleed border], [Cropped border], or [Default border] is selected on a canvas on which [Bleed border], [Cropped border], and [Default border] are not configured, the size of [Guide] is adjusted so that it is included in [Canvas].

**Ink**
Allows you to configure the amount and/or density of the paint to apply, how to mix or stretch colors and the like. It also allows you to configure opacity.

The following items are not available for [Vector layer] and layers whose [Expression color] is [Monochrome].
- Color mixing
- Amount of paint
- Density of paint
- Color stretch
- Intensity of blur

**Important**
Some settings may not display depending on the selected tool or sub tool.
(1) **Opacity**

Configures the opacity of the drawing. A slider allows you to change the setting. You can also change the setting by using the up and down arrow icons next to the value box. The [Dynamics] button allows you to select which input settings affect the opacity. For example, configuring [Pen pressure] for [Dynamics] makes it easier to vary the tone in accordance with the pen pressure.

For more information on dynamics, see “Dynamics settings”.

- [Opacity] is not available when using the [Fill] tool, [Dot pen] sub tool or [Lasso fill] tool to draw on a layer whose [Expression color] is [Monochrome].
- [Dynamics] cannot be configured when [Color mixing] is turned on.

(2) **Combine mode**

Set how to overlap subsequent drawing colors over the first drawing color when drawing in multiple colors on the same layer. Select one from the combine modes described below. This setting is available when [Color mixing] is turned off.

<table>
<thead>
<tr>
<th>Normal</th>
<th>Overlaps the drawing color used in the upper layer as-is to the drawing colors used in the lower layer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darken</td>
<td>The RGB values of the first drawing color are compared to those of subsequent drawing colors and the color with the lowest values is displayed.</td>
</tr>
<tr>
<td>Multiply</td>
<td>The RGB values of the first drawing color are multiplied by those of subsequent drawing colors. After combine, the colors are darker than the originals. If white is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Color burn</td>
<td>Produces an effect similar to the &quot;Burn&quot; in silver halide photography. The original drawing colors are first darkened to enhance contrast and then combined with the fill color. If white is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Linear burn</td>
<td>The drawing colors used in the lower layer are first darkened and then, combined with that used in the upper layer. If white is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Black burn</td>
<td>Subsequently drawn areas are darkened to create an effect like an underexposed photo. The effect is not applied when the original color is transparent.</td>
</tr>
<tr>
<td>Subtract</td>
<td>Subtraction is performed between the RGB values of the first drawing color and those of subsequent drawing colors. After blending, the color is darker than the first color. If black is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Lighten</td>
<td>The RGB values of the first drawing color are compared to those of subsequent drawing colors and the color with the highest values is displayed.</td>
</tr>
<tr>
<td>Screen</td>
<td>The drawing colors used in the lower layer are first inverted and then, multiplied by that used in the upper layer. After combine, the colors are brighter than the originals. However, if black is used as a subsequent drawing color, the first drawing color is displayed as-is. Additionally, if white is used as a subsequent drawing color, white is displayed as-is.</td>
</tr>
<tr>
<td>Color dodge</td>
<td>As with &quot;Dodge&quot; in silver halide photography, brightens the colors used in the lower layer to decrease contrast. If black is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Dodge (Glow)</td>
<td>Produces stronger effect on semi-transparent areas than [Color dodge]. If black is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Dodge (White burn)</td>
<td>Subsequently drawn areas are brightened to create an effect like an overexposed photo. This effect is not applied if the first color is transparent.</td>
</tr>
<tr>
<td>Add</td>
<td>Addition is performed between the RGB values of the first drawing color and those of subsequent drawing colors. After combine, the colors are brighter than the originals. If black is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Add (Glow)</strong></td>
<td>Produces stronger effect on semi-transparent areas than [Add]. If black is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td><strong>Overlay</strong></td>
<td>Combines by applying [Multiply] or [Screen] depending on the overlapped colors. After combine, bright areas are brighter and dark areas, darker.</td>
</tr>
<tr>
<td><strong>Soft light</strong></td>
<td>The result differs depending on the brightness of the subsequent drawing colors. If the subsequent drawing color is brighter than 50% gray, the result is brighter than the original color, like the dodge effect. If the subsequent drawing color is darker than 50% gray, the result is darker than the original color, like the burn effect. If the subsequent drawing color is 50% gray, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td><strong>Hard light</strong></td>
<td>The result differs depending on the brightness of the subsequent drawing colors. If the subsequent drawing color is brighter than 50% gray, the result is a bright color resembling [Screen]. If the subsequent drawing color is darker than 50% gray, the result is a dark color resembling [Multiply]. If the subsequent drawing color is 50% gray, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td>Subtraction is performed between the first drawing color and the subsequent drawing color and the absolute value is used for blending with the first drawing color.</td>
</tr>
<tr>
<td><strong>Erase</strong></td>
<td>The first drawing color is erased in the area where the subsequent color is drawn.</td>
</tr>
<tr>
<td><strong>Background</strong></td>
<td>The subsequent color is drawn underneath the first color. The subsequent color overlaps as if it were the first color.</td>
</tr>
<tr>
<td><strong>Replace alpha</strong></td>
<td>The subsequent color overlaps over the first color. The opacity of the overlapping area is converted to the [Opacity] specified on the [Sub Tool Detail] palette and the [Tool Property] palette.</td>
</tr>
<tr>
<td><strong>Compare density</strong></td>
<td>Filling is only done if the opacity of the subsequent drawing color is greater than that of the first color.</td>
</tr>
<tr>
<td><strong>Erase (compare)</strong></td>
<td>The first color is only erased if the value obtained by subtracting the opacity of the subsequent color from 100 is smaller than the opacity of the first color.</td>
</tr>
<tr>
<td><strong>Vivid light</strong></td>
<td>Contrast is strengthened or weakened according to the subsequent drawing color when blending. If the subsequent drawing color is brighter than 50% gray, the burn effect is applied to brighten the area. If it is darker than 50% gray, the dodge effect is applied and the contrast is strengthened.</td>
</tr>
<tr>
<td><strong>Linear light</strong></td>
<td>The brightness is increased or decreased according to the subsequent drawing color when blending. If the subsequent drawing color is brighter than 50% gray, the area is brightened. If it is darker than 50% gray, the area is darkened.</td>
</tr>
<tr>
<td><strong>Pin light</strong></td>
<td>The image color is overlapped according to the subsequent drawing color when blending. If the subsequent drawing color is brighter than 50% gray, the subsequent color overlaps only in the areas where the first color is darker. If the subsequent drawing color is darker than 50% gray, the subsequent color overlaps only in the areas where the first color is brighter.</td>
</tr>
<tr>
<td><strong>Hard mix</strong></td>
<td>The RGB values of the subsequent drawing color are added to the RGB values of the first drawing color. If the total of an RGB value is higher than 255, it is converted to 255. If the total of an RGB value is lower than 255, it is converted to 0.</td>
</tr>
<tr>
<td><strong>Exclusion</strong></td>
<td>An effect similar to [Difference], except with a lower contrast. If white is used as a subsequent drawing color, the colors are blended with the subsequent color inverted. If black is used as a subsequent drawing color, the first drawing color is displayed as-is.</td>
</tr>
<tr>
<td><strong>Darker color</strong></td>
<td>The brightnesses of the subsequent color and the first color are compared and the color with the lower value is displayed.</td>
</tr>
<tr>
<td><strong>Lighter color</strong></td>
<td>The brightnesses of the subsequent color and the first color are compared and the color with the higher value is displayed.</td>
</tr>
</tbody>
</table>
(3) **Color mixing**
When turned on, allows you to paint by mixing the already used colors as in water coloring.

<table>
<thead>
<tr>
<th>Blend</th>
<th>Mixes the already used colors and paints by adding the drawing color.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running color</td>
<td>Blurs the already used colors and then, paints by adding the drawing color. It allows you to create a running color effect.</td>
</tr>
</tbody>
</table>

(4) **Amount of paint**
Configures the amount of paint for the drawing color. Amount of paint is the ratio for mixing the RGB components of the drawing color with the ground color (color already painted on the layer). The bigger value is, the higher percentage of RGB values of drawing color. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the amount of paint. This setting is available when [Color mixing] is turned on.
For more information on dynamics, see "Dynamics settings".

(5) **Density of paint**
Configures the density of paint for the drawing color. Density of paint is the percentage for mixing transparent values of ground color (color already painted on layer) and drawing color. The bigger value is, the higher percentage of transparent values of drawing color. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the density of paint. This setting is available when [Color mixing] is turned on.
For more information on dynamics, see "Dynamics settings".

<table>
<thead>
<tr>
<th>Divide</th>
<th>Each RGB value of the first drawing color is multiplied by 255 and divided by the respective RGB value of the subsequent drawing color.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hue</td>
<td>The hue of the subsequent drawing color is applied while maintaining the brightness and saturation values of the first drawing color.</td>
</tr>
<tr>
<td>Saturation</td>
<td>The saturation of the subsequent drawing color is applied while maintaining the brightness and hue values of the first drawing color.</td>
</tr>
<tr>
<td>Color</td>
<td>The hue and saturation of the subsequent drawing color are applied while maintaining the brightness of the first drawing color.</td>
</tr>
<tr>
<td>Brightness</td>
<td>The brightness of the subsequent drawing color is applied while maintaining the hue and saturation of the first drawing color.</td>
</tr>
</tbody>
</table>

- Divide
- Hue
- Saturation
- Color
- Brightness

- **Amount of paint 100, Density of paint 0**
- **Amount of paint 50, Density of paint 50**
- **Amount of paint 0, Density of paint 0**
- **Amount of paint 100, Density of paint 100**
- **Amount of paint 50, Density of paint 100**
- **Amount of paint 0, Density of paint 100**
(6) **Color stretch**

Adjusts how much to keep the color at the start of the stroke when drawing. This setting is available when [Color mixing] is [Blend] or [Running color].

- The smaller the value, the shorter will be the length for blending with the surrounding color.
- The larger the value, the longer will be the length for blending with the surrounding color.

(7) **Intensity of blur**

Configures the way the already painted color will run when [Running color] is configured for [Color mixing].

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>The already painted color will run in conjunction with the line thickness.</td>
</tr>
<tr>
<td>Fixed value</td>
<td>The already painted color will run as specified by the slider or input value.</td>
</tr>
</tbody>
</table>

(8) **Fixed intensity of blur**

Specifies how strong the already painted color will run when [Fixed value] is configured for [Intensity of blur]. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the intensity of blur.

For more information on dynamics, see "Dynamics settings".

(9) **Blend with sub color**

Combines the main drawing color and sub drawing color for drawing. The larger the value, the higher will be the ratio of the sub drawing color. The [Dynamics] button allows you to select the settings of the tablet and the like which affect the mixing rate of sub drawing color.

For more information on effect sources, see "Dynamics settings".

(10) **Where to create (When [Gradient] tool is selected) [PRO/EX]**

Specifies the target layer when drawing with the [Gradient] tool.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw on editing layer</td>
<td>Applies gradient directly to the selected layer.</td>
</tr>
<tr>
<td>Create gradient layer</td>
<td>Creates a new layer to apply gradient. When gradient layer is used, you will be able to edit the gradient angle and position even after drawn.</td>
</tr>
</tbody>
</table>
Layer
You can adjust the following settings in the [Sub Tool Detail] palette when an 2D camera folder is selected with the [Object] sub tool.
You can configure the following settings when selecting layers and layer folders that have [Enable keyframes on this layer] turned on.

1) **Layer opacity**
   Configures the opacity of the layer.

2) **Previous keyframe**
   Moves to the previous keyframe for the [Opacity] setting for the selected frame on the [Timeline].

3) **Add/delete opacity keyframe**
   - Click this to add a keyframe to the [Opacity] on the [Timeline] palette.
   - If you change [Opacity] settings, a diamond icon (♦) will appear and a keyframe will be added to the [Timeline] palette.
   - If you click the box when it has a diamond (♦), the icon will disappear and the keyframe will be deleted from the [Timeline] palette.

4) **Next keyframe**
   Moves to the next keyframe for the [Opacity] setting on the [Timeline].

Light Source
Allows you to configure the light source when a 3D material is selected with the [Object] sub tool.

- **Important** Shadows cannot be set if a 3D background material is selected.

1) **Apply light source**
   When turned on, this applies a light source to the selected 3D material.

   - **Memo** The same setting can also be configured by using [Lighting] in the [Rendering settings] dialog box. For details on the [Rendering settings] dialog box, see "Preference".

2) **Shadow**
   When turned on, this applies shadows to 3D materials.

   - **Memo** The same setting can also be configured by using [Lighting] in the [Rendering settings] dialog box. For details on the [Rendering settings] dialog box, see "Preference".

3) **Light Source Direction**
   Allows you to configure the orientation of the light source by dragging a circle.

   - **Memo** Advanced light source settings can also be configured in the [Allocate] category on the [Sub Tool Detail] palette. For details, see "Allocate".
(4) **Use parallel light**

Allows you to expose a 3D material to a light source when turned on.

---

**Light table**

Configure the operating procedure when a layer configured in the light table is selected in the [Light table] palette.

1. **Drag**

Configure the operation to be performed when dragging. Select whether to move or rotate the light table.

2. **Click**

Set the click operation. Select either [None] or [Move center]. When [Move center] is selected, click the canvas to specify the center point for when the light table is rotated or inverted.

3. **Touch**

Set the two finger touch operation. Set the item that you want to operate to on to enable it.

---

**Important**

[Touch] settings can be used on a computer that is compatible with touch operations. [Light table] tool operations cannot be controlled by touch operations in other environments.

<table>
<thead>
<tr>
<th>Move with two fingers</th>
<th>Swipe with two fingers to move the light table.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale up/down with two fingers</td>
<td>Pinch in/pinch out with two fingers to scale the light table up/down.</td>
</tr>
<tr>
<td>Rotate with two fingers</td>
<td>Rotate with two fingers to rotate the light table.</td>
</tr>
</tbody>
</table>
Line space/alignment

Allows you to configure alignment, spacing and the like when using the [Text] sub tool, or when the [Text layer] is selected with the [Object] sub tool.

Important
Some settings may not display depending on the selected tool or sub tool.

(1) Justify
Configures the position for aligning the text lines.

<table>
<thead>
<tr>
<th>Top align/Left align</th>
<th>Top align applies to vertical text while left align applies to horizontal text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center align</td>
<td>Centers each line.</td>
</tr>
<tr>
<td>Bottom align/Right align</td>
<td>Bottom align applies to vertical text while right align applies to horizontal text.</td>
</tr>
</tbody>
</table>

(2) Line space
Adjusts the space between lines. The line space for each line can be set when the line is selected using the [Text] sub tool.

(3) How to specify
Configures the method for specifying the line space.

<table>
<thead>
<tr>
<th>Specify length</th>
<th>Specify the space between lines as length (in points or Q).</th>
</tr>
</thead>
<tbody>
<tr>
<td>By percentage</td>
<td>Specify the space between lines as a ratio (%) of the letter size.</td>
</tr>
</tbody>
</table>

Memo
The unit of [Specify length] for [Line space] can be toggled between points (pt) and Q. It is configured by [Text unit] under [Ruler/Unit] → [Unit] on the [Preferences] dialog box that displays when [File] menu ([CLIP STUDIO PAINT] menu in mac OS version) → [Preferences] is selected.
Manga Perspective

Allows you to configure a manga-like perspective with the depth emphasized when editing a 3D character or 3D drawing figure.

* The "Manga perspective" function has been developed based on technologies devised from "Research and Development of Ultra-realistic Communication Technologies with Evolutionary 3D Imaging Technologies", a consigned research by the National Institute of Information and Communications Technology (NICT), an independent organization, in cooperation with Naemura Laboratory at Tokyo University and HITACHI.

(1) Manga perspective

Allows you to configure a manga-like perspective with the depth emphasized for a 3D character material or 3D drawing figure. Unlike [Perspective] of the [Camera] category, you can emphasize the expression of the depth without changing the impression of the pose.

When this item is turned on, you can adjust the strength of the effect of manga-perspectives by slider. The larger the value, the stronger will be the effect.
(2) **Collision correction**

Turning this on corrects the collision of parts so that they do not overlap when [Manga Perspective] is turned on.

### Mesh [PRO/EX]

Allows you to configure the number of lattices for a mesh transform by [Edit] menu → [Transform] → [Mesh].

1. **Number of horizontal lattice points**
   Displays guides with the configured number of lattice points (handles) in the horizontal direction of the selected image.

2. **Number of vertical lattice points**
   Displays guides with the configured number of lattice points (handles) in the vertical direction of the selected image.

### Move layer

Allows you to configure how to move a layer when using the [Move layer] tool.

1. **Object to move [PRO/EX]**
   Selects the type of the layer to be moved.

<table>
<thead>
<tr>
<th>Layer</th>
<th>Moves a layer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halftone dots of tone</td>
<td>Moves the halftone dots of tone. The range where tone is attached does not change.</td>
</tr>
<tr>
<td>Grid/Ruler</td>
<td>Moves grids and rulers.</td>
</tr>
</tbody>
</table>

2. **Move the object at the clicked position**
   Moves the layer with a drawing in the clicked position.

3. **Move layers in the selected area**
   Moves the layer with a drawing within the selected area.

4. **Change the status of the object to move to selected**
   Selects layers with a drawing in the clicked position and layers with a drawing in the selected area.

5. **Keep original image**
   When turned on, the original image is kept when moving an image. If an area is selected, images in the selected area are duplicated and moved. If no area is selected, the layer to be moved is duplicated and moved.
**Object * **

Allows you to configure the display method of the 3D Object when a 3D material is selected with the [Object] sub tool.

(1) **Material**

Click to display a list of materials. Select the desired material for the selected 3D object material. Selecting a material allows you to change the tone and texture of the 3D object material.

(2) **Layout**

Click to display a list of layouts for the 3D object material. Select the desired layout for the selected 3D object material. The allocation of 3D object materials can be changed by selecting a layout.
(3) **Movable parts**

Click to display a list of pose parts set for the 3D object material. A slider can be used to adjust the position of a pose part.

(4) **Initial pose**

If a 3D material has multiple parts, the parts will be set to their default position.

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**Object List [PRO/EX]**

Allows you to configure the Parts of the 3D material when a 3D material is selected with the [Object] sub tool. This is the same as the [Object List] in the [Allocate] category.

---

**Memo**

The [Object List] is not displayed when a Ver.1.5 compatible 3D material is selected.

(1) **Show/Hide**

Toggles between showing/hiding 3D materials and parts included in 3D materials. Hidden 3D materials and parts cannot be edited. This setting does not apply to the [Camera].

(2) **Lock**

Locks 3D materials so that they cannot be edited. Clicking toggles the lock on and off. Please note that even when the lock is On, the camera angle of the entire 3D layer, etc. can still be changed.

(3) **Toggle selection**

This enables or disables selection on a 3D material.

When selection is enabled, you can select individual parts of 3D materials that contain multiple parts.

(4) **Camera**

Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Camera related settings list. For details on settings that can be configured when [Camera] is selected, see "Allocate".

(5) **Ambient light**

Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Ambient light related settings list. For details on settings that can be configured when [Ambient light] is selected, see "Allocate".

(6) **Parallel light 1**

Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Parallel light related settings list. For details on settings that can be configured when [Parallel light 1] is selected, see "Allocate".
(7) **Parallel light 2**
Select this to switch the [Tool Property] palette and the [Sub Tool Detail] palette’s [Allocate] settings list to the Parallel light related settings list. For details on settings that can be configured when [Parallel light 2] is selected, see "Allocate".

(8) **Material name**
Name of the 3D material. Clicking on a 3D material’s name allows you to edit it.

(9) **Open/Close Parts**
Sets whether to display the names of parts included in materials in the [Object List] when loading 3D object materials containing pose parts and 3D materials in LWS format.

**Memo** To open or close all of the [Object list] hierarchies, Right click [Object List] and click Show all or Close all from the displayed menu.

(10) **Part Name**
Displays the names of parts included in 3D materials when loading 3D object materials containing pose parts and 3D materials in LWS format. Click the part name to switch the edit target to the clicked part. You can change the position and orientation of parts using the drag operation or [Tool Property] palette.

---

**Operation**
Allows you to configure the operating procedure for the layer and the like when the [Object] sub tool is used.

**Important** Some settings may not display depending on the selected layer or object.

(1) **Operation of transparent part**
Configures the operation when a transparent area (area where nothing is drawn) is clicked or dragged.

**Switch to a different layer**
Clicking a transparent area of the selected layer selects objects on other layers with drawings at the clicked point.
Operate object by dragging
You can choose options for [Use 3D layer] and [Set direction of parallel line ruler].

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use 3D layer</td>
<td>If you drag a transparent area while selecting a 3D layer, you can carry out operations selected with the Movement Manipulator or rotating the camera on the 3D layer.</td>
</tr>
<tr>
<td>Set direction of parallel line ruler [PRO/EX]</td>
<td>Dragging when the parallel line ruler is displayed changes the direction of the parallel line ruler in the dragged direction.</td>
</tr>
</tbody>
</table>

Select area by dragging [PRO/EX]
You can set how to select items when dragging a transparent area while selecting a layer such as a vector layer or balloon layer. You can select either [Object] or [Control point].

<table>
<thead>
<tr>
<th>Selection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Select objects within the dragged area on the current layer.</td>
</tr>
<tr>
<td>Control point</td>
<td>Select control points within the dragged area on the current layer.</td>
</tr>
</tbody>
</table>

Move within transformation frame by dragging
You can set operation when dragging transparent areas when there is a transformation frame on the layer.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable on all layers</td>
<td>You can move images within the transformation frame and layer frame by dragging within the transformation frame when it is visible on the layer.</td>
</tr>
<tr>
<td>Enable for 2D camera folders only</td>
<td>You can move 2D camera folder transformation frames by dragging within the folder’s frame. The other layers cannot be moved.</td>
</tr>
</tbody>
</table>
(2) **Selectable object**

Configures the types of layers and objects that can be selected by clicking. The layers and objects that can be configured are as follows:

- Raster
- Vector [PRO/EX]
- Image material
- 3D
- Balloon [PRO/EX]
- Text
- Frame border [PRO/EX]
- Gradient [PRO/EX]
- Fill [PRO/EX]
- Ruler [PRO/EX]
- Saturated line/Stream line [PRO/EX]
- 2D camera

(3) **Add Selection [PRO/EX]**

Configures the operation when another object or control point is selected when there are already selected objects or control points.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New selection</td>
<td>Cancels the current selection to select new objects or control points.</td>
</tr>
<tr>
<td>Add to selection</td>
<td>Adds new objects or control points to the current selection.</td>
</tr>
<tr>
<td>Remove from selection</td>
<td>Removes newly selected objects or control points from the current selection.</td>
</tr>
</tbody>
</table>

(4) **Snap to other frame borders [PRO/EX]**

Allows snapping to another side of the frame border or its extension when a control point or side of a frame border is moved. This setting displays when a frame border folder is selected.
(5) **Keep gutters aligned [PRO/EX]**
This sets the method to control the sides and control points of frame borders. This setting displays when a frame border folder is selected.

**None**
This will only move the selected side or control point. Other sides and control points of frame borders will not move.

**Horizontal & adjacent**
When moving sides or control points of a frame, connecting gutters will move as well.
Horizontal frame borders adjacent to the moving side or control points will move as well.
However, when moving a vertical frame border, only the immediately adjacent frame border will move. Any other adjacent border will not move.

When using wider frame borders, the border may not move with the sides or control points. If so, set the frame border's vertical gutter and horizontal gutter wider than the frame border gap in the [Preferences] dialog.

**All**

When moving sides or control points of a frame, connecting gutters will move as well.

Horizontal frame borders adjacent to the moving side or control points will move as well.
Vertical frame borders adjacent to the moving side or control points will move as well.

When using wider frame borders, the border may not move with the sides or control points. If so, set the frame border’s vertical gutter and horizontal gutter wider than the frame border gap in the [Preferences] dialog.
Outline

Allows you to configure the outline when a 3D material is selected with the [Object] sub tool, for example.

1. Outline width
   You can show or hide the outline of 3D materials. When turned on, the outline width can also be configured. The larger the value, the thicker the outline.

2. Opacity
   Configures the opacity of the outline. The larger the value, the higher will be the opacity of the outline.

3. Color
   Configures the drawing color of the outline. Clicking the color indicator displays the [Color settings] dialog box.

Memo

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".
Perspective ruler [PRO/EX]

Displayed items vary depending on the selected tool or sub tool.

→ "When the Object sub tool is selected"
→ "When the Perspective ruler sub tool is selected"

When the Object sub tool is selected

Allows you to configure how to display the ruler or snap to ruler and the like when a perspective ruler is selected with the [Object] sub tool.

(1) Snap

When turned on, snap to a perspective ruler is enabled. When another special ruler is displayed on the same canvas, snap to other ruler is disabled.

Memo

Clicking the rhombus handle (◊) on the perspective ruler allows you to enable/disable snap to all perspective rulers or each guide line.

(2) Fix eye level

Configures the eye level operation. When turned on, the vanishing point moves along the eye level. When turned off, the position of the eye level moves in conjunction with the vanishing point.

Memo

Eye level is a line that represents the height at which the line of vision or camera is located. A horizontal vanishing point is placed at the eye level.

(3) Horizontalize eye level

The eye level can be horizontalized by clicking.

(4) Grid

Displays equally-spaced grid (auxiliary lines) from the vanishing point. The grid displayed by each button is different.

Memo

- Grids may not display depending on where the vanishing point has been placed.
- To snap to the grid, turn on snap by selecting [View] menu → [Snap to Grid].

XY plane

One-point perspective  Two-point perspective  Three-point perspective
**YZ plane**

One-point perspective  
Two-point perspective  
Three-point perspective

**XZ plane**

One-point perspective  
Two-point perspective  
Three-point perspective

(5) **Grid size**

Specifies the size (gap) between grid lines. The larger the size, the wider is the area where the grid displays.
When the Perspective ruler sub tool is selected

Allows you to configure the vanishing point, guides and the like for the perspective ruler. Furthermore, it allows you to create a new perspective ruler.

(1) Process

Configures how to edit the perspective ruler. Allows you to edit the vanishing point, guide and the like.

Add vanishing point

Adds a vanishing point to the perspective ruler. Drag on the canvas to create two guides. The vanishing point will be added at the intersection of the guide lines. Creates a new perspective ruler when there is none.

Delete vanishing point

Deletes a vanishing point from the perspective ruler. To delete a vanishing point, click the vanishing point or a guide.
Add guide
Adds a guide to the perspective ruler. Dragging on the canvas adds a guide up to the closest vanishing point in the dragged direction.

Delete guide
Deletes a guide from the perspective ruler. To delete a guide, click the guide.

Fix vanishing point
Fixes the vanishing point. To fix, click the vanishing point or a guide.
Infinitize
Places the vanishing point at infinity. To set to infinity, click the vanishing point or a guide.

(2) Change perspective drawing method
When turned off, allows you to add an auxiliary vanishing point without changing the perspective drawing method. When turned on, adding a vanishing point to an existing perspective ruler with the [Perspective ruler] sub tool changes the perspective drawing method.

- Adding a vanishing point to a one-point perspective ruler changes the ruler to a two-point perspective ruler.
- Adding a vanishing point to a two-point perspective ruler changes the ruler to a three-point perspective ruler.

(3) Create at editing layer
When turned on, creates the perspective ruler on the edited layer.
Pinch line [PRO/EX]

Allows you to configure how a line is pinched, or the pinch area when a [Vector layer] or [Balloon layer] is selected with the [Pinch vector line] tool.

(1) **Fix end**

Allows you to select whether or not and how to fix the starting point and/or end point when transforming a line.

**Fix both ends**

Fixes both starting and end points of the line. The starting point and end point do not move even if the line is pinched.

![Diagram showing fix both ends](image)

**Fix either end**

Fixes the opposite end from the point where the line will be reshaped. The end that is fixed does not move even if the line is pinched.

![Diagram showing fix either end](image)
**Free both ends**
Both starting point and end point of the line can move. When the line is pinched, both the starting point and end point may move depending on the value of [Pinch level].

![Diagram](image1.png)

(2) **Pinch level**
Configures the length of the line affected by Pinch line. When the value is small, the portion affected by Pinch line is limited. When the value is large, the entire line may be transformed.

![Diagram](image2.png)

Pinch level: 5  
Pinch level: 15

(3) **Pen pressure**
When turned on, [Pinch level] changes in accordance with the pen pressure on the tablet.

(4) **Pinch area**
Specifies the area affected by Pinch line at the time the line starts to be dragged. The larger the value, the farther the effect will reach.

(5) **All layers**
When turned on, allows you to operate all lines drawn on all displayed vector/balloon/frame border/ruler layers. Clicking a line drawn on another layer switches the edited layer.
When turned off, operation is enabled only for lines drawn on the vector/balloon/frame border/ruler layer being edited.

(6) **Add control point**
Depending on the pinched point and distance between control points, the shape of the line may become irregular after transform. When turned on, control points are added during transform making it more difficult to become irregular after transform. When turned off, no control points are added. This setting allows you to transform straight lines by keeping its shape.
(7) **Connect line**
When turned on, connects two neighboring segments of line with the same settings for pen tip shape, angle, color and the like. Dragging in such a way as to overlap the ends of both segments when pinching a line, connects the two segments.

(8) **Snap to symmetry ruler**
When turned on, the pinched line is snapped to the symmetrical ruler and other lines are changed in conjunction with it. When turned off, only the pinched line is changed.

### Pose
Selecting a 3D drawing figure or a 3D character Material with the [Object] sub tool allows you to set poses.

**Memo**
Some items are not shown when a Ver.1.5 compatible 3D material is selected.

1. **Initial pose**
   When clicked, resets the pose settings to the initial pose.

2. **Flip Horizontal**
   Click this allows you to flip the pose of a 3D drawing figure or 3D character material horizontally or vertically.

3. **Use 3D pose materials**
   The [Use 3D pose material] dialog box will be displayed, allowing your to apply pose materials to 3D character materials and 3D drawing figures.

   **[Use 3D pose material] Dialog Box**
   To apply a pose material you want to import, click OK to apply it to 3D character materials or a 3D drawing figure.

<table>
<thead>
<tr>
<th>(1) Search box</th>
<th>Enter keywords and search for sub tool materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Tag list</td>
<td>A list of tags assigned to materials displayed as buttons. Click a button to display specified information in the pose material list.</td>
</tr>
<tr>
<td>(3) Pose materials list</td>
<td>A list of pose materials.</td>
</tr>
<tr>
<td>(4) Thumbnail [Large]</td>
<td>Shows larger thumbnails of the pose materials in the pose material list.</td>
</tr>
<tr>
<td>(5) Thumbnail [Small]</td>
<td>Shows small thumbnails of the pose materials in the pose material list.</td>
</tr>
<tr>
<td>(6) Thumbnail [Detail]</td>
<td>Other than thumbnails, the pose material list shows information on each material.</td>
</tr>
</tbody>
</table>
(4) **Pose Scanner (image) (Technology preview)**

This reads a picture containing a figure and applies the figure’s pose to 3D characters and 3D drawing figures.

Importable file formats are: BMP, JPEG, PNG, TIFF and Targa.

- This function is a technology preview. You can try it out before its official release.
- When you use this feature, the image data is uploaded to the server, where the AI interprets the data and estimates the pose. A network connection is necessary to execute this function. For information on the image uploaded to the server and the generated data, see “About AI features”.
- If you choose an image with multiple figures in it, the pose will reflect the biggest figure in it.
- The figure’s fingers and hand position will not be captured in the pose.
- Figures may not be recognized depending on the photo used.

(5) **Pose Scanner (camera) [iPad/iPhone]**

When clicked, the device’s camera app will open. This reads a picture containing a figure taken with the camera and applies the figure's pose to 3D characters and 3D drawing figures.

- This function is a technology preview. You can try it out before its official release.
- When you use this feature, the image data is uploaded to the server, where the AI interprets the data and estimates the pose. A network connection is necessary to execute this function. For information on the image uploaded to the server and the generated data, see “About AI features”.
- If you choose an image with multiple figures in it, the pose will reflect the biggest figure in it.
- The figure’s fingers and hand position will not be captured in the pose.
- Figures may not be recognized depending on the photo used.

(6) **Pose Scanner (photo library) [iPad/iPhone]**

Selecting this will display the device's Photo Library. This reads a picture containing a figure in the photo library and applies the figure's pose to 3D characters and 3D drawing figures.

- This function is a technology preview. You can try it out before its official release.
- When you use this feature, the image data is uploaded to the server, where the AI interprets the data and estimates the pose. A network connection is necessary to execute this function. For information on the image uploaded to the server and the generated data, see “About AI features”.
- If you choose an image with multiple figures in it, the pose will reflect the biggest figure in it.
- The figure’s fingers and hand position will not be captured in the pose.
- Figures may not be recognized depending on the photo used.
(7) Joint angle limit
When turned on, the bending angle of [Bones] are restricted in a similar way as human joints. When turned off, [Bones] can bend in any direction.

(8) Lock/release joint *
The joint of the selected part will be fixed. If a part where the joint is already fixed is selected, fixation will be released.

(9) Release all fixed joints *
All joints set for 3D drawing figures and 3D character materials are released.

(10) Register full body pose as material [PRO/EX] *
Poses created for 3D drawing figures and 3D character materials can be registered to the [Material] palette.

(12) Register left hand pose as material [PRO/EX] *
Poses created with the left hand of 3D drawing figures and 3D character materials can be registered to the [Material] palette. Registered hand poses can be applied to both right and left hands.

(13) Register right hand pose as material [PRO/EX] *
Poses created with the right hand of 3D drawing figures and 3D character materials can be registered to the [Material] palette. Registered hand poses can be applied to both right and left hands.

(14) Hand setup
Allows you to assign poses to the hands. For a detailed explanation of each part of the hand setup, see "Explanation: 3D Materials" in the "CLIP STUDIO PAINT Instruction Manual".
**Preference**

Allows you to configure the display method of the 3D material when a 3D material is selected with the [Object] sub tool, for example.

---

**Important**

Displayed setting items vary depending on the selected 3D material.

1. **Rendering settings**
   - Click this to display a [Rendering settings] dialog box that can be used to configure settings such as outlines and lighting (light sources) for 3D materials.
   - For details on the [Rendering settings] dialog box, see "Rendering settings dialog box".

2. **Physics simulation**
   - Enables/disables physical operation for 3D character materials. When turned on, moving the 3D character causes its hair and skirt to move.
   - The [Physics simulation] option shows when a 3D character material with physical settings using Clip Studio MODELER or Clip Studio COORDINATE is selected.

3. **Physical settings**
   - Click this to display a [Physical settings] dialog box that can be used to configure a method for reflecting physical operations on 3D characters.
   - For details on the [Physical settings] dialog box, see "Physical settings".

4. **Display settings for editing**
   - You can set a display method to be used when editing 3D layers. Select [Fast] to speed up the 3D layer display.
   - However, effects and opacity settings for 3D layers are hidden during operation of 3D layers, as are previews on the [Navigator] palette and blending modes set for the canvas.
   - The original display returns when editing of the 3D layer is finished.

---

**Memo**

- For details on CLIP STUDIO MODELER, see CLIP, our creator's support website.
- Importing a 3D character material with physical settings may slow Clip Studio Paint. Turning off [Physics simulation] may improve the processing speed.

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Compatible with Version 1.5
(5) Manipulator

When turned on, this displays the [Manipulator] for a part of a 3D character compatible with Version 1.5. Drag the [Manipulator] to pose a 3D character material or change the angle of a 3D object material.

Aligning the mouse cursor with each ring and dragging it allows you to rotate the selected part in the direction of the ring.

<table>
<thead>
<tr>
<th>Twisted rotation</th>
<th>Drag along the [Red] ring. Rotates the selected part in the direction of the ring.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bending rotation (Blue)</td>
<td>Drag along the [Blue] ring. Rotates the selected part in the direction of the ring.</td>
</tr>
<tr>
<td>Bending rotation (Green)</td>
<td>Drag along the [Green] ring. Rotates the selected part in the direction of the ring.</td>
</tr>
</tbody>
</table>

- [Twisted rotation], [Bending rotation (Blue)] and [Bending rotation (Green)] are displayed only when rotation is possible in the relevant direction.
- The [Manipulator] is an item displayed when a 3D character material compatible with Version 1.5 is selected. The [Manipulator] is displayed automatically when a normal 3D character material is clicked.

Rendering settings dialog box

A. Outline

You can configure outline settings for the selected 3D material.

(1) Add outline

When turned on, this adds an outline to the selected 3D material.

(2) Width

Configures the width of the outline. The larger the value, the thicker will be the outline.

(3) Opacity

Configures the opacity of the outline.

(4) Offset Amount

A polygon offset amount can be set for 3D materials and applied to the outline. Changing this value changes whether or not an outline embedded in other polygons is displayed.

(5) Color

Configures the color of the outline. Clicking the color indicator displays the [Color settings] dialog box.

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".
B. Lighting
You can configure the light source of the selected 3D material.

(6) Apply light source
When turned on, this applies a light source to the selected 3D material.

(7) Method
Allows you to configure how to apply shading. You can select from [Gouraud], [Phong] or [Toon].

(8) Shadow
Applies a shadow to the selected 3D material.

C. Texture
You can configure the texture display method for the selected 3D material.

(9) Use texture
When turned on, this displays a texture for the selected 3D material.

(10) Alpha test
Configures an opacity threshold for extraction of textured line drawings from 3D layers. For example, if [Alpha test] is set to "0.5", line drawings with a texture whose [Opacity] is below 50% are not extracted.

D. Backface culling
When turned on, this enables backface culling. The back faces of polygon drawings are omitted.

E. Clipping planes
Virtual planes from the viewpoint of the camera. There are two types of planes: near planes and far planes. These add effects to the whole of a 3D layer.

(11) Set automatically when resetting camera
When turned on, this automatically applies [Near plane] and [Far plane] settings when the camera position is reset by a function such as [Focus on editing target] in the Object Launcher.

(12) Near plane
Configures the distance of the near plane. Faces (polygons) cannot be drawn closer than this plane.

(13) Far plane
Configures the position of the far plane. Faces (polygons) cannot be drawn further away than this plane.

F. Lighting
You can configure the light source of the entire 3D layer.

(14) Light Source
When turned on, this enables a light source of the entire 3D layer.

G. Apply to all models
Applies the settings in the [Rendering settings] dialog box to all 3D layers on the canvas.
Physical settings

A. Skirt
Configures skirt movement to occur when operating a 3D character material.

Memo
[Skirt] can be configured when a rigid body with a skirt is configured in Clip Studio Modeler. For details on CLIP STUDIO MODELER, see CLIP, our creator's support website.

(1) Gravity
Configures the effect of gravity on the skirt. The larger the value, the greater the effect of gravity will be.

(2) Activeness
Configures the magnitude of the movements of the skirt. The larger the value, the greater the movements of the skirt when the character moves.

(3) Bending spring
Configures how easily the skirt bends. The larger the value, the less easily the skirt bends when the character moves.

B. Ground height
Configures the height at which the skirt begins to bend when it makes contact with the ground.
The skirt will not sink lower than [Ground height] as long as the position of the character's hips is higher than [Ground height].

C. 3D layer settings
Configures how physical operation will be reflected on the whole of the 3D layer when a 3D character material is operated.

(4) Physical operation for skirt only
Reflects the physical operation only in the skirt. Other physics operations are not reflected in Clip Studio Paint.

D. Apply to all models
Applies the settings in the [Physical settings] dialog box to 3D character materials on all 3D layers in the canvas.
**Reading [PRO/EX]**

Allows you to configure settings related to annotative glosses indicating the pronunciation (reading).

1. **Reading setting**
   - Allows you to configure reading for a specified text. It also allows you to delete a configured reading.
   - Selecting and clicking a text to configure/delete the reading displays a pop up dialog box for configuring the reading. Clicking outside the pop up commits the setting.

   **[Reading setting] Pop up Dialog Box**

<table>
<thead>
<tr>
<th>(1) Target string</th>
<th>Displays the selected text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Reading string</td>
<td>Input how to read the text.</td>
</tr>
<tr>
<td>(3) Delete</td>
<td>Deletes the reading.</td>
</tr>
</tbody>
</table>

   - **Memo:** [Reading setting] is not available if a text is not selected.

2. **Reading font**
   - Displays a font list from where you can select the font to use for indicating the reading. For the font list, see "Font List".

3. **Reading size (%)**
   - Configure the size of the letters to use for indicating the reading. Specify the size as a ratio (%) of the letter size.

4. **Reading position**
   - Select the reading display position from [Top align], [Center align] and [End align].

5. **Adjust reading**
   - Adjusts the reading display position by point or Q. Configure the displacement from the alignment position selected in [Reading position].

6. **Space between reading and main text**
   - Adjusts the space between reading and main text by point or Q.

7. **Reading space**
   - Auto-arranges the space between the reading letters by distributing them evenly. Select one from [Even 1], [Even 2], [Even 3] and [Free]. Selecting [Free] allows you to specify the [Word space] in points or Q.

8. **Word space**
   - Specify the space between reading letters in points or Q.
**Font List**

This is a screen displayed when selecting a font. It allows you to configure settings such as switching of the [Font list] to display, method of displaying the fonts, and so on.

1. **Font list**
   Displays a list of available fonts.

2. **Display font name**
   Displays only the font name on the [Font list].

3. **Display font name in specific font**
   Displays each font name on the [Font list] using the corresponding font.

4. **Display text in specific font**
   Previews the selected text on the [Font list]. Sample alphanumeric characters and hiragana are displayed if a text is not selected.

5. **Switch font list**
   Switches the [Font list] to display. You can create and edit the [Font list] with the [Settings of font list] dialog box that displays when you click [Settings of font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box".

6. **Settings of font list**
   Displays the [Settings of font list] dialog box, which allows you to configure a [Font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box".

7. **Search for fonts not in this list [iPad/iPhone]**
   If the fonts installed on your device are not listed in the font list, you can add them here.
   
   Tap to display the OS’s FontPicker. When you select the font you want to use, it is added to the font list.

---

**[Settings of font list] Dialog Box**

A dialog box that displays when [Settings of font list] is clicked. Allows you to manage, such as create, edit, and delete [Font list].

1. **Font list**
   Displays a list of [Font list].

2. **Create new**
   Creates a new [Font list]. When clicked, adds a [Font list] to the list of [Font list] and at the same time, enables the selection of fonts from [Available font].

3. **Change name**
   Changes the name of the [Font list] selected on the list of [Font list].

---

**Memo**

To display more fonts in the [Font list], resize the list of [Font list] dialog box by dragging one of the edges.

[Search for fonts not in this list] shows on iPad iOS 13 or later. This will not display on other devices.

You can also change the name of a [Font list] by double clicking its name on the list of [Font list].
(6) **Available fonts**

Allows you to select a font to display on the [Font list]. Selecting a [Font list] from the list of [Font lists] and turning on the check box of the font to display adds the font to the [Font list].

- If [Available fonts] is displayed empty, select the [Font list] from the list of [Font list].
- To display more fonts in [Available fonts], resize the [Settings of font list] dialog box by dragging one of the edges.

(7) **Display font name**

Displays only the font names on [Available fonts].

(8) **Display font name in specific font**

Displays each font name on [Available fonts] using the corresponding font.

(9) **Select all**

Selects all fonts displayed on [Available fonts].

(10) **Deselect all**

Deselects the selection of all of the fonts displayed on [Available fonts].

---

**Redraw [PRO/EX]**

Allows you to configure the following on the [Sub Tool Detail] palette when using the [Redraw vector line] sub tool.

(1) **Fix end**

Allows you to select whether or not and how to fix the starting point and/or end point when transforming a line.

<table>
<thead>
<tr>
<th>Fix both ends</th>
<th>Fixes both starting and end points of the line. The starting point and end point do not move even if the line is redrawn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix either end</td>
<td>Fixes the opposite end from the point where the line will be reshaped. The end that is fixed does not move even if the line is redrawn.</td>
</tr>
<tr>
<td>Free both ends</td>
<td>Both starting point and end point of the line can move.</td>
</tr>
</tbody>
</table>

(2) **All layers**

When turned on, allows you to operate all lines drawn on all displayed vector/balloon/frame border/ruler layers. Clicking a line drawn on another layer switches the edited layer.

When turned off, operation is enabled only for lines drawn on the vector/balloon/frame border/ruler layer being edited.
(3) **Connect line**
When turned on, connects two neighboring segments of line with the same settings for pen tip shape, angle, color and the like. Dragging in such a way as to overlap the ends of both segments when redrawing a line, connects the two segments.

(4) **Simplify**
When turned on, allows you to simplify a line by reducing the number of control points. A slider allows you to configure how much control points to reduce. The larger the value, the more control points will be reduced.

---

**Redraw line width [PRO/EX]**
Allows you to configure the following on the [Sub tool detail] palette when using the [Redraw vector line width] sub tool.

(1) **Brush size**
Configures the width of the line after it is redrawn. A slider allows you to change the setting. The [Dynamics] button allows you to make settings to reflect the pen pressure in the drawing size.
For more information on dynamics, see "Dynamics settings".

(2) **Specify by size on screen**
Makes the width of the redrawn line displayed on a scaled up/down canvas appear the same as when the canvas is displayed at 100%.

---

**Reference**
Displayed items vary depending on the selected tool or sub tool.

→ "Normal Cases"

→ "When File object layer/Light table layer is selected"

---

**Normal Cases**
Allows you to configure layers to refer to when creating a selection, or filling.

---

**Important**
Some settings may not display depending on the selected tool or sub tool.
(1) **Refer multiple**
When turned on, allows you to configure the layer(s) to refer to. If turned off, only the selected layer is referred to.

<table>
<thead>
<tr>
<th>Layer Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All layers</td>
<td>Refers all layers. However, hidden layers cannot be referred to.</td>
</tr>
<tr>
<td>Reference layer</td>
<td>Refers to layers configured as reference layer.</td>
</tr>
<tr>
<td>Selected layer</td>
<td>Refers to layers that are selected on the [Layer] palette.</td>
</tr>
<tr>
<td>Layer in folder</td>
<td>Refers to layers within the layer folder. Layers not included in the same folder as the edited layer cannot be referred to.</td>
</tr>
</tbody>
</table>

(2) **Exclude from reference**
Toggles non-reference to a layer between on and off. This item can be configured when [Refer multiple] is turned on.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclude draft layers [PRO/EX]</td>
<td>Excludes the [Draft layer] from the targets of reference.</td>
</tr>
<tr>
<td>Not refer text</td>
<td>[Text layer] and [Balloon layer] are excluded from the reference targets.</td>
</tr>
<tr>
<td>Not refer editing layer</td>
<td>Does not refer to the current drawing layer.</td>
</tr>
<tr>
<td>Exclude paper layer</td>
<td>Does not refer to the Paper layer.</td>
</tr>
<tr>
<td>Exclude locked layers</td>
<td>Excludes locked layer(s) from the targets of reference.</td>
</tr>
</tbody>
</table>

(3) **Stop filling up to vector path [PRO/EX]**
Selects or fills the area up to the center line of vectors. This is valid only when [Vector layers] are referred to.

(4) **Include vector path [PRO/EX]**
This item can be configured when [Fill up to vector path] is turned on. The vector center line is included in the selection range or fill range.

(5) **Reference overflow frame**
If set on, Drawn frame is included in the border when creating an animation. Reference frame is included in the border if Drawn frame is not set.

(6) **Do not start filling for this color**
If set on, the selection or fill are not executed when the color of the reference closed area and color of the color indicator are the same. Clicking the color indicator configures the selected drawing color. Click the icon at the right end to bring up the [Color settings] dialog box to set color.

**Memo**
For details on the [Color settings] dialog box, see "*[Advanced settings of color] Dialog Box*".
**When File object layer/Light table layer is selected**

This settings window is displayed when the file object layer is selected with the [Object] tool or the light table layer is selected with the [Light table] tool.

The file object layer includes files created by exporting the selected layer in a different CLIP STUDIO FORMAT (extension: clip) in addition to the files imported from an external source.

---

### Important

Some settings may not display depending on the selected tool or sub tool.

---

1. **File name/Layer name**
   - Displays the reference file name of the selected file object layer. When a layer within the canvas is used as the light table layer, the [Layer name] is displayed when the layer is pasted as the file object layer.

2. **Path**
   - Displays the reference file path of the file object layer.

3. **Status**
   - Displays the status of the file object layer. When something is displayed in the [Status], the content or file path of the reference file may have been changed. Import the file again.

4. **Change file**
   - The file open dialog is displayed, and you can change the reference file for the file object layer. The drawn content of the layer can be changed by changing the file. If the link to the reference file is broken, this issue can be resolved by re-specifying the file. This item is not displayed when a light table layer is selected.

5. **Open file**
   - The application associated with the reference file of the file object layer is started, and the file is displayed. If the file is in CLIP STUDIO FORMAT (extension: clip), the reference file is displayed in another [Canvas] window, where editing such as drawing can be done. When the reference file is saved, the drawn content on the file object layer is updated at the same time. When edited using a different software, update the file by clicking [Update] and importing the file again.

6. **Open folder**
   - Opens the folder where the file object layer reference file is saved.

7. **Update**
   - Reloads the selected file object layer from the reference file and updates it to the new image.

8. **Rendering settings**
   - You can set the display method for cases where a file in CLIP STUDIO FORMAT (extension: clip) is set as a file object layer.

<table>
<thead>
<tr>
<th>Fit to resolution of canvas</th>
<th>If the reference file resolution is different to the canvas resolution, the imported file object layer will be changed to the canvas resolution. The displayed size of the file object layer will change depending on the resolution after being adjusted.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw paper</td>
<td>Imports the file object layer when the paper layer of the reference file is displayed.</td>
</tr>
<tr>
<td>Draw tones in gray</td>
<td>Imports the file object layer when a toned layer is gray.</td>
</tr>
</tbody>
</table>

9. **Timeline**
   - When CLIP STUDIO FORMAT (extension: clip) has multiple timelines, select the timeline to use.
(10) Display frame
When CLIP STUDIO FORMAT (extension: clip) that includes a timeline or a movie file is imported, the frame displayed from the movie is set using a slider. The set frame image is displayed in the canvas.

Can be set for canvases that do not have a timeline set, or whose timeline is disabled.

When the timeline is enabled, the file object layer is saved in the animation folder as a cel, which can be set as the [Display frame] by specifying the cel in the [Timeline] palette.

(11) Playback time
When CLIP STUDIO FORMAT (extension: clip) that includes a timeline or a movie file is imported, the frames (time) set in [Display frame] and playback time of the entire movie are displayed.

Remove dust [PRO/EX]
Allows you to configure the dust size, how to process dust and the like when using the [Remove dust] sub tool.

(1) Dust size
Specifies the maximum size for an object to be recognized as dust.

(2) Mode
Displayed settings vary depending on whether the sub tool is to be used to filter dust or to create a selection area from dust.

When removing dust
Configure the color of points to erase and how to erase.

<table>
<thead>
<tr>
<th>Remove dust from transparency</th>
<th>Small opaque and translucent spots in transparent areas are recognized as dust. Dust is replaced by transparent color.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove dust from white background</td>
<td>Small non-white spots in areas completely painted in white are recognized as dust. Dust is filled with white.</td>
</tr>
<tr>
<td>Fill transparent gaps with surrounding color</td>
<td>Small transparent and translucent spots in opaque areas are recognized as dust. Dust is filled with the color predominant around it.</td>
</tr>
<tr>
<td>Fill transparent gaps with foreground color</td>
<td>Small transparent and translucent spots in opaque areas are recognized as dust. Dust is filled with the drawing color.</td>
</tr>
</tbody>
</table>

When selecting dust
Configure the color of the points to select.

<table>
<thead>
<tr>
<th>Select dust on transparency</th>
<th>Small opaque and translucent spots in transparent areas are selected as dust.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select dust on white background</td>
<td>Small non-white spots in areas completely painted in white are selected as dust.</td>
</tr>
<tr>
<td>Select transparent hole</td>
<td>Small transparent and translucent spots in opaque areas are selected as dust.</td>
</tr>
</tbody>
</table>

Rotate
Allows you to configure the following on the [Sub Tool Detail] palette when using the [Rotate] sub tool.

(1) Step of angle
When turned on, allows you to configure the angle by which the object will rotate each time. Click the icon on the right edge to select an angle from the list.

(2) Level off by double-click
When turned on, double clicking the canvas after a rotation reverts to the original angle (0 degrees).
Ruler [PRO/EX]

Allows you to configure snap to ruler and the like when you have a ruler selected with the [Object] sub tool.

1. **Snap**
   When turned on, drawing snaps to a ruler.

2. **Scale**
   When turned on, a scale is displayed on the ruler. A scale unit can be set from the pull down menu.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>px</td>
<td>The scale is displayed in pixels.</td>
</tr>
<tr>
<td>cm</td>
<td>The scale is displayed in centimeters.</td>
</tr>
<tr>
<td>mm</td>
<td>The scale is displayed in millimeters.</td>
</tr>
<tr>
<td>in</td>
<td>The scale is displayed in inches.</td>
</tr>
<tr>
<td>pt</td>
<td>The scale is displayed in points.</td>
</tr>
<tr>
<td>Q</td>
<td>The scale is displayed in Q numbers.</td>
</tr>
<tr>
<td>Equal division</td>
<td>The scale is displayed with the divisions specified in [Number of divisions].</td>
</tr>
<tr>
<td>Golden ratio</td>
<td>The scale is displayed at the positions determined when the entire ruler is divided by the golden ratio.</td>
</tr>
</tbody>
</table>

3. **Number of divisions**
   Set the spaces allocated in the scale of the ruler. This setting is available when [Equal division] is selected for [Scale].
S

Saturated line [PRO/EX]
Displayed items vary depending on the selected tool or sub tool.

→ "When the Saturated line sub tool or Flash sub tool is selected"

→ "When the Object sub tool is selected"

When the Saturated line sub tool or Flash sub tool is selected
Allows you to configure the destination layer for the saturated line, angle and the like when the [Saturated line] sub tool or [Flash] sub tool is selected.

(1) Destination layer
Allows you to select the destination layer for the saturated line.

<table>
<thead>
<tr>
<th>Draw on editing layer</th>
<th>Draws the saturated line directly on the selected layer. When a [Saturated line] layer is selected, allows you to redraw the reference line while keeping the settings of the already drawn saturated line.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always create saturated line layer</td>
<td>Creates a new [Saturated line] layer to draw the saturated line.</td>
</tr>
<tr>
<td>Draw on saturated line layer</td>
<td>When a [Saturated line] layer is selected, allows you to redraw the reference line while keeping the settings of the already drawn saturated line. When other than a saturated line layer is selected, creates a new saturated line layer to draw the saturated line.</td>
</tr>
</tbody>
</table>

Memo
When drawn on a [Saturated line] layer, the settings of a saturated line can be changed even after drawn.

(2) Tone
When turned on, applies tone to the saturated line. When tone is applied, the expression color of the layer becomes gray.

(3) Use radial line ruler for center
When snap to radial line ruler or radial curve ruler is turned on, you can draw the saturated line centered along the ruler.
(4) Make curve
When turned on, control points to adjust the curve are added to the shape line of the saturated line. You can then change the shape of the saturated line by editing the control points with the [Object] sub tool.

(5) Fill center
Fills the area enclosed by the reference line.

- Reference line is a line specified when drawing a saturated line, and serves as the reference position to draw the saturated line, for example. When specified to be circular, the circle becomes the reference line.
- Turning on [Make the reference position jags] fills the reference position with jagged paint line.

(6) Fill opacity
Configures the opacity of the fill color when [Fill center] is turned on.

(7) Line color
Specify the color for the saturated line.

<table>
<thead>
<tr>
<th>Main color</th>
<th>Configures the main drawing color as the saturated line color.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub color</td>
<td>Configures the sub drawing color as the saturated line color.</td>
</tr>
<tr>
<td>User color</td>
<td>Configures the color specified by the user as the saturated line color. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.</td>
</tr>
<tr>
<td>Select user color</td>
<td>The [Color settings] dialog box is displayed, where you can select the saturated line color. This item does not display as icon.</td>
</tr>
</tbody>
</table>
(8) Fill color

Specify the fill center color.

| Main color | Configures the main drawing color as the fill color. |
| Sub color | Configures the sub drawing color as fill color. |
| User color | Configures the color specified by the user as the fill color. Selecting a color with a color palette, eyedropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn. |
| Select user color | When the [Color settings] dialog box is displayed, you can select the fill center color. This item does not display as icon. |

**When the Object sub tool is selected**

Allows you to configure the expression color for the saturated line and ground when a saturated line is selected with the [Object] sub tool.

(1) Main color

Configures the main drawing color for the saturated line. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.

**Memo**

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

(2) Sub color

Specifies the sub drawing color for the saturated line. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.

**Memo**

For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

(3) Fill center

Fills the area enclosed by the reference line.

**Memo**

- Reference line is a line specified when drawing a saturated line, and serves as the reference position to draw the saturated line, for example. When specified to be circular, the circle becomes the reference line.
- Turning on [Make the reference position jags] fills the reference position with jagged paint line.

(4) Fill opacity

Configures the opacity of the fill color when [Fill center] is turned on.
Selection

Allows you to configure how to create a selection when using a tool or sub tool for creating a selection.

(1) **Selection mode**

Allows you to configure how to create a new selection when there is already one.

<table>
<thead>
<tr>
<th>Selection Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New selection</td>
<td>Creates a new selection.</td>
</tr>
<tr>
<td>Add to selection</td>
<td>Adds the selected area to an already existing selection.</td>
</tr>
<tr>
<td>Remove from selection</td>
<td>Removes the selected area from an already existing selection.</td>
</tr>
<tr>
<td>Select from selection</td>
<td>Creates a selection from the area overlapping a selected area.</td>
</tr>
</tbody>
</table>

(2) **Interlock selection and image**

When turned on, dragging and moving a selected area also moves the image within the selected area.

Select layer

Allows you to configure layers not to be selected when using the [Select layer] tool.

<table>
<thead>
<tr>
<th>Exclude option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclude draft layers [PRO/EX]</td>
<td>Excludes the [Draft] layer from the targets of [Select layer].</td>
</tr>
<tr>
<td>Exclude text</td>
<td>Excludes the [Text] layer from the targets of [Select layer].</td>
</tr>
<tr>
<td>Exclude locked layers</td>
<td>Excludes locked layers from the targets of [Select layer].</td>
</tr>
<tr>
<td>Exclude fill layers</td>
<td>Excludes the [Fill in monochrome] and [Paper layer] from the targets of [Select layer].</td>
</tr>
</tbody>
</table>

Shape operation

Allows you to configure the starting point, rotation after fixed and the like when creating a selection using a figure, or drawing a figure.

(1) **Start from center**

Draws from the center as the starting point.

(2) **Adjust angle after fixed**

When turned on, allows you to change the angle of the figure by moving the mouse after finishing drawing by dragging. Clicking fixes the angle of the figure and completes the drawing.

(3) **Step of angle**

Turning on this item when [Rotate after fixed] is selected allows you to configure the angle step by which the figure will rotate each time.
**Special ruler [PRO/EX]**

Allows you to configure the position and angle of the ruler in addition to snap to the ruler when a special ruler or symmetrical ruler is selected with the [Object] sub tool.

1. **Snap**
   - When turned on, drawing snaps to a ruler.

2. **Center X**
   - Allows you to configure the offset of the center of the special ruler from the canvas left edge. This setting is available when the ruler is [Radial line ruler], [Radial curve ruler], [Concentric circle ruler] or [Guide (Vertical)].

3. **Center Y**
   - Allows you to configure the offset of the center of the special ruler from the canvas top edge. This setting is available when the ruler is [Radial line ruler], [Radial curve ruler], [Concentric circle ruler] or [Guide (Horizontal)].

4. **Angle**
   - When [Parallel line ruler], [Concentric circle ruler], or [Symmetrical ruler] is selected, you can set the angle of the ruler.
   - When [Multiple curve ruler] is selected, you can set the direction of drawing lines with the same shape as the ruler.

**Spraying effect**

For [Spraying effect] category, see "Brush shape → Spraying effect".
Starting and ending

Allows you to configure starting and ending effect when using a drawing-type tool. Starting and ending is an effect that gradually changes the strength of the stroke at the start and end of a line.

Some settings may not display depending on the selected tool or sub tool.

(1) Starting and ending

When clicked, the [Starting and ending effect dynamics] pop-up dialog box displays.

Configure the starting and ending settings by selecting the check box of each relevant item. You can also configure the ratio of the minimum strength value to start and/or end a line using the slider next to each item.

- You can configure multiple starting and ending items.
- Displayed starting and ending items vary depending on the selected tool or sub tool.

(2) How to specify

Select the method for specifying the starting and ending length.

<table>
<thead>
<tr>
<th>Specify length</th>
<th>Specifies the starting and ending length numerically.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drawing starts at the ratio configured in [Minimum value] for [Starting and ending]. The strength of the stroke increases gradually along the length specified in [Starting] until it reaches the maximum value (100%).</td>
</tr>
<tr>
<td></td>
<td>Drawing ends by gradually decreasing the strength of the stroke along the length specified in [Ending] until it reaches the minimum value at the end.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By percentage</th>
<th>Specifies the starting and ending length as a percentage of the length of the line to draw.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drawing starts at the [Minimum value] for [Starting and ending]. The strength of the stroke increases gradually along the length specified in [Starting] until it reaches the maximum value (100%).</td>
</tr>
<tr>
<td></td>
<td>Drawing ends by gradually decreasing the strength of the stroke along the length specified in [Ending] until it reaches the minimum value at the end.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fade</th>
<th>Applies only the ending effect to a line.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ending starts at the maximum value (100%). The strength of the stroke gradually decreases along the length specified in [Ending] until it reaches the minimum value configured in [Starting and ending].</td>
</tr>
<tr>
<td></td>
<td>Once the minimum value is reached, the value is maintained until the end.</td>
</tr>
</tbody>
</table>

(3) Starting

When turned on, applies the starting effect to a line. A slider allows you to configure the starting length.

(4) Ending

When turned on, applies the ending effect to a line. A slider allows you to configure the ending length.

(5) Starting and ending by speed

Adjusts the strength of [Starting and ending] by the speed of the stroke.
Stream line [PRO/EX]

Displayed items vary depending on the selected tool or sub tool.

→ “When the stream line sub tool is selected”

→ “When the Object sub tool is selected”

When the stream line sub tool is selected

Allows you to configure the destination layer for the stream line, angle and the like.

(1) **Destination layer**

Allows you to select the destination layer for the stream line.

<table>
<thead>
<tr>
<th>Draw on editing layer</th>
<th>Draws the stream line on the selected layer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always create stream line layer</td>
<td>Creates a new [Stream line] layer to draw the stream line. When drawn on a [Stream line] layer, the settings of a stream line can be changed even after drawn.</td>
</tr>
<tr>
<td>Draw on stream line layer</td>
<td>When a [Stream line] layer is selected, allows you to redraw the reference line while keeping the settings of the already drawn stream line. You can change the position of the reference line of the stream line, or add a reference line to only a portion of the stream line. When other than a stream line layer is selected, creates a new stream line layer to draw the stream line.</td>
</tr>
</tbody>
</table>

(2) **Tone**

When turned on, applies tone to the stream line. When tone is applied, the expression color of the layer becomes gray.

(3) **Use parallel line ruler for angle**

When snap to parallel line ruler or Multiple curve ruler is turned on, draws the stream line at an angle matching that of the ruler.

(4) **Make curve**

When turned on, control points to adjust the curve are added to the shape line of the stream line. You can then change the shape of the stream line by editing the control points with the [Object] sub tool.

Drag a control point bends the stream line.

(5) **Angle**

Specifies the angle of the stream line.

*Memo*

If [Use parallel line ruler for angle] is turned on, the ruler angle takes precedence.
**When the Object sub tool is selected**

Allows you to configure the expression color for the stream line and ground when a stream line is selected with the [Object] sub tool.

1. **Main color**
   Configures the color of the stream line. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.
   
   ![Memo]
   For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

2. **Sub color**
   Specifies the sub drawing color for the stream line. Clicking the color indicator displays the [Color settings] dialog box where you can set the color.
   
   ![Memo]
   For details on the [Color settings] dialog box, see "[Advanced settings of color] Dialog Box".

3. **Angle**
   Specifies the angle of the stream line.

**Stroke**

For [Stroke] category, see "Brush shape → Stroke".
Text

Allows you to configure the text direction, anti-aliasing and the like when using the [Text] sub tool, or when the [Text layer] is selected with the [Object] sub tool.

1. Text direction
   Select text direction from [Vertical] and [Horizontal].

2. Anti-aliasing
   Configure anti-aliasing for text.

<table>
<thead>
<tr>
<th>Canvas setting [PRO/EX]</th>
<th>Configuring [Monochrome] for [Basic expression color] on the [New] dialog box automatically disables the anti-aliasing. This item does not display when the [Object] sub tool is selected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>Enables anti-aliasing.</td>
</tr>
<tr>
<td>Off</td>
<td>Disables anti-aliasing.</td>
</tr>
</tbody>
</table>

3. Auto TateChuYoko (Horizontal in Vertical)
   Displays half-width letters horizontally when text is input vertically. Select the number of letters to display horizontally from [None], [1 letter], [2 letters], [3 letters] and [4 letters].
   For example, if [2 letters] is configured, 2 half-width letters are displayed horizontally but 3 or more half-width letters are displayed vertically.

4. Use half-width punctuation marks
   When turned on, blank spaces for punctuation marks such as two-byte punctuation marks or parentheses are automatically filled.

5. Wrap text at frame
   When turned on, text is wrapped so that it fits within the text frame. In this case, the font size of text is not changed even when the handle is dragged to change the text frame size.
If the text does not fit within the frame, text that falls outside the frame is not displayed in the canvas. Adjust the size of the frame in order to display the text.

(6) Align frames
Specifies the position to which text within the text frame is aligned.
- You can select [Left], [Center] or [Right] for vertical text.
- You can select [Up], [Center] or [Bottom] for horizontal text.

(7) Edge
When turned on, this adds edges to text. A slider allows you to adjust the width of the edge.

(8) Edge color
Sets the color of text edges. Clicking the color indicator displays the [Color settings] dialog box where you can set the edge color.

(9) Background color
When turned on, this enables you to set the background color in the text frame. Clicking the color indicator displays the [Color settings] dialog box where you can set the background color.

(10) Opacity
Configures the opacity of the background color.

Text list[PRO/EX]
When using the [Text] sub tool, you can enter external characters, symbols, and other characters that are difficult to enter with the keyboard.

The [Text list] category is displayed when the text is entered. This item is not displayed just by selecting the [Text] sub tool.

(1) Text Category
Select the text category. When this category is selected, text that corresponds to the [Text list] is displayed.

(2) Font
Displays a font list from where you can select the one to use. For the font list, see "Font List".

If Iwata Antique B is installed, it is automatically selected when [CLIP STUDIO PAINT EXTERNAL CHARACTERS] is selected in the [Text Category].

(3) Text list
List of text that can be entered. Click on the text to enter it into the canvas.

The fonts displayed in the [Text list] differ according to the selected fonts.
Font List
This is a screen displayed when selecting a font. It allows you to configure settings such as switching of the [Font list] to display, method of displaying the fonts, and so on.

(1) Font list
Displays a list of available fonts.

(2) Display font name
Displays only the font name on the [Font list].

(3) Display font name in specific font
Displays each font name on the [Font list] using the corresponding font.

(4) Display text in specific font
Previews the selected text on the [Font list]. Sample alphanumeric characters and hiragana are displayed if a text is not selected.

(5) Switch font list
Switches the [Font list] to display. You can create and edit the [Font list] with the [Settings of font list] dialog box that displays when you click [Settings of font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box".

(6) Settings of font list
Displays the [Settings of font list] dialog box, which allows you to configure a [Font list]. For details on the [Settings of font list] dialog box, see "[Settings of font list] Dialog Box".

(7) Search for fonts not in this list [iPad/iPhone]
If the fonts installed on your device are not listed in the font list, you can add them here.
Tap to display the OS's FontPicker. When you select the font you want to use, it is added to the font list.

[Search for fonts not in this list] shows on iPad iOS 13 or later. This will not display on other devices.

[Settings of font list] Dialog Box
A dialog box that displays when [Settings of font list] is clicked. Allows you to manage, such as create, edit, and delete [Font list].

(1) Font list
Displays a list of [Font list].

(2) Create new
Creates a new [Font list]. When clicked, adds a [Font list] to the list of [Font list] and at the same time, enables the selection of fonts from [Available font].

(3) Change name
Changes the name of the [Font list] selected on the list of [Font list].

You can also change the name of a [Font list] by double clicking its name on the list of [Font list].

(4) Duplicate
Makes a copy of the [Font list] selected on the list of [Font list].
**5) Delete**
Deletes the [Font list] selected on the list of [Font list].

**6) Available fonts**
Allows you to select a font to display on the [Font list]. Selecting a [Font list] from the list of [Font lists] and turning on the check box of the font to display adds the font to the [Font list].

```
Memo
- If [Available fonts] is displayed empty, select the [Font list] from the list of [Font list].
- To display more fonts in [Available fonts], resize the [Settings of font list] dialog box by dragging one of the edges.
```

**7) Display font name**
Displays only the font names on [Available fonts].

**8) Display font name in specific font**
Displays each font name on [Available fonts] using the corresponding font.

**9) Select all**
Selects all fonts displayed on [Available fonts].

**10) Deselect all**
Deselects the selection of all of the fonts displayed on [Available fonts].

---

**Texture**

For [Texture] category, see "Brush shape → Texture".
Tiling

Allows you to configure the tiling of an image when the [Image material] layer is selected.

(1) Tiling

From the pull down menu, specify the repeat type when tiling images.

Memo

Tiling cannot be configured if the selected layer is a [Vector image material] layer.

<table>
<thead>
<tr>
<th>Repetition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat</td>
<td>Tiles the imported image without changing its direction.</td>
</tr>
<tr>
<td>Reverse</td>
<td>Tiles the imported image by alternating its direction.</td>
</tr>
<tr>
<td>Flip</td>
<td>Tiles the imported image after flipping.</td>
</tr>
<tr>
<td></td>
<td>When [Tiling direction] is [Only vertical], the image is tiled after being flipped vertically.</td>
</tr>
</tbody>
</table>

(2) Tiling direction

Specify the orientation of tiling of an image.

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical and horizontal</td>
<td>The image is arranged vertically and horizontally.</td>
</tr>
<tr>
<td>Only horizontal</td>
<td>The image is arranged only in the horizontal direction.</td>
</tr>
<tr>
<td>Only vertical</td>
<td>The image is arranged only in the vertical direction.</td>
</tr>
</tbody>
</table>
Transform

You can adjust the following settings in the [Sub Tool Detail] palette when an 2D camera folder is selected with the [Object] sub tool.

You can configure the following settings when selecting layers and layer folders that have [Enable keyframes on this layer] turned on.

(1) **Transform**

You can add or delete keyframes for transformations.

<table>
<thead>
<tr>
<th>(1) Previous keyframe</th>
<th>Moves to the previous keyframe for the [Transform] setting on the [Timeline].</th>
</tr>
</thead>
</table>
| (2) Add/delete transform keyframe | • Click this to add a keyframe to the [Transform] on the [Timeline] palette.  
• If you click the box when it has a diamond (♦), you can delete the keyframe from the [Transformation] on the [Timeline] palette.  
• If you click the [Add/Remove keyframe] button for a specific item in the [Transform image] category, a diamond (♦) will appear.  
• A keyframe will automatically be added when you change settings for any option in the [Transform image] category or on the canvas. |
| (3) Next keyframe | Moves to the next keyframe for the [Transform] setting on the [Timeline]. |

(2) **Position**

You can change the position of layers and layer folders.

The reference position is the center of rotation of the transformed frame.

The coordinates for the center of rotation are measured in pixels from the top left of the canvas. The x-coordinate indicates the horizontal value, while the y-coordinate indicates the vertical value.

(3) **Scale ratio**

Set the scale ratio of layers and animation folders as a percentage of the original image. Ratios can be set separately for width and height.

However, when selecting a layer folder, 2D camera folder, gradient layer, or 3D layer, you can only edit the overall scale ratio.

(4) **Keep ratio of original image**

When this is turned on, layers and animation folders will maintain their original aspect ratio when zooming in or out.

This option will not appear when selecting a layer folder, 2D camera folder, gradient layer, or 3D layer.

(5) **Rotation angle**

Specifies the image rotation angle with respect to the horizontal position.

(6) **Center of rotation**

You can set the center of rotation.

The reference position is the center of rotation of the frame before being scaled or moved.

The coordinates for the center of rotation are measured in pixels from the top left of the canvas. The x-coordinate indicates the horizontal value, while the y-coordinate indicates the vertical value.

Even if the location or angle of the transformation frame is changed, the center of rotation will remain the same. When you want to change the center of rotation, you can either change the value in the [Tool Property] palette or drag it on the canvas.
(7) Previous keyframe
Moves to the previous keyframe for the same setting on the [Timeline]. For [Position], the selection will move to the previous keyframe with a [Position] setting.

(8) Add/delete keyframe
You can add or delete keyframes for each setting.
- If you click this when it is empty, a keyframe with the relevant setting will be added to the [Timeline] palette. A diamond (◊) will appear in the [Add/delete transformation keyframe] box and [Transform] box on the [Timeline] palette.
- If you click the box when it has a diamond (♦), the relevant setting will be deleted from the keyframe on the [Timeline] palette. A diamond (◊) will appear in the [Add/delete keyframe] box for [Transformation] and on the [Timeline] palette.
- A keyframe will automatically be added when you change settings for any option in the [Transform image] category or on the canvas.

(9) Next keyframe
Moves to the next keyframe for the same setting on the [Timeline]. For [Position], the selection will move to the previous keyframe with a [Position] setting.

Transformation settings
Allows you to configure how to transform image materials and drawings.
- "Normal Cases"
- "When a text layer is selected"

Normal Cases
Transforming settings are shown when the following is selected.
- Selecting an Image material layer with the [Object] sub tool
- Selecting a Vector layer or a Balloon layer with the [Object] sub tool
- When an item is selected from [Edit] menu → [Transform]
- Select the layer set in the light table with the [Light table] tool

Important: Some settings may not display depending on the selected tool or sub tool.

(1) Reset transformation
Restores the Layer to its original state before transforming.

(2) Flip Horizontal
Allows the layer to be horizontally reversed.

(3) Flip vertical
Allows the layer to be vertically reversed.

(4) OK
Confirms a transformation to a layer.

(5) Cancel
Restores the Layer to its original state before transforming and cancels the transformation.
(6) **Mode**

Allows you to set the transformation mode. When selecting a Vector layer, you can use the control points to transform. Displayed items may vary depending on the selected Layer.

<table>
<thead>
<tr>
<th>Move control points &amp; Scale/ Rotate [PRO/EX]</th>
<th>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging a handle allows you to scale up/down the entire drawing. Dragging a control point allows you to transform a line. With the rotation handle displayed, you can rotate by dragging the image.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move control point [PRO/EX]</td>
<td>Control points are displayed for the drawing on the selected layer. Dragging a control point allows you to transform a line.</td>
</tr>
<tr>
<td>Scale/ Rotate</td>
<td>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging a handle allows you to scale up/down the entire drawing while keeping the angle of the guide line. With the rotation handle displayed, you can rotate the whole image by dragging.</td>
</tr>
<tr>
<td>Scale</td>
<td>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging a handle allows you to scale up/down the entire drawing while keeping the angle of the guide line. The rotation handle will not display.</td>
</tr>
<tr>
<td>Center of</td>
<td>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging a handle allows you to Rotate the entire drawing.</td>
</tr>
<tr>
<td>Free Transform</td>
<td>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging a handle allows you to change the angle of the guide line and transform the entire drawing.</td>
</tr>
<tr>
<td>Skew</td>
<td>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging the handles moves the whole side of the image in the direction of the guide lines.</td>
</tr>
<tr>
<td>Distort</td>
<td>Handles, Guide lines and Control points are displayed for the drawing on the selected layer. Dragging the corner handles of the bounding box adjusts its shape along the guide lines. Dragging the middle point handles of the bounding box, skews the shape along the guide lines.</td>
</tr>
<tr>
<td>Perspective</td>
<td>Handles and center of rotation are displayed for the drawing on the selected layer. Dragging any of the corner handles will move the opposite corner handle into the opposite direction.</td>
</tr>
</tbody>
</table>

(7) **Center of rotation**

You can set the center of rotation for the layer you are editing.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(8) **Change vector width [PRO/EX]**

When turned on, transforming a drawing on a vector layer changes the width of lines in conjunction with transform. When turned off, the original line widths are kept during transform.

(9) **Keep original image**

When turned on, the original image can be kept when moving or transforming.

---

**Memo**

This transformation option will appear when multiple layers are selected of the following types: Image material layers, Text layers, Balloon layers, Gradient Layers, Stream line layers and Saturated line layers. The original image is left on another layer.
(10) Auto action settings [PRO/EX]

Allows you to configure how transform is recorded in the auto action.

**Record scroll amount**

Records the travel distance/orientation of a handle due to transform. When the auto action is run, all selected handles move the same distance in the same direction.

**Record coordinates after transformation**

Records the coordinate value of a transformed handle to an auto action. When the auto action is run, all selected handles move to the position (coordinate) recorded by the auto action.

This item can be configured when the transform is recorded in an auto action.

(11) Change thickness while scaling [PRO/EX]

Allows you to change the thickness of the line in conjunction with the image size when a [Vector layer] or [Balloon layer] is scaled up/down using a handle.
**When a text layer is selected**
The following items are displayed when a text layer is selected with the [Object] Sub Tool or the [Text] tool.

(1) **Show resize handle**
Displays/hides resize handles for scaling up/down the text.

(2) **Mode**
Allows you to select the mode for transforming text.

<table>
<thead>
<tr>
<th>Scale/Rotate</th>
<th>You can Scale or Rotate selected text.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Dragging a handle allows you to scale the image up or down.</td>
</tr>
<tr>
<td></td>
<td>● Dragging the rotation handle allows you to rotate the entire drawing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>You can Scale selected text. The rotation handle will display.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rotate</th>
<th>You can Rotate selected text. Dragging a handle also Rotates text.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Skew</th>
<th>You can Skew selected text. Dragging the corner handles of the bounding box adjusts its shape along the guide lines.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Scale/Rotate/Skew</th>
<th>You can Scale, Rotate or Skew selected text.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Dragging a handle allows you to scale the image up or down.</td>
</tr>
<tr>
<td></td>
<td>● Dragging the rotation handle allows you to rotate the entire drawing.</td>
</tr>
<tr>
<td></td>
<td>● Dragging the center handle allows you to [Skew] and change the angle of the entire text. When [Keep aspect ratio] is turned off, you can change the width and height of the entire text when scaling.</td>
</tr>
</tbody>
</table>

(3) **Keep aspect ratio**
When this is on, the image will keep its original aspect ratio (proportions) when scaled up or down. The image keeps its original aspect ratio (proportions) when scaled up or down.

(4) **Rotation angle**
Sets the rotation angle of the text.

(5) **Tilt (W)**
Tilts the width of the text.
(6) **Tilt (H)**

Tilts the height of the text.

(7) **Flip Horizontal**

Flips the text horizontally.

(8) **Flip Vertical**

Flips the text vertically.

### Transform mask

You can configure the following settings in the [Sub Tool Detail] palette for layers and layer folders that have layer masks and have [Enable keyframes on this layer] turned on. Click the layer mask with the [Object] tool to display these options in the [Sub Tool Detail] palette.

(1) **Transform mask**

You can add and delete keyframes for entire masks.

<table>
<thead>
<tr>
<th>(1) Previous keyframe</th>
<th>Moves to the previous keyframe for the [Mask] setting for the selected frame on the [Timeline].</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Add/delete mask key-frame</td>
<td></td>
</tr>
<tr>
<td>● Click this to add a keyframe to the [Mask] on the [Timeline] palette.</td>
<td></td>
</tr>
<tr>
<td>● If you click the box when it has a diamond (♦), you can delete the keyframe from the [Mask] on the [Timeline] palette.</td>
<td></td>
</tr>
<tr>
<td>● If you click this for a specific setting in the [Mask] category, a diamond icon (◊) will appear.</td>
<td></td>
</tr>
<tr>
<td>● A keyframe will automatically be added when you change settings for any option in the [Mask] category or on the canvas.</td>
<td></td>
</tr>
<tr>
<td>(3) Next keyframe</td>
<td>Moves to the next keyframe for the [Mask] setting for the selected frame on the [Timeline].</td>
</tr>
</tbody>
</table>

(2) **Position**

You can change the position of layers and layer folders.

The reference position is the center of rotation of the transformed frame.

The coordinates for the center of rotation are measured in pixels from the top left of the canvas. The x-coordinate indicates the horizontal value, while the y-coordinate indicates the vertical value.

(3) **Scale ratio**

You can set layer mask scaling as a ratio (%) of the original image. Ratios can be set separately for width and height.
(4) **Keep aspect ratio**
When this is on, the layer mask will be scaled with its original aspect ratio.

(5) **Rotation angle**
You can set the rotation angle of the layer mask from a horizontal position.

(6) **Center of rotation**
You can set the center of rotation.

The reference position is the center of rotation of the frame before being scaled or moved.

The coordinates for the center of rotation are measured in pixels from the top left of the canvas. The x-coordinate indicates the horizontal value, while the y-coordinate indicates the vertical value.

![Memo]
Even if the location or angle of the transformation frame is changed, the center of rotation will remain the same. When you want to change the center of rotation, you can either change the value in the [Tool Property] palette or drag it on the canvas.

(7) **Previous keyframe**
Moves to the previous keyframe for the same setting on the [Timeline]. For [Mask position], the selection will move to the next keyframe with a [Mask position] setting.

(8) **Add/delete keyframe**
You can add or delete keyframes for each setting.

- If you click this when it is empty, a keyframe with the relevant setting will be added to the [Timeline] palette. A diamond (◊) will appear in the [Add/delete mask keyframe] box and [Mask] box on the [Timeline] palette.

- If you click the box when it has a diamond (♦), the relevant setting will be deleted from the keyframe on the [Timeline] palette. A diamond (◊) will appear in the [Add/delete mask transformation keyframe] box and on the [Timeline] palette.

- A keyframe will automatically be added when you change settings for any option in the [Transform mask] category or on the canvas.

(9) **Next keyframe**
Moves to the next keyframe for the same setting on the [Timeline]. For [Mask position], the selection will move to the next keyframe with a [Mask position] setting.
Unit curve

Allows you to configure how to draw a line, the angle step for rotation and the like when using tools or sub tools, such as the [Curve] sub tool, for creating a unit curve.

(1) Curve

Specifies how to draw the curve. Select from [Straight line], [Quadratic Bezier] and [Cubic Bezier].

Memo

For details on how to draw each curve, see "Drawing Continuous Curves".

(2) Step of angle

Configures the angle by which the line will bend each time. Lines are drawn by connecting segments that bend by the configured angle step.
Vector [PRO/EX]

Allows you to configure the display color when a line drawn on a [Vector layer] is selected with the [Object] sub tool.

(1) **Main color**

This setting is available when a line drawn on a [Vector layer] is selected with the [Object] tool. Clicking the color indicator displays the [Color settings] dialog box. Configuring a color changes the display color to the configured color.

**Memo**

For [Vector layer] whose expression color is [Gray], only the brightness is reflected in the original drawing color.

(2) **Sub color**

This setting is available when a line drawn on a [Vector layer] is selected with the [Object] tool. Clicking the color indicator displays the [Color settings] dialog box. Configuring a color changes the layer sub color to the configured color.

**Memo**

[Sub color] is available when sub color is used in [Blend with sub color] and the like. The following methods are available for using sub color:

- Select a line drawn on the vector layer with the [Object] tool and configure sub color in [Blend with sub color] under the [Ink] category.
- Configure [Blend with sub color] for a drawing-type tool and draw on the vector layer.
- Configure a gray (black and white) pattern as shape to the brush tip of a drawing-type tool and draw on the vector layer.
**Watercolor edge**

Allows you to configure how to express line edges when using a drawing-type tool. By configuring the width, opacity, brightness and the like for line edges, you can express faint and subtle change of color such like watercolor.

! Important

Items in the [Watercolor edge] category are not available for [Vector layer] and layers whose [Expression color] is [Monochrome].

1. **Watercolor edge**
   Toggles the effect for drawing border areas between on and off. Using the sliders, configure the width of the dark line border on the inside. The larger the value, the wider will be the dark border.

   ![Border of Watercolor: None](image1)
   ![Border of Watercolor: 5](image2)
   ![Border of Watercolor: 10](image3)

   [Brush size: 100, Transparency effect: 20]

2. **Opacity**
   Specify opacity of outline. The bigger value is, the darker line border becomes.

   ![Transparency effect: 5](image4)
   ![Transparency effect: 10](image5)
   ![Transparency effect: 50](image6)
(3) **Darkness**

Set degree of making line border dark. The bigger value is, the darker line border becomes.

![Luminosity effect: 0](image1)

![Luminosity effect: 20](image2)

![Luminosity effect: 50](image3)

(4) **Process after brush stroke**

Reflects the [Watercolor edge] setting after the line is drawn. This setting will allow you to process [Watercolor edge] faster when it is taking time.

(5) **Blurring width**

Configures the strength of the blur on the boundary of rendering. The larger the value, the more blurred will be displayed the border area.
Zoom

Allows you to configure how to operate when using the [Zoom] tool.

(1) Click

Configure the operation to perform when the canvas is clicked.

<table>
<thead>
<tr>
<th>Scale up</th>
<th>Clicking on the canvas scales up the view.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale down</td>
<td>Clicking on the canvas scales down the view.</td>
</tr>
</tbody>
</table>

(2) Drag

Configure the operation to perform when the canvas is dragged.

<table>
<thead>
<tr>
<th>Scale down by left, Scale up by right</th>
<th>Dragging to the left scales down the view, while dragging to the right scales up the view.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify by rectangle</td>
<td>Drag the mouse to specify an area by a rectangle. The image in the specified area is displayed fitted to the screen.</td>
</tr>
<tr>
<td>None</td>
<td>Disables scale up/down by drag.</td>
</tr>
</tbody>
</table>
2D camera
You can adjust the following settings in the [Sub Tool Detail] palette when an 2D camera folder is selected with the [Object] sub tool.

(1) How to show
With the 2D camera folder settings, you can change how the camera is viewed on the canvas.

Show field guides
A 2D camera folder’s camera frame will be displayed. Here, you can edit the camera frame and camera movement. You can also edit layers within 2D camera folders.

Show camera's field of view
The image shown on the canvas will be only what is shown within the camera’s field of view.
Dynamics

This chapter introduces available [Dynamics] options for each [Sub tool detail] palette settings.
Dynamics

Some settings on the [Tool Property] palette or [Sub Tool Detail] palette have a button displayed on their right. This button is called [Dynamics].

It allows you to configure tablet functions and the like that affect the relevant item. Clicking the button displays a screen where you can change the settings. When configured, the [Dynamics] button changes to the icon of the configured item.

Dynamics settings

Clicking the [Dynamics] button on the [Tool Property] palette or [Sub Tool Detail] palette allows you to configure the following options that affect each setting. Turn on the option to configure and specify the [Minimum value] with the sliders.

You can specify multiple options. When multiple options are specified, the [Dynamics] button changes to

Items that can be configured as dynamics vary depending on the created tool.
<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pen pressure</td>
<td>Changes the tool setting by detecting the pen pressure. You can adjust the pen pressure detect level for the tool using the [Pen pressure settings graph] shown below. Clicking on the graph allows you to add a point (up to 16) and adjust the pen pressure curve by dragging the points. Dragging a point out of the graph allows you to delete the point.</td>
</tr>
<tr>
<td>Tilt</td>
<td>Changes the tool setting by detecting the pen tilt. You can set the maximum value with the slider. The brush size of a tilted pen will become larger than the initial brush size. You can adjust the pen tilt detect level for the tool using the [Tilt settings graph] shown below. Clicking on the graph allows you to add a point (up to 16) and adjust the tilt curve by dragging the points. Dragging a point out of the graph allows you to delete the point.</td>
</tr>
<tr>
<td>Velocity</td>
<td>Changes the tool setting by detecting the speed of the pen stroke.</td>
</tr>
<tr>
<td>Random</td>
<td>Changes the tool settings randomly.</td>
</tr>
</tbody>
</table>
Dynamics settings (Direction)

Clicking the [Dynamics] button for [Direction] on the [Tool Property] palette or [Sub Tool Detail] palette allows you to configure the following options that affect the direction of the brush tip. Turn on the option to configure.

You can configure [Random] and other options simultaneously. When multiple options are specified, the [Dynamics] button changes to ✅.

**Important** Items that can be configured as dynamics vary depending on the created tool.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Keeps the direction constant.</td>
</tr>
<tr>
<td>Direction of pen</td>
<td>Makes the brush tip tilt in the direction the tablet pen is tilted. The effect is reflected when the used tablet is capable of detecting the direction of pen.</td>
</tr>
<tr>
<td>Rotation of pen axis</td>
<td>Changes the brush tip rotation angle in accordance with the rotation (twist) of the tablet pen. The effect is reflected when the used tablet is capable of detecting the pen axis rotation.</td>
</tr>
<tr>
<td>Direction of line</td>
<td>Makes the brush tip point in the direction of a drawn line.</td>
</tr>
<tr>
<td>Random</td>
<td>Changes the rotation angle randomly. Configure the degree of the effect with the slider.</td>
</tr>
</tbody>
</table>
**Dynamics settings (Direction of particle)**

Clicking the [Dynamics] button for [Direction of particle] on the [Tool Property] palette or [Sub Tool Detail] palette allows you to configure the following options that affect the direction of the particles. Turn on the option to configure.

You can configure [Random] and other options simultaneously. When multiple options are specified, the [Dynamics] button changes to 

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Keeps the direction of the particles constant.</td>
</tr>
<tr>
<td>Direction of line</td>
<td>Changes the direction of the particles in the direction of the line.</td>
</tr>
<tr>
<td>Direction of whole spray</td>
<td>Changes the direction of the particles in accordance with the rotation angle configured for [Direction] of the [Brush tip] category.</td>
</tr>
<tr>
<td>Spray toward center</td>
<td>Changes the direction of the particles to make them point the center of the brush tip.</td>
</tr>
<tr>
<td>Random</td>
<td>The direction of the particles changes randomly. Configure the degree of the effect with the slider.</td>
</tr>
</tbody>
</table>
Tools and Sub Tool Categories

This chapter introduces categories that can be configured by tool and sub tool.
Categories

Categories are items displayed on the left side of the [Sub Tool Detail] palette. Selecting a category changes the setting screen of the sub tool, displaying settings related to the selected category.

The [Sub Tool Detail] palette is not available in Clip Studio Paint DEBUT. The category of each tool can be confirmed on the [Tool Property] palette. To confirm the category on the [Tool Property] palette, see "Displaying Categories on the Tool Property Palette".

Checking the Categories

The categories available in a tool or sub tool can be checked in the [Sub Tool Detail] palette. Furthermore, categories can be displayed on the [Tool Property] palette by configuring the [Sub Tool Detail] palette.

This section describes how to display the [Sub Tool Detail] palette and how to display categories on the [Tool Property] palette.

The [Sub Tool Detail] palette is not available in Clip Studio Paint DEBUT. The category of each tool can be confirmed on the [Tool Property] palette. To confirm the category on the [Tool Property] palette, see "Displaying Categories on the Tool Property Palette".
**Displaying the Sub tool detail palette [PRO/EX]**

Click [Sub Tool Detail] on the [Tool Property] palette.

[Diagram of displaying sub tool detail]

---

**Memo**

The [Sub Tool Detail] palette can also be displayed by selecting [Window] menu → [Sub Tool Detail].

---

**Displaying Categories on the Tool property Palette**

To display categories on the [Tool Property] palette, select [Palette menu] → [Show category] on the [Tool Property] palette.

[Diagram of displaying categories]

---

**Memo**

If you are using PRO/EX, turning on [Show category] on the [Sub Tool Detail] palette also displays the categories on the [Tool Property] palette.
Output Process and Input Process [PRO/EX]

The operation and items that can be configured for each sub tool depends on the [Output process] and [Input process]. This section describes the sub tool input and output processes.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Indicates the target to be created or processed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input process</td>
<td>Configures the input method.</td>
</tr>
</tbody>
</table>

Here, [Lasso] and [Selection pen] are used as examples.

**Lasso**

[Output process] and [Input process] of [Lasso] are as follows.

<table>
<thead>
<tr>
<th>Tool name</th>
<th>Output process</th>
<th>Input process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lasso</td>
<td>Selection</td>
<td>Lasso</td>
</tr>
</tbody>
</table>

Since the [Output process] is [Selection] and [Input process] is [Lasso], the selection is created as if enclosing by dragging.

Categories that can be configured on the [Sub Tool Detail] palette are as indicated in the figure below.

[Sub tool detail] palette of [Lasso]
Selection pen

[Output process] and [Input process] of [Selection pen] are as follows.

<table>
<thead>
<tr>
<th>Tool name</th>
<th>Output process</th>
<th>Input process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection pen</td>
<td>Selection</td>
<td>Brush</td>
</tr>
</tbody>
</table>

Since the [Output process] is [Selection] and [Input process] is [Brush], the selection is created in the area drawn by dragging. Categories that can be configured on the [Sub Tool Detail] palette are as indicated in the figure below. Since the selection is created by drawing as with a brush, settings such as [Brush Size] and [Brush shape] are added.

[Sub tool detail] palette of [Selection pen]

Checking the Output Process and Input Process

To check the [Output process] and [Input process] of a sub tool, click the [Palette menu] button on the upper left corner of the [Sub Tool] palette. Select [Settings of sub tool] on the menu that displays.

The [Settings of sub tool] dialog box displays. There, you can check the [Output process] and [Input process] of the currently selected sub tool.
Configuring the Output Process and Input Process

To configure [Output process] and [Input process] to a sub tool, a new sub tool is necessary. Select [Create custom sub tool] on the menu that displays when you click [Palette menu] on the upper left corner of the [Sub Tool] palette.

Select [Output process], [Input process] and the like on the [Create custom sub tool] dialog box that displays.
Input and Output Processes and Categories List (By Tool and Sub Tool)

This section lists the input and output processes, and categories by tool and sub tool. It allows you to check the available categories for each tool and sub tool.

**Zoom**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom</td>
<td>Zoom</td>
<td>Zoom</td>
</tr>
</tbody>
</table>

**Hand**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand</td>
<td>Hand</td>
<td>-</td>
</tr>
</tbody>
</table>

**Rotate**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotate</td>
<td>Rotate</td>
<td>Rotate</td>
</tr>
</tbody>
</table>

**Object (Image material Layer)**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
                     ● Transformation settings  
                     ● Image material  
                     ● Tiling |

**Object (Quick Mask) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>Operation</td>
</tr>
</tbody>
</table>
### Object (Gradient Layer) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>• Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anti-aliasing</td>
</tr>
</tbody>
</table>

### Object (Frame border folder) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>• Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Frame border [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Brush tip</td>
</tr>
</tbody>
</table>

### Object (Ruler) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>• Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ruler [PRO/EX]</td>
</tr>
</tbody>
</table>
### Object (Saturated line Layer) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
               ● Saturated line [PRO/EX]  
               ● Drawing interval [PRO/EX]  
               ● Drawing position [PRO/EX]  
               ● Brush size  
               ● Anti-aliasing  
               ● Brush shape  
               ● Brush shape → Brush tip  
               ● Brush shape → Spraying effect  
               ● Brush shape → Stroke  
               ● Brush shape → Texture  
               ● Starting and ending |

### Object (Selection Layer) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>Operation</td>
</tr>
</tbody>
</table>

### Object (Text)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
               ● Font  
               ● Line space/alignment  
               ● Text  
               ● Reading [PRO/EX]  
               ● Transformation settings  
               ● Text list[PRO/EX] |

### Object (Special Ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
               ● Special ruler [PRO/EX] |
### Object (Perspective ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>● Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Perspective ruler [PRO/EX]</td>
</tr>
</tbody>
</table>

### Object (File object layer)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>● Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Transformation settings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Image material</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Tiling</td>
</tr>
</tbody>
</table>

### Object (Balloon) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>● Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Balloon [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
</tbody>
</table>
### Object (Vector Layer) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object       | ● Operation  
                 ● Vector [PRO/EX]  
                 ● Brush size  
                 ● Ink  
                 ● Anti-aliasing  
                 ● Brush shape  
                 ● Brush shape → Brush tip  
                 ● Brush shape → Spraying effect  
                 ● Brush shape → Stroke  
                 ● Brush shape → Texture  
                 ● Starting and ending |

### Object (Fill in monochrome Layer) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object       | ● Operation  
                 ● Fill  
                 ● Ink |

### Object (Raster Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>Operation</td>
</tr>
</tbody>
</table>
### Object (Stream line Layer) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
● Stream line [PRO/EX]  
● Drawing interval [PRO/EX]  
● Drawing position [PRO/EX]  
● Brush size  
● Anti-aliasing  
● Brush shape  
● Brush shape → Brush tip  
● Brush shape → Spraying effect  
● Brush shape → Stroke  
● Brush shape → Texture  
● Starting and ending |

### Object (3D object material)

Input and output processes of the tool, and categories included in the tool are as follows.

> Displayed items vary depending on the selected 3D material.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
● Allocate  
● Object List [PRO/EX]  
● Object *  
● Camera  
● Light Source  
● Outline  
● Preference |
**Object (3D character Material)**

Input and output processes of the tool, and categories included in the tool are as follows.

> **Important**

Displayed items vary depending on the selected 3D material.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>● Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Allocate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Object List [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Camera</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Light Source</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Character</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Pose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Manga Perspective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Outline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Preference</td>
</tr>
</tbody>
</table>

**Object (3D background material)**

Input and output processes of the tool, and categories included in the tool are as follows.

> **Important**

Displayed items vary depending on the selected 3D material.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Object</td>
<td>● Operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Object List [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Object *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Allocate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Camera</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Light Source</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Outline</td>
</tr>
</tbody>
</table>
### Object (3D drawing figure)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
● Object List [PRO/EX] 
● Allocate 
● Camera 
● Light Source 
● Body shape 
● Pose 
● Manga Perspective 
● Outline 
● Preference |

### Object (Audio Layer)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
● Audio |

### Object (2D camera)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
● 2D camera |

### Object (Layers/layer folders with keyframe editing enabled)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | ● Operation  
● Transform 
● Layer |
## Object (Layer masks with keyframe editing enabled)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | - Operation  
                 - Transform mask |

## Object (File object layers with keyframe editing enabled)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Object         | Object        | - Operation  
                 - Reference  
                 - Transform  
                 - Layer |

## Select layer

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select layer</td>
<td>Simple rectangle</td>
<td>Select layer</td>
</tr>
</tbody>
</table>

## Light table

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Light table    | Light table   | - Light table  
                 - Reference  
                 - Transformation settings  
                 - Image material |

## Edit timeline

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit timeline</td>
<td>Edit timeline</td>
<td>Edit timeline</td>
</tr>
</tbody>
</table>

## Move layer

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move layer</td>
<td>Move layer</td>
<td>Move layer</td>
</tr>
</tbody>
</table>
### Marquee (Rectangle/Ellipse)

Input and output processes of the tool, and categories included in the tool are as follows.

*Important* In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>Figure</td>
<td>Anti-aliasing, Figure, Shape operation, Selection, Correction</td>
</tr>
</tbody>
</table>

### Marquee (Lasso)

Input and output processes of the tool, and categories included in the tool are as follows.

*Important* In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>Lasso</td>
<td>Selection, Anti-aliasing, Correction</td>
</tr>
</tbody>
</table>

### Marquee (Polyline)

Input and output processes of the tool, and categories included in the tool are as follows.

*Important* In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>Continuous curve</td>
<td>Selection, Continuous curve, Anti-aliasing, Correction</td>
</tr>
</tbody>
</table>
## Marquee (Selection pen/Erase selection)

Input and output processes of the tool, and categories included in the tool are as follows.

**Important** In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>Brush</td>
<td>● Selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

## Marquee (Shrink selection)

Input and output processes of the tool, and categories included in the tool are as follows.

**Important** In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed selection</td>
<td>Lasso</td>
<td>● Selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Closed area fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>

## Auto select

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>Fill</td>
<td>● Selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
</tbody>
</table>
Eyedropper

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyedropper</td>
<td>Eyedropper</td>
<td>Eyedropper</td>
</tr>
</tbody>
</table>

Pen (Pen)

Input and output processes of the tool, and categories included in the tool are as follows.

In DEBUT, some categories may not be available depending on the selected sub tool.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Pen</td>
<td></td>
</tr>
</tbody>
</table>

- Brush size
- Ink
- Anti-aliasing
- Brush shape
- Brush shape → Brush tip
- Brush shape → Spraying effect
- Brush shape → Stroke
- Brush shape → Texture
- Watercolor edge
- Erase
- Correction
- Starting and ending
- Anti-overflow
Pen (Markers other than the Dot pen)

Input and output processes of the tool, and categories included in the tool are as follows.

In DEBUT, some categories may not be available depending on the selected sub tool.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pen</td>
<td>Pen</td>
<td>• Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Watercolor edge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Erase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Starting and ending</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anti-overflow</td>
</tr>
</tbody>
</table>

Pen (Dot pen)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Dot pen</td>
<td>• Dot pen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Correction</td>
</tr>
</tbody>
</table>
## Pencil (Pencil)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Pen</td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Watercolor edge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Erase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-overflow</td>
</tr>
</tbody>
</table>

In DEBUT, some categories may not be available depending on the selected sub tool.

## Pencil (Pastel)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Brush</td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Watercolor edge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Erase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-overflow</td>
</tr>
</tbody>
</table>

In DEBUT, some categories may not be available depending on the selected sub tool.
### Drawing-type tool (Brush, Airbrush, Decoration, Blend)

Input and output processes of the tool, and categories included in the tool are as follows.

**Important**

In DEBUT, some categories may not be available depending on the selected sub tool.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Direct draw    | Brush         | ● Brush size  
|                |               | ● Ink       
|                |               | ● Anti-aliasing  
|                |               | ● Brush shape  
|                |               | ● Brush shape → Brush tip  
|                |               | ● Brush shape → Spraying effect  
|                |               | ● Brush shape → Stroke  
|                |               | ● Brush shape → Texture  
|                |               | ● Watercolor edge  
|                |               | ● Erase       
|                |               | ● Correction  
|                |               | ● Starting and ending  
|                |               | ● Anti-overflow  

### Eraser

Input and output processes of the tool, and categories included in the tool are as follows.

**Important**

In DEBUT, some categories may not be available depending on the selected sub tool.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Direct draw    | Eraser        | ● Brush size  
|                |               | ● Ink       
|                |               | ● Anti-aliasing  
|                |               | ● Brush shape  
|                |               | ● Brush shape → Texture  
|                |               | ● Brush shape → Spraying effect  
|                |               | ● Brush shape → Stroke  
|                |               | ● Brush shape → Brush tip  
|                |               | ● Watercolor edge  
|                |               | ● Erase       
|                |               | ● Correction  
|                |               | ● Starting and ending  
|                |               | ● Anti-overflow  

### Blend (Except Copy stamp)

Input and output processes of the tool, and categories included in the tool are as follows.

![Important]

In DEBUT, some categories may not be available depending on the selected sub tool.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Direct draw    | Brush         | ● Brush size  
|                |               | ● Ink          |
|                |               | ● Anti-aliasing|
|                |               | ● Brush shape  |
|                |               | ● Brush shape → Brush tip |
|                |               | ● Brush shape → Spraying effect |
|                |               | ● Brush shape → Stroke  |
|                |               | ● Brush shape → Texture  |
|                |               | ● Watercolor edge |
|                |               | ● Erase        |
|                |               | ● Correction   |
|                |               | ● Starting and ending |
|                |               | ● Anti-overflow |

### Blend (Copy stamp) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy stamp</td>
<td>Copy stamp</td>
<td>● Copy stamp [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-overflow</td>
</tr>
</tbody>
</table>
### Fill (Refer only to editing layer/Refer other layers)
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Fill</td>
<td>● Fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
</tbody>
</table>

### Fill (Close and fill)
Input and output processes of the tool, and categories included in the tool are as follows.

In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed area fill</td>
<td>Lasso</td>
<td>● Closed area fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>

### Fill (Paint unfilled area)
Input and output processes of the tool, and categories included in the tool are as follows.

In DEBUT, some categories may not be available.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed area fill</td>
<td>Brush</td>
<td>● Closed area fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>
### Gradient (Gradient)
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradient</td>
<td>Gradient</td>
<td>• Gradient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anti-aliasing</td>
</tr>
</tbody>
</table>

In DEBUT, some categories may not be available.

### Gradient (Contour line paint)
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contour line paint</td>
<td>Fill</td>
<td>• Contour line paint</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reference</td>
</tr>
</tbody>
</table>

### Figure (Straight line/Curve)
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Unit curve</td>
<td>• Unit curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Starting and ending</td>
</tr>
</tbody>
</table>
## Figure (Polyline/Continuous curve)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Continuous curve</td>
<td>● Continuous curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

*Important*: In DEBUT, some categories may not be available.

## Figure (Lasso fill)

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Lasso</td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>
### Figure (Rectangle/Ellipse/Polygon)

Input and output processes of the tool, and categories included in the tool are as follows.

**Important** In DEBUT, some categories may not be available depending on the selected sub tool.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct draw</td>
<td>Figure</td>
<td>● Figure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Shape operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>

### Figure (Stream line) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stream line</td>
<td>Continuous curve</td>
<td>● Stream line [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Continuous curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Drawing interval [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Drawing position [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>
### Figure (Scattered saturated line, Dense saturated line, Brightness, Burst) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturated line</td>
<td>Figure</td>
<td>● Saturated line [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Figure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Shape operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Drawing interval [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Drawing position [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
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<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
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<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

### Figure (Dark saturated line(curve)) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturated line</td>
<td>Continuous curve</td>
<td>● Saturated line [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Continuous curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Drawing interval [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Drawing position [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Ink</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>
### Frame Border (Rectangle frame) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Create frame   | Figure        | ● Create frame [PRO/EX]  
|                |               | ● Shape operation  
|                |               | ● Brush size  
|                |               | ● Anti-aliasing  
|                |               | ● Brush shape  
|                |               | ● Brush shape → Brush tip  
|                |               | ● Brush shape → Spraying effect  
|                |               | ● Brush shape → Stroke  
|                |               | ● Brush shape → Texture  
|                |               | ● Correction  |

### Frame Border (Polyline frame) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Create frame   | Continuous curve | ● Create frame [PRO/EX]  
|                |               | ● Continuous curve  
|                |               | ● Brush size  
|                |               | ● Anti-aliasing  
|                |               | ● Brush shape  
|                |               | ● Brush shape → Brush tip  
|                |               | ● Brush shape → Spraying effect  
|                |               | ● Brush shape → Stroke  
|                |               | ● Brush shape → Texture  
|                |               | ● Correction  |
### Frame Border (Frame border pen) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create frame</td>
<td>Brush</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Create frame [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

### Frame Border (Cut frame border) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut border</td>
<td>Cut border</td>
<td>Cut border [PRO/EX]</td>
</tr>
</tbody>
</table>

### Ruler (Linear ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create ruler</td>
<td>Unit curve</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Create ruler [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Unit curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>

### Ruler (Curve ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create ruler</td>
<td>Continuous curve</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Create ruler [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Continuous curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>
### Ruler (Figure ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create ruler</td>
<td>Figure</td>
<td>• Create ruler [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Figure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shape operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Correction</td>
</tr>
</tbody>
</table>

### Ruler (Ruler pen) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create ruler</td>
<td>Brush</td>
<td>• Create ruler [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Correction</td>
</tr>
</tbody>
</table>

### Ruler (Special ruler/Guide) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create special ruler</td>
<td>Create special ruler</td>
<td>Create special ruler [PRO/EX]</td>
</tr>
</tbody>
</table>

### Ruler (Perspective ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective ruler</td>
<td>Perspective ruler</td>
<td>Perspective ruler [PRO/EX]</td>
</tr>
</tbody>
</table>

### Ruler (Symmetrical ruler) [PRO/EX]

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create symmetrical ruler</td>
<td>Create symmetrical ruler</td>
<td>Create a symmetrical ruler [PRO/EX]</td>
</tr>
</tbody>
</table>
**Text**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create text</td>
<td>Create text</td>
<td>- Font</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Line space/alignment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Text</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reading [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Edit settings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Text list [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Transformation settings</td>
</tr>
</tbody>
</table>

*Important*

In DEBUT, some categories may not be available.

---

**Balloon (Ellipse balloon) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create balloon</td>
<td>Figure</td>
<td>- Create Balloon [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Figure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Shape operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Correction</td>
</tr>
</tbody>
</table>
### Balloon (Curve balloon) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create balloon</td>
<td>Continuous curve</td>
<td>● Create Balloon [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Continuous curve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>

### Balloon (Balloon pen) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create balloon</td>
<td>Brush</td>
<td>● Create Balloon [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Anti-aliasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Texture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

### Balloon (Balloon tail/Thought balloon tail) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balloon tail</td>
<td>Balloon tail</td>
<td>● Balloon tail [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>
**Balloon (Flash) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Saturated line | Figure        | ● Saturated line [PRO/EX]  
                  |               | ● Figure  
                  |               | ● Shape operation  
                  |               | ● Brush size  
                  |               | ● Drawing interval [PRO/EX]  
                  |               | ● Drawing position [PRO/EX]  
                  |               | ● Ink  
                  |               | ● Anti-aliasing  
                  |               | ● Brush shape  
                  |               | ● Brush shape → Brush tip  
                  |               | ● Brush shape → Spraying effect  
                  |               | ● Brush shape → Stroke  
                  |               | ● Brush shape → Texture  
                  |               | ● Correction  
                  |               | ● Starting and ending |

**Correct line (Control point) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control point</td>
<td>Control point</td>
<td>Control point [PRO/EX]</td>
</tr>
</tbody>
</table>

**Correct line (Pinch vector line) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinch line</td>
<td>Pinch line</td>
<td>Pinch line [PRO/EX]</td>
</tr>
</tbody>
</table>

**Correct line (Redraw vector line) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
</table>
| Redraw         | Redraw        | ● Redraw [PRO/EX]  
                  |               | ● Correction |
## Correct line (Redraw vector line width) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redraw line width</td>
<td>Redraw line width</td>
<td>Redraw line width [PRO/EX]</td>
</tr>
</tbody>
</table>

## Correct line (Simplify vector line/Connect vector line) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit line</td>
<td>Brush</td>
<td>● Edit line [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

## Correct line (Correct line width) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct line width</td>
<td>Brush</td>
<td>● Adjust line width [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

## Correct line (Remove dust) [PRO/EX]
Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove dust</td>
<td>Figure</td>
<td>● Remove dust [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Figure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Shape operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>
**Correct line (Fill leftover) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove dust</td>
<td>Brush</td>
<td>● Remove dust [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Brush tip</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Spraying effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Brush shape → Stroke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Starting and ending</td>
</tr>
</tbody>
</table>

**Correct line (Select garbage) [PRO/EX]**

Input and output processes of the tool, and categories included in the tool are as follows.

<table>
<thead>
<tr>
<th>Output process</th>
<th>Input process</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of dust</td>
<td>Lasso</td>
<td>● Selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Remove dust [PRO/EX]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Correction</td>
</tr>
</tbody>
</table>