# Noritsu NetOrder Printer Driver for Mac OS X Ver2.0 Specification Addendum

**When paper advance length is longer than paper width:**

Short side binding

**Upper application
(e.g. Photoshop)**

**Printer Driver
Create and send output image**

**Printer
(e.g. Noritsu D502)**

**Print**

**Printing direction:
Vertical**

Front
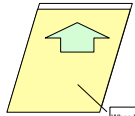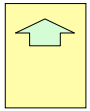
When "binding margin" is configured, Printer Driver is to make an image with white border added.
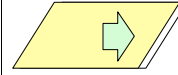
Direction of travel changes due to switch back operation.

Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

No change of direction is required.

**Printing direction:
Horizontal**

Front

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When printing direction is set to "Horizontal", rotate image 90 deg.

Direction of travel changes due to switch back operation.

Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When printing direction is set to "Horizontal", rotate image 90 deg.

No change of direction is required.
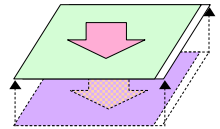
**When paper advance length is longer than paper width:**

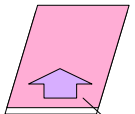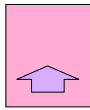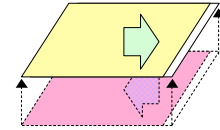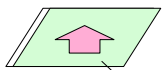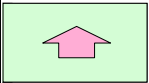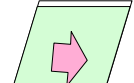Long side binding

| Upper application (e.g. Photoshop) | Printer Driver Create and send output image | Printer (e.g. Noritsu D502) | Print |

**Printing direction: Vertical**

Front

Image appears as follows in the preview screen of Printer Driver.

When "binding margin" is configured, Printer Driver is to make an image with white border added.

Direction of travel changes due to switch back operation.

Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When "Long side binding" is selected, rotate image 180 deg.
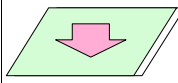
No change of direction is required.

**Printing direction: Horizontal**

Front

When "binding margin" is configured, Printer Driver is to make an image with white border added.
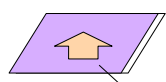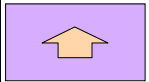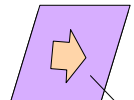
When printing direction is set to "Horizontal", rotate image 90 deg.

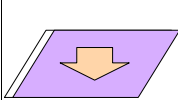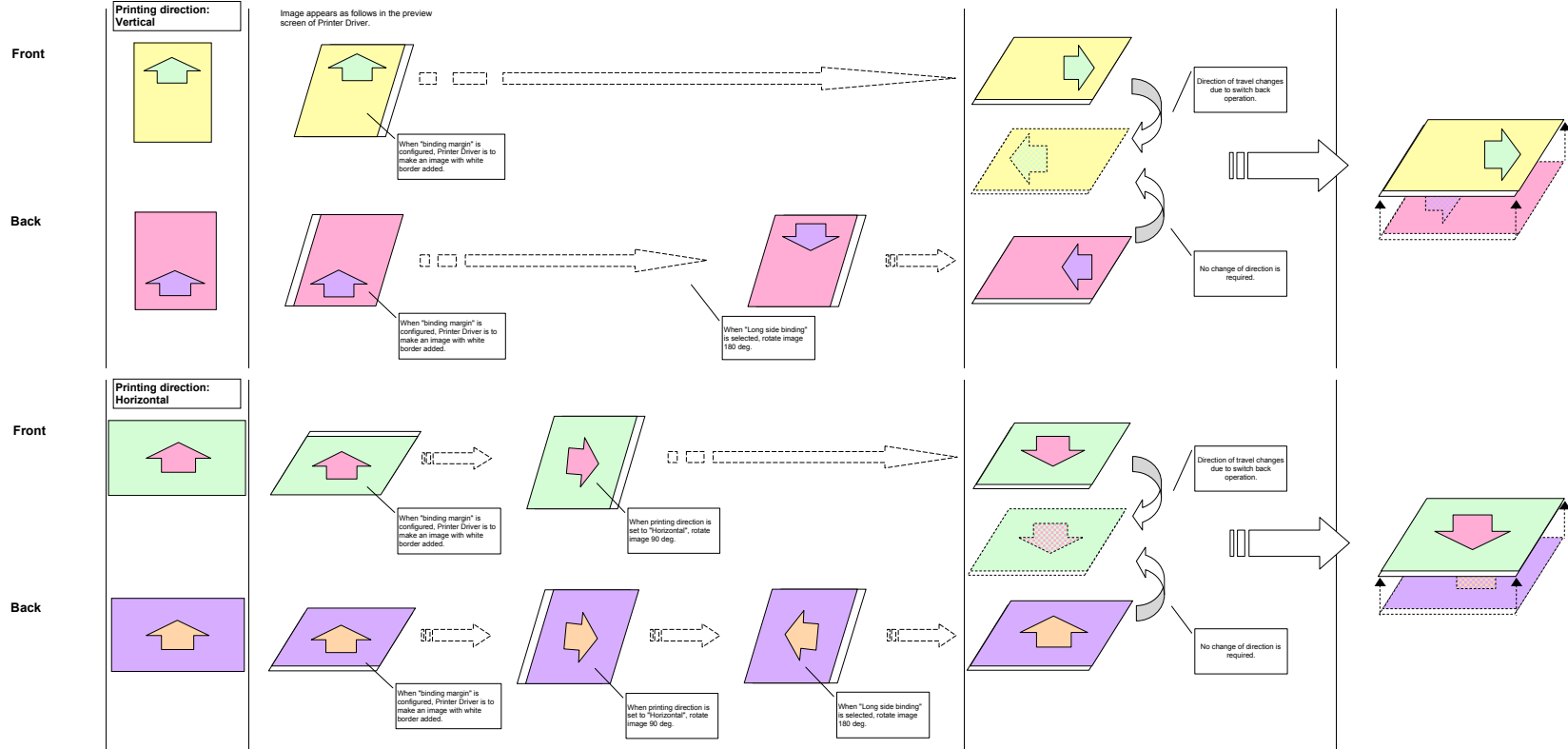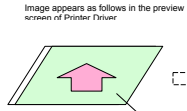Direction of travel changes due to switch back operation.

Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When printing direction is set to "Horizontal", rotate image 90 deg.

When "Long side binding" is selected, rotate image 180 deg.

No change of direction is required.

**When paper advance length is equal to or shorter than paper width:**
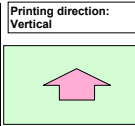
Short side binding

| | **Upper application (e.g. Photoshop)** | **Printer Driver Create and send output image** | **Printer (e.g. Noritsu D502)** | **Print** |

**Printing direction: Vertical**
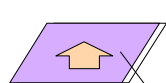
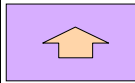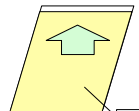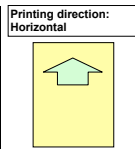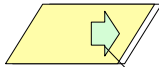Image appears as follows in the preview screen of Printer Driver.

Front

When "binding margin" is configured, Printer Driver is to make an image with white border added.

Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

Direction of travel changes due to switch back operation.

Printer rotates image 180 degree.

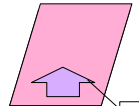**Printing direction: Horizontal**

Front

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When printing direction is set to "Horizontal", rotate image 90 deg.
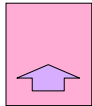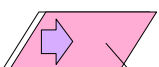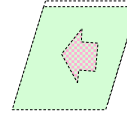
Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When printing direction is set to "Horizontal", rotate image 90 deg.

Direction of travel changes due to switch back operation.

Printer rotates image 180 degree.

Long side binding

**Upper application**
**(e.g. Photoshop)**

**Printer Driver**
**Create and send output image**

**Printer**
**(e.g. Noritsu D502)**

**Print**

**Printing direction:**
**Vertical**

Front

Image appears as follows in the preview screen of Printer Driver.

When "binding margin" is configured, Printer Driver is to make an image with white border added.

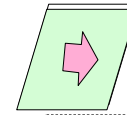Direction of travel changes due to switch back operation.

Back

When "binding margin" is configured, Printer Driver is to make an image with white border added.

When "Long side binding" is selected, rotate image 180 deg.

Printer rotates image 180 degree.

**Printing direction:**
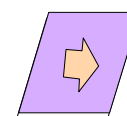**Horizontal**

Front

When "binding margin" is configured, Printer Driver is to make an image with white border added.
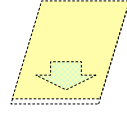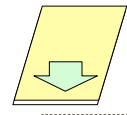
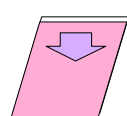When printing direction is set to "Horizontal", rotate image 90 deg.

Direction of travel changes due to switch back operation.

Back

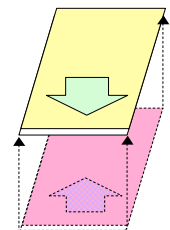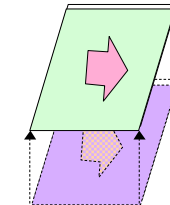When "binding margin" is configured, Printer Driver is to make an image with white border added.

When printing direction is set to "Horizontal", rotate image 90 deg.

Printer rotates image 180 degree.

## 2. Image allocation

- : Input image
- : Page size
- : Image area with no spillover applied
- : Image area with spillover applied
- : Binding margin
- : Margin + spillover
- : Output image size (Image created by driver)
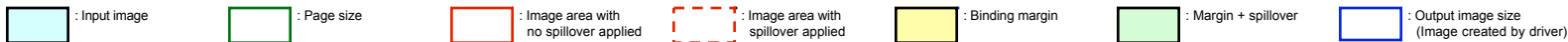
**NOTE:** The sizes and ratios shown in the figures below only represent the image, and may be different from the actual sizes and ratios.

1. When the input image size is smaller than page size:

    1) No margin

    e.g.: When input image is 210 x 297 mm, page size is 254 x 305 mm, binding margin is 30 mm wide, spillover is 1 mm wide, magnification is 100%, long side binding, and binding margin is on the left side:



Input image
210 x 297 mm

Calculate the image area.

Add spillover in the image area and allocate input image

Add binding margin.

Print

Resulting print

A: Binding margin = 30mm
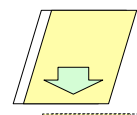B: Page width - binding margin = 224 mm
C: Page height = 305 mm

Obtain the size of area in which binding margin is excluded from the page. (Size of BxC.)

B: Page width - binding margin = 224 mm
B2: B + spillover (2 mm) = 226 mm
C: Page height = 305 mm
C2: C + spillover (2 mm) = 307 mm

Add spillover to BxC, and place the input image at the center of the area.

A: Binding margin (30 mm) + spillover (1 mm on the left)
B: Page width + spillover (2 mm) = 256 mm
C: Page height + spillover (2 mm ) = 307 mm

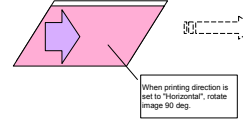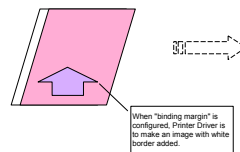Add binding margin and spillover (1 mm on the left) to the binding position (position with no left spillover added), which will be the image to be sent to the printer.

A: Binding margin = 30mm
B: Page width = 254 mm
C: Page height = 305 mm

2） With margin

e.g.: When input image is 210 x 297 mm, page size is 254 x 305 mm, binding margin is 30 mm wide, spillover is 1 mm wide,
margin is 5 mm wide on all ends, magnification is 100%, long side binding, and binding margin is on the left side:

Input image
210 x 297 mm

Calculate the image area. (1)

Calculate the image area. (2)
Allocate input image.

Add binding margin and spillover.

Resulting print

Print

A: Page width = 254 mm
B: Margin = 5 mm
C: A - margin (left and right) = 244 mm
D: Page height = 305 mm
E: Margin = 5 mm
F: D - margin (top and bottom) = 295 mm

Obtain the size of area in which margin is
excluded from the page.
(Size of area indicated by a red square)

A: Page width - margin (left & right)
= 244 mm
B: Page height - margin (top & bottom)
= 295 mm
C: Binding margin = 30 mm

Exclude the binding margin and place the
input image at the center of the area
(area indicated by a red square).

A: Spillover = 1 mm
B: Margin = 5 mm
C: Page width = 254 mm
D: Spillover = 1 mm
E: Margin = 5 mm
F: Page height = 305 mm

Add margin and spillover, which will be the image
to be sent to the printer.

A: Margin = 5 mm
B: Binding margin = 30 mm
C: Page width = 254 mm
D: Margin = 5 mm
E: Page height = 305 mm

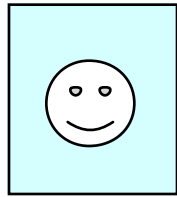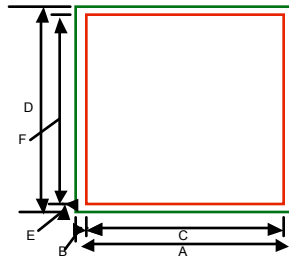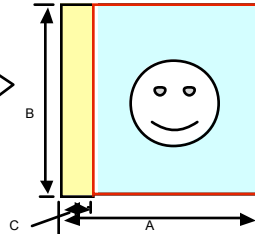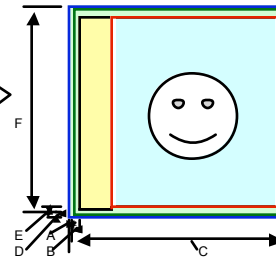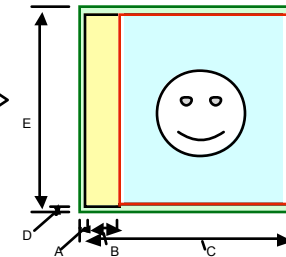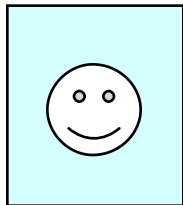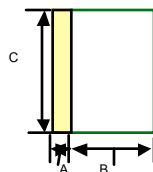2. When the input image size is bigger than page size:

1） No margin

e.g.: When input image is 210 x 297 mm, page size is 127 x 178 mm, binding margin is 30 mm wide, spillover is 1 mm wide,
magnification is 100%, long side binding, and binding margin is on the left side:
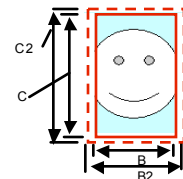
Input image
210 x 297 mm

Calculate the image area.

Add spillover in the image area
and allocate input image.

Add binding margin.

Resulting print

Print

A: Binding margin = 30mm
B: Page width - binding margin = 97 mm
C: Page height = 178 mm

Obtain the size of area in which binding margin
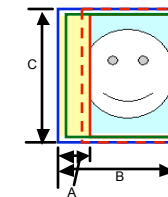is excluded from the page. (Size of BxC)

B: Page width - binding margin = 97 mm
B2: B + spillover (2 mm) = 99 mm
C: Page height = 178 mm
C2: C + spillover (2 mm) = 180 mm

Add spillover to BxC, and place the input
image at the center of the area.

A: Binding margin (30 mm) + spillover (1 mm on left)
B: Page width + spillover (2 mm) = 129 mm
C: Page height + spillover (2 mm ) = 180 mm

Add binding margin and spillover (1 mm on the left)
to the binding position (position with no left spillover
added), which will be the image to be sent to the printer.
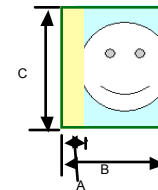
A: Binding margin = 30 mm
B: Page width = 127 mm
C: Page height = 178 mm

2) With margin

e.g.: When input image is 210 x 297 mm, page size is 127 x 178 mm, binding margin is 30 mm wide, spillover is 1 mm wide,
margin is 5 mm wide on all ends, magnification is 100%, long side binding, and binding margin is on the left side:

Input image
210 x 297 mm

Calculate the image area. (1)

Calculate the image area. (2)
Allocate input image.

Add margin and spillover.

Print

Resulting print
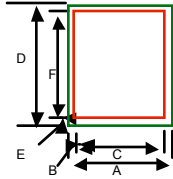


A: Page width = 127 mm
B: Margin = 5 mm
C: A - margin (left and right) = 117 mm
D: Page height = 178 mm
E: Margin = 5 mm
F:  - margin (top and bottom) = 168 mm

Obtain the size of area in which margin is
excluded from the page.
(Size of area indicated by a red square)

A: Page width - margin (left & right)
 = 117 mm
B: Page height - margin (top & bottom)
 = 168 mm
C: Binding margin = 30 mm

Exclude the binding margin and place the
input image at the center of the area
(area indicated by a red square).
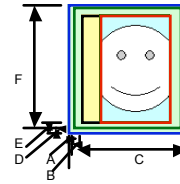
A: Spillover = 1 mm
B: Margin = 5 mm
C: Page width = 127 mm
D: Spillover = 1 mm
E: Margin = 5 mm
F: Page height = 178mm

Add margin and spillover, which will be the image
to be sent to the printer.

A: Margin = 5 mm
B: Binding margin = 30 mm
C: Page width = 127 mm
D: Margin = 5 mm
E: Page height = 178 mm

3. When the input image size is equal to page size:

1) No margin

e.g.: When input image is 254 x 305 mm, page size is 254 x 305 mm, binding margin is 30 mm wide, spillover is 1 mm wide,
magnification is 100%, long side binding, and binding margin is on the left side:

Input image
254 x 305 mm

Calculate the image area.

Add spillover in the image area
and allocate input image

Add binding margin.

Print

Resulting print



A: Binding margin = 30mm
B: Page width - binding margin = 224 mm
C: Page height = 305 mm

Obtain the size of area in which binding margin
is excluded from the page. (Size of BxC.)

B: Page width - binding margin = 224 mm
B2: B + spillover (2 mm) = 226 mm
C: Page height = 305 mm
C2: C + spillover (2 mm) = 307 mm

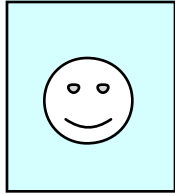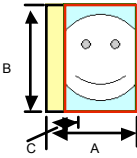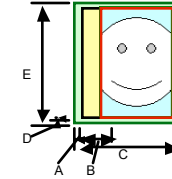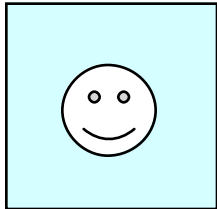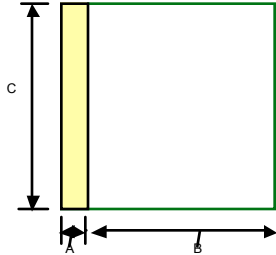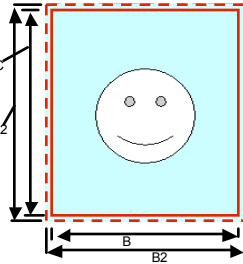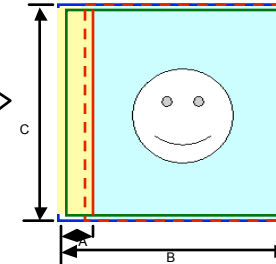Add spillover to BxC, and place the input
image at the center of the area.
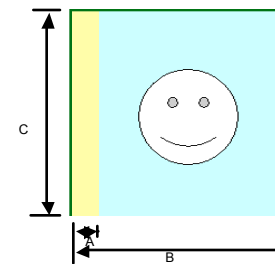
A: Binding margin (30mm) + spillover (1mm on the left)
B: Page width + spillover (2 mm) = 256 mm
C: Page height + spillover (2 mm ) = 307 mm

Add binding margin and spillover (1 mm on the left)
to the binding position (position with no left spillover
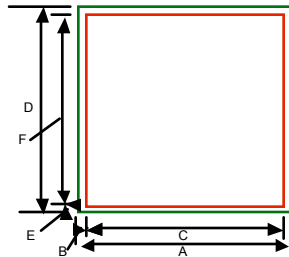added), which will be the image to be sent to the printer.

A: Binding margin = 30 mm
B: Page width = 254 mm
C: Page height = 305 mm

2) With margin

e.g.: When input image is 254 x 305 mm, page size is 254 x 305 mm, binding margin is 30 mm wide, spillover is 1 mm wide,
        margin is 5 mm wide on all ends, magnification is 100%, long side binding, and binding margin is on the left side:

| Input image 254 x 305 mm | Calculate the image area. (1) | Calculate the image area. (2) Allocate input image. | Add margin and spillover. | Resulting print |



**Calculate the image area. (1)**

A: Page width = 254 mm
B: Margin = 5 mm
C: A - margin (left and right) = 244 mm
D: Page height = 305 mm
E: Margin = 5 mm
F: D - margin (top and bottom) = 295 mm

Obtain the size of area in which margin is
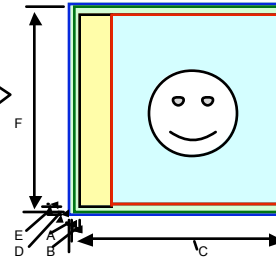excluded from the page.
(Size of area indicated by a red square)

**Calculate the image area. (2) Allocate input image.**
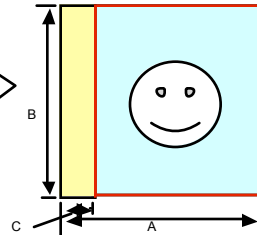
A: Page width - margin (left & right)
    = 244 mm
B: Page height - margin (top & bottom)
    = 295 mm
C: Binding margin = 30 mm

Exclude the binding margin and place the
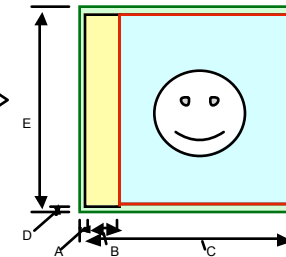input image at the center of the area
(area indicated by a red square).

**Add margin and spillover.**

A: Spillover = 1 mm
B: Margin = 5 mm
C: Page width = 254 mm
D: Spillover = 1 mm
E: Margin = 5 mm
F: Page height = 305 mm

Add margin and spillover, which will be the image
to be sent to the printer.

**Resulting print**

A: Margin = 5 mm
B: Binding margin = 30 mm
C: Page width = 254 mm
D: Margin = 5 mm
E: Page height = 305 mm