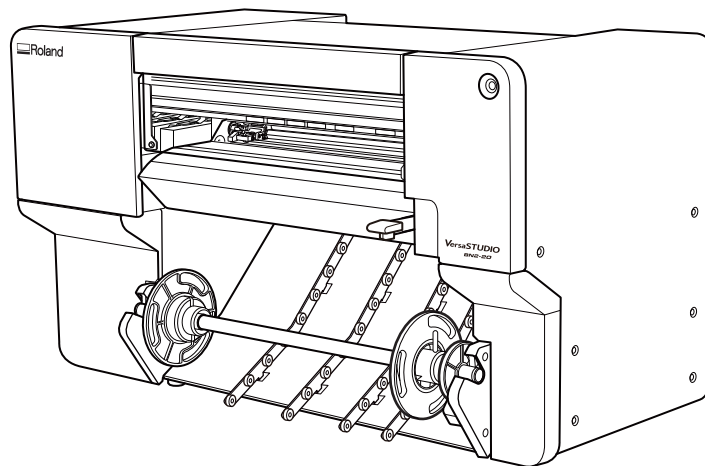


VersaSTUDIO

BN2-20 BN2-20A

Installation and Initial Settings



Thank you very much for purchasing this product.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely.
- Unauthorized copying or transferal, in whole or in part, of this manual is prohibited.
- The specifications of this product and the contents of this operation manual are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprints or errors, please inform us.
- Roland DG Corporation assumes no responsibility for any direct or indirect loss or damage that may occur through use of this product, regardless of any failure to perform on the part of this product.
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Introduction

About the Documentation for This Machine 3

About the Documentation for This Machine

The following manuals are included with the machine:

Paper manuals

- Safety Precautions
This manual contains important precautions for using the machine.
- Quick Access Guide
This guide contains the setup flow for this machine as well as links to procedures.
- FlexiDESIGNER VersaSTUDIO Edition Activation Code Guidelines
This guide includes the activation code needed to download and install the software.
- Regular Maintenance Guidelines
These guidelines include links to maintenance items listed in the manual. Scan the QR code to open the maintenance instructions directly.

Electronic-format manuals

- Installation Guide
This guide contains details on how to install the machine.
- Installing the Software and Configuring Its Initial Settings
This guide contains information on how to configure the initial settings of the machine.
- User's Manual
This manual contains details such as how to use and maintain the machine as well as an FAQ (a set of frequently asked questions).
- Introduction to FlexiDESIGNER VersaSTUDIO Edition
This guide contains basic operating instructions for the design and output software.

Support videos

These are the support videos for the manuals. The videos help guide users through explanations that are not easily understood through text and illustrations only.

You can view and download the electronic-format manuals from the following URL or QR code.

* You can also view and download the paper manuals.

* You can also view this website from a smartphone.



<https://downloadcenter.rolanddg.com/BN2-20>

Downloading and Installing Software

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Directly Connecting to the Computer	25

System Requirements

Prepare a computer that matches the requirements.

Operating system (OS)	Windows 11, Windows 10 (64-bit edition)
CPU	3 GHz or faster Intel i5 or i7 recommended
Memory	16 GB or more
Video card, monitor	Full HD (1,920 × 1,080 pixels, 24-bit color)
Solid state drive	256 GB or more free space
Hard disk	500 GB or more free space
Other requirements	<ul style="list-style-type: none">• Internet connectivity and web browser• Ethernet port

- This software is a 32-bit application and therefore runs in WOW64 (Windows-On-Windows 64) when running on 64-bit editions of Windows operating systems.

For the latest information, visit the Roland DG Corporation website (<https://www.rolanddg.com/>).

VersaWorks 6

For details, see the VersaWorks 6 Installation Guide.

RELATED LINKS

- <https://downloadcenter.rolanddg.com/VersaWorks6>

Software to Install

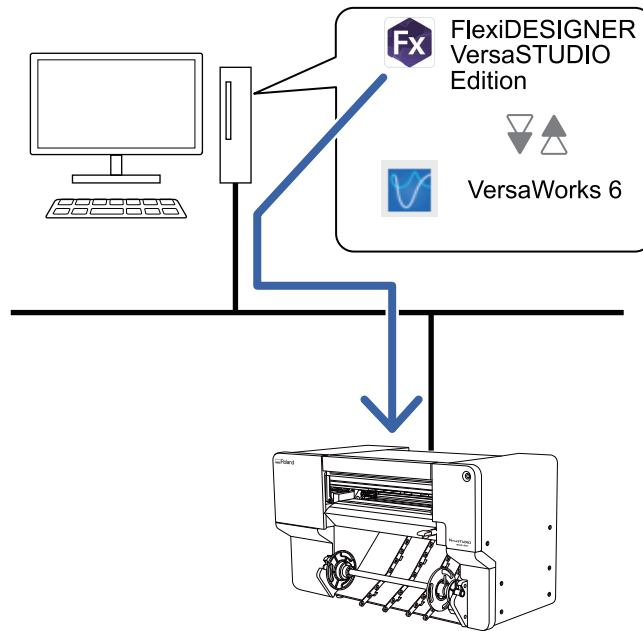
Roland DG Connect Hub	Software required for Roland DG Connect, a connected service that connects you to Roland DG Corporation products. The service can also be used to download and update software for use with the machine.
BN2 Utility	Used for operating the machine, checking the status, and performing maintenance and other tasks.
FlexiDESIGNER VersaSTUDIO Edition	Design and output software.
VersaWorks 6	RIP and management software. *1

*1 Using FlexiDESIGNER VersaSTUDIO Edition allows for output with easy operation.

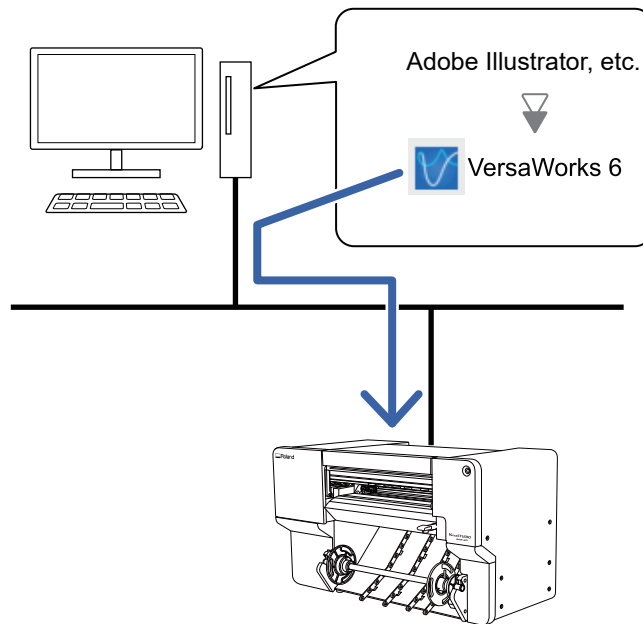
System Configuration Diagrams

Outputting data to the machine requires VersaWorks 6. The general system configurations are as follows.

Creating and Outputting Data with FlexiDESIGNER VersaSTUDIO Edition



Creating and Outputting Data with Commercially Available Software



Network Settings

IMPORTANT

The machine and computer are connected using an IP address that is automatically assigned via DHCP.

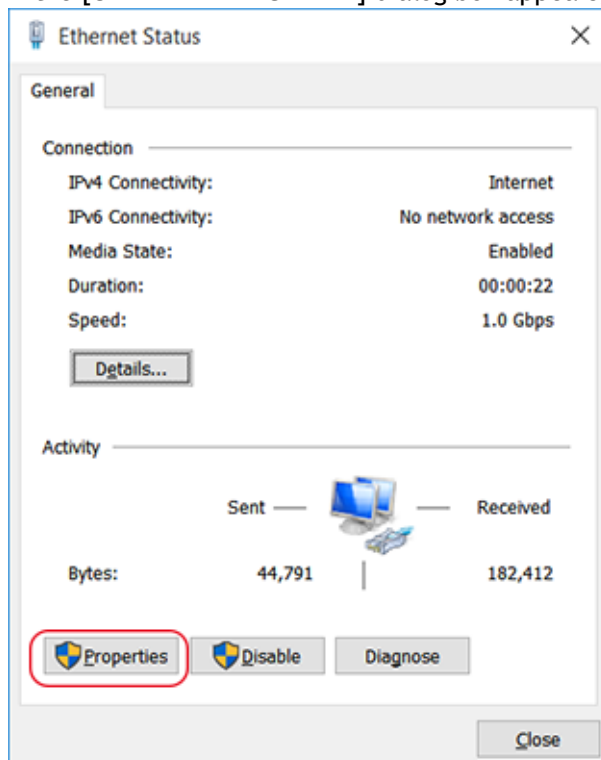
Setting the Computer's Network

Procedure

1. Log on to Windows as the [Administrator] or a member of the [Administrators] group.
2. Display the network connections screen.
 - Windows 11
 - a. Click [Start]>[Settings].
 - b. Click [Network & internet]>[Dial-up].
 - c. Click [Network and Sharing Center].
 - d. Click [Ethernet] or [Wi-Fi].
 - Windows 10
 - a. Click [Start]>[Settings]>[Network and Internet].
 - b. Click [Network and Sharing Center].
 - c. Click [Ethernet] or [Wi-Fi].

3. Click [Properties].

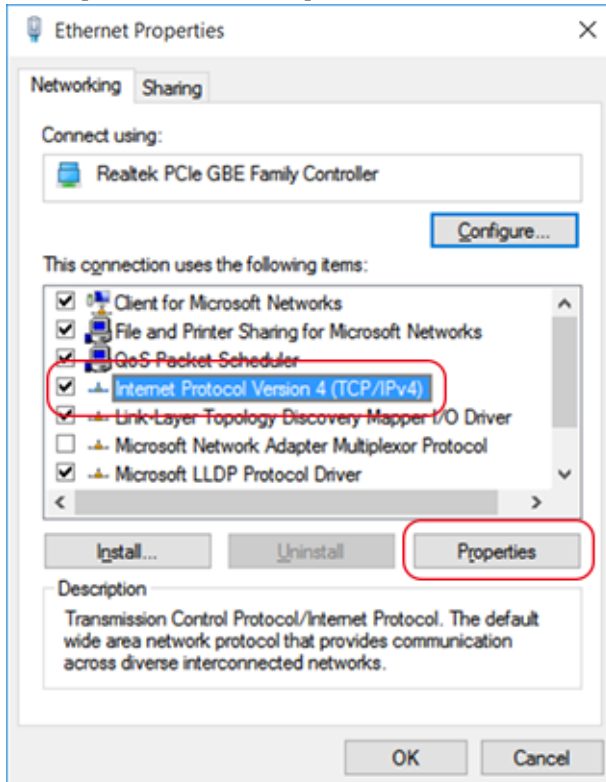
If the [User Account Control] dialog box appears, click [Continue].



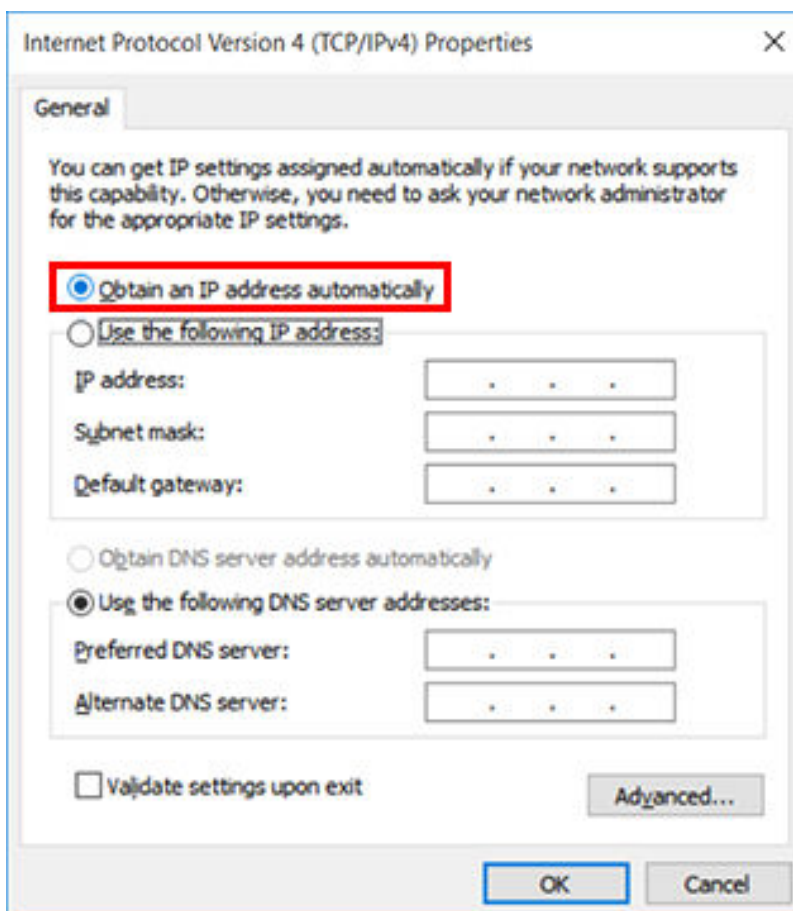
The [Ethernet Properties] or [Wi-Fi Properties] dialog box appears.

4. Select [Internet Protocol Version 4 (TCP/IPv4)], and then click [Properties].

If the [Internet Protocol] check box is clear, select it.



5. Select [Obtain an IP address automatically] and click [OK].



6. Click the following buttons to return to the original state.
 - a. [Close] in the [Ethernet Properties] or [Wi-Fi Properties] dialog box
 - b. [Close] in the [Ethernet Status] or [Wi-Fi Status] dialog box

Downloading Software

IMPORTANT

A connection to the Internet is required to download the software.

Downloading Roland DG Connect Hub

Procedure

1. Start the computer and log on as the "Administrator" or an "Administrators" account.
Shut down all other programs.

MEMO

Only the account with "Administrators" rights that was used to install this software can use it.

2. Access the following website on the computer where the software will be downloaded.
<https://downloadcenter.rolanddg.com/BN2-20/#software>

MEMO

Depending on where you live, you may be asked to complete user registration before downloading the software.

3. Click [Roland DG Connect / Connect Hub].
4. Click [Installer].
The explanation window for Roland DG Connect appears.
5. Click [Next].
6. Read the license agreement for the software. If you agree with the contents, click [Agree].
7. Download [RolandDG_Connect_Setup.zip] to an arbitrary location.

Installing the Software

The software to use with this machine can be installed from Roland DG Connect once Roland DG Connect Hub is installed on the computer connected to the machine.

IMPORTANT

A connection to the Internet is required to install the software.

Installing Roland DG Connect Hub

MEMO

A Roland DG Connect Hub setup video is available. This video aids in understanding the flow and details of the settings, so view it before performing setup.

[https:// downloadcenter.rolanddg.com/contents/software_parts/connect_info_en.html](https://downloadcenter.rolanddg.com/contents/software_parts/connect_info_en.html)

Procedure

1. Right-click the downloaded file [RolandDG_Connect_Setup.zip], and then click [Extract All].
2. Click [Browse], specify the folder in which to extract the files, and then click [Extract].
3. Double-click [RolandDG_Connect_Setup.exe] in the extracted folder [RolandDG_Connect_Setup].
When the [User Account Control] window appears, click [Yes] (or [Allow]).
4. Select the language to use from the pull-down list, and then click [OK].
The setup menu screen appears automatically.
Follow the on-screen instructions to carry out the installation.

MEMO

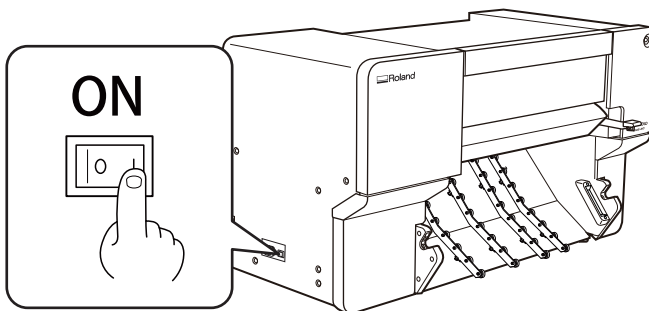
For details on installation and registration, refer to the Initial_Setting_Guide in the extracted folder, [RolandDG_Connect_Setup].

Install the software from Roland DG Connect.

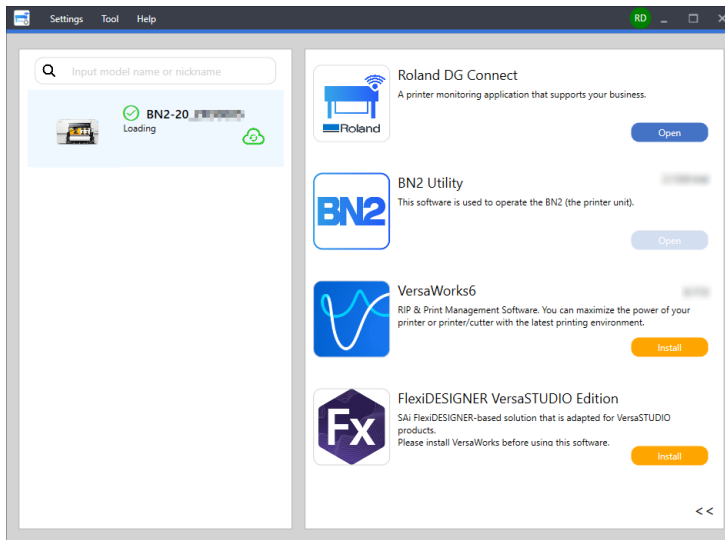
Use Roland DG Connect Hub to install the related software. After software is installed, you can perform operations such as starting and updating the software from Roland DG Connect Hub.

Procedure

1. Start [Roland DG Connect Hub].
 - Windows 11
 - a. Click [Start]>[All apps].
 - b. From the list of apps (programs), click [Roland DG Corporation]>[Roland DG Connect Hub].
 - Windows 10
 - a. Click [Start].
 - b. From the list of apps (programs), click [Roland DG Corporation]>[Roland DG Connect Hub].
2. Refer to the Initial_Setting_Guide in the [RolandDG_Connect_Setup] folder to perform the following operations.
 - a. Create a Roland DG Connect ID.
If you already have an ID, proceed to the next step.
 - b. Configure the Connect Hub settings.
3. Turn on the main power switch.



4. In the home screen, click the machine to use.
The software that can be used with the selected machine is displayed in the window on the right side of the screen.



5. Install all the software displayed on the right side of the screen.

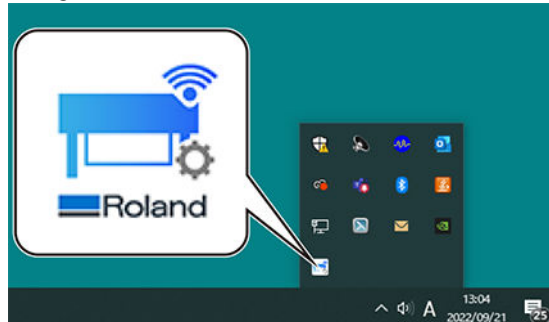
For information on how to install VersaWorks or connect with the printer, refer to https://downloadcenter.rolanddg.com/contents/manuals/VW2018_INS_EN.pdf.

For information on how to install FlexiDESIGNER VersaSTUDIO Edition, refer to [Installing FlexiDESIGNER VersaSTUDIO Edition](#).

When all the software to use is installed, the procedure is complete.

MEMO

When the installation is finished, click the Close button (✕) in the upper-right corner of the home screen to minimize Roland DG Connect Hub to the notification area. Although Roland DG Connect Hub is no longer displayed, it is still running. The icon of Roland DG Connect Hub is displayed at all times in the notification area while this software is running.



Installing FlexiDESIGNER VersaSTUDIO Edition

Create an account and obtain a license before installing FlexiDESIGNER VersaSTUDIO Edition.

MEMO

Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

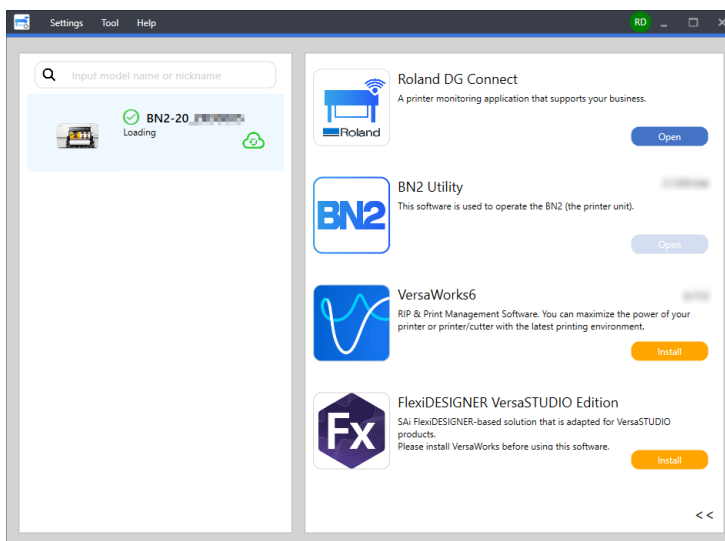
<https://youtu.be/b0Vdr3rquFI>



Step 1: Creating an Account

Procedure

1. Click [Install] for FlexiDESIGNER VersaSTUDIO Edition in the Roland DG Connect Hub window.



2. Register a new account or log in to an SAI Cloud account.

- Registering a new account

Enter the activation code in the [Activation Code] field under [Activate a New License or Prepaid Subscription] on the left side of the window.

Enter the activation code on the included FlexiDESIGNER VersaSTUDIO Edition Activation Code Guidelines, and then click [Activate].

Activate a New License or Prepaid Subscription

Please enter the activation code that accompanied your software purchase.

Activation Code

[Activate](#)

Use this only if you have purchased a new license or prepaid subscription and you are activating this license for the first time.

Login to SAi Cloud Account

Email

Password

[Login](#)

[Forgot Password?](#)

Use this if you have already activated your license and are checking back in for an overview of your licenses, managing your subscriptions, editing your account information or reviewing approval jobs.

- Logging in with an existing SAi Cloud account

Log in by entering your information under [**Login to SAi Cloud Account**] on the right side of the window, and then proceed to [Step 2: Downloading FlexiDESIGNER VersaSTUDIO Edition](#).

Activate a New License or Prepaid Subscription

Please enter the activation code that accompanied your software purchase.

Activation Code

[Activate](#)

Use this only if you have purchased a new license or prepaid subscription and you are activating this license for the first time.

Login to SAi Cloud Account

Email

Password

[Login](#)

[Forgot Password?](#)

Use this if you have already activated your license and are checking back in for an overview of your licenses, managing your subscriptions, editing your account information or reviewing approval jobs.

3. Enter your email address and click [**Create account**].

An email will be sent to the entered email address.

Create A Free SAi Cloud Account

I am a returning customer

I am new to the SAi Cloud

Enter your email address to get started.

Important: The email address you select for this SAi Cloud account will be the owner of the software. It will be used for all SAi software services. It is recommended you use a permanent business email address.

[Create Account](#)

4. Check the email.

Open the email from SAi and access the URL included inside.

5. Enter the required items and click [**Create account**].

Create Account

* Email

* Password
Password must be at least 6 characters

* Retype Password

* Name

Address Line 2

City

State/Province

Zip/Postal

VAT number

Create Account

6. When the [Terms and Conditions] appear, click [I agree to the usage conditions].

Terms And Conditions

Terms and Conditions

User Agreement

IMPORTANT—READ CAREFULLY:

This Account User's Agreement is a legal contract between You (defined below) and SA International Inc.

BY USING YOUR SAI CLOUD ACCOUNT, YOU (AS THIS TERM IS DEFINED BELOW) AGREE BY CLICKING ON THE "ACCEPT" BUTTON TO BE BOUND BY THE TERMS OF THIS AGREEMENT (AS THIS TERM IS DEFINED BELOW), INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY DISCLAIMERS, LIMITATIONS OF LIABILITY, JURISDICTION, AND TERMINATION PROVISIONS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT OPEN AN SAI CLOUD ACCOUNT AND EXIT NOW

7. Click [Activate now].

Add To SAi Cloud Account

This software license will be added to your SAi Cloud Account.

Activate Now

8. When the [Privacy Policy] appears, click [Continue].

Privacy Policy

SAi Global Internet Privacy Policy

SA International (SAi) is recognized as a global leader in providing complete, professional software solutions from design to production for the sign making, digital printing, screen-printing and CNC machining industries. Our software solutions help turn creative ideas into reality by providing world-class design and editing tools geared for production. Our products include Flexi, PhotoPRINT, EnRoute, DisplayGenie, PixelBlaster or an OEM-type software.

It is the policy of SA International Inc. ("SAi") to comply with all applicable privacy and data protection laws. We refer to SAi throughout as "we," "us", and/or "our." This commitment reflects the value we place on keeping the trust of our customers, business partners, employees, and others who share their personal information and non- personal aggregate data with us.

Our SAi Global Internet Privacy Policy and Practices (the "Policy") describes when and why we, as a data controller, use your personal information, the conditions under which we disclose it and how protect your privacy when we collect personal information on our internet sites: www.thinksai.com, www.SignPrintGuild.org, www.enroutesoftware.com, www.autographictoolbox.com, www.displaygeniesoftware.com, www.enroutesubscriptions.com, www.flexiplugins.com, www.flexisubs.com, www.flexisubscriptions.com, www.photoprintsubscription.com, www.ripsoftwaresubscriptions.com, www.saidisplaygenie.com, www.saintl.biz, www.sign.com, www.signsoftwaresubscriptions.com and www.saicloud.com, or in the ordinary course of our business. This Policy also describes how we use your non-personal aggregate data.

PixelBlaster software is handled through a third-party company, Aurelon. Users can access the new PixelBlaster Privacy Policy when they log in to their account.

As used in the Policy, the term "personal information" means information that identifies or is able to identify you personally. The term "non-personal aggregate data" refers to any other information you may provide which may, for example and without limitation, be the operation of our software and the amount of consumables used in the conduct of a business such as media

Continue

Step 2: Downloading FlexiDESIGNER VersaSTUDIO Edition

Procedure


1. Click [View] in the [Licenses] window.
The software's information will be displayed.

Your account settings have been updated.

Licenses

[+ Activate new software now](#)

Search: Sort by: Sort Order: [Search](#) [Reset](#)

License	Software ID	License Type	Status	Activation Code	Subscription	Actions
 VersaSTUDIO Desig...			Not installed		Not Expired	View

Items per page: [Prev](#) [Next](#)

[Show Voided Licenses](#)

2. Click [Download now].

Getting Started

Step 1 - Download

Clicking on the download button below will download a small application. Run the application to download your software.

[Download Now](#)

Step 2 - Install

Once the download is complete, run the installer. The final step in the install process will run a "License Manager" application.

Step 3 - License

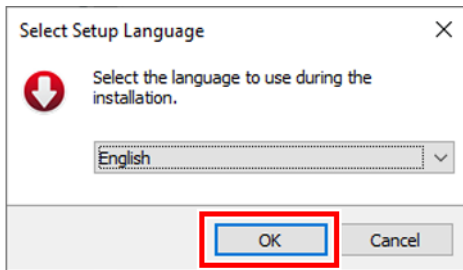
The "License Manager" application will ask for an activation code. Use the activation code below to license this software.

["License Manager" can't connect?](#)

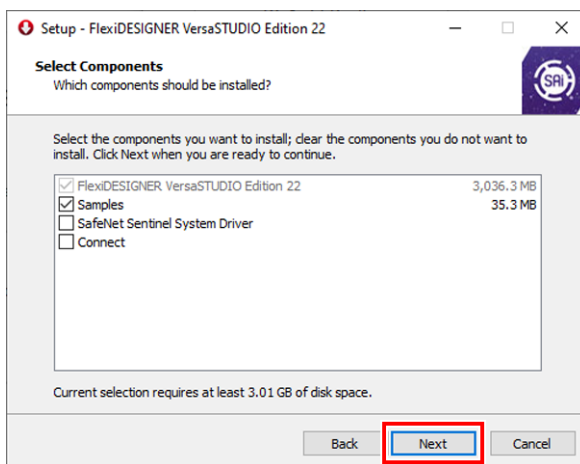
Step 3: Preparing for Installing FlexiDESIGNER VersaSTUDIO Edition

Procedure

1. Double-click flexidesigner_versastudio_edition_xxx_xxxx.exe.
When the [User Account Control] window appears, click [Yes] (or [Allow]).
2. Select the language to use during installation, and then click [OK].



3. Read the license agreement. If you agree with the contents, select [Agree] and click [Next].
4. Specify the installation location and click [Next].
5. Select the components to install, and click [Next].

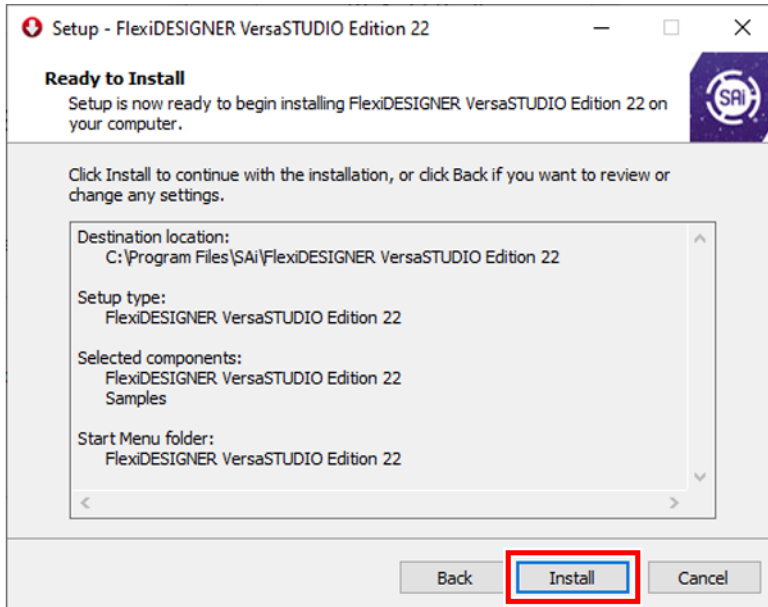


6. Specify where the shortcut should be created, and click Next.
This completes the preparation for the installation.

Step 4: Installing FlexiDESIGNER VersaSTUDIO Edition

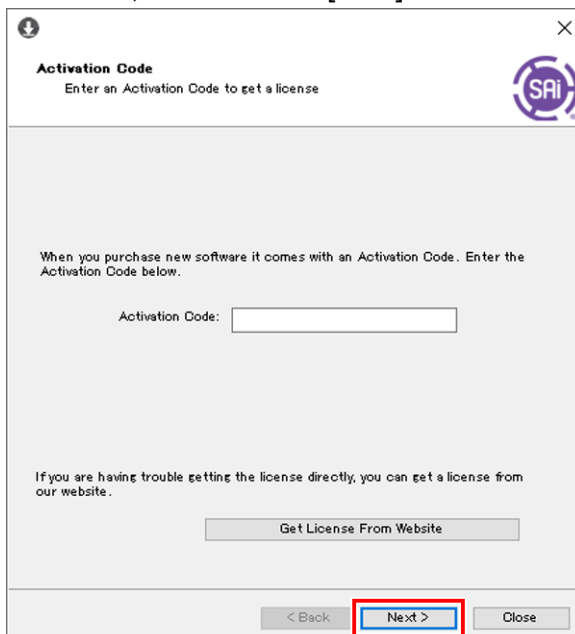
Procedure

1. Check the settings in the installation preparation completion window, and if there are no problems, click [Install].

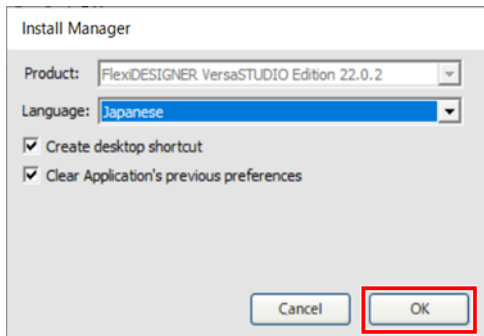


2. If the [Activation Code] input window is displayed, enter the activation code.

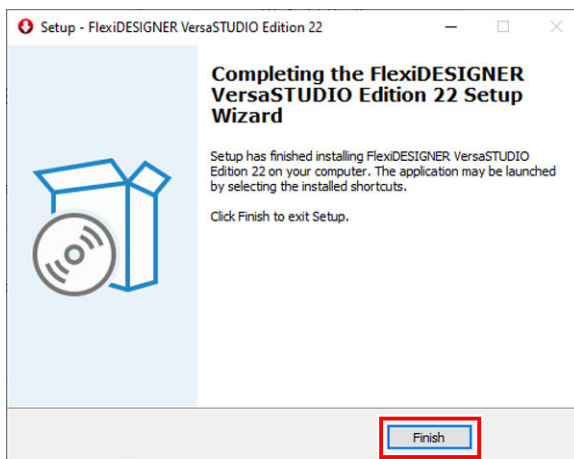
Enter the activation code on the included FlexiDESIGNER VersaSTUDIO Edition Activation Code Guidelines, and then click [Next].



3. If [Licensing successful] is displayed, click Finish.
4. On the Installation Manager window, select the language and applicable options, and then click [OK].



5. When the following window is displayed, click Finish.



This completes the installation of FlexiDESIGNER VersaSTUDIO Edition.

Step 5: Configuring FlexiDESIGNER VersaSTUDIO Edition Settings

Procedure

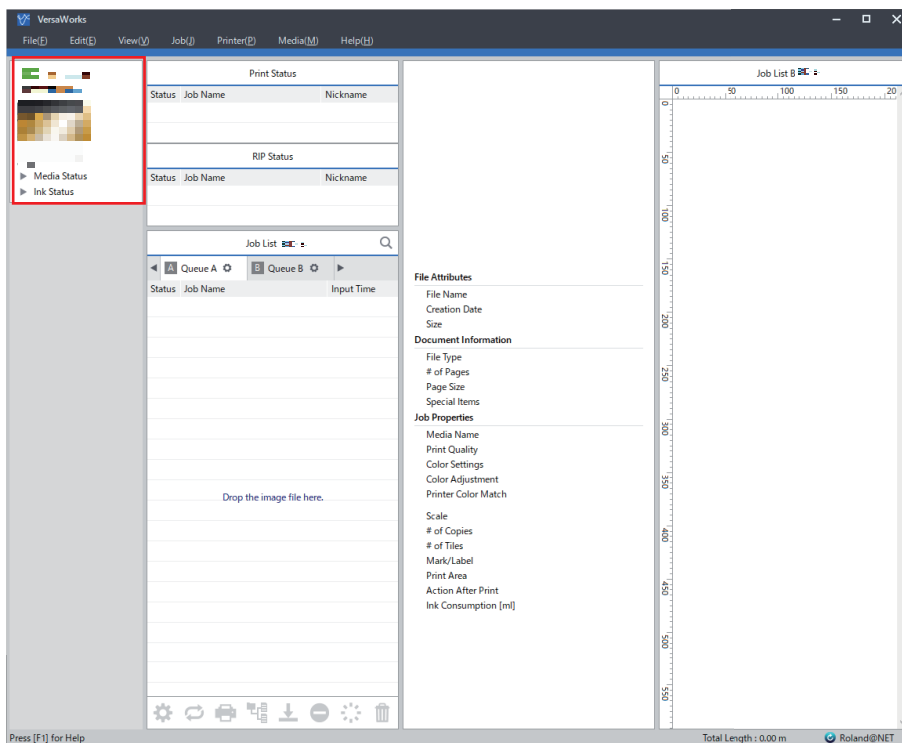
1. Make sure the power to the printer is switched on.
2. Click [Open] next to VersaWorks in the Roland DG Connect Hub home screen.
3. Set the printer to connect.

The first time you register printers in VersaWorks, the connectable printers are automatically searched for and registered.

However, this automatic registration does not occur if no printers are detected or if five or more printers are detected. In these situations, register printers manually.

MEMO

If you are already using VersaWorks, printers are registered automatically, and the machine information is displayed in the top menu.



When at least one printer is detected:

- (1) When the window of the detected printer appears, click [OK].
- (2) When the message [Do you want to install the virtual printer driver?] is displayed, click [Yes].

This message does not indicate the printer driver to use in communication. It indicates the virtual printer driver to use when printing directly from the application.

- (3) When the [User Account Control] window appears, click [Yes](or [Allow]).
- (4) When the [Add Printer Wizard] window appears, click [Next].

Registration is complete once the machine information is displayed in the top menu.

When no printers are detected or five or more printers are detected:

- (1) Enter the IP address and click [Verify].

Items such as the [Model Name] and [Firmware Version] are displayed.

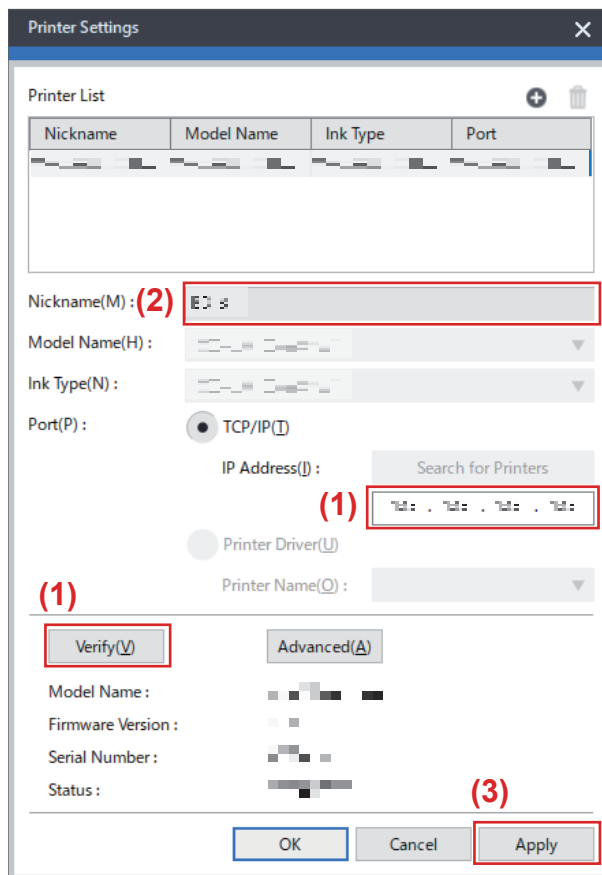
MEMO

If the printer cannot be found, check the LAN cable connection status.

- (2) Set the [Nickname].

If you do not set a nickname, the model name is displayed.

- (3) Click [Apply].



- (4) When the message [Do you want to install the virtual printer driver?] is displayed, click [Yes].

This message does not indicate the printer driver to use in communication. It indicates the virtual printer driver to use when printing directly from the application.

- (5) When the [User Account Control] window appears, click [Yes](or [Allow]).

- (6) When the [Add Printer Wizard] window appears, click [Next].

The information of the connected printer appears in the [Printer List].

- (7) Click [OK].

Registration is complete once the machine information is displayed in the top menu.

This completes setup.

Actions to Take When Machine Information Is Not Displayed in Utility

If machine information is not displayed in Utility, bring the computer and this machine into the same subnet mask.

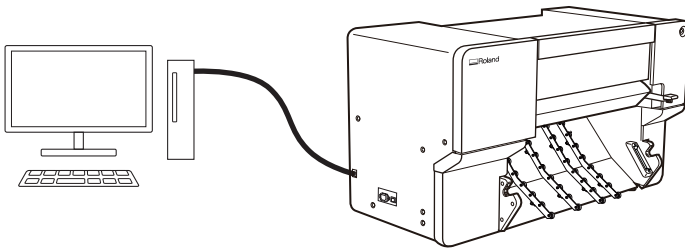
MEMO

If the computer and this machine cannot be brought into the same subnet mask, connect them directly.
[P. 25 Directly Connecting to the Computer](#)

Directly Connecting to the Computer


This section explains the setting procedure for connecting one computer and one machine directly, not over a network.

IP addresses that start with "192.168." can be used freely by anyone. Use one of these addresses when connecting one computer and one machine in an environment separate from other networks.



Step 1: Make the Network Settings on the Printer

Procedure

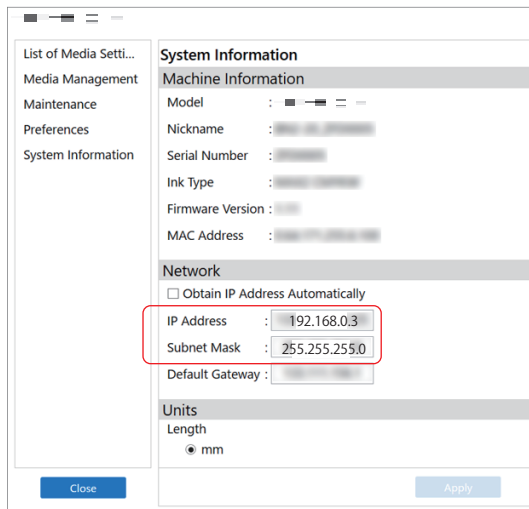
1. On the Utility home screen, click .
2. Click [System Information], and then clear the [Obtain IP Address Automatically] check box under [Network].
3. Enter the [IP Address] and [Subnet Mask].
 - (1) Enter the [IP Address].

Item	Address to enter
IP address	192.168.0.XXX
Subnet mask	255.255.255.0

Note: Here, "XXX" may be any number you want from 1 to 254.
Here, "192.168.0.3" is entered by way of example.

- (2) Enter the [Subnet Mask].

Enter the same subnet mask as the one used by the computer.

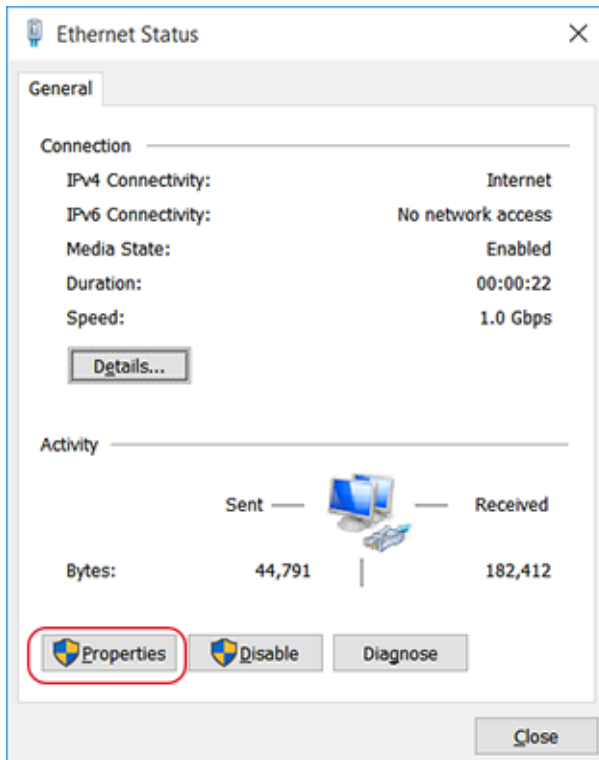


4. Click [Apply].

Step 2: Setting the Computer's Network

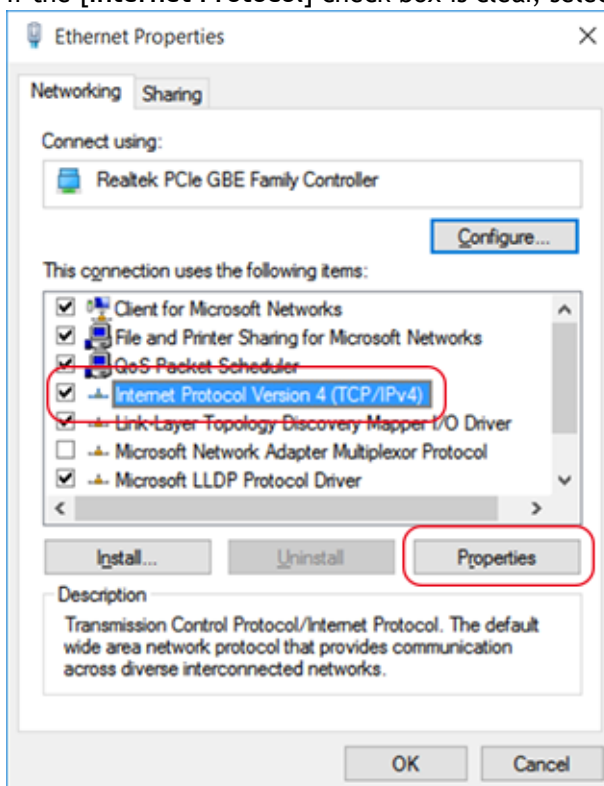
Procedure

1. Log on to Windows as the [Administrator] or a member of the [Administrators] group.
2. Display the network connections screen.
 - Windows 11
 - a. Click [Start]>[Settings].
 - b. Click [Network & Internet]>[Dial-up].
 - c. Click [Network and Sharing Center].
 - d. Click [Ethernet].
 - Windows 10
 - a. Click [Start]>[Settings]>[Network & Internet].
 - b. Click [Network and Sharing Center].
 - c. Click [Ethernet].
3. Click [Properties].
If a [User Account Control] window appears, click [Continue].



The [Ethernet Properties] window appears.

4. Select [Internet Protocol Version 4 (TCP/IPv4) Properties], and then click [Properties].
If the [Internet Protocol] check box is clear, select it.

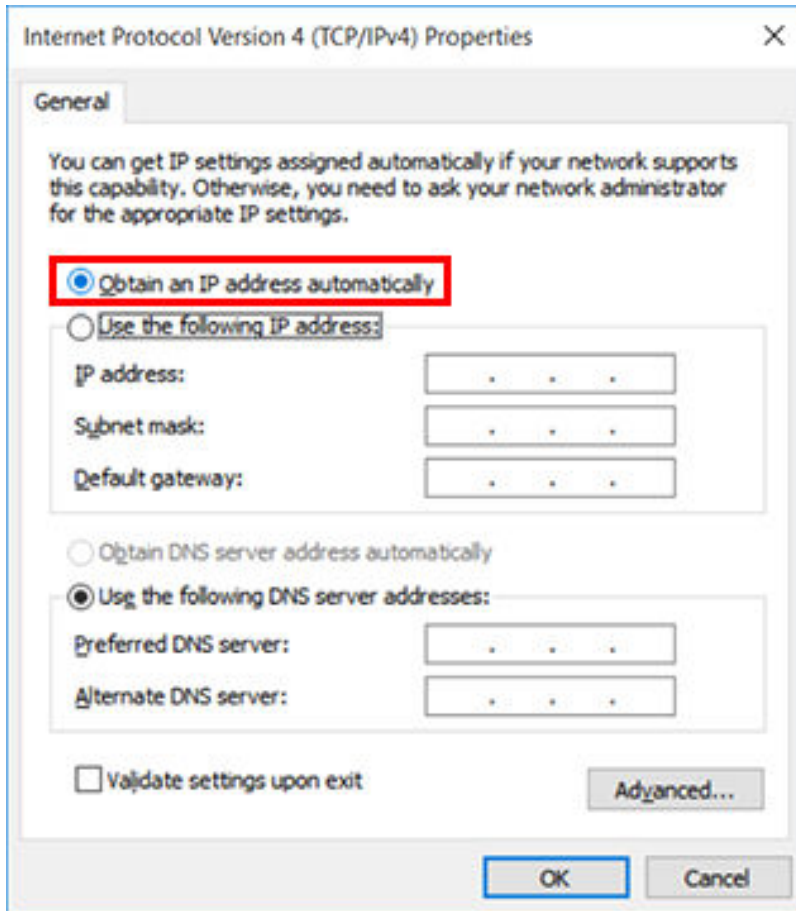


5. Select [Use the following IP address]. Enter the information as shown below, and then click [OK].

Actions to Take When Machine Information Is Not Displayed in Utility

Item	Address to enter
IP address	192.168.0.XXX
Subnet mask	255.255.255.0

"XXX" represents a number from 1 to 254. However, do not use the same number as set in "Make the Network Settings on the Printer."



6. Click the following buttons to return to the original state.
 - a. [Cancel] in the [Ethernet Properties] window
 - b. [Cancel] in the [Ethernet Status] window

Initial Printer Settings

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Installing the Cutting Tool

This operation is unnecessary if you will not use the cutting tool. Tighten the print-head carriage screw lightly when no cutting tool is installed. Keeping the screw firmly tightened causes the cutting tool insertion hole to become gradually smaller, making installation difficult.

⚠ WARNING

Be sure to perform operations as specified by the instructions, and never touch any area not specified in the instructions.

Sudden movement of the machine may cause injury.

⚠ CAUTION

Never touch the tip of the knife.

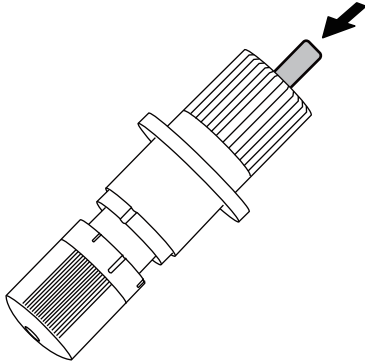
Doing so may result in injury. The cutting performance of the blade will also be impaired.

Step 1: Assembling the Cutting Tool

Procedure

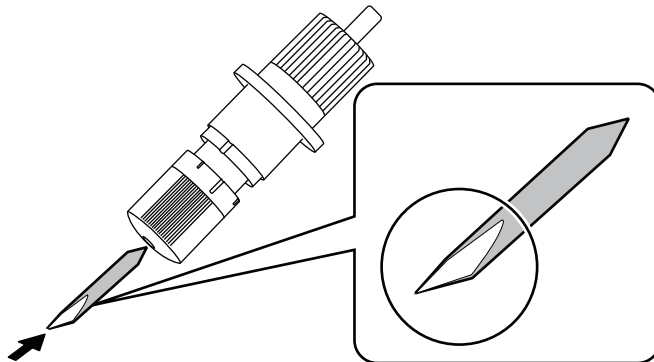
1. Insert the pin into the blade holder.

Insert the pin until the tip protrudes about 3 to 5 mm (0.12 to 0.19 in.).



2. Insert the blade into the blade holder.

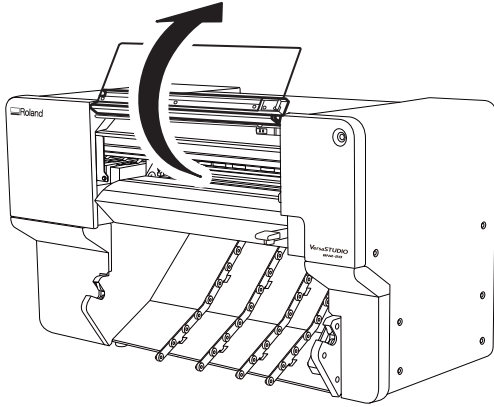
Insert the blade into the hole so the blade tip is on the outside.



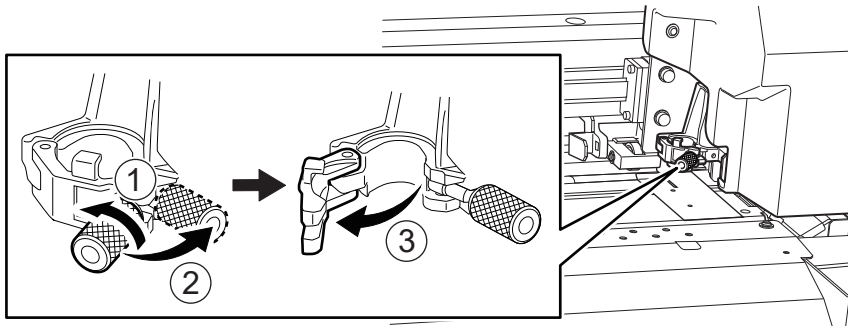
Step 2: Installing the Cutting Tool

Procedure

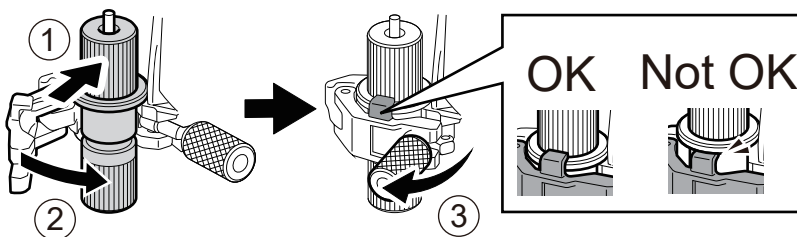
1. Open the front cover.



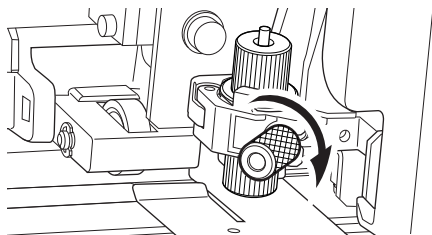
2. Loosen the print-head carriage screw.



3. Install the cutting tool in the print-head carriage.



4. Tighten the screw.



5. Close the front cover.

Loading Media

Media type

In this manual, the paper used for output is called "media." The two main types of media used in this machine are shown below.

- Roll media: Media wound onto a paper tube
- Sheet media: Media not wound onto a paper tube such as standard-size media

Various paper qualities of roll media and sheet media are selectable according to the purpose. For detailed information about each media, contact your media supplier. Media can also be purchased from our website.

<https://www.rolanddg.com/>

Usable media

This machine cannot print on every kind of media. Before selecting media, be sure to perform trial printing to check whether satisfactory output quality is obtained.

Size

	Usable Media
Width *1	150 to 515 mm (5.9 to 20.3 inches)
Cutable media thickness*1	Max. 0.22 mm (8.66 mil; depending on the media composition)
Maximum media thickness (including backing paper)*1	When only printing: 1.0 mm (39.4 mil) When performing cutting: 0.4 mm (15 mil)
Maximum roll outer diameter	150 mm (5.9 in.)
Paper tube (core) inner diameter	76.2 mm (3 in.) or 50.8 mm (2 in.)

*1 Applies to both roll and sheet media

Maximum roll weight

6 kg (13.23 lb.)

Other conditions

Media such as the following cannot be used.

- Media whose end is attached to the paper tube (core)
- Media that is severely warped or that has a strong tendency to reroll
- Media that cannot withstand the heat of the media heating system
- Media whose paper tube (core) is bent or crushed
- Media that bends under its own weight when loaded
- Media on a sagging roll
- Media that is rolled unevenly

Loading Roll Media

Load the roll media onto the media flange and then load it in the machine. This procedure is not necessary when using sheet media.

MEMO

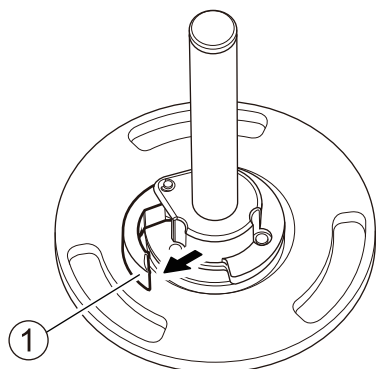
Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

https://youtu.be/k9GFL-_84iU



Procedure

1. Remove the media shaft from the machine.
2. Open the lock lever (①) on the left media flange in the direction of the arrow, and remove the flange from the media shaft.

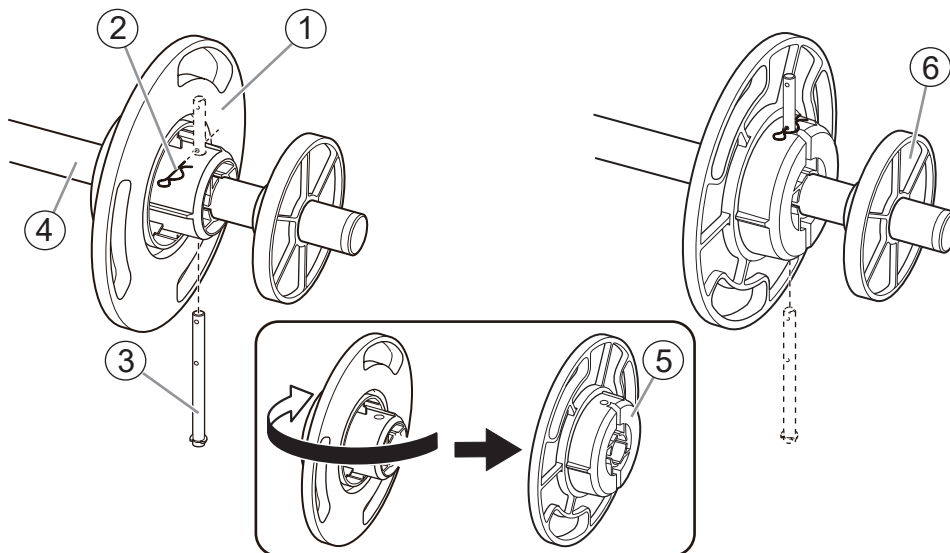


3. Check the orientation of the right media flange (①).

With the factory default settings, the right media flange is installed so that loading of roll media with a 3-inch paper tube inner diameter is possible.

To load roll media with a 2-inch paper tube inner diameter, change the orientation of the right media flange using the following procedure.

- (1) Remove the snap pin (②) and pull out the mounting pin (③).
- (2) Remove the right media flange from the media shaft (④).
- (3) Change the orientation of the right media flange and install it on the media shaft with the 3-inch side (⑤) facing the stopper (⑥).
- (4) Secure the right media flange and media shaft with the mounting pin, and then attach the snap pin.



4. Load the roll media onto the media flange.

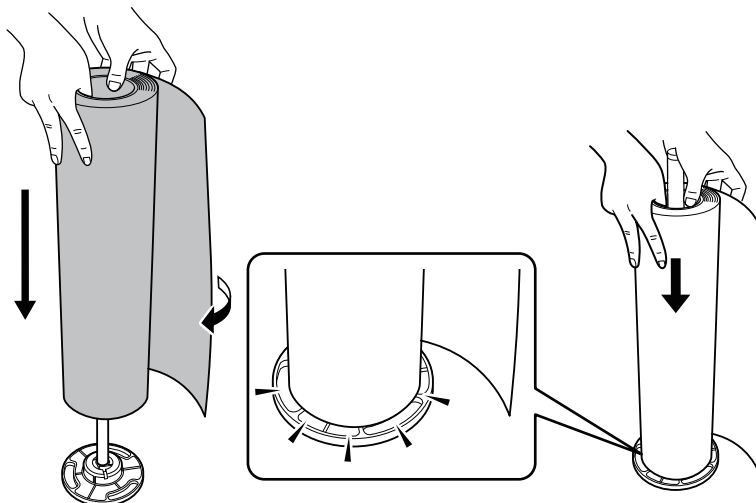
Place the media shaft flange at the bottom and load the roll media so that the media feeds in the clockwise direction when viewed from above.

MEMO

Media cannot be loaded correctly if the direction of the roll media is incorrect.

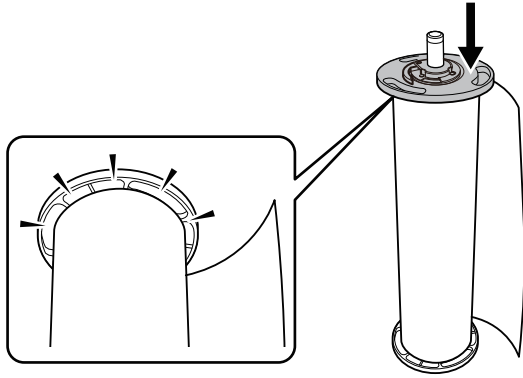
Install the roll media so there is no gap between it and the media flange.

To keep the printing result from being negatively affected, prevent contact with the media print surface as much as possible.



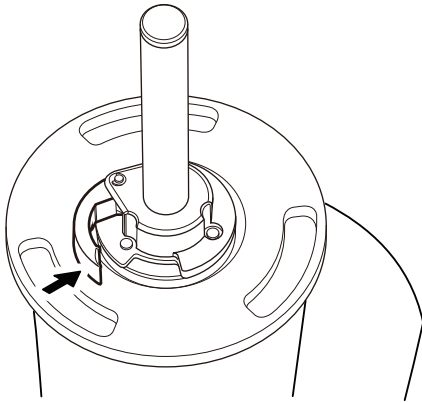
5. Install the left media flange.

Install the media flange so there is no gap between it and the roll media.



6. Secure the left media flange in place.

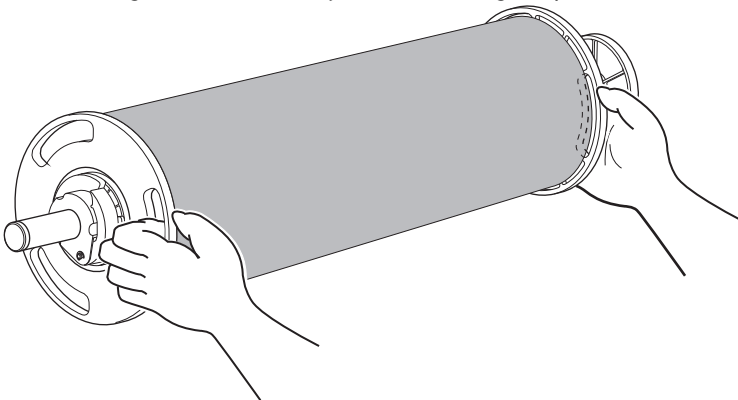
Close the lock lever in the direction of the arrow to secure the left media flange in place.



7. Load the roll media on the printer.

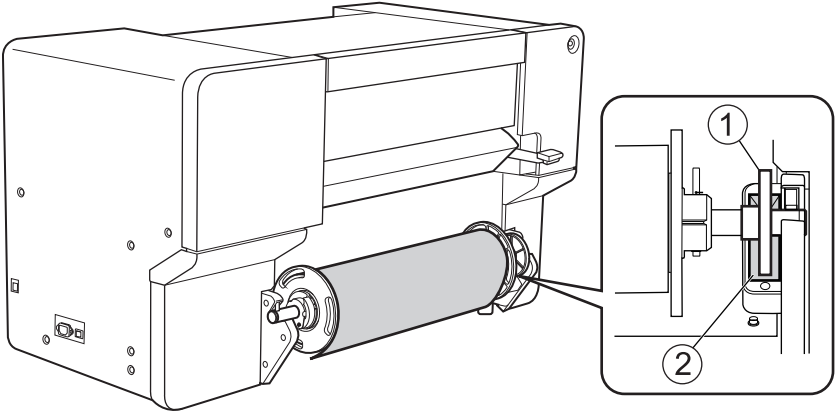
IMPORTANT

When loading the media, hold by the media flange to prevent contact with the media print surface.



(1) Align the stopper (①) with the guide (②).

(2) Press the left and right ends of the media shaft into the shaft holder until you hear a click.



Ink Filling and Initial Adjustment

Fill the machine with ink and perform initial adjustment.

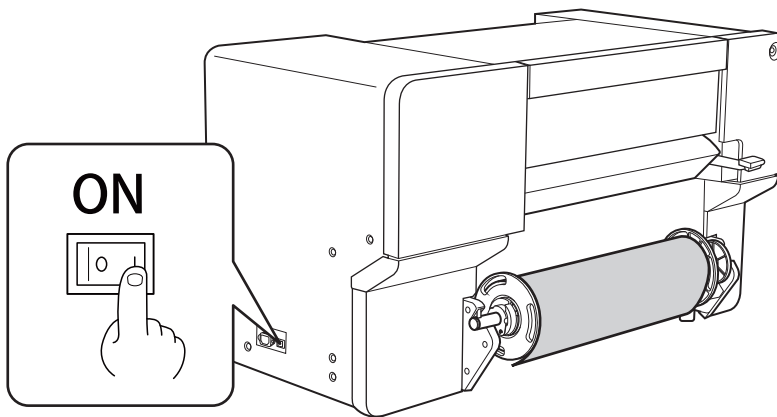
Step 1: Filling with Ink

Use BN2 Utility to operate the machine.

In this manual, BN2 Utility is referred to as "Utility."

Procedure

1. Close the front cover.
2. Turn on the main power switch.

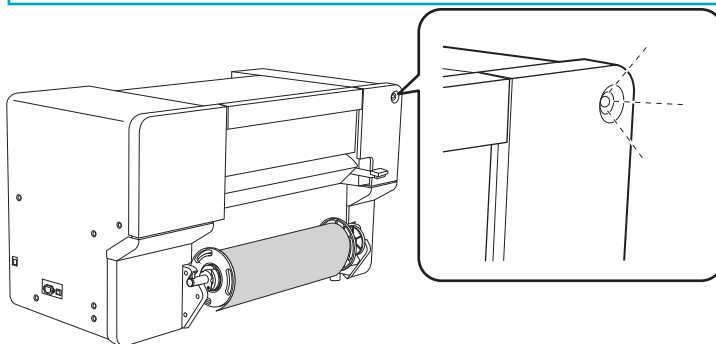


3. Press the sub power button.

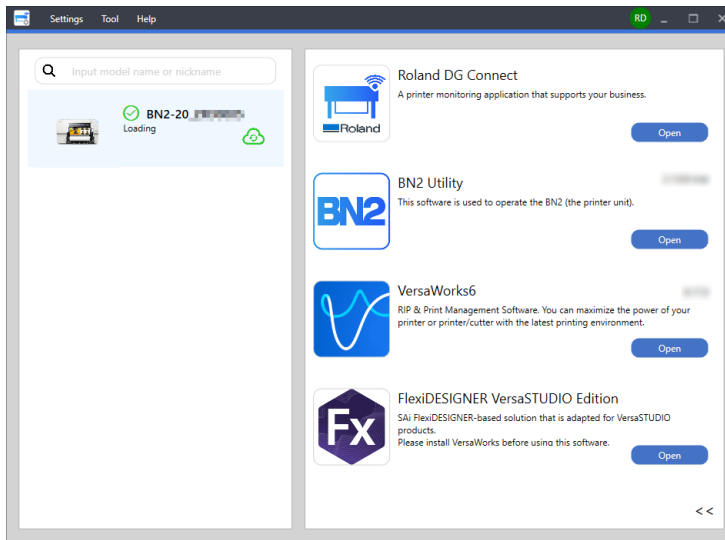
When the sub power button indicator changes from flashing to steady, startup is finished.

MEMO

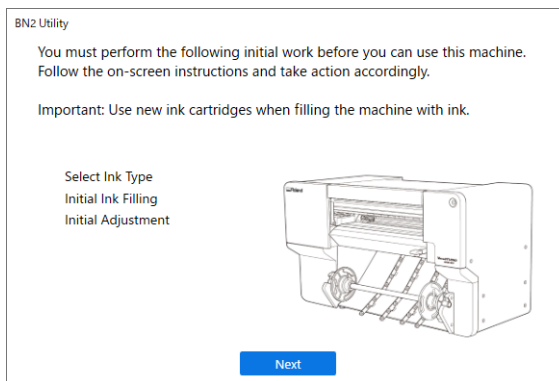
After turning on the main power, wait some time before pressing the sub power button. Firmware initialization starts when the main power is turned on, and there will be no response when pressing the sub power button until initialization is complete.



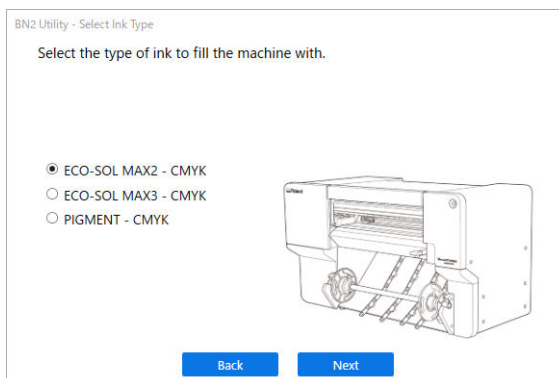
4. Start Utility from the Roland DG Connect Hub home screen.
Click [Open] next to Utility.



5. When the operation guide window appears, click [Next].



6. Select the type of ink being used for filling, and then click [Next].



A window appears with selections of the type of ink being used for filling. If the current selection is correct, click [Next]. To change the selection, click [Back].

7. Perform [Manual Cleaning before Initial Ink Filling].

To prevent discharging problems, perform cleaning before filling the machine with ink.

MEMO

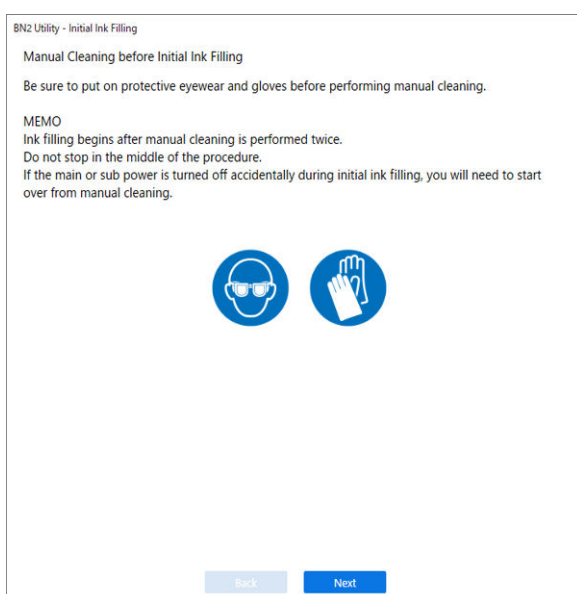
[Manual Cleaning before Initial Ink Filling] is not necessary when filling with pigment ink.

MEMO

Ink filling begins after manual cleaning is performed twice.
 Do not stop in the middle of the procedure.
 If the main or sub power is turned off accidentally during ink filling, you will need to start over from manual cleaning.

IMPORTANT

- Never use any implements other than the included cleaning sticks.
Fabric or other lint-producing items may damage the heads.
- Use new cleaning sticks.
Reusing cleaning sticks may reduce print quality.
- Do not put used cleaning sticks in the cleaning liquid. Doing so will deteriorate the cleaning liquid.
- Never rub the nozzle surface of the heads.



Click [Next]. Proceed with the work by following the instructions in the Utility window.

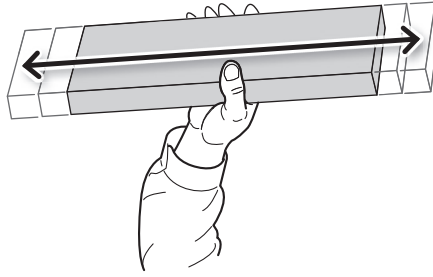
8. Insert the ink cartridge to fill the machine with ink.

IMPORTANT

Be sure to use an unused ink cartridge when filling the machine with ink.

IMPORTANT

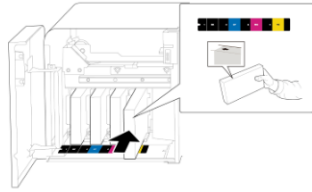
Before inserting ink cartridges, shake each of them 50 times (about 20 seconds).
 The precipitation of the ingredients in the ink disables printing in normal color. So that the ink mixes well, shake the ink cartridge horizontally with a stroke length of around 5 cm (2 in.) from each end of the ink cartridge.



Open the left cover and insert the ink cartridge with the same color as the ink label in the ink slot. Insert the ink cartridge all the way until a beep is heard.

BN2 Utility - Initial Ink Filling

Open the left cover and insert the ink cartridge with the same color as the ink slot label in the ink slot.
Insert the ink cartridge all the way until a beep is heard.
After all the cartridges have been inserted correctly, ink filling begins.



9. When the [The ink tanks have been filled.] window appears, click [Next].

Step 2: Loading Media

When [Load the media, and then make sure that the loading lever is lowered. Start setup.] is displayed, load the media while referring to the loading instructions for the media being used.

IMPORTANT

Perform printing tests and various adjustments. Load media that is at least 400 mm (15.75 in.) wide and 600 mm (23.63 in.) long.

- When using roll media
P. 41 Loading Roll Media
- When using sheet media
P. 46 Loading Sheet Media

Loading Roll Media

MEMO

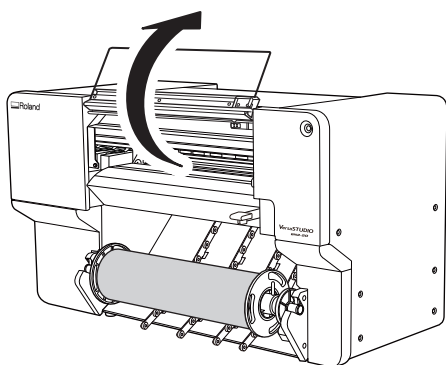
Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

https://youtu.be/Os_Z7k8-3PE



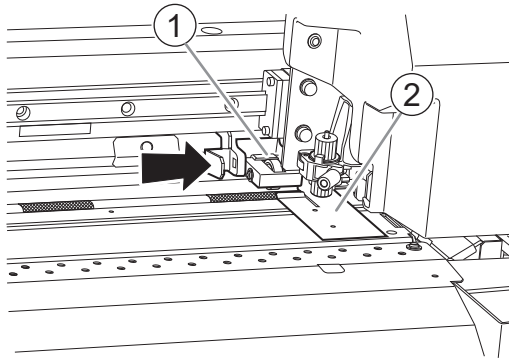
Procedure

1. Open the front cover.



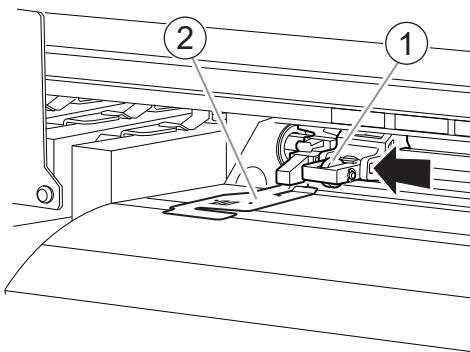
2. Move the right pinch roller (①) and the right media clamp (②) to the right end.

Press the part indicated by the arrow on the right pinch roller to move the roller and the right media clamp together.



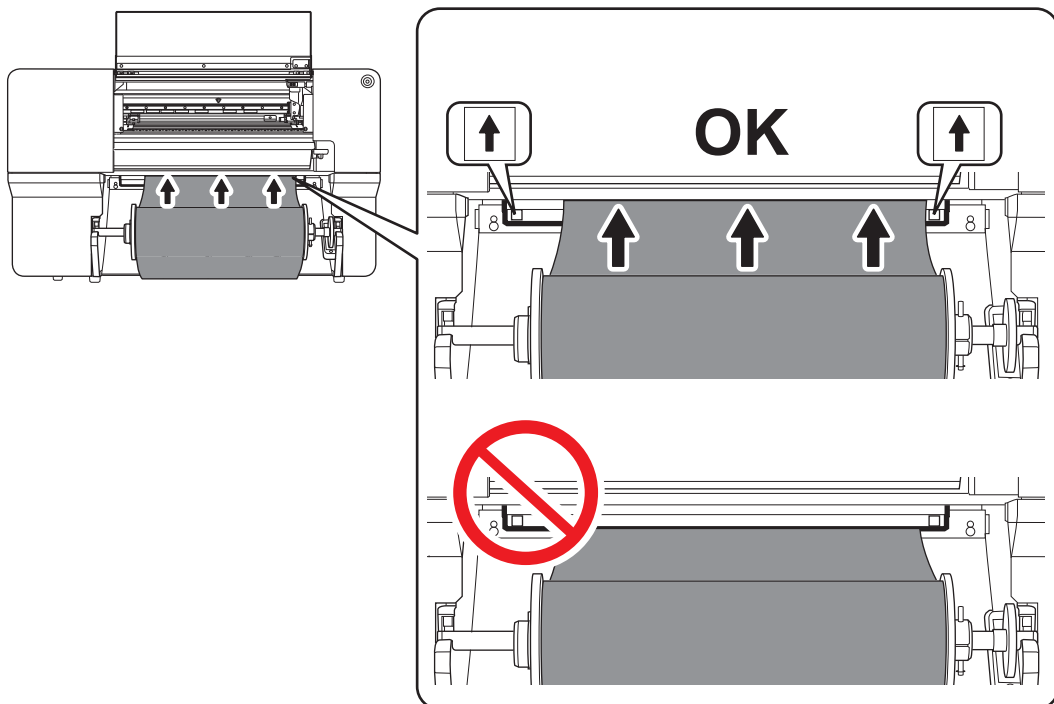
3. Move the left pinch roller (①) and the left media clamp (②) to the left end.

Press the part indicated by the arrow on the left pinch roller to move the roller and the left media clamp together.



4. Use the following procedure to load the media.

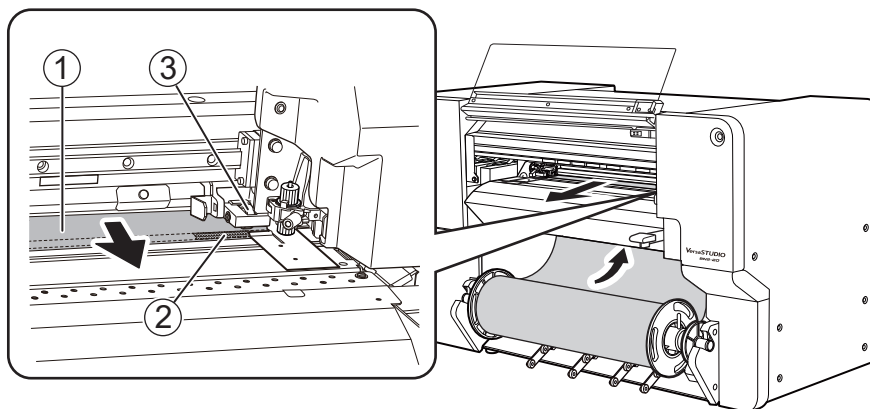
- (1) Pull out the media and load it from above the plate in front with the arrow stickers.



- (2) Pass the media (①) between the right grit roller (②) and right pinch roller (③).

MEMO

If the left edge of the media is left of the left pinch roller, pass the media between the left grit roller and left pinch roller as well.



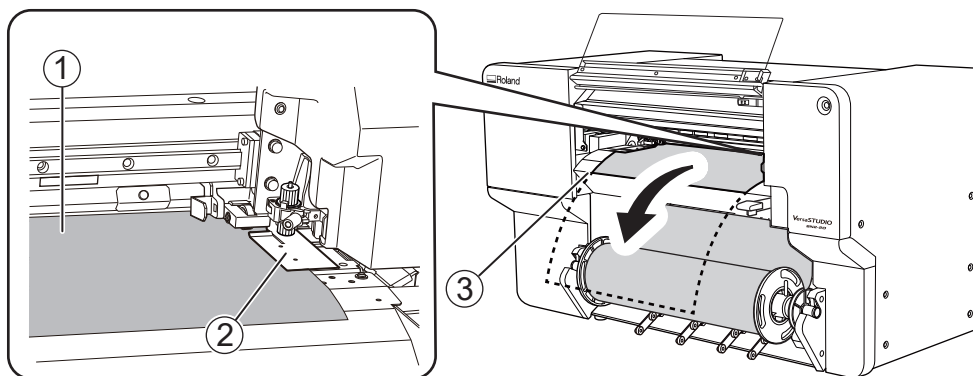
- (3) Pass the media (①) under the right media clamp (②), and pull it out about 20 cm (7.87 in.) from the edge of the apron (③).

MEMO

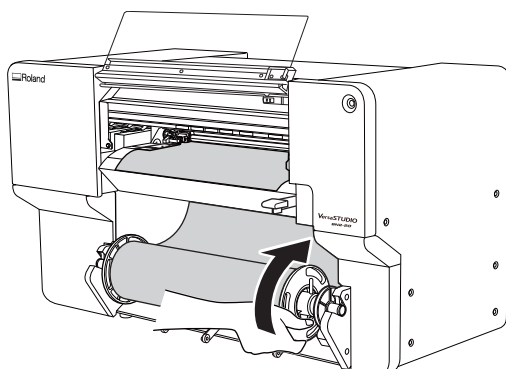
If the left edge of the media hits the left media clamp, pass the media under the left media clamp.

MEMO

You will hear a beep. Approximately 2 seconds later, you will hear two beeps, and then the suction fan will activate. While this fan is operating, the position of the media will be maintained even if you remove your hands from it.



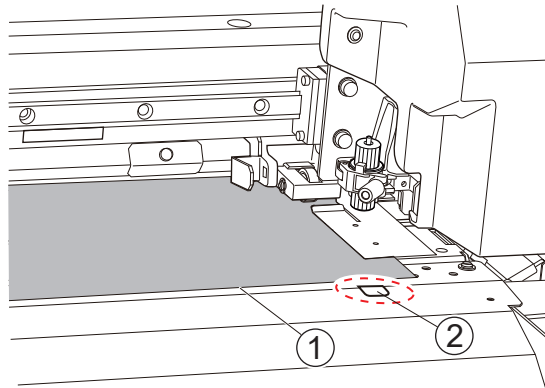
- (4) Hold the media holder flange and take up about 20 cm (7.87 in.) of media.



MEMO

Do not take up so much media (①) that the sensor (②) becomes visible.

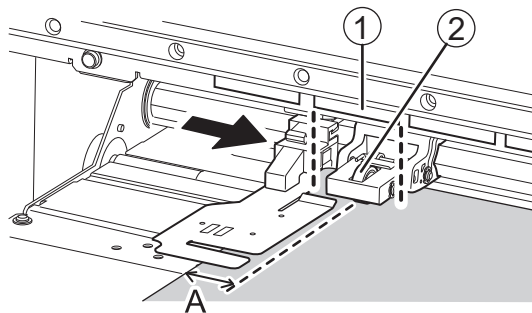
If you take up too much media, you will hear two short beeps and the suction fan will stop. If the media comes off or is not straight, take up the media and redo the procedure from step 4.



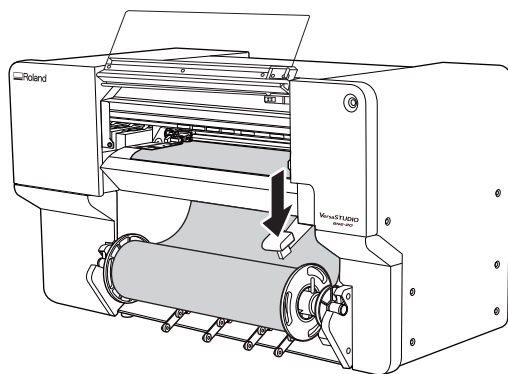
5. Place the left media clamp and the left pinch roller.

Place the left pinch roller (②) within the grit pattern (①).

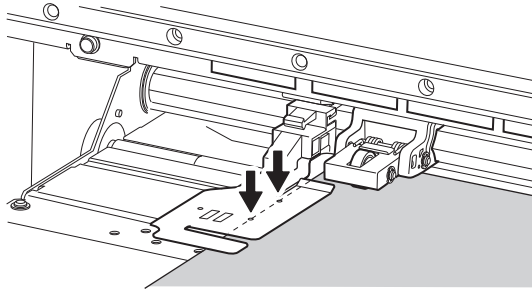
Ensure that margin A from the left edge of the media to the left edge of the left pinch roller is at least 10 mm (0.4 in.).



6. Lower the loading lever.

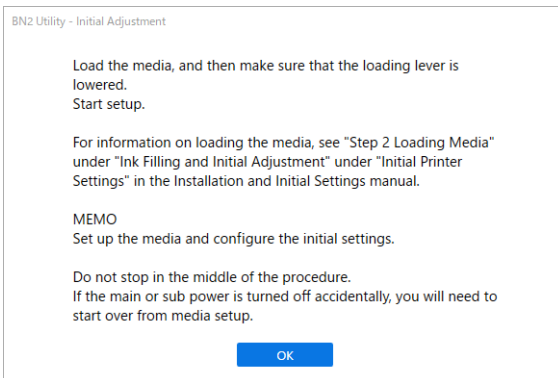


7. Line up the edges of the media with the centers of the holes of the left media clamp.



8. Close the front cover.

9. Click [OK].



Loading Sheet Media

When loading sheet media in the machine, use the right edge of the media as a reference. This is because the range of movement of the right pinch roller is fixed.

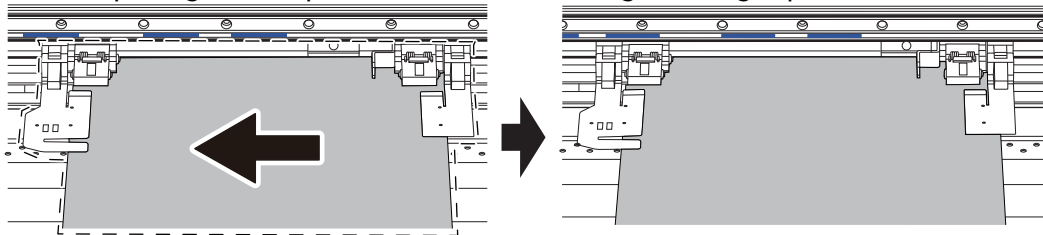
Place the media in a position where the following conditions are met and where media waste will be minimized.

- Position of right edge of media

Within the right pinch roller movable range and where about 10 mm (0.39 in.) between the right roller edge of the right pinch roller and the right edge of the media can be secured.

- Position of left edge of media

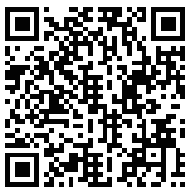
Where about 10 mm (0.39 in.) between the left edge of the roller and the left edge of the media can be secured when placing the left pinch roller within the range of the grit pattern.



MEMO

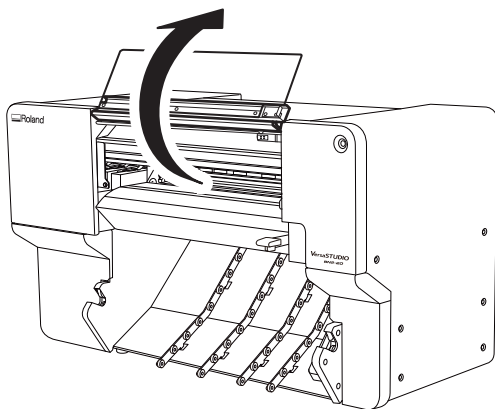
Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

<https://youtu.be/y3pYUMM4tCs>



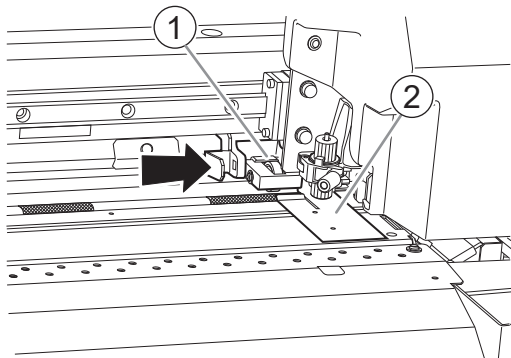
Procedure

1. Open the front cover.



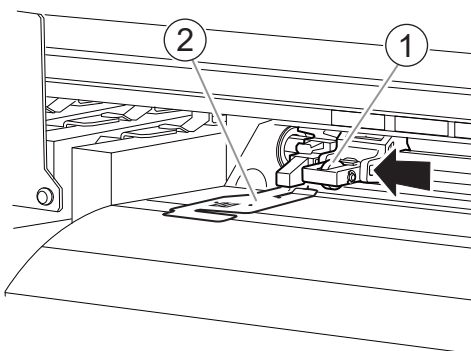
2. Move the right pinch roller (①) and the right media clamp (②) to the right end.

Press the part indicated by the arrow on the right pinch roller to move the roller and the right media clamp together.



3. Move the left pinch roller (①) and the left media clamp (②) to the left end.

Press the part indicated by the arrow on the left pinch roller to move the roller and the left media clamp together.



4. Use the following procedure to load the media.

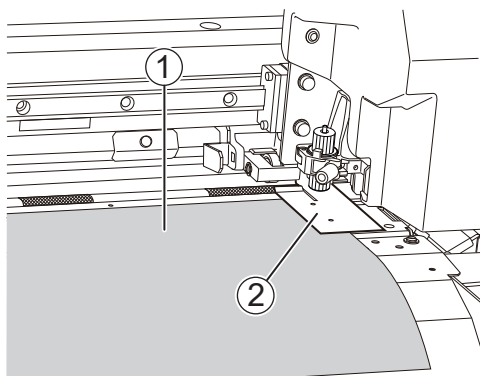
- (1) Pass the media (①) under the right media clamp (②).

MEMO

If the left edge of the media hits the left media clamp, pass the media under the left media clamp.

MEMO

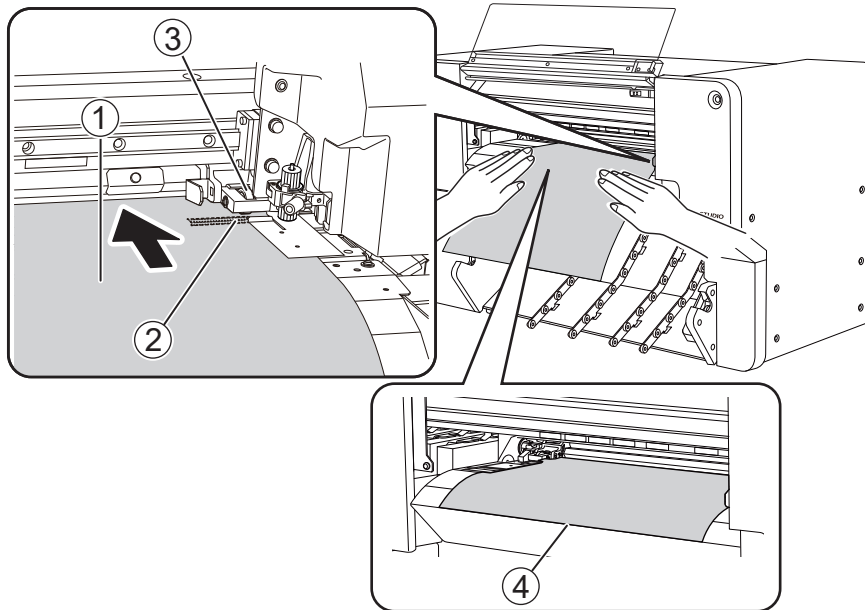
Lifting the tip of the media clamp to pass the media through may cause the blade to come into contact with the media. Be careful not to allow contact with the blade.



- (2) Pass the media (①) between the right grit roller (②) and right pinch roller (③) to the back.
Feed the media and line up the edge of the media with the edge of the apron (④).

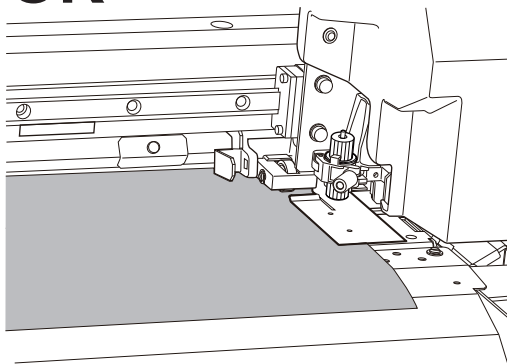
MEMO

If the left edge of the media is left of the left pinch roller, pass the media between the left grit roller and left pinch roller as well.

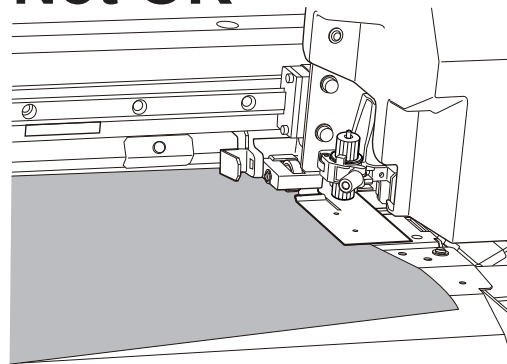


5. Straighten the media.

OK

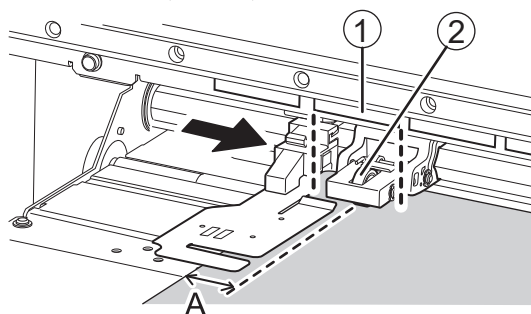


Not OK



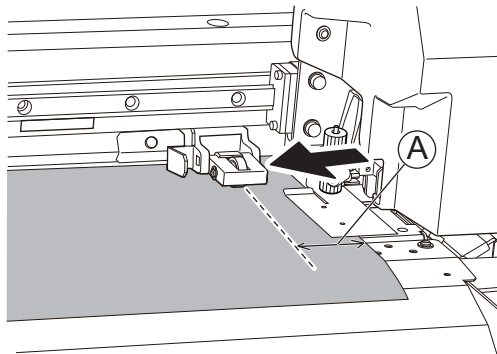
6. Press lightly on the media, and place the left media clamp and left pinch roller on the media. Place the left pinch roller (2) within the grit pattern (1).

Ensure that marginA from the left edge of the media to the left edge of the left pinch roller is at least 10 mm (0.4 in.).

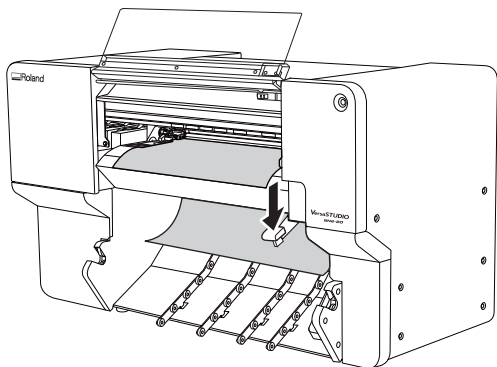


MEMO

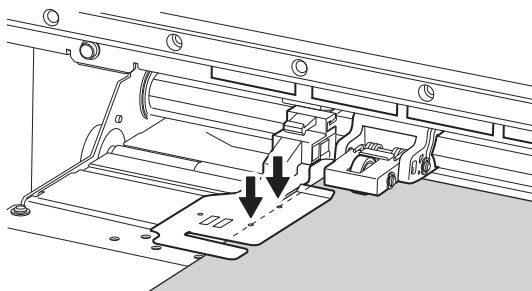
If at least 10 mm (0.4 in.) cannot be ensured for margin A from the left edge of the media to the left edge of the left pinch roller, move the right pinch roller and the media to the left to provide the margin. The range of motion of the right pinch roller is fixed. Place the right pinch roller within the movable range in a position that ensures margin A from the right edge of the media to the right edge of the right pinch roller is about 10 mm (0.39 in.).



7. Lower the loading lever.



8. Line up the edges of the media with the centers of the holes of the left media clamp.



9. Close the front cover.

10. Click [OK].

BN2 Utility - Initial Adjustment

Load the media, and then make sure that the loading lever is lowered.
Start setup.

For information on loading the media, see "Step 2 Loading Media" under "Ink Filling and Initial Adjustment" under "Initial Printer Settings" in the Installation and Initial Settings manual.

MEMO

Set up the media and configure the initial settings.

Do not stop in the middle of the procedure.
If the main or sub power is turned off accidentally, you will need to start over from media setup.

OK

Step 3: Nozzle Drop-out Test

Check the print head ink discharge conditions.

MEMO

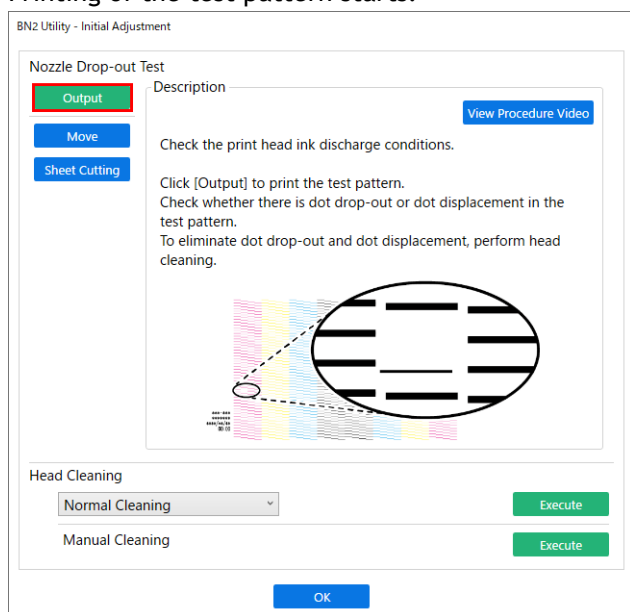
Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.
<https://youtu.be/iZfrhQ16J1M>



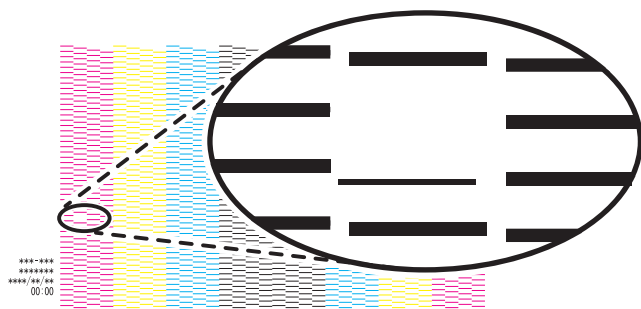
Procedure

1. Click [Output].

Printing of the test pattern starts.



2. Check whether there is dot drop-out or dot displacement in the test pattern.



Missing blocks indicate dot drop-out. Collapsed or inclined blocks indicate dot displacement.

- If there is no dot drop-out or dot displacement, click **[OK]**.
- If dot drop-out or dot displacement is present, perform cleaning.

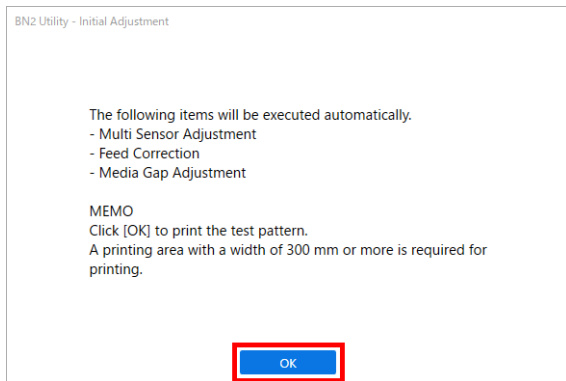
[P. 60 Fixing Dot Drop-out and Dot Displacement](#)

Step 4: Performing Automatic Correction

Automatically correct the media feed amount and ink landing position.

Procedure

1. Click [OK].



A test pattern will be printed for automatic correction.

MEMO

Automatic correction may not finish depending on the characteristics of media such as transparent media and silver media with high light reflectance. In these situations, click [Skip]. Clicking [Skip] applies the standard value.



When correction is complete, the blade adjustment window will be displayed.

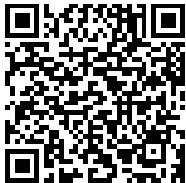
Step 5: Blade Adjustment

Adjust the media cutting quality.

MEMO

Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

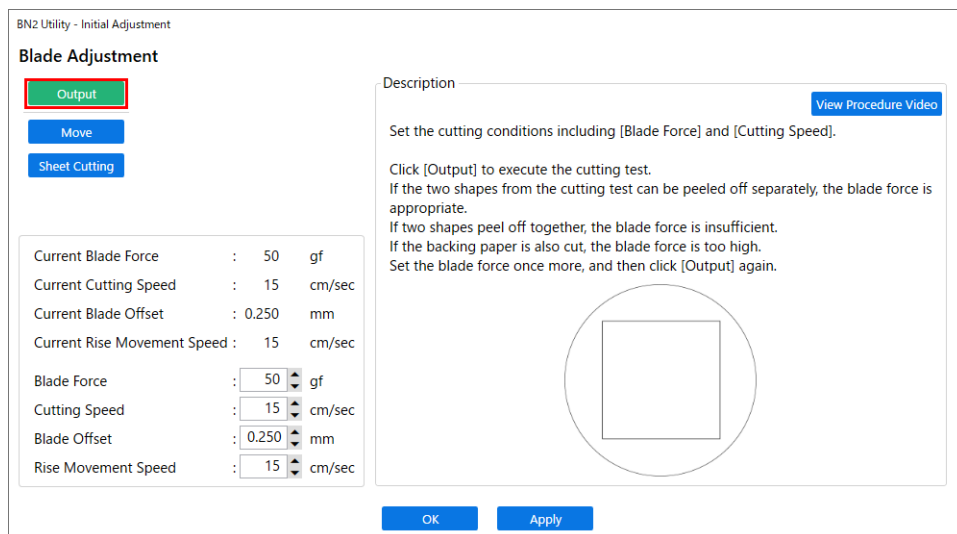
https://youtu.be/a_wRdd3JMZ8



Procedure

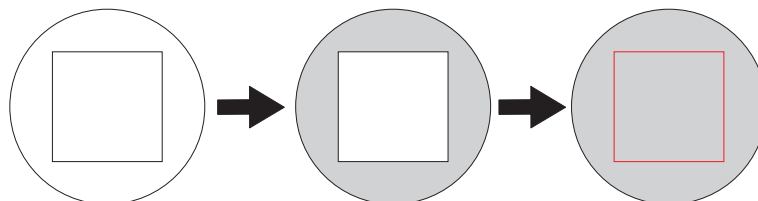
1. Make sure the cutting tool is installed, and then click [Next].
If no cutting tool has been installed, install one.
[Installing the Cutting Tool](#)

2. Click [Output].






A cutting test will be performed.

3. Check the cutting results.



Check item	Result	Setting item	Adjustment
Check the shape.	The cut shape is distorted.	[Cutting Speed]	Reduce

Check item	Result	Setting item	Adjustment
Peel off the circle.	The square also peels off.	[Blade Force]	Increase
	Some uncut areas remain.	[Cutting Speed]	Reduce
Peel off the square.	The blade leaves faint traces on the backing paper.	[Cutting Speed]	No change
	The blade trace is indistinct.		Increase
	The blade trace is too deep and cuts into the backing paper.		Reduce
Check the shape of the square you have peeled off.	 The corners are not rounded and do not have "horns."	[Blade Offset]	No change
	 The corners are rounded.		Increase
	 The corners have "horns."		Reduce

4. Enter the value for the area to be changed.

For information on adjusting the amount of blade extension, refer to "Adjusting the Amount of Blade Extension."

[P. 59 Adjusting the Amount of Blade Extension](#)

Cutting condition	Setting details	Default settings
[Blade Force]	Set the force (pressure) of the blade.	50 gf
[Cutting Speed]	Set the speed of cutting.	15 cm/s (5.91 in./s)
[Blade Offset]	Set the blade offset. Enter the listed offset value for the blade. The offset value for the included blade is 0.250 mm (9.8 mil).	0.250 mm (0.010 in.)
[Rise Movement Speed]	Set the blade's up speed during cutting (the speed at which the blade travels when it moves to the next cutting line after cutting one cutting line). If the media comes loose during no-load feed and the blade damages the surface of the media, reduce the speed.	15 cm/s (5.91 in./s)

5. Click [Apply].

6. Continue adjusting the cutting conditions until the settings are optimized.

Repeat steps 2 to 6 to adjust the conditions.

Once adjustment is complete, click [OK].

Step 6: Print & Cut Position Adjustment

Adjust any printing or cutting position misalignment.

MEMO

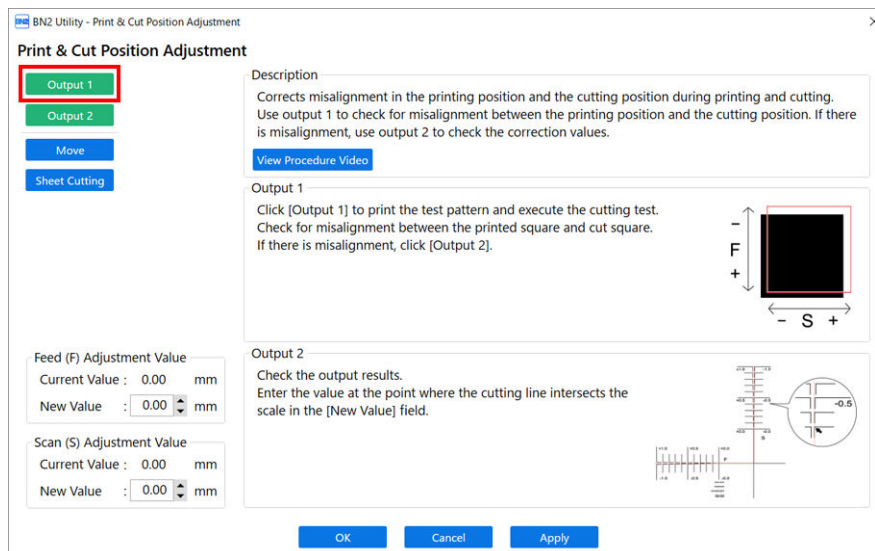
Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

https://youtu.be/GdQpUs3_jUc



Procedure

1. Click [Output 1].



The machine will print a test pattern and perform a cutting test.

2. Check the results of [Output 1].

Check for misalignment between the printed square and cut square.

- Adjustment is not necessary if there is no misalignment. Click [OK] and proceed to step 9.
- If there is misalignment, proceed to step 3 to perform adjustment.

3. Click [Output 2].

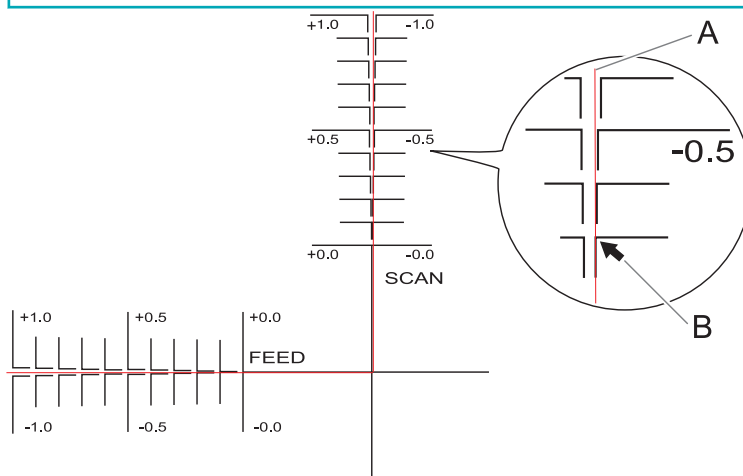
The machine will print a test pattern for adjustment and perform a cutting test.

4. Check the results of [Output 2].

The point where the cutting line (A) intersects the correction-value scale (B) is the correction value. In the following figure, the correction value is "-0.3."

MEMO

Cutting will be performed along the red lines in the following figure. Peel the media from the backing paper for checking.



Check along the FEED (media feed direction) and SCAN (print-head carriage movement direction) axes.

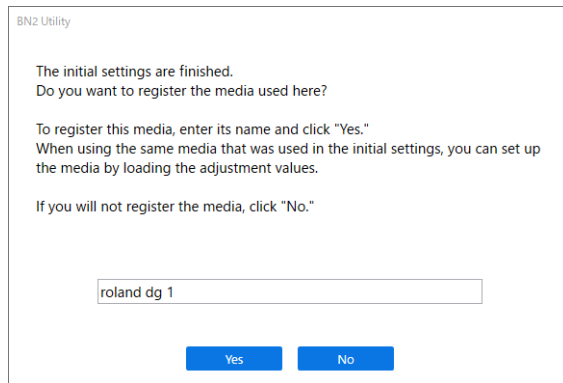
5. Enter the correction values for the FEED (media feed direction) and SCAN (print-head carriage movement direction) axes.
 - a. Enter the FEED (media feed direction) correction value as a new value for [Feed (F) Adjustment Value].
 - b. Enter the SCAN (print-head carriage movement direction) correction value as a new value for [Scan (S) Adjustment Value].
6. Click [Apply].
7. Click [Output 1].
The machine will print a test pattern for adjustment and perform a cutting test.
8. Check the results of [Output 1].
If the printing and cutting lines are aligned, adjustment is complete. Click [OK].
If further adjustment is needed, repeat steps 3 to 8.

MEMO

Default settings

- [Feed (F) Adjustment Value] (correction value of the media feed direction): 0.00 mm
- [Scan (S) Adjustment Value] (correction value of the print-head carriage movement direction): 0.00 mm

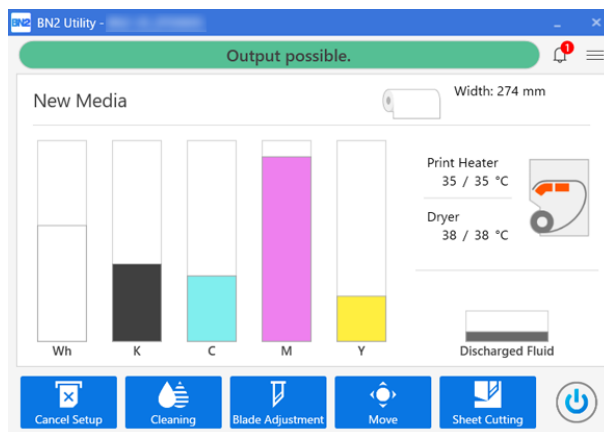
9. On the initial settings completion window, select whether to register the media being used.
 - To register the media
Enter the media name, and then click [Yes].



MEMO

Enter a name to save the configured adjustment and correction values.
Registering the media makes it possible to set up the media without having to perform adjustment or correction again when using the same media.

The operation is complete once the following window is displayed.



- **To continue without registering**

Click [No].

The operation is complete once the following window is displayed.

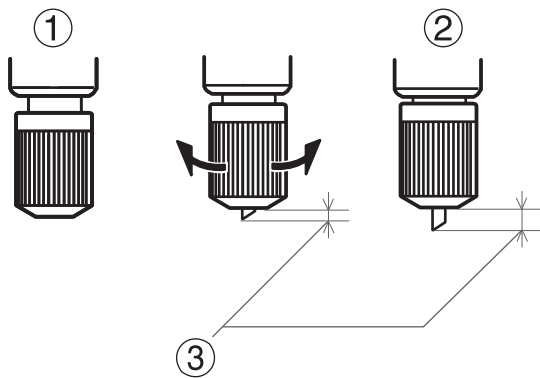


Adjusting the Amount of Blade Extension

When you want to perform accurate and fine adjustment of the cutting-in amount, such as when cutting media with thin backing paper, you can obtain good results by adjusting the amount of blade extension (③). Turn the cap portion of the blade holder to adjust the amount of blade extension. Each indicator tick corresponds to 0.1 millimeters, and adjustment for 0.5 millimeters can be made by rotating the cap one full turn.

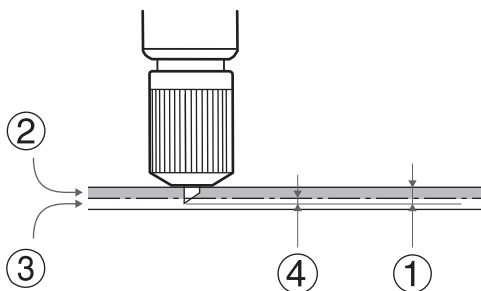
Note that making the amount of blade extension too small may cause the tip of the blade holder cap to touch the printed surface, soiling and damaging it. It is important to be especially careful about this when you are using media that has poor ink-adhesion properties.

The amount of blade extension (③) is 0 mm (①) at minimum and 2.5 mm (98.42 mil) (②) at maximum.



Rough Estimate for the Amount of Blade Extension

Set the amount of blade extension to an amount that is the sum (①) of the thickness of the material portion (②) and half (④) the thickness of the backing paper (③).



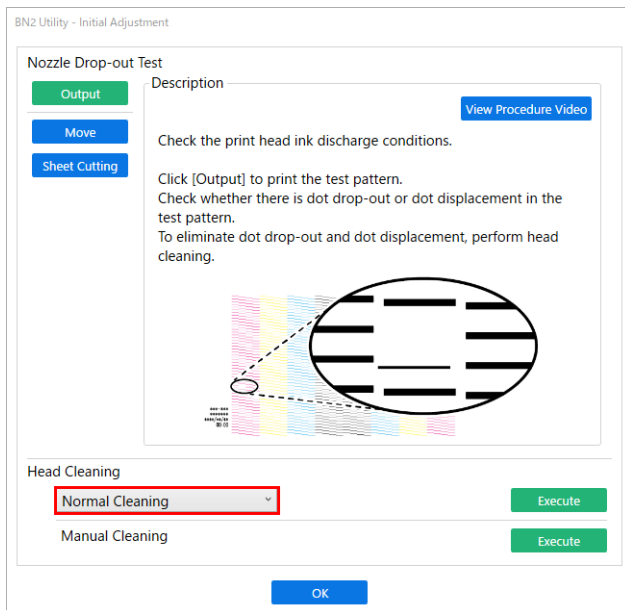
Fixing Dot Drop-out and Dot Displacement

Clean the print heads to improve ink discharge conditions such as dot drop-out and dot displacement.

Normal Cleaning

Procedure

1. Select **[Normal Cleaning]** from the head cleaning pull-down menu.



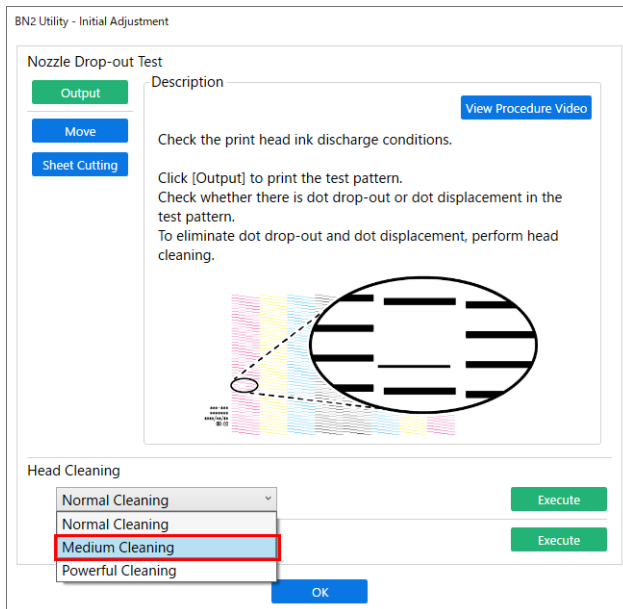
2. Click **[Execute]**.
[Normal Cleaning] is executed.
3. Click **[Output]**.
Printing of the test pattern starts.
4. Check whether there is dot drop-out or dot displacement in the test pattern.
 - If there is no dot drop-out or dot displacement, click **[OK]** and proceed to [Step 4: Performing Automatic Correction](#).
 - If the problem persists, try performing **[Normal Cleaning]** again.
If the problem persists even after performing **[Normal Cleaning]** two or three times, perform **[Medium Cleaning]**.

Medium Cleaning

If dot drop-out and dot displacement persist even after performing [Normal Cleaning], perform the more forceful [Medium Cleaning].

Procedure

1. Select [Medium Cleaning] from the head cleaning pull-down menu.



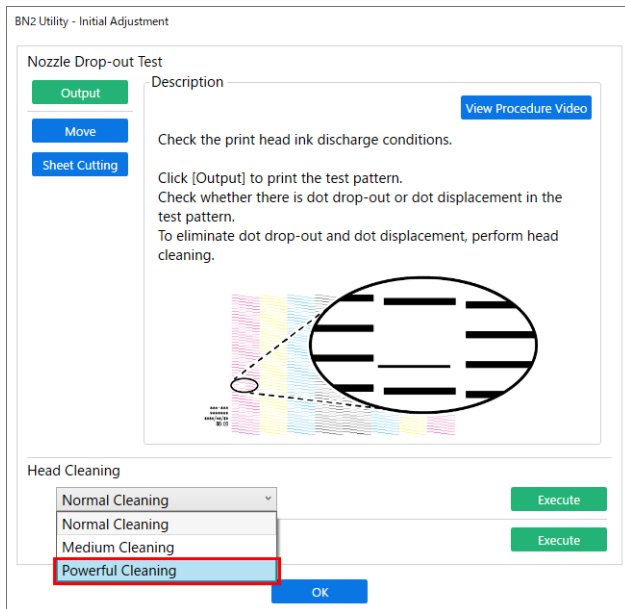
2. Click [Execute].
[Medium Cleaning] is executed.
3. Click [Output].
4. Check whether there is dot drop-out or dot displacement in the test pattern.
 - If there is no dot drop-out or dot displacement, click [OK] and proceed to [Step 4: Performing Automatic Correction](#).
 - If the problem persists, try performing [Medium Cleaning] again.
If the problem persists even after performing [Medium Cleaning] two or three times, perform [Powerful Cleaning].

Powerful Cleaning

If dot drop-out and dot displacement persist even after performing [Medium Cleaning], perform the more forceful [Powerful Cleaning].

Procedure

1. Select [Powerful Cleaning] from the head cleaning pull-down menu.



2. Click [Execute].
[Powerful Cleaning] is executed.
3. Tap [Output].
4. Check whether there is dot drop-out or dot displacement in the test pattern.
 - If there is no dot drop-out or dot displacement, click [OK] and proceed to [Step 4: Performing Automatic Correction](#).
 - If the problem persists, try performing [Powerful Cleaning] again.
If the problem persists even after performing [Powerful Cleaning] two or three times, perform [Manual Cleaning].

Manual Cleaning

If dot drop-out and dot displacement persist even after performing [Powerful Cleaning], perform the [Manual Cleaning].

MEMO

Use the following link to view a reference video for this procedure. We recommend that you view this video to understand the overall flow of work.

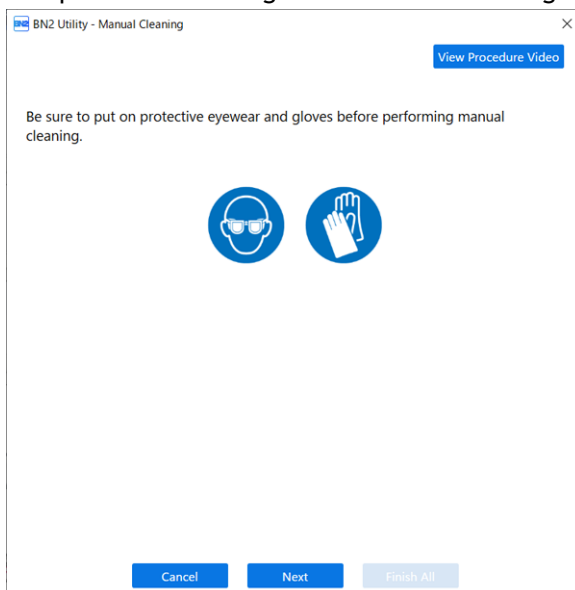
<https://youtu.be/gB-WQnIP6NM>



Procedure

1. Remove any media.
2. Click [Execute] next to Manual cleaning.

The print-head carriage moves to the left edge.



3. Open the left cover.
4. Follow the instructions in the Utility window to perform [Manual Cleaning].

IMPORTANT

Important notes on cleaning

- Use one cleaning stick per cleaning session, and then discard the stick after use. Reusing cleaning sticks may reduce print quality.
- Never use any implements other than the included cleaning sticks.

- Do not put a cleaning stick that has been used for cleaning into the cleaning liquid. Doing so will deteriorate the cleaning liquid.
- Never rub the nozzle surface of the heads.

5. When [Manual Cleaning] is complete, click [Finish All].

The nozzle drop-out test window appears.

Perform a nozzle drop-out test.

[Step 3: Nozzle Drop-out Test\(P. 51\)](#)

