Mimaki CG-AR

Plotter Driver

Operation Manual

MIMAKI ENGINEERING CO., LTD.

https://mimaki.com/

D203609-11

Table of Contents

Introduction 3

Precautions 3
Please Read Before Using the Plotter Driver 3
Explanation of Symbols 4
Supported Plotter 4
System and Software 4
When Using Creasing Tool (Option) 4

Installing the Plotter Driver 5

Installing the Plotter Driver 5
Installing the Driver Using an INF File 7
Uninstalling the Plotter Driver 10

Outputting Using the Plotter Driver 11

Plotter Driver Setup 12

CG-AR Series Cutting Settings 13
Set the output port 17

Troubleshooting 23

The driver media size cannot be correctly read in by Word. 23

Index 24

Introduction

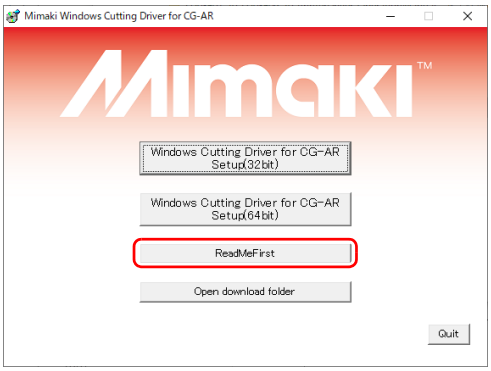
Using the Windows plotter driver allows vector data to be extracted from data printed using an application and then output to a plotter.

Precautions

- It is strictly prohibited to write or copy a part or whole of this document without our approval.
- Every effort has been taken to ensure the accuracy of this document, but if any errors are discovered, please contact your local distributor or our sales office.
- The contents of this document may be subject to change without notice.
- Copying the MIMAKI ENGINEERING CO., LTD. Software described in this document to another disk (except for backup) and loading the software to memory for purposes other than running it are strictly prohibited.
- Note that some of the information provided in this document may differ from actual specifications, due to improvements in or changes to software.
- MIMAKI ENGINEERING CO., LTD. does not assume any liability against damages (including but not limited to the loss of profit, indirect damage, special damage or other monetary damages) arising from the use or inoperability of this product except as stipulated by the warranty provisions of MIMAKI ENGINEERING CO., LTD. The same shall also apply even if MIMAKI ENGINEERING CO., LTD. had been notified of the possibility of damages in advance. For example, we shall not be liable for any loss of media that is created using this product or indirect damages caused by products made using this media.
- The latest issue of this document can be downloaded from our official site.

Please Read Before Using the Plotter Driver

Before using the plotter driver, click [ReadMeFirst] on the CG-AR plotter driver installation screen to confirm compatible machines, compatible applications, and precautions.



Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.
Other company and product names mentioned herein are the trademarks or registered trademarks of the respective companies in Japan and in other countries.

©2021 MIMAKI ENGINEERING CO., LTD. All rights reserved.

Explanation of Symbols

Precautions and points of note relating to settings and operations are indicated by the following symbols:

Symbol	Explanation
	The “IMPORTANT” symbol indicates important information for using the plotter driver.
	The “Tips” symbol indicates useful information.

Supported Plotter

This plotter driver supports the following MIMAKI ENGINEERING CO., LTD. plotter:

■ CG-AR series

System and Software

The following system environment is required to install and use the plotter driver:

Operating System	Windows 10 (32 bit/64bit), Windows 11 (64bit)

When Using Creasing Tool (Option)

When using the creasing tool, “cut” should be substituted for “crease” as necessary.

Installing the Plotter Driver

Important! • Administrator rights are required to install and uninstall the plotter driver.

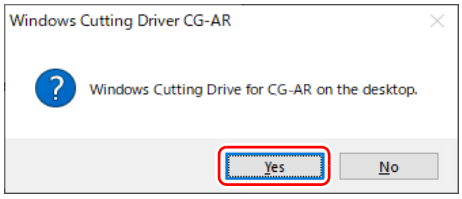
Installing the Plotter Driver

1 **Connect the plotter to a PC using a USB interface cable or LAN cable.**

2 **Download the CG-AR plotter driver from our official site (https://mimaki.com/download/).**

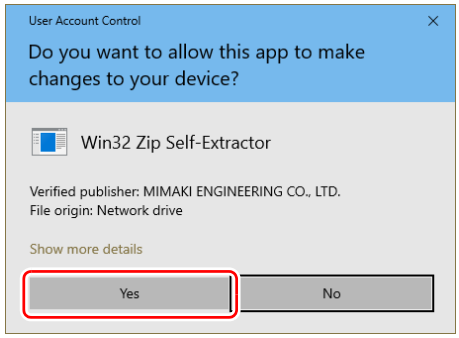
3 **Double-click the downloaded file and expand it on the desktop.**

• The [User Account Control] dialog appears.



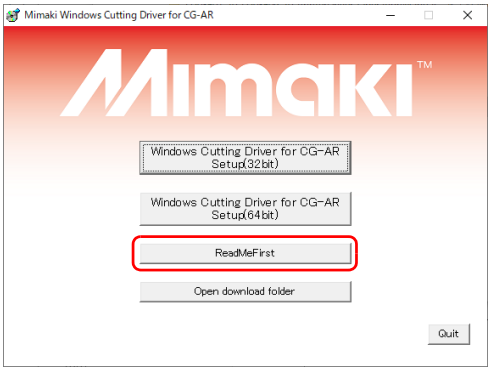
4 **Click [Yes] on the [User Account Control] dialog.**

• The plotter driver installation window appears once the file has been expanded on the desktop.
• If you accidentally close the installation window, it can be redisplayed as follows:
(1) Open the "Windows_Cutting_Driver_CG-AR" folder on the desktop.
(2) Double-click "CDMenu.exe" to launch it.



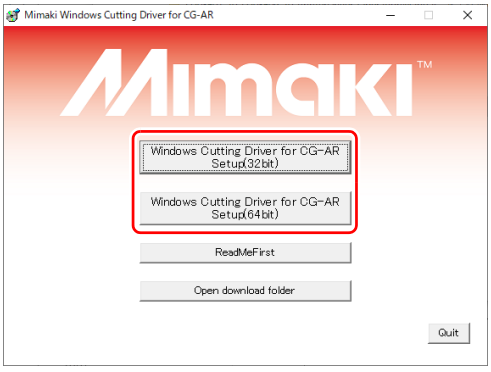
5 **Click [ReadMeFirst] on the installation screen.**

• A text file is displayed. Confirm the compatible machines, compatible applications, and precautions for the plotter driver.

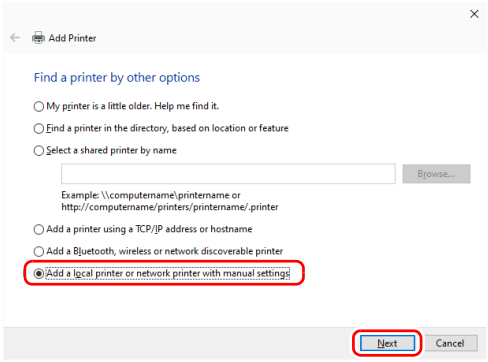


6 **On the installation window, click [Windows Cutting Driver for CG-AR Setup] for the operating system used by the PC on which the driver is to be installed.**

• The [Add Printer] wizard appears.

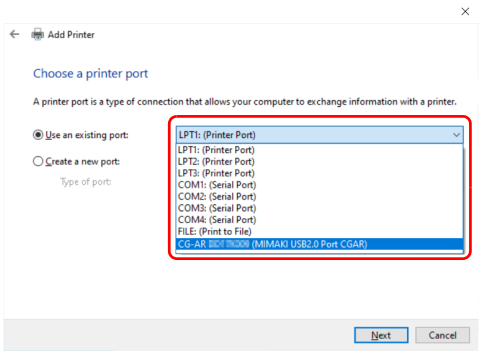


7 Select [Add a local printer or network printer with manual settings], then click [Next].

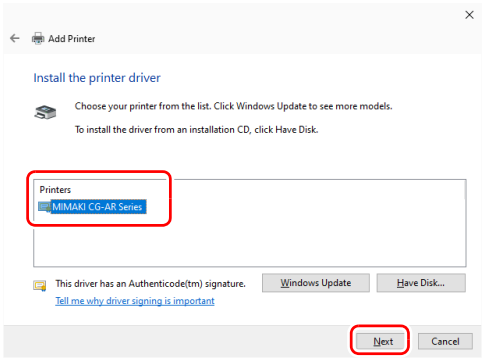


8 Select the printer port, then click [Next].

- The [Install the plotter driver] window appears.
- If no printer port (port beginning with "CG-AR") is found, click [Next], then set the printer port after installation is complete.
- The printer port can be changed later. (☞"Set the output port" (P.17) onward)

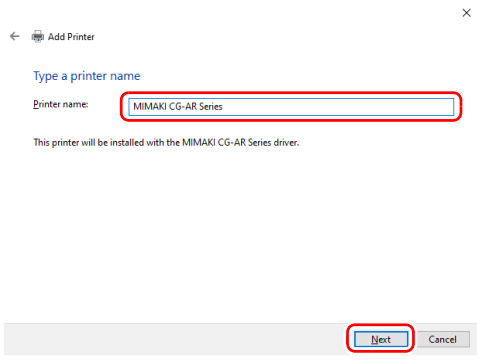


9 Select "MIMAKI CG-AR Series", then click [Next].



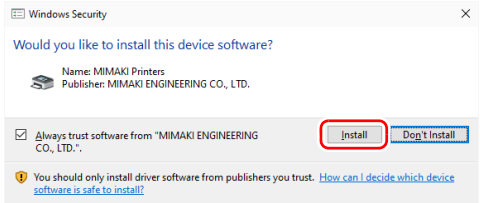
10 Enter a name for the printer, then click [Next].

- The printer name can be changed later.
- The [Would you like to install this device software?] dialog appears.



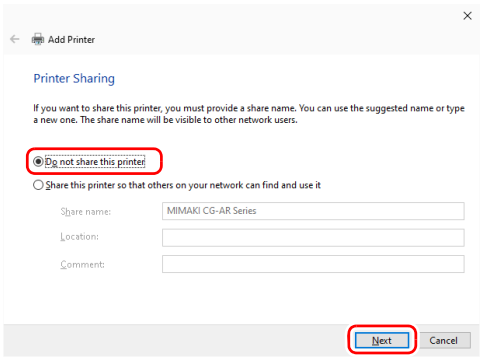
11 Click [Install].

- Installation starts.
- The [Printer Sharing] window appears.



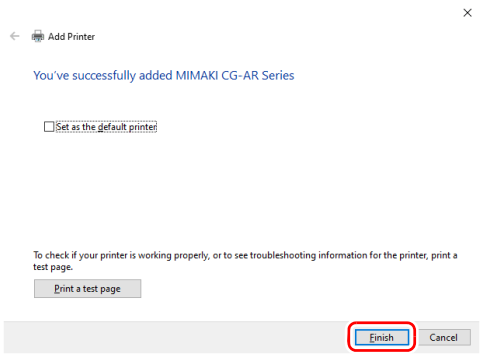
12 Select [Do not share this printer], then click [Next].

- The window to finish the installation appears.



13 Click [Finish].

- Once installation is complete, the CG-AR printer name entered in Step10(P.6) is added to the printer list.



Installing the Driver Using an INF File

Use this method to install the driver if it cannot be correctly installed using the normal installation method (☞"Installing the Plotter Driver" (P.5)). This procedure is not required if the driver has already been installed correctly.

1 Connect the plotter to a PC using a USB interface cable or LAN cable.

2 Click the Windows Start menu, then click [Settings].

- The [Windows Settings] window appears.

3 Click [Devices].

- The [Bluetooth & other devices] window appears.

4 Click [Printers & scanners] in the list on the left-hand side.

- The [Printers & scanners] window appears.

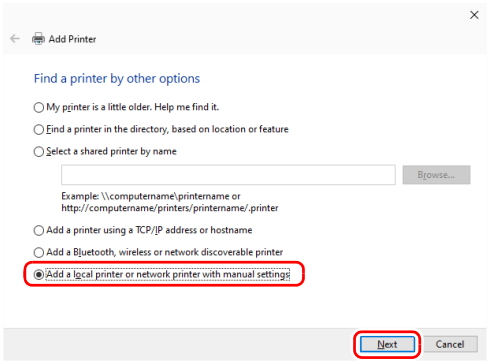
5 Click [+ Add a printer or scanner].

- A list of the available printers is displayed.

6 Click [The printer that I want isn't listed] below the printer list.

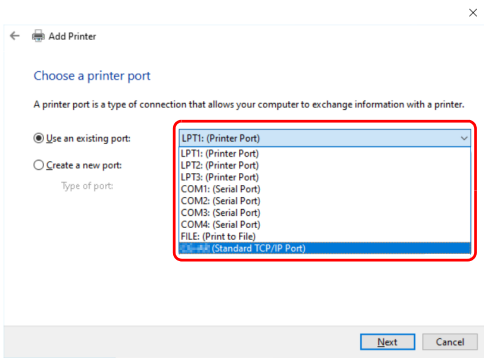
- The [Add Printer] wizard appears.

7 Select [Add a local printer or network printer with manual settings], then click [Next].



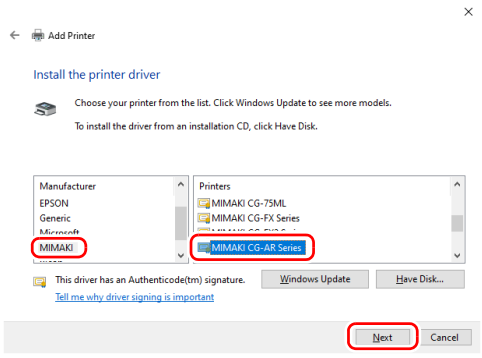
8 Select the printer port, then click [Next].

- The [Install the plotter driver] window appears.
- If no printer port is found, click [Next], then set the printer port after installation is complete.
- The printer port can be changed later. (☞"Set the output port" (P.17) onward)

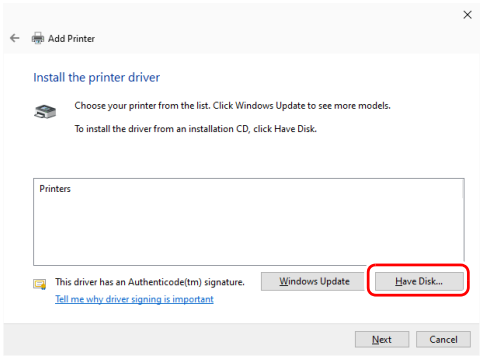


9 If "MIMAKI" is not listed for the manufacturer, proceed to the next step. If "MIMAKI" is listed for the manufacturer, select the following items, click [Next], then proceed to Step14(P.9).

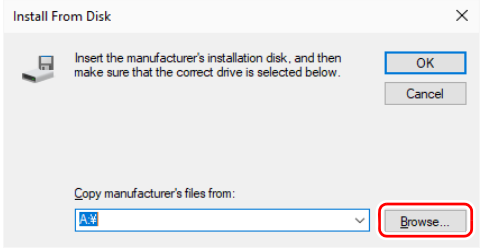
- Manufacturer: MIMAKI
- Printer: MIMAKI CG-AR Series



10 Click [Have disk].

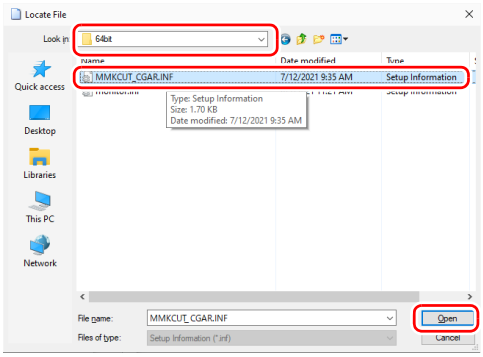


11 Click [Browse].



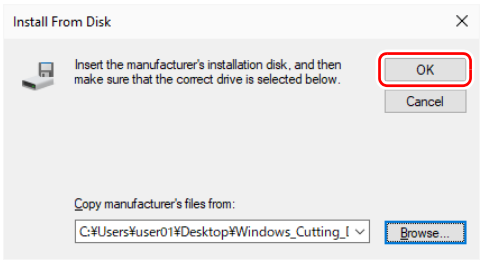
12 Select the following file, then click [Open].

- Folder: Folder expanded on desktop:
  C:\Users\[userID]\Desktop\Windows_Cutting_Driver_CG-AR\
- File: For 64 bit: 64bit\MMKCUT_CGAR.INF
  For 32 bit: 32bit\MMKCUT_CGAR_32.INF



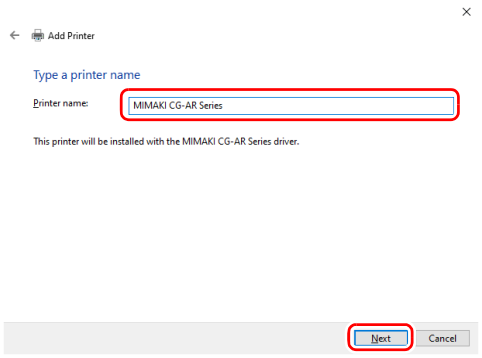
13 Click [OK].

- The [Install the plotter driver] window appears again.



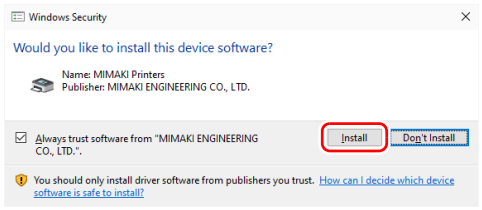
14 Enter a name for the printer, then click [Next].

- The printer name can be changed later.
- The [Would you like to install this device software?] dialog appears.



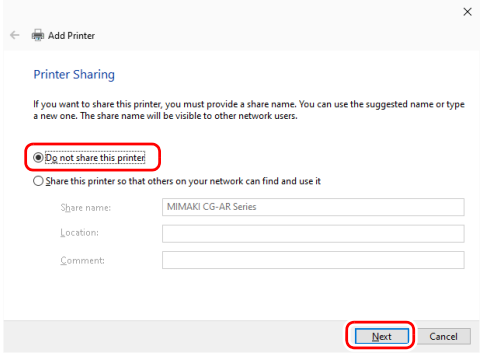
15 Click [Install].

- Installation starts.
- The [Printer Sharing] window appears.



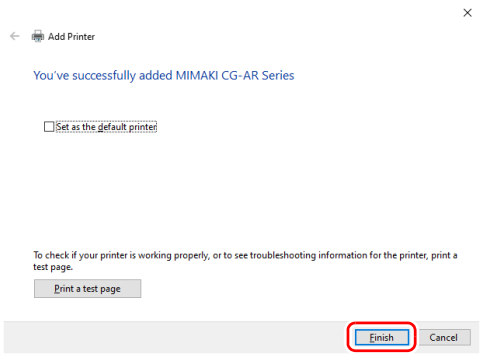
16 Select [Do not share this printer], then click [Next].

- The window to finish the installation appears.



17 Click [Finish].

- Once installation is complete, the CG-AR printer name entered in Step14(P.9) is added to the printer list.



Uninstalling the Plotter Driver

1 Click the Windows Start menu, then click [Settings].

- The [Windows Settings] window appears.

2 Click [Devices].

- The [Bluetooth & other devices] window appears.

3 Click [Printers & scanners] in the list on the left-hand side.

- The [Printers & scanners] window appears.

4 Select a CG-AR printer name (user specified).

5 Click [Delete device].

- The CG-AR plotter driver is uninstalled.

Outputting Using the Plotter Driver

Output using the Windows plotter driver is dependent on the application being used.
When using the Windows plotter driver for the first time, check whether data can be output to the plotter from the application being used.

A list of software for which output has been confirmed by Mimaki is provided in [ReadMeFirst]. (☞ "Please Read Before Using the Plotter Driver" (P.3))

Here, the procedure for outputting to the machine using Word is described as an example.

1 Launch Word.

2 Insert text or a figure for cutting in Word.

Set the text or figure as follows to make the cutting line easy to see.
- Text color: Black (R:0 G:0 B:0)
- [Shape Fill]: [No Fill]
- [Shape Outline]: Black (R:0 G:0 B:0)

3 Select [File] - [Print] in Word.

4 Select the CG-AR printer name (user specified) in [Printer].

5 Click [Printer Properties].

- The [CG-AR printer name (user specified) Properties] window appears.

6 Set the cutting settings, then click [OK].

- Please refer to ☞"CG-AR Series Cutting Settings" (P.13).

7 Click [Print].

- Data is output to the plotter.

Important!

- The cutting sequence cannot be set in the Windows plotter driver. The cutting sequence is dependent on the application being used. Check by actually outputting the data.
- The size of the data that can be created will vary depending on the application used.

Plotter Driver Setup

Set up the plotter driver to suit your particular usage requirements.

1 Click the Windows Start menu, then click [Settings].

• The [Windows Settings] window appears.

2 Click [Devices].

• The [Bluetooth & other devices] window appears.

3 Click [Printers & scanners] in the list on the left-hand side.

• The [Printers & scanners] window appears.

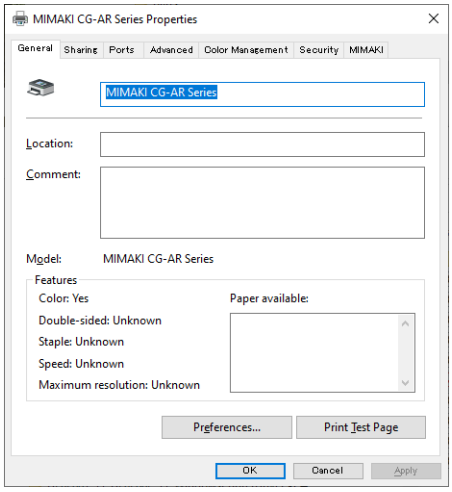
4 Select a CG-AR printer name (user specified).

5 Click [Manage].

• The [CG-AR printer name (user specified)] window appears.

6 Click [Printer properties].

• The [CG-AR printer name (user specified) Properties] window appears.
• The properties window includes the following tabs. Click the corresponding tab to configure and check individual settings.



Setting tab	Outline
General	Displays the general plotter driver information. Clicking [Preferences] allows [Form setting], [Output setting], and [Etc] to be set. (☞P.13 onward)
Sharing	Sets printer sharing.
Ports	Sets the output port. (☞P.17 onward)
Advanced	Sets the advanced driver settings.
Color Management	Manages colors. (There is no need to perform these settings.)
Security	Sets the security settings.
MIMAKI	Displays the plotter driver version information. Clicking the URL displays the official Mimaki website.

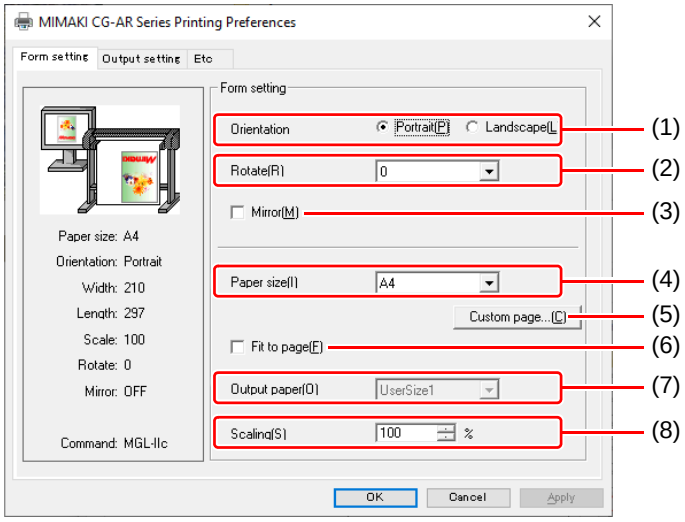
CG-AR Series Cutting Settings

This section describes the various CG-AR plotter driver settings.

Form setting

1 **Click [Preferences] on the [General] tab in [Printer properties] in "Outputting Using the Plotter Driver" - Step 6 (P.12).**

- The [Form setting] tab in [Printing Preference] is displayed.
- Configure the settings to suit your particular usage requirements.



(1) Orientation
Sets whether the pattern to be cut is laid out vertically or horizontally.

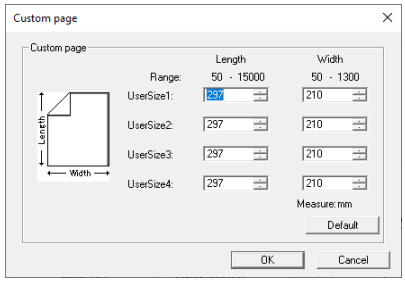
(2) Rotate
Sets whether the media is used vertically or horizontally.
Setting: .....0, 90, 180, 270 degrees

- With some applications, the orientation displayed in the preview may be opposite to the actual output when horizontal media is rotated.

(3) Mirror
Cuts with left and right reversed.

(4) Paper size
Select the media size loaded in the plotter or the media size recognized by the application from the [Paper size] list.

(5) Custom page
Allows up to four different custom media to be set.
Length .....50 to 15,000 mm (the maximum value will vary depending on the machine model)
Width .....50 to 1,300 mm (the maximum value will vary depending on the machine model)
The set custom media can be reset to the default values by clicking [Default].



(6) Fit to page
Enlarges or reduces the image for cutting so that it fits on the output media.

(7) Output paper
Checking [Fit to page] allows [Output paper] to be selected.

(8) Scaling
Unchecking [Fit to page] allows [Scaling] to be selected.
If the image is enlarged beyond the media size, only the parts within the media will be cut.

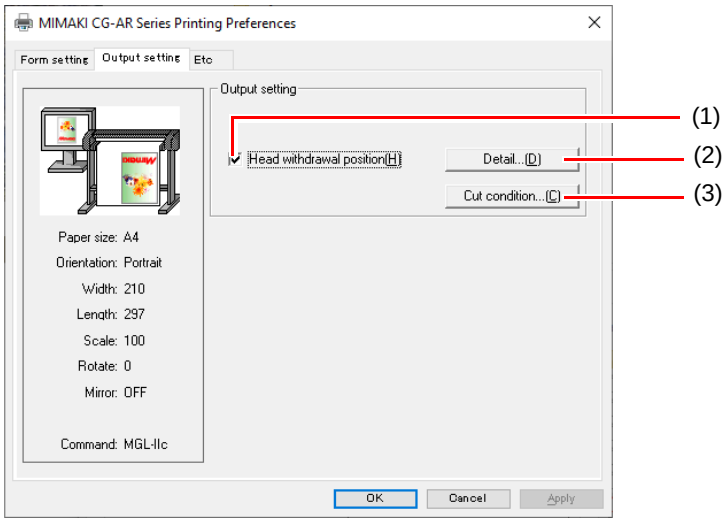
Output setting

1 Click [Preferences] on the [General] tab in [Printer properties] in "Outputting Using the Plotter Driver" - Step 6 (P.12).

- [The [Cut condition] can be set when the command is MGL-IIc.

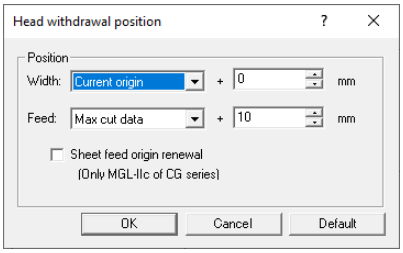
2 Click the [Output setting] tab.

• Configure the settings to suit your particular usage requirements.



(1) Head Withdrawal Position
Checking this moves the head back to the specified position after cutting is complete.

(2) Head Withdrawal Position Details
Checking [Head withdrawal position] enables the [Detail] button.



Width..... Sets the head withdrawal position in the head movement direction. It can be set in the range 0 to 100 mm from the "Origin" or the "Maximum cut data".

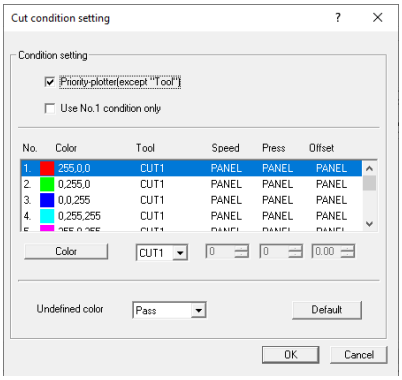
Feed..... Sets the head withdrawal position in the feed direction. It can be set in the range 0 to 100 mm from the "Origin" or the "Maximum cut data".

Sheet feed origin renewal
Checking this sets the position to which the head was returned as the origin. This is available only when using the MGL-IIc command.

- If [Sheet feed origin renewal] is checked, the head movement direction withdrawal position cannot be set.

(3) Cut condition

Edit the tool, speed, pressure, and offset for each color. The cutting sequence cannot be set here. The cutting sequence is dependent on the application being used. Check by actually outputting the data.



• Priority-plotter(except "Tool"):

Enabled..... Cuts using the plotter tool conditions.

Disabled ..... Cuts using the tool conditions listed.

• If [Priority-plotter(except "Tool"] is checked, the listed settings cannot be altered.

• Use No. 1 condition only:

Enabled.....Cuts all colors using the tool conditions set in No. 1 in the list.

Disabled .....Allows cutting by selecting the tool conditions for each individual color.

• If [Use No. 1 condition only] is checked, the settings for [Undefined color] cannot be altered.

• Color:

If the color for which tool conditions are to be set is not listed, click [Color], and change to the required color. The tool usage sequence cannot be set here.

• TOOL:

Sets the tool used (CUT1 to CUT6, CRE, PEN) with the plotter for the selected color.

• Speed:

Sets the cutting speed (1 - 73 cm/s). Selecting "0" uses the plotter setting.

• Press

Sets the cutting pressure (1 to 550 g). Selecting "0" uses the plotter setting.

• Offset

Sets the cutting offset (0.01 - 2.50 mm). Selecting "0" uses the plotter setting.

• If the values set exceed the permissible setting limits for the plotter used, the corresponding plotter limit values will be used.

Set as follows to output regardless of line color:

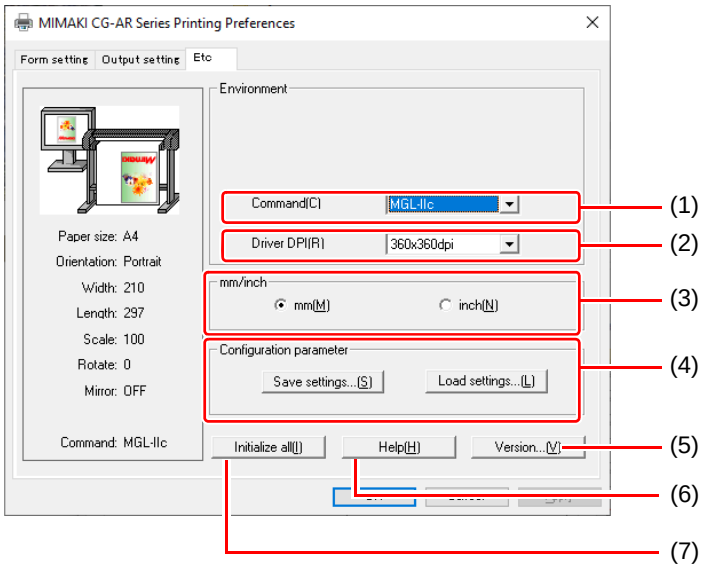
- Priority-plotter (except "Tool"): On
- Use No. 1 condition only: On
- Set No. 1 (255.0.0) Tool to match plotter.
- Set the speed, pressure, and offset at the plotter.

Etc

1 Click [Preferences] on the [General] tab in [Printer properties] in "Outputting Using the Plotter Driver" - Step 6 (P.12).

2 Click the [Etc] tab.

• Configure the settings to suit your particular usage requirements.



(1) Command
Set to the same setting as for [COMMAND] on the plotter itself.
(2) Driver DPI
Sets the driver resolution.

• Select 720 × 720dpi if the cutting quality is coarse or when cutting small characters.

(3) mm/inch
Selects the length units (mm or inches).
(4) Configuration parameter
Save settings.....Saves the specified driver settings.
Load settings.....Loads a saved settings file and changes the driver settings.
(5) Version
Displays the plotter driver version information.

(6) Help
Displays help information.
(7) Initialize all
Initializes all of the settings.

Set the output port

When you connect the PC with the plotter via USB interface cable

1 Install "Mimaki Driver" in your PC.

- Download the "Mimaki Driver" from the official Mimaki website (https://japan.mimaki.com/download/), and install it.

2 Connect your PC with plotter with a USB cable and turn on the power.

3 Select the [Ports] tab.

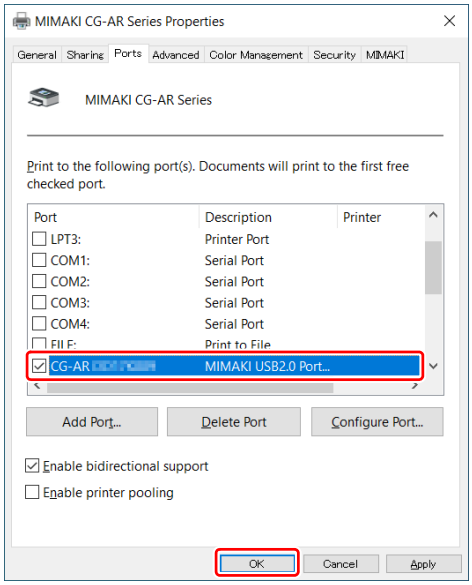
- ☞"Plotter Driver Setup"Step 6 (P.12)

4 Select the output port, then click [OK].

- When you connect multiple plotters with the PC, select different ports.

Important!

- Ports are created for each plotter. Use the plotter serial number indicated for the port name to identify the ports.



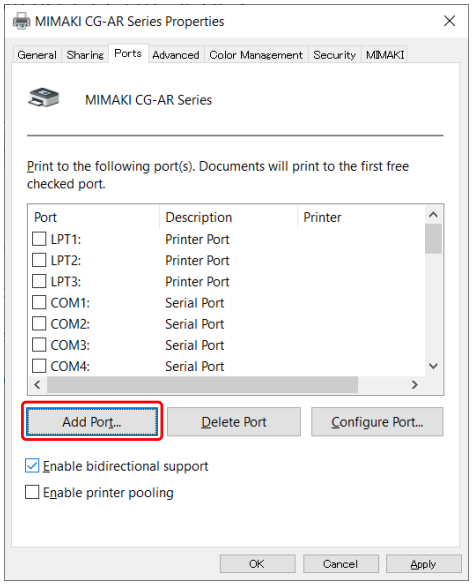
When you connect the PC with the plotter via LAN cable

1 **Connect your PC with plotter with a LAN cable and turn on the power.**

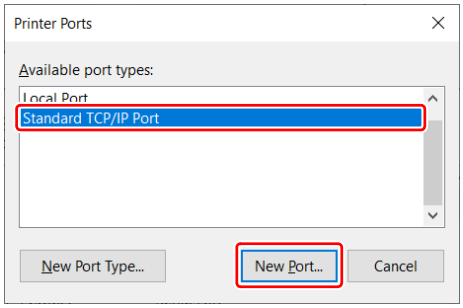
2 **Select the [Ports] tab.**

- Please refer to ☞"Plotter Driver Setup"Step 6 (P.12).

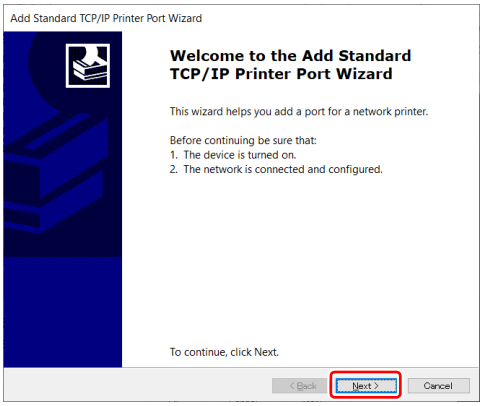
3 **Click [Add Port...].**



4 **Select the "Standard TCP/IP Port" of printer port, and click [New Port...].**

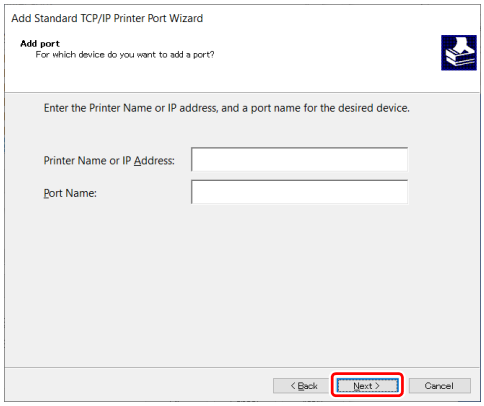


5 **Click [Next].**

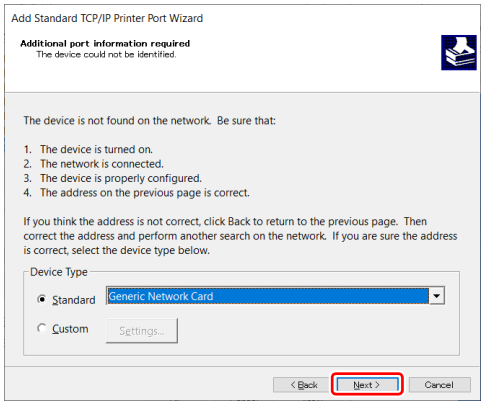


6 Enter the IP address to [Printer Name or IP Address] and click [Next].

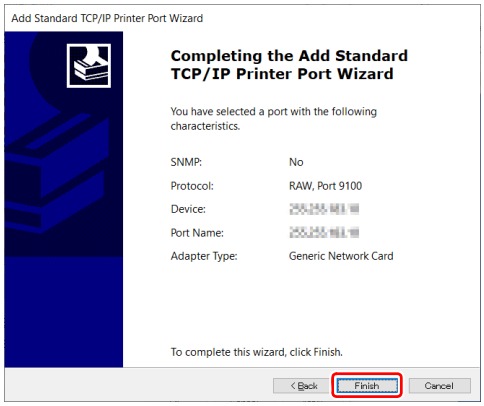
- Please refer to the operation manual of the plotter ("Set the network") for IP address.



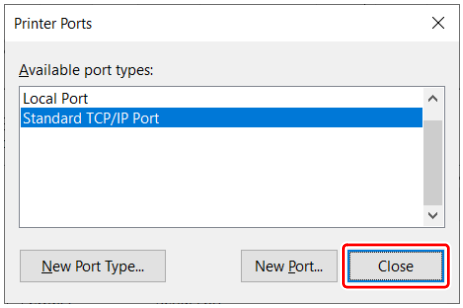
7 Click [Next].



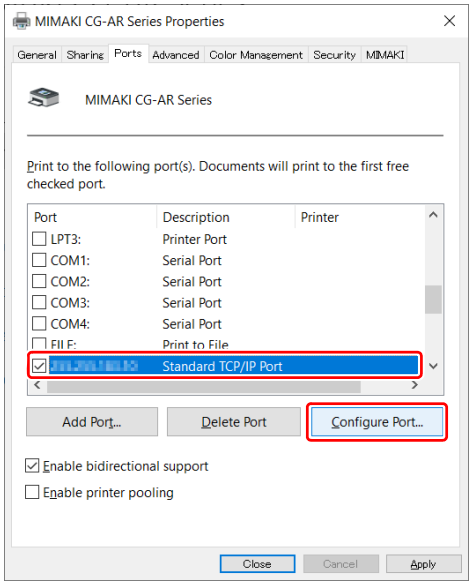
8 Click [Finish].



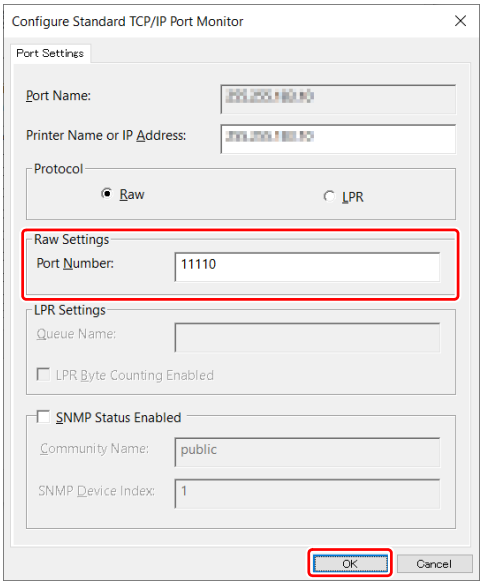
9 Click [Close].



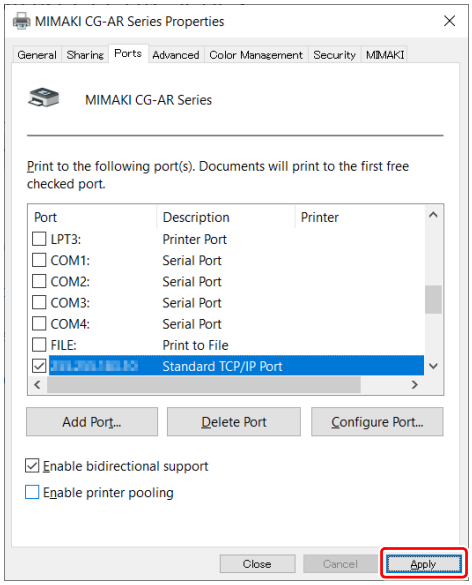
10 Select the created "Standard TCP/IP Port", and click [Configure Port...].



11 Enter "11110" to [Port Number] and then click [OK].



12 Click [Apply].



13 Click [Close].

When you connect the PC with the plotter via RS-232C interface cable

1 Connect the plotter to a PC using an RS-232C interface cable, then turn on the power.

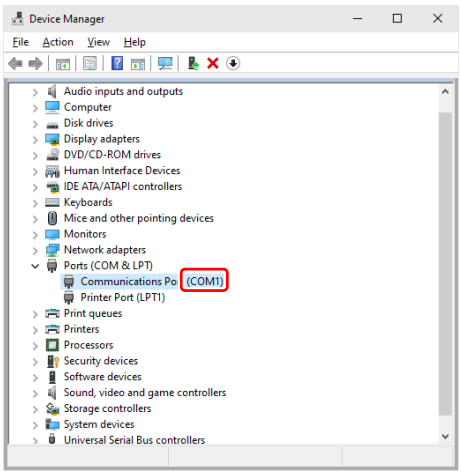
2 Check the serial port number.

(1) Right-click the Start menu, then select [Device Manager].
- The [Device Manager] window appears.

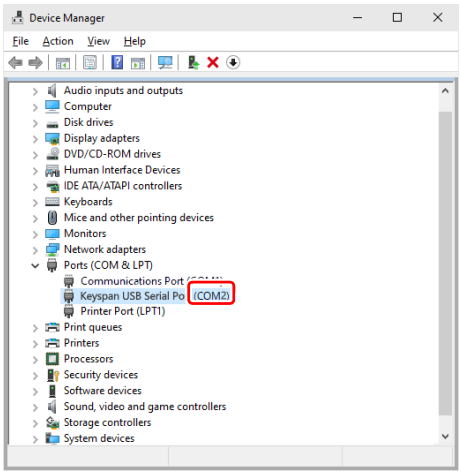
(2) Double-click and open [Ports(COM & LPT)].

(3) Check the COM number of the communication port.

- If an RS-232C interface cable is connected directly to the PC serial port, check the COM number of the communication port.



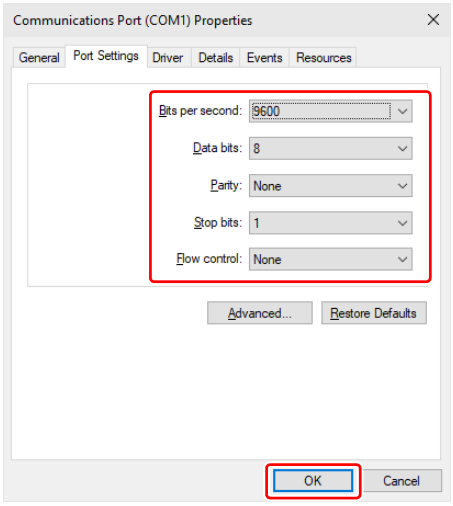
- If a Keyspan USB serial adapter is used for connection, check the COM number of the Keyspan USB Serial Port.



(4) Double-click the communication port.
- The [Communications Port Properties] dialog appears.

(5) Check to confirm that the settings on the [Port Settings] tab match those for the plotter.
- If the settings differ, set to match the plotter settings.

(6) Click [OK].
- The [Communications Port Properties] dialog closes.



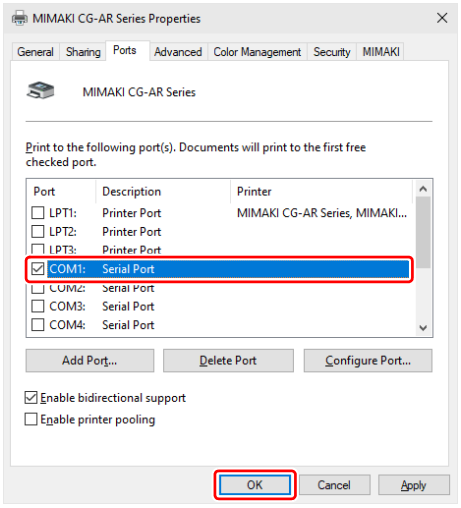
(7) Click [x] at the top right of the [Device Manager] window.
- The [Device Manager] window closes.

3 Select the plotter driver [Ports] tab.

- Please refer to ☞"Plotter Driver Setup"Step 6 (P.12).

4 Select the port number checked in Step2"Check the serial port number."(P.21), then click [OK].

- When you connect multiple plotters with the PC, select different ports.

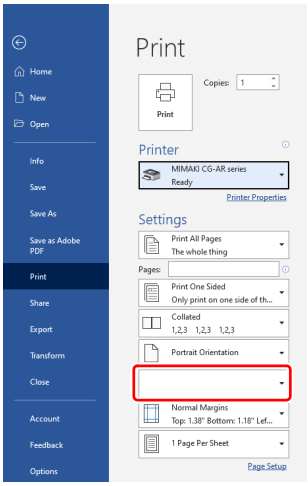


Troubleshooting

The driver media size cannot be correctly read in by Word.

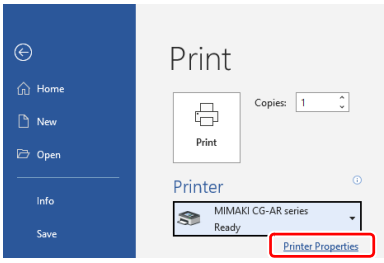
On the Word [Print] window, reading-in of the media size can fail to occur. The media size will remain blank in such cases.

Take the following action:



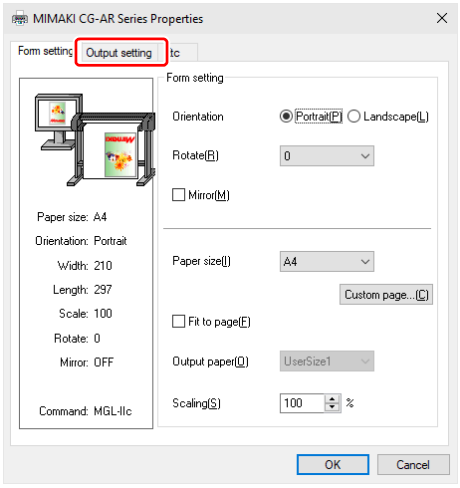
1 Click [Printer Properties] on the Word [Print] window.

- The [CG-AR printer name (user specified) Properties] dialog appears.



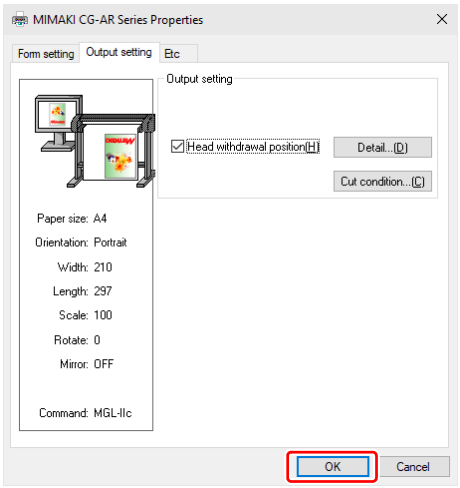
2 Click the [Output setting] tab on the [CG-AR printer name (user specified) Properties] dialog.

- The correct information is re-read from the CG-AR plotter.



3 Click [OK] on the [CG-AR printer name (user specified) Properties] dialog.

- The media size will appear on the Word [Print] window.



Index

A

Advanced 12

C

Color Management 12
Command 16
Configuration parameter 16
Custom page 13
Cut condition 15
Cutting sequence 11
Cutting Settings 13

D

Driver DPI 16

E

Etc 16
Explanation of Symbols 4

F

Fit to page 13
Form setting 13

G

General 12

H

Head Withdrawal Position 14
Head Withdrawal Position Details 14
Help 16

I

Initialize all 16
Installing the Plotter Driver 5
Introduction 3

M

MIMAKI 12
Mirror 13

O

Operating System 4
Orientation 13
Output paper 13
Output port setting 17
  LAN connection 18
  Serial connection 21
  USB connection 17, 21
Output setting 14
Outputting Using the Plotter Driver 11

P

Paper size 13
Ports 12
Precautions 3

R

Rotate 13

S

Scaling 13
Security 12
Select the printer port 6, 8
Sharing 12
System and Software 4

U

UnInstalling the Plotter Driver 10

V

Version 16

D203609-11-29072022
© MIMAKI ENGINEERING Co., Ltd. 2022

MM