

Raster Link 7 Jig BarCode Function Guide

MIMAKI ENGINEERING CO., LTD.

https://mimaki.com/

Table of Contents

Introduction Precautions About this Guide	3
Chapter 1 Jig BarCode Outline	
1.1 What is Jig BarCode? 1.2 Operating Environment 1.3 System Configuration 1.4 Work Flow Preparation procedure Printing procedure Comparison with conventional printing procedure 1.5 About JigLink	7 8 9 9 9
Chapter 2 Preparation	
2.1 [Preparation] Setting Up RasterLink7	. 13 es
Create and export a jig definition file Launching JigLink and preparing barcodes	. 15
Chapter 3 Printing Procedure Using Jig BarCoo	de
3.1 [Printing] Outline of Procedure	
Chapter 4 Troubleshooting	
4.1 Searching for an Issued Barcode 4.2 Entering a Barcode Manually 4.3 Printing Using Multiple Jigs 4.4 Restrictions when Using Jig BarCode If the number of jig print copies exceeds the maximum number that be arranged on a single jig For multiple prints 4.5 Error Messages	. 27 . 28 . 30 can . 30

Introduction

This guide describes how to use JigLink and the printing procedure for jig printing using Jig barcode function in RasterLink7.

Precautions

- · Any unauthorized use or reproduction, in part or whole, of this guide is strictly prohibited.
- The information in this guide is subject to change without notice in the future.
- Note that some of the descriptions in this guide may differ from the actual specifications due to improvements to and revisions of this software.
- Copying the Mimaki Engineering Co. Ltd. software described in this guide to other disks (except for backup purposes) or loading it to memory except for the purpose of running it, is strictly prohibited.
- With the exception of what is provided in the warranty provisions, Mimaki Engineering Co. Ltd. does not assume any liability for any damage (including, but not limited to, the loss of profit, indirect damage, special damage, or other monetary damages) resulting from the use or inability to use this product. The same shall also apply to cases where Mimaki Engineering Co. Ltd. has been advised of the possibility of damage in advance. As an example, we shall not be liable for the loss of any media (work) made by using this product or for any indirect loss caused by a product made with such media.

RasterLink is a trademark or a registered trademark of Mimaki Engineering Co. Ltd. in Japan and other countries.

Microsoft, Windows, Windows 8.1, and Windows 10 are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

Other company names and product names described in this guide are trademarks or registered trademarks of their respective companies.

About this Guide

Notation used in this guide

• The buttons and items displayed in screens are enclosed in square brackets, such as [OK] and [Open].

Symbols used in this guide

	Description			
(Important!)	Important	The "Important" symbol represents information you must be familiar with when using this tool.		
0	Mandatory action sign	Indicates an action that must be carried out.		
	Tip	The "Tip" symbol represents useful information to know.		
	Reference information	Indicates the corresponding page for related information. Clicking the symbol takes you to the applicable page.		

How to obtain this guide and related documents

The latest versions of this guide and related documents are available at the following location:

Our official website (https://mimaki.com/download/software.html)

Chapter 1 Jig BarCode Outline



This chapter

This chapter outlines Jig barcode function.

What is Jig BarCode?6	Work Flow	<u>Q</u>
Operating Environment7	Preparation procedure	<u>e</u>
System Configuration	Printing procedure Comparison with conventional printing procedure	ıg
	About lighting	10

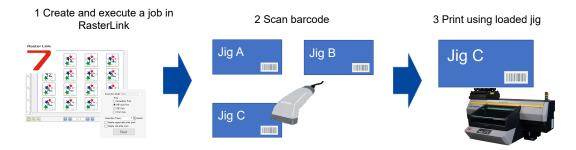
1.1 What is Jig BarCode?

• What is Jig BarCode?

Jig barcode function is a function for jig printing using jig information scanned via a barcode.

It simplifies the jig selection process for jobs.

It is designed for users who use jig adjustment for multiple jigs.



Advantages of Jig BarCode

Jig barcode function offers the following advantages:

- Eliminates the need to select a jig in RasterLink each time a job is printed.
- Printing can be triggered by scanning a barcode, reducing the operations using RasterLink and simplifying the procedure.
- Using jigs scanned via a barcode prevents incorrect jig placement when printing.
- Managing jigs using barcodes reduces management costs.

Explanation of terminology

Term	Explanation
Issue	Saving an image file.

1.2 Operating Environment

Software and drivers

Using Jig barcode function requires that the following software and driver be installed on the PC being used:

Name	Version
RasterLink7 *1	Ver. 2.0.0 or later
JigLink *2	Ver. 1.0.0 or later
Mimaki driver	Ver. 5.5.0 or later

^{*1.} Jig barcode function must be enabled.

Supported models

The following printers support Jig barcode function.

Compatible models
UJF-7151plusII
UJF-3042MkII e, UJF-3042MkII Ex e
UJF-6042MkII e



• The work change settings must be enabled when using Jig barcode function.

Miscellaneous

The following equipment must also be provided to use Jig barcode function.

Name	Explanation
Barcode reader	 Must be HID compatible. (USB/Bluetooth connection) Must be able to scan EAN/JAN codes. Connect to a PC on which RasterLink7 has been installed.
Barcode label printer	A printer for printing the barcodes issued by JigLink.
Jig	A tool required for affixing barcode labels and printing jig barcodes.



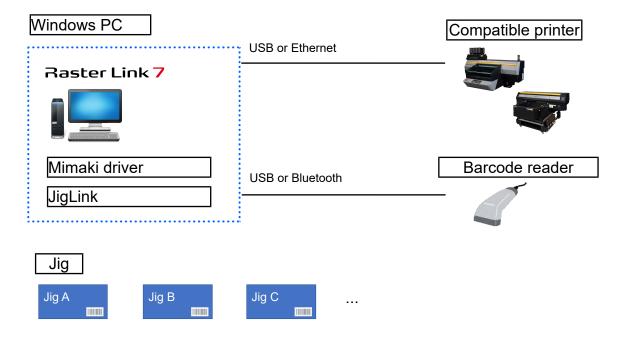
• There are no special requirements for the manufacturer.

[&]quot;[Preparation] Setting Up RasterLink7"(P. 12)

^{*2.} It must be set after it has been installed.

[&]quot;[Preparation] Registering Jigs to JigLink and Affixing Barcodes"(P. 14)

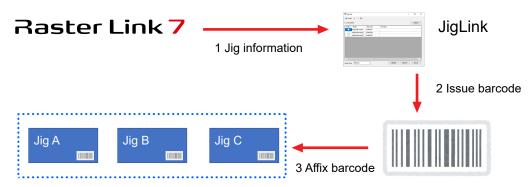
1.3 System Configuration



1.4 Work Flow

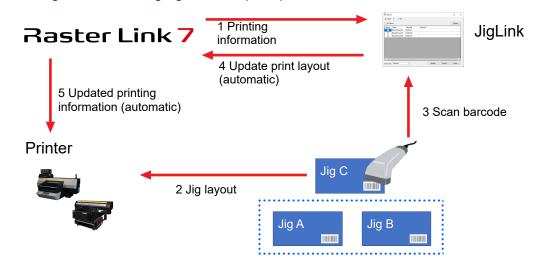
Preparation procedure

"Preparation"(P. 11)

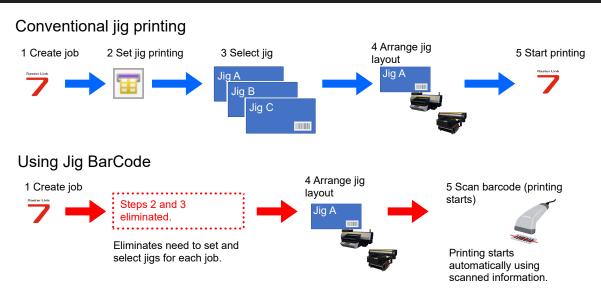


Printing procedure

"Printing Procedure Using Jig BarCode"(P. 19)



Comparison with conventional printing procedure



1.5 About JigLink

About JigLink

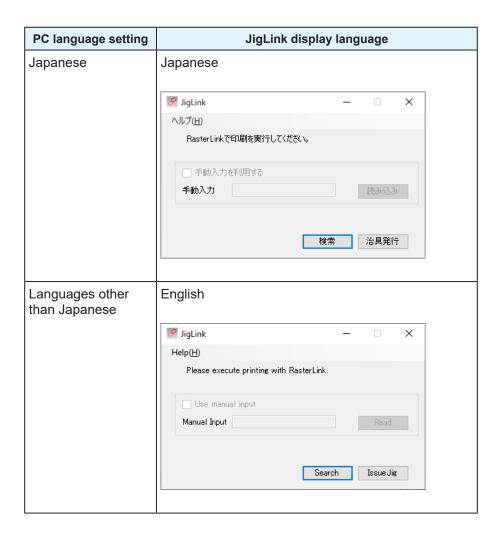
JigLink is software designed to link barcodes to jig information.

JigLink includes the following functions:

- · Jig information management
- · Barcode generation
- · Barcode scanning
- · Print layout updating

JigLink language setting

The language setting for JigLink is determined automatically by the language setting of the PC on which JigLink is installed.



Chapter 2 Preparation



This chapter

This chapter describes the preparation required before printing using Jig barcode function.

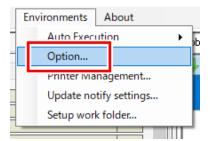
[Preparation] Setting Up RasterLink712		
[Preparation] Installing JigLink13	Affixing Barcodes	.14
ir reparation; motalling digitalit	Create and export a jig definition file	.15
	Launching Jigl ink and preparing barcodes	15

2.1 [Preparation] Setting Up RasterLink7

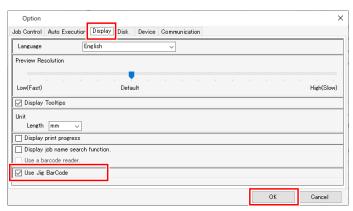
Enabling options

Enable Jig barcode function in RasterLink7.

1 In the menu, select [Environments] - [Option].



2 Click the [Display] tab, check the [Use Jig barcode function] checkbox, then click [OK].



[Output Port] setting



[Output Port] on the [Printer Settings] window displayed when registering the printer should be set to either USB or Ethernet.

Jig barcode function cannot be used if [File] is selected.

2.2 [Preparation] Installing JigLink

How to obtain the installer

Download the JigLink installer from the RasterLink7 download page on the official Mimaki website.

 Download Page https://mimaki.com/product/software/rip/raster-link7/download.html

Installation procedure

- 1 Double-click the executable file downloaded.
 - · The installer launches and installation starts.
- 2 Install as instructed on the screen.
 - The JigLink shortcut icon 🌊 is added to the Windows desktop once installation is completed.

2.3 [Preparation] Registering Jigs to JigLink and Affixing Barcodes

This section describes the procedure from registering jig definition files created using RasterLink7 into JigLink to printing out barcodes.

1 Create and export a [RasterLink7] jig definition file

"Create and export a jig definition file"(P. 15)

· Use RasterLink7 to create and export a jig definition file.



2. Launch [JigLink] JigLink

"STEP 2. Launching JigLink"(P. 15)

· Launch JigLink, then load a jig definition file.



3. Issue [JigLink] barcodes

"STEP 3. Issuing barcodes"(P. 16)

· Issue identification barcodes for the jigs registered.



4. Printing and affixing [JigLink] barcodes

"STEP 4. Printing and affixing barcodes"(P. 17)

· Print the issued barcodes and affix them to the jigs.

Create and export a jig definition file

- STEP 1. Create and export a jig definition file
 - Use RasterLink7 to create a jig definition file to be registered in JigLink.
 - 2 Once the jig definition file has been created, click the export jig definition file icon and save the file in the following location.
 - Save destination: "(Drive on which Windows is installed)\text{YMimakiTools\text{YJigLink\text{YJigData}"}}



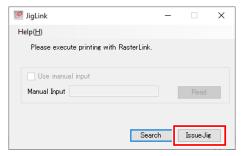


- Jig definition files cannot be loaded if they are saved to a location other than that described above.
- 3 The above procedure should be repeated for each jig to be registered to JigLink.

Launching JigLink and preparing barcodes

- STEP 2. Launching JigLink
 - 1 Either select Windows [Start] [Mimaki JigLink] [Mimaki JigLink], or double-click the action on the desktop.
 - · JigLink launches.

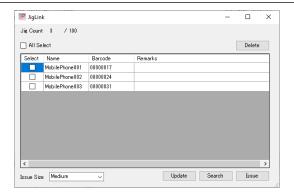
2 Click [Issue Jig].



· A list of the jig definition files exported in STEP 1 is displayed.



 Up to 100 jigs can be registered for issuing barcodes. More than 100 jigs can be registered, but barcodes cannot be issued for these.

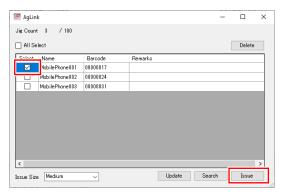




 The jig definition files exported from RasterLink7 are not automatically loaded after JigLink is launched. Either click [Update] or restart JigLink.

STEP 3. Issuing barcodes

Select the checkboxes for the jigs for which barcodes are to be issued, then click [Issue].



- Selecting multiple checkboxes allows a number of barcodes to be issued at the same time.
- [Issue Size] (Large/Medium/Small) can be altered to issue different size barcodes.

9 Select the save destination folder, then click [Open].

• The selected jig barcodes are saved as jpeg image files in the specified save destination.





The file name and file extension cannot be specified when barcodes are issued.
 They can however be edited manually after issuing if required.

STEP 4. Printing and affixing barcodes

Using a barcode reader to scan the barcodes issued eliminates the need to select jigs in RasterLink.



• The user is responsible for providing a printer and printing out the barcodes.



The barcodes should be affixed in the following locations:

- · A location that does not interfere with printing
- · A location that can be scanned easily using a barcode reader
- 1 Print out the jig identification barcodes issued in STEP 3 using a barcode label printer.
- 2 Affix the printed barcodes to the jigs.

Chapter 2 Preparation / 2.3 [Preparation] Registering Jigs to JigLink and Affixing Barcodes

Chapter 3 Printing Procedure Using Jig BarCode



This chapter

This chapter describes the printing procedure using Jig BarCode.

3.1 [Printing] Outline of Procedure

Jig barcode function is used for jig printing by using RasterLink7 in conjunction with JigLink.

This section describes the procedure from creating jobs using RasterLink7 to using scanned barcodes for printing in JigLink.



• All of the steps outlined in "Preparation"(P. 11) must be completed before proceeding.

1. Select a [RasterLink7] job

** "3.2 STEP 1. Job selection"(P. 21)

· Select the job to be printed.



2. Select a [RasterLink7] jig

"3.2 STEP 2. Jig selection"(P. 21)

· Select the jig to be used from the jig printing.



3. Start [RasterLink7] printing

(P. 22)



4. Check [JigLink] startup and status

"3.2 STEP 4. Startup and status check"(P. 23)

· Check the JigLink startup and status.



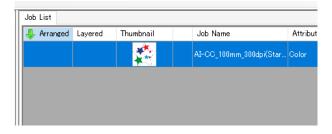
5. Scan [JigLink] barcode

"3.2 STEP 5. Barcode scanning"(P. 23)

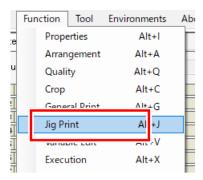
Use the barcode reader to scan the barcode of the jig to be used.

3.2 [Printing] Detailed Procedure

- STEP 1. Job selection
 - 1 Load the job to be printed into RasterLink7.
 - **?** Select the job.



- STEP 2. Jig selection
 - Select [Jig Print] in the function menu or by clicking the function icon.





9 Select the jig template.

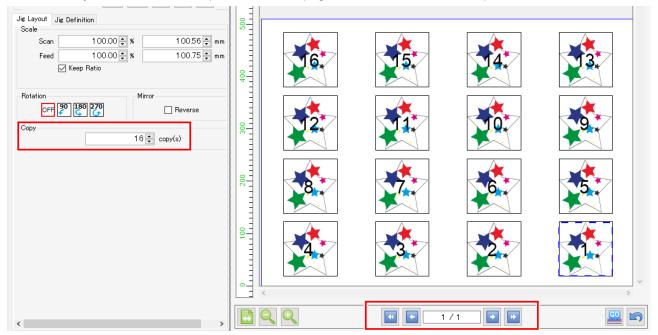


• Select a jig template with the same number of materials set as the actual jig to be used.



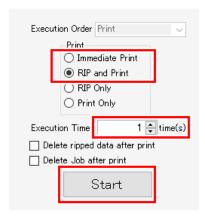
 If you wish to check the layout, select a jig template with the same layout as the actual jig to be used. 3 Set the number of copies to ensure that the job fits within one page.

• Adjust the number of copies so that the page number indicated on the preview screen is "1/1".



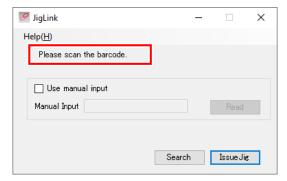
STEP 3. Start printing

- Select [Execution] in the function menu or by clicking the function icon.
- **?** Configure the settings as follows, then click [Start].
 - [Print]: [Immediate Print] or [RIP and Print]
 - [Execution Time]: 1 time



• STEP 4. Startup and status check

- 1 Either select Windows [Start] [Mimaki JigLink] [Mimaki JigLink], or double-click the kind icon on the desktop.
 - · JigLink launches.
- 2 Check to confirm that the message on the screen reads [Please scan the barcode.].





Try the following if the above message does not appear:

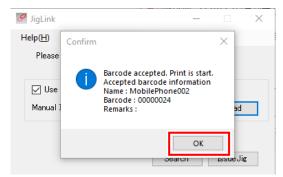
- Restart JigLink.
- Cancel any jobs currently being printed in RasterLink7, then reset the job and start printing.

STEP 5. Barcode scanning

- Place the jig to be used in the printer.
- 2 Use a barcode reader to scan the barcode affixed to the jig in TSTEP 4. Printing and affixing barcodes"(P. 17) of Preparation.
 - When the barcode has been successfully scanned, the information on the jig linked to the scanned barcode is displayed on the JigLink screen.



- When reading barcodes, make sure the JigLink screen is active.
- Click [OK].



- · Printing starts, provided the following conditions are met:
 - (1) The printer is in remote mode
 - (2) JigLink barcode scanning was successful.

Chapter 3 Printing Procedure Using Jig BarCode / 3.2 [Printing] Detailed Procedure

Chapter 4 Troubleshooting



This chapter

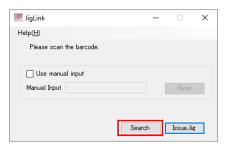
This chapter describes how to resolve problems that may arise and describes operation procedures that may be unclear.

Searching for an Issued Barcode2	26	Restrictions when Using Jig BarCode	30
Entering a Barcode Manually2 Printing Using Multiple Jigs2		If the number of jig print copies exceeds maximum number that can be arranged or single jig	on a
		For multiple prints	30
		Error Messages	31

4.1 Searching for an Issued Barcode

Barcodes issued using JigLink can be used to search for jig information.

1 Click [Search] on the barcode scanning screen or barcode issuing screen.

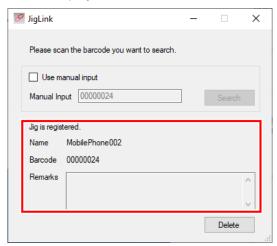




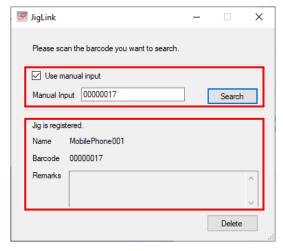
2 Either use the barcode reader to scan the barcode or enter the barcode value manually.

or

- · Scanning using a barcode reader
 - (1) Scan the jig barcode using the barcode reader.
 - · The search results are displayed for the barcode scanned.



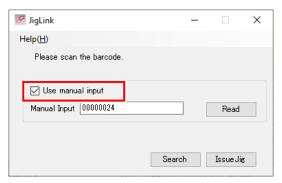
- · Entering value manually
 - (1) Check the [Use manual input] checkbox.
 - (2) Enter the barcode value, then click [Search].
 - The search results are displayed for the barcode entered.



4.2 Entering a Barcode Manually

This section describes how to enter barcode data manually if the barcode cannot be scanned correctly or if the barcode reader is broken.

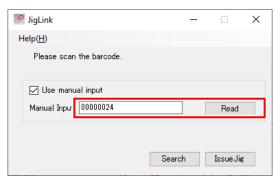
1 Check the [Use manual input] checkbox on the barcode scanning screen.





If the checkbox is grayed out and cannot be selected, check whether the message on the screen reads [Please scan the barcode.].

- If the message [Please scan the barcode.] appears: Restart JigLink.
- If the message [Please scan the barcode.] does not appear:
 Check whether the job is being executed in RasterLink7. If it is being executed, cancel the job currently being printed, reset the job and start printing.
- 2 Enter the barcode value in the text box, then click [Read].



The search results are displayed for the barcode entered.

4.3 Printing Using Multiple Jigs

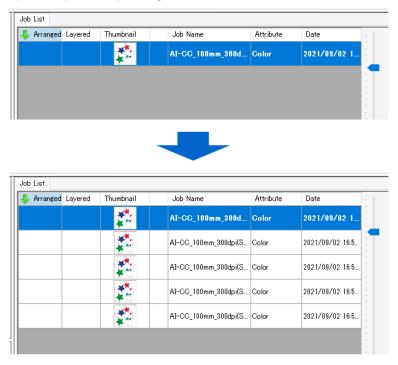
The following restrictions apply when using Jig barcode function:

- The number of copies that can be set is determined by the maximum number that can be arranged for the jig.
- The jig cannot be changed midway if printing is set for multiple times.

"Restrictions when Using Jig BarCode"(P. 30)

This section describes how to print more than the maximum number that can be arranged for each jig.

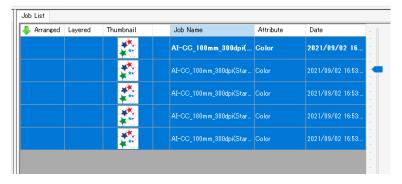
- Printing 27 iPhone cases using multiple jigs allowing 3 × 3 iPhone cases to be arranged It is assumed here that all of the designs for printing are the same.
 - 1 Create a job to be printed using Jig barcode function following the same procedure as STEP 1. Job selection to STEP 2. Jig selection in Tiprinting Detailed Procedure (P. 21).
 - 2 Use the RasterLink7 job duplication function to duplicate the job to match the number of jigs to be used.
 - · Otherwise, repeat step 1 to duplicate jobs.



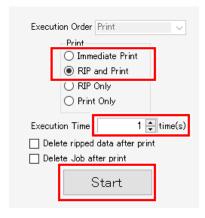
(Important!)

• The number of copies for all of the jobs may not exceed the maximum number that can be arranged on the jigs.

3 Select all of the jobs.



- ⚠ Print using the following settings:
 - [Print]: [Immediate Print] or [RIP and Print]
 - [Execution Time]: 1 time



5 Scan the barcode affixed to the jig, then position the jig on the printer.



- Printing starts when the printer is set to remote mode.
- When printing is complete, scan the barcode for the next jig to be used for printing, then position the jig on the printer.
- **7** Repeat steps 4 and 5 for each of the jobs (number of jigs to be used).

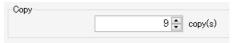
4.4 Restrictions when Using Jig BarCode

Restrictions apply to the number of copies and prints for jig printing using JigLink.

If the number of jig print copies exceeds the maximum number that can be arranged on a single jig

Printing will not be performed correctly.

The number of copies may not exceed the maximum number that can be arranged on a jig. Example: If the jig allows up to 3×3 to be arranged, the maximum number of copies will be 9.



Refer to the following if you wish to print more than the number that can be arranged on a jig: "Printing Using Multiple Jigs"(P. 28)

For multiple prints

Different jig information cannot be scanned and used for the second or subsequent prints.

The same jig must be used for all of the prints.

If jig C is scanned for the first print...



The second and all subsequent prints use jig C



- Set a multiple number of execution times in RasterLink7, then print.
- 2 Launch JigLink, then scan the barcode for the jig to be used for printing.
- Mount the scanned jig on the printer, then set to remote mode.
 - · The first print starts.
- 4 Once the first print is complete, remount the jig used for the first print on the printer, then set to remote mode.
 - The second print starts.
 - Even if the barcode for a different jig is scanned for the second or subsequent prints, printing will use the jig information scanned for the first print.
- 5 Repeat step 4 for the number of prints specified using the same jig.

4.5 Error Messages

Error messages are displayed in the RasterLink7 log.

Jobs for which an error has occurred will automatically be canceled in RasterLink7.

Error message list

No.	Message	Cause	Corrective action
1	The number of copies is set larger than the number of materials placed on the loaded jig. Please check the job.	The number of job copies exceeds the number of materials for the jig scanned.	Check the scanned barcode.Review the number of job copies.
2	Delete the loaded jig on JigLink and register it again.	The scanned jig information was corrupted.	 Delete the scanned jig from JigLink. Export the jig from RasterLink7 and re-register.
3	An error has occurred in JigLink. JigLinkPlease restart JigLink.	An error other than those described above.	Restart JigLink.Restart RasterLink7.

Chapter 4 Troubleshooting / 4.5 Error Messages	
	00

Jig Barcode Function Guide

October, 2021

MIMAKI ENGINEERING CO.,LTD. 2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN

