KONICA MINOLTA

AccurioPress

C6100/C6085

C3080/C3080P/C83hc/C3070

Automatic Inspection Operation Manual

Aim of this manual

This manual describes the basic use of the automatic inspection function, which automatically checks the printing quality.

Notations and symbols used in this manual

⚠ CAUTION

- This symbol indicates that negligence of the instructions may lead to mishandling that may cause injury or property damage.

NOTICE

This symbol indicates a risk that may result in damage to this machine or originals.
Follow the instructions to avoid property damage.

Tips

- This symbol indicates information that complements the topic or optional devices required to use a certain function.

Reference

This symbol indicates a function or functions that are related to the topic.

The meaning of other notations and symbols are as follows.

Notation/Symbol	Description
[ ]	These brackets indicate the name of a key on the **touch panel** or of a button on a computer screen.
Bold	Words in bold type indicate the name of a key on the **control panel**, of a part, of an option, or of User's Guide.

This guide describes product names and system configurations as follows.

Product name	Conventions used in this guide
AccurioPress C6100/C6085/ C3080/C3080P/ C83hc/C3070	This machine: Indicates the entire system including options and functions. The main body: Indicates a main unit that covers printing functions. The machine: Indicates a mechanical part related to the structure or mechanism.
Microsoft Windows	Windows

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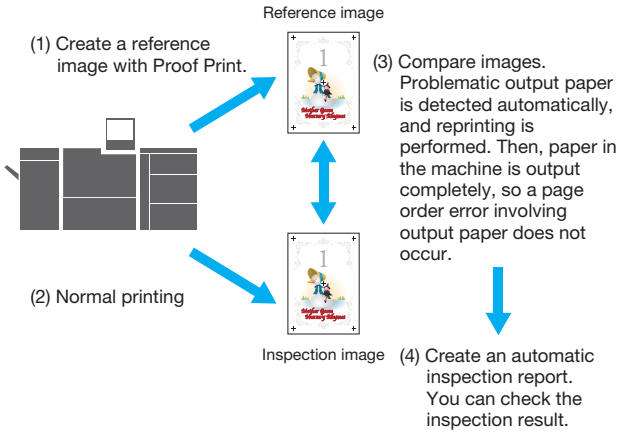
1 Overview of Function

1 Overview of Function

1.1 What is Automatic Inspection?

This function uses the sensor to automatically detect image dirt that occurs during printing, and removes problematic output paper.

It reduces inspection work costs and provides an efficient printing process.



Tips

- The paper size available for automatic inspection is the same as for the Intelligent Quality Optimizer IQ-501, excluding the banner paper size of length 487.8 mm or more.

NOTICE

To use this function, the following optional units are required.

Intelligent Quality Optimizer IQ-501

Video Interface Kit VI-511

Auto Inspection Unit UK-301

Video Interface Kit VI-513

Relay Unit RU-702

The following optional unit is required to use the real-time VDP collation function during printing.

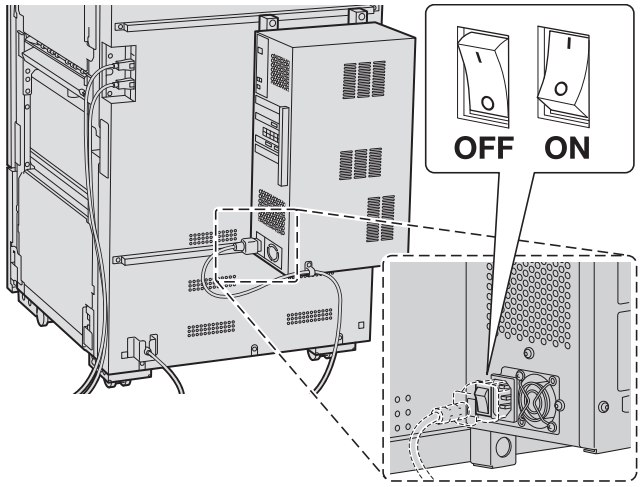
Variable Data Inspection Kit UK-312

NOTICE

*Turn ON the **power switch** of **Auto Inspection Unit UK-301**, and turn ON the **sub power switch** of this machine.*

*The power source of the **Auto Inspection Unit UK-301** is synchronized with the **sub power switch** of this machine. When you turn OFF the **sub power switch** of this machine, you do not need to turn OFF the **power switch** of the **Auto Inspection Unit UK-301**.*

*When you forcibly turn OFF the **main power switch** of this machine, also turn OFF the **power switch** of the **Auto Inspection Unit UK-301**.*



For details on the default administrator password, refer to [Safety Information] in the separate volume.

2 Automatic Inspection Setting

2 Automatic Inspection Setting

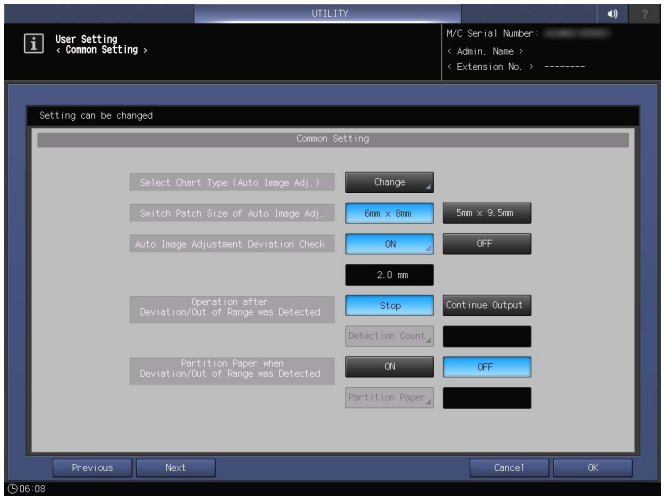
2.1 Presetting the Details of Automatic Inspection

2.1.1 About the Detailed Setting of Automatic Inspection

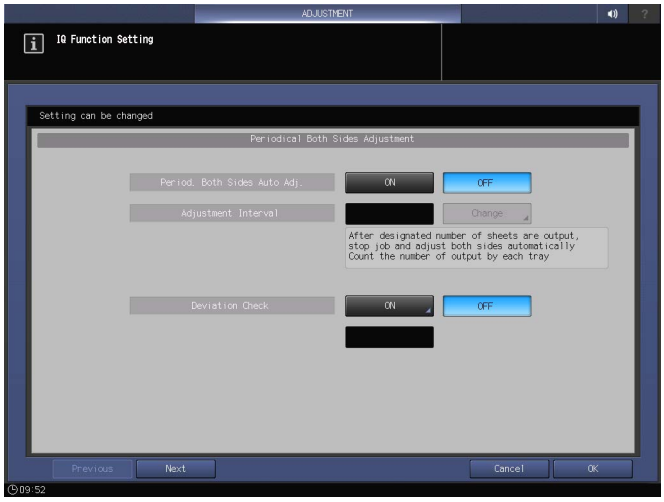
Determine the basic settings and operation settings for automatic inspection.

To configure the settings, follow one of the procedures below.

- [Utility] - [User Setting] or [Administrator Setting] - [Common Setting]



- [IQ Function Setting] on the [MACHINE] screen



Setting item	Description
[Operation after Deviation/Out of Range was Detected]	Specify the operation to be performed when inappropriate output paper is detected. You can specify whether to stop this machine immediately or only when the number of detected errors exceeds the standard. * When the standard value for the number of detected errors is set to "0", this machine will not stop even if the number of detection increases.

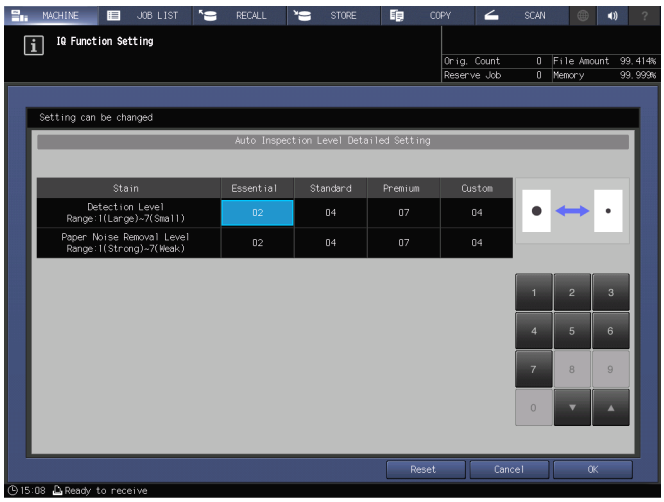
Setting item	Description
[Partition Paper when Deviation/Out of Range was Detected]	Configure a setting to insert partition paper when inappropriate output paper is detected. When inserting, select the paper tray to load partition paper into.
[Automatic Reprint when Deviation/Out of Range was Detected]	Configure a setting to perform reprinting when inappropriate output paper is detected. When reprinting is performed, paper in the machine is output once, so a page order error involving output paper does not occur.
[Output Tray for Out of Range]	Specify the tray to output paper that does not satisfy the standard. You can combine the **Purge Tray** of the **Relay Unit RU-702** with a sub tray of the optional output unit mounted later, and also select the same tray for a job. * Paper cannot be output to the sub tray of **Folding Unit FD-503**, **Large Capacity Stacker LS-506**, or **Saddle Stitcher SD-506**. Also, paper cannot be output to the sub tray of **Saddle Stitcher SD-513** when the Multi Tri-Fold, Fold & Staple, or Half-Fold mode is being used. * When a paper output enabled option is not connected to **Relay Unit RU-702** or later, the button of [RU702 + Sub tray] is grayed out.
[Create Auto Inspection Report]	Configure a setting to create an automatic inspection result report. When inappropriate output paper is not discharged automatically, the user deals with the inappropriate output paper based on the report.
[Create Report of Completed Job]	Configure a setting to create an inspection result report of the Completed Job.
[Automatic Inspection Level Setting]	Adjust the detection standard for automatic inspection. There are three levels: [Essential], [Standard], and [Premium], for each of which you can adjust the detection standard. Configure a setting to create an inspection result report of the Completed Job. You can also set the detection standard of [Custom]. For details, refer to "2.1.2 [Automatic Inspection Level Setting]" in this manual.
[Wait Screen for Automatic Inspection]	Set the automatic inspection on the Wait screen. When outputting a print job for Direct Print and such without temporarily saving it, input the job in Wait mode; you can set the automatic inspection. * This option is not displayed when **Image Controller IC-313**, **Image Controller IC-314**, **Image Controller IC-315** or **Image Controller IC-417** is mounted on the machine.
[Reference Image Automatic Deletion]	Configure a setting to automatically delete the reference image that is created for automatic inspection. When the amount of available reference image memory is not sufficient, the reference image of the oldest update date and time in [Reference Image List 1] is deleted automatically.
[Setting for Inspect. of Excluded Areas]	Set the default of the Inspection Excluding Area.
[Counted Error by Each Level]	Counts the detected stains and omissions by level, and displays the results in the automatic inspection result report.

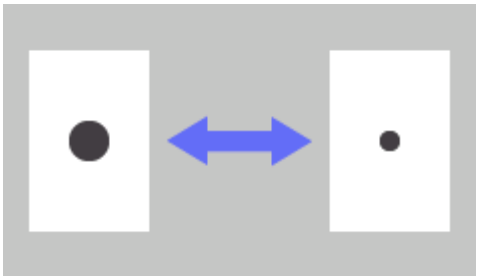
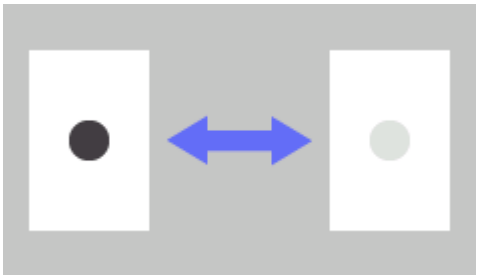
NOTICE

[Reference Image Automatic Deletion] is set to [ON] by default. When you do not want to automatically delete a reference image, set to [OFF].

2.1.2 [Automatic Inspection Level Setting]

Specify the reference values of the stain size and density that are to be detected by automatic inspection.



Setting item	Description
[Detection Level]	Range: 1(Large) - 7(Small) Adjusts the size and density standard of a stain to be detected. 
[Paper Noise Removal Level]	Range: 1(Strong) - 7(Weak) Adjusts the level to exclude noises originating from paper itself from the detection target. 

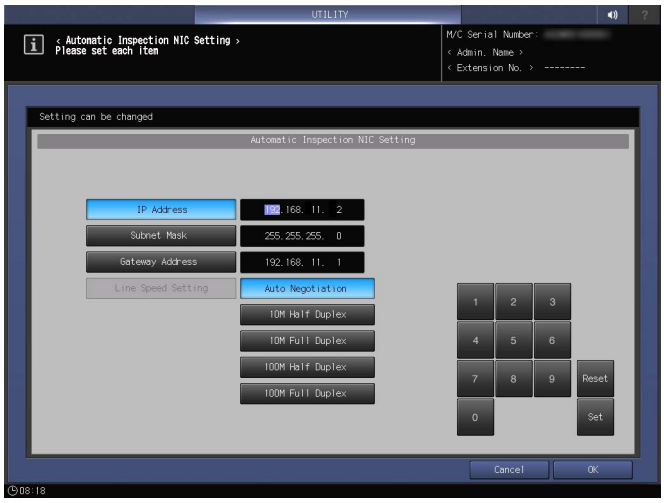
When **Image Controller IC-313**, **Image Controller IC-314**, **Image Controller IC-315** or **Image Controller IC-417** is installed on the machine, [Level Setting] is displayed. Select [Essential], [Standard], or [Premium] to specify the level for each item.

2.1.3 [Automatic Inspection NIC Setting]

Selecting [Automatic Inspection NIC Setting] allows you to check the automatic inspection report from Web Utilities of the **Auto Inspection Unit UK-301**. This value is set by default at the time of installation.

To check or change the setting, follow the procedure below.

- [Utility] - [Administrator Setting] - [Network Setting] - [Automatic Inspection NIC Setting]



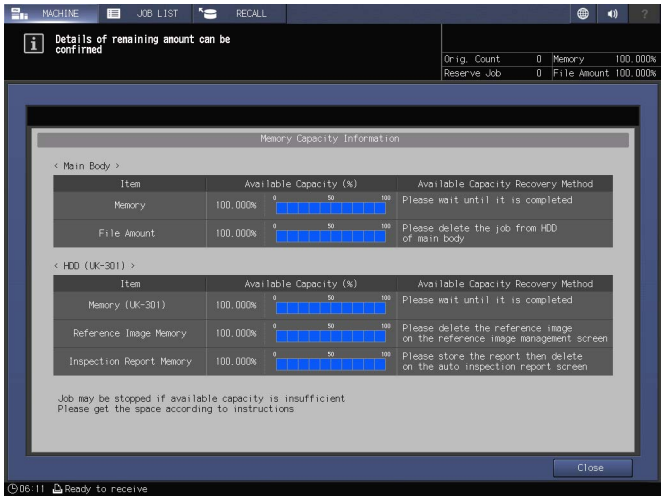
Setting item	Description
[IP Address]	Specify the IP address of the **Auto Inspection Unit UK-301**.
[Subnet Mask]	Specify the subnet mask of the **Auto Inspection Unit UK-301**.
[Gateway Address]	Specify the gateway address of the **Auto Inspection Unit UK-301**.
[Line Speed Setting]	Specify the line speed of the **Auto Inspection Unit UK-301**. Adjust to suit your network environment.

2.1.4 [Memory Status]

You can confirm the amount of available memory space.

To confirm, follow the procedure below.

- [MACHINE] - [Memory Status]



● Main Body

Item name	Description
[Memory]	Displays the amount of available space in the main unit memory.
[File Amount]	Displays the amount of available space in the main unit file system.

● HDD (UK-301)

Item name	Description
[Memory (UK-301)]	Displays the amount of available space in the memory of the **Auto Inspection Unit UK-301**.
[Reference Image Memory]	Displays the amount of available space in the reference image memory of the **Auto Inspection Unit UK-301**.
[Inspection Report Memory]	Displays the amount of available space in the detection report memory of the **Auto Inspection Unit UK-301**.

Tips

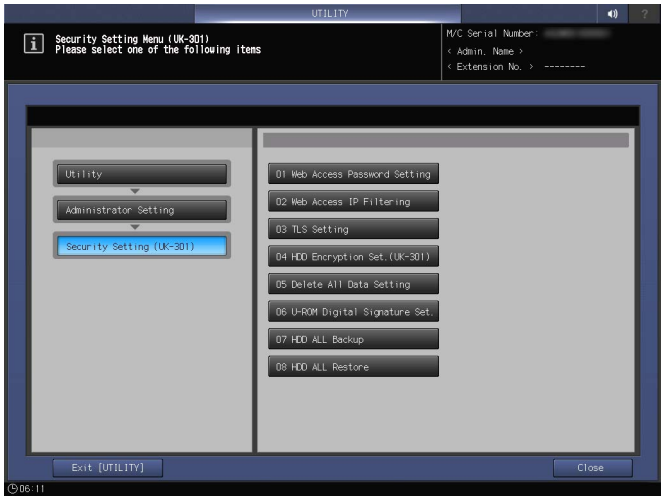
- If available memory space runs out, the job may be stopped. Follow the instruction shown in [Available Capacity Recovery Method] to increase the amount of available memory space.

2.1.5 [Security Setting (UK-301)]

Set the security of the **Auto Inspection Unit UK-301**. Take the required measures to suit your environment.

To configure the setting, follow the procedure below.

- [Utility] - [Administrator Setting] - [Security Setting (UK-301)]



Setting item	Description
[Web Access Password Setting]	Specify the password for Web Utilities of the **Auto Inspection Unit UK-301**.
[Web Access IP Filtering]	Set IP filtering for Web Utilities of the **Auto Inspection Unit UK-301**. Specify the allowable range of the IP address to restrict accesses from IP addresses outside the specified range. This option can be synchronized with the subnet mask.
[TLS Setting]	Configure a setting to encrypt network communications of the **Auto Inspection Unit UK-301**. Setting this option to ON performs TLS encryption.
[HDD Encryption Set. (UK-301)]	Configure a setting to encrypt HDD of the **Auto Inspection Unit UK-301**. Specify the password to encrypt data.
[Delete All Data Setting]	Deletes all the HDD data of the **Auto Inspection Unit UK-301**. This function deletes data by overwrite processing to prevent information from being leaked when a leased machine is returned.
[U-ROM Digital Signature Set.]	Specify the digital signature of the **Auto Inspection Unit UK-301**. Setting to ON enables authentication via digital signature, which allows you to more safely update the firmware of the **Auto Inspection Unit UK-301**.
[HDD ALL Backup]	Backs up HDD data of the **Auto Inspection Unit UK-301** to an external storage medium.
[HDD ALL Restore]	Restores HDD data of the **Auto Inspection Unit UK-301** using the data pre-saved in an external storage medium.

NOTICE

If UK HDD encryption is enabled while there is an existing reference image or uncreated automatic inspection report, this machine may not run normally, for example, it may freeze when a reference image is displayed.

To enable UK HDD encryption, delete all of the reference images and uncreated automatic inspection reports in advance.

2.1.6 Automatic Inspection Notification

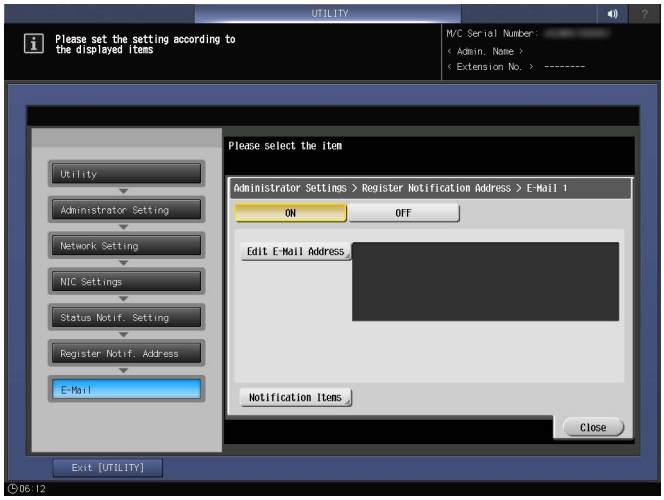
Set an automatic inspection notification. When your E-mail is registered, a notification E-mail is automatically sent to you if a stain is detected on an image.

To register the destination E-mail address, follow the procedure shown below.

- [Utility] - [Administrator Setting] - [Network Setting] - [NIC Settings] - [Detail Settings] - [Status Notif. Setting] - [Register Notif. Address] - [E-mail] - [ON] - [Edit E-mail Address]

To configure the automatic inspection notification setting, follow the procedure below.

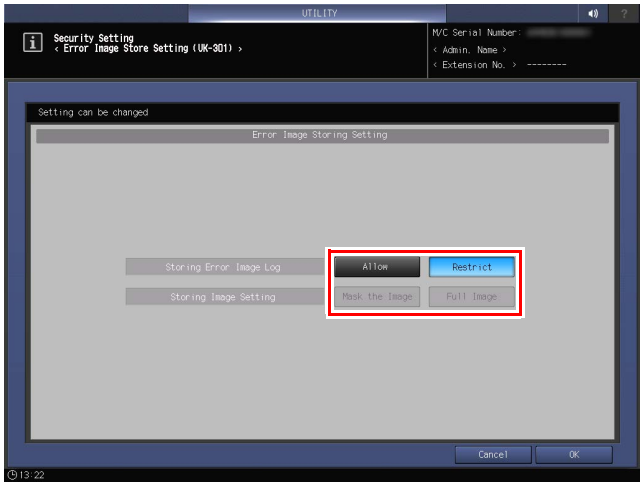
- [Utility] - [Administrator Setting] - [Network Setting] - [NIC Settings] - [Detail Settings] - [Status Notif. Setting] - [Register Notif. Address] - [E-mail] - [ON] - [Notification Items] - [Auto Inspection]



2.1.7 [Error Image Store Setting (UK-301)]

Specify whether to allow log storage when a service call occurs.To allow logs, specify whether to mask the image.

- [Utility] - [Administrator Setting] - [Security Setting] - [Error Image Store Setting (UK-301)]



Setting item	Description
[Storing Error Image Log]	Specify whether to allow log storage when a service call occurs. The stored logs are used to help the service representative's work.
[Storing Image Setting]	Specify this option to mask an image to be stored as a log. If [Mask the Image] is selected, the image is stored with all areas within 1mm from the paper edge blackened. If [Full Image] is selected, the image is stored with no areas blackened. This item is only available when there is no problem even if the image attracts someone's attention.

2.2 Checking the Automatic Inspection Level

You can check the inspection level on printing paper using automatic inspection test charts.

In the actual automatic inspection, the visibility (size and density) of stains on an image varies depending on the paper or image. When adjusting the inspection level, use test charts.

Use two types of automatic inspection test charts.

- Reference chart:
  There are no dots in the table of the reference chart.

Auto Inspection System
Level Check Chart ver. 01

spot Bk tone 255 = D-max 0 = white

	125	75	50	25	15
0.5mm					
1.0mm					
1.5mm					
2.0mm					

- Inspection chart:
  The inspection chart includes dots in the table.

Auto Inspection System
Level Check Chart ver. 01

spot Bk tone 255 = D-max 0 = white

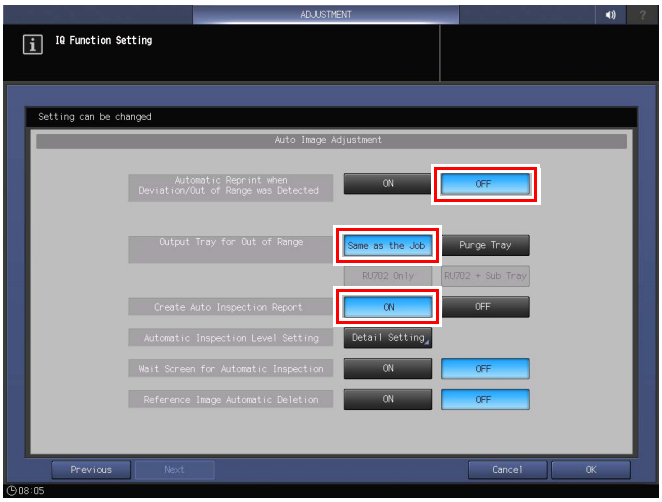
	125	75	50	25	15
0.5mm					
1.0mm					
1.5mm					
2.0mm					

Tips

- For details on how to obtain automatic inspection test charts, contact your service representative.

1 Set the details of automatic inspection.

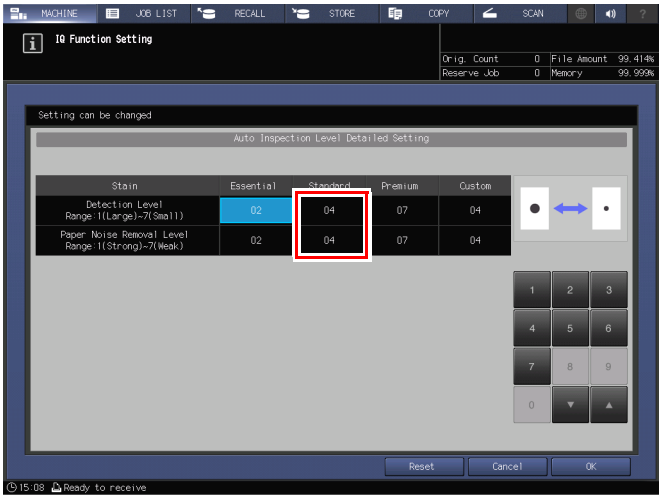
Determine the basic settings and operation settings for automatic inspection. For details on the settings, refer to "2.1 Presetting the Details of Automatic Inspection" in this manual. In this step, configure the following settings.



[Automatic Reprint when Deviation/Out of Range was Detected]: [OFF]
[Output Tray for Out of Range]: [Same as the Job]
[Create Auto Inspection Report]: [ON]

2 Configure settings in [Auto Inspection Level Detailed Setting].

In this step, change each setting of [Standard] to the desired inspection level value.



3 Create a reference image using the reference chart.

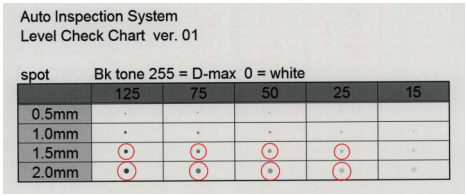
Create a reference image following the procedure described in "3.1 Creating a New Reference Image for Automatic Inspection" in this manual.

4 Perform automatic inspection using the reference image created in step 3 and the inspection chart.

Perform automatic inspection following the procedure described in "3.2 Selecting the Created Reference Image for Automatic Inspection" in this manual. Select [Use Registered Image] in [Reference Image Setting], and then select the reference image created in step 3. Also, select [Standard] in [Inspection Level Setting].

5 Check the automatic inspection report.

Check the report following the procedure described in "4.1 Confirming the Automatic Inspection Report" in this manual. Check whether the levels specified in step 2 match the values framed in red.


Auto Inspection System
Level Check Chart ver. 01

spot Bk tone 255 = D-max 0 = white

	125	75	50	25	15
0.5mm					
1.0mm					
1.5mm					
2.0mm					

NOTICE

The result of automatic inspection may vary depending on whether any subtle changes are made for each print job. Perform automatic inspection three to five times and then judge the combined results.

6 If adjustment is required, repeat steps 2 to 5.

NOTICE

Visibility may differ between the actual output original and the automatic inspection test chart. If necessary, configure settings again in [Auto Inspection Level Detailed Setting].

3 Performing Automatic Inspection

3 Performing Automatic Inspection

3.1 Creating a New Reference Image for Automatic Inspection

When newly performing automatic inspection, create a reference image before executing a job.

1 Hold a print job on this machine.

When printing via the printer driver, change the storage destination in the [Workflow] tab of the **PS-PI-ugin** driver.

For details on how to hold a job, refer to [Job Management] in the HTML User's Guide.

2 Press [JOB LIST] on the [MACHINE] screen to display the [Hold Job] screen.

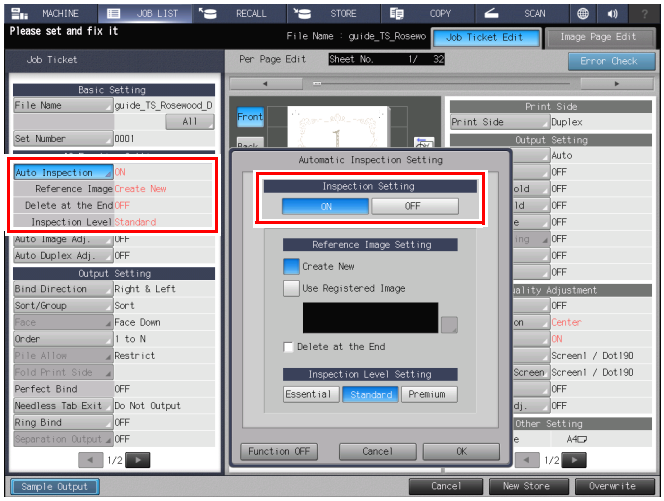
3 Select the held print job, and press [Job Ticket].

The [Job Ticket Edit] screen is displayed.

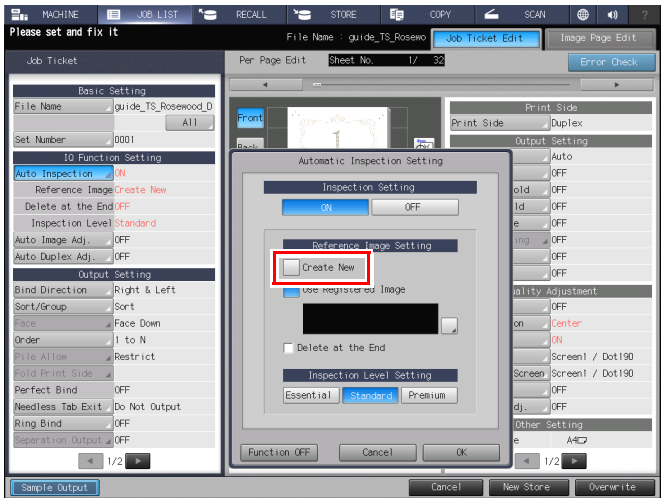
4 Press [Auto Inspection].

The [Automatic Inspection Setting] window opens.

5 Set [Inspection Setting] to [ON].



6 Select the [Create New] check box in [Reference Image Setting].

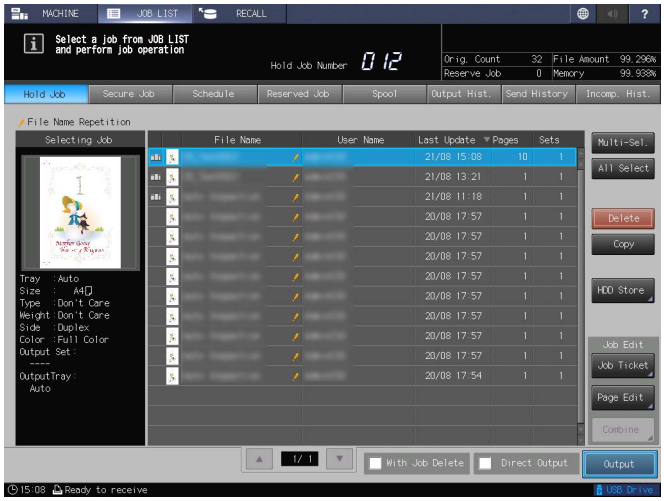


7 Specify each item, and press [OK] to apply the setting.

When deleting [Reference Image] when printing is finished, select [Delete at the End].
In [Inspection Level Setting], specify the desired level depending on the output purpose.

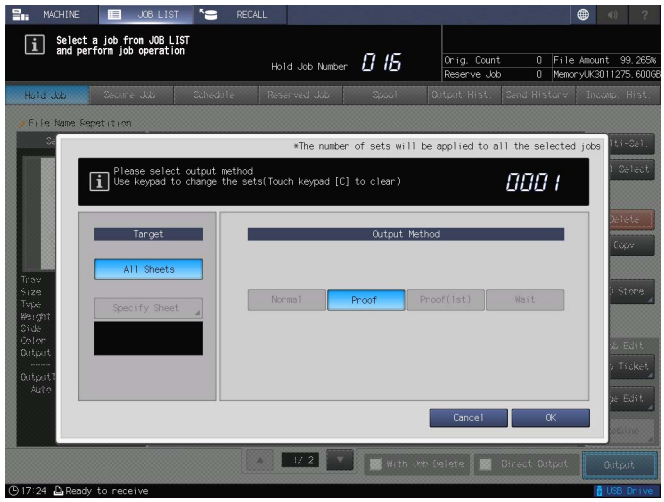
8 Press [New Store] or [Overwrite].

The setting is stored, and the display returns to the [Hold Job] screen.

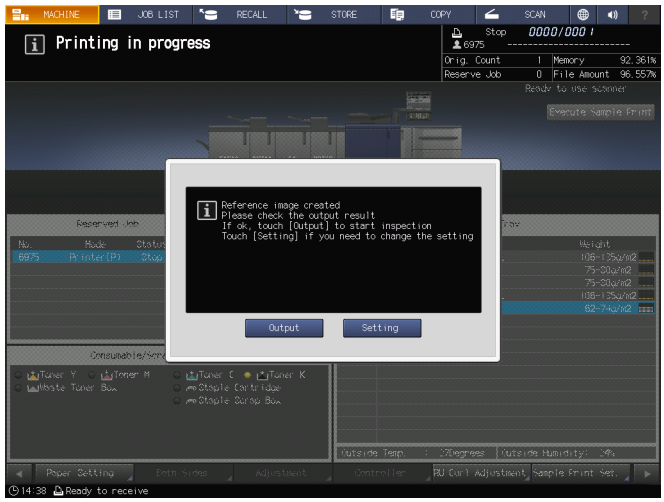


9 Press [Output], and press [OK].

One copy is output as [Proof], and the reference image for automatic inspection is created. Check whether or not output paper is erroneous.



➔ A job ticket can be changed in [Setting].



10 Check the contents, and press [Output].

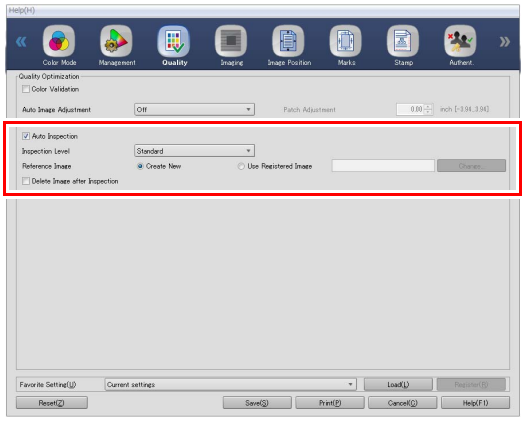
The print job starts, and [Auto Inspection] is performed. If an error is detected by the automatic inspection, it is displayed in [IQ Detected Result]. The [Automatic Inspection Report] can be viewed on this machine or in Web Utilities of the **Auto Inspection Unit UK-301**.

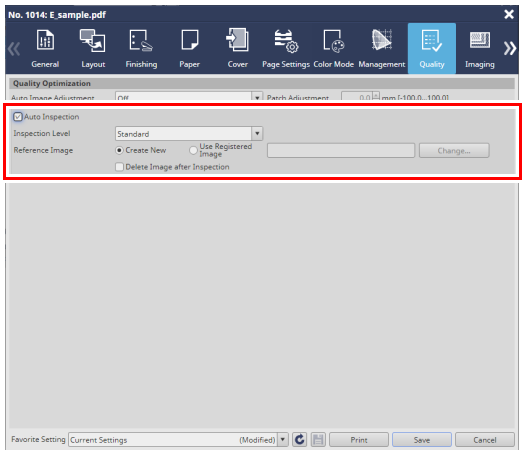
Tips

- To set an [Automatic Inspection Area], we recommend that you create a reference image in [Sample Output]. For details on the [Automatic Inspection Area], refer to "7. Automatic Inspection Area" in this manual. Then, follow the procedure described in "3.2 Selecting the Created Reference Image for Automatic Inspection" in this manual to perform automatic inspection.
- Textured paper, blank insertion paper, punched paper, tab paper, and insertion paper are not targeted for automatic inspection.
- When using numbered paper, paper with page numbers printed, or the date/time stamp function, set Inspection Excluding Area by reference; you can perform automatic inspection. For details, refer to "7. Automatic Inspection Area" in this manual.

Tips

- [Auto Inspection] can also be configured using JobCentro or AccurioPro Print Manager.





3.2 Selecting the Created Reference Image for Automatic Inspection

When performing [Auto Inspection] using the created reference image, you need to select an image from the list.

1 Hold a print job on this machine.

When printing via the printer driver, change the storage destination in the [Workflow] tab of the **PS-PI-ugin driver**.

For details on how to hold a job, refer to [Job Management] in the HTML User's Guide.

2 Press [JOB LIST] on the [MACHINE] screen to display the [Hold Job] screen.

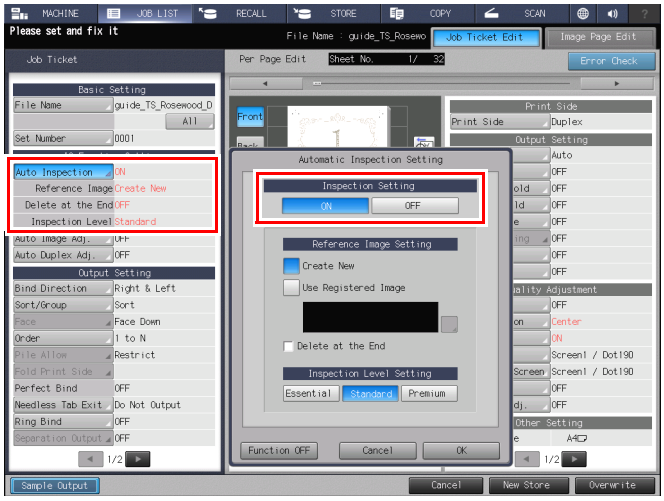
3 Select the held print job, and press [Job Ticket].

The [Job Ticket Edit] screen is displayed.

4 Press [Auto Inspection].

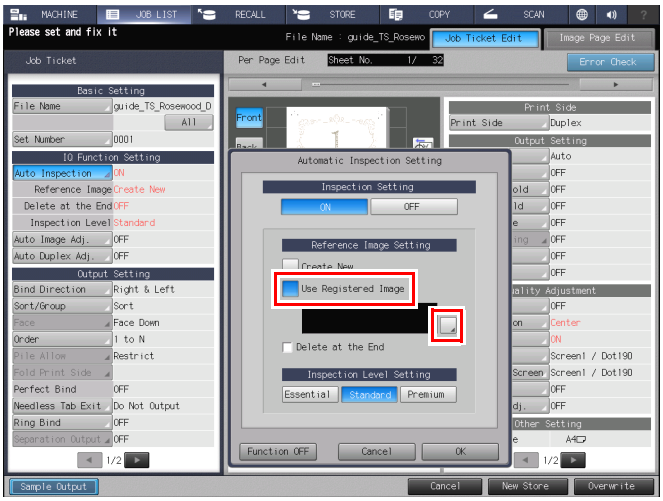
The [Automatic Inspection Setting] window opens.

5 Set [Inspection Setting] to [ON].



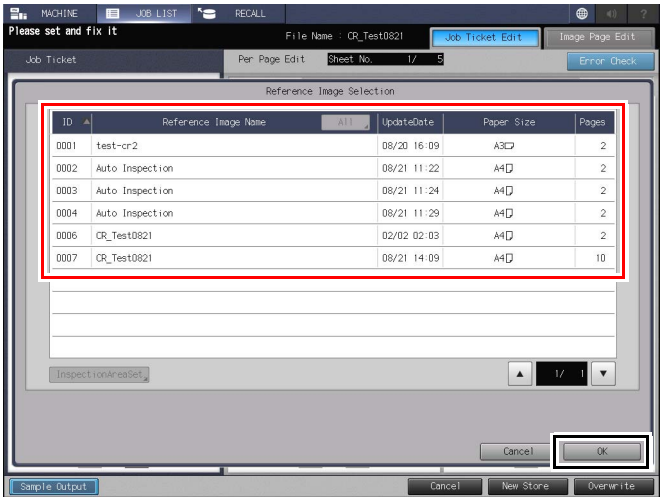
6 Select [Use Registered Image] in [Reference Image Setting], and press the white button on the lower-right side.

The [Reference Image Selection] screen is displayed.



7 Select the desired [Reference Image], and press [OK].

This returns to the [Automatic Inspection Setting] screen.



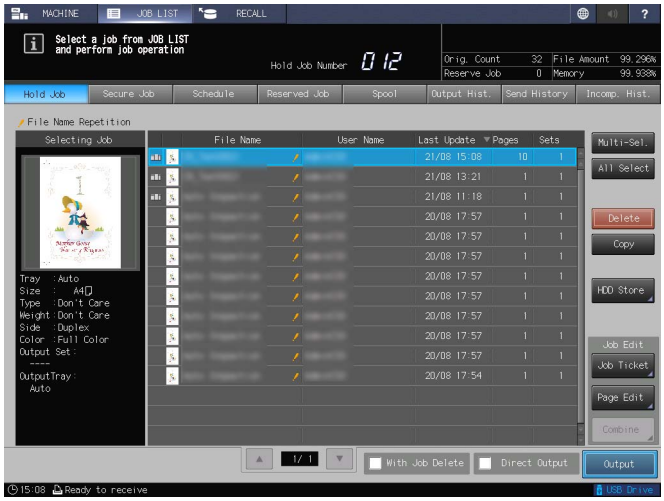
8 Specify each item, and press [OK] to apply the setting.

When deleting [Reference Image] when printing is finished, select [Delete at the End].

In [Inspection Level Setting], specify the desired level depending on the output purpose.

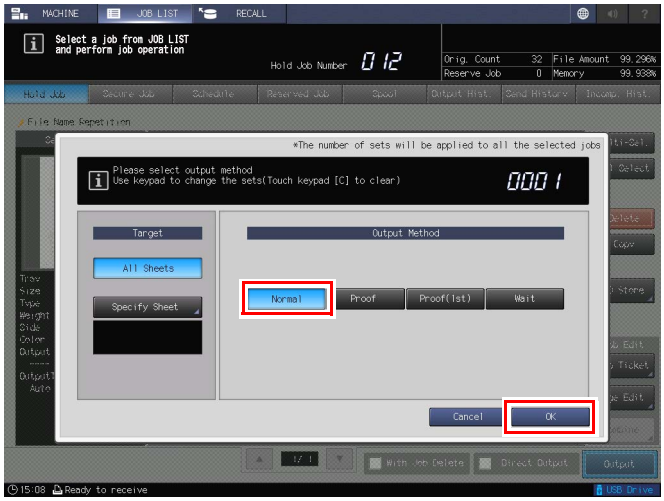
9 Press [New Store] or [Overwrite].

The setting is stored, and the display returns to the [Hold Job] screen.



10 Press [Output], select [Normal] in [Output Method], and press [OK].

The print job starts, and [Auto Inspection] is performed. If an error is detected by the automatic inspection, it is displayed in [IQ Detected Result]. The [Automatic Inspection Report] can be viewed on this machine or in Web Utilities of the **Auto Inspection Unit UK-301**.

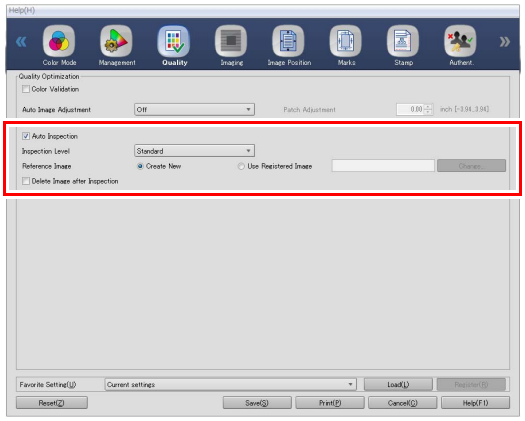


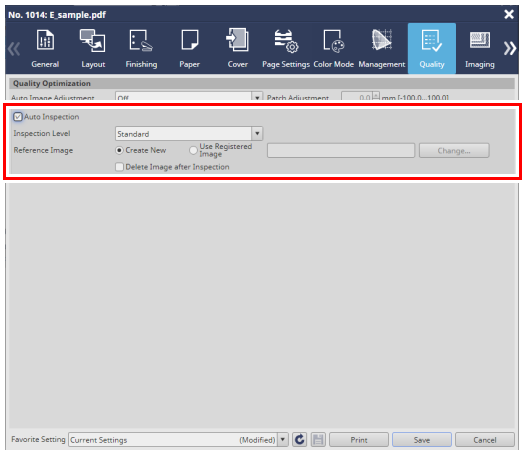
Tips

- Textured paper, blank insertion paper, punched paper, tab paper, and insertion paper are not targeted for automatic inspection.
- When using numbered paper, paper with page numbers printed, or the date/time stamp function, set Inspection Excluding Area by reference; you can perform automatic inspection. For details, refer to "7. Automatic Inspection Area" in this manual.
- To display [Change Level], press **Stop** on the **control panel** during printing. You can change the inspection level.

Tips

- The reference image can also be selected using JobCentro or AccurioPro Print Manager.





3.3 Creating a New Reference Image for Automatic Inspection Using a Wait Setting Job

Executing a job in Wait setting allows you to use the automatic inspection when outputting a print job such as Direct Print without holding it. This function is useful when you do not want to hold a job, for example, when immediately printing a job with a large amount of printing a job containing a large amount of data.

NOTICE

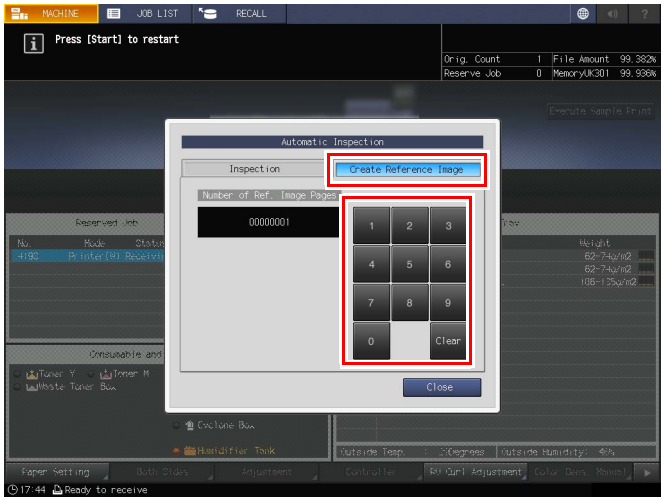
Before using this function, set [Wait Screen for Automatic Inspection] to [ON].

1 Output a print job in the Wait setting.

The [Auto Inspection] screen is displayed on the control panel.

➔ For details on the wait output procedure, refer to the HTML User's Guide.

2 Press [Create Reference Image], and enter [Number of Ref. Image Pages].

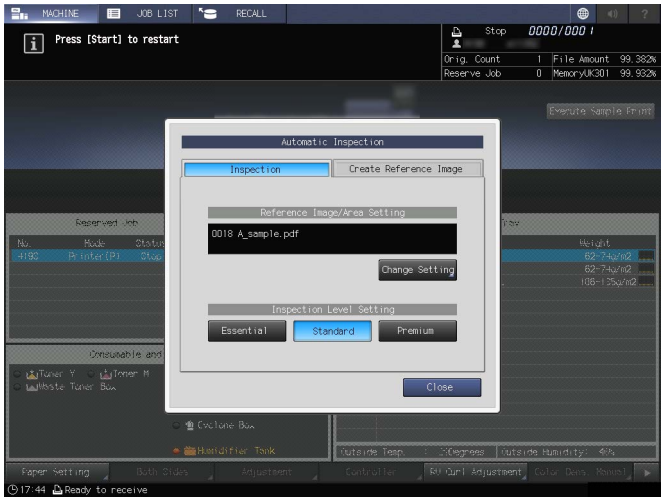


3 Press **Start** on the **control panel**.

One copy is output, and the reference image for automatic inspection is created. Check whether or not output paper is erroneous. After output, the [Auto Inspection] screen is automatically displayed on the **touch panel**.

4 Press [Inspection], and confirm [Reference Image/Area Setting] and [Inspection Level Setting].

The automatically created reference image file name is displayed in [Reference Image/Area Setting]. You can change the inspection level setting as needed.



5 Press **Start** on the **control panel**.

The print job starts, and [Auto Inspection] is performed. If an error is detected by the automatic inspection, it is displayed in [IQ Detected Result]. The [Automatic Inspection Report] can be viewed on this machine or in Web Utilities of the **Auto Inspection Unit UK-301**.

3.4 Selecting a Created Reference Image for Automatic Inspection Using a Wait Setting Job

When performing [Auto Inspection] using the created reference image for a job in the Wait setting, you need to select an image from the list.

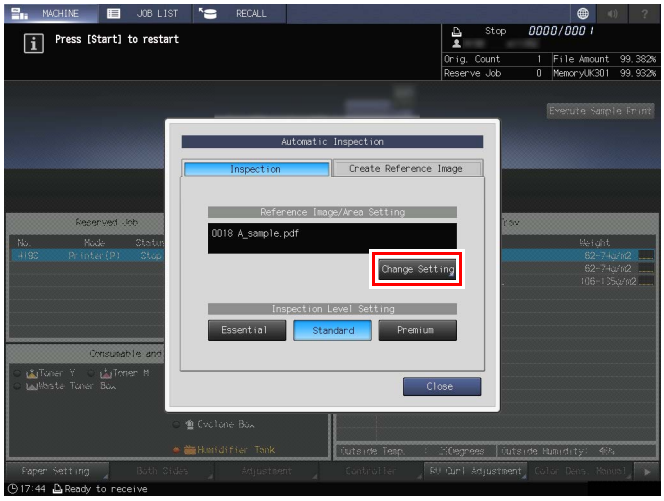
1 Output a print job in the Wait setting.

The [Auto Inspection] screen is displayed on the control panel.

➔ For details on the wait output procedure, refer to the HTML User's Guide.

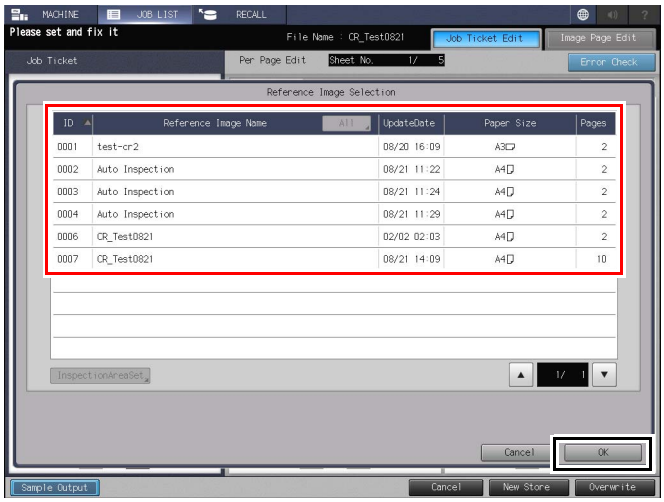
2 Press [Change Setting] under [Reference Image/Area Setting].

The [Reference Image Selection] screen is displayed.



3 Select the desired [Reference Image], and press [OK].

This returns to the [Auto Inspection] screen.



4 Press **Start** on the **control panel**.

The print job starts, and [Auto Inspection] is performed. If an error is detected by the automatic inspection, it is displayed in [IQ Detected Result]. The [Automatic Inspection Report] can be viewed on this machine or in Web Utilities of the **Auto Inspection Unit UK-301**.

4 Automatic Inspection Report

4 Automatic Inspection Report

4.1 Confirming the Automatic Inspection Report

When you want to check the result of [Auto Inspection], confirm [AutoInspect.Report], and take the appropriate action such as reprinting. The [Automatic Inspection Report] can be viewed on this machine or in Web Utilities of the **Auto Inspection Unit UK-301**.

NOTICE

To create [AutoInspect.Report], enable [Create Auto Inspection Report] before performing automatic inspection.

To display [AutoInspect.Report], configure [Automatic Inspection NIC Setting].

4.2 Viewing the report from the machine

Procedure

1 Press [AutoInspect.Report] on the [MACHINE] screen.

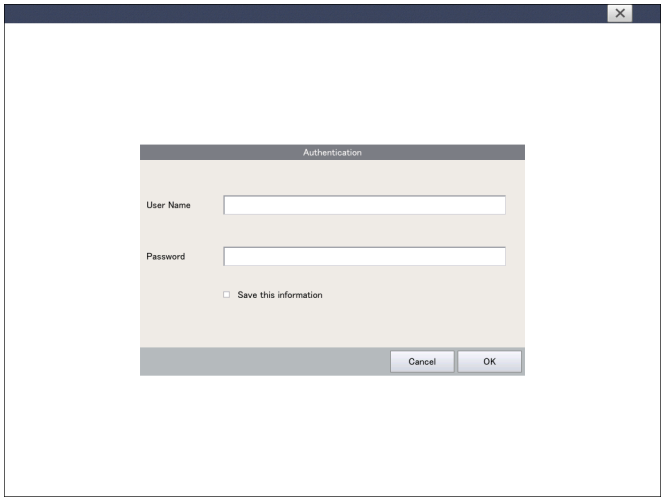
The login window opens.

2 Enter the user name and password for [User Name] and [Password] to log in.

[User Name]: webuser

Enter any password.

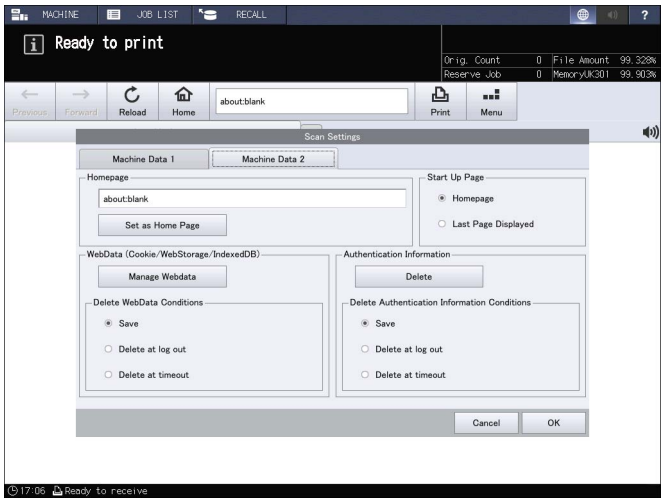
The [AutoInspect.Report] screen is displayed.



➔ To change [Password], select [UTILITY] - [Administrator Setting] - [UK-301 Security Settings] - [Web Access Password Setting]. After changing the password, turn the **sub power switch** of this machine OFF and ON.

➔ If you select the [Save this information] check box, [User Name] and [Password] are stored, so you do not need to enter them to log in the next time and after.

➔ To delete [User Name] and [Password] that are stored, press [Web Browser] on the [MACHINE] screen, select [Menu] - [Setting] - [Setting], and press [Delete] in [Machine Data 2].

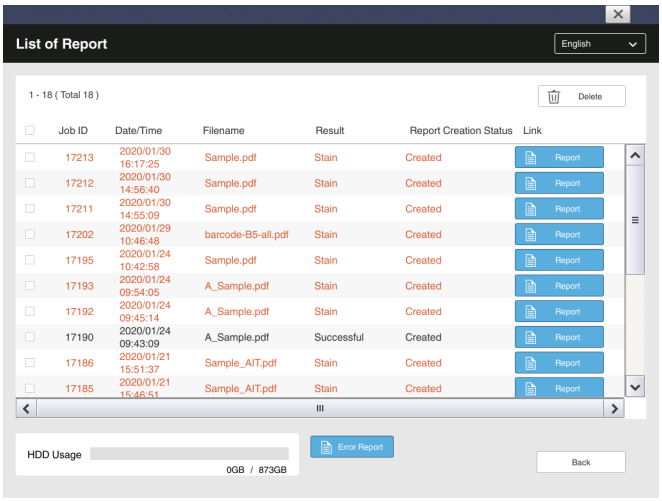


➔ When the machine is equipped with **Image Controller IC-313**, **Image Controller IC-314**, **Image Controller IC-315** or **Image Controller IC-417** [Save this information] is not available.

➔ Beyond that, you need to enter [User Name] and [Password] every time depending on the option configuration.

3 Press [Link (Report)].

A list of [Completed Job] and [Out of range] is displayed.



Display item	Description
[Job ID]	Displays the ID of the output job.
[Date/Time]	Displays the date and time at which the job is output.
[Filename]	Displays the file name of the output job.
[Result]	Displays the inspection result such as "Successful" or "Stain".
[Report Creation Status]	Indicates the report creation status. If the report has not been created, you will not be able to confirm the details in [Link(Report)].
[Link(Report)]	Allows you to confirm the details of the report.
[Error Report]	Displays a report list of errors that occurred while the job was executed. The report is output as a PDF, and then deleted automatically when the job is completed. If no errors occurred, this will not be displayed.

➔ You can switch the language to Japanese or English via the drop-down list on the upper right of the screen.

➔ When an error is detected, the character color is changed.

➔ If the HDD capacity of the **Auto Inspection Unit UK-301** reaches 100%, no report is created. Select an unnecessary report, and press [Delete] to delete such a report.

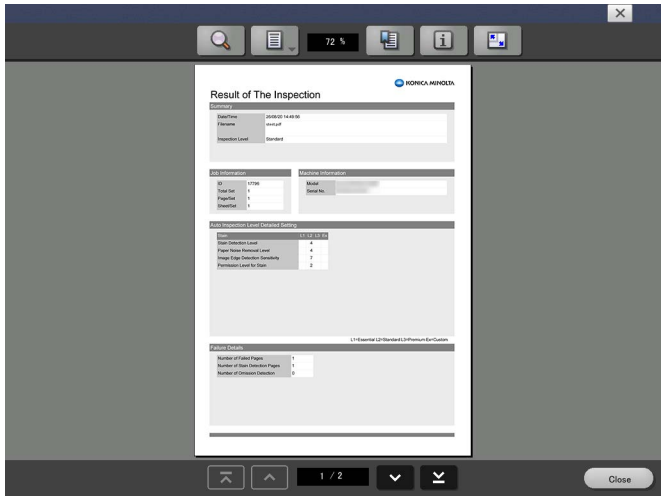
4 Press the file name under [Out of range], and also press [Display].

The Automatic Inspection Report screen is displayed.

To check [Completed Job], select Web Utilities of the **Auto Inspection Unit UK-301**.

The [Decoding result] is a report of the decode results of the numbers/barcodes. Access and check it from a browser.

5 Press "  ".
A list of out-of-range parts is displayed.



Key type	Description
	Searches for characters in a report. When the target is found, it is indicated by the green marker.
	Sets the page display unit to [Single Page] or [Synchronize Page].
	Allows you to check the page on which a stain is detected.
	Allows you to check information such as the file name or size.
	Allows you to change the screen display method such as enlargement or reduction.

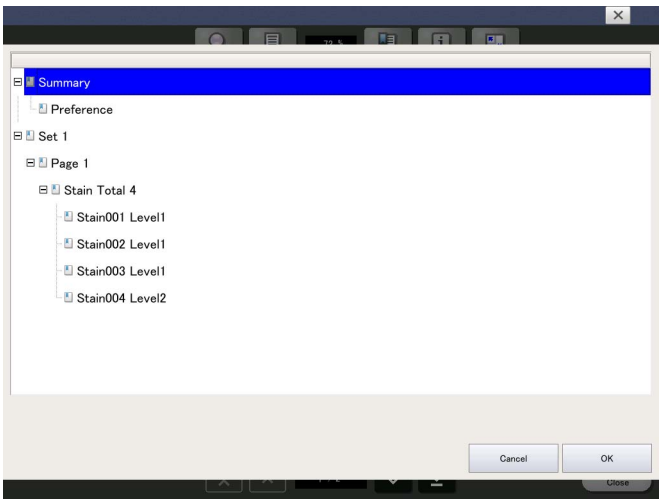
➔ Pressing [×] on the upper right of the screen returns to the [MACHINE] screen. Pressing [Close] on the lower right of the screen returns to the [Completed Job], [Out of range] screen.

➔ For details on Automatic Inspection Report, refer to "4.3 Viewing the report via Web Utilities of the Auto Inspection Unit UK-301" in this manual.

6 Select the part you want to check, and press [OK].

The detected page is displayed.

➔ For details on the detection location, refer to Web Utilities of the **Auto Inspection Unit UK-301**.



Type	Description
[Set]	Indicates the number of the set in which an out-of-range image is detected.
[Page]	Indicates the number of the page on which an out-of-range image is detected.
[Stain Total]	Indicates the total number of detected stains. Up to 20 stains are displayed.
[Stain(XXX) Level(n)]	Displays the stain level (n). For details on the stain level, refer to "2.1.2 [Automatic Inspection Level Setting]" in this manual. XXX: Serial No.
[Omission Total]	Indicates the total number of detected omissions. Up to 20 omissions are displayed.
[Omission(XXX) Level(n)]	Displays the omission level (n). XXX: Serial No.
[Barcode Total(n)]	Displays the number (n) of barcode or QR code errors.
[Blank(m)]	Displays the area in which the barcode or QR code was blank. m: Area No.
[Decode Error(m)]	Displays the area in which barcode or QR code decoding failed. m: Area No.
[1st/2nd Mismatch(m)]	Displays the area in which front/back mismatching of barcode or QR code occurred. m: Area No.
[Sequential Check Mismatch(m)]	Displays the area in which a sequential error of a barcode or QR code occurred. m: Area No.
[Serial No.(0-9)Total(n)]	Displays the number (n) of number errors.
[Blank(m)]	Displays the area in which the number was blank. m: Area No.
[Decode Error(m)]	Displays the area in which number decoding failed. m: Area No.
[1st/2nd Mismatch(m)]	Displays the area in which front/back mismatching of number occurred. m: Area No.
[Sequential Check Mismatch(m)]	Displays the area in which a sequential error of a number occurred. m: Area No.

Type	Description
[Alignment error]	Displayed when the system failed in alignment with the reference image.
[CSV Read Error]	Displayed when the system failed to create a report.
[Too Many Stains]	Displayed when many stains were detected.

4.3 Viewing the report via Web Utilities of the Auto Inspection Unit UK-301

Procedure

1 Open the Web browser.

For details on the browser operating environment of Web Utilities, refer to [Web Utilities] in the HTML User's Guide.

2 Enter the following URL in the address bar and press [Enter].

"http://< IP address of **Auto Inspection Unit UK-301**>/"

Example: When the IP address of the **Auto Inspection Unit UK-301** is set to "192.168.1.20", type "http://192.168.1.20/".

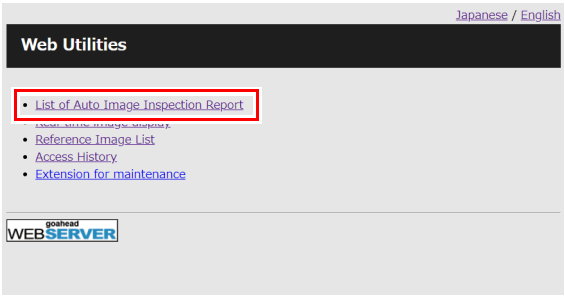
This displays the top page of Web Utilities of the **Auto Inspection Unit UK-301**.

NOTICE

*In [Automatic Inspection NIC Setting], specify the IP address of the **Auto Inspection Unit UK-301** in advance.*

3 Click [List of Auto Image Inspection Report].

The login window opens.



➔ To change the language, click [Japanese / English] on the upper-right side of the screen.

➔ In addition, [Access History] that contains the operation contents and [Extension for maintenance] of the menu for a service engineer (CE) are displayed on the top page of Web Utilities.

4 Enter the user name and password for [User Name] and [Password] to log in.

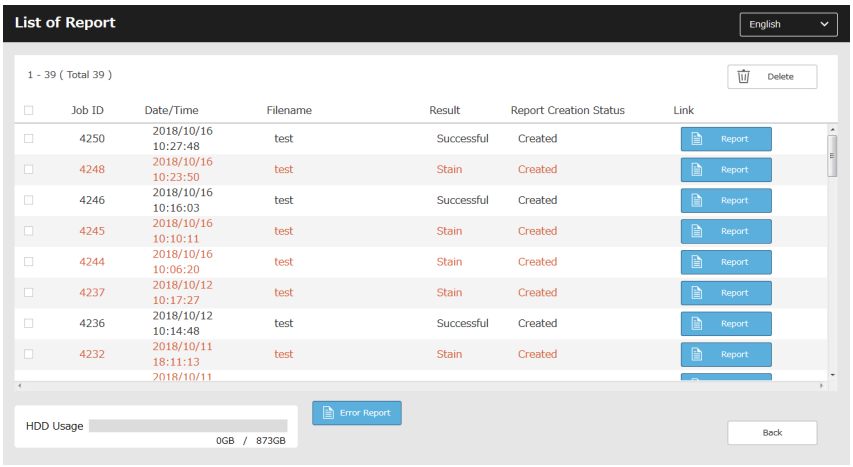
[User Name]: webuser

Enter the desired password for [Password].

When the log in process is completed, the [List of Report] screen is displayed.

➔ To change [Password], select [UTILITY] - [Administrator Setting] - [UK-301 Security Settings] - [Web Access Password Setting].

5 Confirm the target Automatic Inspection Report.



The following items are displayed in [List of Report].

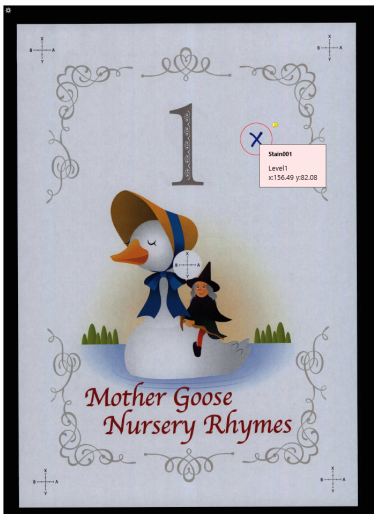
- [Job ID]
- [Date/Time]
- [Filename]
- [Result (Successful/Stain)]
- [Report Creation Status (Created/Uncreated)]
- [Link (Report)]
- [Error Report]

How to check the automatic inspection report

Click [Report] to display [Completed Job] and [Out of range].

- When an error is detected, the character color is changed.
- If the HDD capacity of the **Auto Inspection Unit UK-301** reaches 100%, no report is created. Select an unnecessary report, and click [Delete] to delete data.

Display item	Description
[Completed Job]	Shows a report of the printout that satisfies the inspection standard. Up to 1,000 pages can be created as a report. If the number of pages exceeds 1,000, the excess is divided into another PDF file.

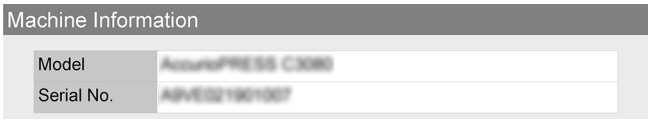
Display item	Description
[Out of range]	Shows a report of the printout that does not satisfy the inspection standard. If you view a report via Web Utilities of the **Auto Inspection Unit UK-301**, the problem part is framed in red, and the reason is displayed. 
[Decoding result]	Shows a report of the decode results of the numbers/barcodes. It is created as a CSV file.

Information such as the detection date and time as well as the inspection level are displayed in the report PDFs. For details on each item, refer to the following information.

[Summary]

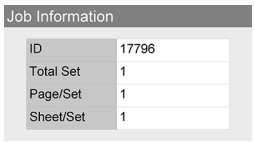
Name	Description
[Date/Time]	Displays the detection date and time.
[Filename]	Displays the file name that is used for printing.
[Inspection Level]	Displays the inspection level.

[Machine Information]



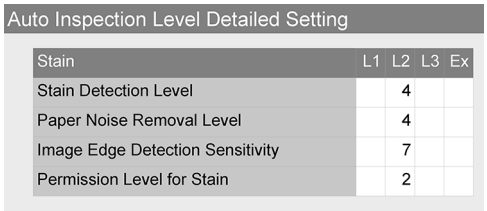
Name	Description
[Model]	Displays the model code that is used for printing when an automatic inspection is performed.
[Serial No.]	Displays the serial number of the model that is used for printing when an automatic inspection is performed.

[Job Information]



Name	Description
[ID]	Displays the ID of the job for which an automatic inspection is performed.
[Total Set]	Displays the number of sets specified for the job.
[Page/Set * Total Page]	Displays the number of pages for each copy. * When **Image Controller IC-313**, **Image Controller IC-314**, **Image Controller IC-315** or **Image Controller IC-417** is used, the total number of pages in a single job is displayed.
[Sheet/Set * Total Page]	Displays the number of sheets that are used for each copy. * When **Image Controller IC-313**, **Image Controller IC-314**, **Image Controller IC-315** or **Image Controller IC-417** is used, the number of sheets used for each job is displayed.

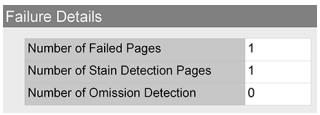
[Auto Inspection Level Detailed Setting]



Displays the items specified in [Automatic Inspection Level Setting]. For details, refer to "2.1.2 [Automatic Inspection Level Setting]" in this manual.

Name	Description
[Stain Detection Level]	Displays [Detection Level].
[Paper Noise Removal Level]	Displays [Paper Noise Removal Level].
[Image Edge Detection Sensitivity]	Displays [Image Edge Detection Sensitivity].
[Permission Level for Stain]	Displays [Permission Level for Stain].

[Failure Details]

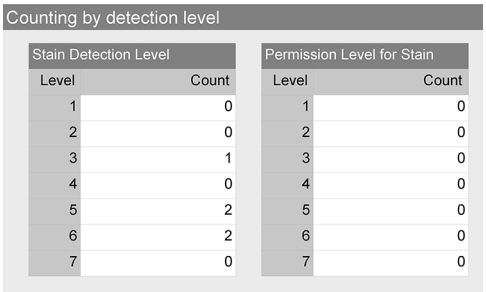


Failure Details

Number of Failed Pages	1
Number of Stain Detection Pages	1
Number of Omission Detection	0

Name	Description
[Number of Failed Pages]	Displays the number of pages that are judged to be out of range.
[Number of Stain Detection Pages]	Displays the number of pages in which a stain is judged to be a non-standard image.
[Number of Omission Detection]	Displays the number of pages in which an omission is judged to be a non-standard image.
[Number of Barcode Decode Error Pages]	Displays the number of pages in which a barcode / QR code reading or decoding error occurred.
[Number of Barcode Blank Pages]	Displays the area in which the barcode or QR code was blank.
[Number of Barcode 1st/2nd Mismatch Pages]	Displays the number of pages in which the front and back of a barcode or QR code did not match.
[Number of Barcode Sequential Check Mismatch Pages]	Displays the number of pages in which the ascending order or descending order of a barcode or QR code did not match.
[Number of Serial No.(0-9) Decode Error Pages]	Displays the number of pages in which a number reading or decoding error occurred.
[Number of Serial No.(0-9) Blank Pages]	Displays the number of pages in which the number was blank.
[Number of Serial No.(0-9) 1st/2nd Mismatch Pages]	Displays the number of pages in which the front and back of number did not match.
[Number of Serial No.(0-9) Sequential Check Mismatch Pages]	Displays the number of pages in which the ascending order or descending order of a number did not match.

[Counting by detection level]



Counting by detection level

Stain Detection Level

Level	Count
1	0
2	0
3	1
4	0
5	2
6	2
7	0

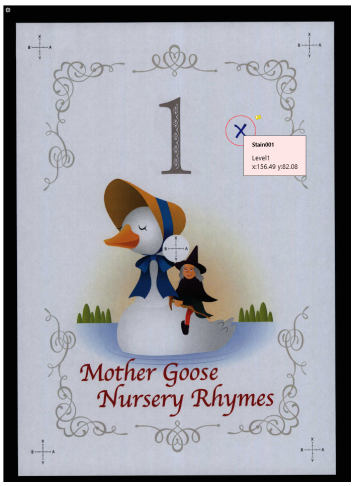
Permission Level for Stain

Level	Count
1	0
2	0
3	0
4	0
5	0
6	0
7	0

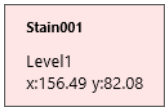
To display this item, set [Counted Error by Each Level] to On. For details on the procedure, refer to "2.1.1 About the Detailed Setting of Automatic Inspection" in this manual.

Name	Description
[Stain Deteciton Level]	Displays the detected stains for each level according to their size.
[Permission Level for Stain]	Displays the detected omissions for each level according to their size.

Out of range



The part related to the problem is framed in red, and details are displayed as shown below.



Name	Description
[Stain(XXX)]	Displays the number of detected stains. ("XXX" indicates a serial number.)
[Level(X)]	Displays the stain detection level. ("X" indicates the level.)
[x:XXX.XX] [y:XXX.XX]	Displays the stain position by using the upper left of the screen as the origin of coordinates. ("x" indicates the lateral position, and "y" indicates the vertical position.)

4.4 Checking the Automatic Inspection Report in PDF

Overview

Display items can be changed by opening the PDF file of the downloaded automatic inspection report using Adobe Acrobat.

This function displays stains or omissions judged to be in the allowable range as well as the specified [Inspection Excluding Area], and also allows you to change the color to display the inspection result.

NOTICE

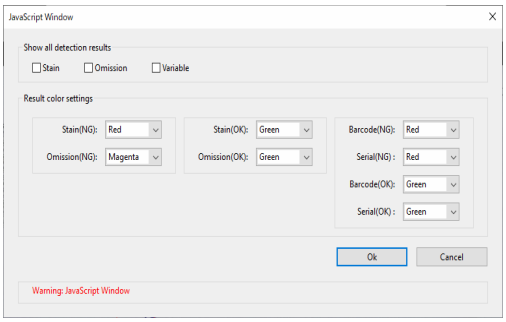
The following setting is required to use this function.

Enable [Enable Acrobat Javascript] in [Preferences] of Adobe Acrobat.

Reference

For details about how to set or use Adobe Acrobat, refer to Help of Adobe Acrobat.

Select [Preference] or from [Bookmarks] of Adobe Acrobat; a window is displayed. Set the required items, and click [OK].



Item name		Overview
[Show all detection results]	[Stain]	Select this check to enclose stains or omissions judged to be in the allowable range by a frame.
	[Omission]	
	[Variable]	Select this check box to display [Inspection Excluding Area], [Barcode Area], or [Serial No. (0-9) Area].
[Result color settings]	[Stain(NG)]	Sets the color of the frame to enclose image failures such as stains or omissions.
	[Stain(OK)]	
	[Omission(NG)]	
	[Omission(OK)]	
	[Barcode(NG)]	Sets the color of the frame to enclose a number or bar code reading error.
	[Serial(NG)]	
	[Barcode(OK)]	
	[Serial(OK)]	

5 Real-time Inspection Display

5 Real-time Inspection Display

5.1 Confirming the Inspection Result in Real Time

You can confirm the automatic inspection result in real time. This function displays the images that are loaded with **Intelligent Quality Optimizer IQ-501** during job execution.

Procedure

1 Open the Web browser.

For details on the browser operating environment of Web Utilities, refer to [Web Utilities] in the HTML User's Guide.

2 Enter the following URL in the address bar and press [Enter].

"http://<IP address of **Auto Inspection Unit UK-301**>/"

Example: When the IP address of the **Auto Inspection Unit UK-301** is set to "192.168.1.20", type "http://192.168.1.20/".

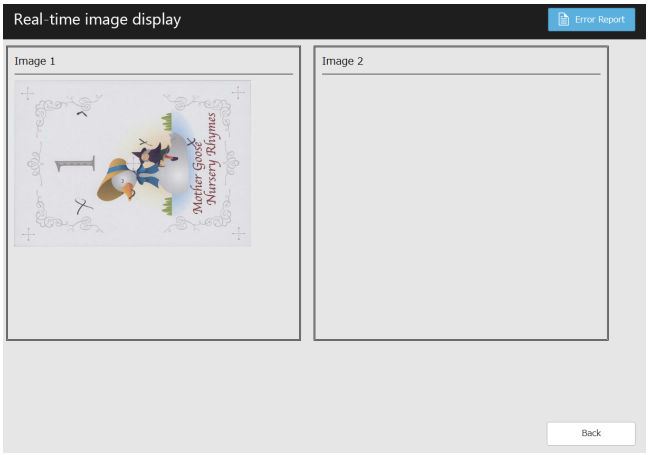
This displays the top page of Web Utilities of the **Auto Inspection Unit UK-301**.

NOTICE

*In [Automatic Inspection NIC Setting], specify the IP address of the **Auto Inspection Unit UK-301** in advance.*

3 Click [Real-time image display].

The [Real-time image display] screen is displayed. If the automatic inspection job is started in this state, the inspected images continue to be updated in real time. If stains or omissions outside the range are detected, [Error Report] is displayed at the top right of the screen.



4 Click [Error Report].

The AutoInspect.Report screen is displayed.

Tips

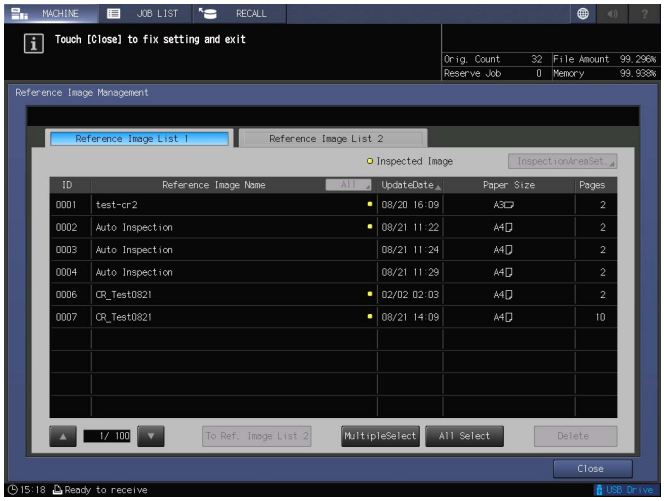
- The real-time inspection image is displayed in the orientation in which the image is scanned.
- Even if an out-of-range image is detected, a real-time inspection image continues to be updated until paper in the machine is output.

6 Reference Image

6 Reference Image

6.1 Managing Reference Images

You can confirm the previously created reference images.



Tips

- Up to 1,000 reference images can be stored in [Reference Image List 1], and also up to 1,000 ones in [Reference Image List 2]. In some cases, up to the maximum number of reference images cannot be stored depending on the paper size to be read.

Setting item	Description
[Reference Image List 1]	You can confirm the images registered in [Reference Image List 1]. The round yellow icon is marked for the [Reference Image Name] row of the image that was previously used for automatic inspection. It is recommended that frequently used images are registered in [Reference Image List 1]. When performing automatic inspection, you need to place reference images in [Reference Image List 1].
[Reference Image List 2]	You can confirm the images registered in [Reference Image List 2]. The round yellow icon is marked for the [Reference Image Name] row of the image that was previously used for automatic inspection. It is recommended that images that are less frequently used are registered in [Reference Image List 2]. When performing automatic inspection, you need to place reference images in [Reference Image List 1].
[InspectionAreaSet.]	Specify the inspection area of the selected reference image. For details, refer to "7. Automatic Inspection Area" in this manual.
[MultipleSelect]	Select multiple reference images. When multiple reference images are selected, you cannot move the list or set the inspection area.
[All Select]	Select all the reference images.
[Delete]	Deletes the selected reference image.
[To Ref. Image List 2]	Moves the selected reference image to [Reference Image List 2].
[To Ref. Image List 1]	Moves the selected reference image to [Reference Image List 1].

Tips

You can also confirm the reference images from [Reference Image List] of Web Utilities of the **Auto Inspection Unit UK-301**.

7 Automatic Inspection Area

7 Automatic Inspection Area

7.1 What Is the Automatic Inspection Area?

Overview

Set an area that is not subject to automatic inspection, or set an area that is subject to special inspection, such as variable printing, for example by changing part of an image intentionally. Efficient inspection is enabled by preventing unnecessary errors and automating checks such as serial number printing.

There are four types of automatic inspection areas.

Inspection Excluding Area

Specify the area that is not targeted for automatic inspection.

Barcode Area

Sets an area targeted for barcode inspection. This function reads and decodes the barcode in the target area. You can also check whether the numeric value changes sequentially.

The barcode area is compatible with the following types of barcodes.

- CODE39
- CODE93
- CODE128
- JAN(EAN)
- ITF
- NW-7
- UPC
- QR Code
- PDF417
- Aztec Code

The read barcode must satisfy the following conditions.

- Narrow bar width: 0.3 mm / 0.01 inch or more
- Cell size: 0.35 mm / 0.01 inch or more
- Background color: White
- There must be a margin of at least 5 mm around text.

Tips

- If [Barcode Area] is selected in [Select Area Type], sequential check can be set. For details, refer to "8.4 Performing Sequential Check for the Barcode Area or Serial No. (0-9) Area" in this manual.

Serial No. (0-9) Area

Sets an area targeted for serial No. (0-9) inspection.

This function reads and decodes the number in the target area. You can also check whether the numeric value changes sequentially. The read number must satisfy the following conditions.

- Font type: Gothic / Arial
- Font size: 8 points or more
- Background color: White
- Number of characters: 20
- There must be a margin of at least 5 mm / 0.2 inch around text.

Tips

- If [Serial No. (0-9) Area] is selected in [Select Area Type], sequential check can be set. For details, refer to "8.4 Performing Sequential Check for the Barcode Area or Serial No. (0-9) Area" in this manual.
- If a space between numbers in the target area is narrow when a number is read in [Serial No. (0-9) Area], a recognition error may occur.
- If [Barcode Area] or [Serial No. (0-9) Area] is selected in [Select Area Type], the decoding result is created as a CSV file.

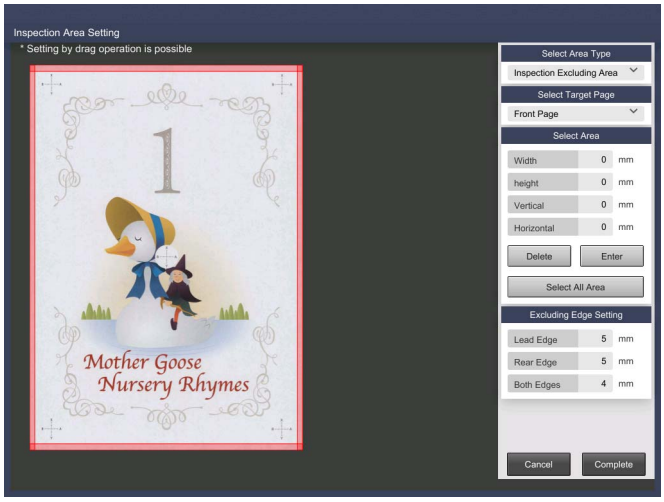
Specified Inspection Level Area

You can set another inspection level to the specified area. For details on how to set the automatic inspection level, refer to "2.1.2 [Automatic Inspection Level Setting]" in this manual.

7.2 Setting an Inspection Area

Set an area that is not subject to automatic inspection, or set an area that is subject to special inspection, such as variable printing, for example by changing part of an image intentionally.

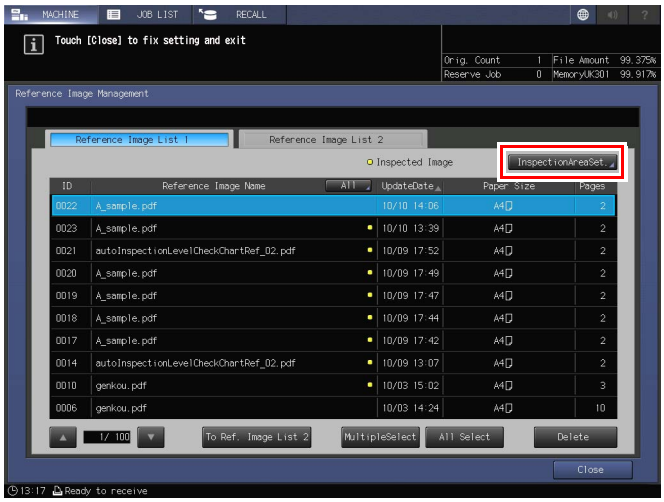
Efficient inspection is enabled by preventing unnecessary errors and automating checks such as serial number printing.



Tips

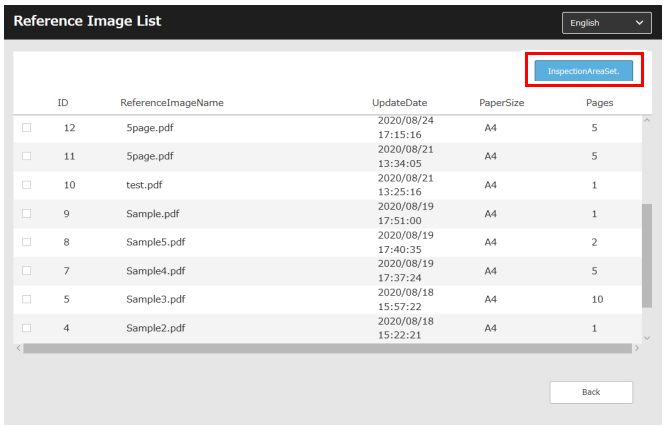
The preview image of this function is displayed in the paper feed direction, not the crosswise direction, as the vertical direction.

1 Press [InspectionAreaSet.] on the [Reference Image Management] screen.

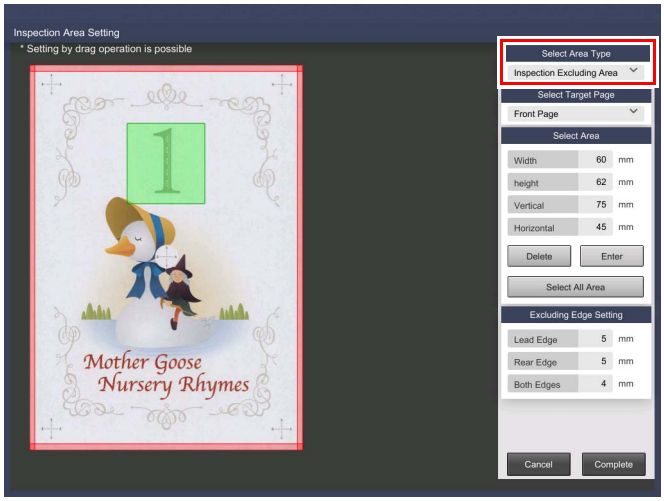


➔ You can also select [Reference Image Selection] - [InspectionAreaSet.] on the [Job Ticket] screen to specify the desired area.

➔ You can also set an inspection area from [InspectionAreaSet.] on the [Reference Image List] screen of Web Utilities.



2 Set the inspection area on the setting screen.



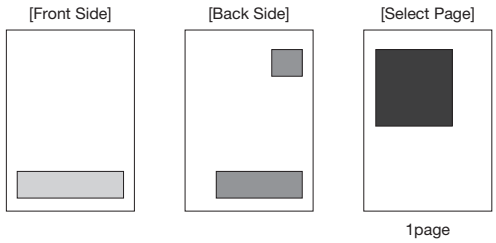
Display item	Description
[Select Area Type]	Specify the type of area to set.
[Select Target Page]	Select the page that is targeted for automatic inspection. There are three types of pages: [Front Page], [Back Page], and [Select Page], in each of which you can specify a different area. Only one page is specifiable for [Select Page].
[Select Area]	Specify an area for the page you selected in [Select Target Page]. You can also drag the desired area to specify it. Up to 30 areas can be specified in a single page. The allowable range is 0 mm to 488 mm. * If [Select All Area] is selected, all the target pages are specified as areas. Use this option when specifying the back side for 1-sided printing.
[Excluding Edge Setting]	Set an area that is not subject to automatic inspection at the paper edge. To set an area, select [Inspection Excluding Area] in [Select Area Type]. You can change the default setting in [IQ Function Setting]. For details, refer to "2.1.1 About the Detailed Setting of Automatic Inspection" in this manual.
[Sequential Check]	Configure the setting to inspect whether the serial number or barcode in the specified area has been correctly changed. To configure this setting, select [Barcode Area] or [Serial No. (0-9) Area] in [Select Area Type]. This function is optional. For details, contact your service representative.
[Zoom In/Out]	Changes the display magnification of the target side in the range from 1.5 times to 0.5 times. To reset the magnification, press the button with the arrow mark. * This item is only displayed when the Inspection Area screen is displayed from the **control panel**.

3 Press [Complete].

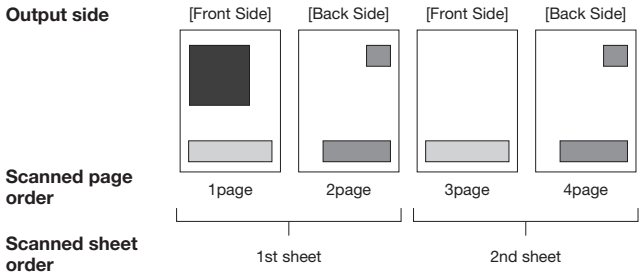
Tips

- The sides and pages selected in [Select Target Page] are ordered as read by **Intelligent Quality Optimizer IQ-501** when a reference image is created.

Setting example



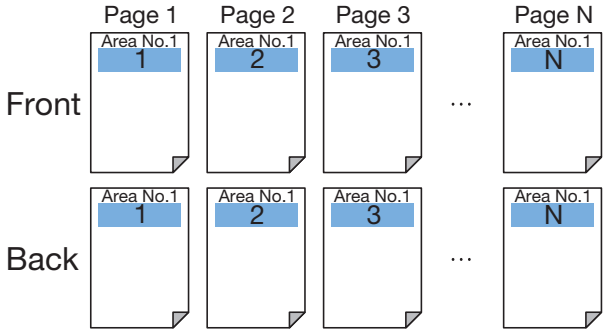
Automatic inspection execution example



Tips

Selecting [VDP area match(1st/2nd) ON] automatically checks whether the same barcode is output to the front and back pages, or whether the serial number was correctly changed. This item is displayed in [Select Area] when the same area No. is specified in [Front Page] and [Back Page].

VDP area match execution example



8 Output Setting

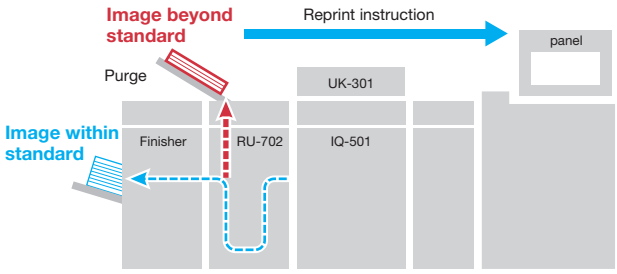
8 Output Setting

8.1 Outputting a Printout with an Error Detected to Another Tray

Overview

Output a printout, in which an error is detected by automatic inspection, to the **Purge Tray**, and perform re-printing. In this case, the paper left in the machine at the same time is also output to the **Purge Tray** to ensure the page order of the printout remains as intended.

- Example shown in this manual



This example describes a system configuration to output a printout with an error detected and paper left in the machine to the **Purge Tray** of the **Relay Unit RU-702** and perform reprinting.

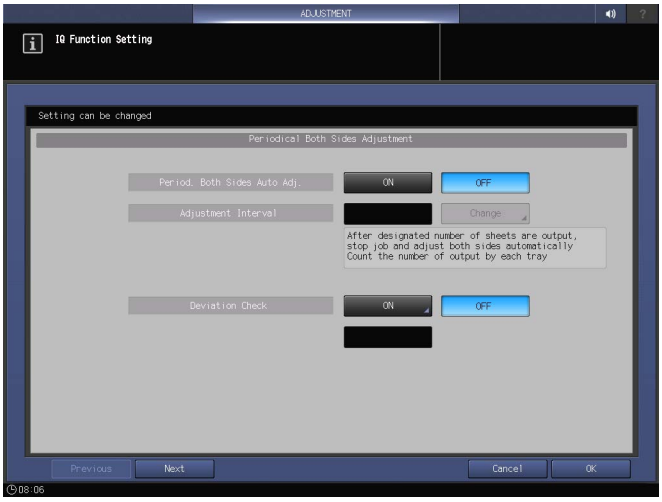
Intended environment

Item name	Name
Operating system	Windows10
Application	Adobe Acrobat Reader DC
Printer driver	**PS Plug-in driver**
Image Controller	**Image Controller IC-604** or **Image Controller IC-605**
Output Option	**Intelligent Quality Optimizer IQ-501** **Auto Inspection Unit UK-301** **Relay Unit RU-702** **Video Interface Kit VI-511** **Video Interface Kit VI-513**

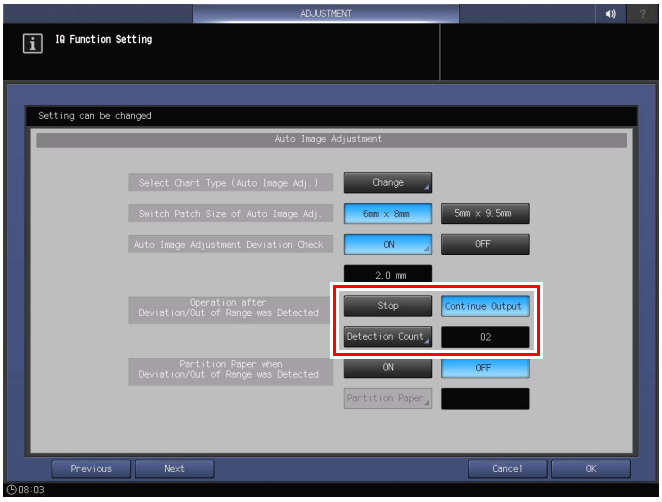
Procedure

1 Press [IQ Function Setting] on the [MACHINE] screen.

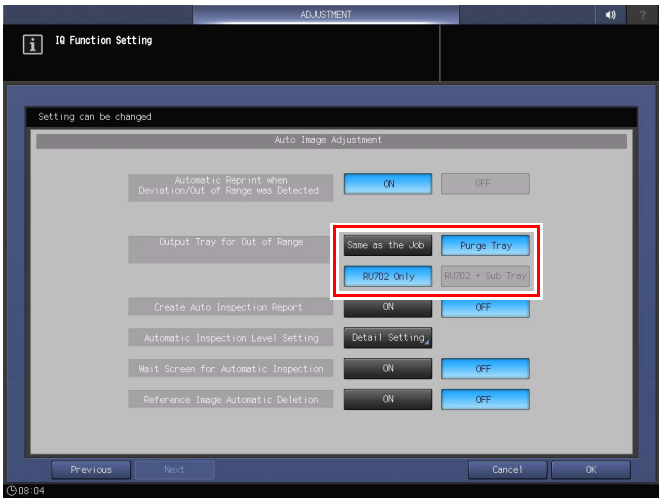
The [IQ Function Setting] screen is displayed.



2 Select [Continue Output] in [Operation after Deviation/Out of Range was Detected], and enter [Detection Count] using the keypad on the screen.



3 Select [Purge Tray] of [Output Tray for Out of Range].



4 Press [OK].

5 Automatic inspection and printing are performed.

For details, refer to "3. Performing Automatic Inspection" in this manual.

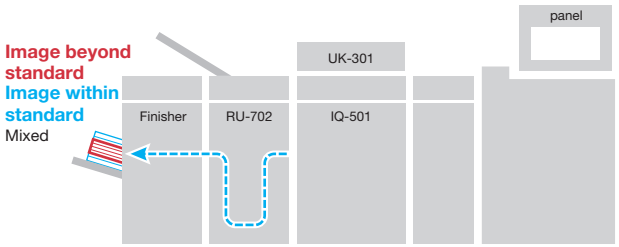
If an error is detected during printing, the printout subject to the detected error and paper left in the machine at the same time are output to the **Purge Tray**.

8.2 Outputting a Printout with an Error Detected to the Same Tray

Overview

Output a printout, in which an error is detected by automatic inspection, to the same tray as normal printouts, not the **Purge Tray**. Reprinting is not performed to avoid pages from being duplicated. This setting is available if you want to reduce paper loss or use paper remaining in the machine at the same time.

- Example shown in this manual

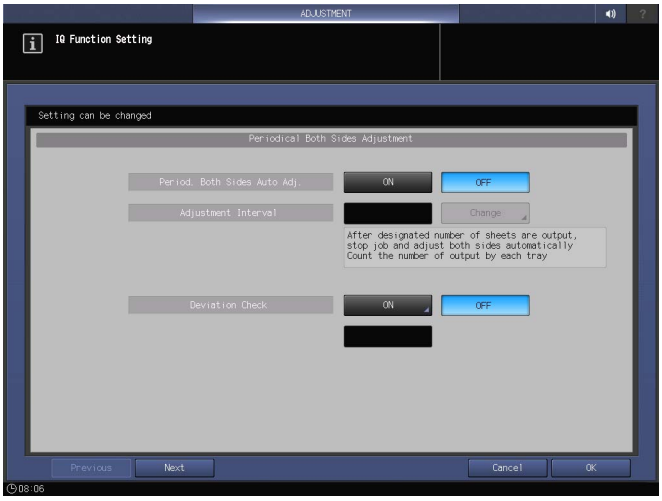


In this example, a normal printout and a printout with an error detected are mixed in the same tray. Check the automatic inspection report, and manually take the appropriate action.

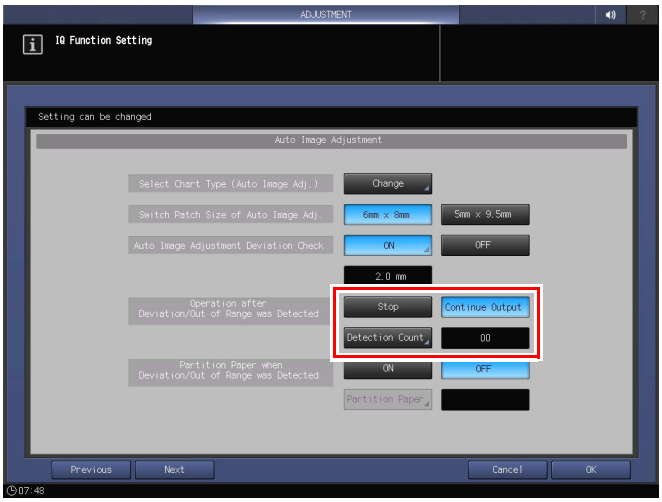
Procedure

1 Press [IQ Function Setting] on the [MACHINE] screen.

The [IQ Function Setting] screen is displayed.

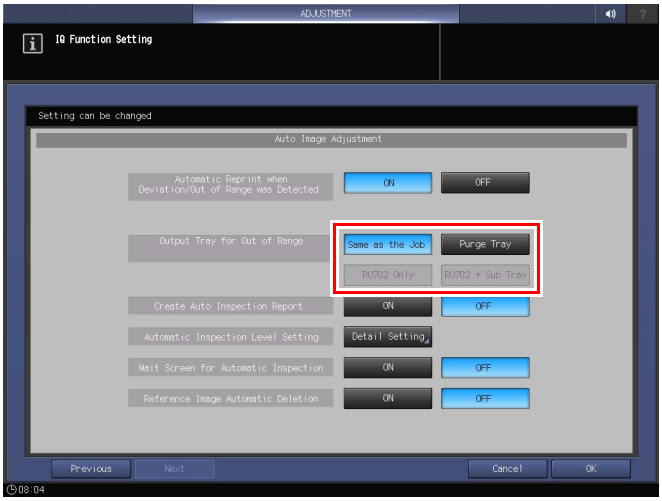


2 Select [Continue Output] in [Operation after Deviation/Out of Range was Detected], and type "00" for [Detection Count] using the keypad on the screen.

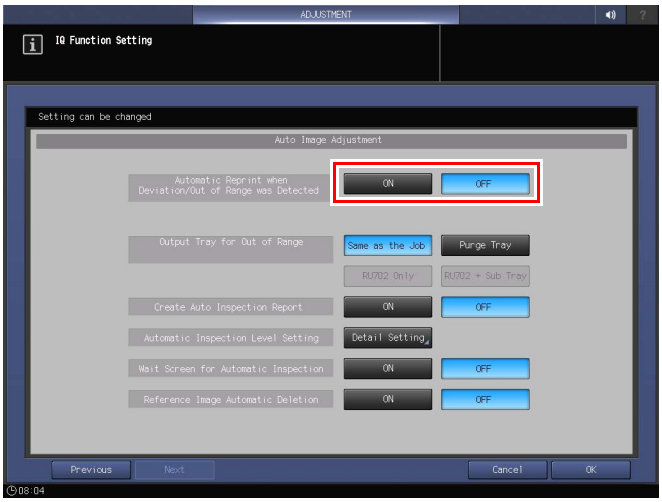


Printing is continued even if an error is detected multiple times.

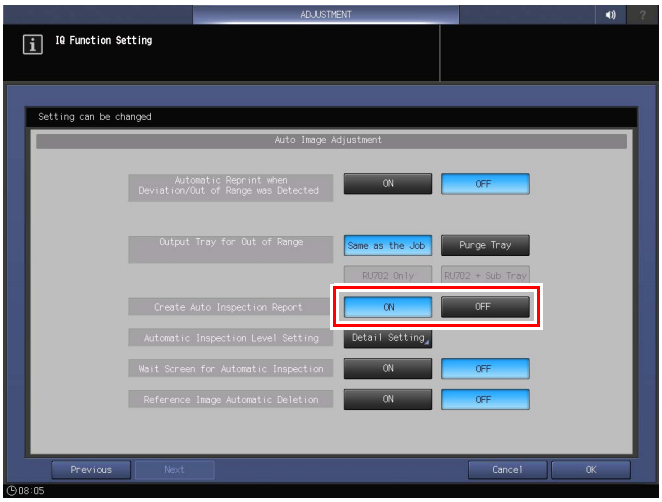
3 Select [Same as the Job] of [Output Tray for Out of Range].



4 Select [OFF] in [Automatic Reprint when Deviation/Out of Range was Detected].



5 Select [ON] in [Create Auto Inspection Report].



6 Press [OK].

7 Automatic inspection and printing are performed.

For details, refer to "3. Performing Automatic Inspection" in this manual.

When an error is detected during printing, a printout is also output to the same tray as a normal printout.

8 Check the automatic inspection report.

For details, refer to "4. Automatic Inspection Report" in this manual.

9 Check the printout.

Check the actual printout based on the information in the automatic inspection report, and take the appropriate action as needed.

8.3 Decoding the Barcode Area or Serial No. (0-9) Area to Check the Contents

Overview

Decode the barcode or number in the barcode inspection or serial No. (0-9) inspection area, and check the contents. This section describes the setting method.

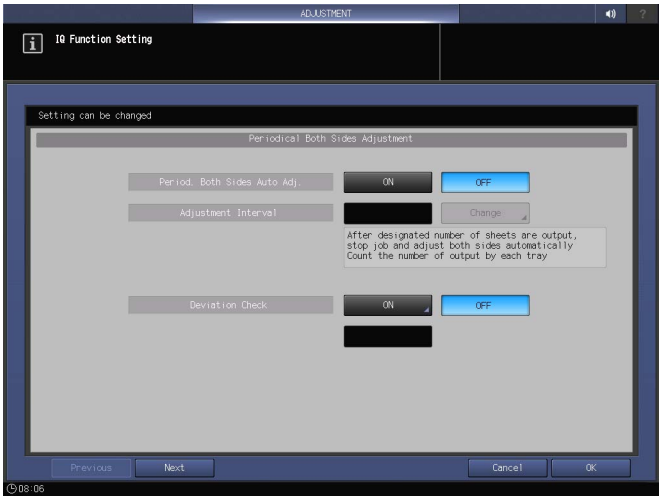
Intended environment

Item name	Name
Operating system	Windows10
Application	Adobe Acrobat Reader DC
Printer driver	**PS Plug-in driver**
Image Controller	**Image Controller IC-604** or **Image Controller IC-605**
Output Option	**Intelligent Quality Optimizer IQ-501** **Auto Inspection Unit UK-301** **Relay Unit RU-702** **Video Interface Kit VI-511** **Video Interface Kit VI-513**

Procedure (Creating a Reference Image)

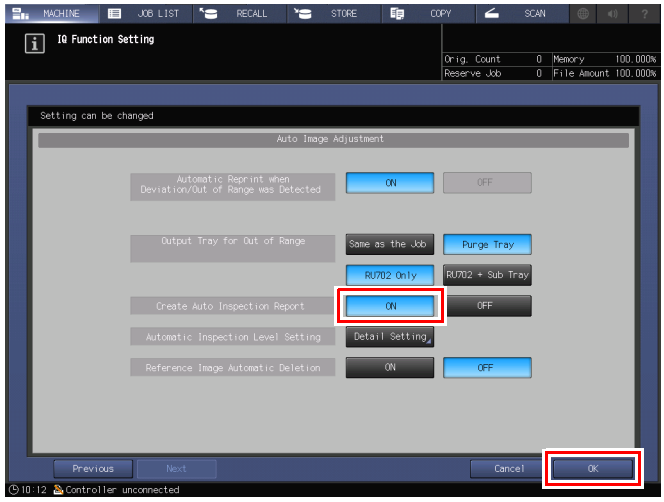
1 Press [IQ Function Setting] on the [MACHINE] screen.

The [IQ Function Setting] screen is displayed.



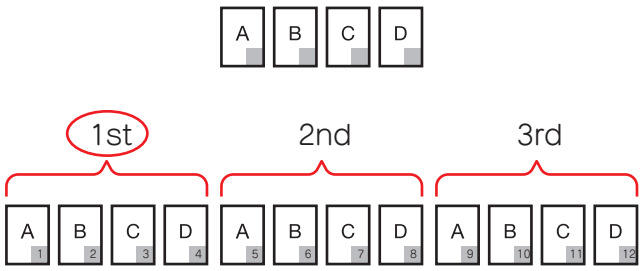
➔ You can also select **Utility/Counter** - [User Setting] - [Common Setting] or **Utility/Counter** - [Administrator Setting] - [Common Setting] to configure the setting.

2 Select [ON] in [Create Auto Inspection Report], and press [OK].



3 Hold a print job for creating a reference image on this machine.

➔ When preparing a print job for creating a reference image, select only one set from the repeated parts.



A to D: Reference image

Gray part: Variable area

This figure shows that inspection is repeated three times every four reference images (A, B, C, and D) when there are 12 sheets of variable jobs. The inspection repetition count varies depending on the number of job sheets.

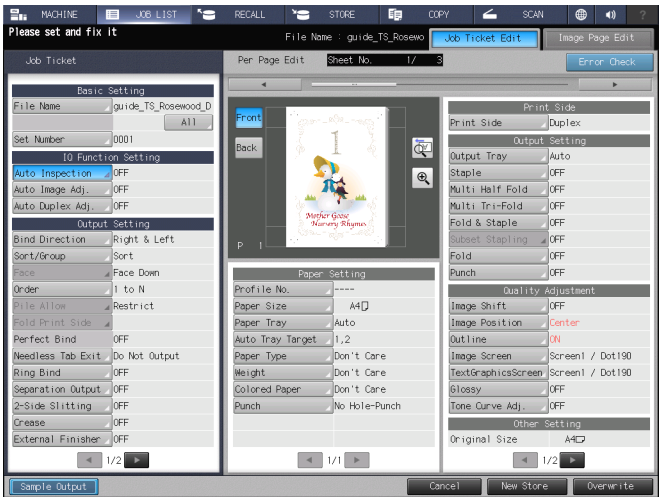
➔ When printing via the printer driver, change the storage destination in the [Workflow] tab of the **PS Plug-in driver**.

➔ For details on how to hold a job, refer to [Job Management] in the HTML User's Guide.

4 Press [JOB LIST] on the [MACHINE] screen to display the [Hold Job] screen.

5 Select the held print job, and press [Job Ticket].

The [Job Ticket Edit] screen is displayed.



6 Press [Auto Inspection], set [Inspection Setting] to [ON], and enable [Create New] in [Reference Image Setting].

➔ For details on the procedure, refer to "3.1. Creating a New Reference Image for Automatic Inspection" in this manual.

7 Press [Sample Output].

A reference image for automatic inspection is created.

8 Check the contents of the created reference image.

➔ The printed data is registered as a reference image. The file name of the reference image is the same as the original.

➔ The printed data is also registered and displayed as a reference image in [Reference Image Management] - [Reference Image List 1] on the [MACHINE] screen. For details, refer to "6.1. Managing Reference Images" in this manual.

➔ If you want to recreate a reference image as the result of checking the contents, execute steps 1 to 7 again.

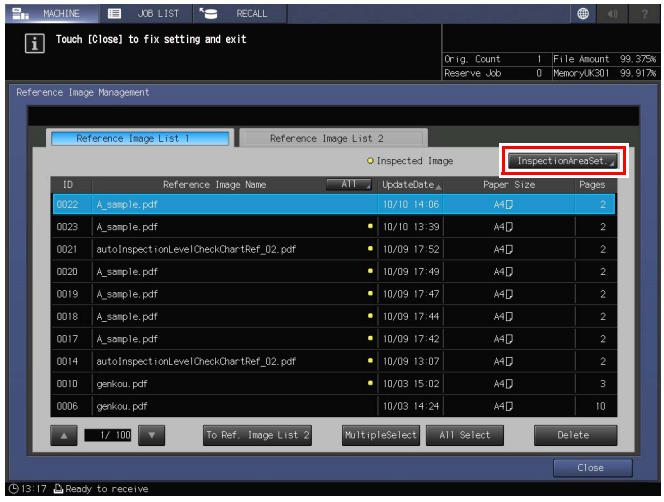
Procedure (Setting an Inspection Area)

1 Press [Reference Image Management] on the [MACHINE] screen.

The [Reference Image Management] screen is displayed.

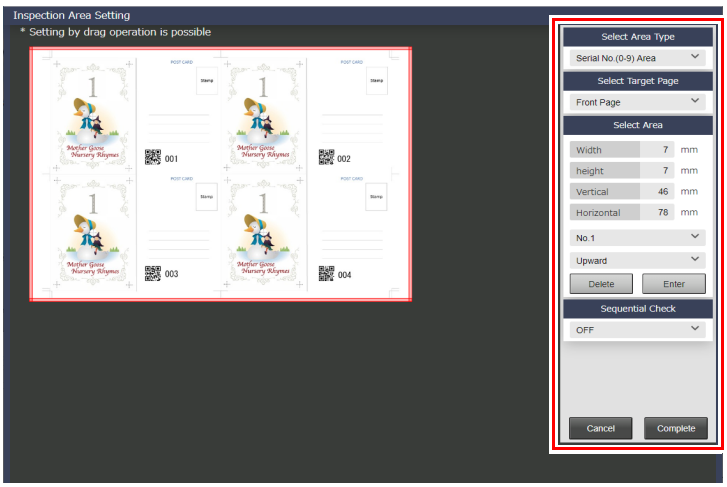
2 In [Reference Image List 1], select the row of the reference image created in "Procedure (Creating a Reference Image)", and press [InspectionAreaSet].

The [InspectionAreaSet.] screen is displayed.



3 Set the inspection area on the setting screen.

➔ In this example, set the serial No. (0-9) area.



4 Select [Serial No. (0-9) Area] in [Select Area Type].

5 Select the page to set the inspection area in [Select Target Page].

➔ If [Select Page] is specified, [Front Page] and [Back Page] cannot be set.

6 In [Select Area], specify an area for the page you selected in [Select Target Page].

➔ Enter the numeric value, or use the mouse to drag the inspection area to set it.

7 Press [Enter].

Area Setting is completed.

8 When you want to set two or more inspection areas, select [No.2] and subsequent numbers in the menu list of No. Then, execute steps 6 and 7 again.

➔ You can set up to 30 inspection areas in each of [Front Page] and [Back Page].

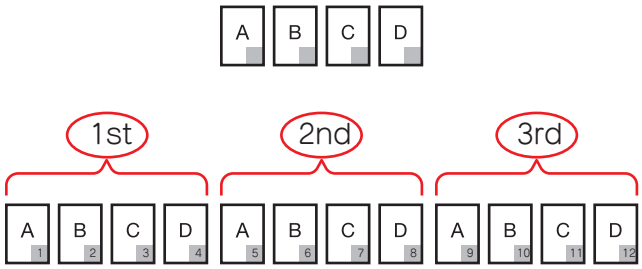
➔ To delete the setting, select the No. you want to delete, and press [Delete].

➔ If you want to change an area other than the specified inspection area, set [Inspection Excluding Area]. For details on the procedure, refer to "7.2. Setting an Inspection Area" in this manual.

9 Press [Complete].

Procedure (Decoding)

1 Hold the print job including all the repeated parts on this machine.



2 Press [JOB LIST] on the [MACHINE] screen to display the [Hold Job] screen.

3 Select the print job held in step 1, and press [Job Ticket].

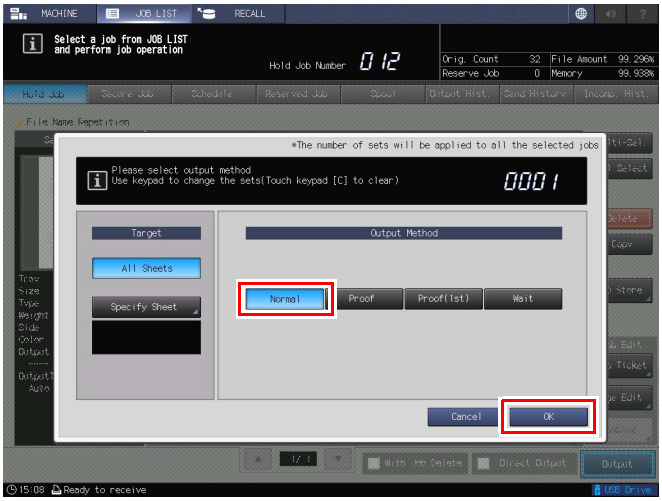
The [Job Ticket Edit] screen is displayed.

4 Press [Auto Inspection], set [Inspection Setting] to [ON], enable [Use Registered Image] in [Reference Image Setting], and select the reference image created in "Procedure (Setting an Inspection Area)".

➔ For details on the procedure, refer to "3.2. Selecting the Created Reference Image for Automatic Inspection" in this manual.

5 Press [Output].

6 Press [Normal] in [Output Method], and press [OK].



Printing starts, and data in the inspection area is decoded from the print image.

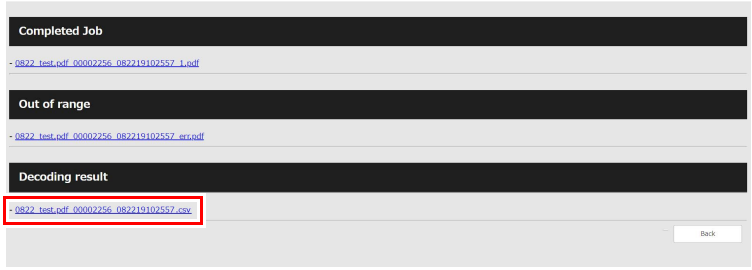
➔ You can check the decoding result (CSV file) in the automatic inspection report.

7 Confirm the automatic inspection report in Web Utilities of the **Auto Inspection Unit UK-301**.

➔ For details on how to view the automatic inspection report, refer to steps 1 to 5 in "4.3 Viewing the Report via Web Utilities of the Auto Inspection Unit UK-301" in this manual.

8 Click [Report] of the printed job, and click the file name of [Decoding result] on the displayed screen.

The CSV file of the decoding result is downloaded.



9 Compare the original data with the CSV file data of the decoding result.

➔ If data match, it means that the data of the inspection area has been correctly printed.

➔ If an error is found in the decoding result, check the original data and the inspection area setting. Also, check whether the inspection target is within the range of specifications.

8.4 Performing Sequential Check for the Barcode Area or Serial No. (0-9) Area

Overview

You can check whether consecutive numbers or barcodes in the barcode inspection or serial No. (0-9) inspection area have been changed correctly. This section describes the setting method.

Intended environment

Item name	Name
Operating system	Windows10
Application	Adobe Acrobat Reader DC
Printer driver	**PS Plug-in driver**
Image Controller	**Image Controller IC-604** or **Image Controller IC-605**
Output Option	**Intelligent Quality Optimizer IQ-501** **Auto Inspection Unit UK-301** **Relay Unit RU-702** **Video Interface Kit VI-511** **Video Interface Kit VI-513**

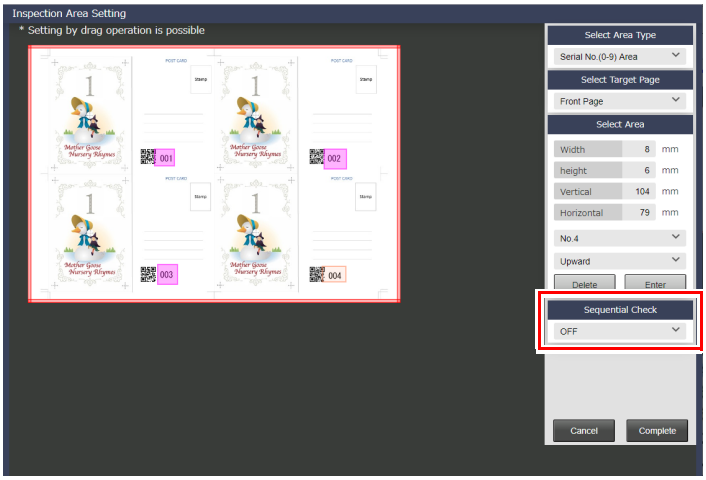
Procedure (Creating a Reference Image)

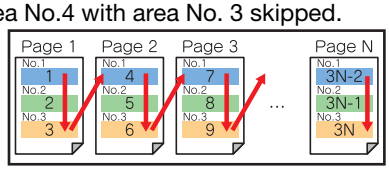
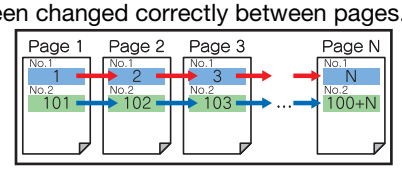
1 Create a reference image, referring to "Procedure (Creating a Reference Image)" of "8.3 Decoding the Barcode Area or Serial No. (0-9) Area to Check the Contents" in this manual.

Procedure (Setting an Inspection Area)

1 Set the inspection area, referring to steps 1 to 8 in "Procedure (Setting an Inspection Area)" of "8.3 Decoding the Barcode Area or Serial No. (0-9) Area to Check the Contents" in this manual.

2 Select the [Sequential Check] method from the menu list.



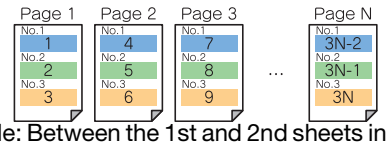
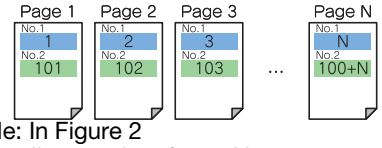
Display item	Description
[OFF]	Does not perform sequential checking.
[Check the data inside a page]	Check whether the numbers that have been sequentially arranged on one page have been correctly changed based on the area No. The area No. does not need to be successive. Example: When there are area No.1, area No.2, and area No.4 (area No.3 is skipped), sequential check is performed in the order of area No.1, area No.2, and area No.4 with area No. 3 skipped. 
[Check the data between pages (only within the same area)]	Check whether the number set in each area No. has been changed correctly between pages. 

3 Press [Complete].

Procedure (Decoding)

1 Decode the data of the inspection area, and download the CSV file, referring to steps 1 to 8 in "Procedure (Decording)" of "8.3 Decoding the Barcode Area or Serial No. (0-9) Area to Check the Contents" in this manual.

2 Confirm the downloaded CSV file data.

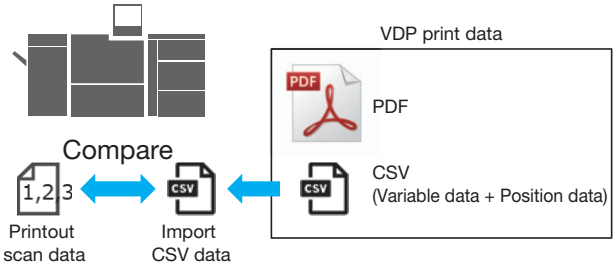
Setting item	Check item
[Check the data inside a page]	• The decoding results of area No. are arranged in regular order. • The decoding results of the last area No. in a page and those of the first area No. in the next sheet are arranged in regular order. 1.  Example: Between the 1st and 2nd sheets in Figure 1 The decoding results of area No. 4 in the first sheet and those of area No. 1 in the second sheet are arranged in the order of "3" to "4", so there is no problem.
[Check the data between pages (only within the same area)]	• The decoding results for each area No. are arranged sequentially between sheets. 2.  Example: In Figure 2 The decoding results of area No. 1 are arranged in regular order like "1, 2, 3" between pages, so there is no problem. Also, the decoding results of area No. 2 are arranged in regular order like "101, 102, 103", so there is no problem.

➔ If an error is found in [Sequential Check], check the decoding results and the original data (print data). Also, check whether the inspection area or the sequential check setting is within the range of specifications.

8.5 Variable Data Inspection Function

This function automatically inspects whether or not variable printing of numeric values or barcodes is performed correctly by collating the CSV file of VDP print data with the actual printout in real-time.

Overview



NOTICE

The following optional unit is required to use the Variable Data Inspection function.

Variable Data Inspection Kit UK-312

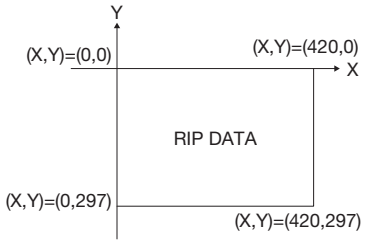
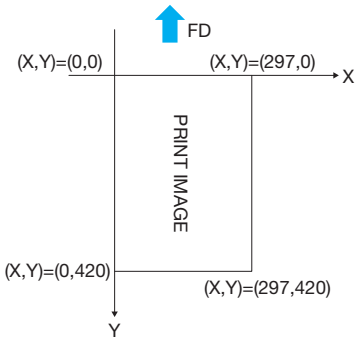
Tips

- You can only perform the VDP data comparison without the automatic inspection.
- The automatic inspection can be combined with the Variable Data Inspection function.

Procedure (Preparing the CSV File to Collate)

1 Check that the collated CSV file is formatted as shown below.

No.	Name	Description
1	Setting Quantity	Number of setting items related to the entire job. Select the required items from the following: JobName and Ascending or Descending Order. To only set "Ascending or Descending Order", type "1". To set both, type "2".
2	JobName	Job name. Symbol \ is handled as _. This item can be omitted. * When this item is omitted, the part (XXX) without the CSV file name extension (example: XXX.csv) is recognized as [File Name] of the job. * If an extension (pdf, etc.) is included in [File Name] specified in the job side, delete the extension in the job side, or include the extension in the CSV file name (example: XXX.pdf.csv).

No.	Name	Description
3	Ascending or Descending Order	Order in which the numeric value varies. 0: Ascending order 1: Descending order * This item is required to set.
4	Page	Page number to be collated. Set in the range from 1 to 200000. * If **Image Controller IC-313** is mounted, the scan image in **Intelligent Quality Optimizer IQ-501** is used as the reference image (for 1 output sheet, the front page is counted as the first page and the back side is counted as the second page).
	Area No.	Area No. Set in the range from 1 to 30.
	CODE	Code type. Set "0" or "1". 0: Number only 1: Barcode (including 2D code)
	Expected value	Expected decoding result. If the read value matches this value, it is assumed that there is no problem. * Enter a UTF-8 character string such as -, +, $, /, ., %, and space, excluding a comma (,). * If the value is blank, it is skipped without being collated.
	START_X	Starting point of X coordinate. Set in the range from 0 to 330 (units of 1 mm). Set the top direction as the top and the upper left as the origin reference on the original (RIP) image, and specify the XY coordinates.  * If **Image Controller IC-313** is mounted, specify the XY coordinates by setting the delivery direction as the top direction and the upper left as the origin reference based on the scan image in **Intelligent Quality Optimizer IQ-501**. 
	END_X	Ending point of X coordinate. Set in the range from 1 to 331 (units of 1 mm).
	START_Y	Starting point of Y coordinate. Set in the range from 0 to 487 (units of 1 mm).
	END_Y	Ending point of Y coordinate. Set in the range from 1 to 488 (units of 1 mm).

No.	Name	Description
4	ROT	Image orientation in decoding area. 0: Upward 1: Leftward 2: Downward 3: Rightward
	TYPE	Barcode type. The following types are available. 1: Code 39 2: Code 128 3: JAN(EAN) 5: ITF 6: NW-7 7: Code 93 8: UPC 65: QR Code 66: PDF417 67: Aztec Code 68: Data Matrix ECC 200 * Data Matrix ECC 200 performs decoding only for Variable Data Inspection. The barcode inspection of the automatic inspection function is not available.
	Assign	Leave this item blank.

NOTICE
To edit a CSV file using spreadsheet software, set the character code to UTF-8 before saving.

Procedure (Uploading a CSV File)

Upload the collated CSV file from Web Utilities of **Auto Inspection Unit UK-301** to this machine.

NOTICE
To upload a CSV file using the Microsoft browser such as Internet Explorer or Edge, open the [Security] tab in [Internet Options], and set [Include the path of the local directory when uploading a file to the server]. in [Custom Level] to [Disable].

If this setting is not changed, it may cause an upload failure.

1 Open the Web browser.

➔ For details on the browser operating environment of Web Utilities, refer to [Web Utilities] in the HTML User's Guide.

2 Enter the following URL in the address bar and press [Enter].

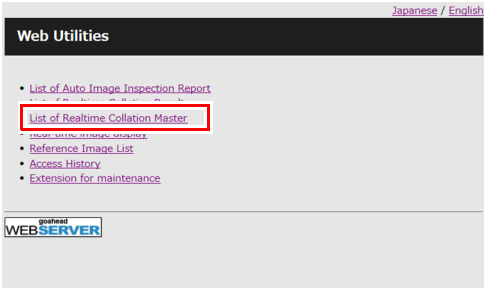
"http://<IP address of **Auto Inspection Unit UK-301**>/"

Example: When the IP address of the **Auto Inspection Unit UK-301** is set to "192.168.1.20", type "http://192.168.1.20/".

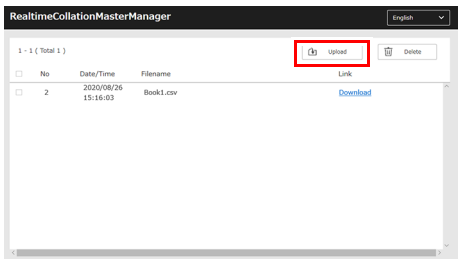
This displays the top page of Web Utilities of the **Auto Inspection Unit UK-301**.

NOTICE
*In [Automatic Inspection NIC Setting], specify the IP address of the **Auto Inspection Unit UK-301** in advance.*

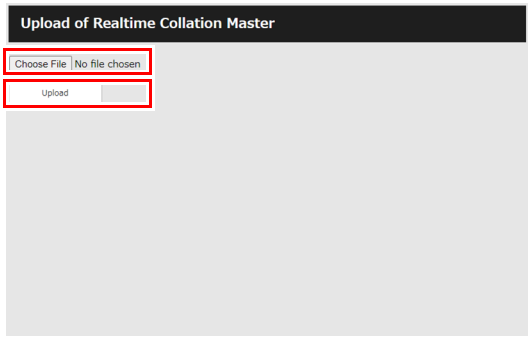
3 Click [List of Realtime Collation Master].



4 Click [Upload].



5 Click [Choose File], select the desired file, and click [Upload].



The selected CSV file is uploaded to this machine.

Procedure (Holding a Print Job before Execution)

Execute a job, and collate the expected decoding result entered in the CSV file with the printout.

For details on the procedure, refer to "3.1 Creating a New Reference Image for Automatic Inspection" or "3.2. Selecting the Created Reference Image for Automatic Inspection" in this manual.

Tips

- The settings related to the automatic inspection are not required if the automatic inspection is skipped.
- [File Name] of the executed print job must completely match the CSV file name. If an extension such as "xxxxx.pdf" is included in the file name, the real-time VDP collation cannot be performed.

Procedure (Checking the Collation Result after Printing)

The collation result can be confirmed in [List of Realtime Collation Result] of Web Utilities of the **Auto Inspection Unit UK-301**.

1 Open the Web browser.

➔ For details on the browser operating environment of Web Utilities, refer to [Web Utilities] in the HTML User's Guide.

2 Enter the following URL in the address bar and press [Enter].

"http://<IP address of **Auto Inspection Unit UK-301**>/"

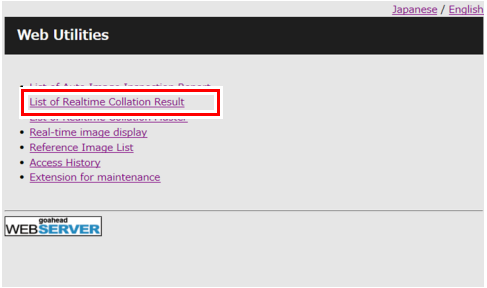
Example: When the IP address of the **Auto Inspection Unit UK-301** is set to "192.168.1.20", type "http://192.168.1.20/".

This displays the top page of Web Utilities of the **Auto Inspection Unit UK-301**.

NOTICE

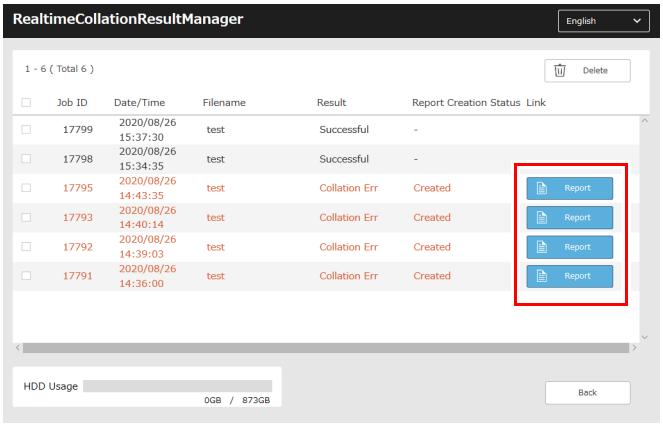
*In [Automatic Inspection NIC Setting], specify the IP address of the **Auto Inspection Unit UK-301** in advance.*

3 Click [List of Realtime Collation Result].



The List of Realtime Collation Result screen is displayed.

4 If the inspection result is [Collation Err], click [Report].



The Mismatch Report screen is displayed.

9 Troubleshooting

9 Troubleshooting

9.1 If an Out-of-Range Image is Detected

Out-of-range image report status and remedy

When message "Out of range was detected." is displayed on the **touch panel**, check the out-of-range image report.

No.	Status	Cause	Remedy
1	A comment marked by a red circle is displayed on the out-of-range image report, and also stains are found on the actual printouts.	Out-of-range stains were detected.	Stains may be seen in the paper feeding route. Perform maintenance for this machine. For details, refer to [Adjustments] or [Machine Management] in the HTML User's Guide.
2	A comment marked by a red circle was displayed on the out-of-range image report, but no stains are found on the actual printouts.	The inspection accuracy level may be too high.	Lower one of the following levels. • Inspection Level • [Detection Level] • [Paper Noise Removal Level]
		The paper of the reference image and the actual printout is different.	Load the paper that is used to create a reference image. Otherwise, load the paper you want to actually use, and create a reference image again.
		The scanner unit of the **Intelligent Quality Optimizer IQ-501** is dirty.	Clean the scanner unit. For details, refer to [Machine Management] ▶ [Cleaning] ▶ [Cleaning the Intelligent Quality Optimizer IQ-501] in the HTML User's Guide.
3	An error occurs in the barcode inspection or serial No. (0-9) inspection area.	The original data is erroneous. Or, the setting does not match the specifications.	Check the inspection data and decoding results (CSV file in the report). Also, check whether the barcode area or serial No. (0-9) area is set based on the specifications. For details, refer to "7. Automatic Inspection Area" in this manual.
4	A comment marked by a pink circle is displayed on the out-of-range image report.	A stain was detected on the reference image, or an out-of-range image omission was detected.	Perform maintenance for this machine, and create a reference image again. Otherwise, lower the [Inspection Level].
5	Message "Alignment error" is displayed on the bookmark of the out-of-range image report.	The system failed in alignment between the reference image and the inspection image.	An alignment failure may occur on a pale image or a simple image of ruled lines only. When this error recurs on a specific image, set the entire target page to an excluding area in [Inspection Excluding Area]. For details, refer to "7. Automatic Inspection Area" in this manual.
		A large stain is found on an image.	If any stain is found on the reference image, create a reference image again. If any stain is found on printouts, perform automatic inspection again after carrying out maintenance of this machine.
		The printed image is completely different from the reference image.	Check whether the print job matches the reference image. If no problems are identified, create a reference image again.

No.	Status	Cause	Remedy
6	Message "Too Many Stains" is displayed on the bookmark of the out-of-range image report.	One hundred or more stains, which is in the standard, were detected. (Such stains are not out of range, so a comment marked by a red circle is not displayed.)	Stains may be seen in the paper feeding route. Perform maintenance for this machine. For details, refer to [Perform maintenance] or [Adjustments] in the HTML User's Guide.
	Message "Position Error (Scan)" is displayed as error information on the out-of-range image report.	A large stain is found on an image.	If any stain is found on the reference image, create a reference image again. If any stain is found on printouts, perform automatic inspection again after carrying out maintenance of this machine.
		The target image, for example, a pale image or a simple image made up of ruled lines only, is difficult to align.	Set Inspection Excluding Area to the entire surface of the page in which an error frequently occurs.
		The printing position is misaligned by 2.5 mm or more.	Check the paper loaded in the tray.
		Paper is different between the reference image and the actual print.	Load the paper that is used to create a reference image. Otherwise, load the paper you want to actually use, and create a reference image again.
	Message "Barcode/ No.Mis." is displayed as error information on the out-of-range image report.	The contents of the source CSV file are different from the printing result.	Check the inspection data and decoding results (CSV file in the report). Also, check whether the barcode area or serial No. (0-9) area is set based on the specifications. For details, refer to "7. Automatic Inspection Area" in this manual.
		The settings of the type or orientation of the inspection area, the barcode type, and more are different.	
	Message "CSV Unfit" is displayed as error information on the out-of-range image report.	The specified page is not found in the source CSV file.	Check the inspection data and the CSV file in the report.
		The specified coordinates are different in the source CSV file.	
		The specified setting value is different in the source CSV file.	
7	Message "Inspection failed" is displayed on the control panel.	The paper size is different between the reference image and the print job.	Check whether the print job matches the reference image. If no problems are identified, create a reference image again.

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