

PRINTER DRIVER GUIDE

(For Macintosh® CP-K60DW series)

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Refer to the following web site to check the latest version of the printer driver.

<http://www.mitsubishielectric.com/products/vis/index.html#Printers>

You can not use different version of the driver at the same time.

When the driver has already installed, uninstall it and then install this driver.

System requirements

- Computer : PowerMacintosh G4, G5, PowerBookG4, iMac, Mac mini,
MacBook, MacBook Pro, Mac Pro, MacBook Air
 - Main storage memory : 512 Mbytes or more
 - Hard disk : Empty capacity 512 Mbytes or more
 - Operating system : 10.6, 10.7, 10.8, 10.9, 10.10, 10.11, 10.12
 - USB*1 cable : Be sure to use a cable 2m or shorter.
- * Use the printer driver in an environment that your operating system works properly.

*1: CP-K60DW series printer supports USB 2.0 (Hi-Speed USB) interface.

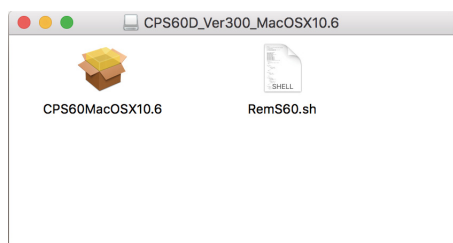
Installation

Administrator authority is required to install this printer driver.

When the printer driver of older version has been installed, uninstall it before installing this driver.

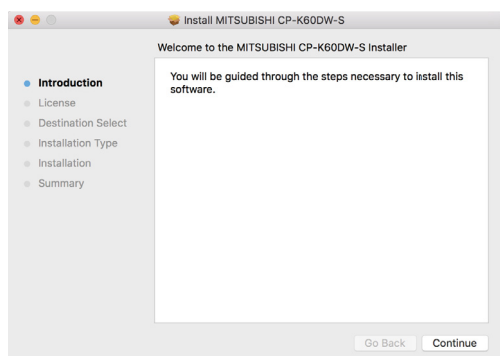
* Although the screen of the display is an installation screen of Mac OS X 10.12, operating procedures are the same as any other Mac OS X.

- 1) Start your Macintosh.
- 2) Double-click on “CPS60MacOSX10.6” of the folder. (Fig. 1)

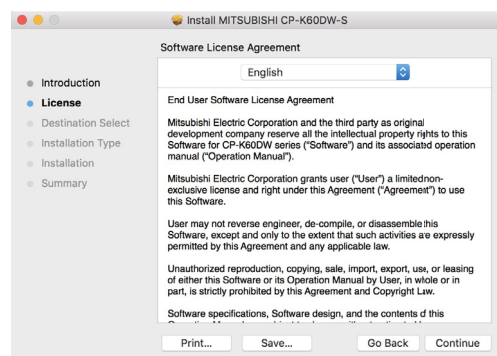


<Fig. 1>

- 3) Click “Continue” button in the “Install MITSUBISHI CP-K60DW-S.” (Fig. 2)
- 4) Read the Software License Agreement and click “Continue” button. (Fig. 3)

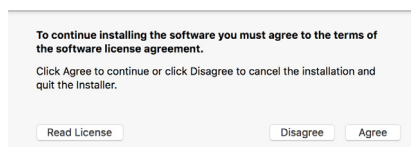


<Fig. 2>

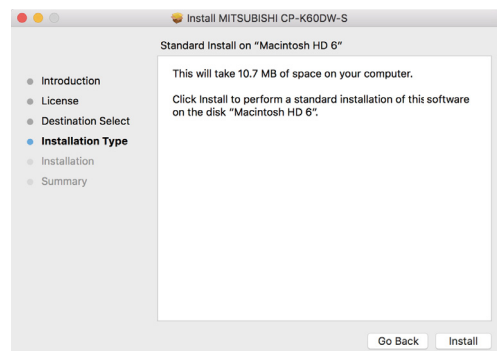


<Fig. 3>

- 5) When you agree with the terms and conditions of the Agreement, click “Agree.” (Fig. 4)
- 6) Click “Install” button. (Fig. 5)

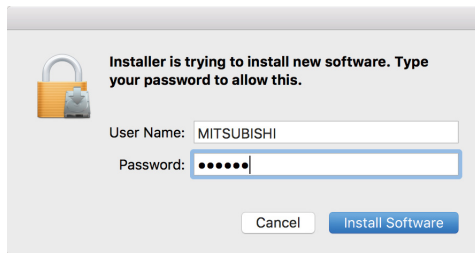


<Fig. 4>



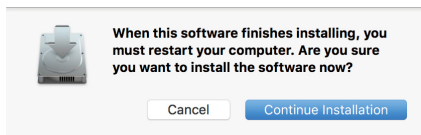
<Fig. 5>

- 7) Enter a username and password, and click “Install Software” button. (Fig. 6)
 (“Install Software” button: “OK” button in Mac OS X 10.6)

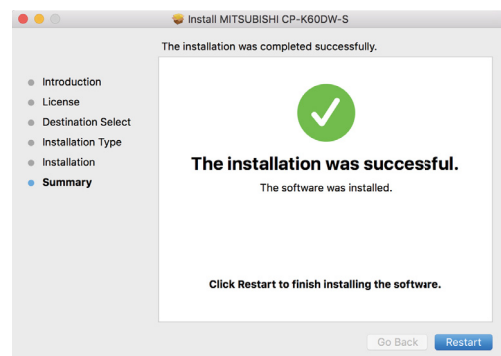


<Fig. 6>

- 8) Click “Continue Installation.” (Fig. 7)
 9) Click “Restart” to restart the personal computer. (Fig. 8)

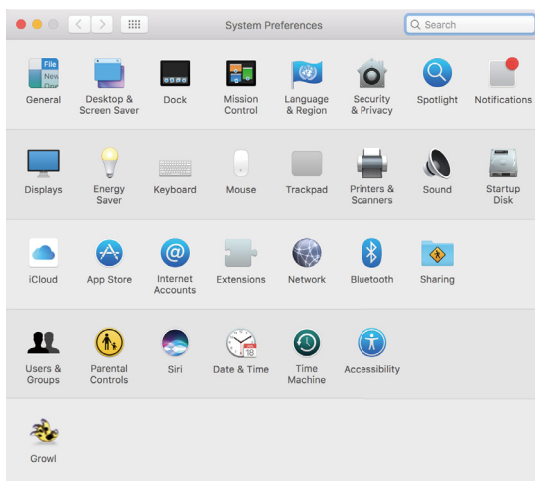


<Fig. 7>

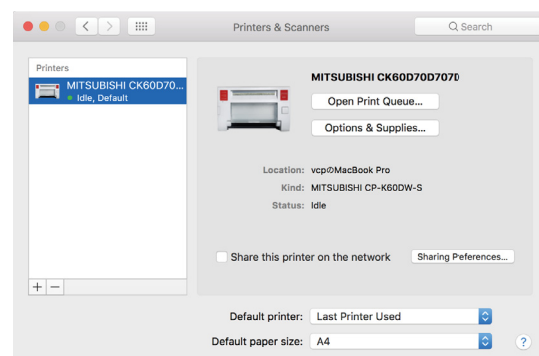


<Fig. 8>

- 10) Turn on the printer and connect it with the personal computer.
 11) Click “System Preferences” to display “System Preferences” screen. (Fig. 9)
 12) Click “Printers & Scanners” on “System Preferences screen.”
 The installed printer is automatically added to the “Printers.” (Fig. 10)
 (“Printers & Scanners”: “Print & Fax” in Mac OS X 10.6 and “Print & Scan” in Mac OS X 10.7 and 10.8)
 * This printer is added in the name of “MITSUBISHI CK60D70D707D.”



<Fig.9>

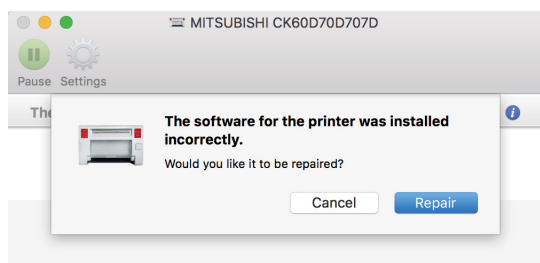


<Fig.10>

<Notes on installation on Mac OS X 10.8 to 10.12>

The following correspondence may be necessary at the time of installation to Mac OS X 10.8 to 10.12. Please install according to follows.

1. When attempting to install the Mac OS X driver downloaded from web site
You may receive a message window that shows “ “CPS60MacOSX10.6” can’t be opened because it is from an unidentified developer.” during installation is displayed.
In this case, click “OK” button on this window and follow the steps below.
 - 1) Click the installer package while holding Control key.
 - 2) Click “Open” on the context menu.
 - 3) Click “Open” button on the message window that shows “ “CPS60MacOSX10.6” is from an unidentified developer. Are you sure want to open it?.”
Installation will start.
2. About operation after the installation completion of the driver
After the installation completion of the driver, please operate follows.
 - 1) After completion of the driver installation, open “System Preferences” and select “Printers & Scanners.”
 - 2) Select the installed printer in the printer list and click “Open Print Queue...” button.
 (“Printers & Scanners”: “Print & Scan” in Mac OS X 10.8)
 - 3) Click “Repair” button (Fig.11).
The Printer becomes available.



<Fig. 11>

Uninstallation

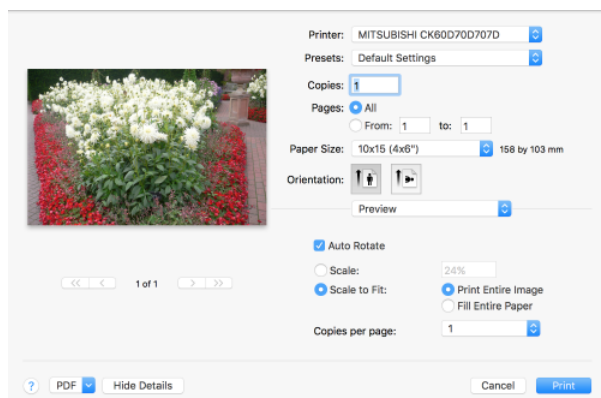
Operate the following procedures to uninstall the printer driver.

- 1) Start “Terminal” of “Utility” in the “Applications” folder.
- 2) When you do not have administrator authority, obtain it by “su” command.
- 3) Go to the directory where the uninstallation script (RemS60.sh) is stored and execute the script.
./RemS60.sh
- 4) When a password is required, enter the password for the administrator.
- 5) When uninstallation is completed successfully, the following message is displayed.
Uninstallation was completed.
Is a computer rebooted?” (Y/N):
- 6) Enter “Y” or “y” to reboot the computer.
If the computer is not rebooted automatically, exit the ongoing applications and reboot the computer manually.

Function explanation

1. Print Settings

1.1. Preview menu



<Fig. 12 Preview menu>

1) Paper Size

The size of paper is selected.

The number of print pixels for each paper size is shown in the table.

Paper size		Print dots
9x13 (3.5x5")		1076x1568
10x15 (4x6")	10x15 (4x6")	1218x1864
	5x15x2 Type1 (2x6"x2)	
13x18 (5x7")		1568x2128
15x20 (6x8")		1864x2422
15x15 (6x6")		1820x1864
9x13x2 Type1 (3.5x5"x2)		1568x2190
10x15x2 Type1 (4x6"x2)		1864x2454
5x15x2 Type2 (2x6"x2)		609x1864
15x20 (6x8") border		1536x2126

For the print, see "Operating directions for customer's purpose."

2) Orientation

The direction of paper is set.

This is the standard setting function of the operation system.

3) Scale

Enlargement scale is set. (Range : 25 - 400%)

This is the standard setting function of the operation system.

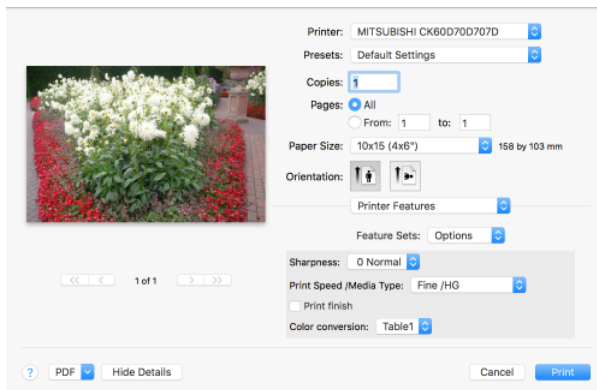
4) Copies

The printer prints the number of printouts which is shown in dialog. (Range: 1 – 9999)

* This is the standard setting function of the operation system.

1.2. Printer Features menu

The following settings can be configured when “Feature Sets” of “Printer Features” is set to “Options” in the Print dialog.



<Fig.13 Printer Features menu>

1) Sharpness

none / -3 / -2 / -1 / 0 / 1 / 2 / 3

Level of outline correction is changed.

none : Not perform the outline correction.

-3 to 3 : The value is smaller, the outline becomes softer.

The value is larger, the outline becomes sharper.

2) Print Speed /Media Type

Printing speed is set by media type you want to use.

Fine /HG : When using the HG type media, printing is performed at the standard speed.
(Standard quality picture)

UltraFine /HG : When using the HG type media, printing is performed at the speed slower than the Fine speed. (High quality picture)

Fine /Non-HG : When using the non-HG type media, printing is performed at the standard speed.
(Standard quality picture)

UltraFine /Non-HG : When using the non-HG type media, printing is performed at the speed slower than the Fine speed. (High quality picture)

3) Print Finish

Printing is finished in matte.

Note: Matte is only recommended for an even number of 9x13 and 10x15 prints.

* Printing an uneven number of prints may lead to lower number of prints produced per ink ribbon kit.

4) Color conversion

none / Table1

none : Color conversion is not performed.

Table1 : Color conversion is performed.

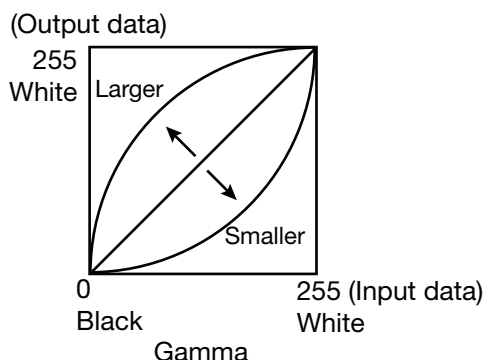
When “Feature Sets” of “Printer Features” is set to “Gamma”, “Brightness”, or “Contrast”, the menu display changes and the following settings become configurable.

5) Gamma

Adjusted value R, G, and B (-5 - +5)

Use this function to adjust the density of the middle tones.

When you want to increase the density of the middle tones, decrease the value of “Gamma”.

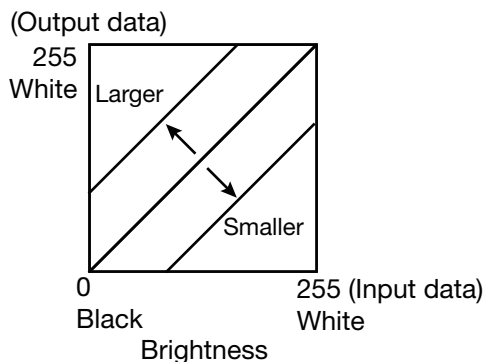


6) Brightness

Adjusted value R, G, and B (-64 - +64)

Use this function to adjust the brightness of the print picture.

When you want to make the print picture darker, decrease the value of “Brightness”.

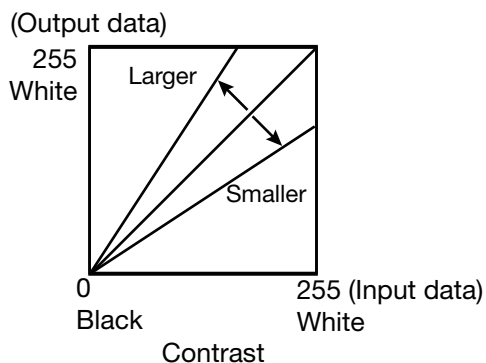


7) Contrast

Adjusted value R, G, and B (-64 - +64)

Use this function to adjust the contrast of the print picture.

When you want to make the contrast of the print picture stronger, increase the value of “Contrast”.



2. Error indication

No.	Error dialog message	Operation
1	Printer is not connected.	When the error is resolved, printing restarts.
2	The printer does not respond. Turn the printer Off and then On again, and try again.	<p>The print job operations of the Print Queue screen are equipped as standard in the operating system. The buttons as follows are displayed.</p> <p>Delete Job: Deletes the job being selected in the Print Queue.</p> <p>Hold Job: Holds the job being selected in the Print Queue.</p> <p>Resume Job: Resumes printing of the held job being selected in the Print Queue.</p>
3	Something is wrong with the printer. Turn the printer Off and then On again, and try again.	
4	Mechanical Error. Set paper again.	
5	Mechanical Error. Turn the printer Off and then On again, and try again.	
6	Printing unit is opened.	
7	Printing unit is opened while printing.	
8	Ink ribbon and paper type do not match.	
9	Ink ribbon is not correctly installed.	
10	Ink ribbon end.	
11	Paper empty.	
12	The ink ribbon is not standard.	
13	The printer was turned off while printing. Turn on a printer.	
14	Paper jam. Set paper again.	
15	Paper size of printer driver and ink ribbon type do not match.	
16	Ink ribbon empty. Exchange ink ribbons.	
17	Paper end.	
18	It is not equipped with the paper strip bin.	
19	Ink ribbon error. Set paper again.	
20	Ink ribbon error. Set paper and ink ribbon again.	

* The error dialog messages are displayed in the Print Queue screen of "MITSUBISHI CK60D70D707D" which is displayed by clicking the "Open Print Queue" button in "Printers & Scanners".

"Printers & Scanners": "Print & Fax" in Mac OS X 10.6 and "Print & Scan" in Mac OS X 10.7 and 10.8.

* When no error message is displayed on the monitor and printing is not carried out, check the indicators on the front of the printer.

* For the details of the indicators on the printer, see the operation manual of CP-K60DW series printer.

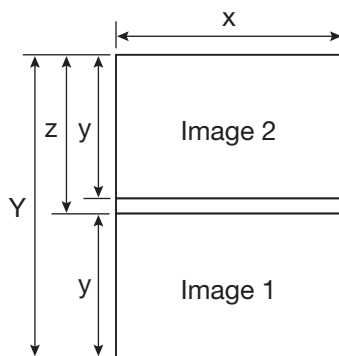
* In Mac OS 10.8 to 10.12 when the error message is long, "..." is displayed in the middle of a sentence and the whole sentence may not be displayed. In such cases, please clicks [i] mark of right of the error dialog, the whole sentence is displayed.

- 1) Secure of Hard disk for spool file
Secure the capacity of Hard disk for spool file enough for the printer operation and the number of printing sheets.
The printing cannot be correctly carried out when the capacity is running short.
The drive for spool file is the same drive as the system drive usually.
- 2) Operation of the printer
Refer to the operation manual of the printer.
Do not turn off the power switch during data transfer or print.
If you turn off the power switch, restarting of a computer may be needed.
When deletion of a printing data cannot be performed, restarting of a computer is required.
- 3) About connection of a computer and a printer
Do not disconnect the interface cable during data transfer.
If the interface cable is disconnected, wait 1 minute or more after disconnecting the cable to connect it again. If the cable is connected without leaving an enough interval, the printer driver may not work correctly.
- 4) System requirements for USB interface
Use a personal computer that are USB-guaranteed by the manufacturer.
CP-K60DW series printer supports USB 2.0 (Hi-Speed USB) interface.
- 5) Connection of USB cable
When you take out and insert a USB cable after installation of a printer driver, wait 10 seconds or more after extracting a cable.
If the cable is reinserted without leaving an interval, the printer may not operate normally.
- 6) Print job
Do not delete the print job in the spooler during data transfer. When deleting it, do not start printing until the printer becomes to the initial status.
- 7) Number of prints
With some applications, the number of prints set by the printer driver does not work. Set the number of prints from the print dialog box of the application.
- 8) Errors during printing
When an error occurs during printing, it may not be displayed on the monitor. Check the indicator on the front of the printer and take the countermeasure, and then start printing procedure again. For the indication by the indicator of the printer and the countermeasure, see the operation manual of the printer.
- 9) When "Resume Job" is selected after "Hold Job" is performed in the Print Queue screen, an error may not be displayed even if it occurs. In this case, select "Hold Job" and resolve the error, then click "Resume Job" to resume printing.
- 10) "Add" of the "Printer List"
In some version of Mac OS X, you may not print images with the printer registered by the "Add" button. Make the computer recognize the printer by the procedure described in "Installation."
- 11) When the printer is turned off or a USB cable is not connected to the printer, the printer status may be displayed as standby. However, it does not affect the further printing operations.
- 12) In Mac OS X 10.6, when an error job is deleted without resolving the error, the error indication in the Print Queue may not be cancelled even if the error is resolved. In this case, delete the printer from the printer list, and then add it again to cancel the error indication.
- 13) When you pause or resume the printing or delete the job in the Print Queue while the printer driver is communicating with the printer such as during the printer error, the communication may fail and the deleted job may be printed.
- 14) When "UltraFine" is selected in "Print Speed /Media Type"
The UltraFine is only available on printers with the appropriate firmware.
Printers without appropriate firmware will ignore the UltraFine setting.

- 15) When the 15x15 is selected for the paper size
The 15x15 is only available on printers with the appropriate firmware.
Printers without appropriate firmware will show an error of size mismatch (See 3. Error indication No.15), if 15x15 is selected.
- 16) When the 5x15x2 (2x6"x2) (Type1 or Type2) is selected for the paper size
Printers with the appropriate firmware will support 5x15x2 (2x6"x2) multi-cut function Type1 or Type2.
Without the appropriate firmware, the printer will print a 4x6 size even paper size 5x15x2 (2x6"x2) is selected. The paper cut position may shift depending on the printer.
- 17) When the size mismatch error occurs in Mac OS X 10.7 to 10.12 (See 2. Error indication No.15) and the failed job is deleted in the Print Queue without resolving the error, the printing may not be started even when the next print job is sent. In this case, connect the USB cable again. The error indication is canceled in the Print Queue. If you keep the USB cable connected, printing is started after a while.
- 18) When the 5x15x2 (2x6"x2) Type 2 is selected for the paper size
In Mac OS X 10.7 to 10.12, when the number of printed pictures (pages) or that of copies is set to an odd number, a blank page may be printed, if you delete or pause the job in the Print Queue during the printer error.
- 19) When the paper size "10x15 (4x6)" or "5x15x2 Type1 (2x6"x2)" is selected for the paper size in Mac OS X 10.11 or 10.12.
When the paper size "10x15 (4x6)" or "5x15x2 Type1 (2x6"x2)" is selected for the paper size in Mac OS X 10.11 or 10.12, the paper size "10x15 (4x6)"/"5x15x2 Type1 (2x6"x2)" may not be switched. In this case, once an item with a different paper size is selected (for example, "15x20 (6x8)", etc.) and re-select the paper size "10x15 (4x6)" or "5x15x2 Type1 (2x6"x2)" you want to set again.
- 20) When turning off the printer or unplugging the USB cable with Mac OS X 10.10, the OS will display the message "Printer not connected", the message may not disappear even if the printer is turned on again or the USB cable is connected. In this case, once delete the printer from the printer list and add the printer again, the error display will be canceled.

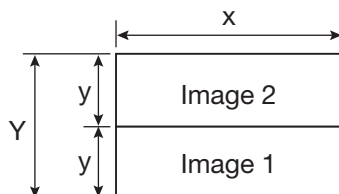
Operating directions for customer's purpose

- When you want to adjust the color of the print image.
Set the following settings in "Feature Sets" of "Printer Features" in the Print dialog.
(Note that the effects are invalid on the display even if you make following setting.)
 - When you want the density of entire print picture to be thick (dark), decrease the value of "Brightness".
 - When the print picture is out of focus (the contrast is weak), increase the value of "Contrast".
The contrast becomes stronger.
 - When you want to change the color of printout.
Change the value of "Brightness".
 Increase Red :Increase the "R" value.
 Increase Green :Increase the "G" value.
 Increase Blue :Increase the "B" value.
- When "9x13x2 Type 1" or "10x15x2 Type 1" is selected in "Paper size"
Lay out the image 1 and image 2 as following and print them.



	Print dots	
	9x13x2 Type 1	10x15x2 Type 1
Y	2190	2454
x	1568	1864
y	1076	1218
z	1114	1236

- When "5x15x2 Type 1" is selected in "Paper size"
Lay out the image 1 and image 2 as following and print them.



	Print dots
Y	1218
x	1864
y	609

- When "5x15x2 Type 2" is selected in "Paper size"
When multiple images are selected in "Preview", etc., the images are printed in 5x15 (2x6") size.
When the number of pages or copies is odd, the last print of 5x15 (2x6") size paper is output as a blank page. Depending on the application software, a blank page may be set every other page.

Prohibition matter

We prohibit Reverse Engineering, decompiling or reverse assembling of this driver software.

Exemption from responsibility

Occasionally, this software does not operate normally depending on operating environment.
Moreover, Mitsubishi Electric Co. will not assume any responsibility for damage (including, but not limited to, lost profit or damage caused from special circumstances etc.) occurring during the use of this driver.