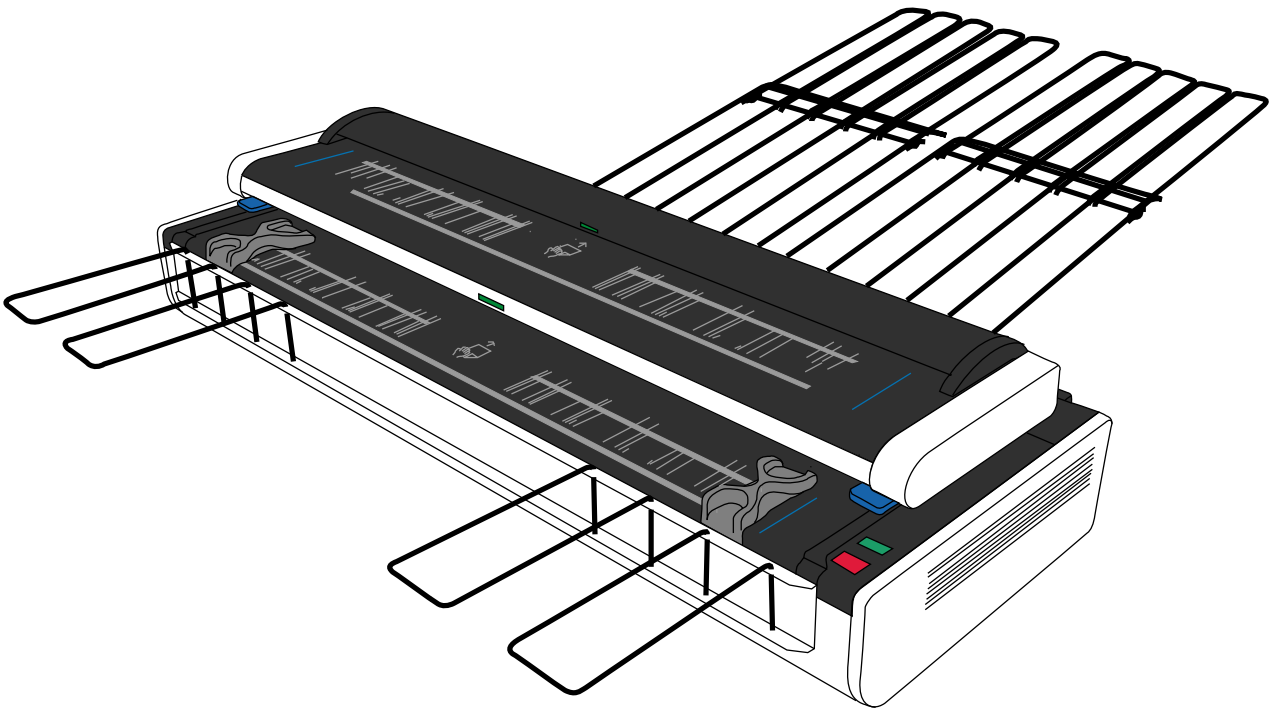


# KIP 2300

## User Guide

Version QA.1



We highly appreciate your purchasing our KIP 2300 Image Scanner.

This User's Manual contains functional and operational explanation for KIP 2300 Image Scanner. Read this User's Manual carefully before use in order to understand the KIP 2300 Image Scanner completely and to use more efficiently. Keep this User's Manual for future reference.

**1. For U.S.A.**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**2. For Europe**

This equipment complies with the requirements in Pub.22 of CISPR Rules for a Class B computing device.

Operation of this equipment in a residential area may cause unacceptable interference to radio and TV reception requiring the operator to take whatever steps are necessary to correct the interference.

**Do not install Machine around electronics equipment or precision instruments. It may be influenced by electrical reason or vibration while operation.**

**If Machine is installed near electronics equipment, such as TV or radio, interference to equipment, such as noise or flickering may be occurred. Use separate power line and install Machine as far as such equipment.**

As an ENERGY STAR® Partner, Katsuragawa Electric Co., Ltd. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



The International ENERGY STAR® Office Equipment Program is an international program that promotes energy saving through the penetration of energy efficient computers and other office equipment. The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment such as computers, monitors, printers, facsimiles, copiers, scanners, and multifunction devices. Their standards and logos are uniform among participating nations.

The symbol shown indicates that this product conforms to Directive 2002/96/EC of the European Parliament and the council of 27 January 2003 on waste electrical and electronic equipment (WEEE) and does not apply to countries outside of EU.



Only For EU Member States

The symbol shown indicates that this product conforms to SJ/T11364-2006 of People's Republic of China Electronic Industry Standard and does not apply to countries outside of People's Republic of China.



The symbol shown indicates that this product conforms to GB 18455-2001 11364-2006 of National Standard of the People's Republic of China and does not apply to countries outside of People's Republic of China.



## **WARNING FOR THE SAFETY** (OBSERVE THESE WARNING)

Following warnings are very important to use this equipment safely and to prevent the operator from danger and his/her property from being damaged.

Hazardous or damage degree is classified and shown as follows when this machine is erroneously used ignoring this USER'S MANUAL.



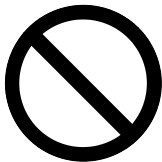
### **WARNING**

This caution mark denotes that the failure to follow given instructions in handling the machine could result in a death or serious injury.



### **CAUTION**

This caution mark denotes that the failure to follow given instructions in handling the machine could result in an injury or physical damage only.



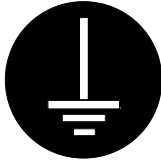
This symbol signifies what must not be done.



This symbol signifies General Mandatory Action.



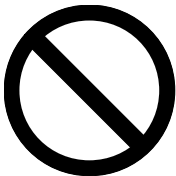
# WARNING



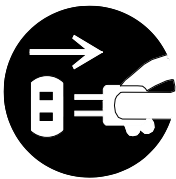
Connect the scanner and Ground with each other surely with the grounding wire. Otherwise, it is dangerous for you if you receive an electric shock or at the time of lightning. If the outlet does not have a Grounding Terminal or if it is impossible to connect, call the vendor or service professional for the installation.



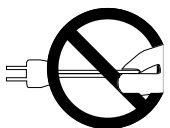
1. Power source should be rated from 100V - 240V +6/-10%, 6A or higher, and 50/60Hz.
2. It is preferable that the used power circuit is provided with a dedicated breaker.
3. Install the machine as close as possible to the outlet.
4. When you wish to move the machine to another place, make sure to ask your service engineer.



1. Do not use a multi-wiring connector that might raise the temperature of the outlet abnormally and cause a fire.
2. Do not put anything heavy on the power cord. It may cause a fire or receiving an electric shock.
3. Do not step on the power cord, and do not damage or process it. It may also cause a fire or receiving an electric shock.
4. Do not tie the power cord or make a knot on it. It may also cause a fire or receiving an electric shock.
5. Do not put a flower vase, a flowerpot or a water-filled glass on the top of the machine. If the water spilt out, it may also cause a fire or receiving an electric shock.



1. If the machine generates abnormal smell or noise, turn it off and then disconnect the power plug from the outlet necessarily.
2. Do not handle the power plug with the wet hand positively. It may cause to receive an electric shock.
3. Insert the power plug into the outlet completely. If the power plug is not inserted completely, it may cause a fire.
4. Use only the attached power cord.



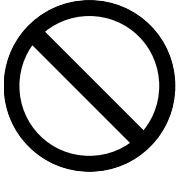
Make sure to catch the Plug when you unplug the machine. Otherwise, you may break the cord and may result in a fire or receiving an electric shock.



Do not disassemble or tamper the machine. Otherwise, it may cause a fire or receiving an electric shock.



# CAUTION

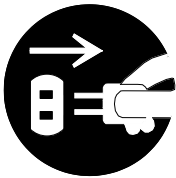


Do not install the machine at the following places.

1. Humidified or dusty place.
2. Unstable floor. (When the machine comes down, it may cause the injury.)



Be careful not to catch your hand between Upper Unit and Main Unit when you close the Upper Unit.



1. Unplug the machine before you move it to another place. Otherwise, the power cord may be damaged and may result in a fire or receiving an electric shock.
2. If nobody operates the scanner in the night time, make sure to turn it off for the safety.
3. If nobody operates the machine for a long time during consecutive holidays, make sure to turn it off for the safety.
4. Nothing should be put near the power plug so as to disconnect it quickly anytime.

## LED Safety (Safety of LED Products)

“Caution - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure”

As the LED on the Light Source PCBs (PW12130 & PW12131) are Class 2 LED singularly, it is not allowed for using it with disassembling or converting.

Classification of LED product :

- CLASS 1 LED PRODUCT

IEC 60825-1:2001

EN 60825-1:1994 + A2:2001 + A1:2002

- Maximum class of the embedded LED : CLASS 2 (WHITE LED, Maximum power : 4.0mW)

# 1.1 Installation Requirements

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The following conditions have to be satisfied when installing the KIP2300 Scanner.

1. Satisfy the following input power condition.

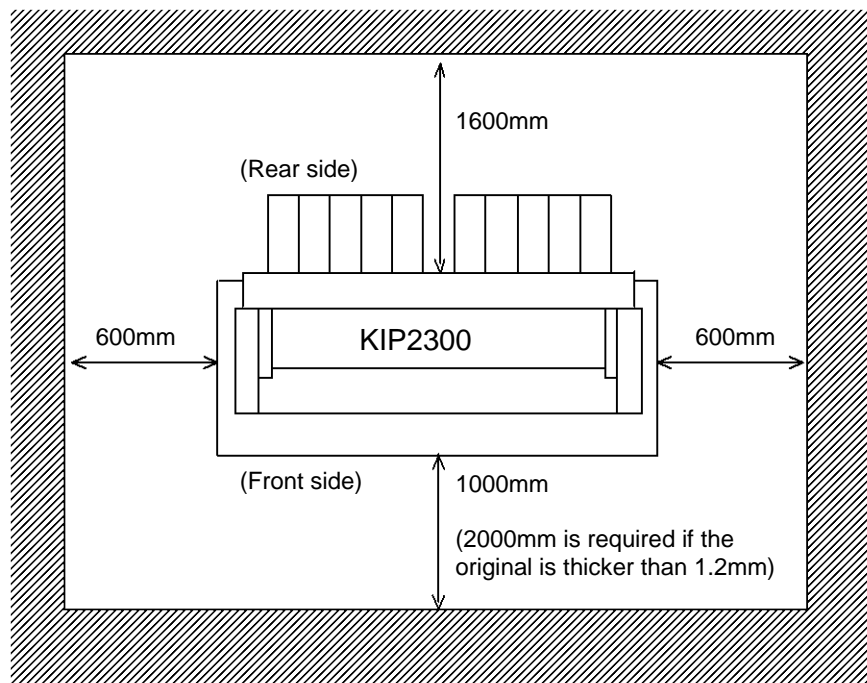
Voltage — 100 - 240V +6%/-10%

Current — 6A or higher

Frequency — 50 or 60Hz.

KIP2300 can be connected to the outlet simply so far as the voltage is within 100 - 240V.  
(+6% and -10% are acceptable)

2. Connect the power plug to the grounded outlet.
3. To completely disconnect the equipment from the power source, please draw the power plug from the outlet. The outlet must be easily accessible near the equipment.
4. The temperature must be within 10 through 32 degrees centigrade, and the humidity must be within 20 through 80%.
5. Keep the equipment away from fire, dust and direct sunlight. If it is impossible to avoid the direct sunlight, please pull the curtain to intercept the sunlight.
7. Keep enough space around the machine as follows.  
(The following values are the least requirements. Please keep a wider space if possible.)



## Reference

Machine Noise Information Ordinance 3. GSGV January 18, 1991 :  
The maximum sound pressure level is equal or less than 70dB (A) according to ISO 7779.

## NOTE

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It may be influenced by electrical reason or vibration while operation.**

**If Machine is installed near electronics equipment, such as TV or radio, interference to equipment, such as noise or flickering may be occurred.**

**Use separate power line and install Machine as far as such equipment.**

## 1.2 Specifications

Model	KIP2300 Image Scanner
Type	Desktop scanner
Reading sensor	3 CCD Reduction Optical System (3 CCD of RGB 7450 pixels)
Optical Resolution	Main scanning (horizontal) direction — 600dpi Sub scanning (vertical) direction — 600dpi
Range of Scan Resolution	100 – 2400dpi
Scan mode	Binary mode 8 bit gray mode 24 bit color mode
Scanning method	Sheet through type
Scan speed	Monochrome/Gray mode 100dpi : 12"/sec (lower feeder), 5"/sec (upper feeder) 600dpi : 5"/sec (lower feeder), 5"/sec (upper feeder) 2400dpi : 1.25"/sec (lower feeder), 1.25"/sec (upper feeder)  Color Mode 100dpi : 12"/sec (lower feeder), 5"/sec (upper feeder) 600dpi : 2"/sec (lower feeder), 2"/sec (upper feeder) 2400dpi : 0.5"/sec (lower feeder), 0.5"/sec (upper feeder)
Original type	Sheet type & board type - Upper original feeder can accept 0.05-0.1mm. - Lower original feeder can accept 0.05-16.0mm.
Maximum reading width	914.4mm (36")
Transportable original length	Max. — 16,000mm Min. — 210mm  NOTE : 48" is the maximum length for "board type" original.
Transportable original width	Max. — 1066.8mm (42") Min. — 210mm
Thickness of original	Max. — 16mm Min. — 0.05mm
Placement of original	Centered
Light source	White LED
Warm up time	Less than 10 seconds
Memory	256MB DDR DIMM
Operation system	Windows 7, Vista, XP & 2000 NOTE : KIP2300 supports only 32 bit version of the above OS.
Interface	USB 2.0 : for controlling & image data transfer HIL (High-speed Image Link) : for image data transfer  NOTE : Connected PC needs to have a PCI Express card slot for installing the HIL Add-in Card

### NOTE

Specifications may change without notification.



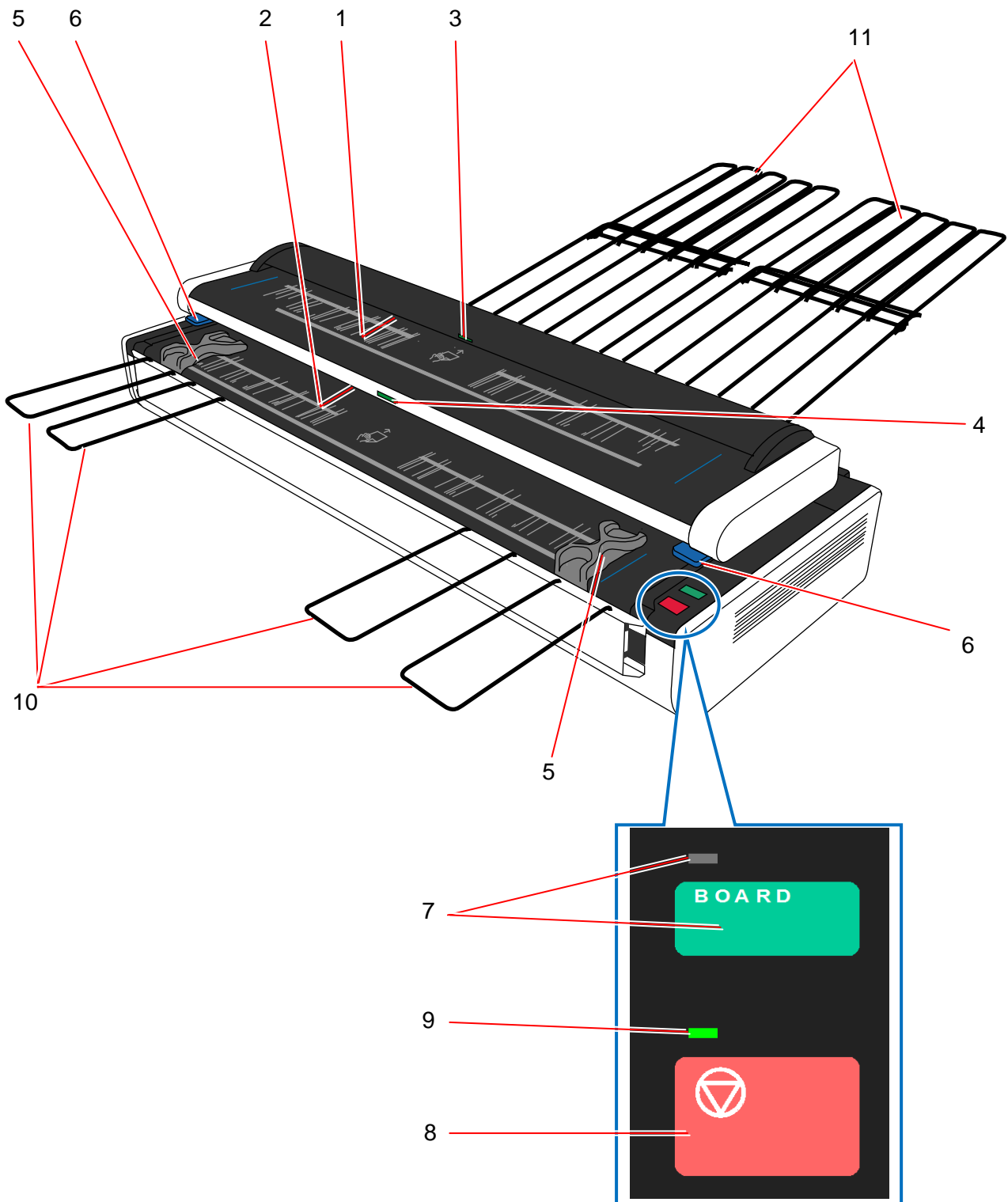
Power source	<u>Voltage</u> 100 – 240V +6%/-10%  <u>Frequency</u> 50 or 60Hz
Max. power consumption	Less than 120W
Average power consumption	(US : 120V) - During scanning       ——— 120W - Stand by                   ——— 50W - In Power Save Mode   —— 0W  (EUR / ASIA : 200-240V) - During scanning       ——— 120W - Stand by                   ——— 50W - In Power Save Mode   —— 0W
Dimension	1,366mm (Width) x 543mm (Depth) x 323mm (Height)  NOTE : Original Guides, Original Tray and Pedestal are excluded.
Weight	About 76kg
Environmental conditions	<u>Temperature</u> 10 - 32 degrees centigrade <u>Humidity</u> 15 - 85%RH (No dew)  (Recommended) 23 degrees centigrade and 60% RH (No dew)
Acoustic noise	Stand by                   ——— Less than 55db During scanning       —— Less than 60db Impulse sound         ——— Less than 70db
Option	Pedestal (Scanner Stand)

 **NOTE**

Specifications may change without notification.

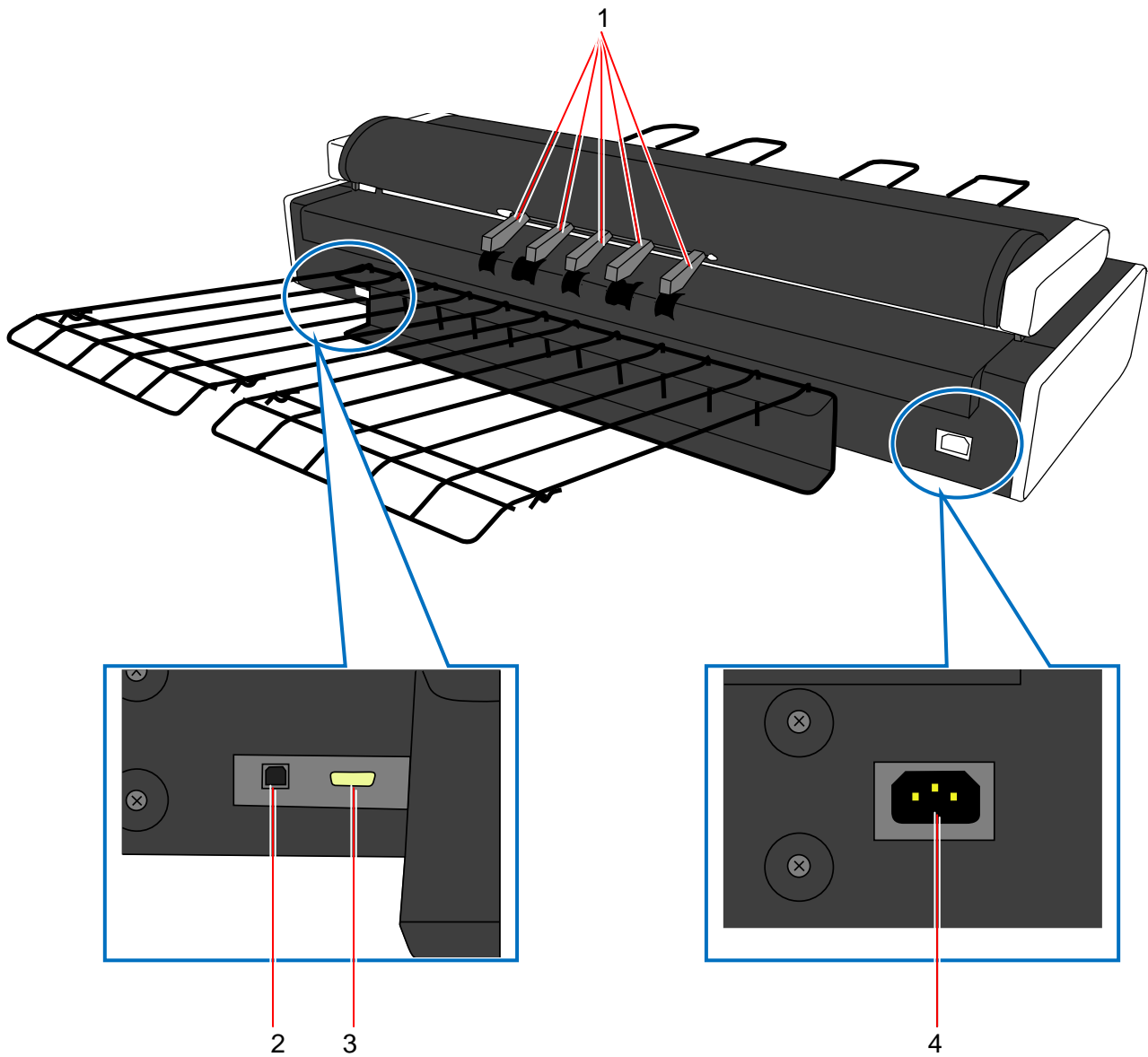
# 1.4 Name & Function of Each Part

## 1.4.1 Front view



No.	Name	Function
1	Upper Original Feeder	Upper Original Feeder accepts a sheet type original that is 0.05-0.1mm in thickness. Please set the original with face up. The original fed from here Feeder is ejected to the front side of scanner via Lower Original Feeder.
2	Lower Original Feeder	Lower original Feeder accepts a sheet type original that is 0.05-1.49mm in thickness as well as a board type original that is 1.5-16.0mm in thickness. Please set the original with face down. The original fed from here is ejected to the rear side of scanner and received by the Rear Steel Tray.
3	Upper Original Feeder Indicator	This lights green when the Upper Original Feeder can accept original insertion.
4	Lower Original Feeder Indicator	This lights green when the Lower Original Feeder can accept original insertion. And in the Board Original Mode, it blinks green when the scanner detects original.
5	Original Guides	These guides can be shifted left and right according to the original width, and prevent the original from skewing during scanning.
6	Levers	Unlocking the Levers allow for opening the Scanner Upper Unit.
7	Board Button & Lamp	Pressing the Board Button enables or disables Board Original Mode. The Board Lamp lights green when the Board Original Mode is enabled.
8	Stop Button & Lamp	Pressing the Stop Button during scanning will stop scanning and original transportation in the middle, and one more will eject the original to either front or rear.
9	Power Lamp	This shows the status of scanner. <ul style="list-style-type: none"> <li>- Blinking in green : During initialization (not ready)</li> <li>- Lighting in green : Ready for scanning or during scanning</li> <li>- Lighting in orange : Scanning (original transportation) is paused</li> <li>- Blinking in orange : Ejecting the original</li> <li>- Lighting in red : Scanner has any error</li> </ul>
10	Front Steel Tray	Helps feeding a board type original into the Lower Original Feeder.
11	Rear Steel Tray	Receives the original ejected from the scanner after scanning.  Max. number of originals : about 50 sheets of 36"x48" Max. weight of originals : 5kg/square meter

## 1.4.2 Rear view

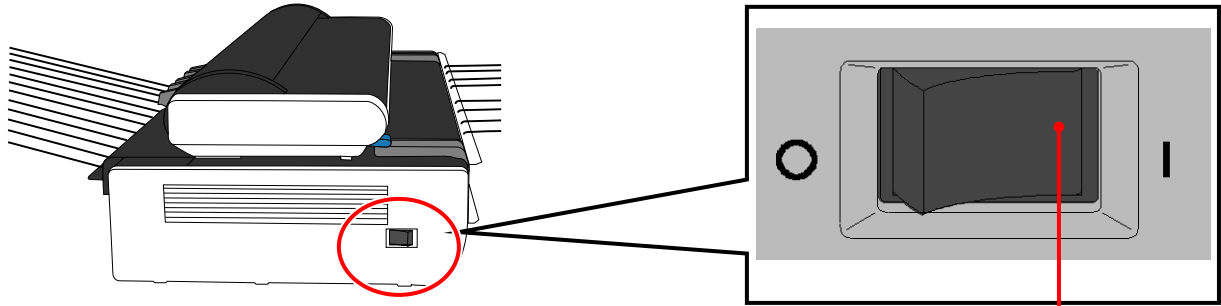


No.	Name	Function
1	Rear Counter Rollers	Help to transport the original when ejected.
2	USB Terminal	USB cable is connected. - Connected to the PC - Type B Connector - 5V max.
3	HIL Terminal	HIL Connector is connected. - Connected to the PC - 5V max.
4	Inlet	Power cord is connected.

## 2. 1 Turning ON / OFF

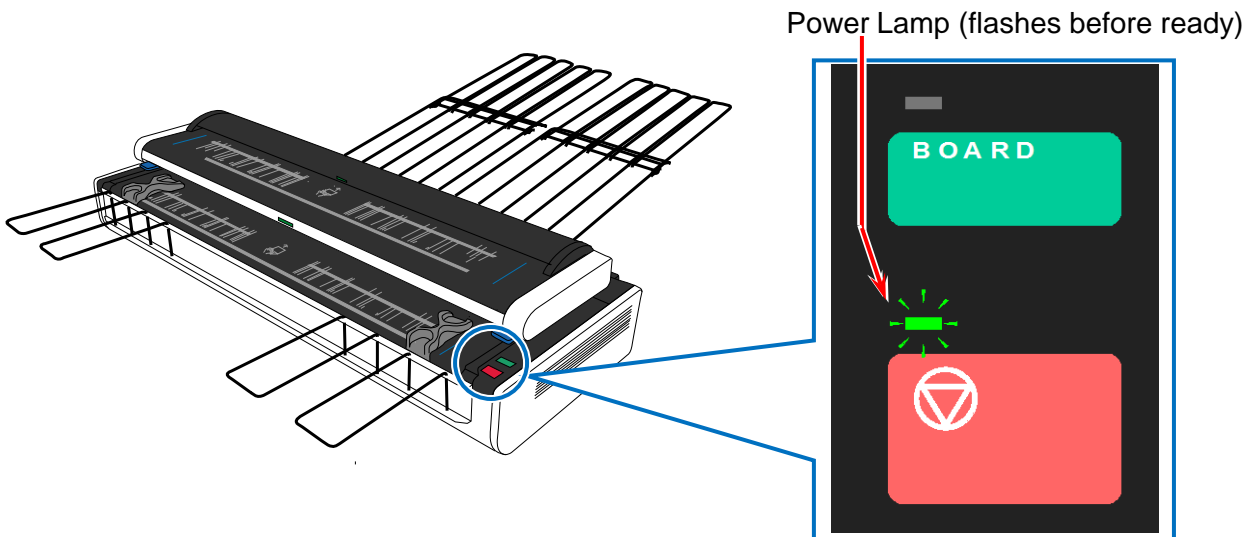
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1. Prepare a power cable that satisfies the following specifications.
2. Connect the KIP2300 scanner to the outlet via the power cable.
3. Turn on the KIP2300 scanner pressing the bar ( | ) side of Power Switch on the left.

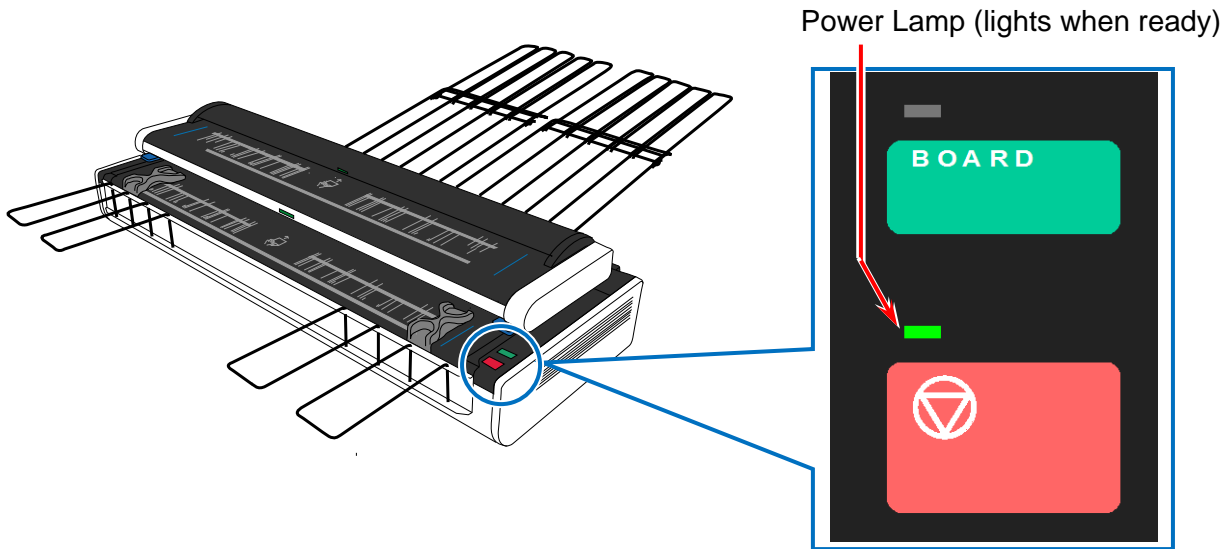


Press this side for turning on.

4. Scanner takes initialization. It takes about 10 seconds for the initialization, and the scanner does not accept original insertion during this period, which is shown by green flash of Power Lamp.



5. Scanner gets ready when all the initializations are finished, which is shown by continuous lighting of Power Lamp in green.

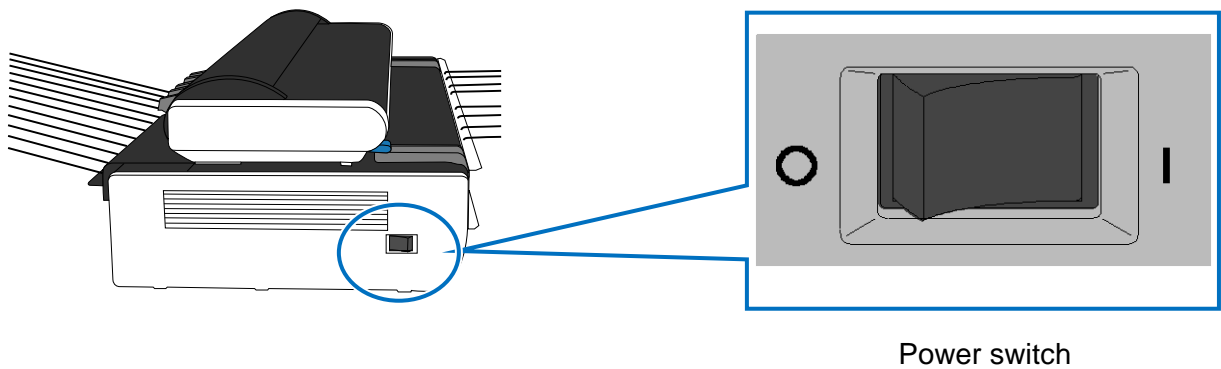


## 2.2 Auto Power OFF

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KIP 2300 has Auto Power OFF feature for energy saving purpose, which automatically switches off the scanner when 15 minutes of inactive period has passed.

Please turn on the scanner again with the Power Switch for using the scanner again.



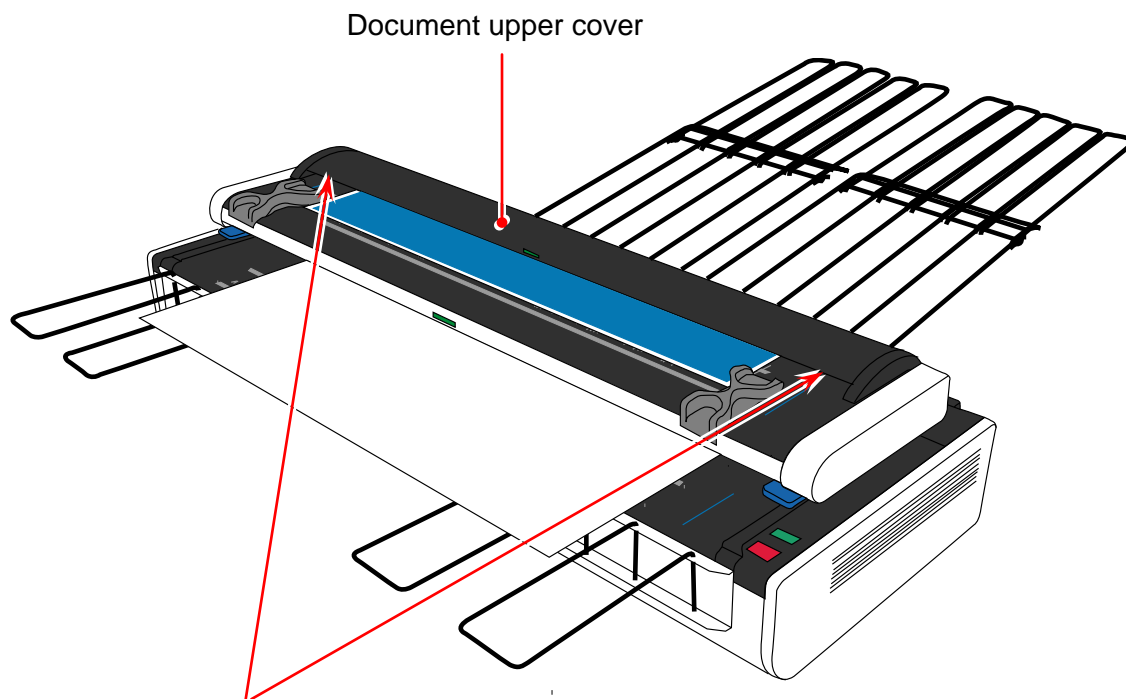
## 3. 1 Original Misfeed

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When the original is mis-fed during scanning, remove it manually as instructed in below.

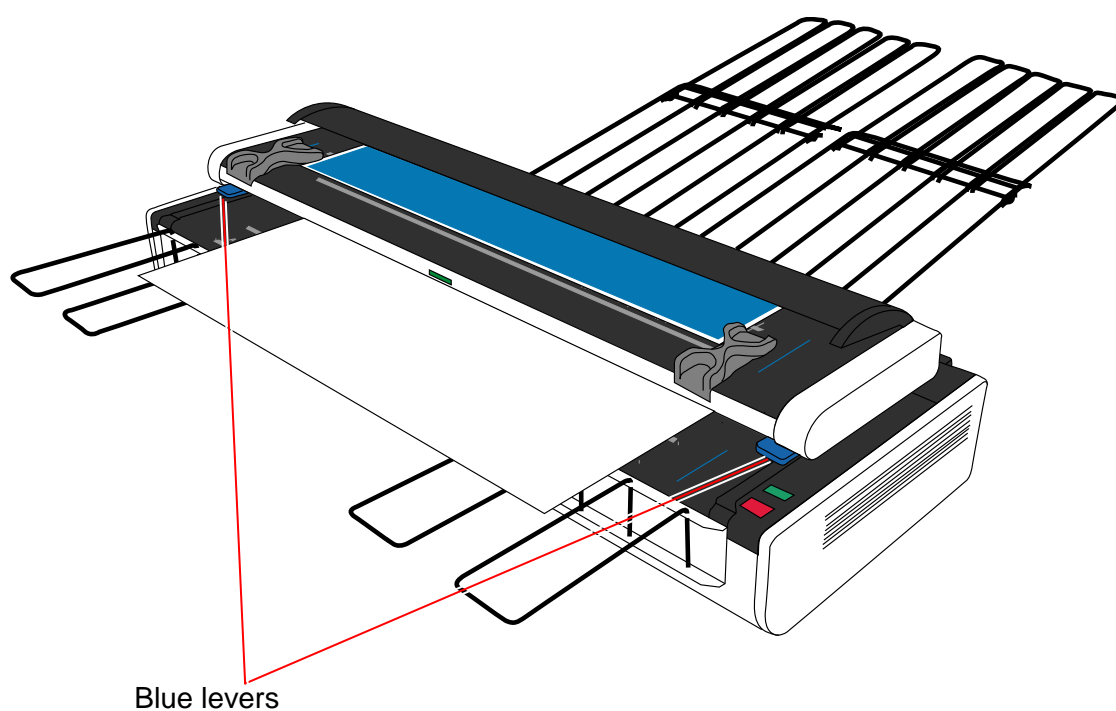
### 3. 1 When feeding into upper original feeder

1. Open the document upper cover with holding both sides.

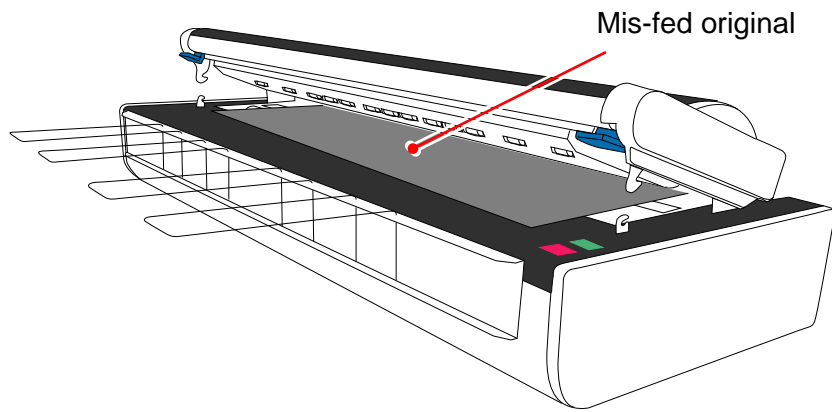


Hold here when opening the document upper cover.

2. Pull up both blue levers to open the scanner upper unit.



3. Remove the mis-fed original.



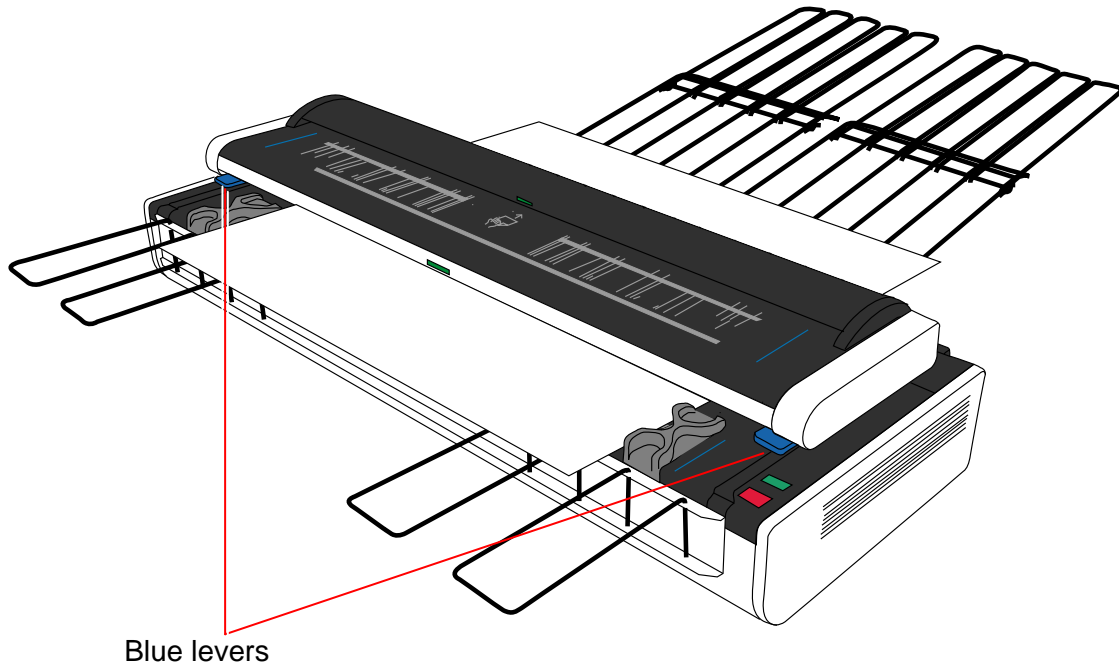
**! CAUTION**

Take care not to catch your hand when closing the document upper cover or scanner upper unit.

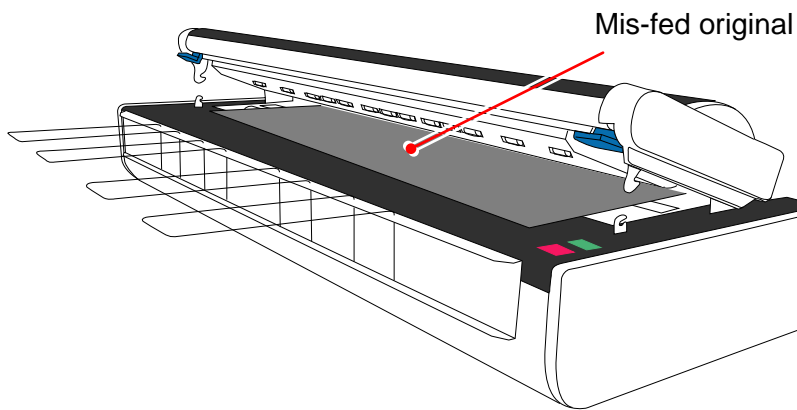


## 3. 2 When feeding into lower original feeder

1. Open the scanner upper unit by pulling up the blue levers on both sides.



2. Remove the mis-fed original.



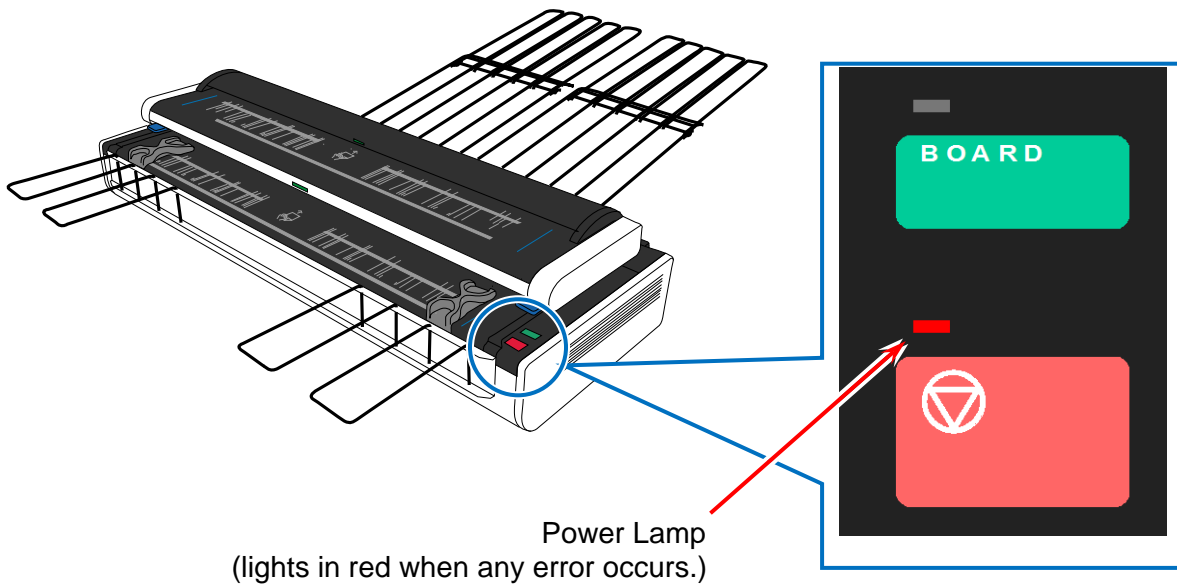
### **!** CAUTION

Take care not to catch your hand when closing the scanner upper unit.

## 3. 2 Error

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The Power Lamp lights in red when the scanner has any error. See the description of error indicated on the controller monitor, and correct the error appropriately.



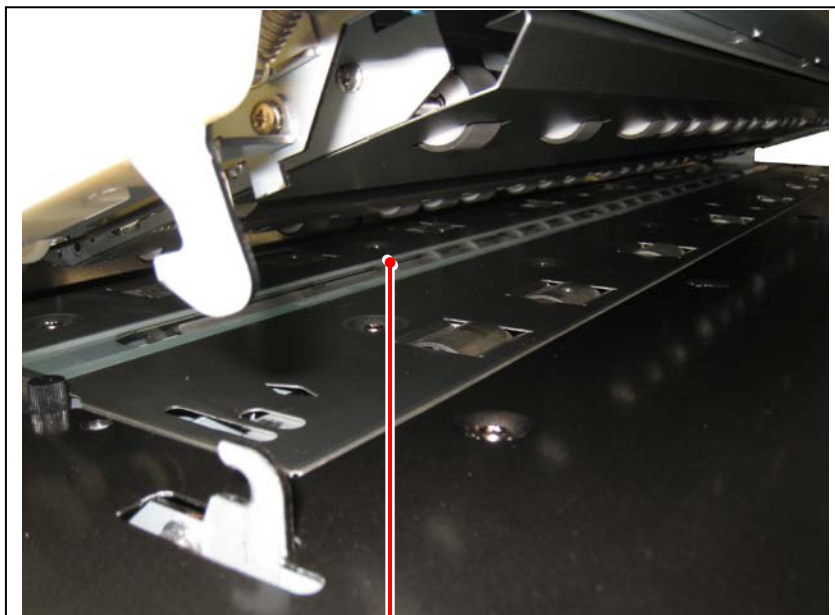
## 4. 1 Cleaning

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It is recommended to clean Original Glass, Platen and Feeding Rollers once a week or as needed. Dirt of these parts may result in the image problem or getting dirt on the scan original.

### 4. 1. 1 Document Glass

Open the scanner upper unit. Wipe the Document Glass with a soft cloth with a little water (or with neutral detergent) first, and wipe it with a dry soft cloth.



Document Glass

**⚠ CAUTION**

The Document Glass can be removed if the thumb screws on both sides (and the brackets) are removed. But do not touch this screw as only the service technician is allowed for removing the Document Glass. If the Document Glass is removed, some foreign substance may drop into the machine, and may cause several troubles as short-circuit.

Do not touch this screw!



## 4. 1. 2 Platen

Wipe the entire white part of the Platen with a soft cloth with a little water (or with neutral detergent) first, and wipe it with a dry soft cloth.



Platen : Clean the entire white part.