

F-Mark2

Auto sheet feeder

Setup user's manual

F-Mark2 setup user's manual_01E

- Read this manual carefully before using the machine.
- Keep the manual in a handy place for future reference.

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1. Safety Precautions



WARNING



Indicates a potentially hazardous situation if not avoided, could result in death or serious injuries.

Following these guidelines to avoid to the risk of fire, burns, injury, electro shocks, rupture, overheating, abnormal odors or smoke.

- Always use the recommended AC adapter (EA10682U-120 from EDAC Power) for the F-Mark feeder to prevent any damage or failure.
- The rated voltage is 100-240V AC 50-60Hz.
- Do not touch the F-Mark device during a lightning storm.
- Do not use the machine / AC adapter in place of high humidity.
- Do not overload the power cord.
- Do not place heavy objects on, or damage the power cord or plug.
- Do not forcibly bend or pull the power cord.
- Make sure that the plug is fully inserted in the power outlet. Do not use outlet that is loose.
- Do not allow the machine / AC adapter / power plug to get wet for example, by handling them with wet hands or spilling beverages onto them.
- Do not disassemble or modify the F-Mark / AC adapter.
- Disconnect the AC adapter and stop using the machine if you notice abnormal odor, heat, discoloration, deformation or anything unusual while using it.



CAUTION

Indicates a potentially hazardous situation which, if not avoided could result in minor or moderate injury.

Follow these guidelines to avoid the risk of injury, electro shocks, or damages to the F-Mark2.

- When placing the F-Mark2 device, allow enough table space, take in consideration the vibrations generated during operations.
- Ignoring to do this might cause the product or part of it to fall out of position, resulting in possible body injury or malfunction of the product.
- Do not use or store the product is exposed to direct sunlight, water or oil splashes, salty air or saltwater, dust or humidity, flammable gas.
- Do not touch the paper sheets during operation, the paper edge can cut seriously your skin.
- Do not approach with your face to the moving arm and moving paper sheet.
- Do not attempt to lubricate the mechanisms.
- Do not apply force or object weights on the moving arm.
- Lay the power adapter in a position so the green light is visible.
- The will alert if the adapter should accidentally go off due to external effects. If for any reason the green light goes off, disconnect the AC power cord from the wall.
- Be sure to grasp the plug, not the cable, when disconnecting the power supply from an electric form an electric socket.

2. Terms of use for F-Mark2

Restriction on use F-Mark2

- F-Mark2 cannot be connected with other cutting plotter.
- F-Mark2 cannot be use with Plug-in software and Graphtec Design software with accessories of CE7000.
- F-Mark2 cannot be use with "Simple Mode" of CE7000.
- Use F-Mark2 with "ROLL-2 CURRENT POSITION" of CE7000.
- Disable the "Sleep Mode" and "Screen Saver" of the operate computer of F-Mark2.
- When using the F-Mark2, the holder for pen cannot use be in CE7000.
- Use the USB cables which supplied with F-Markk2 for connecting F-Mark2, CE7000, operating computer and USB-Hub, if use any USB cables, F-Mark2 might not worked properly.
- iMark Plus software cannot be load the file name of 2byte characters, use the file name of alphabet and number.
- The files that can be loaded into the iMark Plus software are only the files that can be saved by the Illustrator 8 format or EPS file that file saved by the Corel Draw.
- When installing the F-Mark2 under the strong lighting environment such as spotlight, it may not operate properly.

Media restrictions to be used with the F-Mark2

- Curled media cannot be use with the F-Mark2.
- Thick media may not be use with the F-Mark2 because it interferes with Media Separation Flap.
- Perforated media may not be use with the F-Mark2 because it is possibility of double feedings.
- The maximum number of media that can be load to the Supply tray of F-Mark2 is 200 sheets or 35 mm in height. The thick media cannot be loaded 200 sheets into the F-Mark2.
- When the media that under cutting interferes with the media in the Exit tray, remove the media periodically from the Exit tray.

Cutting area

The cutting are of F-Mark2 as follows.

- Minimum distance from front edge of media to cutting line.
Adhesive cut :20 mm (Recommended value :30 mm)
Die cutting :25 mm (Recommended value :35 mm)
- Minimum distance from rear end of media to cutting line.
5 mm (Recommended value : 15mm)
- Minimum distance from top edge of media to cutting line.
5 mm (Recommended value : 15 mm)

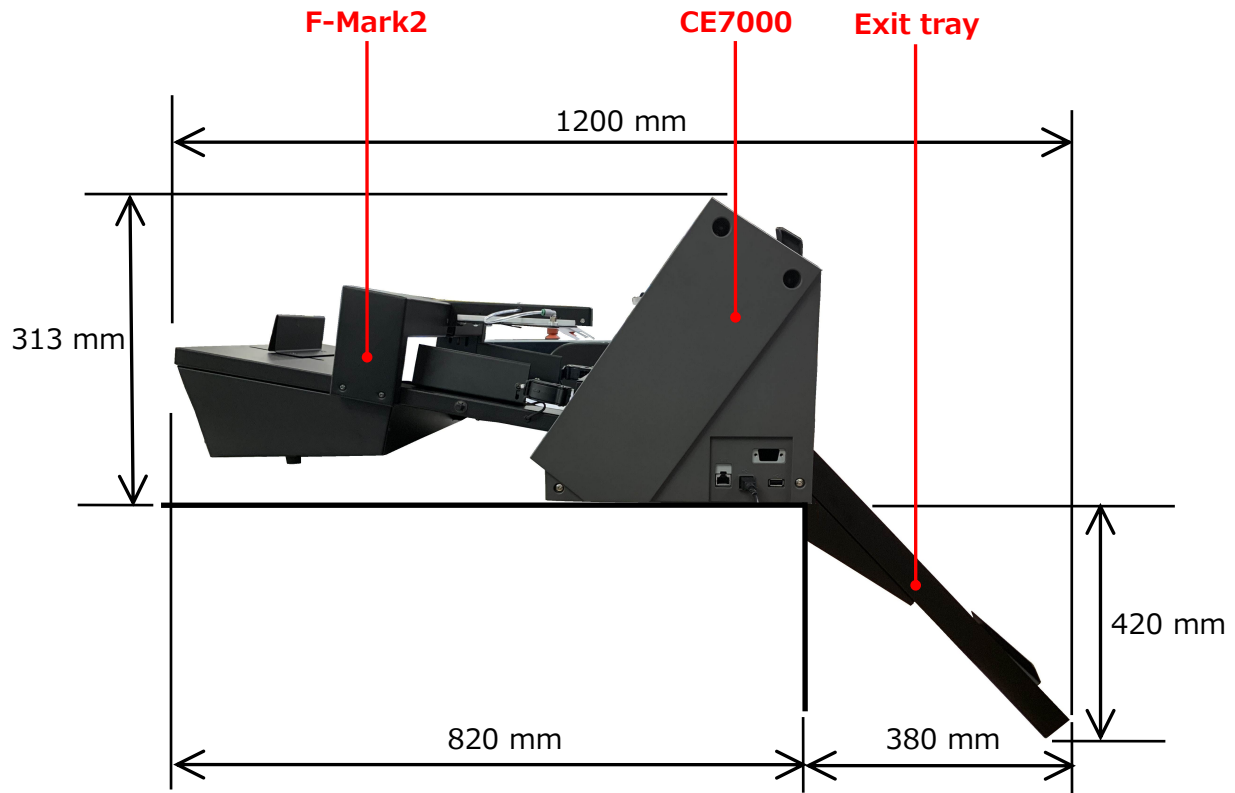
We recommend using recommended values for stable media feeding and stable cutting.

When minimum distance selected, the media may not be fed correctly depending on the media type and cutting shape.

3. Necessary items in advance for installing F-Mark2

Please prepare the working table of the following size as installation place of F-Mark2.

- The required space is 800 mm or more in width, 820 mm or more in length, 420 mm or more in height. Because the Exit tray hangs 420mm from the top of work table.



Please prepare the tree places electrical outlet, for F-Mark2, for CE7000-40, for operation computer.

4. Main Specifications

The F-Mark2 automatic feeder is part of the CE7000 ASF(Auto Sheet Feeder) system.

It allows automatic operations for contour cutting on printed adhesive sheets or cardboard.

The system is composed by an automatic feeder, a cutting plotter, a dedicated software with optical detection features and Exit Tray. A mobile lever equipped with vacuum suction cups lift the sheets from the Media Supply Tray and insert them into the cutting plotter.

The F-Mark2 feeder is equipped with an internal vacuum pump, which does not require external air connection.

The system is connected to a computer using USB cable, the dedicated software must be installed on a PC on Windows OS.

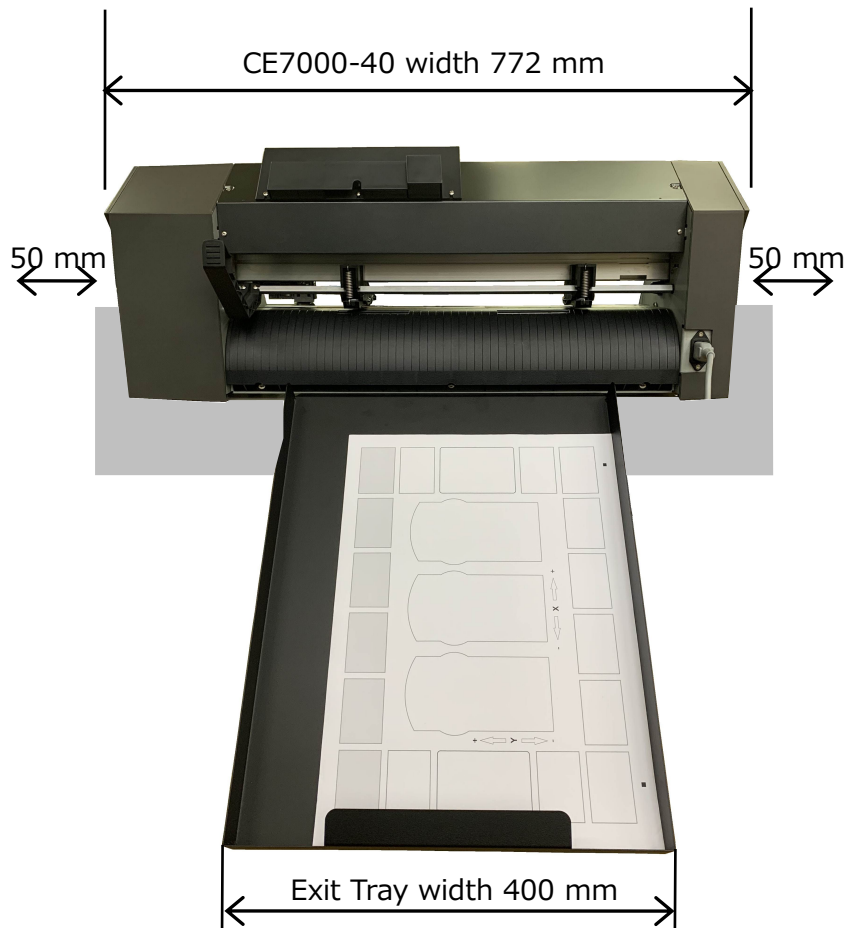
The safety precautions and specification here are referred to the feeder unit only.

For safety precautions and specifications of cutting plotter, refer to the CE7000 user's manual.

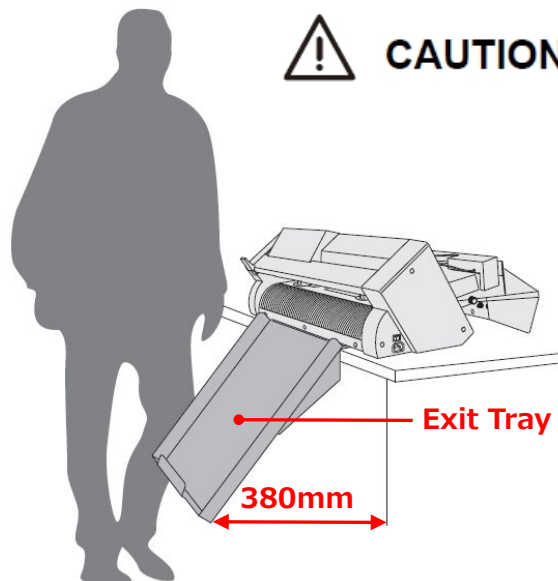
Media size	Width:297 to 370mm Length:210 to 500mm up to 700mm with optional extender A4,A3,SRA3,Extended A3.
Sheet capacity	Media supply tray:about 200 sheets (limit depending on media thickness) Max height:35mm (depending on type of media)
Sheet weight	350g/m ²
Power source	AC100V to 240V 50/60Hz
Power consumption	60W
Weight	Sheet feeder:10kg Exit tray:4kg
Feeding system	Internal vacuum pump
Feeding time	5 seconds
Media separation	Air blowers, variable air stream separation
Compatible OS	Windows 7/8/ 8.1/10 (32bit/64bit)
Interface	USB
Dimensions (L)x(W)x(H)	Feeder:590x430x220mm System Feeder+Cutting Plotter+Exit tray 1200x680x270mm(Height from table top)
Optional parts	Extender to 700mm sheets Stopper for small formats
Operating environment	10 to 35°C, 35 to 75%R.H.(non-condensing)
Guaranteed accuracy environment	16 to 32°C, 35 to 70%R.H.(non-condensing)
Installation space(L)x(W)	Tabletop 820x750mm

5. External Dimensions

- The tabletop length required to connect and install the F-Mark2 to the cutting plotter is 820 mm.
- The width of F-Mark2 when connected to the CE7000-40 is 772 mm.
- When F-Mark2 connecting to the CE7000-40, 50 mm space is required on each side of the CE7000-40 to connect the power cord and USB cable to the CE7000-40.



- When installing F-Mark2 and CE7000-40, the Exit Tray expands 380 mm from the working table. Therefore, when installing F-Mark2 and CE7000-40, secure the enough space so that the worker does not hits to Exit Tray.



6. How to unpack the box of F-Mark2

1. Open the box of the F-Mark2 with a knife.



2. Remove the packing material from the box.



3. Take out the Accessories box from the box.



4. Take out the Exit tray from the box.



5. Remove the packing material from the box.



6. Remove the side packing materials from the box.



7. Remove the back side packing material from the box.



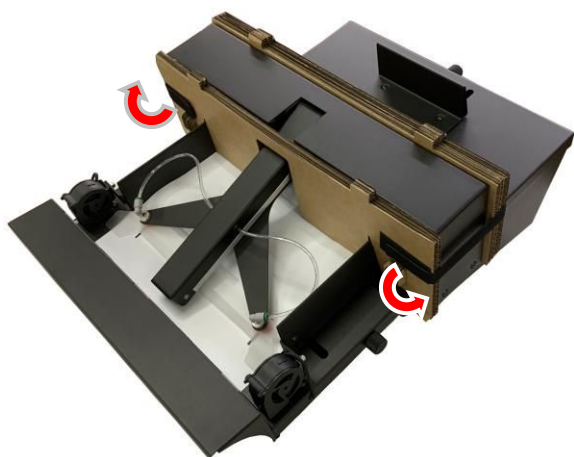
8. Take out the F-Mark2 from the box.



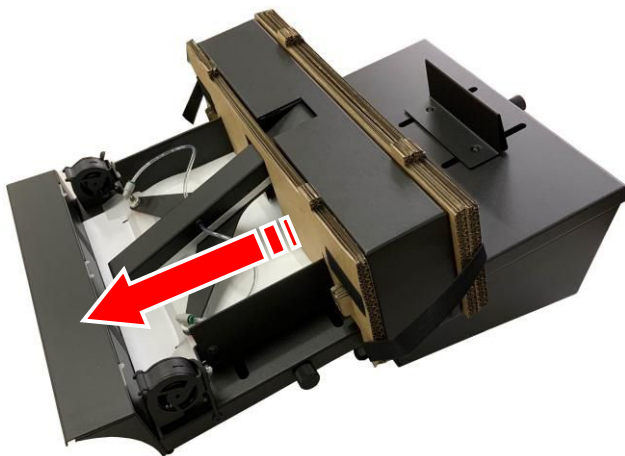
9. Take out the F-Mark2 from the packing plastic bag.



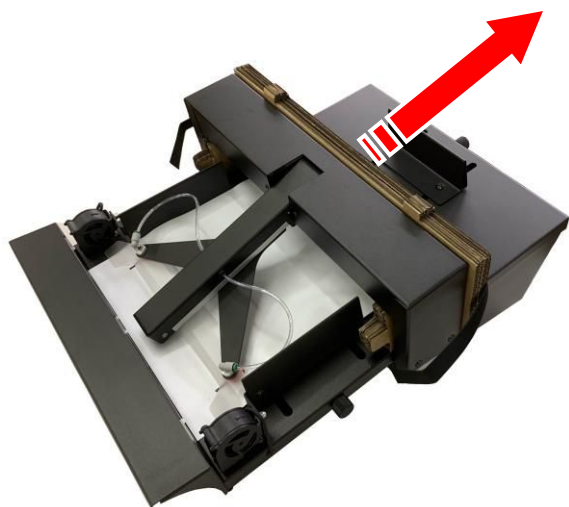
10. Peel off two Velcro which fixing the Arm cushioning material.



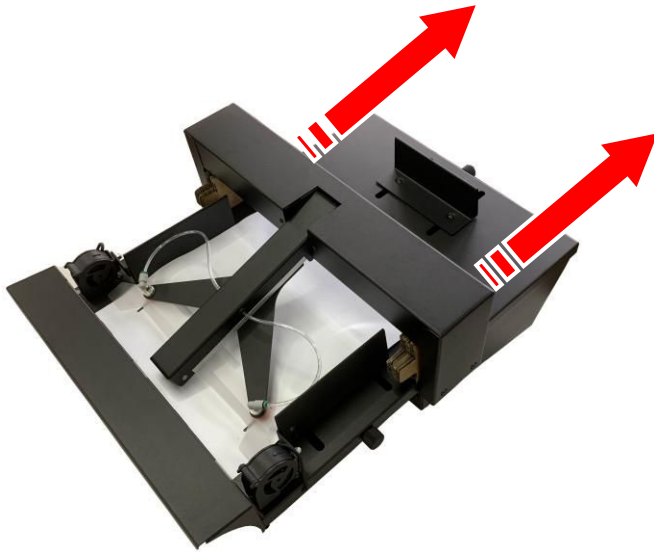
11. Detach the front Arm cushioning material from the F-Mark2.



12. Detach the rear Arm cushioning material from the F-Mark2.



13. Detach the two cushioning materials under the Arm from the F-Mark2.



14. Turn the Blower to the side.



15. Take out the Exit Tray from the packing plastic bag.

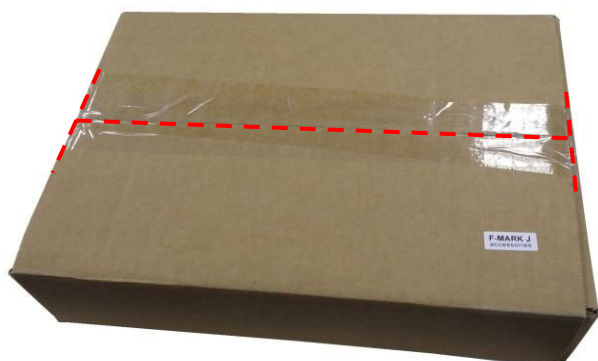


16. Take out the Test Cut sheets and Calibration sheets from the Exit Tray.
There are 12 Test Cut sheets and 2 Calibration sheets.



7. Confirm the accessories of F-Mark2

1. Open the accessories box with a knife.



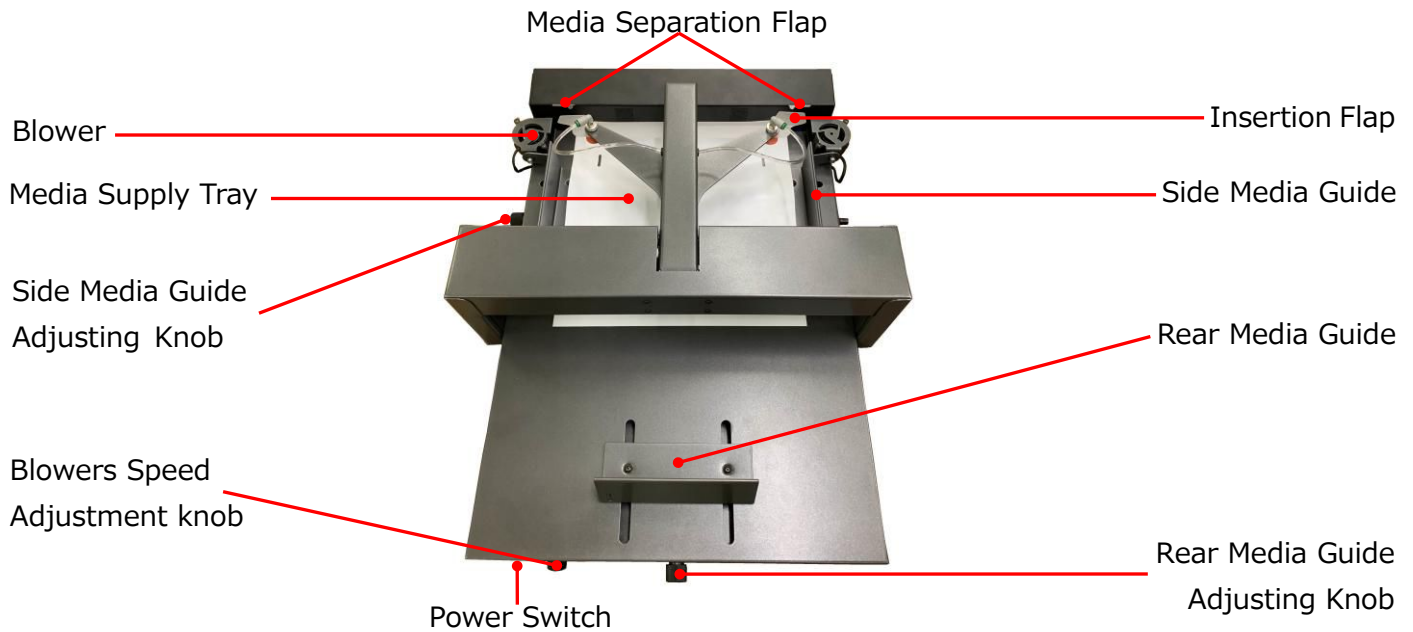
2. Confirm the accessories of F-Mark2 with following lists.

Item	Image	Quantity
Camera assembly		1
Allen wrench (2mm) for camera mounting		1
Suction cup for spare		2
AC power adapter for F-Mark		1
Power cord for AC power adapter (The plug shape varies depending on the region)		1

Item	Image	Quantity
USB Hub		1
USB cable 1.0m from USB Hub to Cutting plotter		1
Adhesive cable clip for camera cable fixing		2
Alignment label For mounting position of F-Mark2 to CE7000-40		2
CD-Rom		1
Safety Precautions		1
Calibration sheet (Not in the accessories box)		2
Test Cut sheet		12

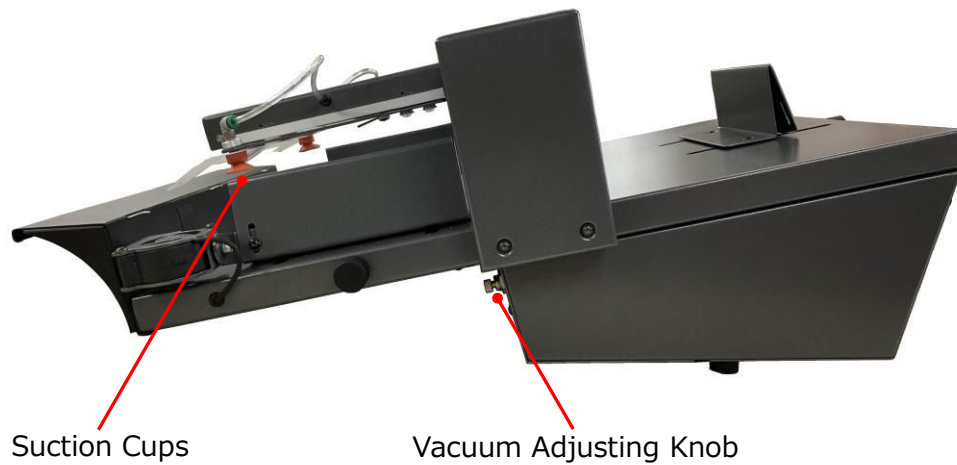
Item	Image	Quantity
Stopper Plate (Not in the accessories box)		1
Tail Tool (Not in the accessories box)		1
Exit Tray (Not in the accessories box)		1

8. Names and Functions of F-Mark2



- **Media Separation Flap** : For prevent media double feeding.
- **Blower** : Separate the media by the wind from the blower for prevent media double feeding.
- **Blowers Speed Adjustment knob** : Adjust the blower speed.
When turning the knob clockwise,the rotation speed of blowers increases. When turning the knob counterclockwise,the rotation speed of blowers decreases.When turning the knob counterclockwise to the end,blowers stops.
- **Insertion Flap** : It assists the insertion of media when inserting the media to the cutting plotter.
- **Media Supply Tray** : Storing the media to be cut by the cutting plotter.
- **Side Media Guide** : Adjust the width of media in the Media Supply Tray.
- **Side Media Guide Adjusting Knob** : Adjust the width of Side Media Guide depending on the media width to be used. When adjusting it, make suer that Side Media Guide lightly touches to side of media. If width of Side Media Guide is narrow or wider than the width of media to be used may not transport Correctly.
- **Rear Media Guide** : Adjust the rear edge of media in the Media Supply Tray.
- **Rear Media Guide Adjusting Knob** : Adjusting the position of Rear Media Guide depending on the media size to be used.When adjusting it, make sure that the tip of media lightly press to the front of inside of Media Supply Tray.
- **Power Switch** : Turn the F-Mark on and off. When the F-Mark turn on,the F-Mark starts initial operation.

Side view



- **Suction Cups** : Pick up media by Suction Cups when inserting the media to the cutting plotter.
- **Vacuum Adjusting Kob** : Adjust the vacuum force to pick up media.
When turning the knob clockwise, the vacuum force increasing.
When turning the knob counterclockwise, the vacuum force decreasing.
Adjust the vacuum force depending on the media to be used.

9. How to install F-Mark2

1. Peel off the adhesive tape on the back of Exit tray.

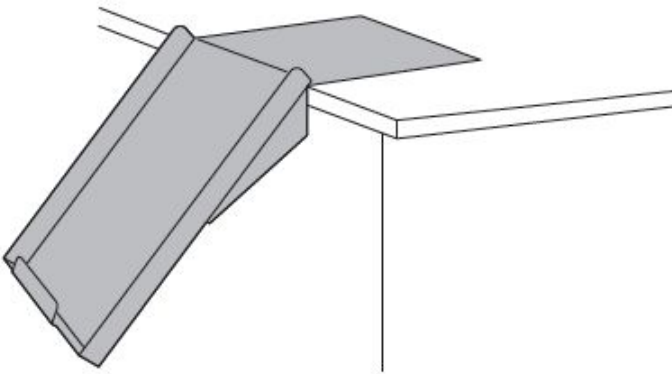


2. Put the Exit tray on the working table. Then press the Exit tray firmly on the Working table.



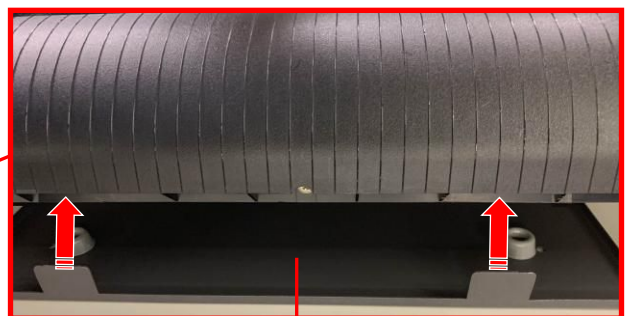
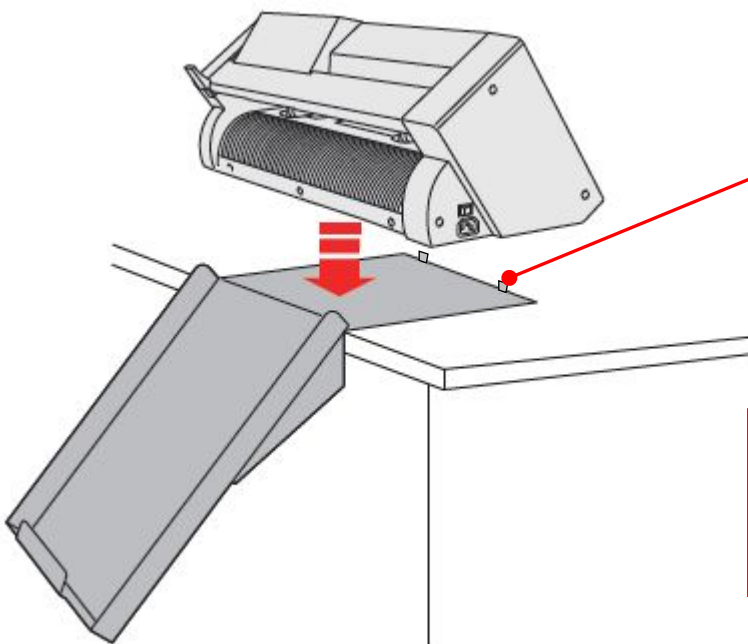
CAUTION

The adhesive tape fix the Exit tray for a short time, it may drop if you do not place the CE7000-40.

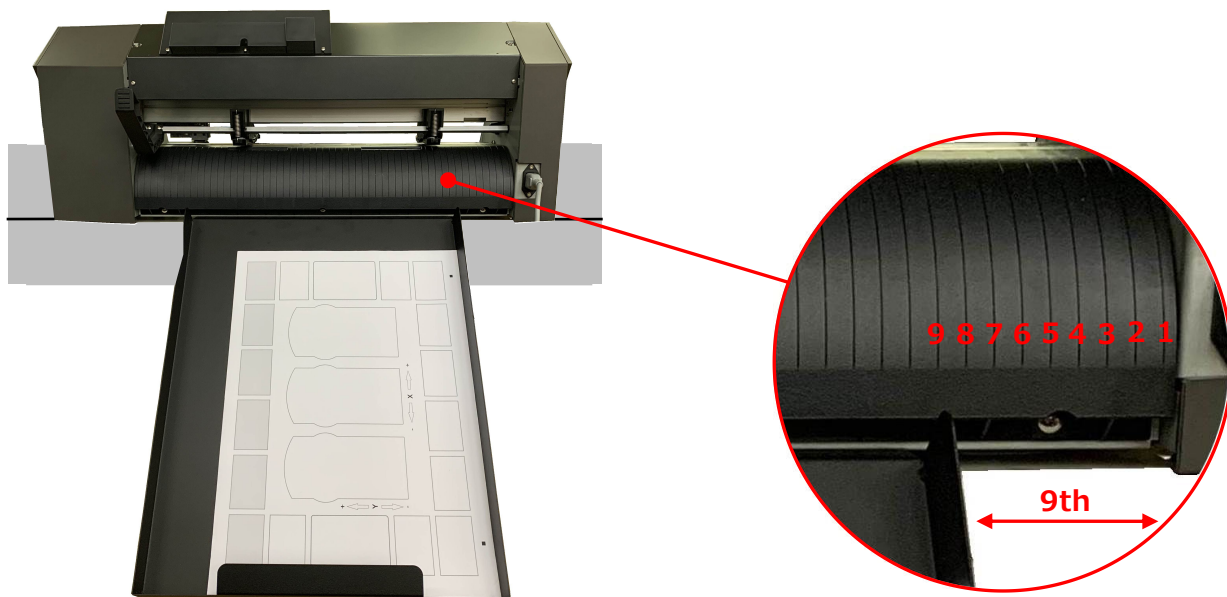


3. Put the CE7000-40 on top of the Exit tray.

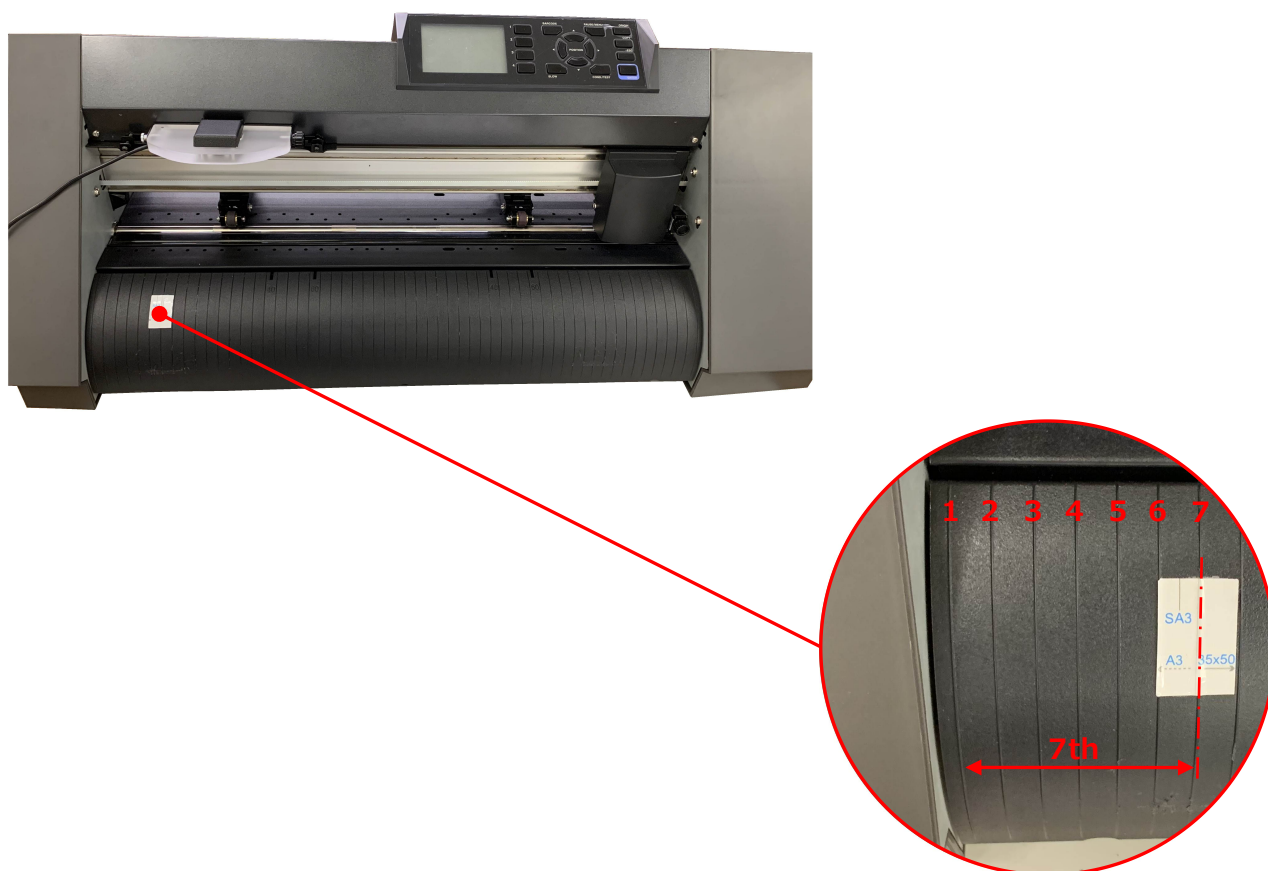
There are two ribs on the front of Exit tray. When putting on the CE7000-40 on the Exit tray, insert the two ribs so that they fit into the gaps of the Front Cover of CE7000-40.



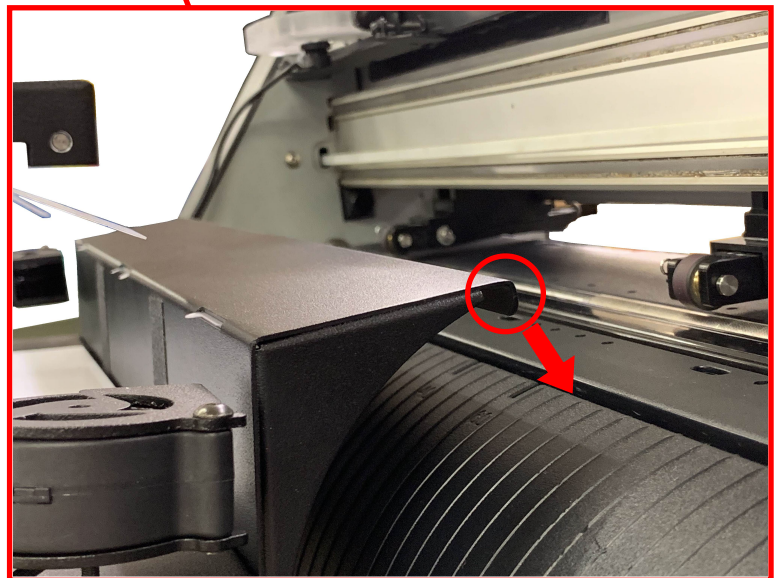
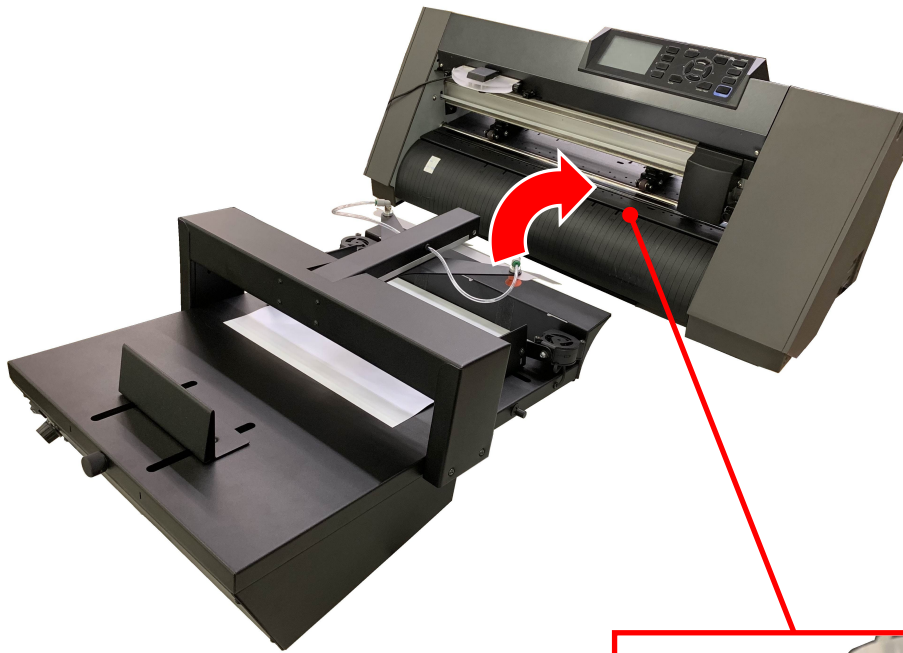
4. Adjust the position the CE7000-40 so that the right edge of the Exit tray is align the 9th line of the Rear Cover of the CE7000-40, in order to media which after cut by the CE7000-40 drop into the Exit tray correctly.



5. Align the center of Alignment label with the 7th line of the Front Cover of the CE7000-40 and pasted it.

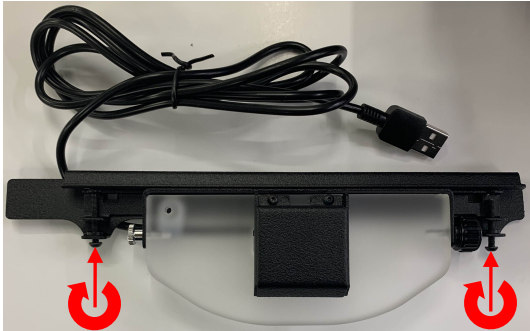


6. Connect the F-Mark2 to the CE7000-40 so that the front edge of the F-Mark2 fits into the groove on the Front Cover of the CE7000-40.

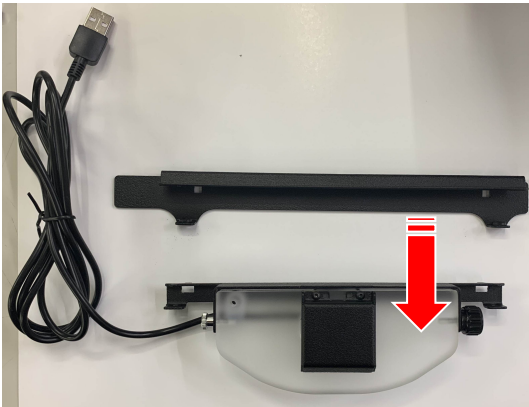


10. How to attach the Camera to the CE7000-40

1. Detach the two M2L20 screws from the Camera Assembly using the accessory allen wrench.



2. Separate the Bracket from the Camera



3. Insert the Bracket into the back of Center Cover of the CE7000-40.

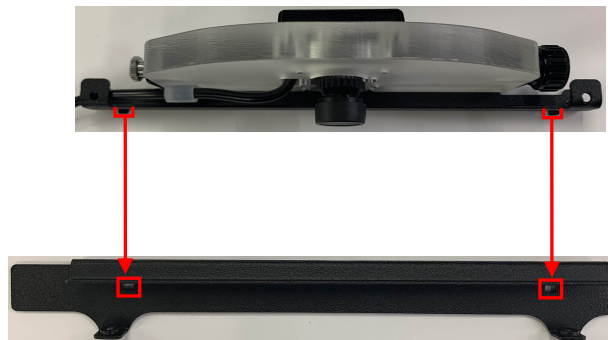
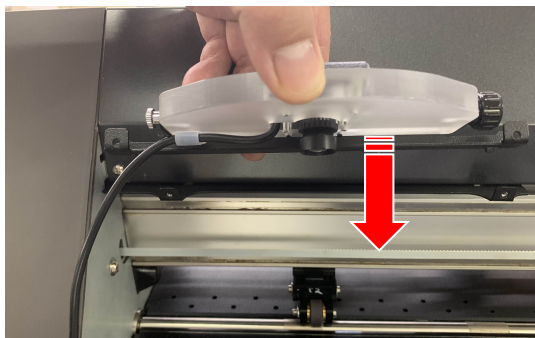


4. Attach the Bracket to the left side of the Center Cover of the CE7000-40 as shown in below picture. Push it all at left as the arrow1 and then pull it in the direction of arrow2.



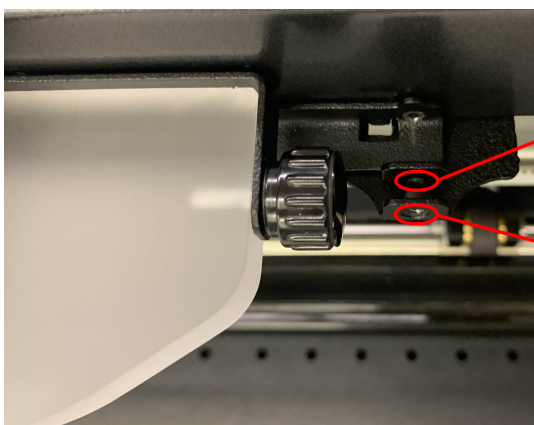
5. Align the Camera with the Bracket and attached it.

When attach the camera to the Bracket, align the two ribs on the Camera with two grooves on the Bracket.



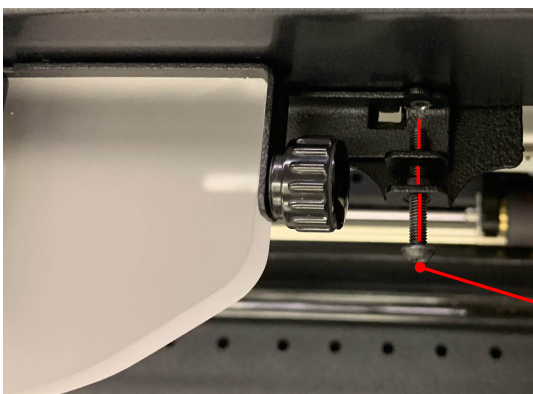
6. Attach the two M2L20 screws to the Bracket to fixing the Camera to the Center Cover of the CE7000-40.

When attaching the two screws to the Bracket, align the screw holes on the Bracket with holes on the Camera Stay.



Hole on the Camera stay

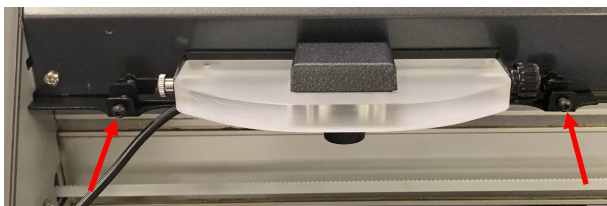
Screw hole on the Bracket



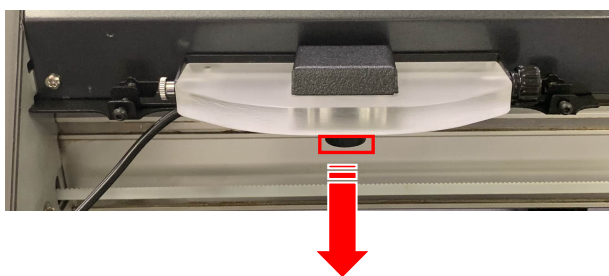
Align the position of screw hole on the Bracket and hole on the Camera stay, and then insert the M2L20 screw into the screw hole and hole.

M2L20 screw

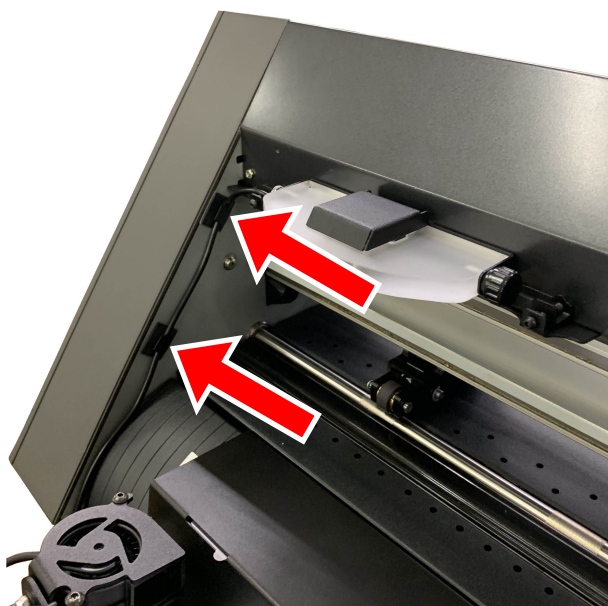
7. Tighten the two M2L20 screws using the accessory allen wrench to fix the Camera to the CE7000-40.



8. Detach the Camera Lens Cover from the Camera.

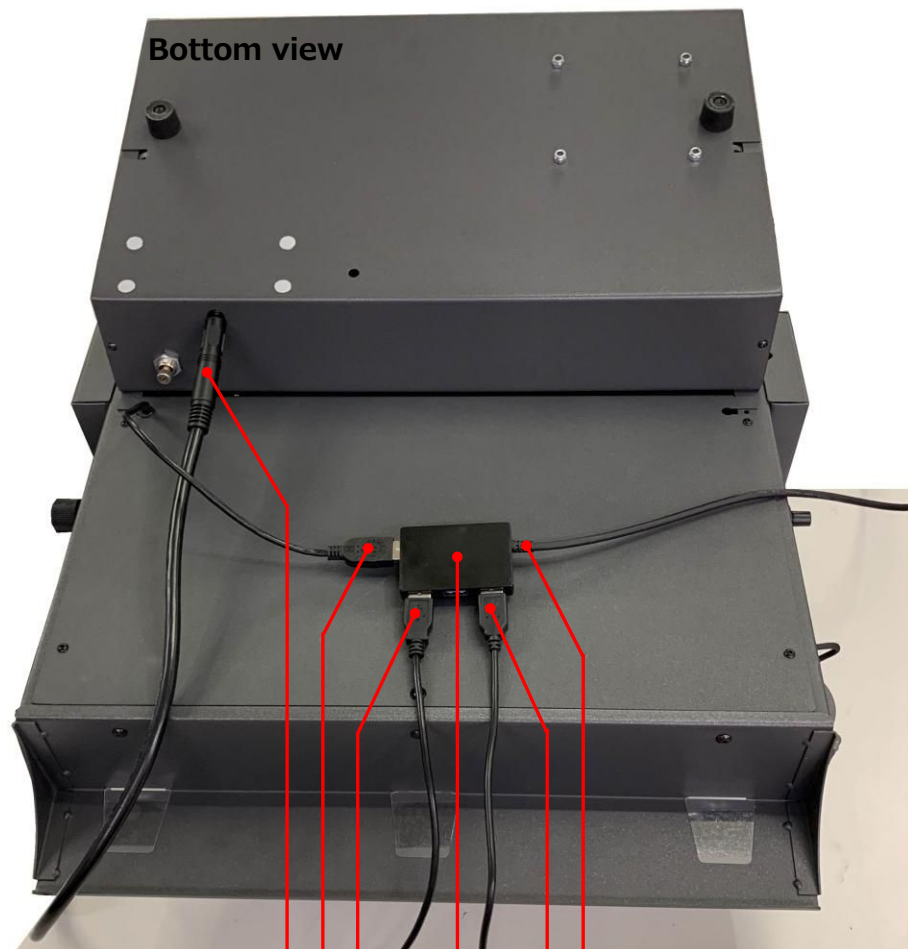


9. Paste the two Adhesive cable crips to the left side inner wall of the CE7000-40.
And then fix the Camera cable on the crips.



11. Cable connection

Connect the USB cables and AC power cable to the F-Mark2 as shown picture below



AC power cable to the AC power adapter

USB cable from the inside of the F-Mark2

USB cable to the camera

USB cable to the computer

USB cable to the CE7000

USB Hub

NOTICE

- After cables connection, confirm that there is no add load to the cables.
- Please use the accessory USB cables with F-Mark2 for connecting the F-Mark2,CE7000-40, computer and USB Hub, if other USB cables used, the F-Mark2 may not operate properly.

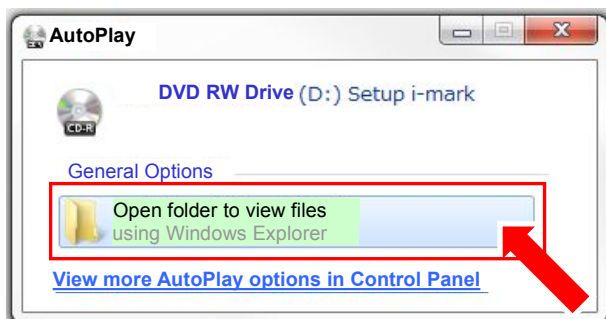
12. How to install the iMark Plus software

Please check the following items before installing the iMark Plus software into the computer.

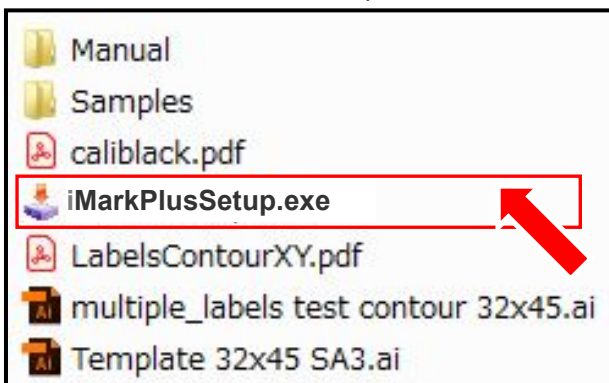
- When there is virus detection programs and programs that reside in the system, please exit in advance.
- To install the software, login the Windows as a member of the administrator account that has administrator rights on the computer.

The procedure to installing the iMark Plus software into the Windows 7 (32bit) environment is described.

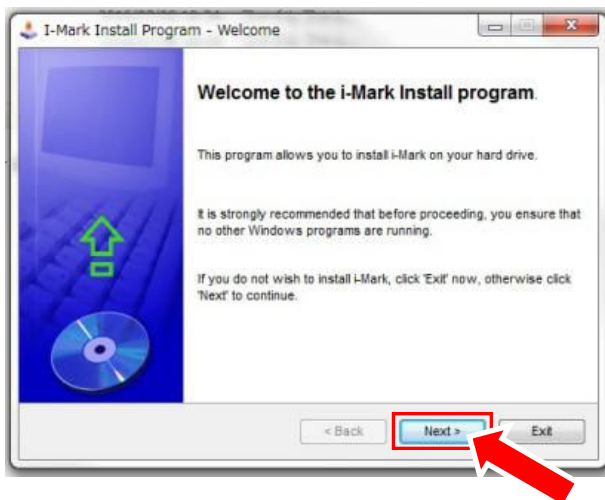
1. Insert the iMark Plus software CD into the CD drive of the computer, and then AutoPlay will be displayed. Click the "Open folder to view files".



2. The files in the CD will be displayed. Select the "iMarkPlusSetup.exe", and double click it.



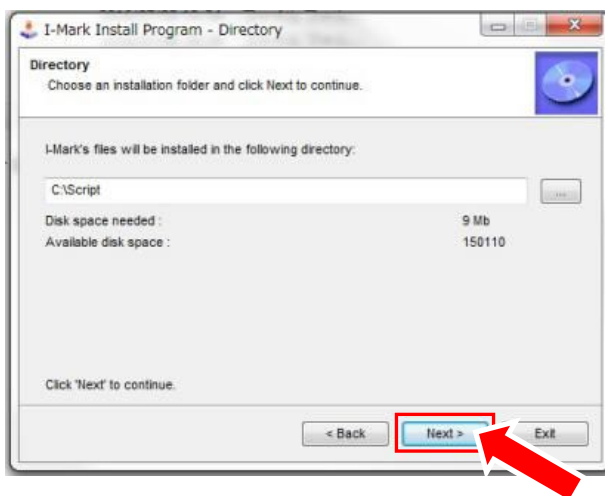
3. Welcome to the i-Mark Install program window will be displayed.
Click “Next >” button.



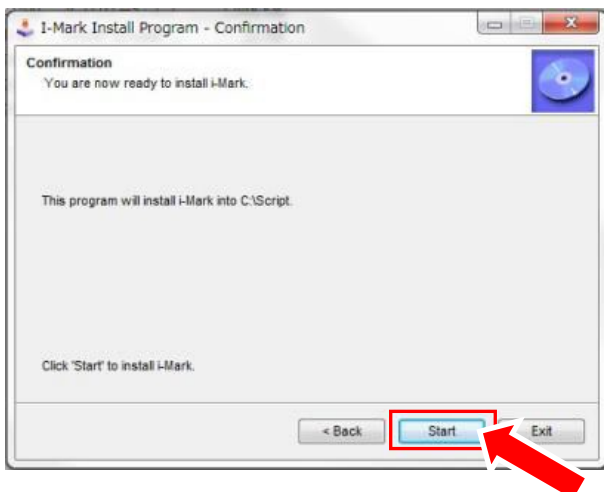
4. The window for selecting the computer directory to install the iMark Plus software will be displayed.
Click the “Next >” button.

NOTICE

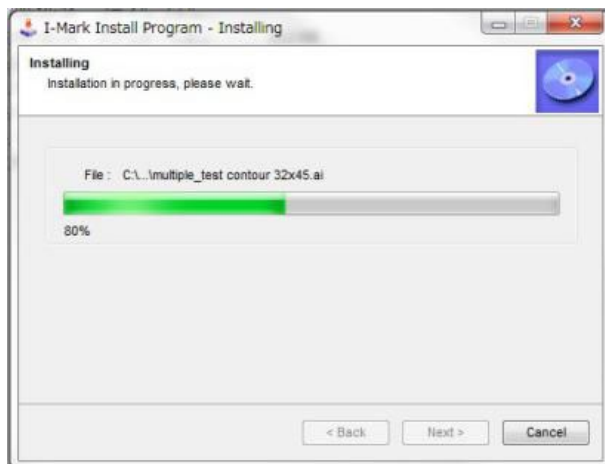
Do not change the folder that installing the iMark Plus software from the default settings (C:\Script).



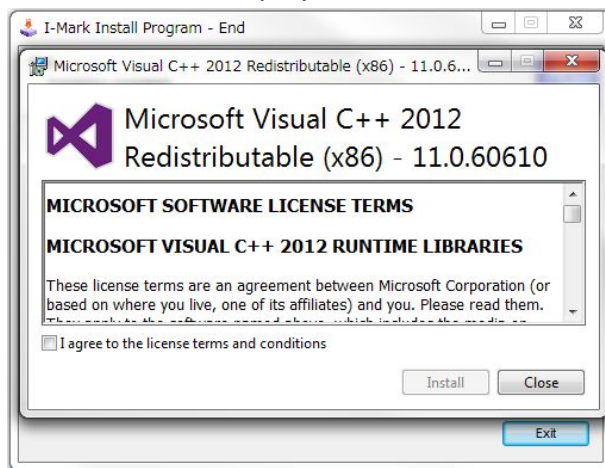
4. The window for confirming the computer directory to install the iMark Plus software will be displayed.
Click the “Start” button to start the installing.



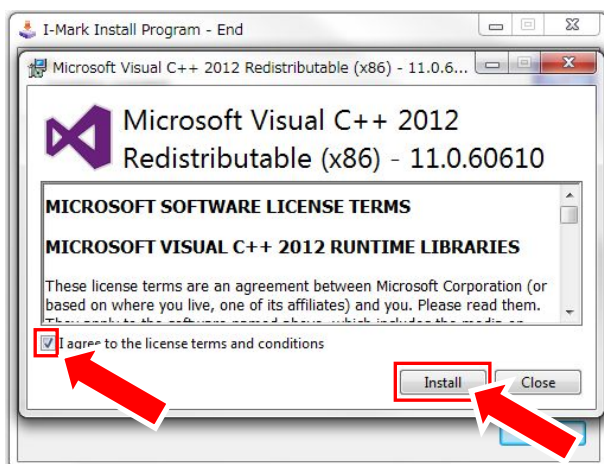
6. iMark Plus software installing will be started.



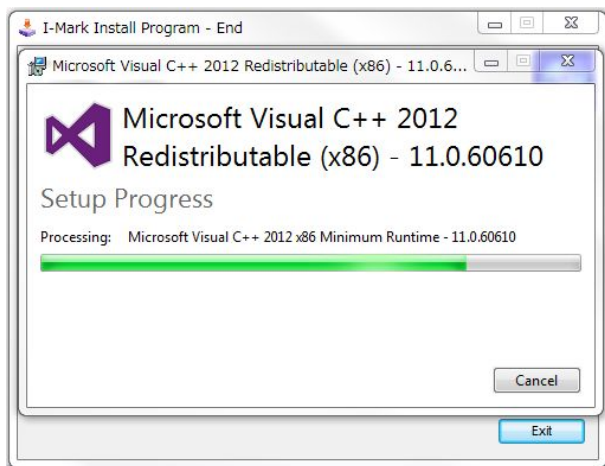
7. When iMark Plus software installation is completed, the Microsoft Visual C++ 2012 installing window will be displayed.



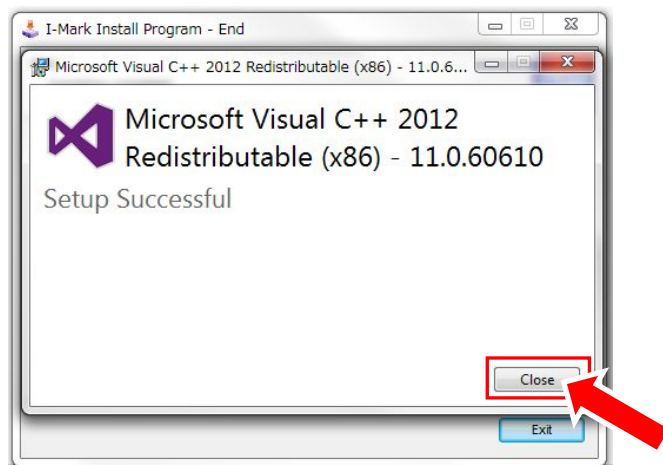
8. Click the check box of "I agree to the license terms and conditions", and then click the "Install" button to start the installing.



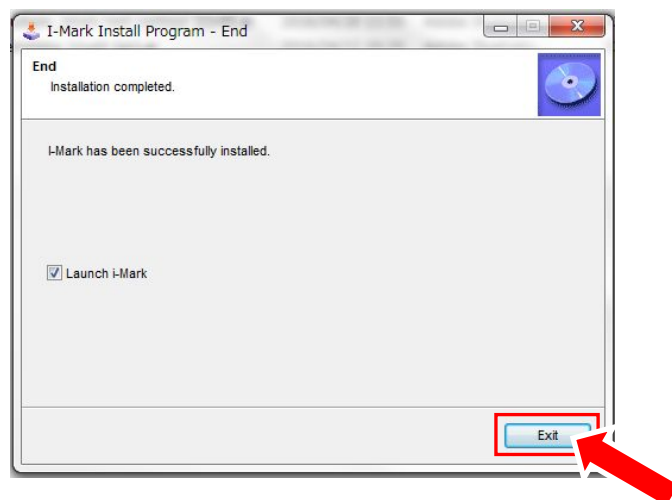
9. Microsoft Visual C++ 2012 installing will be started.



10. When installation is completed, click the "Close" button to close the window.



11. Click the "Exit" button to complete the installation.



NOTICE

- iMark Puls software will not be launch if the F-Mark2 does not connected to the computer.

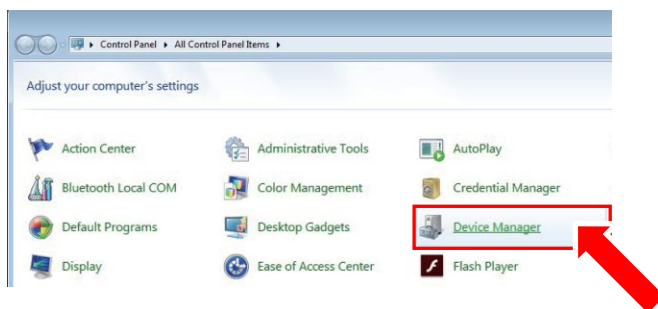
13. Notice on using the iMark Plus software

Please note the followings when using iMark Plus software on computer.

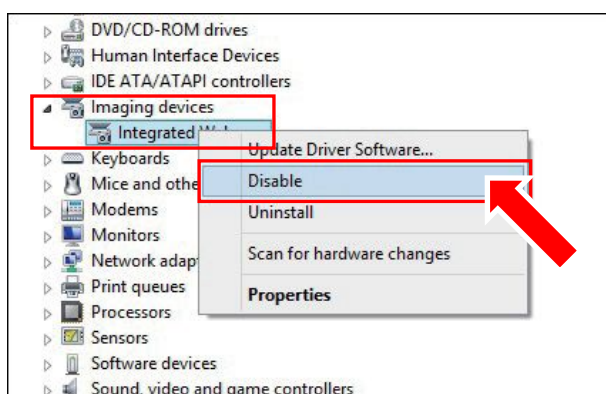
- When there is virus detection programs and programs that reside in the system, please exit in advance.
- Disable the “Sleep Mode” and “Power Saving Mode” and “Screen Saver” of the operation computer of iMark Plus software.
- If operating the iMark Plus software on a computer with internal camera, the iMark software can not be launched, because the internal camera is detected as camera of F-Mark2.
In that case, please disable the internal camera in the following procedure.

<< Procedure to disable the internal camera >>

1. Open the “Control Panel” of Windows.
2. Open the Device Manager” of Windows.



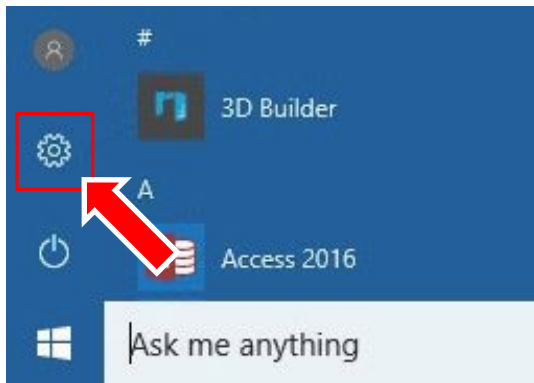
3. Click the right mouse button at the “Image devices” which for the internal camera.
4. Select the “Disable”.



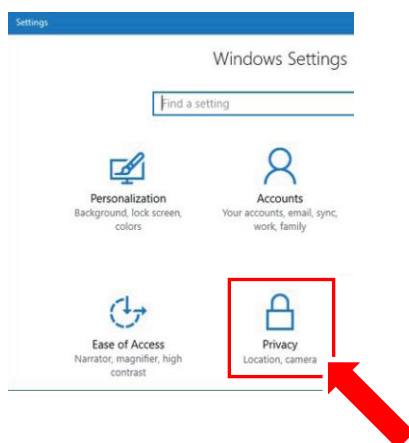
- If operating the iMark Plus software with the setting of the camera privacy set to “Off” on a computer which installed Windows10, the iMark Plus software can not be launched, because the F-Mark2 camera can not be used.
In that case, please change the setting of camera privacy in the following procedure.

<< Procedure to change the setting of camera privacy >>

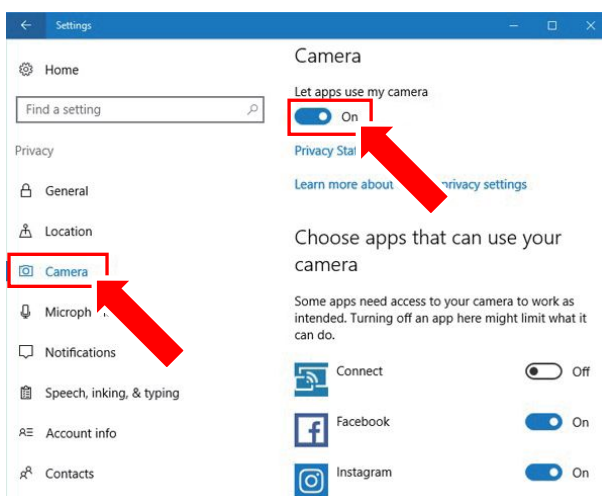
1. Open the Windows Setting menu.



2. Open the Privacy menu.

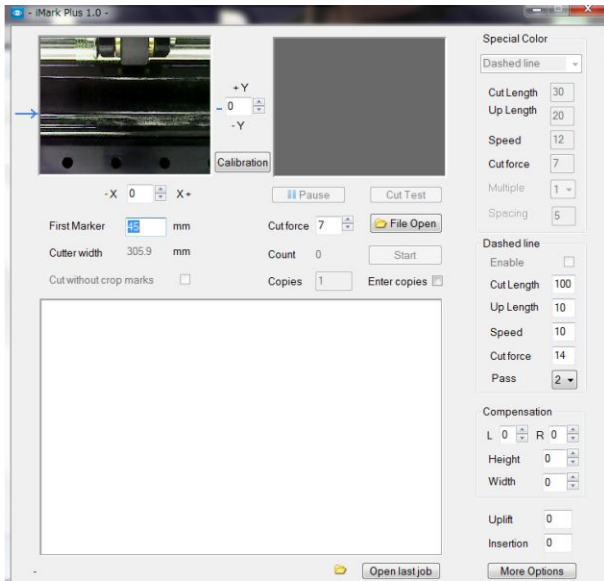


3. Select the Camera of privacy menu.
4. Set the Camera of privacy to “On”.



14. How to adjust the angle of the Camera

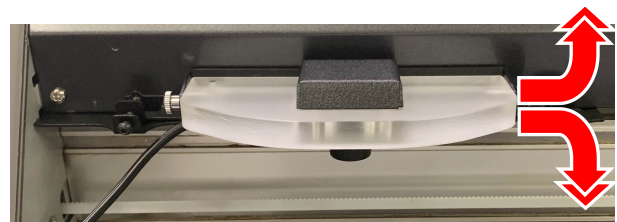
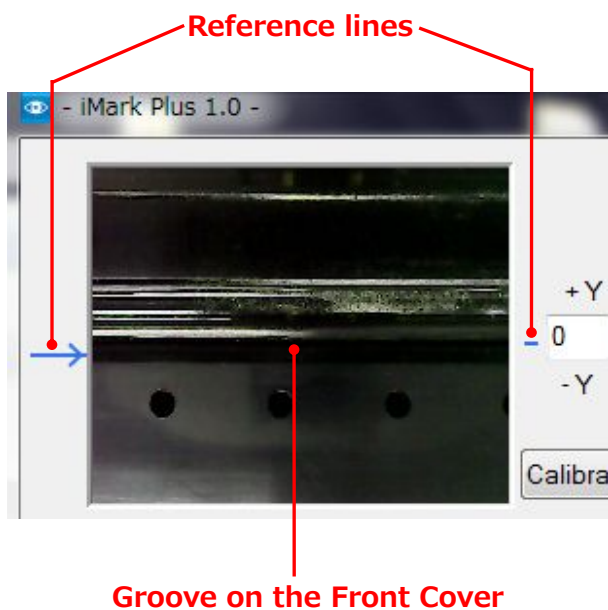
1. Launch the iMark Plus software.



2. Loosen the thumb screws on right side of the Camera to adjust the angle of the Camera.



3. Adjust the angle of the Camera so that the groove on the Front Cover of the CE7000 align to the reference lines that displayed in the iMark Plus software as show in picture below.



4. Tighten the thumb screws while pay attention so that the angle of the Camera does not change.



NOTICE

- After adjusting the angle of Camera, please operate the F-Mark2 so that the angle of Camera does not change.
- Before cutting media with F-Mark2 or performing the Calibration of the F-Mark2, please make sure that the angle of camera adjusted.

15. How to initialize F-Mark2 and CE7000-40.

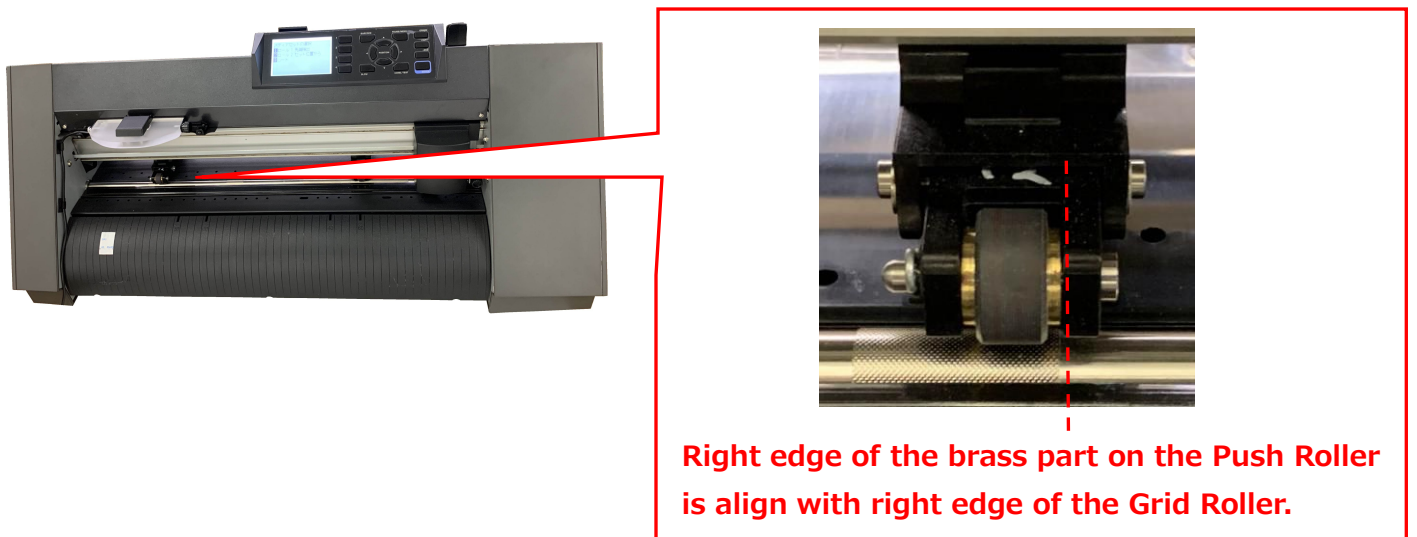
Please check the following items before setting the F-Mark2 and CE7000-40.

- The iMark Plus software is installed in the operation computer.
- The F-Mark2 connected to the operation computer and CE7000-40.

1. Lower the Media Set Lever of the CE7000-40 to move the left side Push Roller position.



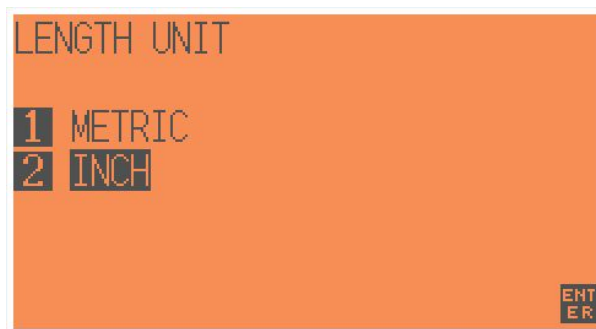
2. Move the left side Push Roller onto the leftmost Grid Roller as shown in picture below.
And adjust the position of the left side Push Roller so that the right edge of the brass part on the Push Roller is align with right edge of Grid Roller as show in picture below.



NOTICE

- This position is reference position of the left side Push Roller.
- Do not move the position of left side Push Roller from the reference position, if move it, the F-Mark2 will not operate properly.
- Change the position of right side Push Roller according to the media width to be use.

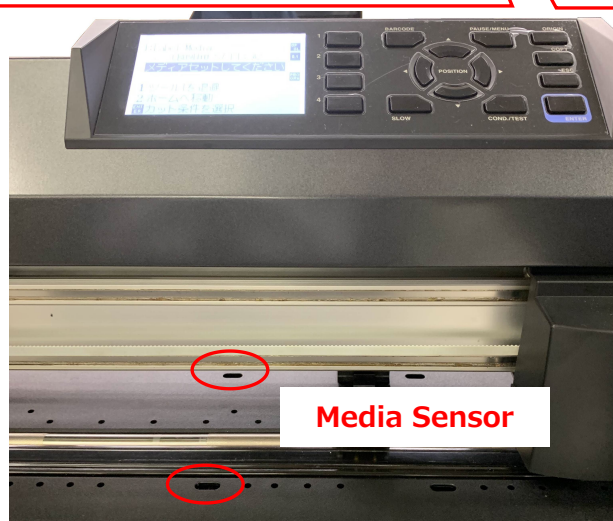
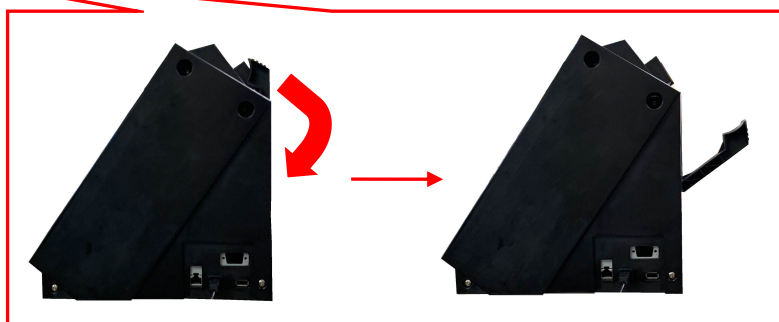
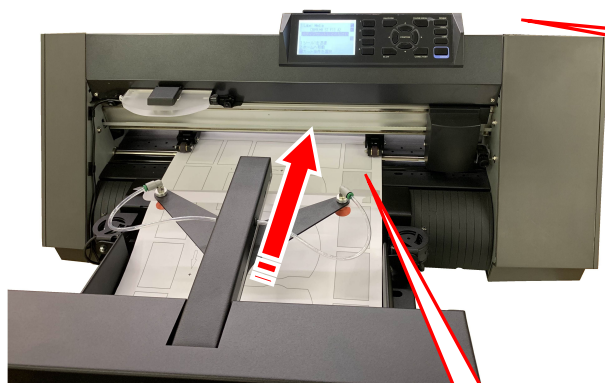
3. Turn on the CE7000-40, and select the language and unit displayed on the CE7000-40.



NOTICE

- This setting is performed only at the initial setting of the CE7000-40.
- Displayed unit of the CE7000-40 and operating units of iMark Plus software are not linked.

4. Lower the Media Set Lever of the CE7000-40, and loading the media into the CE7000-40.



NOTICE

When loading the media into the CE7000-40, loading the media so that the it covers the Front and Rear Media Sensor by the media.

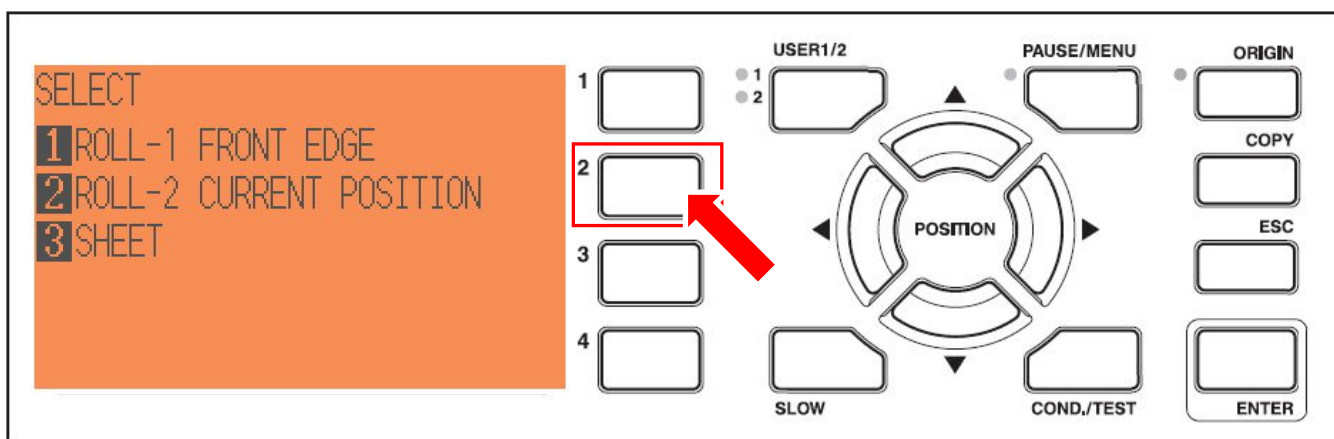
5. Rise the Media Set Lever of the CE7000-40.



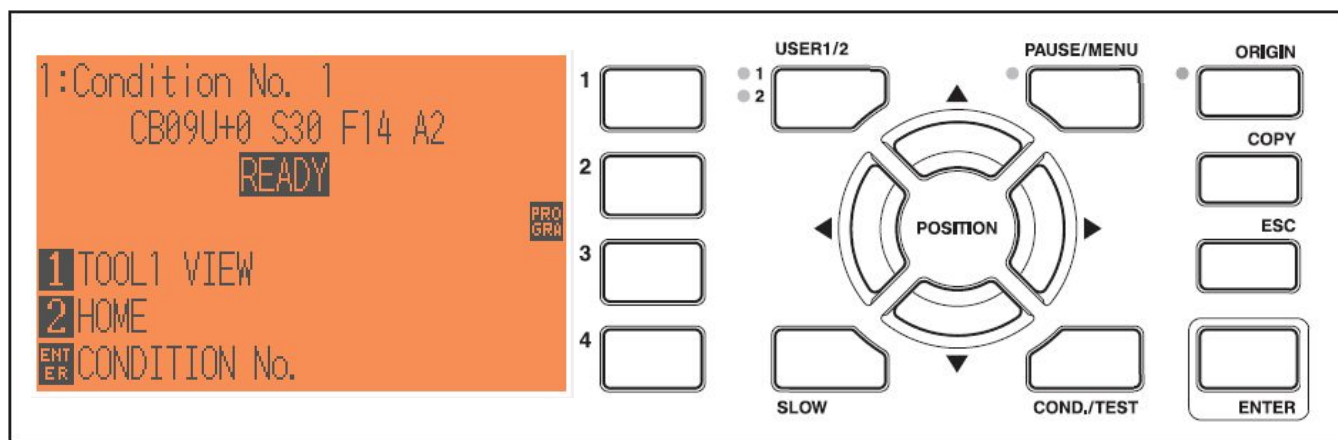
6. Press the “2” button on the control panel of the CE7000-40.

Then the Tool Carriage will be moved between the left and right Push Rollers.

After that, the “READY” will be displayed on the control panel of the CE7000-40.

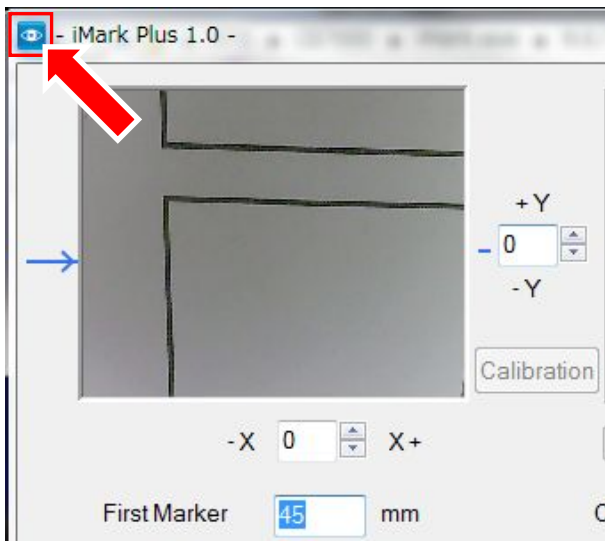


After Tool Carriage moving between the left and right Rush Rollers, the “READY” will be displayed on the control panel.

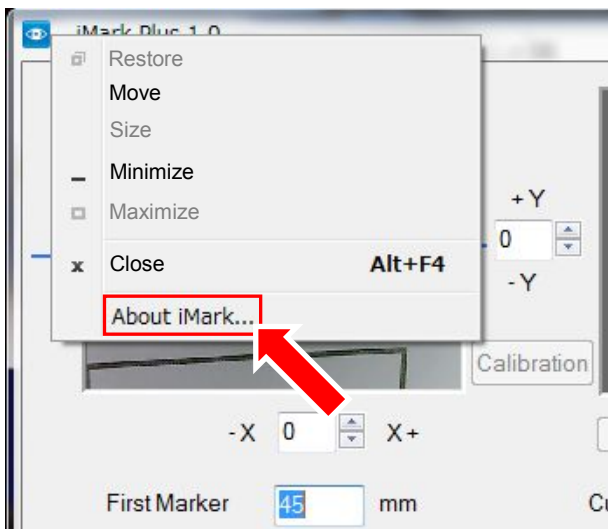


7. Launch the iMark Plus software on the operation computer.

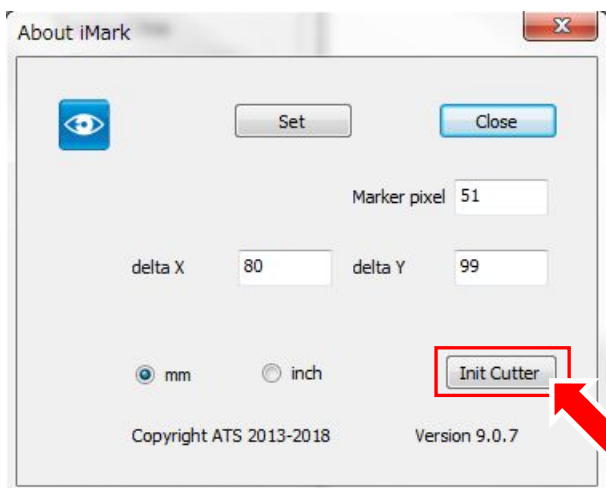
And click the “iMark icon” on the upper left in the iMark Plus software screen.



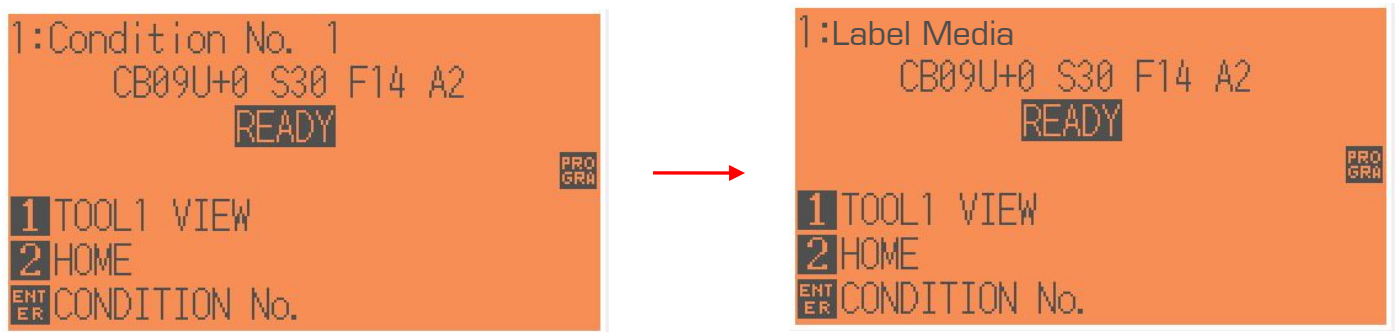
7. Pull down menu will be displayed, and then click the “About iMark...” to open the “About iMark” window.



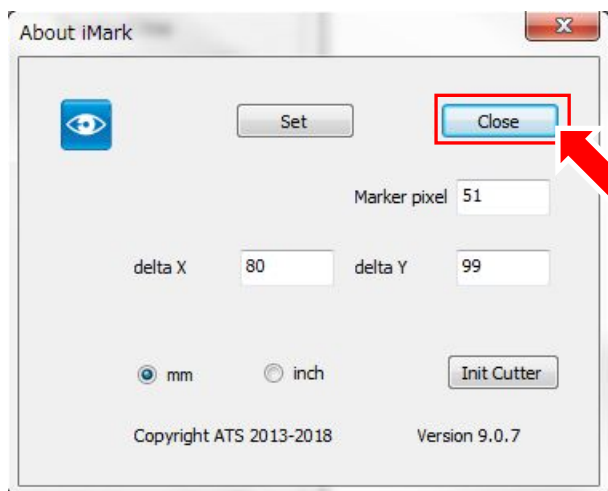
8. Click the “Init Cutter” button to change the settings of CE7000-40 to the F-Mark2.



9. When the settings of the CE7000-40 has been correctly changed to the F-Mark2, "1:Label Media" will be displayed on the control panel.



10. Click the "Close" button to finish the setting of CE7000-40.



NOTICE

This procedure needs to be performed under the following conditions in order to operate the F-Mark2 properly.

- When reconnecting the computer to F-Mark2.
- When changing the operation computer.
- When disconnected the USB connection.

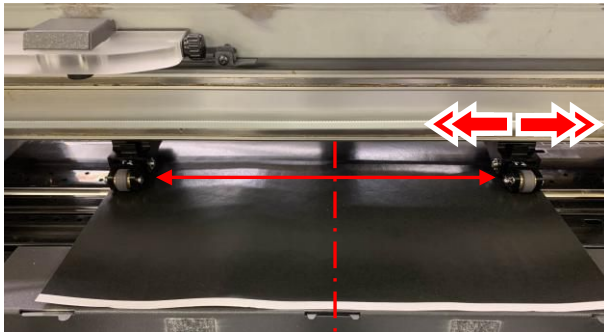
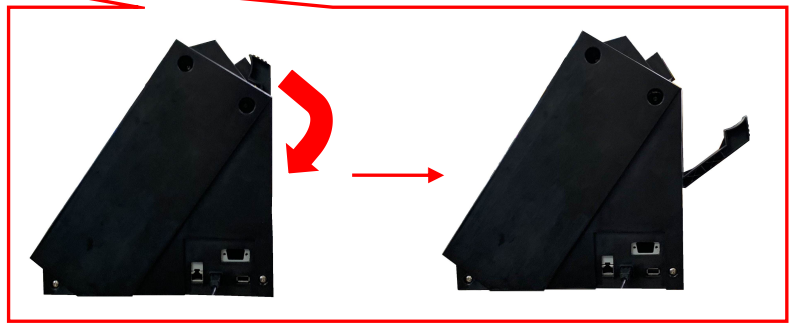
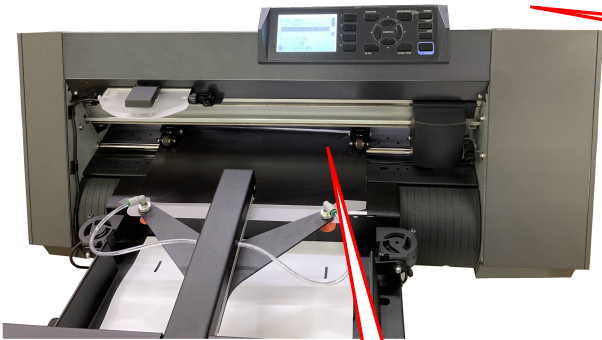
16. How to calibrate F-Mark2

The F-Mark2 needs to be calibration in order to read the crop mark correctly.

Please check the following items before performing the calibration of the F-Mark2.

- The iMark Plus software is installed in the operation computer.
- The F-Mark2 connected to the operation computer and CE7000-40.
- The settings of CE7000-40 has been changed to the F-Mark2.
- The angle of camera has been adjusted correctly.
- The left side Push Roller of the CE7000-40 is in the correct position.

1. Lower the Media Set Lever of the CE7000-40, and loading the "Calibration Sheet" into the CE7000-40.



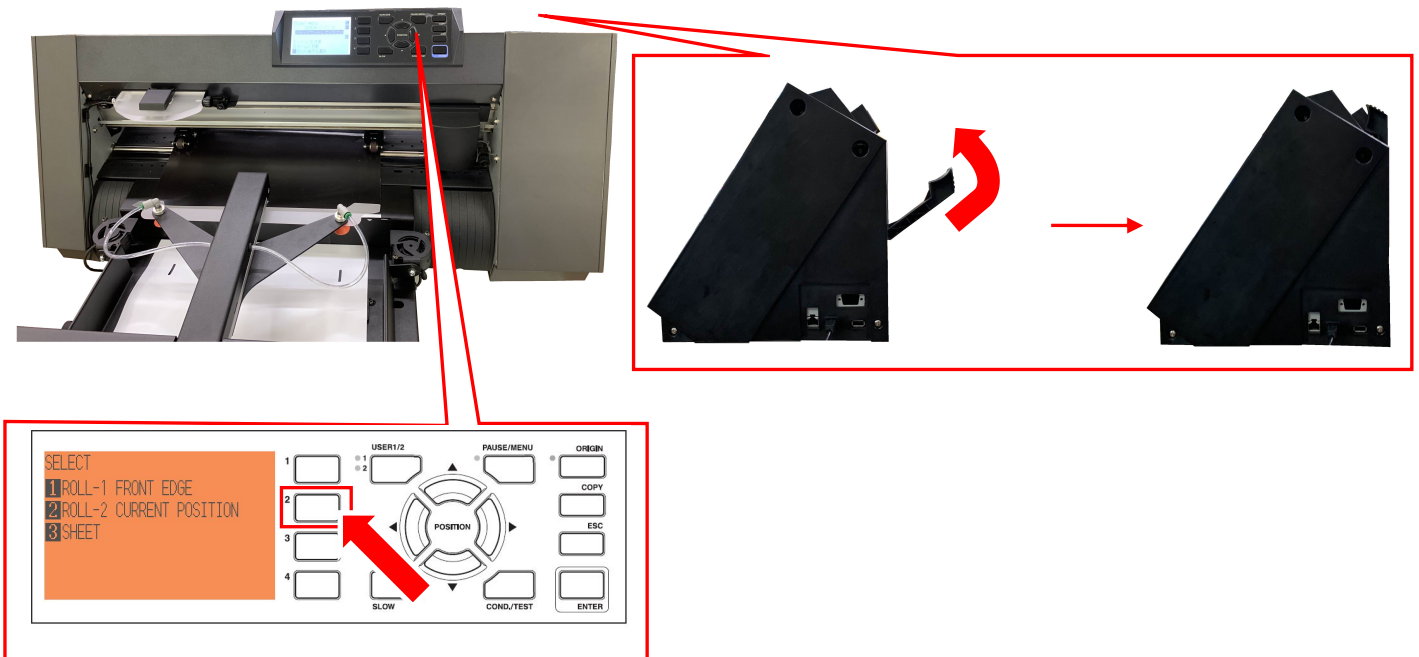
When loading the calibration sheet into the CE7000-40, load the calibration sheet so that the it is centered between the left and right Push Rollers.

And change the position of right side Push Roller according to the width of calibration sheet.

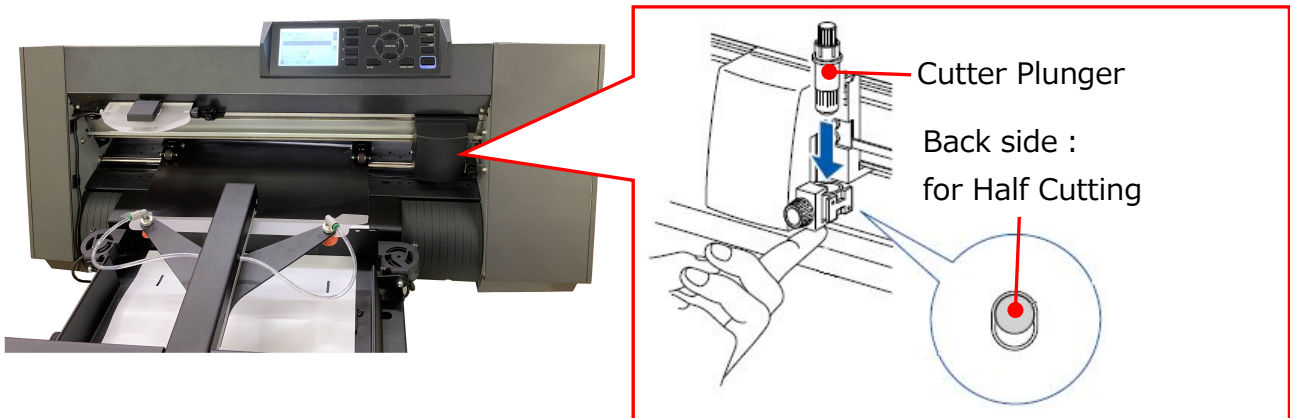
NOTICE

Never move the left side Push Roller position.

2. Rise the Media Set Lever of the CE7000-40, and then press the "2" button on the control panel of the CE7000-40.



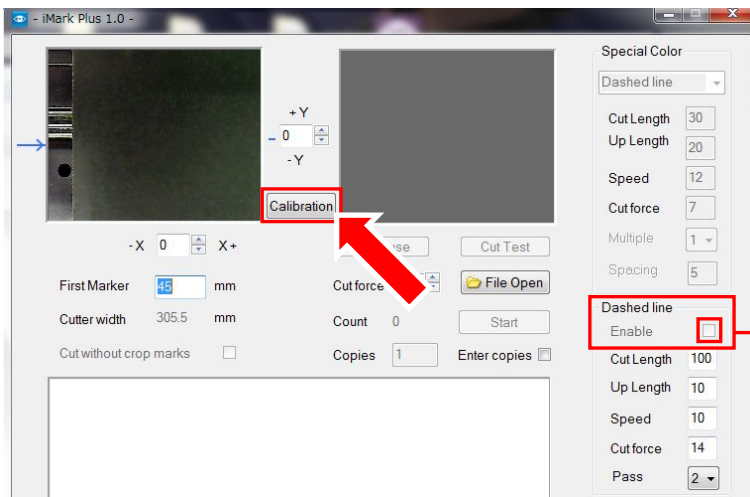
3. Set the Cutter Plunger to the back side (for Half Cutting) of the Tool holder on the CE7000-40.



NOTICE

- For the how to set the Cutter Plunger to the Tool Holder on the CE7000-40, please refer to the User's manual of the CE7000-40.
- For the how to adjust the blade length of Cutter Plunger, please refer to User's manual of the CE7000-40.
- When performing the calibration of the F-Mark2, set the Cutter Plunger to the back side position (for Half Cutting) of the Tool Holder on the CE7000-40.

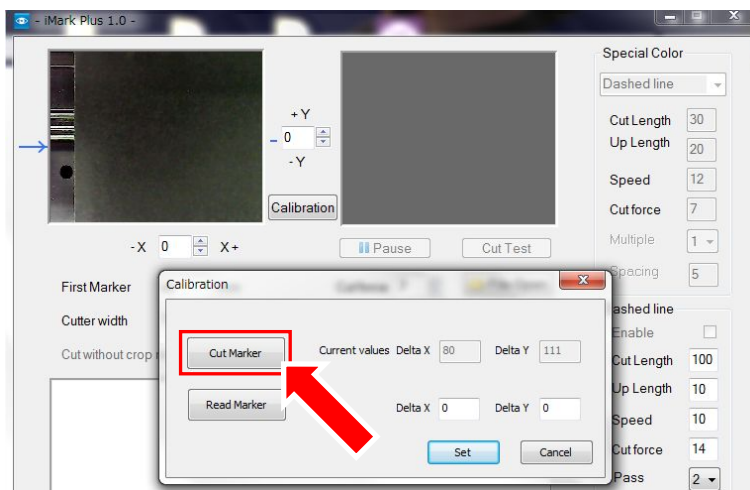
3. Launch the iMark Puls software, and confirm that the “Enable” in the “Dashed line” is not checked, and then click the “Calibration button”



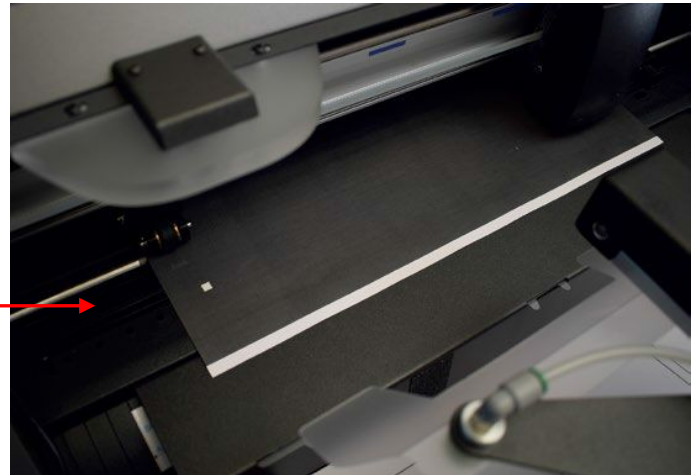
NOTICE

Calibration can not be performed correctly if “Enable” in the “Dashed line” is checked.

4. The “Calibration” window will be displayed, then click the “Cut Marker” button, and then the CE7000-40 will be cutting a small square on the Calibration Sheet.



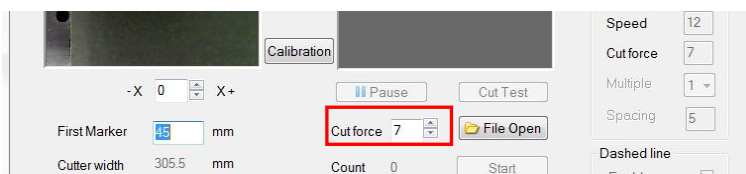
5. Peel off a small square cut by the CE7000-40 from the Calibration Sheet so that the white square can be seen.



NOTICE

If the cut square can not be peeled off well from the Calibration Sheet or if the cut square cut out from the Calibration Sheet, please adjust the following items.

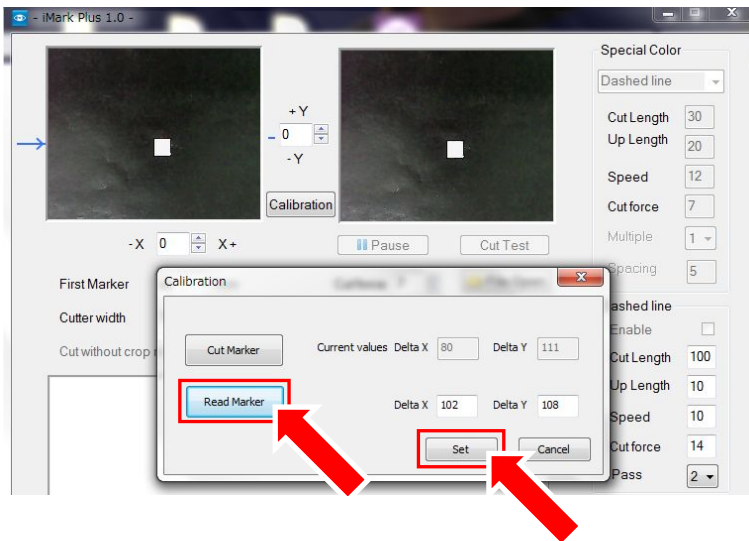
- Adjust “Cut force” in the iMark Plus software.



- Adjust the blade length of the Cutter Plunger.

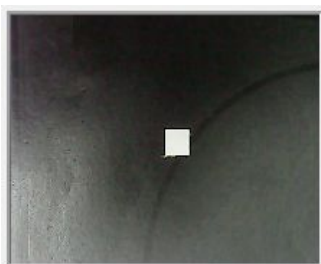
*For the how to adjust the blade length of Cutter Plunger, please refer to User's manual of the CE7000-40.

6. Click the “Read Maker” button to read the calibration data, and then click the “Set” button to saving the calibration data.

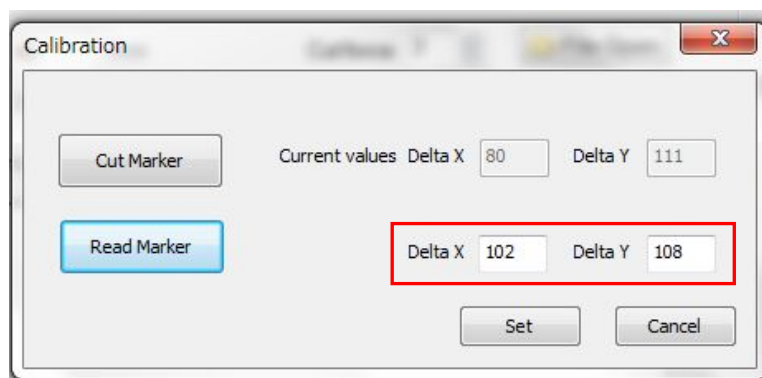


NOTICE

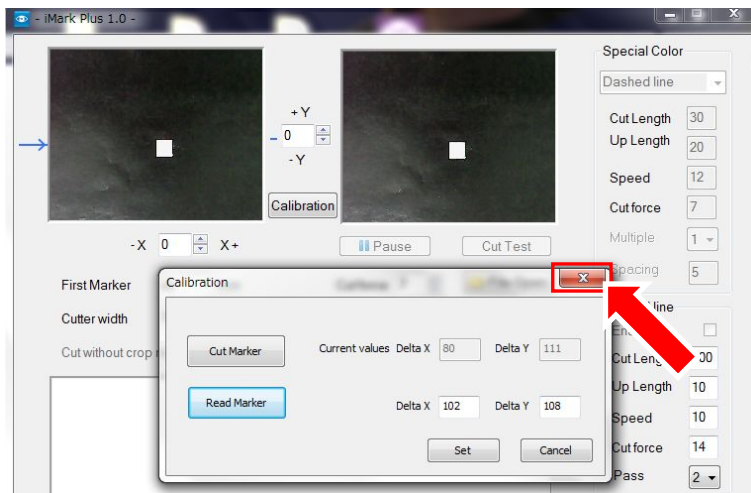
- When performing “Read Maker”.
If the “Read Marker” is performed while the calibration sheet is reflecting by the Lighting in the room, the correct calibration may not be performed, in this case, please shade the camera unit so that the small square part is not reflected by the light, and then perform the “Read Maker”.



- After performed Calibration.
When correct calibration is performed , the value of *90 to 120 is displayed in the “Delta X” and the value of *95 to 135 is displayed in the “Delta Y”.
(*The values are ideal values, there varies depending on the equipment.)
If values for Delta X and Delta Y are much different than the above ideal values, the calibration was not performed correctly. Please calibration again.



7. Click the “X” button on the upper left on the Calibration window to close it, and remove the calibration sheet from the CE7000-40 and finish the calibration.



8. After calibration is finished, perform the “Cut Test” to check the calibration of the F-Mar2 is correctly.

NOTICE

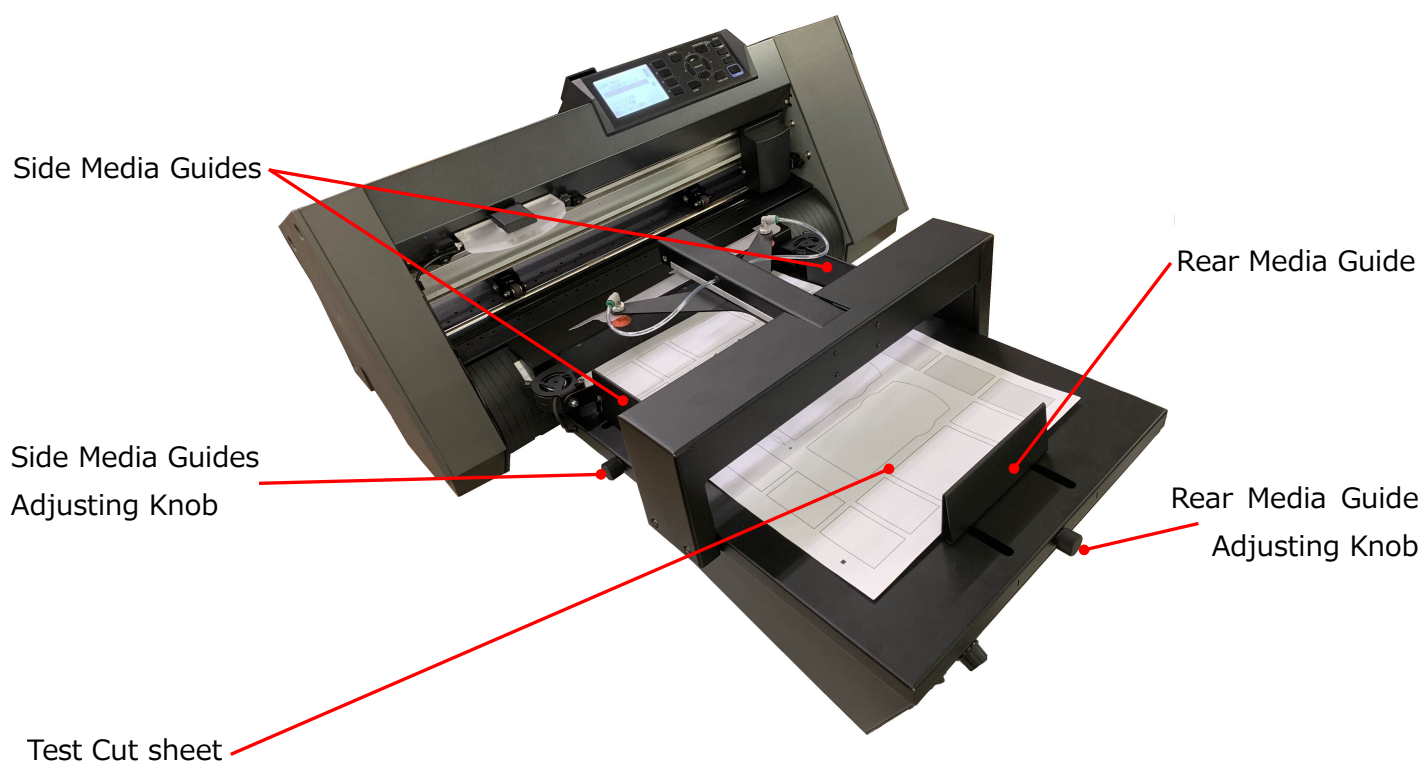
- Two calibration sheets are included in the F-Mark2, if used up these, please print the “caliblack.pdf” image data which is installed to the accessory CD to the label media, and use it as a calibration sheet.
- The calibration data is saved in the operation computer.
- When change the operation computer, needs calibration with changed computer.
- When USB cable connection was disconnected, needs calibration again.
- When performing calibration under the strong lighting such as spotlight, calibration may not be preformed correctly.

17. How to cut test with Test Cut sheet

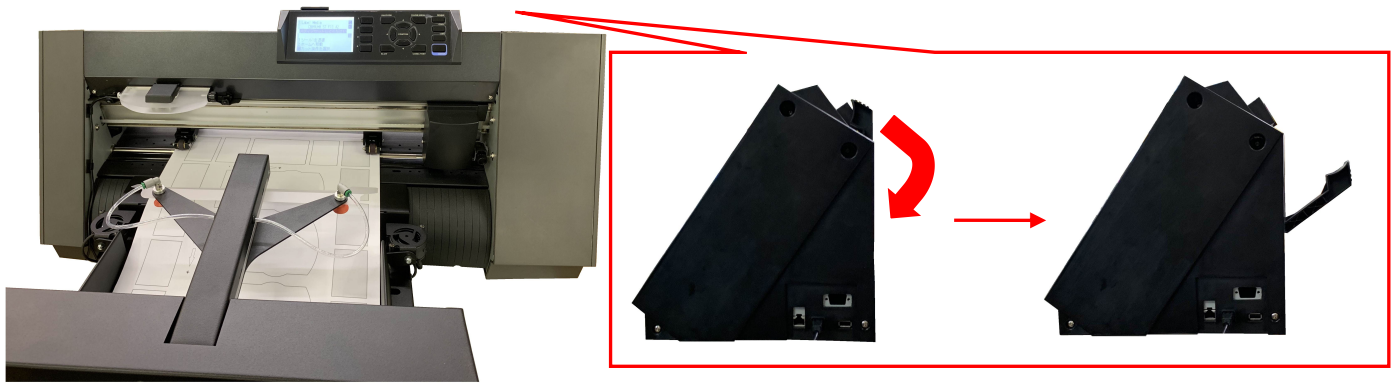
Please check the following items before performing the cut test with Test Cut sheet.

- Prepare the Test Cut sheets that was included with the F-Mark2.
- The iMark Plus software is installed in the operation computer.
- The F-Mark2 connected to the operation computer and CE7000-40.
- The settings of CE7000-40 has been changed to the F-Mark2.
- The angle of camera has been adjusted correctly.
- The left side Push Roller of the CE7000-40 is in the correct position.
- Calibration of the F-Mark2 finished correctly.

1. Load the Test Cut sheets into the Media Supply Tray, and adjust the width of Side Media Guides and position of Rear Media Guide fit to the Test Cut sheets.

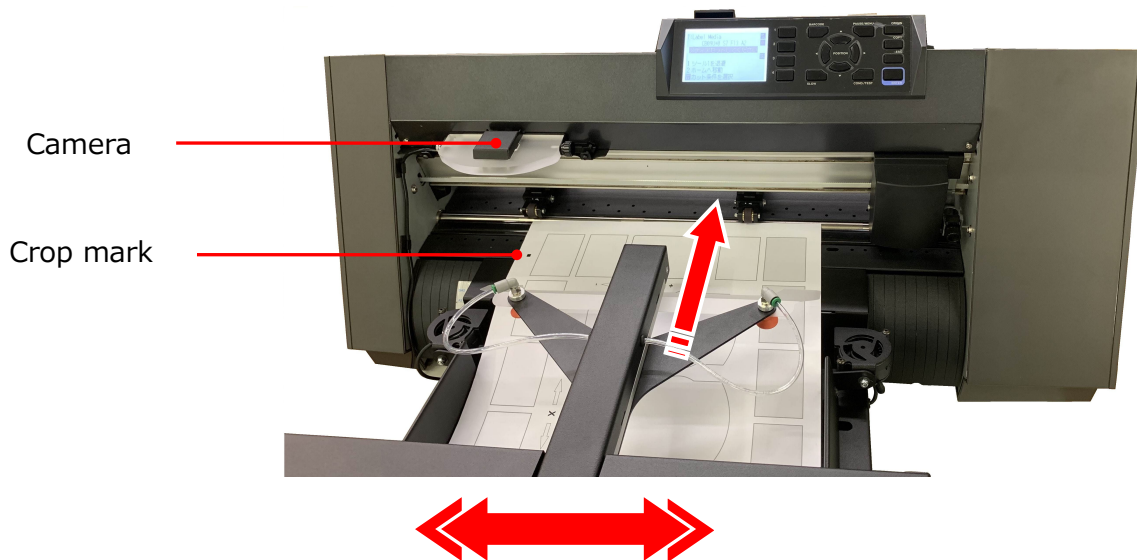


2. Lower the Media Set Lever of the CE7000-40.

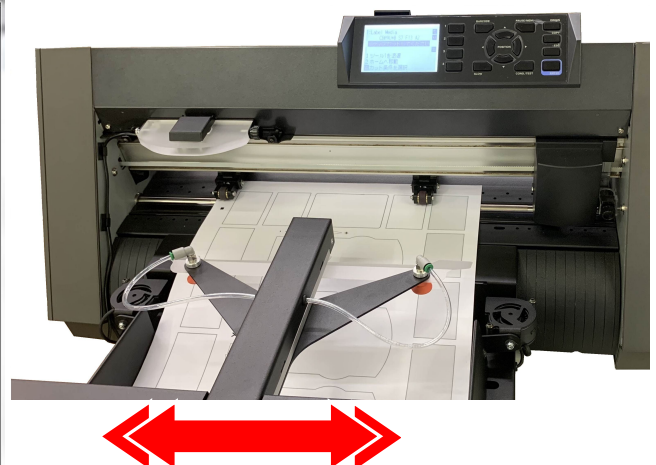
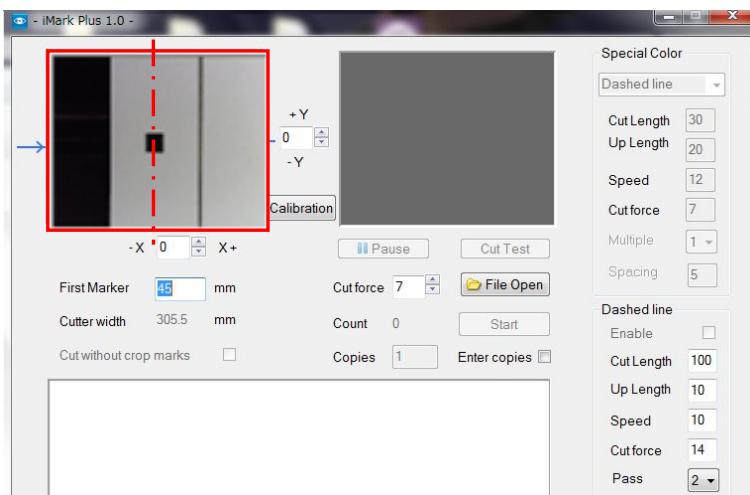


2. Pull out the tip of media to the front of Push Roller on the CE7000-40.

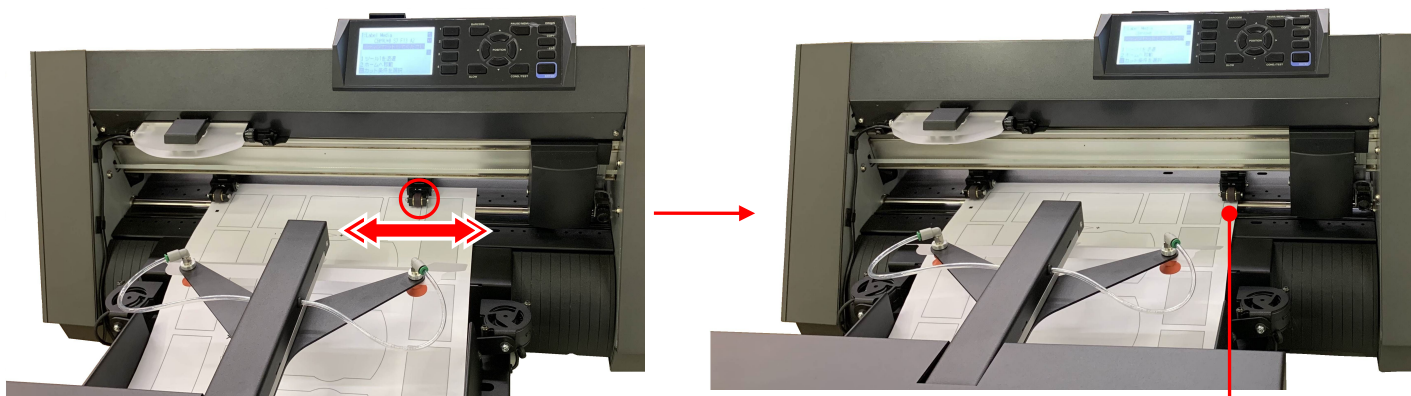
And then shift the position of the F-Mark2 so that the crop mark on the Test Cut sheet under the Camera.



3. Launch the iMark Plus software, and then fine adjust the position of the F-Mark2 so that the crop mark which displayed on the iMark Plus software window is displayed on the center of the window.



4. Shift the right side Push Roller according to the width of Test Cut sheet.



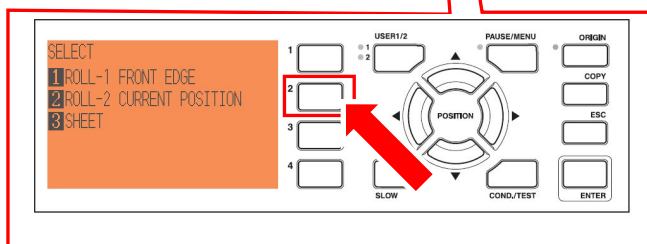
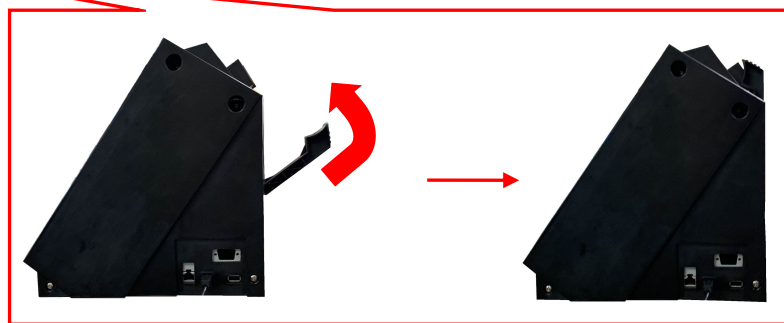
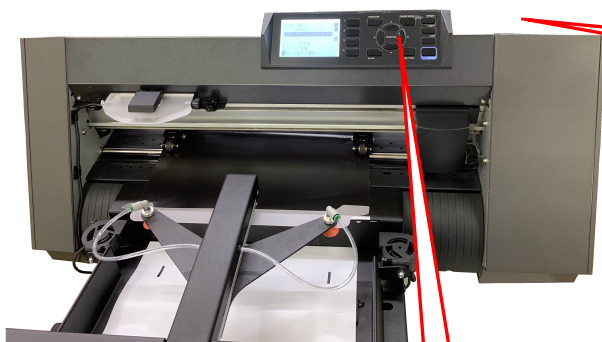
NOTICE

- Never move the left side Push Roller position.



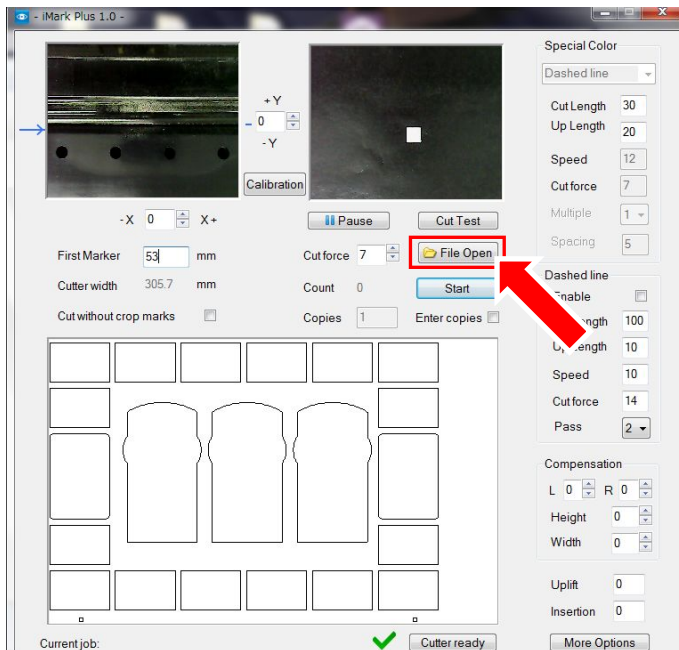
5. Remove the Test Cut sheet from the CE7000-40.

6. Rise the Media Set Lever of the CE7000-40, and then press the "2" button on the control panel of the CE7000-40.



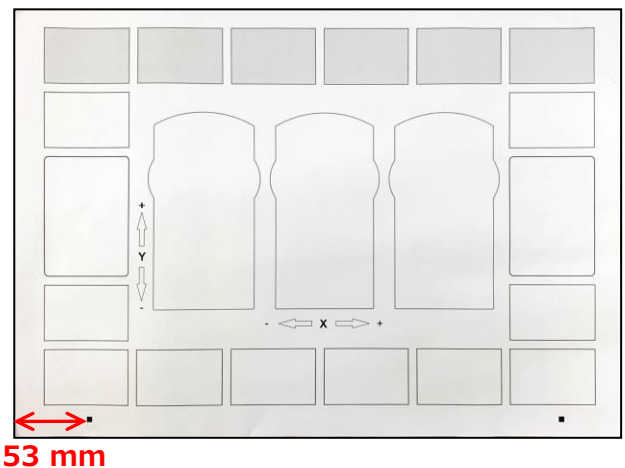
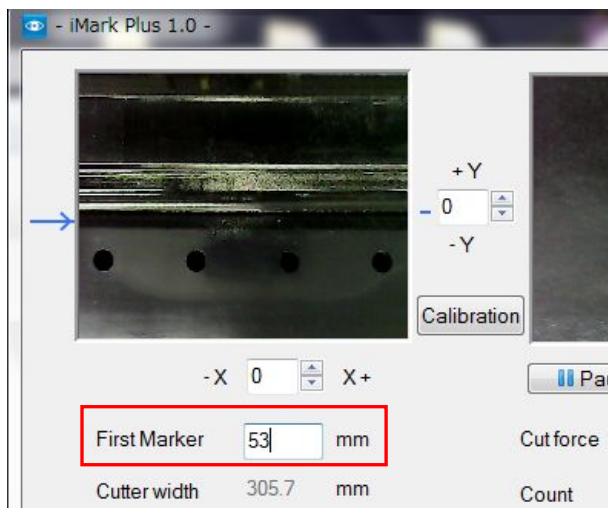
7. Click "File Open" button to load the cut data file (multiple_labels test contour 32x45.ai) for the Test Cut sheet into the iMark Plus software.

The cut data file (multiple_labels test contour 32x45.ai) for the Test Cut sheet is included in the F-Mark2 accessory CD. Please copy this file into the operation computer if necessary.

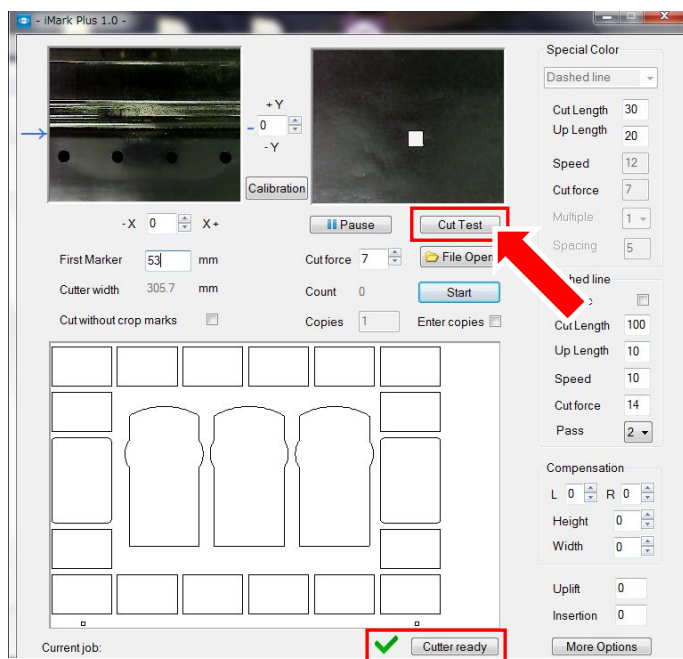


8. Input "53" to the "First Marker".

The value means the distance from the front edge of the "Test Cut sheet" to the "First crop mark".



9. Make sure that the “Cutter ready” is displayed on the bottom of the iMark Plus software window, and then click the “Cut Test” button to perform the cut test to the Test Cut sheet.



18. Adjustment of cutting position

After performing the test cut with Test Cut sheet, perform the adjustment of the cutting position.

- Adjustment of cutting position in X direction.

Adjustment of cutting position in X direction can be adjusting by inputting the values in the bottom of camera preview window in the iMark Plus software.

If inputting the values in X, the cutting position can be shift to the horizontal direction of the media.

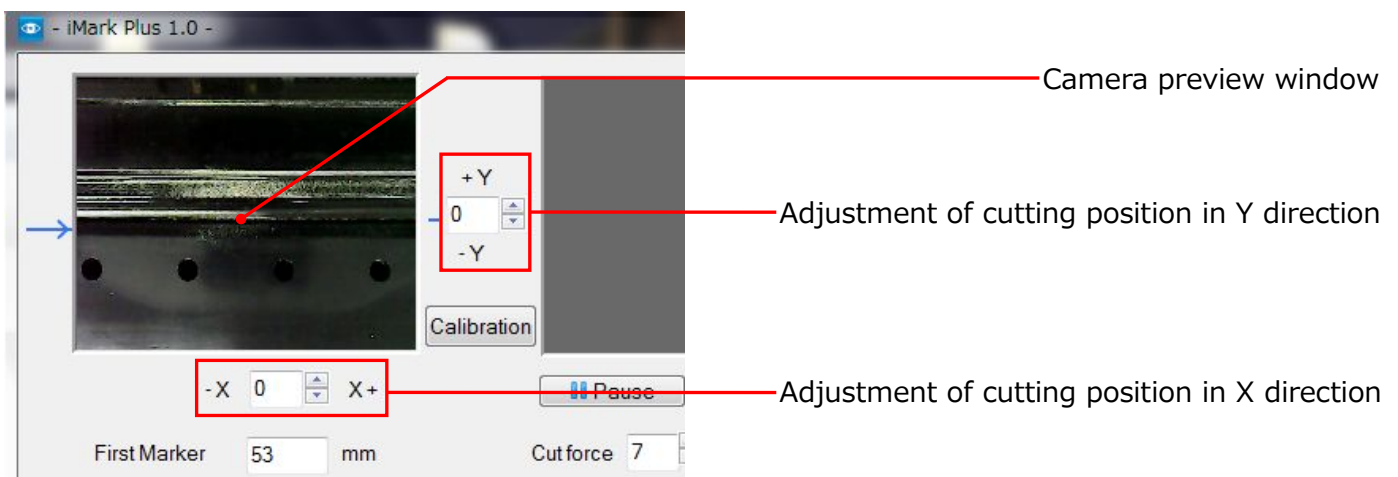
- Adjustment of cutting position in Y direction.

Adjustment of cutting position in Y direction can be adjusting by inputting the values in the right of camera preview window in the iMark Plus software.

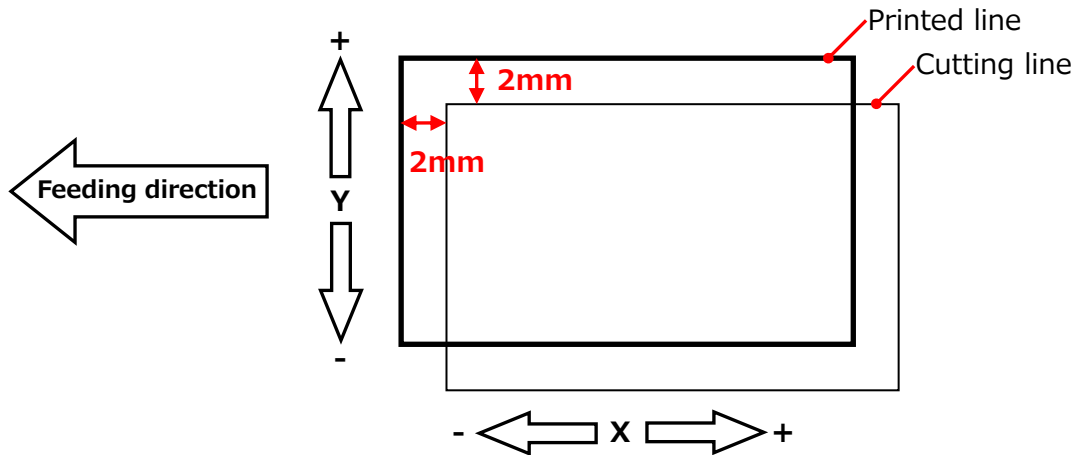
If inputting the values in Y, the cutting position can be shift to the vertical direction of the media.

- **The input unit for X and Y:0.1 mm.**

E.g. Inputted value is 10 = 1 mm

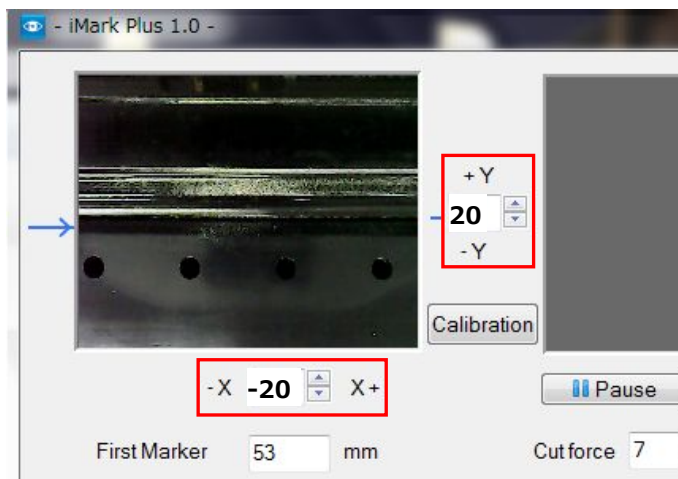


E.g. When cutting position is shifted as shown below drawing.



In such case,

1. Input "-20" into the X, and input "20" into the Y.



2. And then click the "Cut Test" button to perform the Cut Test, and confirm the cutting position.

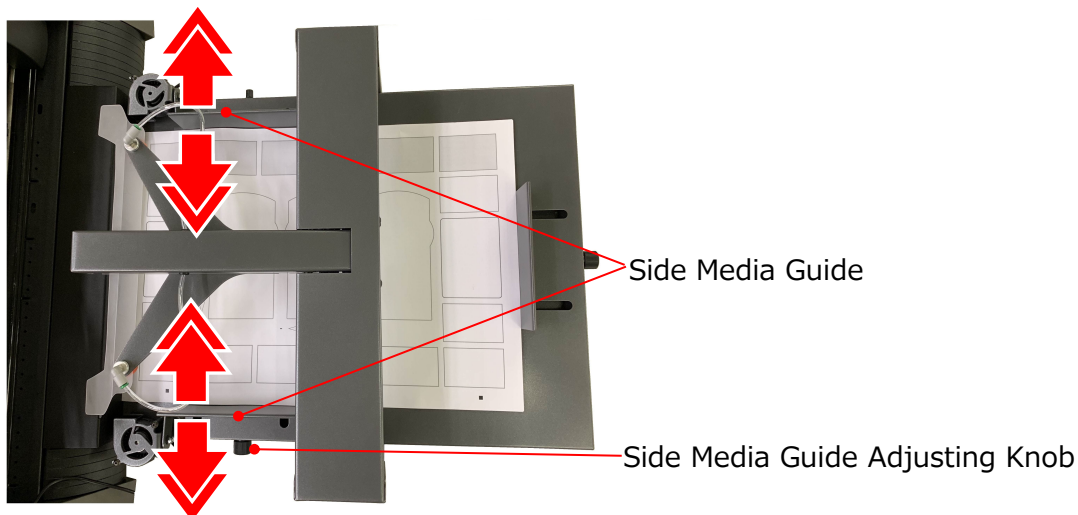
NOTICE

- The inputted values for X and Y will not be effective for the cutting position without perform the cut by clicking the "Cut Test" button.
Therefore, after inputting the values for X and Y, make sure to click the "Cut Test" button to perform the cut.
- The inputted values for X and Y are reset to 0 when click the "Start" button and perform the cut, but each inputted values will be effective for the cutting position correction.
- Depending on the type of media, the adjustment values X and Y may not be 1=0.1 mm, adjust the adjustment values of X and Y depending on the cutting result.

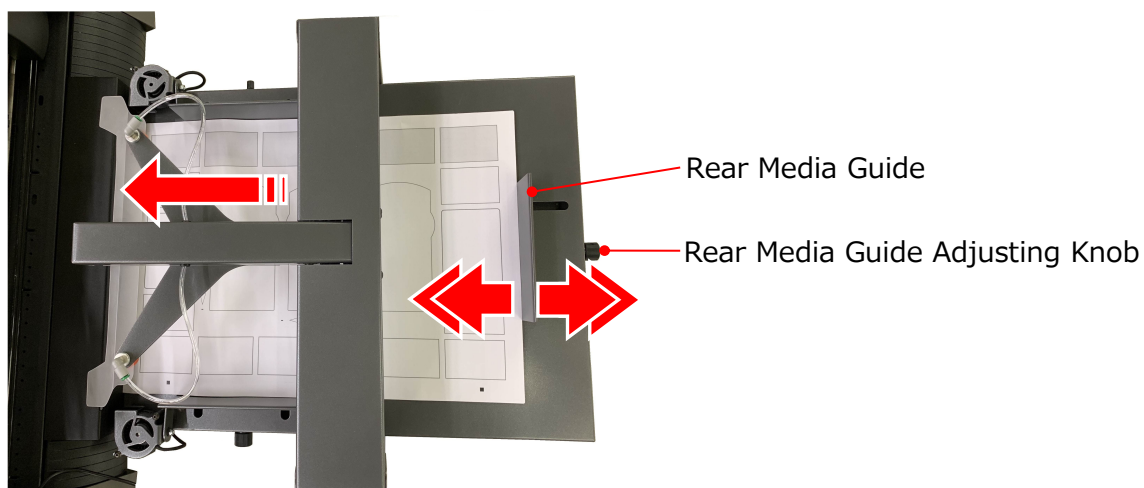
19. Notice on loading media into F-Mark2

When loading the media into the F-Mark2, follow the procedure below.

1. Loading media into the Media Supply Tray on F-Mark2.
2. Adjust the position of Side Media Guide depending on the width of media to be used.
(When adjusting the position of Side Media Guide, adjust the position so that the Side Media Guide lightly touches to the side of media to be used.)



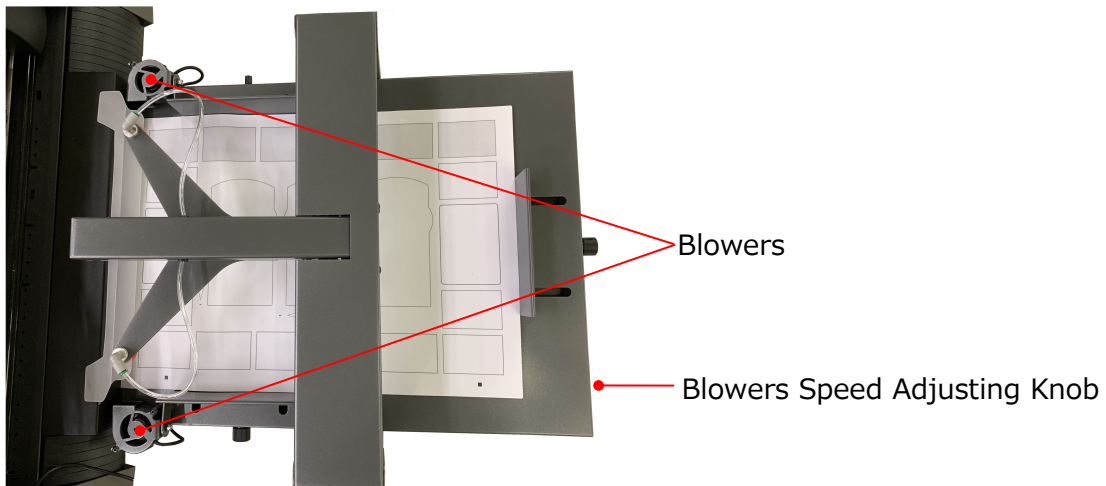
3. Adjust the position of Rear Media Guide depending on the length of media to be used.
(When adjusting the position of Rear Media Guide, adjust the position so that the front edge of media to be used lightly pressed to the front of inside of Media Supply Tray.)



5. Push the front edge of media into the Media Supply Tray.

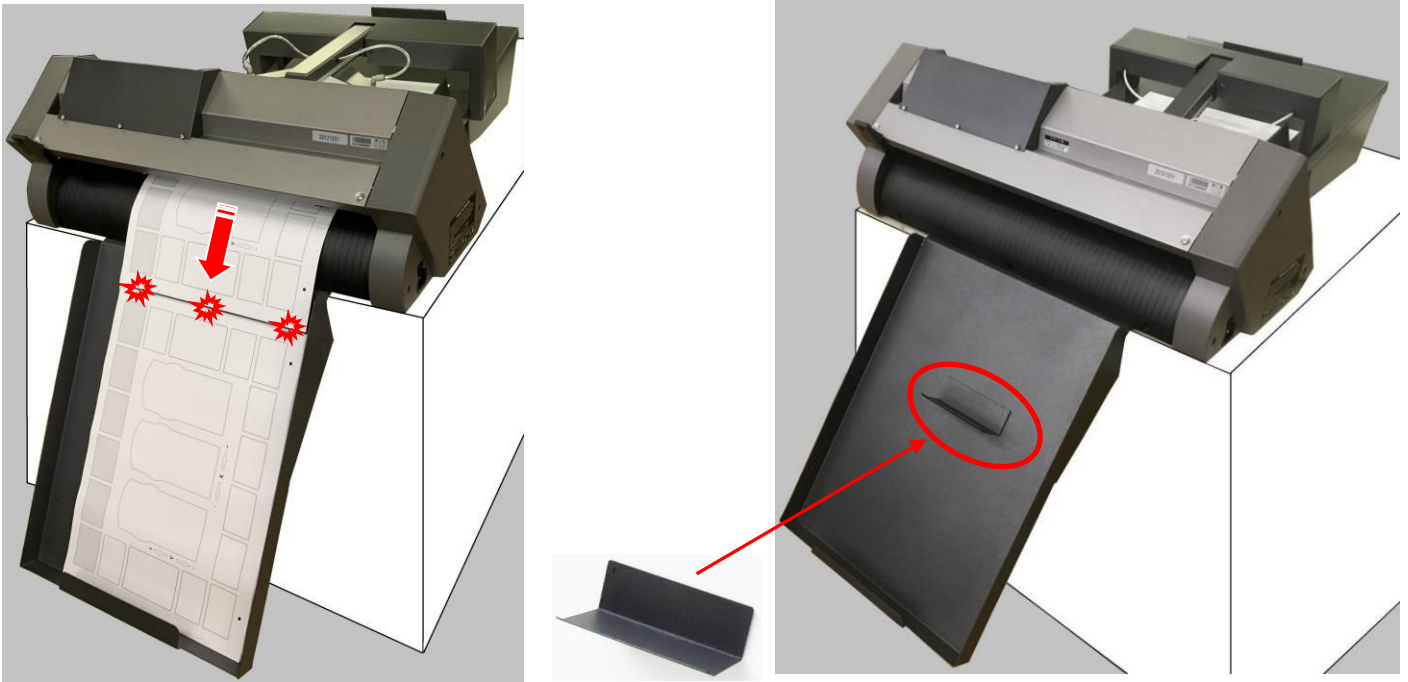


4. When using Blowers, adjust the rotation speed of Blowers and the width of Side Media Guide So that the media slightly rises.



20. How to use Stopper Plate

If correctly cut can not be performed due to the front edge of media that being cut with CE7000 interferes with media in the Exit Tray, might be able to solve the problem by attaching the Stopper Plate on the Exit Tray.

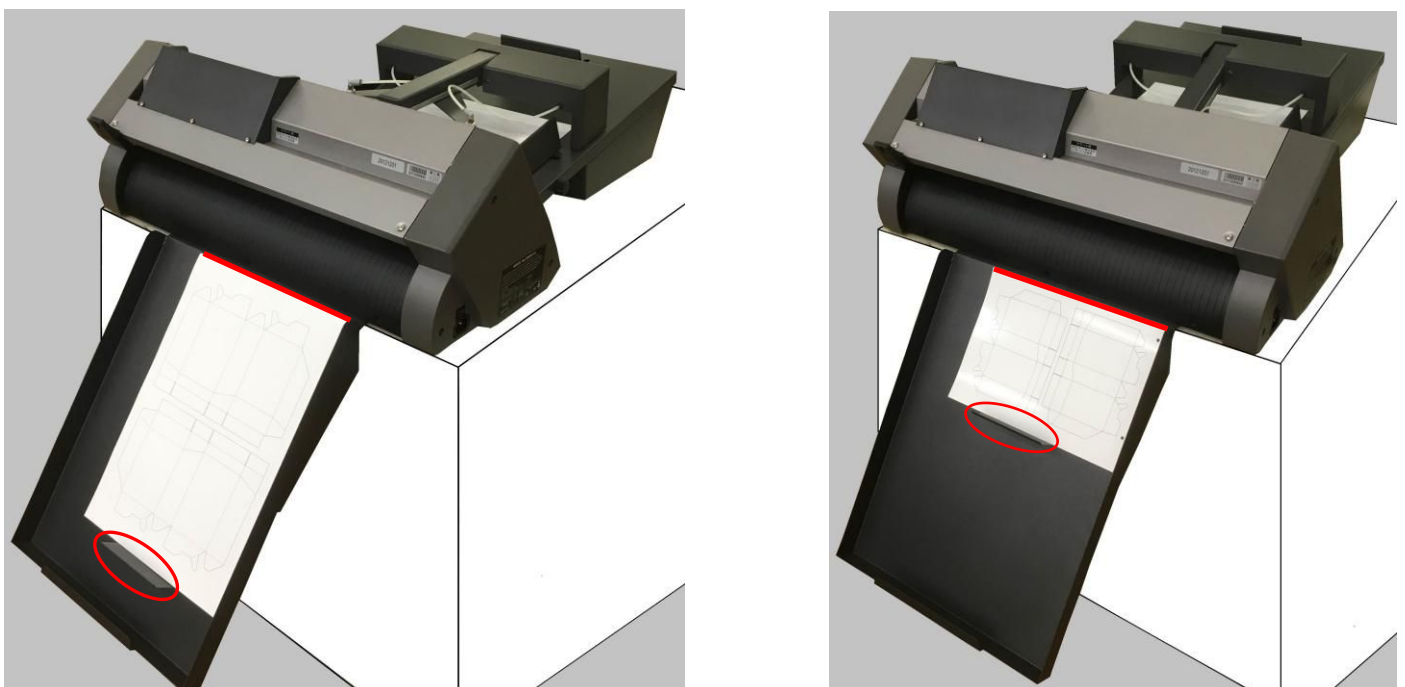


Stopper Plate can be attach any position on the Exit Tray because back of Stopper Plate is magnetized.

- **Attaching position of Stopper Plate**

When attach the Stopper Plate to the Exit tray, adjust the attach position of Stopper Plate depending on the media size to be used.

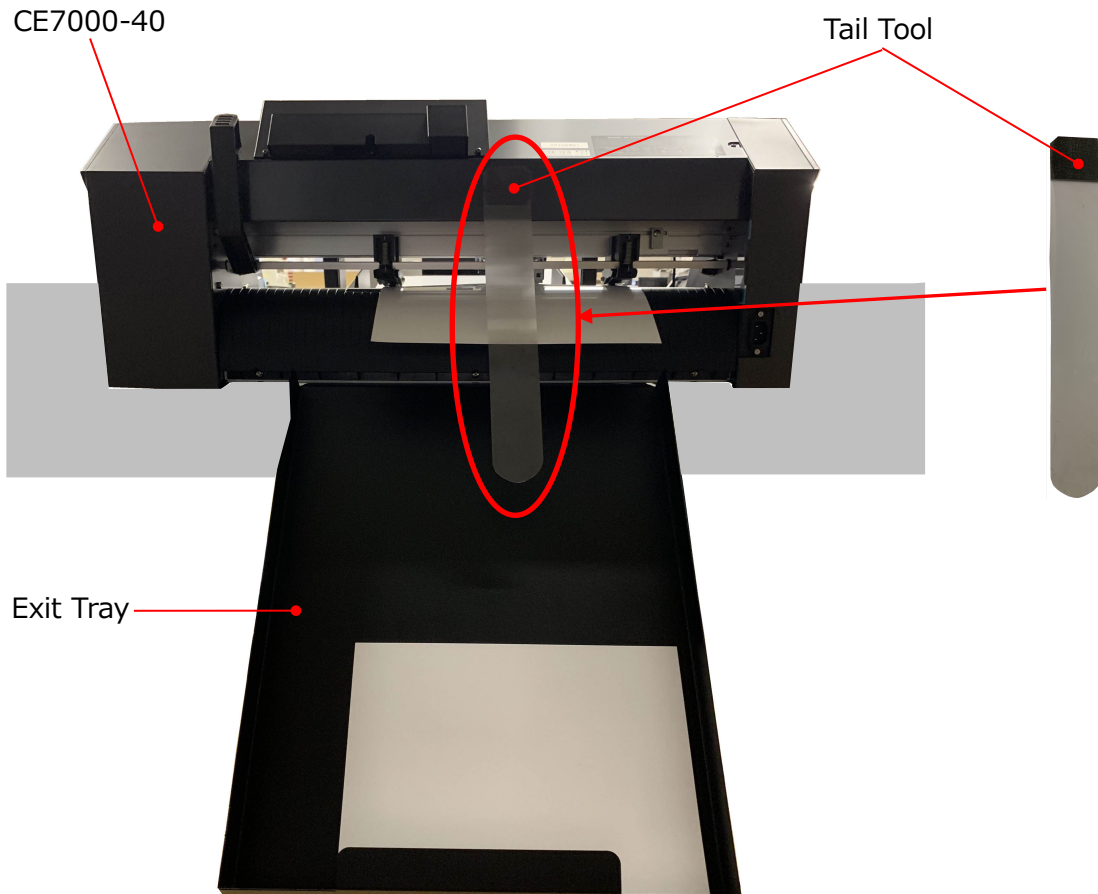
Adjust the position of the Stopper Plate so that the front edge of the media will be top of Exit Tray.



21. How to use Tail Tool

When the Tail Tool is attached to the rear part of CE7000-40, the media that after cutting with CE7000-40 will be fit into the Exit Tray without scattering.

- Attach the Tail Tool to the rear part of the CE7000-40 as shown as picture below.



22. How to attach the Extension Plate (It is sold separately)

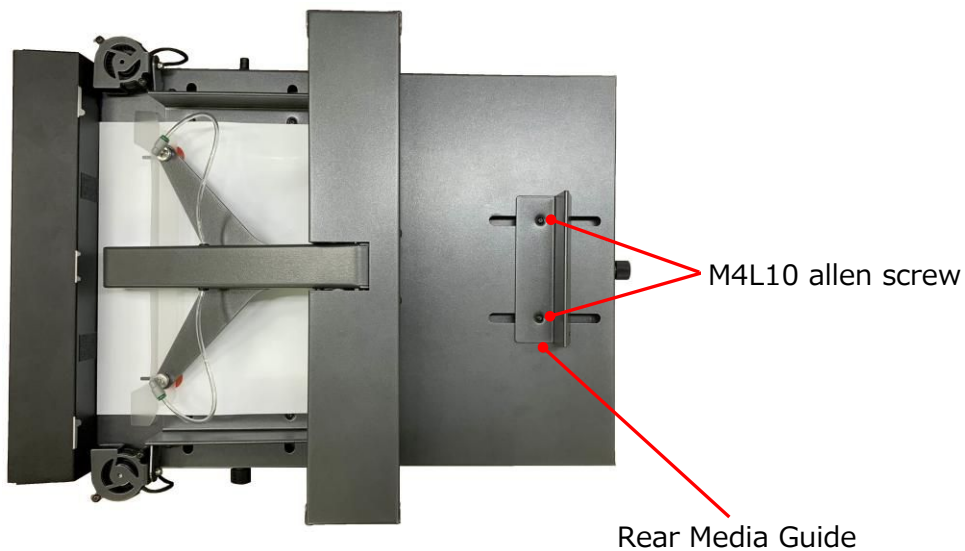
When attach the “Extension Plate” to F-Mark2, the media of length 500 mm to 700 mm can be use in F-Mark2.

NOTICE

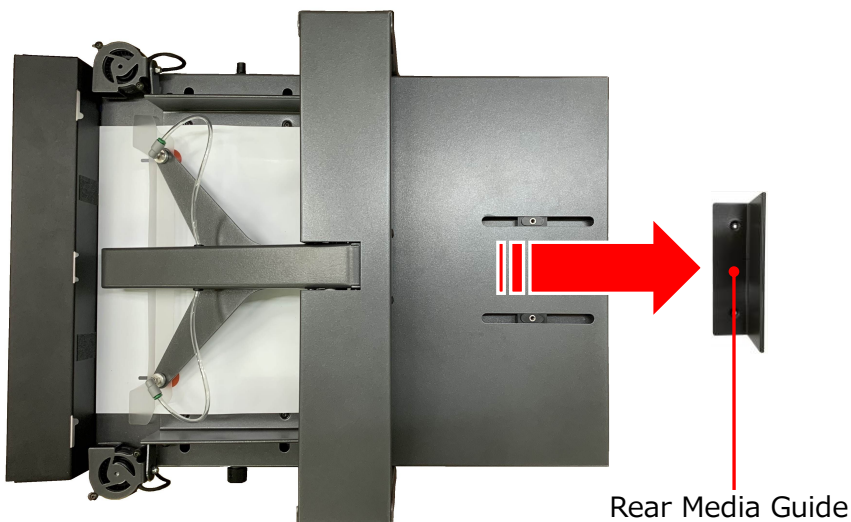
- The “Extension Plate” is not included in accessories of F-Mark2. It si sold separately.

The “Extension Plate” can be attached to F-Mark2 in the following procedure.

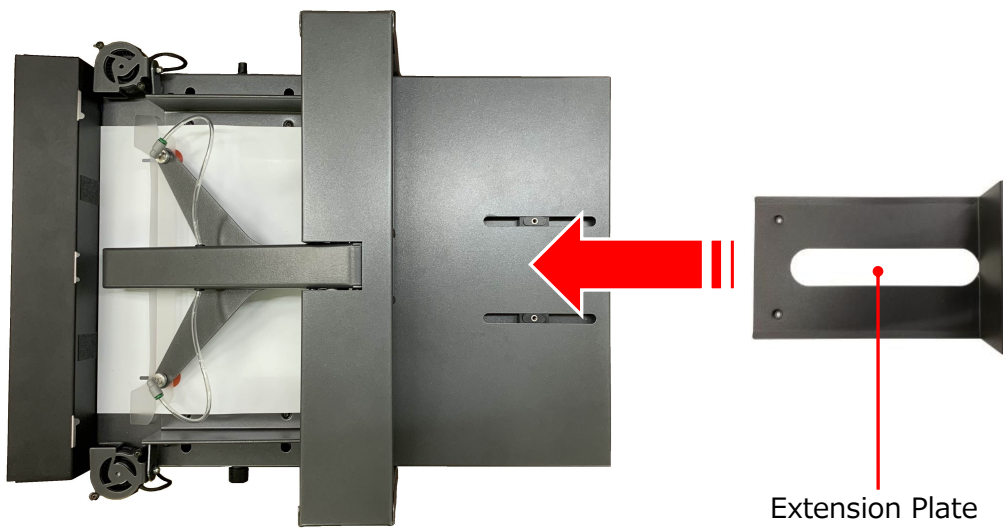
1. Remove the two M4L10 allen screws holding the Rear Media Guide from F-Mark2 using the 2.5mm allen wrench.



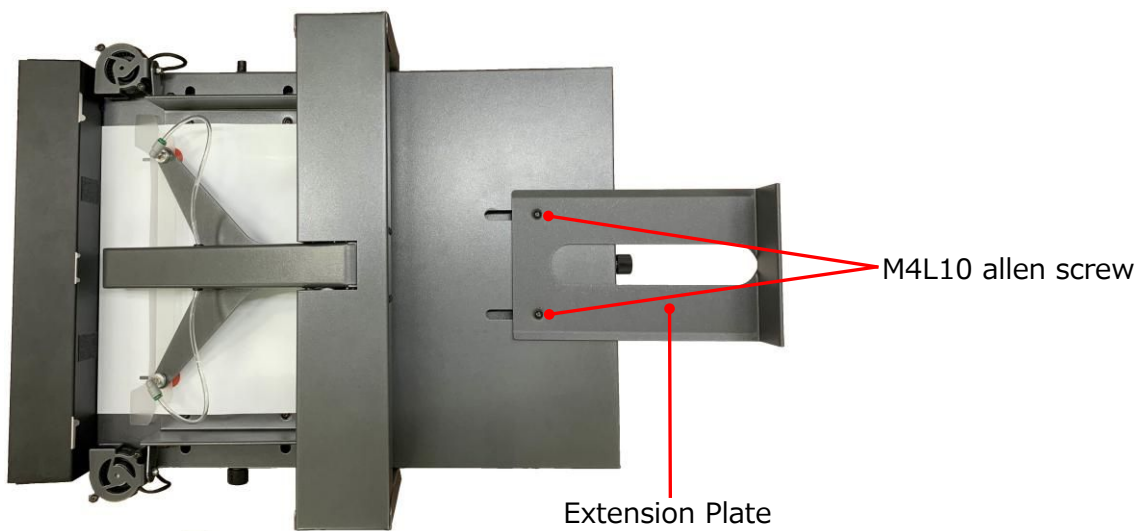
2. Detach the Rear Media Guide from F-Mark2.



4. Attach the Extension Plate to F-Mark2.



3. Fix the Extension Plate to F-Mark2 with two M4L10 allen screws using the 2.5mm allen wrench.



23. How to replace the Suction Cups and the Insertion Flap

- Two Suction Cups are included in the accessories of F-Mark2 for initial replacement.
- Insertion Flap is not included in the accessories of F-Mark2, please purchase it for replacement.

Suction Cups

- If F-Mark2 can not pick up media correctly, replace the Suction Cups.
- Replace the Suction Cup at least once a year for stable media pick up.

Insertion Flap

- The Insertion Flap help keep the media flat while inserting media into the CE7000-40.
- Replace the Insertion Flap if it is damaged.

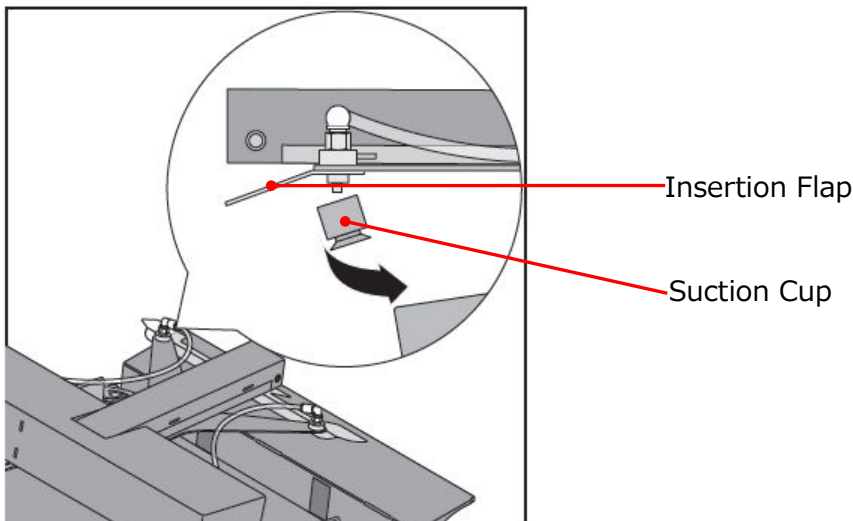
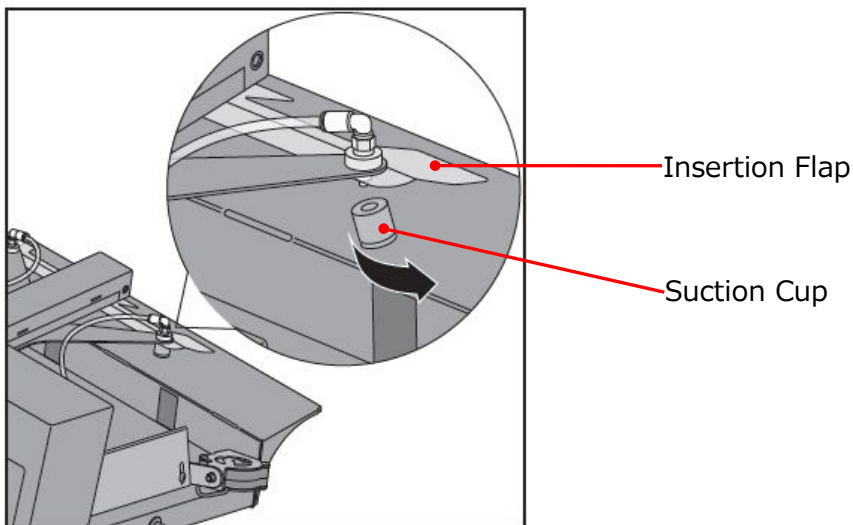
NOTICE

- Two Suction Cups are included in the accessories of F-Mark2 for initial replacement, please purchase it for next replacement.
- The “Insertion Flap” is not included in accessories of F-Mark2, please purchase it for replacement.

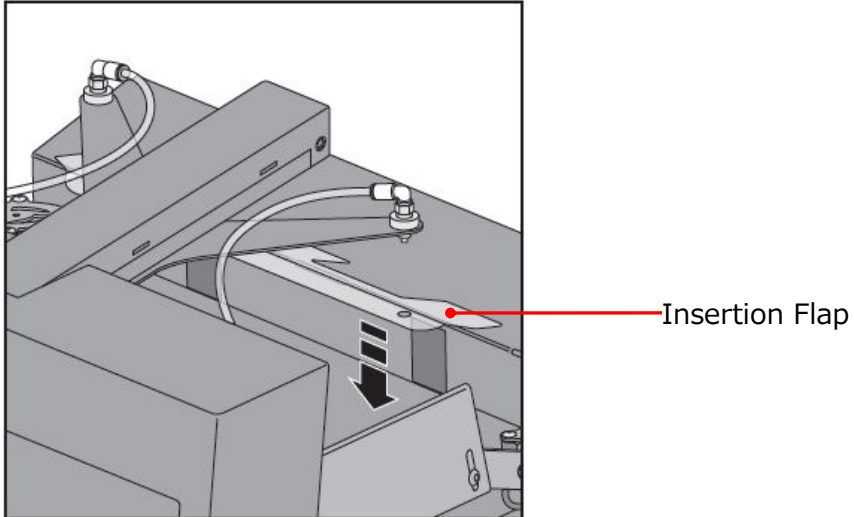
When replacing the Suction Cups and Insertion Flap, follow the procedure below.

1. Detach the Suction Cups.

It can be easily detached by pulling diagonally.

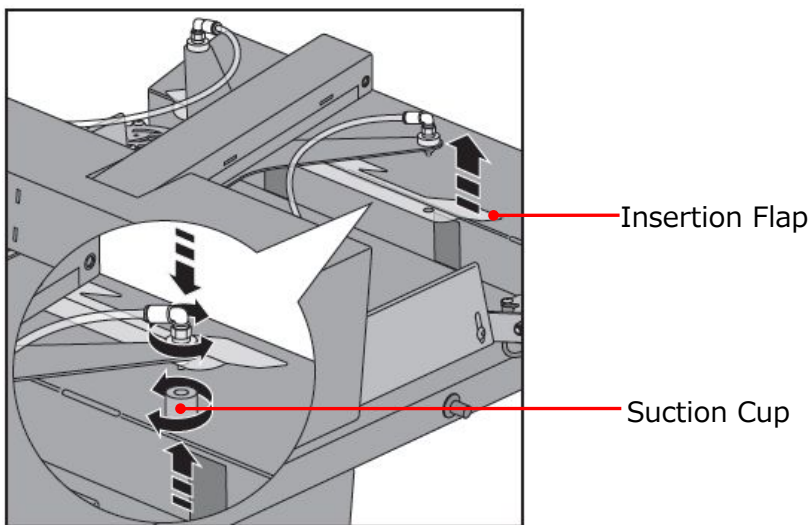


2. Replace the Insertion Flap if necessary.



3. Insert the Insertion Flap into the suction cups connection part where located on the front edge of the Arm and then insert the Suction Cups.

When inserting the Suction Cups, insert the Suction Cups while rotating it so that the Suction Cups are firmly inserted until end of connection part while holding the Arm.

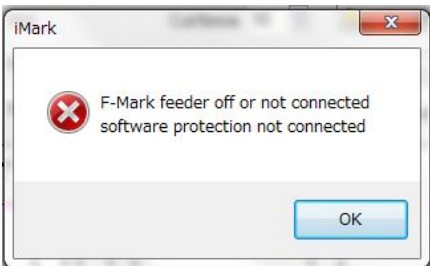


24. Troubleshooting

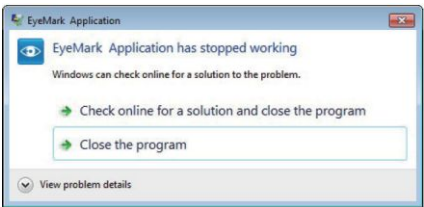
1. The Arm does not perform the initial operation even if turn on F-Mark2.

Symptom	Check items	Solutions
The Arm does not perform the initial operation even if turn on F-Mark2.	Check that the green light on the power switch is on.	Check that the connection of the AC power adapter and power cord connected correctly.
	Check that the green light on the AC power adapter is on.	Check that the power cord for AC power adapter is not damaged. If power cord is damaged, immediately stop using power cord and replace it.
		Check that the connection of the AC power adapter connected correctly. If green light on the AC power adapter does not on even though it is connected correctly. Immediately stop using AC power adapter and replace it.
	When green light on the power switch is on.	Turn the Blowers Speed Adjusting Knob clockwise to check whether Blowers rotates. Please contact to dealer and tell the symptoms.

2. When click the “Cut Test” or “Start” button in the iMark Plus software, the message “F-Mark feeder off or not connected software protection not connected” will be displayed on the operated computer and F-Mark2 does not work.

Symptom	Check items	Solutions
When click the “Cut Test” or “Start” button in the iMark Plus Software, the message “F-Mark feeder off or not connected software protection not connected” will displayed on the operate computer and F-Mark2 does not work. 	Check that the F-Mark2 power is on.	Refer to “The Arm does not perform the initial operation even if turn on F-Mark2”
	Check that the connection of USB cable to connected correctly.	Check that the USB cable of the operate computer is connected to the USB Hub correctly.
		Check that the USB cable of C7000 is connected to the USB Hub correctly.
		Check that the USB cable of camera is connected correctly.
		Check that the USB cable from the inside of F-Mark2 is connected to USB Hub correctly.
	Check that the each USB cable and USB Hub connectors are not damaged.	If it is damaged, immediately stop using damaged item, and replace it.
	Put the hands under the camera, and check that the hands displayed in the preview window in the iMark Plus software.	If hands displayed. Recheck that the each USB cable is connected to USB Hub correctly. If F-Mark2 does not work even though each USB cable connected correctly. Please contact to dealer.
		If hands not displayed. Restart the iMark Plus software and operation computer.
	If remaining the problem even though restart the iMark Plus software and operate computer.	Connect the USB cable that from the camera directly to USB terminal of operate computer. And check that the hands displayed or not.

3. Troubleshooting for other symptoms

Symptom	Check items	Solutions
The "Calibration" button in iMark Plus software is gray, and it is not able to calibrate.	CE7000-40 is not connected to USB-Hub of F-Mark2 with USB cable.	Connect CE7000-40 to USB-Hub with USB cable, and initialize CE7000-40. Refer to "How to initialize F-Mark2 and CE7000-40."
	Operation computer is not connected to USB-Hub with USB cable.	Connect operation computer and USB-Hub with USB cable, and initialize CE7000-40. Refer to "How to initialize F-Mark2 and CE7000."
The preview window in the iMark Plus software will be displayed black.	The USB cable of the camera is not connected securely to the USB-Hub.	Check that the USB cable of camera is connected correctly.
	The cap of lens is not removed from the camera.	Remove the cap of lens from the camera.
	The initialization of the connection of F-Mark2 and CE7000 did not perform.	Initialize the connection of F-Mark2 and CE7000. Refer to "How to initialize F-Mark2 and CE7000-40".
	Multiple iMark Plus softwares are running.	Close unnecessary iMark Plus software.
The following error will be displayed and the iMark Plus software stops working. 	The iMark Plus software can not open the file if file is named with some of 2 bytes characters or the combining characters.	Rename the file name by alphabet or numbers.

Symptom	Check items	Solutions
The camera of F-Mark2 can not be detected.	The USB cable of the camera is not connected securely.	Check that the USB cable of camera is connected correctly.
	The camera other than F-Mark2 camera is connected to the operation computer.	If the external camera is connected, disconnect the camera other than F-Mark2 camera from the operation computer. If the internal camera enabled on the operation computer, disable the internal camera. Refer to "Notice on using the iMark Plus software".
	The camera privacy setting on the operation computer is set to OFF.	Set the camera privacy setting of the operation computer is set to ON. Refer to "Notice on using the iMark Plus software" .
The media does not reach to the Pinch Roller of CE7000-40 when media is inserted to CE7000-40.	The value of "Insertion" in the iMark Plus software is not enough for insertion position of media to be used.	Adjust the value of "Insertion". Input units of "Insertion" is 0.1 mm, therefore if you want to change the insertion position 1 mm, input 10 into the "Insertion". After changing the type of media to be used, adjust the value of "Insertion" to stable insert the media into CE7000-40.

Symptom	Check items	Solutions
When lifting the media from the Media Supply Tray, the media will drop.	There is not enough vacuum force to lift the media.	Turn the "Vacuum Adjusting Knob" to clockwise to increase the vacuum force.
	The surface of Suction Cups are dirty.	Clean the surface of Suction Cups where contact with the media.
	Suction Cups are deformed.	Replace the Suction Cups if they are deformed. Replace the Suction Cups at least once a year for stable media pick up.
	Suction Cups are not firmly inserted until end of connection part.	Insert the Suction Cups firmly until end of connection part. Refer to "How to replace the Suction Cups and the Insertion Flap".
F-Mark2 stops after the crop marks detection.	The crop marks can not be detected with the camera due to connection position between F-Mark2 and CE7000-40 is incorrect.	Adjust the position of F-Mark2 so that the crop mark will be displayed on the center of preview window in the iMark Plus software.
	The value of "First Marker" in the iMark Plus software is incorrect.	Measure the distance between the first marker (first crop mark) and the front edge of the media, and then input the correct value for the first "First Marker" in the iMark Plus software.
When inserting the media into the CE7000-40, the media hits to edge of cutting mat or edge of groove on the CE7000-40, and the media can not be inserted into the CE7000-40 or media dropped.	The value of "Uplift" in the iMark Plus software is not enough for the lifting height of the media to be used.	Adjust the value of "Uplift" so that the media does not hit to edge of cutting mat or edge of groove on the CE7000-40.
	The media to be used is curled.	F-Mark2 can not use curled media.

Symptom	Check items	Solutions
Sometimes, F-Mark2 can not be insert the media to the CE7000-40 correctly.	The media has been curled or shrank in the unstable operating environment.	Changes temperature or humidity might be cause the media curled or shrunk. Use F-Mark2 in the stable operating environment.
	The media can not be pick up one by one due to the static electricity.	Remove the static electricity from the media to be used before using.
	The connection position between F-Mark2 and CE7000-40 is shifted due to vibration during operation.	Use the F-Mark2 on the stable working table.
The inputted values or changed settings in the iMark Plus software are not reflected to the cutting.	The “Cut Test” in the iMark Plus software has not been performed, after inputting the values or changing the settings.	After inputting the values or changing the settings in the iMark Plus software, make sure to perform the “Cut Test” to enable the inputted values or changed settings.
The X cutting position does not align.	The left side Pinch Roller has been shifted after performed calibration.	Set the position of left side Push Roller to correct position, and then perform the calibration again. Refer to “How to initialize F-Mark2 and CE7000-40” and “How to calibrate F-Mark2”.
The Y cutting position does not align.	The angle of the camera has been changed after performed calibration.	Adjust the angle of camera to correct angle, and then perform the calibration again. Refer to “How to adjust the angle of the Camera” and “How to calibrate F-Matk2”