

L24 / L36 Large Format Scanner

User Manual

V1.0 August 2016



Contents

Warnings	4
Declaration of Conformity	5
Scanner Overview	5
Main Features	5
Scanner - Identification of parts	6
Unpacking	8
Box contents	9
Fitting the scanner to the printer	10
Operation	13
Power	13
Keypad	13
LED	13
LCD	14
Sleep mode	14
Information messages.....	14
Configuring the network connection of the scanner	15
Software Installation and Operation	18
Functionality - Basic operation	21
Loading documents into the scanner	21
Opening/Closing the scanner.....	22
Scan to USB	23
Scan to PC	25
Copy	27
Functionality – More Settings: Image Adjustment	28
Functionality – Saving your preferred settings as power on Defaults.....	30
Application notes	31
Tightly curled documents	31
Recommended Settings.....	31
Document Carrier Sheets.....	32
Eliminating clipped copies	33
Scanner Settings.....	34

Maintenance	36
Cleaning.....	36
Consumables.....	36
Calibration.....	37
Stitch Adjustment	38
Scan Length Adjustment	39
Loading Firmware	41
Troubleshooting.....	42
Error Codes	42
Operation errors	43
Document does not feed correctly.....	43
Scanner LED is not on.....	43
The scanner LED remains Orange when powered on.....	43
Scan or copy is blank.....	43
Scan to USB does not work	43
Scan to PC shows a short (truncated) scan image.....	43
No Scan to PC output.....	43
No Copy output.....	44
No Scan or Copy function.....	44
Testing connectivity	44
Supported Configurations.....	45
Image Quality.....	46
Incorrect Scan or Copy length.....	47
Specifications	48
Glossary of Terms.....	50

Warnings

	<p>Do not drop the scanner. The scanner contains components that could be damaged by severe shock.</p>
	<p>Beware of trapping fingers when opening or closing the scanner.</p>
	<p>Beware of exposed electrical connectors if the covers are removed. No user serviceable parts inside.</p>
	<p>Keep the scanner out of direct sunlight.</p>
	<p>Do not shock the scanner. Use the supplied power supply only.</p>
	<p>Keep the scanner dry.</p>
	<p>Operating Environment: Relative humidity 35% - 80% Temperature 10C – 35C</p>

Declaration of Conformity

Manufacturer	Global Scanning Suzhou Co. Ltd #39 Dongjing Industrial Zone, #9 Dongfu Road, Suzhou Industrial Park, Suzhou, Jiangsu, 215123
Declaration of Conformity	Energy Star, CB, CE, FCC, UL, VCCI, C-Tick, CCC, GS, BIS, KCC, EAC, BSMI, NOM-019-SCFI, ICES-003
Model name:	L24, L36
Function:	Large Format Scanner
Rating voltage:	19V
Rating current:	3.42A
Power supply:	FSP065-REBXX (X=0-9, A-Z or Blank)

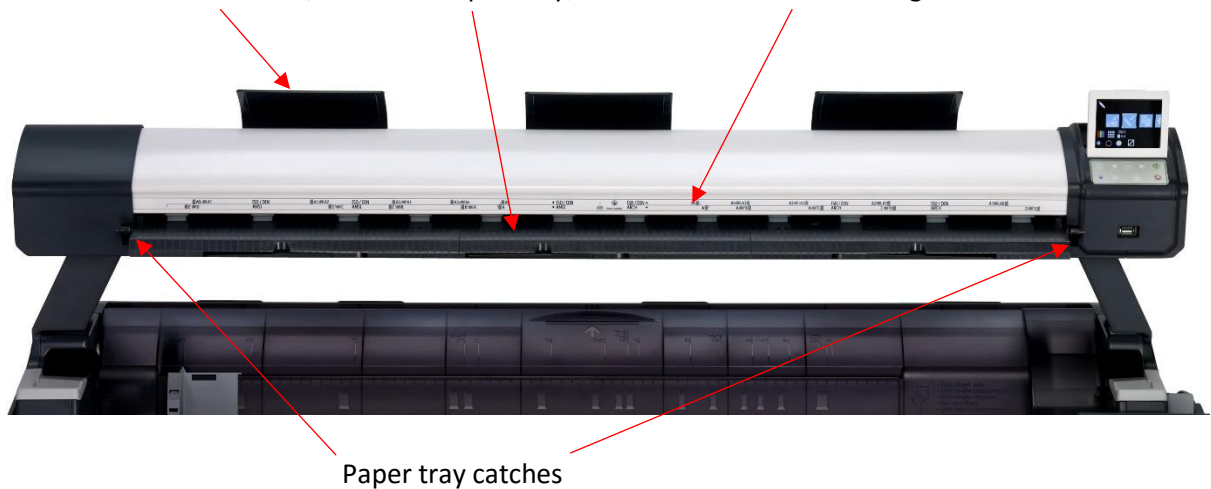
Scanner Overview

Main Features

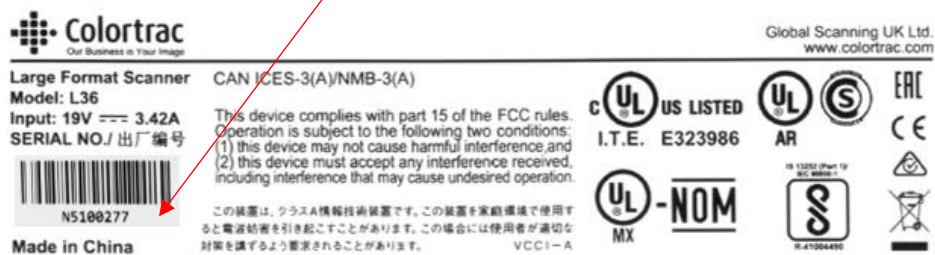
- Functions:
 - Scan to USB memory stick
 - Scan to network connected PC
 - Copy
- Optical resolution: 600dpi.
- SingleSensor – patented single in-line image array.
- Dual sided LED illumination of original documents, reduces the shadow effect occurring at creases and folds of the drawings.
- Single linear document hold-up flap to help smooth out creases.
- Face-up scanner with imaging width: L24 = 24" (610mm) or L36 = 36" (914mm).
- Maximum document width: L24 = 26" (660mm) or L36 = 38" (965mm).
- Ultra-light weight scanner.

Scanner - Identification of parts

- Document Return Guides, Paper Tray, Document size guide



- Serial Number plate is on the rear of the scanner. (This example shows S/N = N5100277)



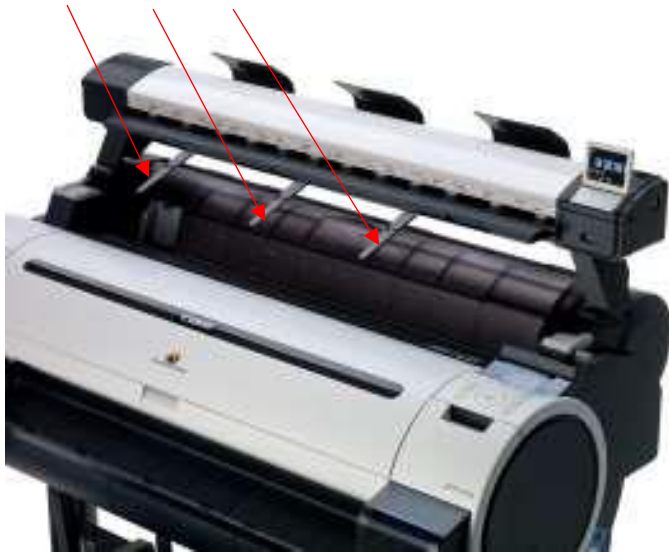
- USB stick slot, User Interface (UI) – LCD display and Keypad.



Power switch.

Power and Ethernet connector. (Rear of scanner)

- Paper guides (to prevent scan documents entering the printer).



Unpacking

- With the scanner box on the floor, or a suitable large table, remove the top of the cardboard box.



- Remove the Calibration target and keep it in a safe place for future use. (It is protected inside a cardboard sleeve inside a sealed plastic bag).



- Remove the packing from the top of the scanner and remove the scanner from its protective plastic bag and place on a suitable table.

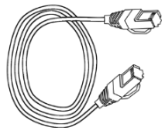
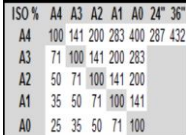







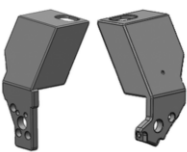
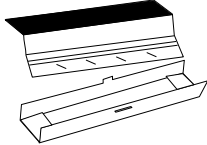




- Remove the transit tape from the scanner. Using the two levers, carefully open the scanner and remove the foam packing strip from inside the scanner. Close the scanner by lifting the paper tray with both hands until the two levers click into the locked position.



Box contents.

- Unpack & check the remaining contents of the box, so as not to throw away important item with the packaging.

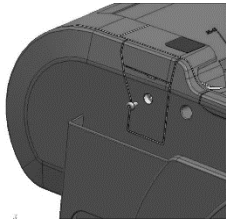
Item	Description	Qty.	Item	Description	Qty.																																																
	Ethernet Cable	1	 <table border="1" data-bbox="868 412 1054 546"> <tr> <td>ISO %</td> <td>A4</td> <td>A3</td> <td>A2</td> <td>A1</td> <td>A0</td> <td>24"</td> <td>36"</td> </tr> <tr> <td>A4</td> <td>100</td> <td>141</td> <td>200</td> <td>283</td> <td>400</td> <td>287</td> <td>432</td> </tr> <tr> <td>A3</td> <td>71</td> <td>100</td> <td>141</td> <td>200</td> <td>283</td> <td></td> <td></td> </tr> <tr> <td>A2</td> <td>50</td> <td>71</td> <td>100</td> <td>141</td> <td>200</td> <td></td> <td></td> </tr> <tr> <td>A1</td> <td>35</td> <td>50</td> <td>71</td> <td>100</td> <td>141</td> <td></td> <td></td> </tr> <tr> <td>A0</td> <td>25</td> <td>35</td> <td>50</td> <td>71</td> <td>100</td> <td></td> <td></td> </tr> </table>	ISO %	A4	A3	A2	A1	A0	24"	36"	A4	100	141	200	283	400	287	432	A3	71	100	141	200	283			A2	50	71	100	141	200			A1	35	50	71	100	141			A0	25	35	50	71	100			Copy Scale Factor Stickers	5
ISO %	A4	A3	A2	A1	A0	24"	36"																																														
A4	100	141	200	283	400	287	432																																														
A3	71	100	141	200	283																																																
A2	50	71	100	141	200																																																
A1	35	50	71	100	141																																																
A0	25	35	50	71	100																																																
	Mains Cable	1		Screw Hexagon Socket Button Head M4x10	6																																																
	Power Supply	1		Thumb screw	2																																																
	3mm Hex Tool	1		Cable clip	1																																																
	PC Software & Documentation CD	1		Scanner mounting brackets 1 x Left side 1 x right side	2																																																
	Calibration Target	1		L Scanner Guide	1																																																
	Document Return Guide(s)	1 for L24 3 for L36																																																			

Fitting the scanner to the printer

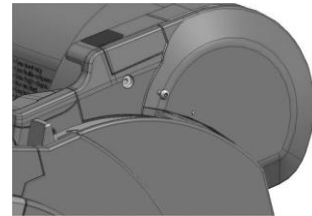
- Install the scanner mounting brackets on the printer. (Supported printers: iPF 670/671/770/771). Repeat the following steps for both sides of the printer.

- Remove the screw using the 3mm hex tool supplied.

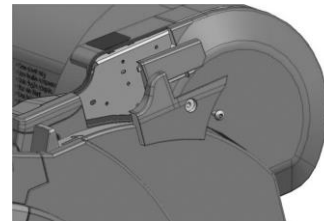
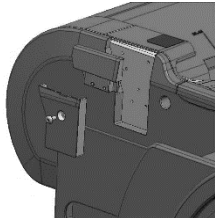
Left side:



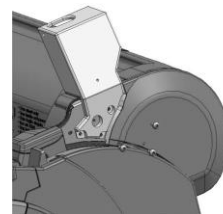
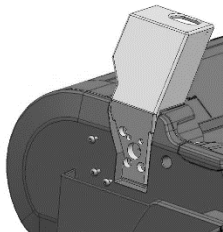
Right side:



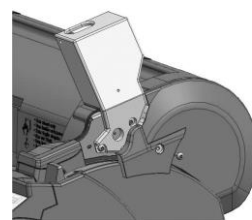
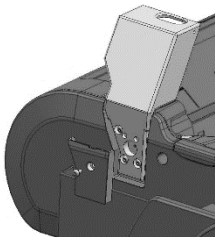
- Remove the 2 covers.



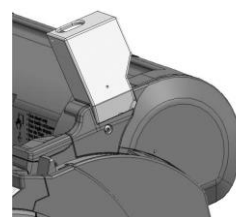
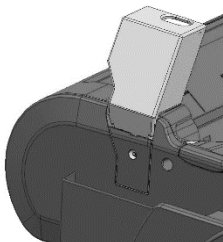
- Fit the scanner mount using 3 screws and 3mm hex tool supplied.



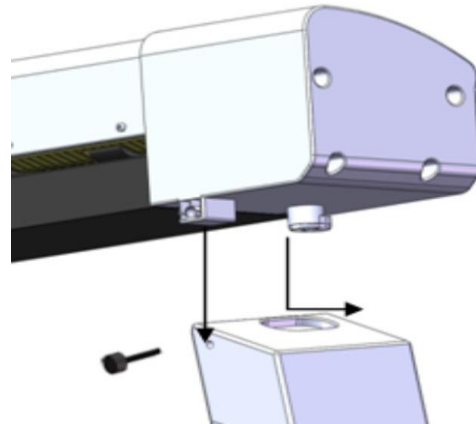
- Replace the lower cover.



- Left and right scanner mount fitment complete.

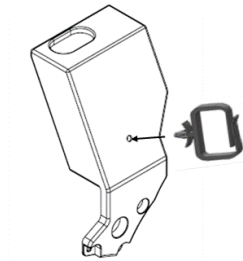


- Fit the scanner to the scanner mounting brackets. Locate the scanner's feet in the holes on top of the scanner mounts and pull the scanner to the front.

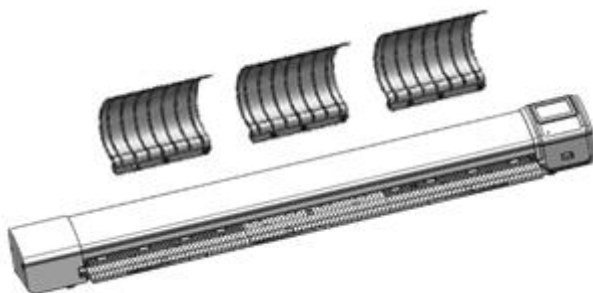


IMPORTANT: Secure in place using the 2 thumb screws provided. Failure to do so could result in the scanner falling off the mounts.

- Attach the cable clamp to the right side scanner mounting bracket.



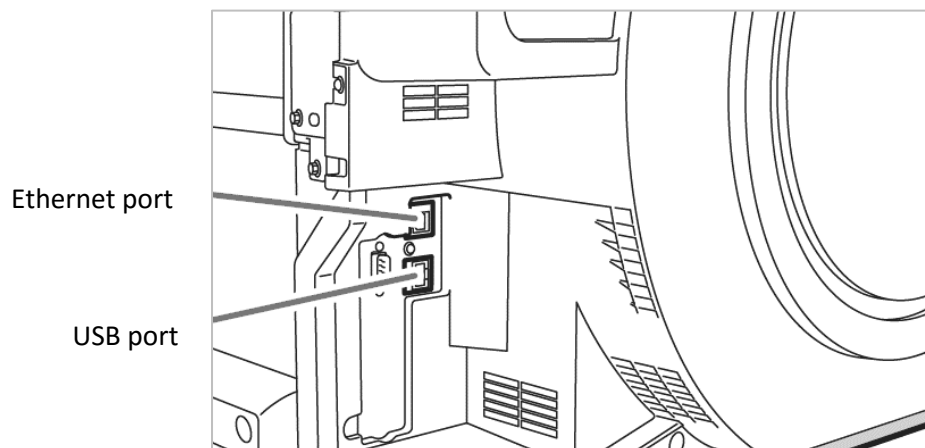
- Fit 1 document return guide to the rear of the scanner in the centre.
For the L36, fit an additional 2 document return guides either side.
(The L24 has 1 document return guides. The L36 has 3 in total).



- Connect the Ethernet cable to the rear of the scanner.
 - The scanner controller communicates with the printer over the network. (The printer must be installed on the network, on-line and ready for the system to be able to Copy). If the printer is NOT on the network, use a direct Ethernet cable connection from the scanner to the printer, but this is not the preferred connection as the system will not be able to Scan to PC as well as Copy to the printer.



- iPF printer connections



- Connect the power cable to the rear of the scanner and connect the power supply to the mains. Use the supplied power supply only. Pass the cables through the cable clamp on the right side scanner mounting bracket.



Operation

Power

- The scanner is powered on/off by the power switch on the right hand end.
- When powered on, the amber LED on the keypad will illuminate and after a few seconds, it turns blue and the LCD displays various icons. (If the LED remains amber, check the paper tray is closed correctly).

Keypad



Home.



Move left or right through the menus.



Enter the selected menu or select the current value.



Eject document if loaded. When entering numbers, it acts as a back space.



Back up 1 level in the menus. When entering numbers, it acts as Cancel.

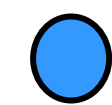


Start scan or copy.

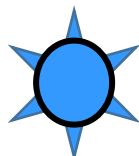


Cancel scan or copy.

LED



Power on.

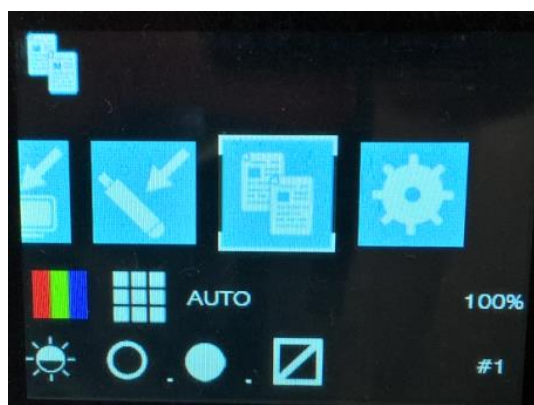


Flashing approximately every second = scanning.
Flashing every 10 seconds = sleep mode.



Scanner paper tray open.

LCD



Mode (Copy)

Function (Copy)

Current Image Adjustment and (Copy) Settings

(Power on default settings: Colour mode, Standard Resolution, Auto-size, Brightness=0, Black Point(BP)=1, White Point(WP)=1, Crop off, 100% copy scale, 1 Copy. The defaults can be changed to your preferred settings: See Functionality – More Settings: Image Adjustment).

Sleep mode

- The scanner complies with the Energy Star standard, so will enter sleep mode after 15 minutes of no use to save electricity. (The time cannot be changed or the feature disabled).
- When in sleep mode, the scanner consumes very little power. It will flash the Blue LED on the Keypad every 10 seconds.
- To exit sleep mode, press the Green button on the keypad.

Information messages



Scanner working



USB stick warning: A USB stick must be formatted to FAT 32 format and have a maximum capacity of 128GB.



Printer warning: To Copy, a supported printer must be on-line and ready.



PC warning: To scan to PC, the L Scan App must be running on a connected computer.



Calibration warning: See Troubleshooting Error Codes.



Internal memory warning: See Troubleshooting Error Codes.



Scanner open: The paper tray is open, close the scanner.

Configuring the network connection of the scanner

- Turn on the power switch on the side of the scanner.
- To configure the scanner for DHCP network IP address.
On the User Interface (UI) of the scanner, use the left /right buttons as necessary to select the Settings, and press OK.



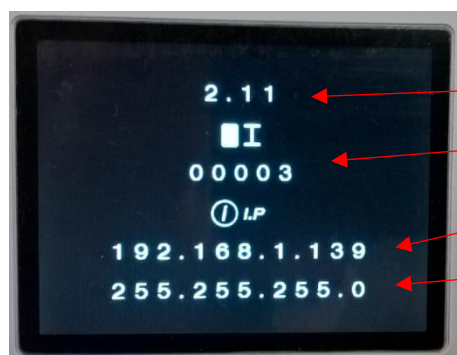
Select the Network Icon and press OK.



- Use the left and right buttons to select DHCP and press OK.



- After selecting DHCP, the scanner will request an IP address from the server and then display it automatically.



Firmware version

Total scanned length in meters

IP Address

Subnet Mask

Use the Home button to exit.



- Alternatively, configure the scanner for a static IP address and subnet mask. Static IP address and subnet masks should be entered and configured by your network administrator or IT support provider.
 - On the scanner UI, use the left /right buttons as necessary to select the Settings, and press OK.



- Use the left and right buttons to select the Network Icon and press OK.



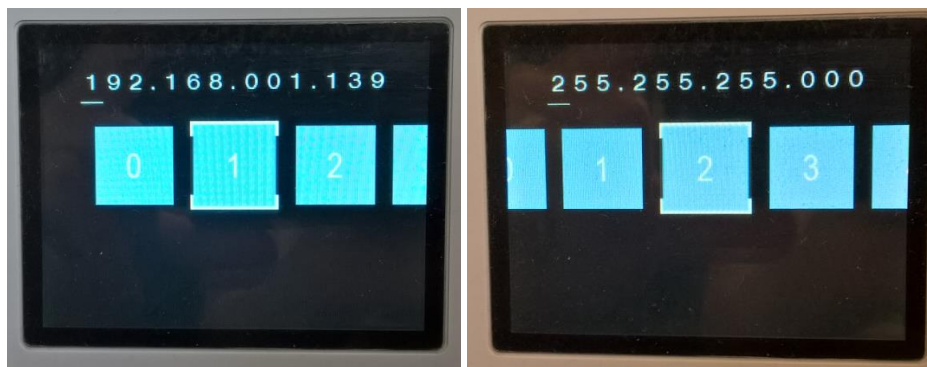
- Use the left and right buttons to select Static and press OK.



Use the left and right buttons to select IP or Mask and press OK.



- To enter the address, use the left and right buttons to select the number required for the underlined value and press OK to enter that digit. The underline cursor will move to the next number to the right. Repeat until all the digits are entered correctly. The new value will be automatically saved once the last digit is entered.



If you make a mistake, use the Eject button to go back to the previous number, or Back up button to cancel and exit.



Back. In this menu the Eject button moves the cursor back to the previous digit.



Cancel - Back up 1 level. Cancel number entry and exit this menu.



Home. Once complete, select the Home button to exit.

- Display the IP address of the printer or PC.
The scanner will display the IP address of the printer when copying, or that of the PC when scanning to PC. You can disable the display of the IP address during these operations by selecting the Display Printer/PC IP Address.

On the scanner UI, use the left /right buttons as necessary to select the Settings, and press OK.



Select the Network Icon and press OK.



Select the Display Printer/PC IP Address Icon and press OK.



Select the Display Printer/PC IP Address Off



OR select the Display Printer/PC IP Address On as required.



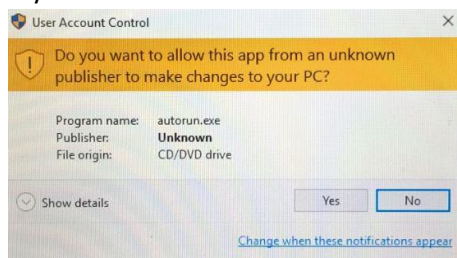
Software Installation and Operation

- Identify a network connected PC on which to install the L Scan App. This PC needs to be on and the L Scan App running to allow the scanner to Scan to PC.

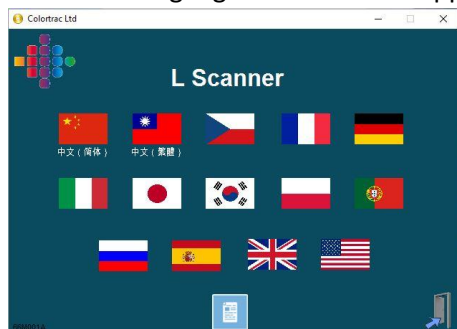
Insert the CD into the selected PC and the installation will automatically start.

Note: Install the L Scan App on one PC only. Multiple installations will result in the Scan to PC scan files being saved on random PCs, so is not recommended.

- If your PC shows a User Account Control warning, select Yes to allow the app to run.

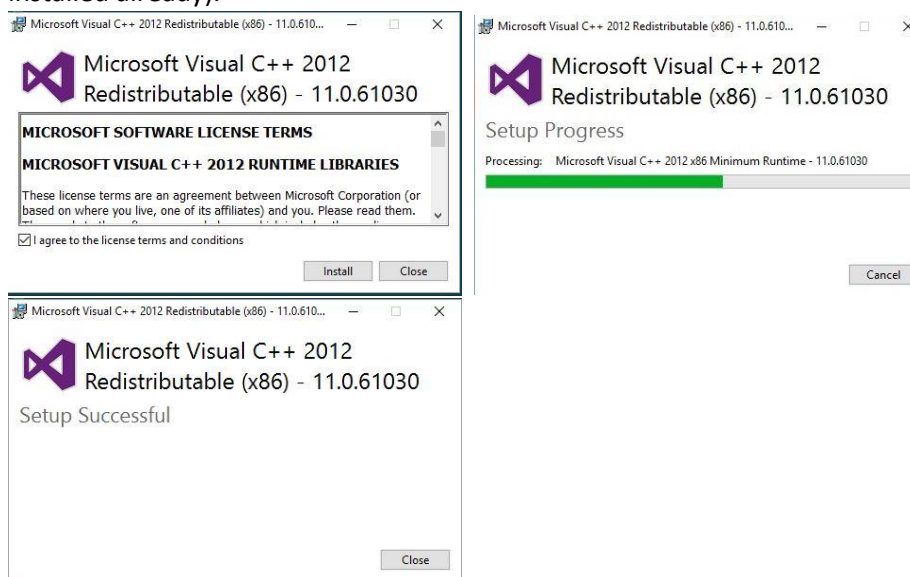


- Select the language for the L Scan App you wish to install.

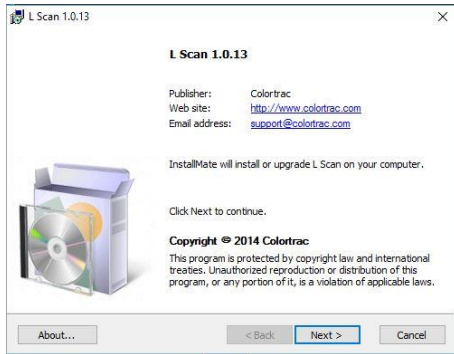


- If your PC does not already include Microsoft's® Visual C++ Redistributable files, the following install Windows will appear. Select "I agree to the terms and conditions" and select Install. When complete, select Close.

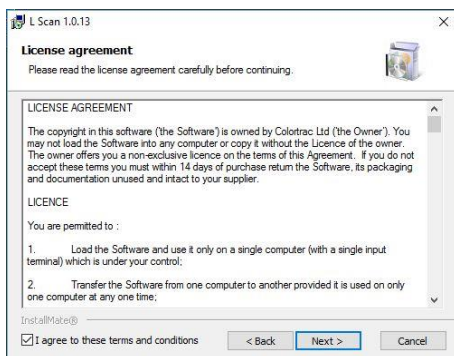
(If you do not see these Windows, it is not a problem. It means the PC has these components installed already).



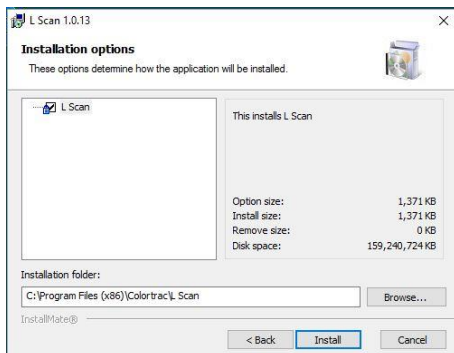
- Install the L Scan App. Select Next.



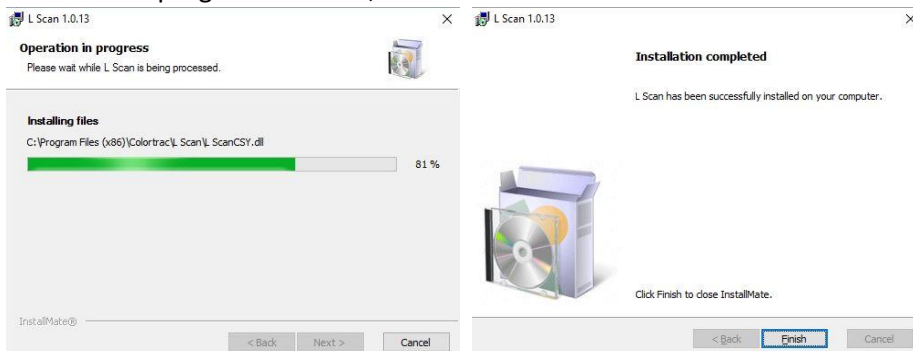
- Read the end user license agreement and, if you agree, select “I Agree to the Terms and conditions” and select Next.



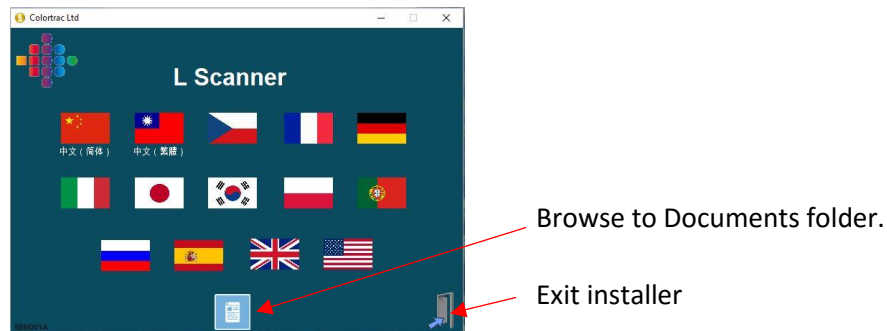
- Select Install.



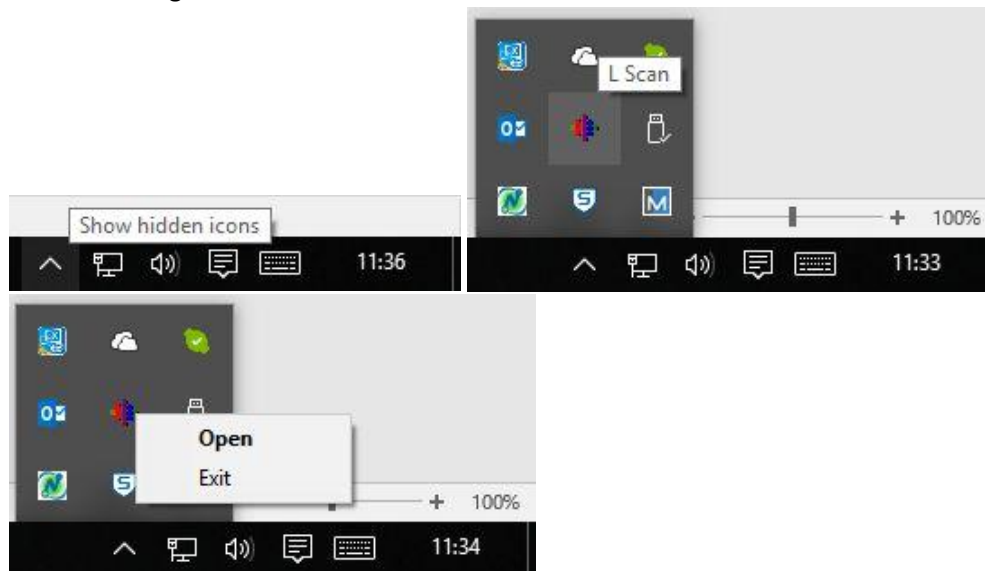
- Wait for the program to install, then select Finish.



- Select the Document icon to browse to the Documents folder on the CD. Please read and / or print the documents. This folder contains the L Icon Guide, the L Scanner Guide and software release notes. Select the Exit icon to close the installation program.

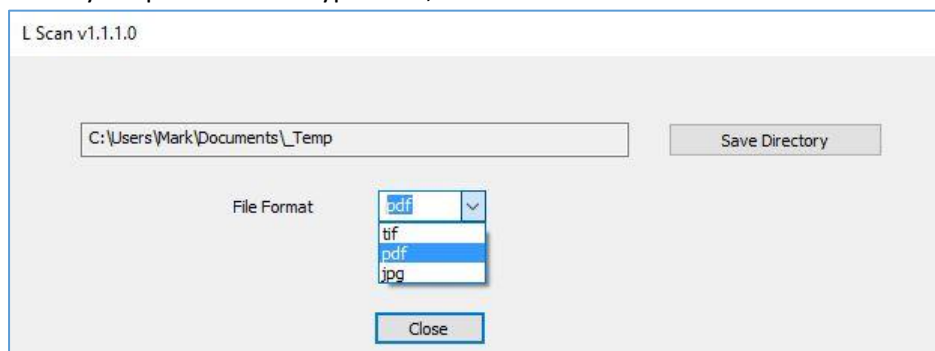


- The L Scan App will run as a Windows® Tray App and will start automatically every time the PC is started. The L Scan App interface window can be displayed by selecting the Show Hidden Icons in the bottom right hand corner of the PC screen.



You can right click the icon to Open the L Scan App window.
 Selecting Exit will stop the L Scan App and prevent it from receiving Scan to PC scan files.

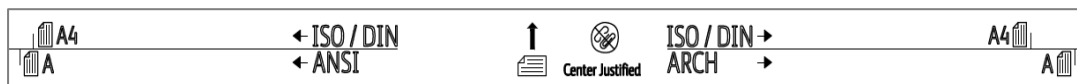
- Start the L Scan App. Select Save Directory and browse to select your preferred Scan to PC destination folder. (This is normally a folder that is shared with other users on the network). Select your preferred file type: TIFF, PDF or JPEG. Close the Window.



Functionality - Basic operation

Loading documents into the scanner

- Caution: The scanner's scan glass will be permanently damaged if you try to scan documents that contain staples, paper clips or other similar objects. Avoid scanning documents with sticky tape or Post-It notes as the glue can adhere to the scan glass resulting in image quality issues.
- To scan thicker documents, such as the calibration target, remove the document return guides to provide a straight paper path.
- The original document will be loaded into the scanner face up in the centre.
If using auto-size, the exact position is not critical.
If using fixed sizes, align to the appropriate mark on the document size strip.
ISO/DIN sizes are shown above the line
ANSI sizes are shown below the line to the left only.
ARCH sizes are shown below the line to the right only.



- Using two hands, hold the document at both sides near the lead edge, giving a little outward tension to make the lead edge of the document straight. Present the lead edge to the scanner keeping the lead edge square to the feed rollers. After a delay of approximately 0.5 seconds, the feed rollers will automatically take the document into the scanner and place it in the correct position ready for the Scan or Copy operation.



The document can be ejected to the rear of the scanner by pressing the eject button.

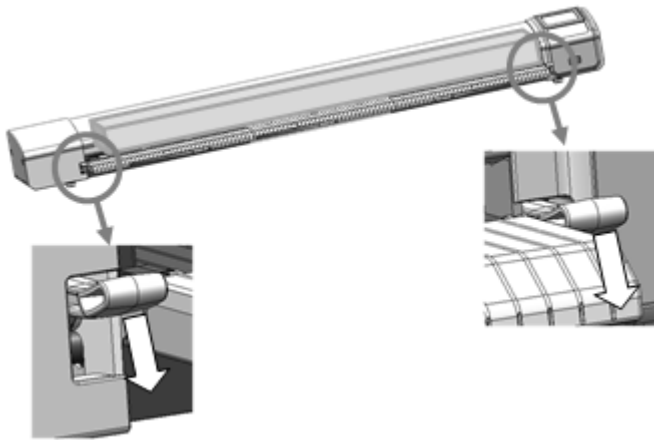


Eject

- If a document has jammed, open the scanner and remove the document by hand. The jammed document can be removed from the front or back of the scanner as preferred. (See Opening/Closing the scanner).

Opening/Closing the scanner

- Do not leave the scanner open for long periods of time.
- The scanner is opened by releasing the two levers at the same time.



- Close the scanner by holding both sides of the paper tray and lifting it until both latches click into place.

Scan to USB

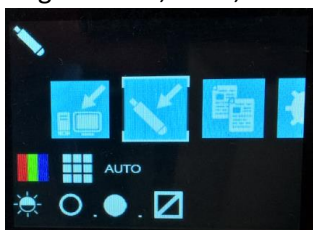
- Insert a USB memory stick in to the L Series scanner. The USB stick must have been formatted as FAT32 and have a maximum capacity no greater than 128GB. Do not use a USB extension cable.



- Insert a document into the approximate centre of the scanner, face up. The exact position is not critical as we will scan using Auto-Size.



- Use the default settings: Colour mode, Standard Resolution, Auto-size. Brightness=0, BP=1, WP=1, Crop off



- On the scanner User Interface, use the left /right buttons to select the SCAN to USB function and press the Green button. The document will be scanned to internal memory and the document will be held at the rear rollers.



Scan to USB



Start

To cancel the Scan, press the Red Stop button during the scan operation.



Cancel

- The scanner will then transfer the scan data to the USB stick displaying the % complete. Wait for the scan data to transfer to the USB stick and the hour glass to disappear. Once complete, the document will be ejected and the USB stick can be removed. (WARNING: Removing the USB stick during the data transfer process will corrupt the scanned image).



Wait

- Insert the USB stick into any PC and open the Scan000X file using any standard picture viewer. The number of the Scan file on the USB stick will start at 0001 and increment depending on what files are already on the USB stick. Please note the date/time stamp of the scan file will be incorrect on the USB stick because the L series scanner does not include a clock, so the correct date cannot be assigned.



Scan to PC

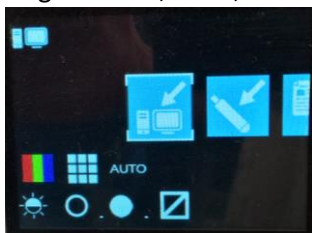
- Ensure “L Scan App” is running on one PC only.



- Insert a document into the approximate centre of the scanner, face up. The exact position is not critical as we will scan using Auto-Size.



- Use the default settings: Colour mode, Standard Resolution, Auto-size
Brightness=0, BP=1, WP=1, Crop off



- On the scanner UI, use the left /right buttons to select the SCAN to PC function and press the Green button. The document will be scanned directly to the L Scan App via Ethernet. The document will be held at the rear rollers until the data transfer to the PC is complete.



To cancel the Scan, press the Red Stop button during the scan operation.



- Wait for the scan data to complete the transfer to the PC and the hour glass to disappear. Once complete, the document will be ejected.



- On the PC, the L Scan App will show Scan Received. Open the scan file using any standard picture viewer.



The Scan file name is date & time as follows:

YYYY-M-D-H-M-S

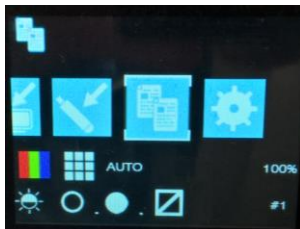
2016-8-3-15-11-1

Copy

- Ensure the printer is on-line and ready to print. Insert a document into the approximate centre of the scanner, face up. The exact position is not critical as we will scan using Auto-Size.



- Use the default settings: Colour mode, Standard Resolution, Auto-size Brightness=0, BP=1, WP=1, Crop off, Scale=100%, Copies=1



- On the scanner UI, use the left /right buttons to select the COPY function and press the Green button. The document will be scanned to internal memory and the document will be held at the rear rollers.



- To cancel the Copy, press the Red Stop button during the copy operation.

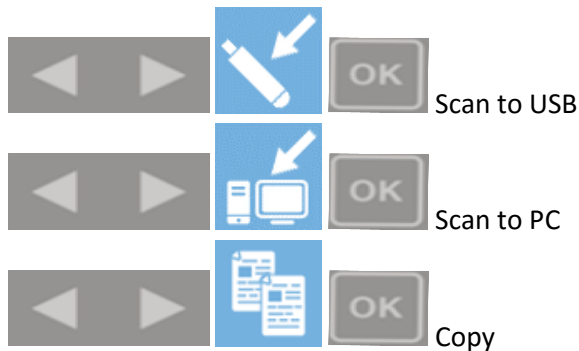


- The scanner will then transfer the scan data to the printer. Wait for the scan data to complete the transfer to the PC when the hour glass will disappear and the original document will be ejected from the scanner. Collect your copy from the printer.



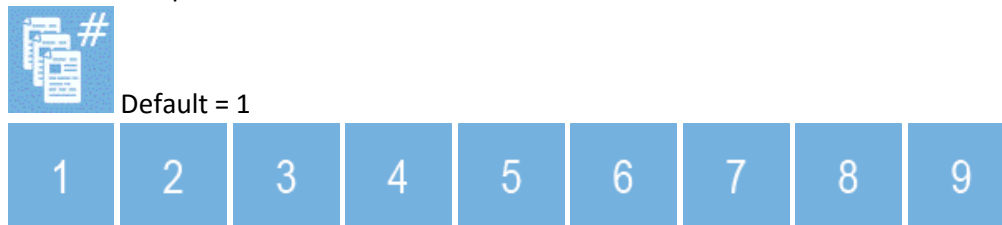
Functionality – More Settings: Image Adjustment

- On the scanner UI, use the left /right buttons to select the function you wish to adjust and press OK.

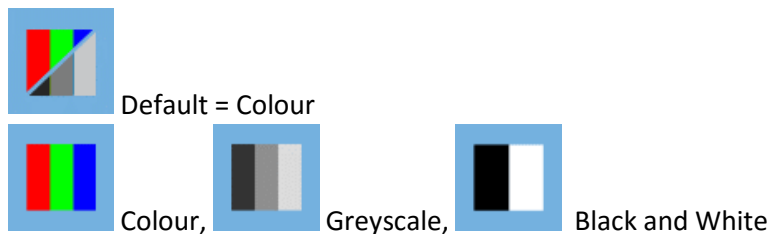


- Select the Setting to be changed and press OK. Select the new value and press OK.

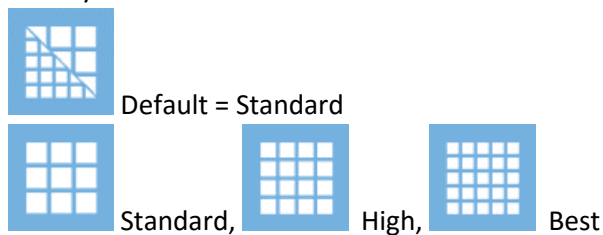
- Number of copies



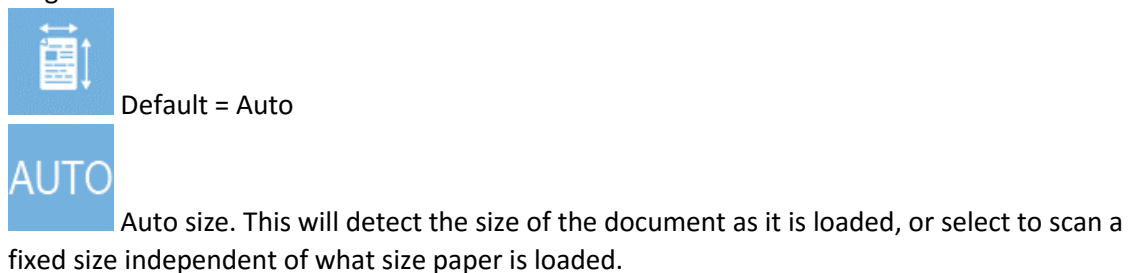
- Colour mode



- Quality Mode



- Original document size



ISO	ISO A0	ISO A1	ISO A2	ISO A3	ISO A4	ISO sizes
ANSI	ANSI A	ANSI B	ANSI C	ANSI D	ANSI E	ANSI sizes
ARCH	ARCH A	ARCH B	ARCH C	ARCH D	ARCH E	ARCH sizes
		Portrait, Landscape				

ISO	Dimensions	ANSI	Dimensions	ARCH	Dimensions
A0	841mm x 1189mm	E	34in x 44 in	ARCH E	36inx 48in
A1	841mm x 594mm	D	34in x 22 in	ARCH D	36in x 24in
A2	594mm x 420mm	C	22in x 17 in	ARCH C	24in x 18in
A3	297mm x 420mm	B	17in x 11in	ARCH B	18in x 12in
A4	297mm x 210mm	A	11in x 8.5in	ARCH A	12in x 9in

- Copy scale factor

Default = 100%

25% 35% 50% 71%

100%

141% 200% 283% 287% 400% 432%

Reduction

No change

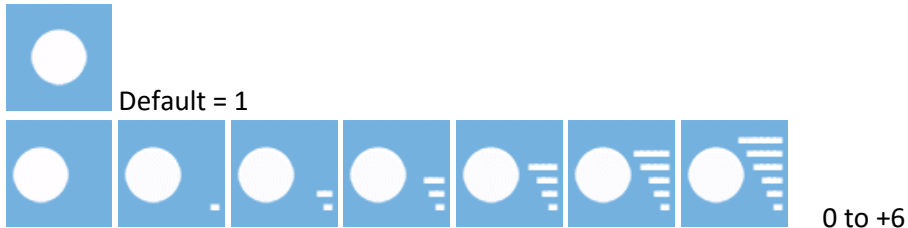
Enlargement

- Brightness. Increase to lighten the image, decrease to darken the image.

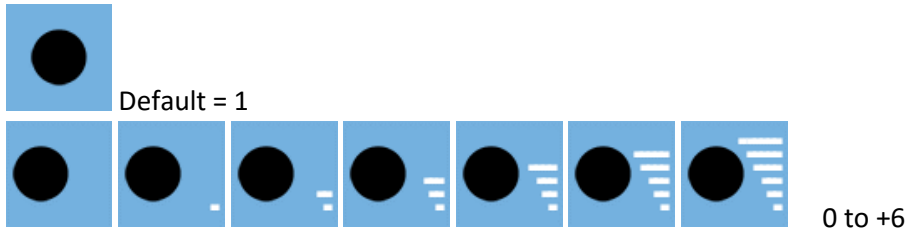
Default = 0

-3 to +3

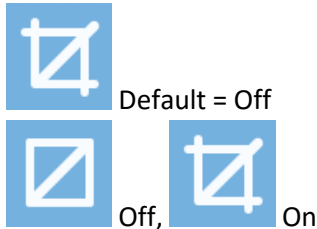
- White Point. Increase to clean up a dirty background. Makes the whites whiter.



- Black Point. Increase to darken the shadow areas of the image. Makes the blacks blacker.



- Crop. Removes a 3mm border from all sides of the scanned image.

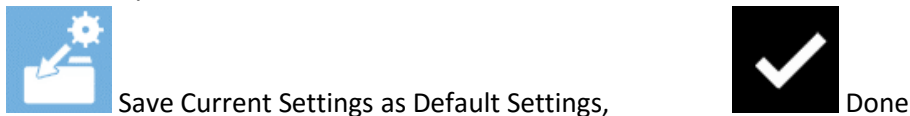


Functionality – Saving your preferred settings as power on Defaults

- This function saves the current Image Adjustment Settings as the Default Settings. It does not affect any calibration data.
- On the scanner UI, use the left /right buttons to select the Settings icon and press OK.



Select the Save settings to folder icon and press OK. A tick will be displayed to show it was successfully saved.



To restore Factory Default Image Adjustment Settings, select the reset Settings icon and press OK.



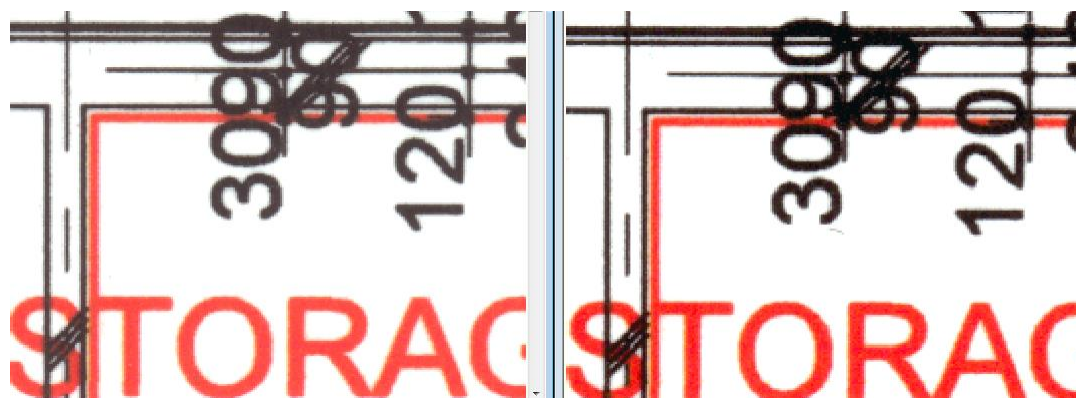
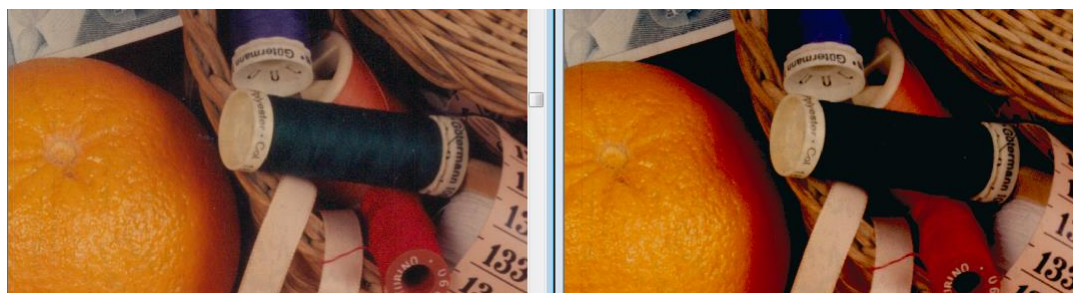
Application notes

Tightly curled documents

- Prior to scanning, flatten the document as best as possible.
- During the scan process, guide the document as it feeds through the scanner to prevent the original re-entering the scanner. If the original is allowed to re-enter the scanner, it will result in a paper jam and possible damage the original document.

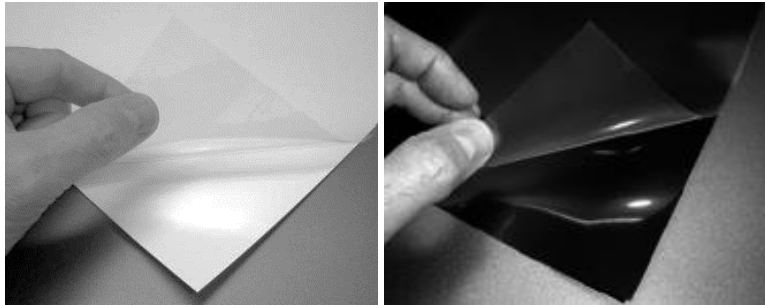
Recommended Settings

For Photographic originals where colour accuracy is most important.	For Graphics & Line drawings where sharp distinctive colours are required. (Default)
White Point = 0 and Black Point = 0	White Point = 1 and Black Point = 1



Document Carrier Sheets

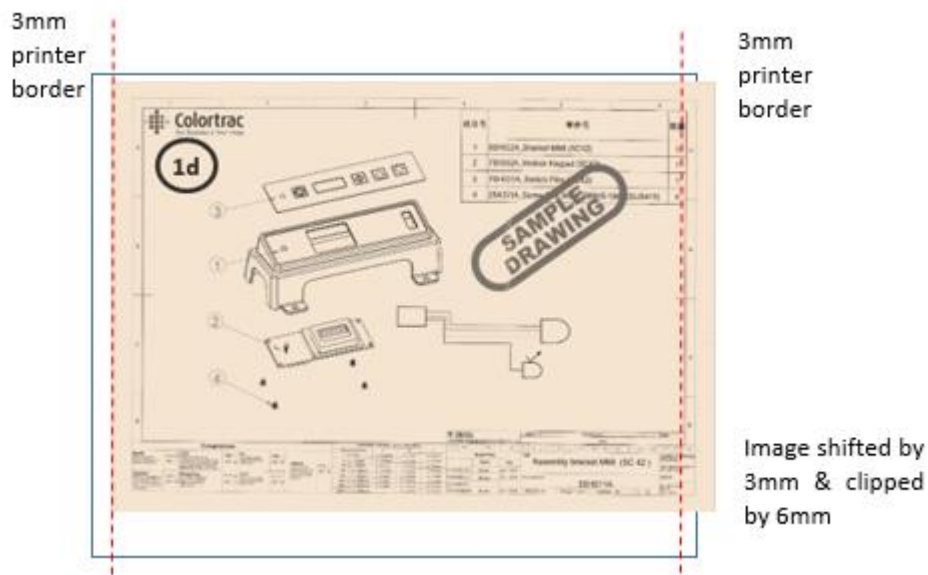
- Delicate documents: Old, fragile documents could be damaged further when feeding through a scanner. To avoid such problems, these delicate documents can be placed inside a document carrier sheet before scanning to provide protection.



- Documents Carrier Sheets can also be useful when scanning
 - Transparent documents to improve light reflection and provide a more even image.
 - Glossy originals to avoid them becoming scratched
 - Irregular shaped or torn documents, or multiple documents pieces to scan as a single file.
 - Dirty documents as the carrier sheet can protect the scan glass from storage dust.
 - Semi-transparent documents that contain print on both sides can result in show through of the text on the reverse side. Scanning such documents in black backed carrier sheets can help reduce the reflected light and hence the amount of show through.
- Contact your reseller for more information, prices and availability of carrier sheets.

Eliminating clipped copies

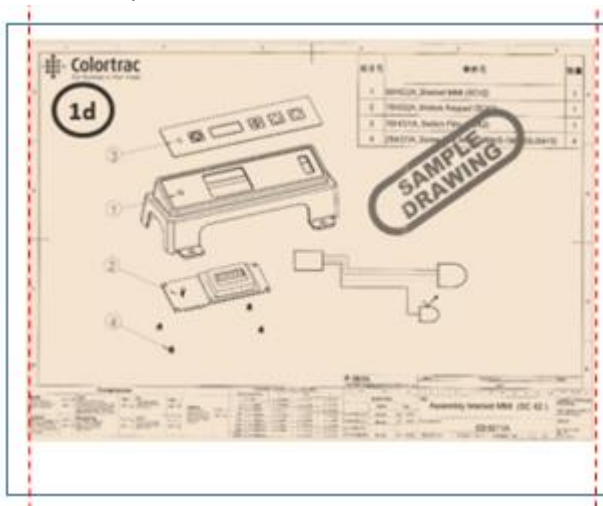
- If you scan a 594mm original as fixed size A1, then the image is 594mm wide.
- The printer has a 3mm margin either side that it cannot print within. That means on a 594mm roll, only 588mm can be printed on. Therefore, copying a 594mm original scan onto the 588mm printable width of the paper will mean the image is shifted 3mm to the side and 6mm (2 x 3mm) is clipped from the far side.



- Enabling the Crop feature means the original image is printed correctly by cropping a 3mm border from all around the scan before printing.



Crop on



Scanner Settings

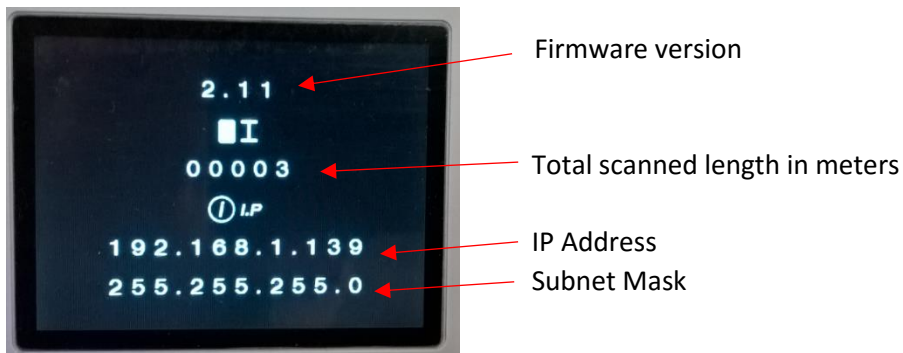
- On the scanner UI, use the left /right buttons as necessary to select the Settings icon and press OK.



- Select the Setting to be changed and press OK. Select the new value and press OK.
- Information.



There is nothing to adjust. This displays:



- Network Settings. (See Installation section)



- Automatic IP Settings



DHCP

- Manual IP Settings



Static IP Address



IP Address, Subnet Mask

- Display Printer/PC IP Address during Copy/Scan to PC operations.



Off,



On

- Load Firmware. (See Maintenance section).



- Save Current Settings Default Settings. (See Functionality – More Settings: Image Adjustment section).



- Restore Factory Default Image Adjustment Settings. (See Functionality – More Settings: Image Adjustment section).



- Scan Length. (See Maintenance section).



- Calibration. (See Maintenance section).



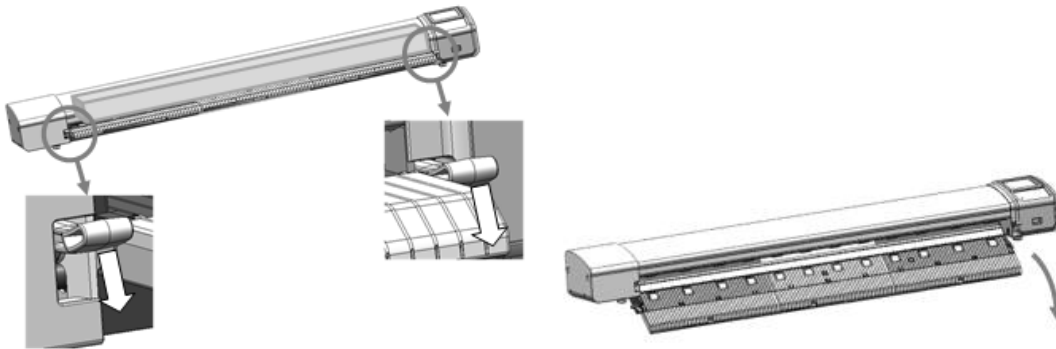
- Stitch adjustment. (See Maintenance section).



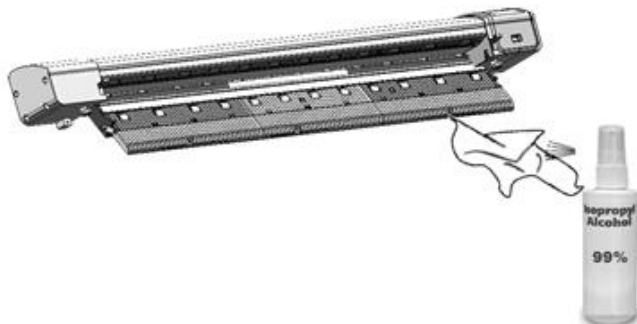
Maintenance

Cleaning

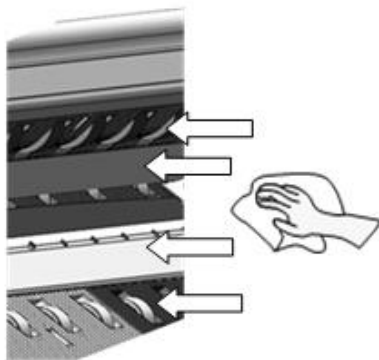
- Open the scanner.



- Spray 99% isopropyl alcohol onto a lint free cloth.



- Using the cloth, clean the following components:



- Top drive rollers
- Scan glass
- Hold up flap
- Bottom rollers (Rotate rollers by hand to clean all round).

Consumables

- Parts that wear according to operator usage are deemed consumables and can be purchased from your supplier. Those L Series Scanner parts considered to be consumables are:
 - Scan Glass Sub.
 - Paper Hold Up flap.
 - Calibration/Stitch Target.

Calibration

- Remove the document return guides to prevent the calibration target getting stuck during forward/rewind motion required for calibration.



- Clean the scanner.
- Insert the calibration target (it must be clean and in good condition) into the scanner face up, black end first.



- On the scanner UI, use the left /right buttons as necessary to select the Settings, then press OK.



- Select Calibration and press OK. (Calibration will not start until calibration sheet is loaded and in the correct orientation - Face up, black end first).



- The calibration target will be scanned back & forth until complete. Please wait until the scanner returns to the Home screen. This process will take a few minutes. Return the calibration target to its protective cover for safe keeping.

Stitch Adjustment

- Remove all the document return guides to prevent the calibration target getting stuck during forward/rewind motion required for calibration.



- Clean the scanner.
- Insert the calibration target (it must be clean and in good condition) into the scanner face up, black end first.



- On the scanner UI, use the left /right buttons as necessary to select the Settings and press OK.



- Select Auto-Stitch and press OK. (Auto-Stitch will not start until calibration sheet is loaded and in the correct orientation - Face up, black end first).



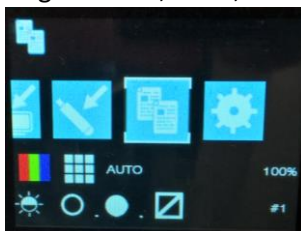
- The calibration target will be scanned back & forth until complete. Please wait until the scanner returns to the Home screen. This process will take a few minutes. Return the calibration target to its protective cover for safe keeping.

Scan Length Adjustment

- To correct the length of scans or copies, Copy a document and measure the length of both the original and the copy. The copy should be within 2% of the original. So for a 500mm document, the acceptable range is 499mm to 501mm. If the copy length is incorrect, adjust as follows:
 - Insert a document into the approximate centre of the scanner, face up. The exact position is not critical as we will scan using Auto-Size. We will copy a document and measure the length of both the original and the copy.



- Use the default settings: Colour mode, Standard Resolution, Auto-size
Brightness=0, BP=1, WP=1, Crop off, Scale=100%, Copies=1



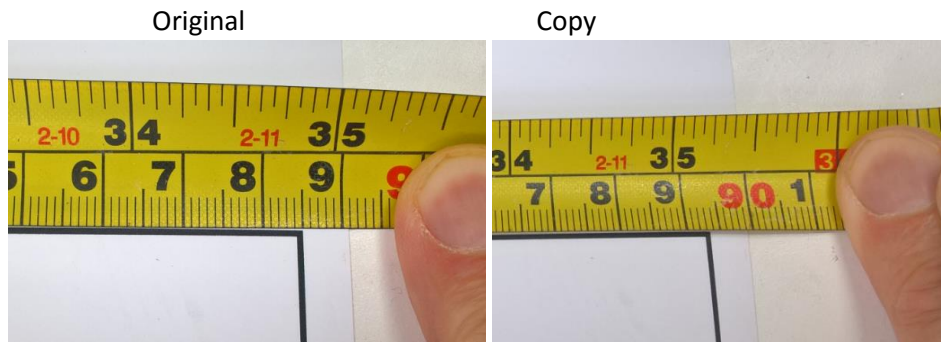
- On the scanner UI, use the left /right buttons to select the COPY function and press the Green button.



- The scanner will then transfer the scan data to the printer. Wait for the scan data to complete the transfer to the PC when the hour glass will disappear and the original document will be ejected from the scanner. Collect your copy from the printer.

- Measure both the original document and the copy. Calculate the adjustment figure by dividing the length of the original by the length of the copy.

$$\text{Adjustment figure} = \frac{\text{Original document length}}{\text{Copied document length}} = \frac{885\text{mm}}{893\text{mm}} = 0.9910$$



- On the scanner UI, use the left /right buttons as necessary to select the Settings and press OK.



- Select Scan Length Adjustment and press OK.



- To enter the adjustment figure, use the left and right buttons to select the number required for the underlined value and press OK to enter that digit. The underline cursor will move to the next number to the right. Repeat until all the digits are entered correctly and the new value will be automatically saved once the last digit is entered.



- If you make a mistake, use the Eject button to go back to the previous number.



Back. In this menu the Eject button moves the cursor back to the previous digit.



Cancel - Back up 1 level. Cancel number entry and exit this menu.

Loading Firmware

- Locate the firmware zipped file and a USB stick, which must have been formatted as FAT32 with a maximum capacity no greater than 128GB.



LFW2-11

- On a PC, use Windows Explorer® to extract the firmware zipped files to the root of a USB memory stick.

USB STICK (E:)				
Name	Date modified	Type	Size	
PRNT	08/08/201...	File folder		
LsRGB.tab	05/06/201...	TAB File	6,145 KB	
LUPDATE	19/07/201...	Configuration settings	17 KB	
P110.spi	19/07/201...	SPI File	1,614 KB	

- Place the USB stick into the scanner.



- On the scanner UI, use the left /right buttons as necessary to select the Settings and press OK.



Select Firmware Load icon and press OK.



- DO NOT SWITCH OFF the scanner during the firmware loading process as this can cause permanent damage to the scanner. The UI will display the percentage complete while it loads the firmware into the scanner. Wait until the firmware has loaded and the scanner has rebooted automatically. This will take a few minutes.

Troubleshooting

Error Codes

<u>Error Codes</u>	<u>User actions</u>
1 INVALID_MODEL	Power cycle. If problem persists, call service.
2 INVALID_CAL_PARAMS	Power cycle. If problem persists, Calibrate. Power cycle. If problem persists, Stitch.
3 SD_MOUNT	Power cycle. If problem persists, call service.
4 SD_READ	Power cycle. If problem persists, call service.
5 SD_WRITE	Power cycle. If problem persists, call service.
6 SD_FULL	Power cycle. If problem persists, call service.
7 SD_FORMAT	Power cycle. If problem persists, call service.
8 SD_CLOSE	Power cycle. If problem persists, call service.
9 USB_MOUNT	Retry USB stick, or try another one*.
10 USB_READ	Retry USB stick, or try another one*.
11 USB_WRITE	Retry USB stick, or try another one*.
12 USB_FULL	Delete files, or try another USB stick*.
13 USB_DELETE	Retry USB stick, or try another one*.
14 USB_CLOSE	Retry USB stick, or try another one*.
15 ETHERNET_NO_PRINTER	See Troubleshooting: Connectivity.
16 ETHERNET_PRINT	See Troubleshooting: Connectivity.
17 ETHERNET_NO_PC	See Troubleshooting: Connectivity.
18 ETHERNET_SCAN	See Troubleshooting: Connectivity.
19 STITCH	Power cycle. If problem persists, run Stitch.
20 NORM	Power cycle. If problem persists, Calibrate.
21 LED	Power cycle. If problem persists, call service.
22 UPDATE	Power cycle. If problem persists, load firmware.

*(USB errors: Check formatted to Fat32 and memory size is 128GB maximum).

Operation errors

Document does not feed correctly.

- The document is not fed straight into the scanner. Hold the original document with two hands and feed into the scanner until you feel equal resistance on both sides from the feed rollers. If the document is not straight, open the scanner to remove the original, close the scanner and try again. Load the document into the centre of the scanner.
- Check that the scanner is closed properly, with both latches clicked into place.
- Document is the wrong size for the scanner. Make sure the document is within the specification allowed for the scanner.

Scanner LED is not on

- There is no power to the scanner. Check the scanner is switched on, the mains power is on, the power cable is connected correctly to the power adapter and the power adapter cable is connected correctly to the scanner.

The scanner LED remains Orange when powered on.

- The scanner lid is open. Close the scanner, so both paper tray latches are clicked into place.

Scan or copy is blank.

- Make sure the original document is fed face up and into the centre of the scanner.

Scan to USB does not work

- Ensure the USB memory stick has been formatted as FAT 32 and has a maximum capacity of 128GB. Ensure it has enough free space for the scan. A lower Scan Quality mode requires less space.

Scan to PC shows a short (truncated) scan image.

- The scanner stops mid scan when scanning to PC. After a small wait, the document is ejected and the scan received on the PC is truncated (Shorter than the original). This is caused by the network or PC being too slow to keep up with data transfer rate from the scanner. Check the network and PC, or select a lower scan Quality mode. The network & PC might be the correct spec, but if they are too busy during the scan process and they might not be able to keep up with the data transfer rate of the scanner.

No Scan to PC output.

- The L Scan App must be running.
- More than one version of the L Scan App is running on the same subnet as the scanner.
 - The scanner communicates with the L Scan App on the PC via network broadcast. If more than one copy of the L Scan App software is running on the subnet, there is no way of defining which PC will receive the scan file.

No Copy output.

- The printer must be on-line and ready to print.
- More than one of the supported iPF67x/77x printers is on the same subnet as the scanner.
 - The scanner communicates with the printer via network broadcast. If more than one of the supported printers (iPF 670/671/770/771) is on the subnet, there is no way of defining which printer will receive the copy. Other printer models are not affected.

No Scan or Copy function

- Duplicate IP address used on the network. The copy/scan function will not work if the scanner, printer or L Scan App PC do not have unique IP addresses within the subnet. Ensure all IP addresses are set correctly.

Testing connectivity

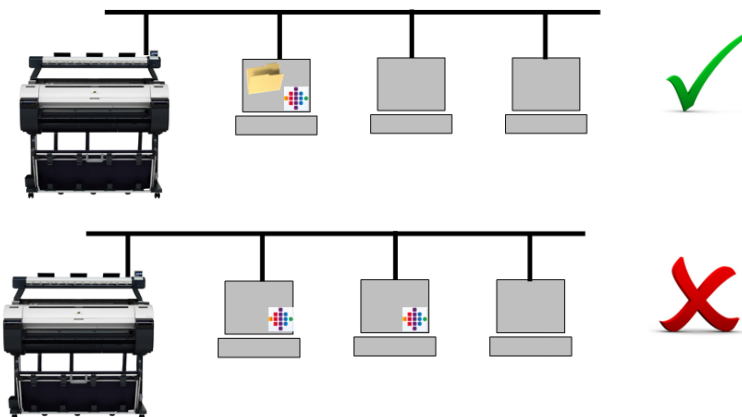
- If you are still having problems with the Scan to PC or Copy functions, eliminate the scanner and L Scan App as the cause of the issue by testing using a direct Ethernet connection. This is intended as a diagnostic step only and not recommended as the permanent configuration.
- Copy - connect an Ethernet cable between the Scanner and the printer using static IP addresses as below.
- Scan to PC - connect an Ethernet cable between the Scanner and the PC using static IP addresses as below.



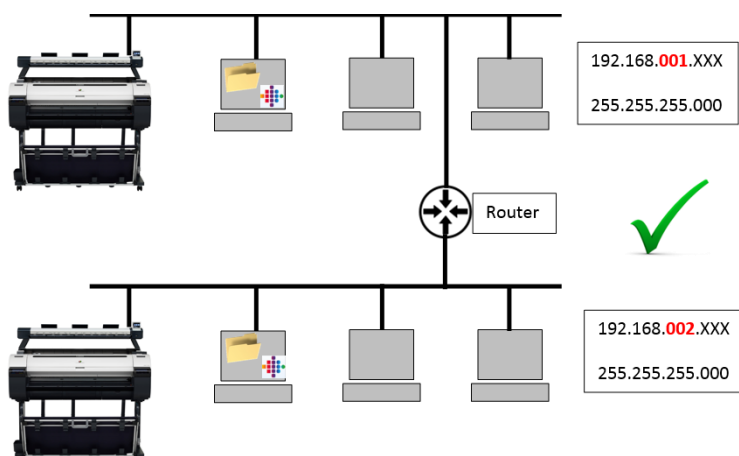
- If this is working, the scanner and L Scan App are working as expected. If the system does not work correctly when connected via the local network using the desired IP addresses (Static or DHCP), then the problem lies with the network configuration. For further information regarding network configurations, please contact your local network administrator.

Supported Configurations

- L Scan App: Only 1 per subnet – Scan to a shared network folder that can be accessed by other users. Multiple L Scan Apps per subnet are not supported.



- L series Scanner or iPF670/671/770/771 Printer: Only 1 per subnet – Additional L series scanners or iPF670/671/770/771 printers should be on a separate subnet.



- L series Scanner or iPF670/671/770/771 Printer: Multiple L series scanners or iPF670/671/770/771 printers per subnet are not supported.

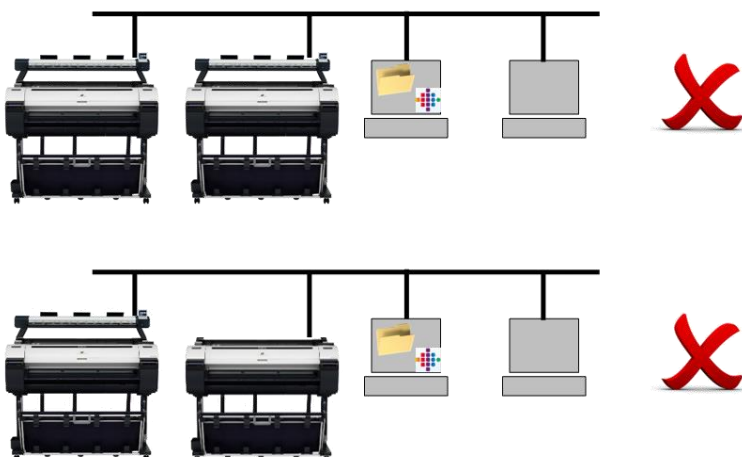
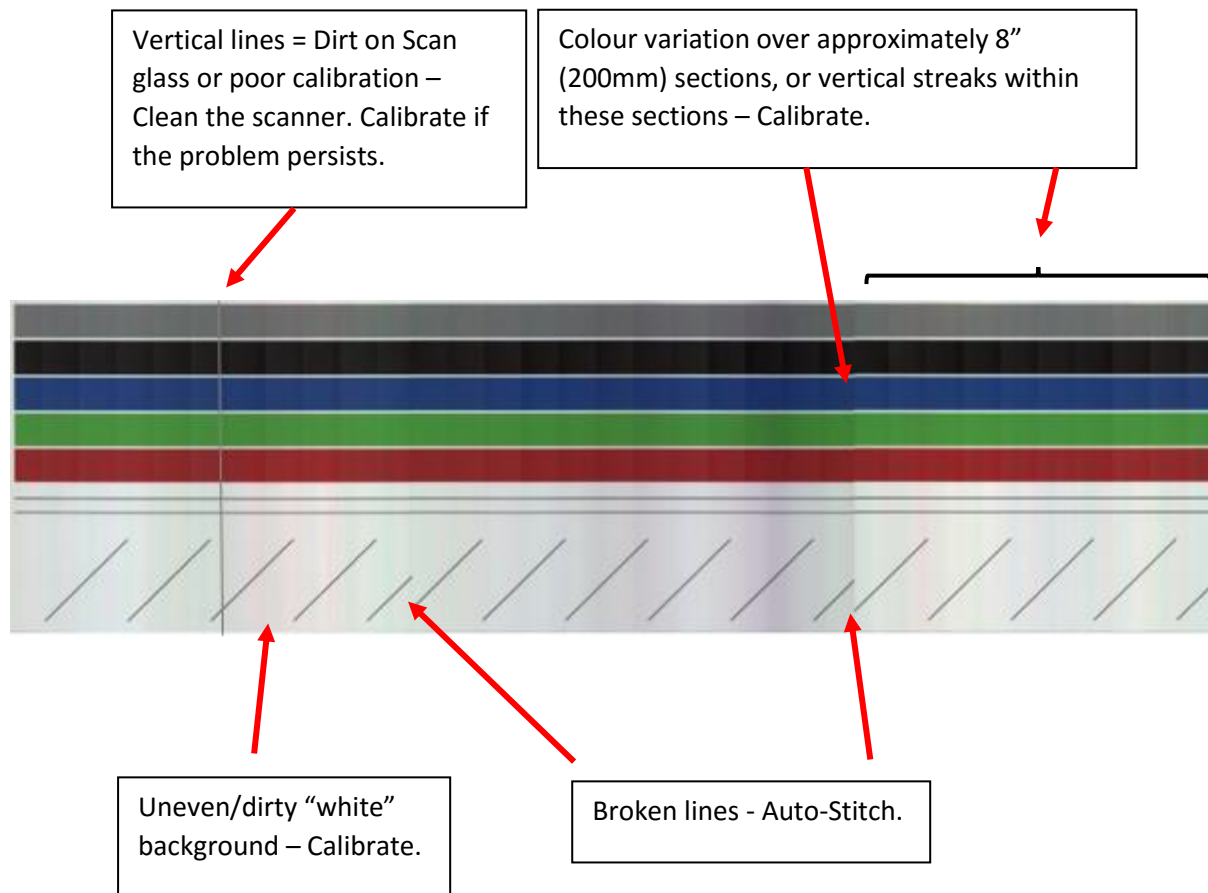
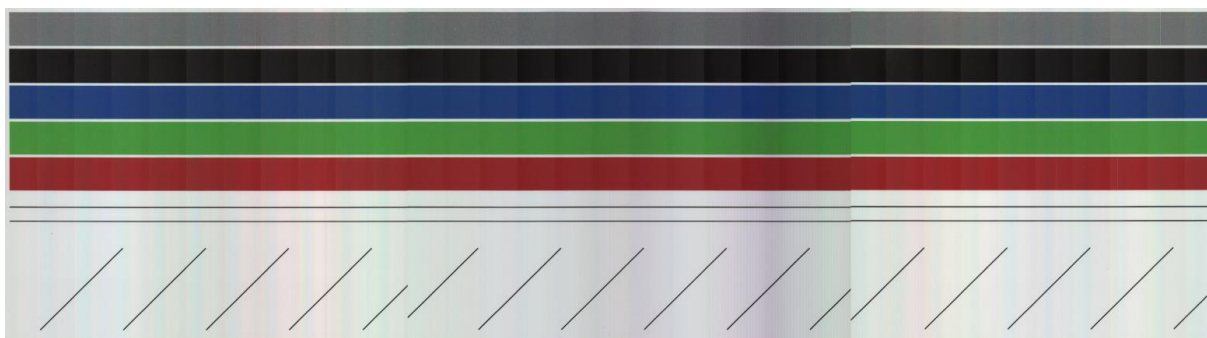


Image Quality

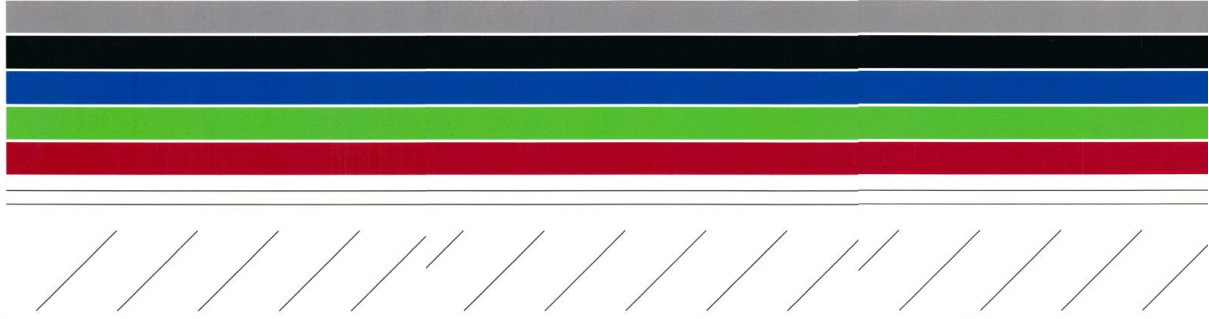
- The following scanned image shows possible image errors and the actions required to resolve them.



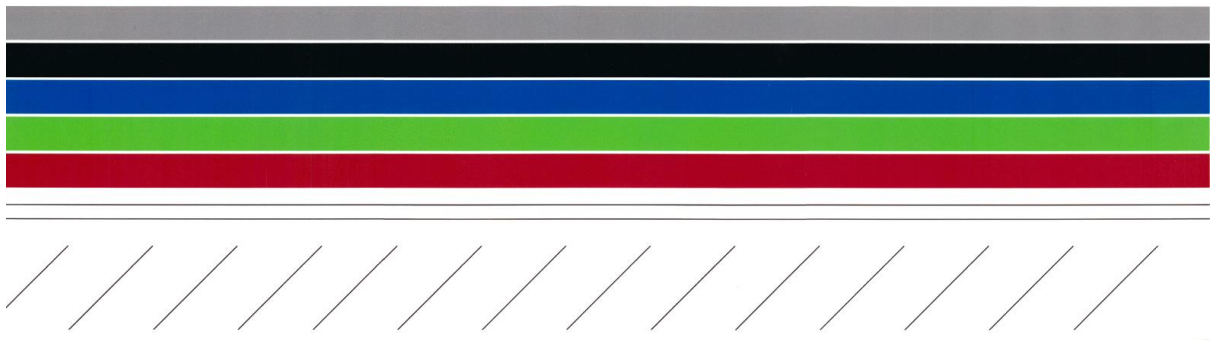
- Cleaning the scanner will remove most vertical lines.



- Calibrating the scanner will remove the streaking and clean up the white background. Calibration adjusts the optical sensitivity of each pixel in the sensor to give the correct levels of black and white.



- Auto-stitch the scanner to align broken lines. Auto-stitch adjusts the electronic alignment of each segments of the scan sensor for both front to back and left to right alignment to avoid “stitch errors” at each intersection.



Incorrect Scan or Copy length

- The length of a scan file or a copy is not the same as the original document. This can be corrected using the Scan Length Adjustment process.



Specifications

Name	L 24, L 36
Models (All regions)	L MFP scanner is ONLY able to print to iPF670/671/770/771
Scan Technology	SingleSensor with multiple dual sided LED illumination
Illumination	L24: 64 LEDs, L36: 96 LEDs
Optical Resolution (dpi)	600dpi.
Resolutions for SCAN mode	Standard/High/Best = 200/400/600dpi
Resolutions for COPY mode (scan/print)	Standard/High/Best = 300/300, 300/600, 600/600dpi
Paper path	Face up, rear exit. Forward document transport only. Document return guide(s) included.
Scan width (inches)	24" and 36"
Min scan width	6.2" (16cm) for L24, 6" (15cm) for L36
Document width (inches)	26" and 38"
Max scan length	109" (2768mm)
Weight of scanner	L24 = 5.36kg (11.8lbs) without Doc return guide L36 = 6.88kg (15.1lbs) without Doc return guide
Dimensions width	L24 = 935mm, L36 = 1238mm
Dimensions height	131mm
Dimensions depth	Without Doc Return Guide - Paper tray folded: 146mm Without Doc Return Guide - Paper Tray flat: 193mm With Doc Return Guide - Paper tray folded: 206mm With Doc Return Guide - Paper Tray flat: 253mm
Max & Min Document thickness	Designed to scan Canon iPF printer CAD paper. Min = 0.07mm Max = 0.5mm
Scan accuracy	Accuracy 0.2% +/-1 pixel
Power Supply	External PSU: Input: 100 - 240V, 50-60Hz Output: 3.42A at 19V.
Max Power consumption	Standby (sleep): 0.05W Idle: 10.20W Scanning: 19.40
Compliances	Energy Star Argentina/S mark Australia/C-Tick National/CB Canada/ICES-003, CUL China/CCC India/BIS Japan/VCCI Korea/KCC Mexico/NOM-019-SCFI Russia/EAC EU/CE USA/FCC USA/UL

Max scan speed (inches/sec)	<p>COPY 300/300dpi Standard = 1ips colour, 3ips mono 300/600dpi High = 1ips colour, 3ips mono 600/600dpi Best = 0.5ips colour, 1.5ips mono</p> <p>SCAN 200dpi Standard = 1ips colour, 3ips mono 400dpi High = 0.5ips colour, 1.5ips mono 600dpi Best = 0.33ips colour, 1ips mono</p>
Scan to USB	USB2, 128GB FAT32.
Scan to Network - L Scan App	<p>L Scan App - Sets scan directory and file type. Minimum PC specification: • Windows® 7/8/10 - 32bit. • 100Mbs Ethernet. • Intel® Celeron, Core-Duo, Core-2-Duo or 2.8GHz Hyper-Threading (HT) or AMD® Dual-Core processors • 2GB RAM • High speed 7,200rpm Serial ATA (SATA) HDD with minimum 2GB for applications and 20GB free for images Suggested PC specification: • Windows® 7/8/10 - 64bit. • 100Mbs Ethernet. • Intel® i3, i5 or i7 processors • 4GB RAM • SATA 6.0Gbit/sec USB3 on the motherboard and SATA 6.0Gbit 7,200 rpm HDD controller.</p>
L Scan App Software	Only L24 and L36 scanner models are supported by the L Scan App. Scanning cannot be started remotely.
Modes	<p>Scan to USB - RGB/Greyscale/BW, TIFF Scan to Network - RGB/Greyscale/BW, Tiff, JPEG, PDF, TiffG4 Copy - RGB/Greyscale/BW Cloud connectivity is achieved by using Canon's Direct Print & Share as a separate process.</p>
Languages for L Scan App	English/French/German/Italian/Spanish/Simplified Chinese/Traditional Chinese/Korean/Russian/Portuguese/Japanese/Czech/Polish
Environment	Temp: 10-35C Humidity: 10-90%
Acoustic noise	L36 - 50.6dB grey scan L24 - 48.4dB grey scan

Note: Specifications are correct at the time of writing and are subject to change without notice.

Glossary of Terms

128GB	128 Giga Bytes. Size of memory.
ANSI	America National Standards Institute. Standard paper sizes definition.
ARCH	Architectural paper sizes. Standard paper sizes definition.
Auto-stitch	Adjusts the electronic alignment of each segments of the scan sensor for both front to back and left to right alignment to avoid “stitch errors” at each intersection.
Black Point.	Increase to darken the shadow areas of the image. Makes the blacks blacker.
Calibration	Adjusts the optical sensitivity of each pixel in the sensor to give the correct levels of black and white.
DHCP	Dynamic Host Configuration Protocol automatically provides a network device with its IP address.
DPI	Dots per Inch. The number of scan/print pixels per linear inch.
FAT32	File Allocation Table file system. FAT32 defines the structure data is saved in memory.
IP Address	Internet Protocol Address. Each device on a network has a different numerical label to identify it.
ISO	International Organization for Standardization. Standard paper sizes definition.
JPEG	Joint Photographic Experts Group file format is a commonly used method of lossy compression (data is thrown away to provide smaller files) for digital images.
LED illumination	Light Emitting Diode. Long lasting, efficient, bright light source.
LCD display	Liquide Crystal Display. User Interface screen.
PDF	Portable Document Format standard defined by ISO, which is independent of hardware or software. Scan images are usually embedded as JPEG files.
Static IP Address	A fixed Internet Protocol Address assigned at the device that cannot be changed by DHCP.
Subnet Mask	It divides the IP address into network address and host address. Without the subnet mask, the IP address is meaningless.
TIFF	Tagged Image File Format. The L Scan App it saves the image in a loss-less, uncompressed file format. Results in larger file sizes, but no lost data.
USB	Universal Serial Bus. Memory sticks plug into devices using the USB port.
UI	User Interface - consists of the LCD display and Keypad.
White Point.	Increase to clean up a dirty background. Makes the whites whiter.
Windows® Tray App.	A small software application that runs in the background and provides messages to the user.