DTM print

FX510e FOIL IMPRINTER | FX510ec FOIL IMPRINTER

User's Manual

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Notices

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Printing History

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a CLASS A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

EMS and EMI Compliance Statement

This equipment has been tested and passed with the requirements relating to electromagnetic compatibility based on the standards EN 55022:1998+A1:2000+A2:2003, CISPR 22 , Class A EN 55024:1998+A1:2001+A2:2003,

IEC 61000- 4 Series EN 61000-3-2 / 2000 & EN 61000-3-3 / 1995. The equipment also tested and passed in accordance with the European Standard EN55022 for the both Radiated and Conducted emissions limits.

Caution

- Danger of explosion if battery is incorrectly replaced
- Replace only with the equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.
- Only use with designated power supply adapter model.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Safety Instructions

Please read the following instructions carefully

- Keep the equipment away from humidity.
- Before you connect the equipment to the power outlet, please check the voltage of the power source.
- Make sure the printer is off before plugging the power connector into the power jack.
- It is recommended that you connect the printer to a surge protector to prevent possible transient over voltage damage.
- Be careful not to get liquid on the equipment to avoid electrical shock.
- For safety and warranty reasons, ONLY qualified service personnel should open the equipment.
- Do not repair or adjust energized equipment under any circumstances.

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Section 1: Getting Started

Thank you…

… for choosing an FX510e/FX510ec Foil Imprinting System. The FX510e Foil Imprinter adds brilliant, shiny highlights to your pre-printed or blank labels. This User's Manual is your complete step-by-step guide to quickly and easily setting up and printing with your new Foil Imprinting System.

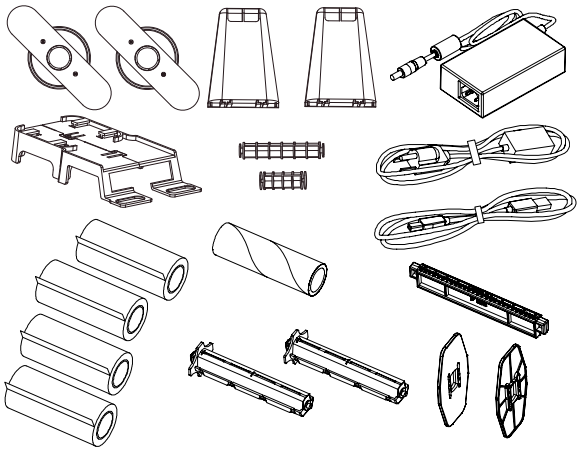
1 A Choosing a Good Location

- Place the printer on a flat surface in a location with adequate air circulation to prevent internal heat build up.
- Do not place the printer near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Allow for adequate clearance in front of the printer to accommodate the printed label stock as it is leaving the printer to avoid the possibility of binding or jamming of the label stock.
- Allow for adequate overhead clearance for opening the top cover to allow easy access to the label stock and ribbons.
- When using the Passive Label Unwinder make sure you have an appropriate depth of up to 60 cm

1 B Box Content

Please check that all of the following items are included with your printer.

- FX510e Foil Imprinter
- Power Cord
- AC Adapter
- USB Cable
- 4 Sample Ribbons (Red, Gold, Silver, Blue Metallic)
- Black Ribbon Hubs (set of 2)
- Brown empty Ribbon Core
- Blue Internal Label Supply Hub with blue Label Guide Plates (set of 2)
- Passive Label Unwinder with 2" and 4" wide Supply Hubs
- Quickstart Guide

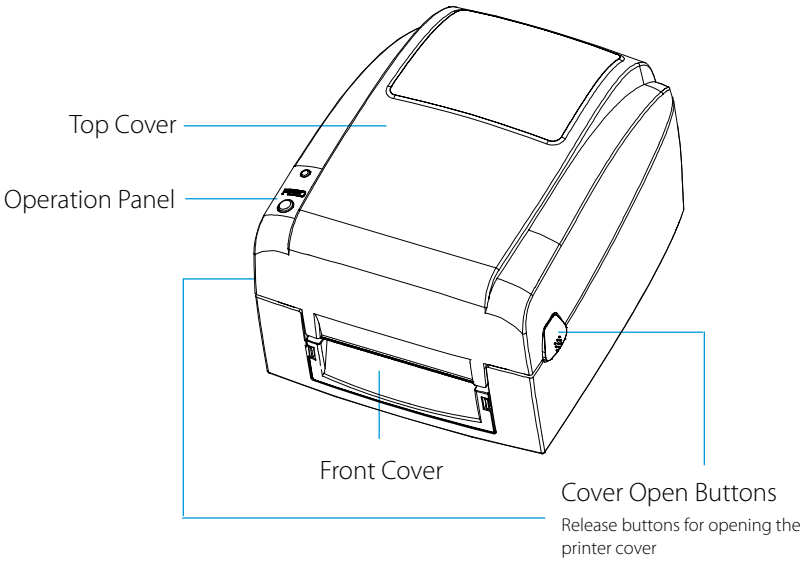


Save the carton and packaging materials. They will come in handy when transporting the printer.

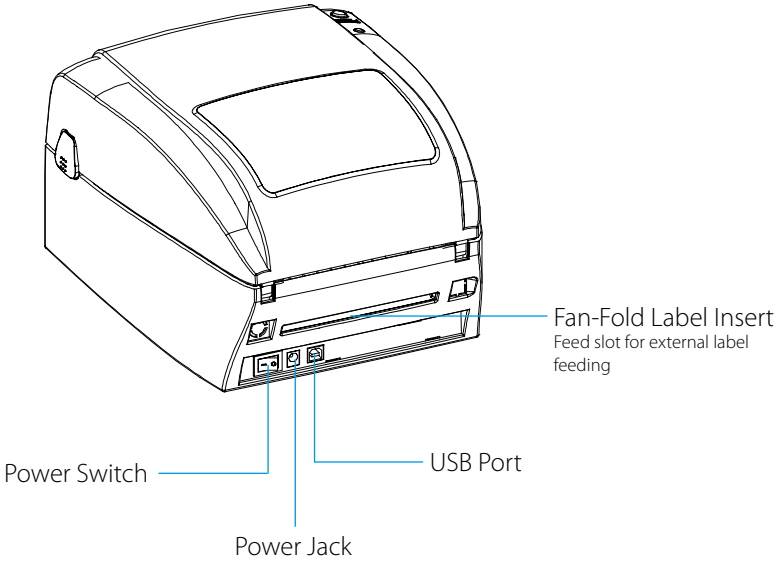
1 C Getting To Know Your Printer

FX510e Overview

Front View. This illustration shows the front of the printer with its control buttons and LED indicator light.

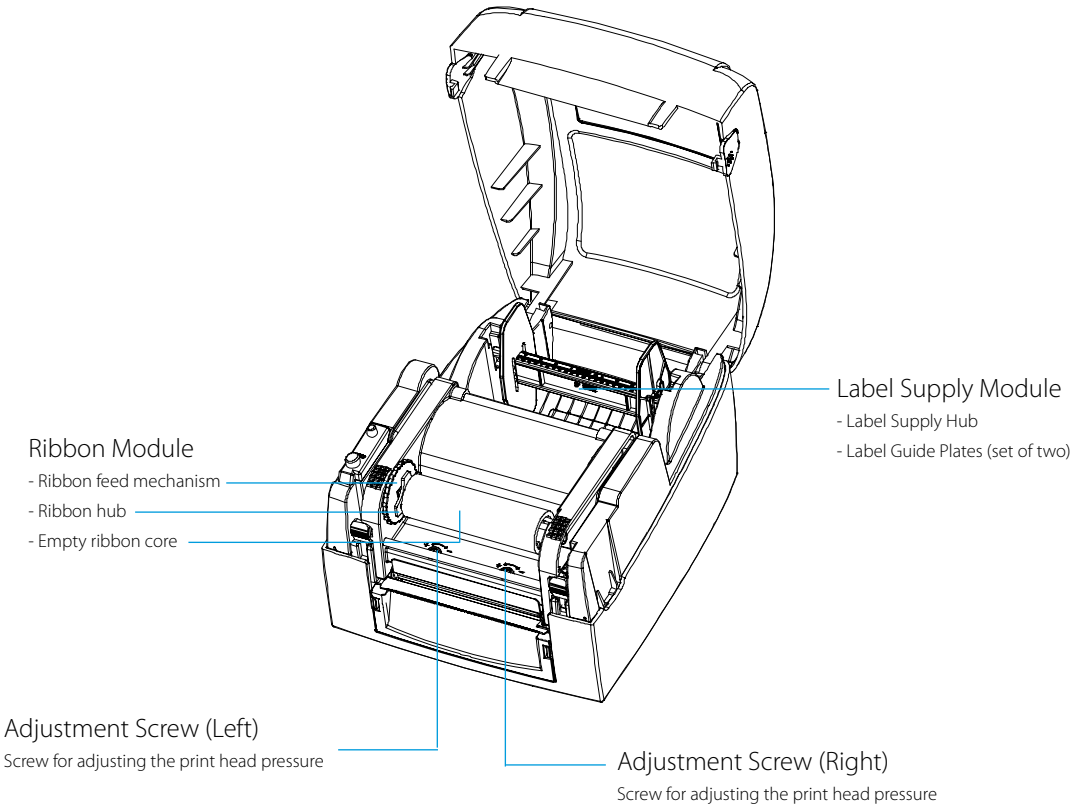


Rear View. This illustration shows the USB input port and power switch found on the rear panel of the printer.



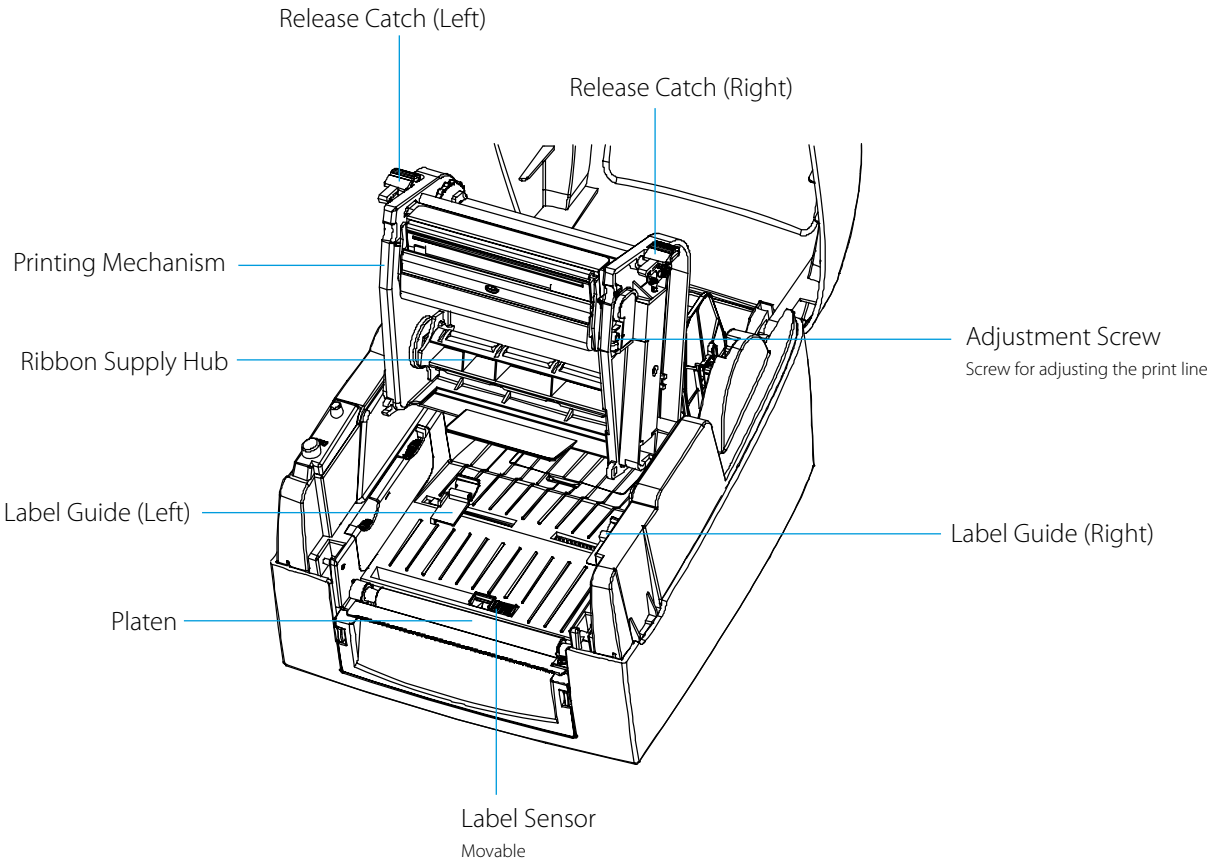
Open The Printer Cover

This illustration shows the interior view of the printer.



Open The Printing Mechanism

This illustration shows the print head and ribbon mechanism.

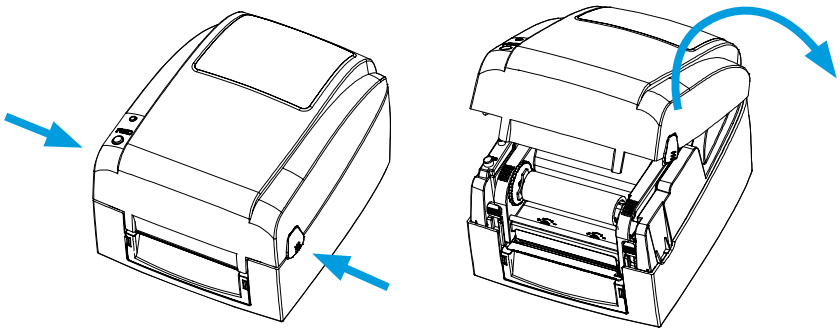


Section 2: Printer Setup

2A Open The Printer Cover

Pressing The Cover Open Buttons

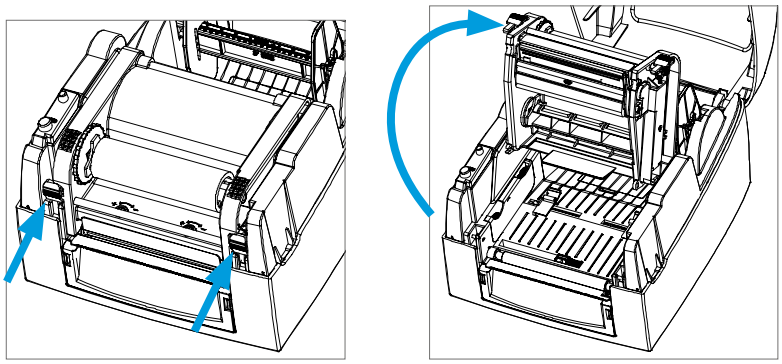
Place the printer on a flat surface. Open the printer cover by pressing the release buttons on both sides of the printer housing and lift the printer cover backward.



2B Open The Printing Mechanism

Pressing The Release Catches

Release and lift the printing mechanism.



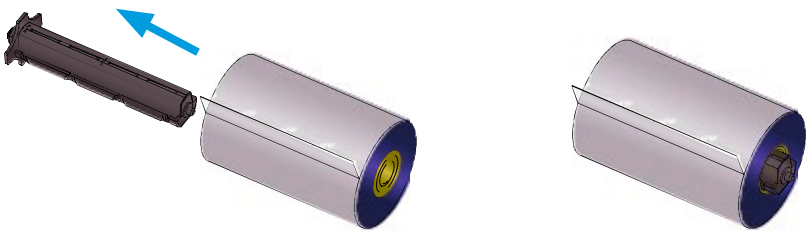
2C Loading The Ribbon

The following steps only apply to thermal transfer printing mode. Direct thermal does not need ribbon to be installed.

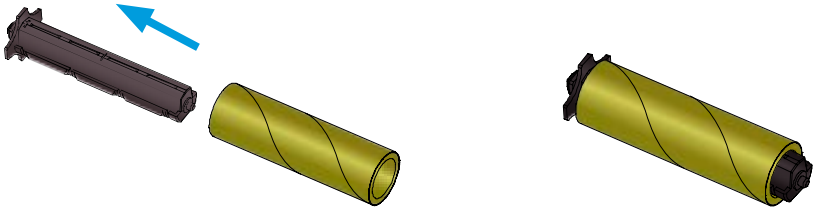
Note: *Media and ribbon types should be matched to provide with optimal print results. Always use ribbon that is wider than the media to protect the print head from wear. For direct thermal printing, do not load ribbon in the printer.*

A New Ribbon Module Installation

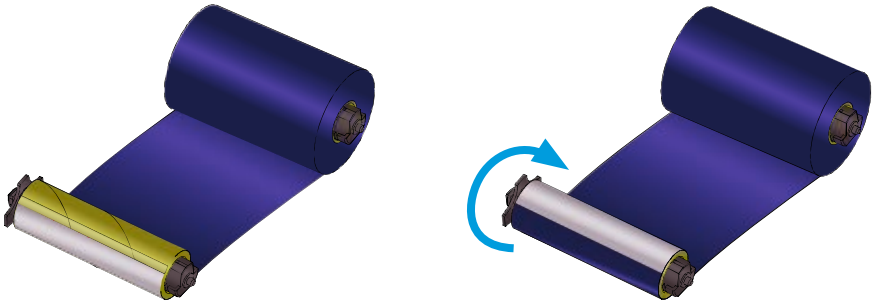
Place the new ribbon on the hub which forms a ribbon supply hub.



Place the empty ribbon core on the hub which forms a ribbon rewind hub.



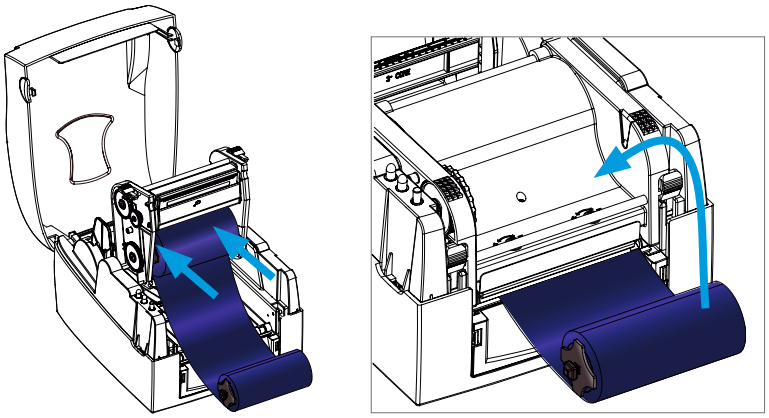
Stick the ribbon supply hub on the ribbon rewind hub and wind the rewind hub 2~3 circles.



Install The Ribbon On The Printer

Place the ribbon supply hub at the back of the printing mechanism. Pass the ribbon supply hub under the print head.

Note: *The ribbon supply hub accepts the coated side of ribbon to be wound ink-inside IN or wound ink-side OUT. You will need to wind it ink-inside IN.*

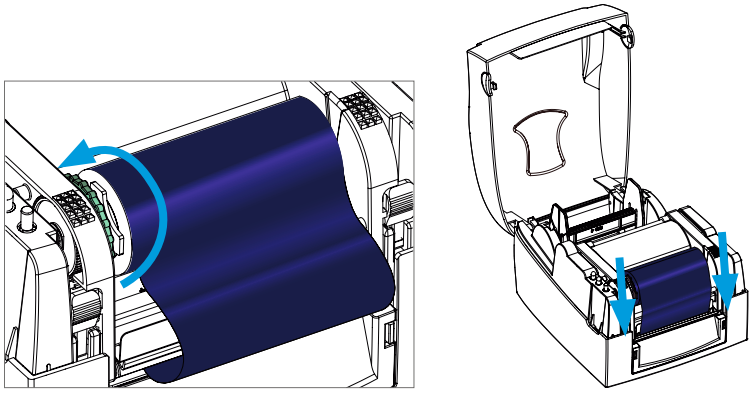


Insert the ribbon rewind hub on the ribbon feed mechanism.

Note: *The ribbon rewind hub accepts the coated side of ribbon to be wound ink-inside IN or wound ink-side OUT. We recommend to wind it ink-inside IN.*

Wind the ribbon to the back.

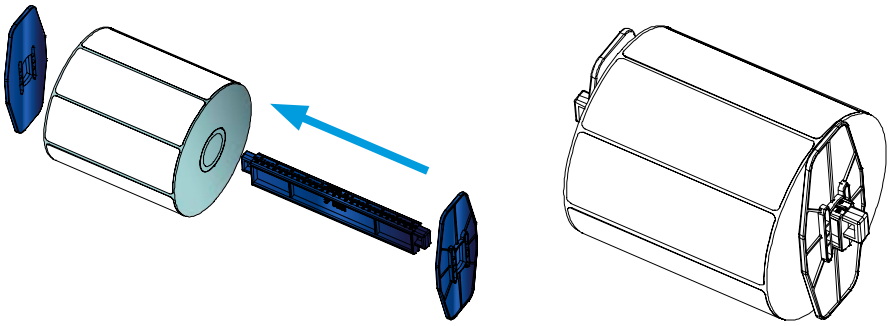
Close the printing mechanism, making sure that it clicks into place.



2 D Loading The Label Roll

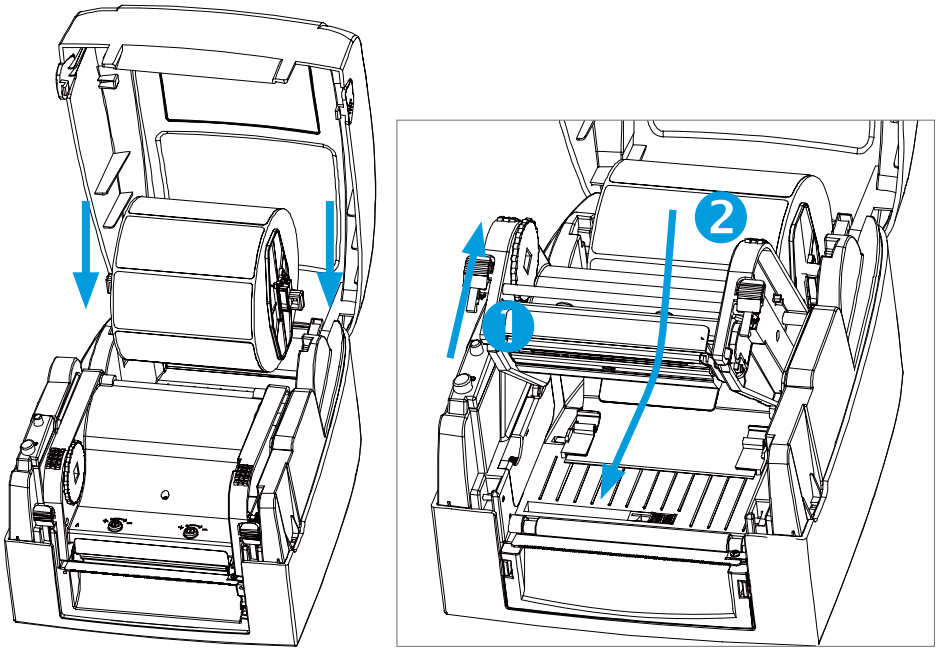
A New Label Roll Module Installation

Place the label stock on the label supply hub, attach the guide plates to the label stock holder.

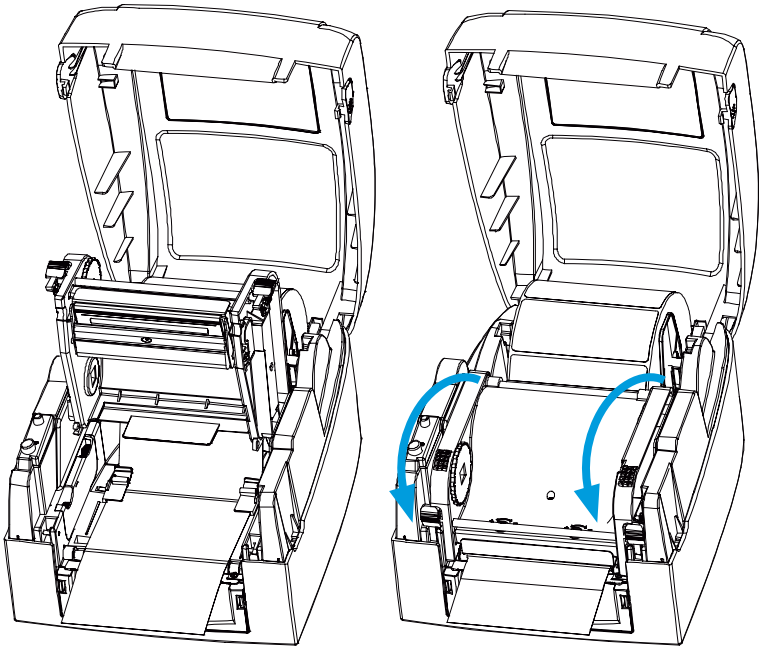


Install The Label Roll Module On The Printer

Now load the label stock into the printer. Release the printing mechanism and lift it.



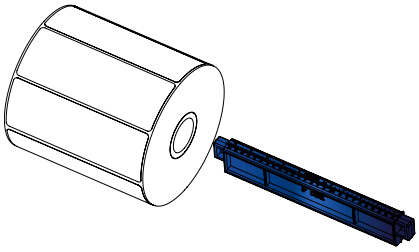
Pass the labels through the label guides up to the tear-off plate. Adjust the label guides to the label width. Close the printing mechanism.

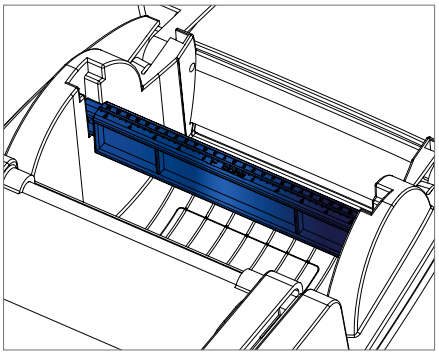


2 E Installing The Label Supply Hub

1″ Cores

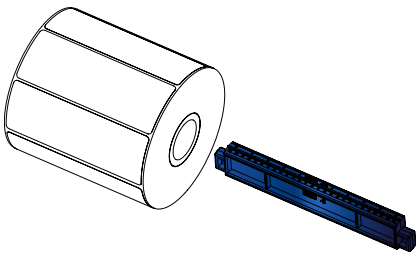
Installing the label supply hub for 1″ cores.

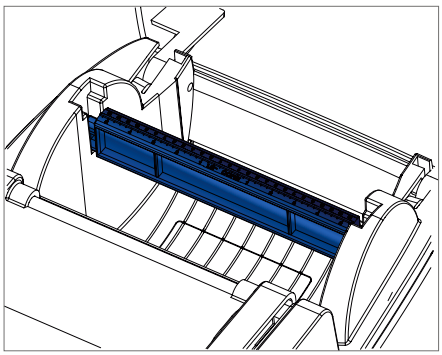




1.5″ Cores

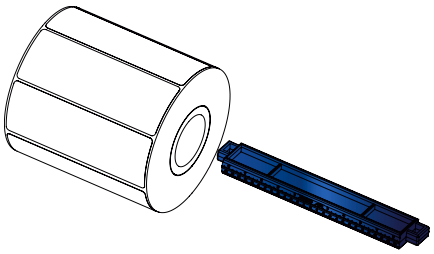
Installing the label supply hub for 1.5″ cores.

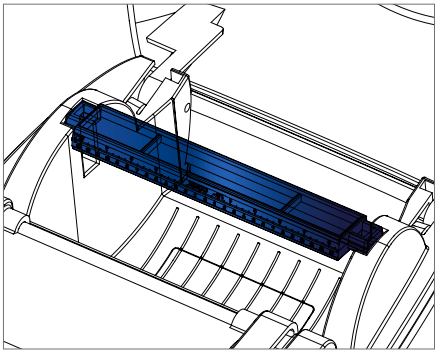




3″ Cores

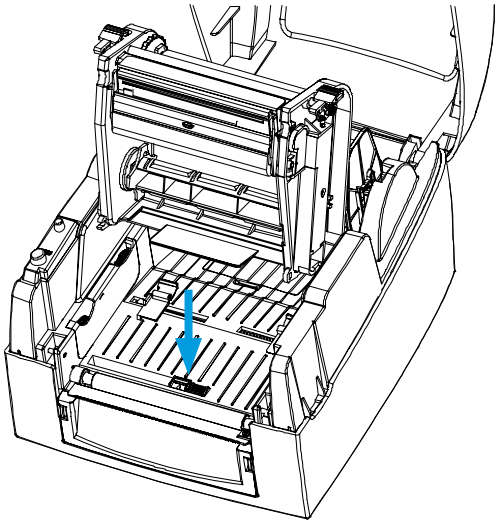
Installing the label supply hub for 3″ cores.

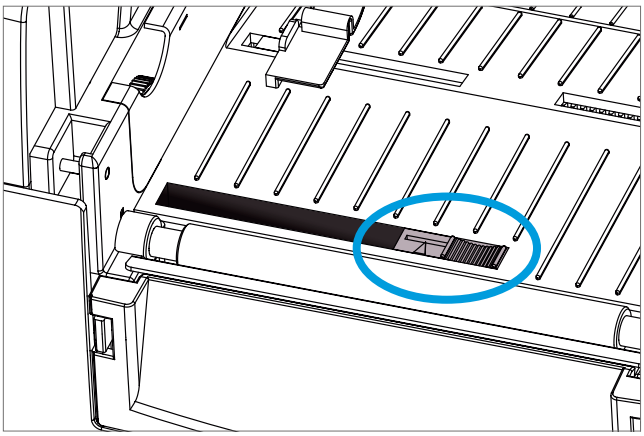




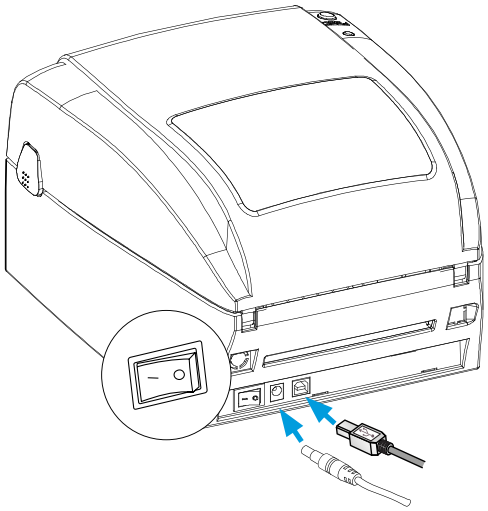
2 F Sensor Position

The sensor position can be moved, e.g. if the black mark is only at one side. During adjustment, the sensor must therefore be positioned directly below the black mark line. The black mark should be at least 3 mm thick to ensure correct functioning.





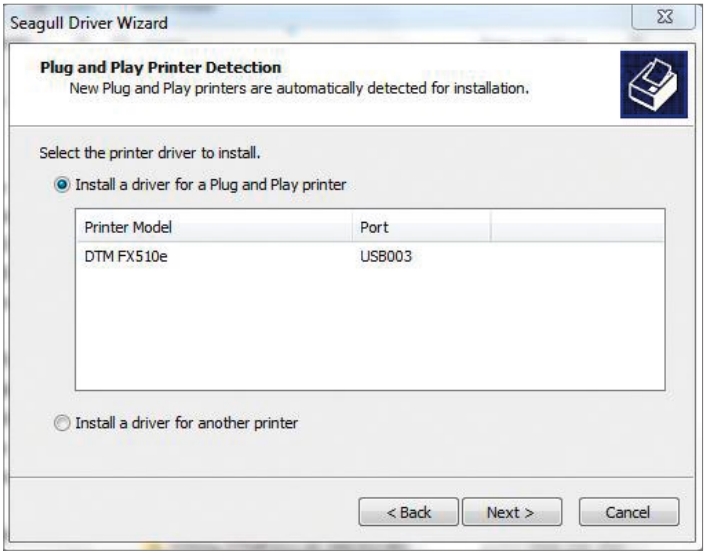
2 G Connecting The Printer To The Computer



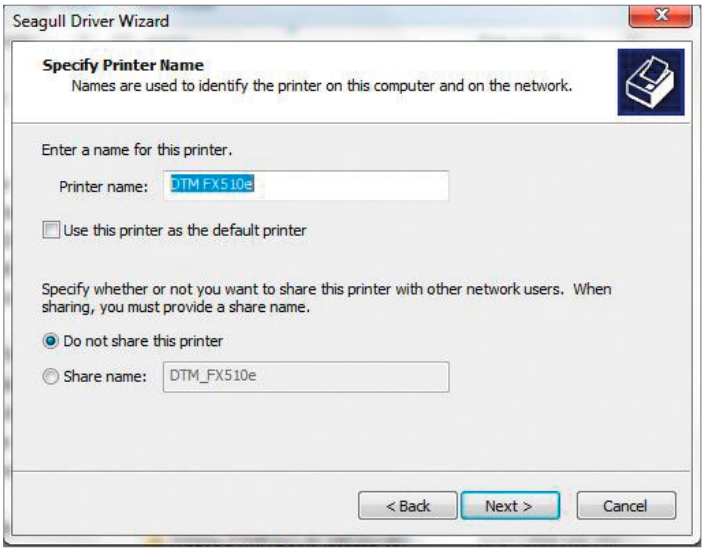
1. Make sure the printer is switched off.
2. Connect the power cord to the AC adapter and connect the adapter to the printer.
3. Connect the USB cable to the printer and host computer.
4. Switch on the printer, the LED indicator should now lights up.

2 H Installing The Driver on Windows

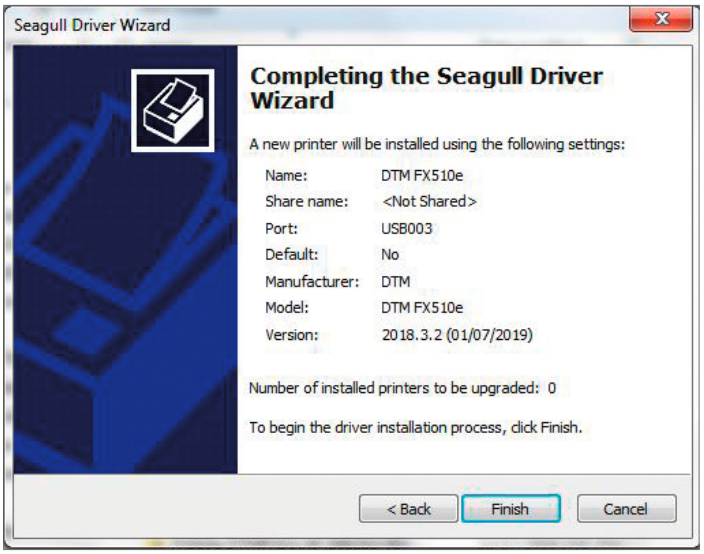
1. Download the driver at fx510e.dtm-print.eu.
2. Select the icon for the driver file and double-click to start the installation.
3. Follow the instructions on the screen. The Driver Wizard guides you through the installation procedure.
4. Select "Install printer drivers".
5. Choose "DTM FX510e"



6. Enter a printer name and assign the appropriate rights.



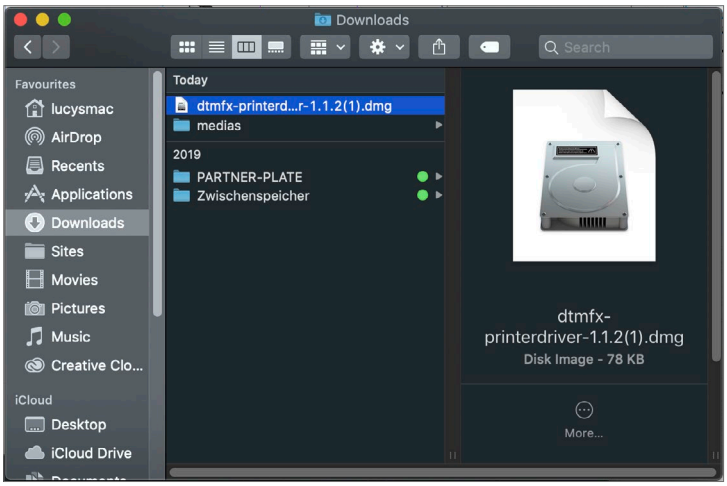
7. Once the installation is complete, a summary of the printer settings is displayed.



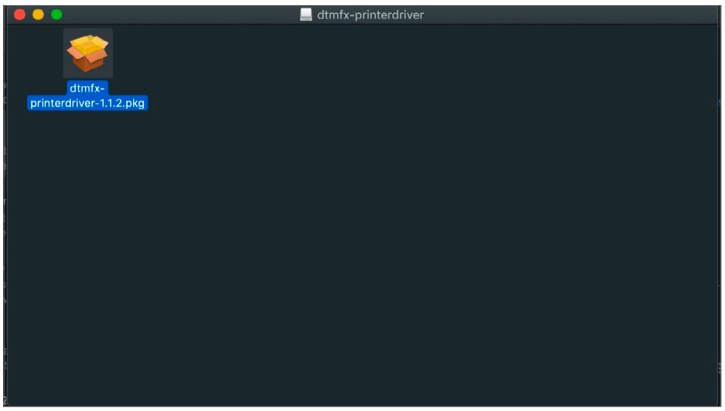
8. Check whether the printer settings are correct and click "Finish" to start copying the driver files.
9. Wait until copying is complete, then finish the installation.
10. Once the driver installation is complete, the new printer should appear in the "Devices and Printer" folder.

2 | Installing The Driver on MAC

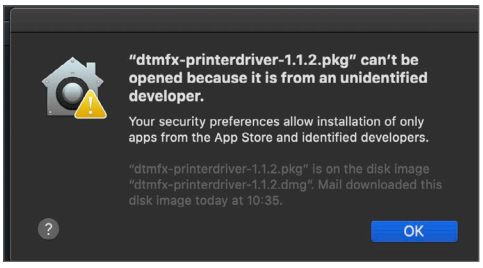
1. Download the driver at fx510e.dtm-print.eu.
2. Go to the Download Folder and double click the driver file to open it.



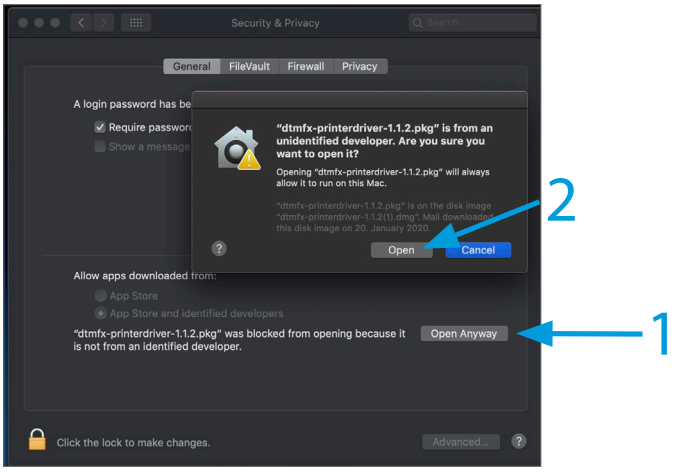
3. Double click the driver icon to start the installation.



4. A warning message will occur.

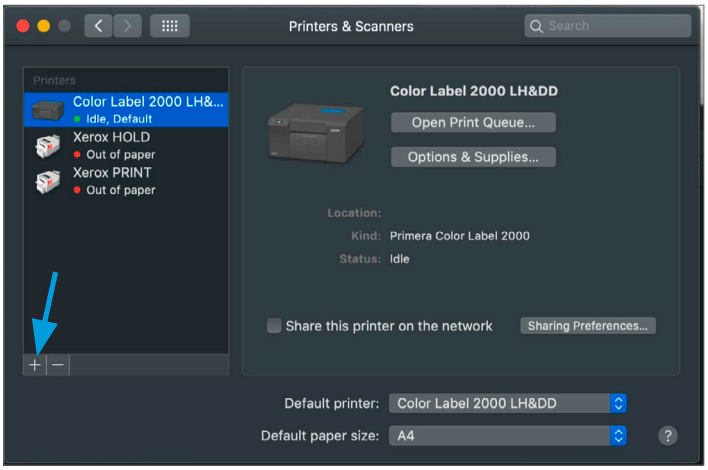


5. Open System Preferences. Go to Security & Privacy and click on Open Anyway and then on Open.

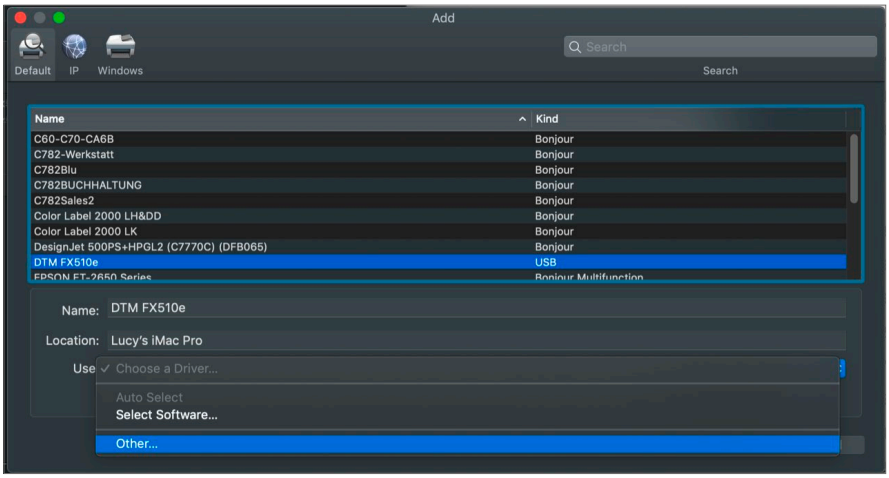


6. Follow the instructions on the screen. The Driver Wizard guides you through the installation procedure.
7. When you have successfully installed printer, go to System Preferences and click on Printers & Scanners.

8. Add the printer by clicking on the + icon.

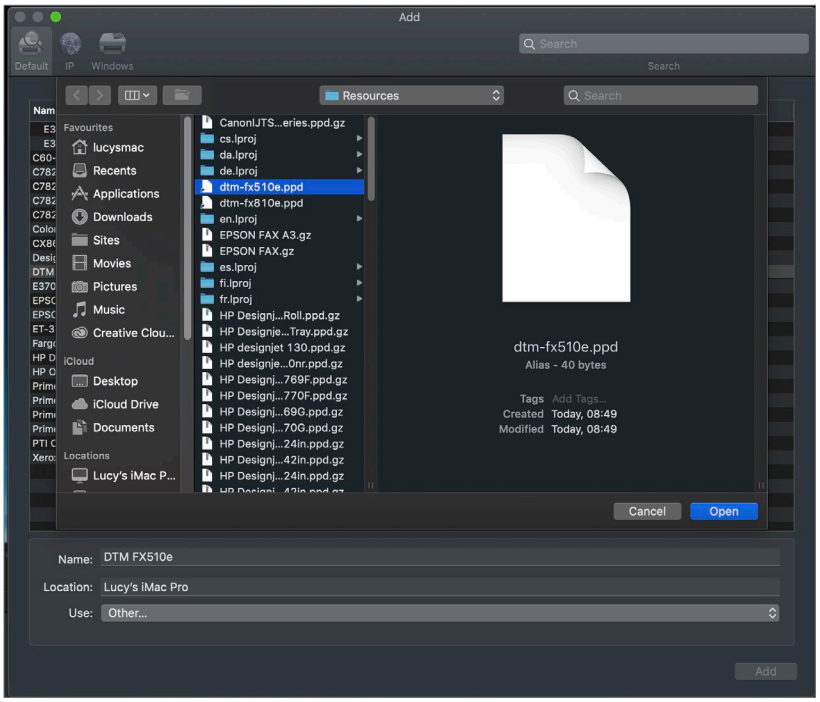


9. Choose the DTM FX510e from the list. Open the drop down menu at Use and choose Other... .



10. Select the file dtm-fx510e.ppd and click Done-

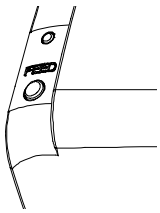
    Note: If the window does not navigate you directly to the Resources folder, you can find the ppd file here: /Library/Printers/PPDs/Contents/Resources/dtm-fx510e.ppd



Section 3: Operating Panel

3 A LED Operation Panel

Feed Button



When you press the FEED button, the printer moves the label to the defined stop position. If you are using continuous labels, pressing the FEED button will move label stock until you release the button again. If you are using individual labels, pressing the FEED button will move only one label. If the label does not stop at the correct position, please run the auto calibration (See Section 3 B. for the label size calibration function) on the label stock.

LED Indicators

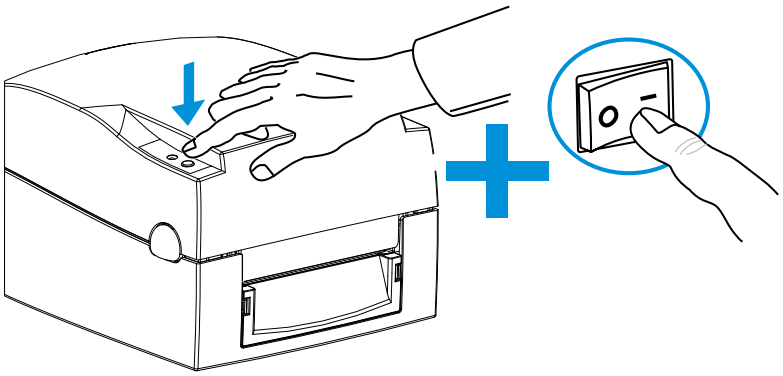
LED Indicator	Beeps	Status	Description
LED ON (Green)	none	Standby mode	The FX510e is ready for operation
LED ON (Red)	2x 2 beeps 2x 3 beeps 2x 4 beeps	Error mode	The printer has detected an error. See Section 3 C for Error alerts.
LED OFF	none	Off-line mode	The printer is not connected to the power supply.

3 B Label Size Calibration and Self Test Page

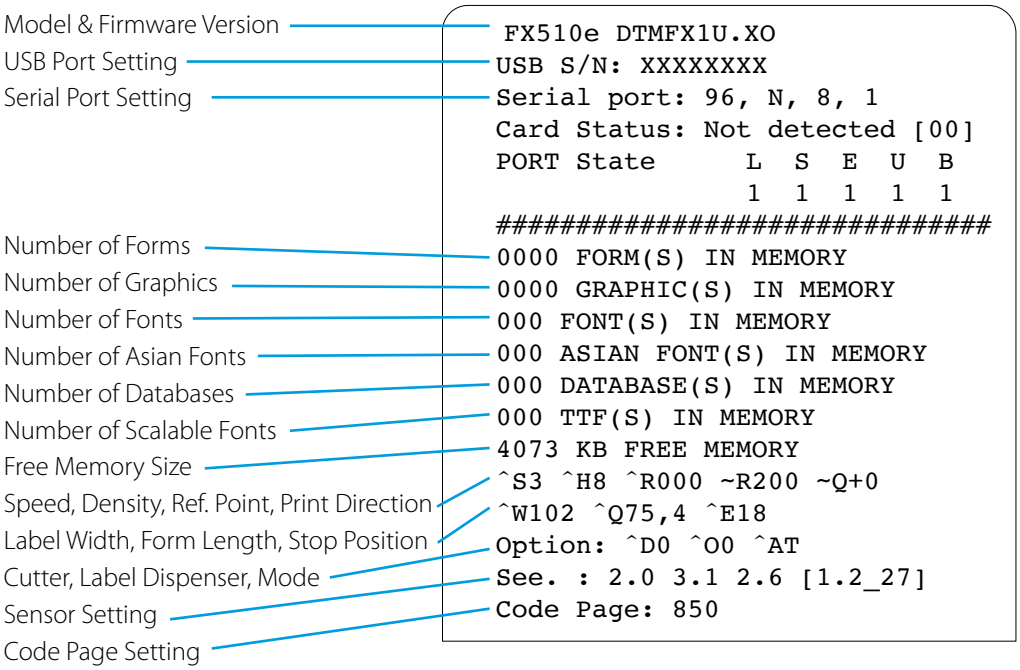
The printer can automatically detect and store label height. That means the host computer does not need to transmit the label height to the printer. And the self-test function lets you check whether the printer is functioning normally.

Here is how you run the label size calibration and self test:

1. Check that the label stock is loaded correctly.
2. Switch off the printer.
3. Switch the printer on again, keeping the FEED button pressed. When the LED starts to flash red and you hear 3 beeps, release the FEED button. The printer will now measure the label stock and store the label height.
4. Once the printer has successfully measured the label stock, it will print a self-test label.



The contents of a self-test printout are listed below.



3 C Error Alerts

In the event of a problem that prevents normal functioning of the printer, you will see the LED indicates an error message with a red light and some additional beep signals. Please refer to below table for the error alerts.

LED Indicator	Beeps	Description	Solution
LED On	2x 4 beeps	The printing mechanism is not correctly closed.	Open the print mechanism and close it again.
LED Flashing	none	High temperature at the print head.	Once the print head has cooled down, the printer switches to standby mode.
LED On	2x 3 beeps	No ribbon is installed and the printer displays an error.	Make sure that the printer is set to direct thermal printing mode.
		The ribbon is finished or the label supply hub is not moving.	Replace the ribbon roll.
LED On	2x 2 beeps	No paper is detected.	Make sure that the label sensor is positioned correctly. If the sensor still does not detect the paper, run the auto-detection function again
		Paper is finished.	Replace the label roll.
		Printer feed problem.	Possible reasons: the print medium has become trapped around the rubber roll; the sensor cannot detect a gap or black mark between the labels; there is no paper. Please reset the sensor.
LED On	2x 2 beeps	The memory is full. The printer prints the message "Memory full".	Delete unnecessary data or install additional memory.
		Unable to find file. The printer prints the message "Filename cannot be found"	Use the "~X4" command to print all files. Then check whether the files exist and whether the names are correct.
		A file of the same name already exists. The printer prints the message "Filename is repeated".	Change the name of the file and try storing it again.

Section 4: Printing from Windows

4 A Adding highlights to a label with NiceLabel

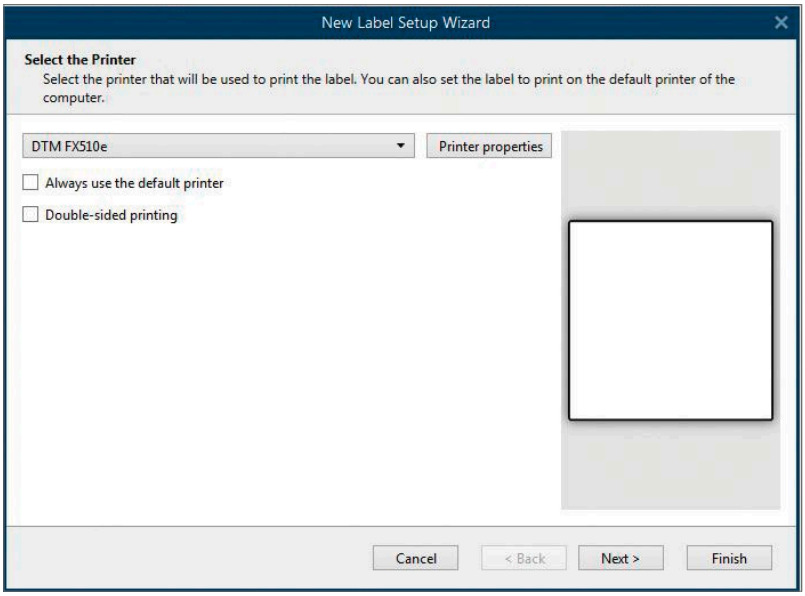
Your printer ships with a version NiceLabel Free 2019 DTM Edition. These easy-to-use software's are designed to allow you to create label designs with text, shapes or bar codes quickly and simply. The following is a tutorial to guide you through creating and printing a sample label in NiceLabel.

Download NiceLabel at dtm-print.eu/download and follow the installation process. Launch NiceLabel from your computer's Start Menu.

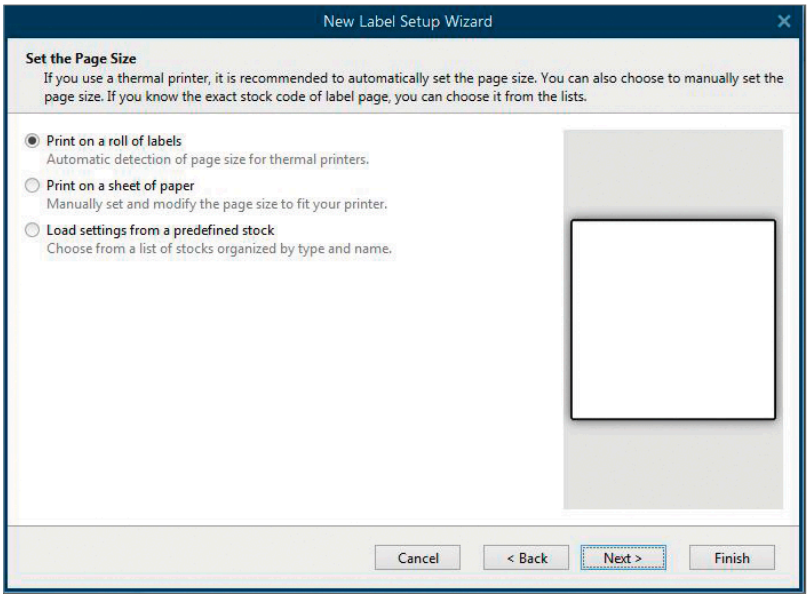
Note: *You are not required to print from the NiceLabel software. You can print from any application that prints to a Windows Printer, such as Adobe Acrobat. In some cases it can be even easier to print with a software that supports multiple layers.*

Load a colour, clear or metallic ribbon. For instructions see Section 2 C.

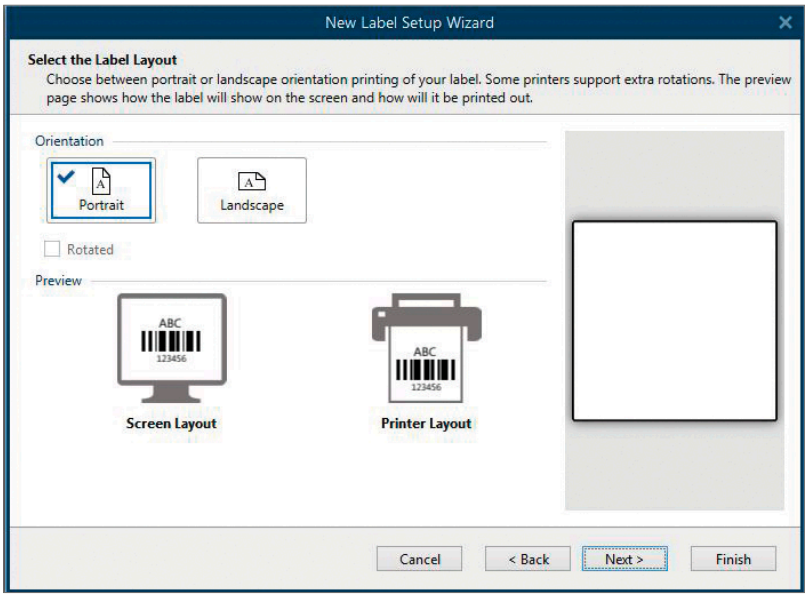
1. Select "New Label". Select the Printer "DTM FX510e". Click "Next".



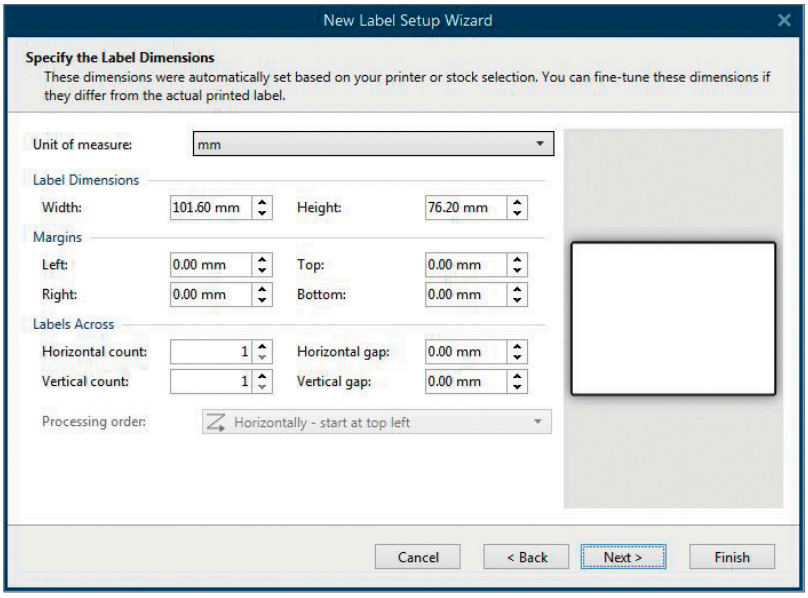
2. Select "Print on a roll of labels". Click "Next".



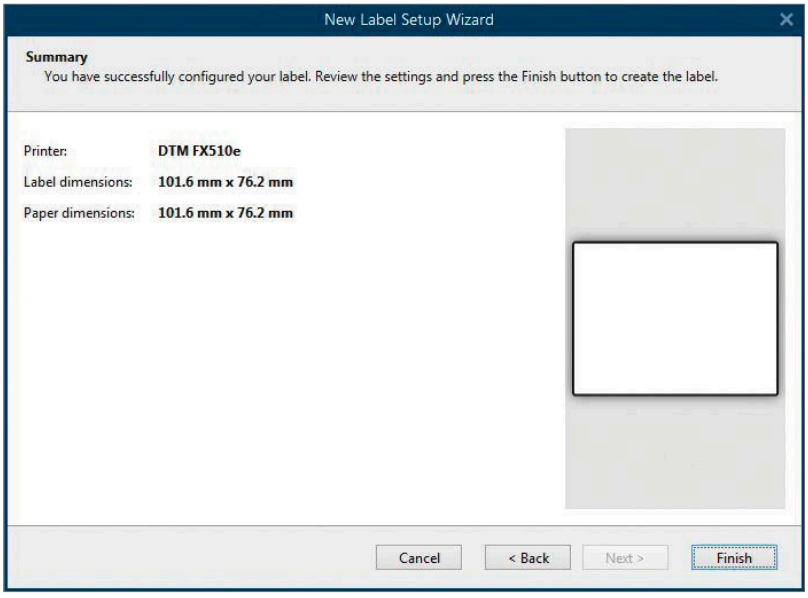
3. Choose Orientation. Click "Next".



4. Set the dimensions of your label and unit of measure. Click "Next".

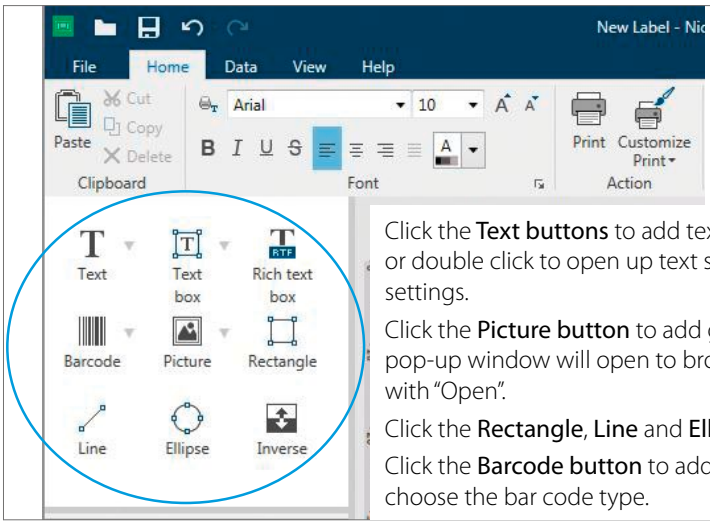


5. Review the label setup summary. If it is correct, click "Finish". Your blank label will be displayed.



After you click "Finish", you can always go back and change any of these "Label Properties" settings, by going to the Menu Bar and select "Document Properties" or double click on the blank label.

Once you have created your label size you can start to design your label using tools from the tool box/button bar. You will need to add text, rectangles, lines and/or graphics. This can be done using one of the buttons on the button bar at the top left screen.



Click the **Text buttons** to add text to your labels. Edit the text on screen or double click to open up text settings to change font, size and other settings.

Click the **Picture button** to add graphic. Click anywhere on the label. A pop-up window will open to browse to the image/graphic and select it with "Open".

Click the **Rectangle**, **Line** and **Ellipse button** to add geometrical shapes.

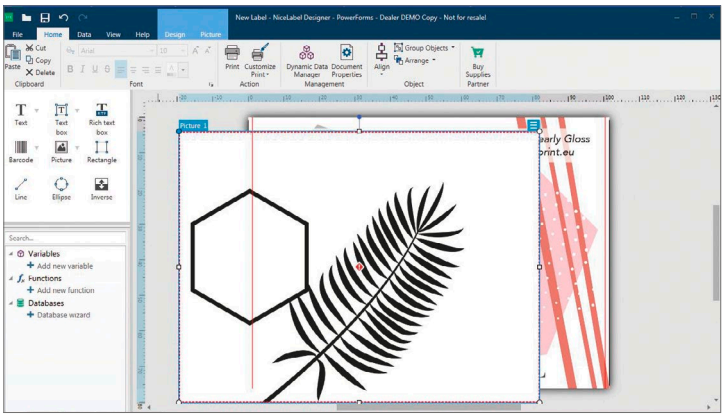
Click the **Barcode button** to add a bar code. Double click the bar code to choose the bar code type.

Tip 1: *Double-click any object to open settings for that object.*

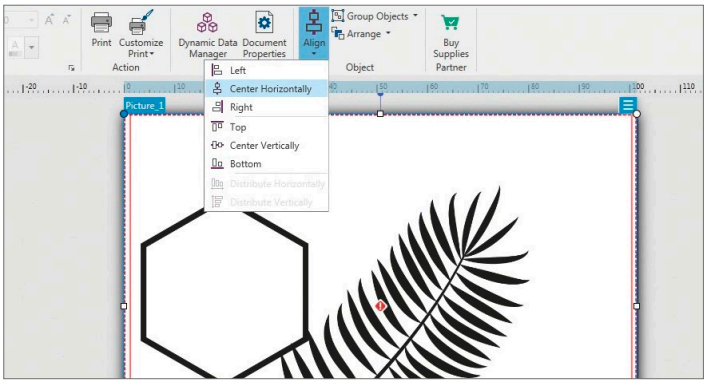
Tip 2: *Go to the Help tab to access the NiceLabel Manual and Tutorials*

If you are adding metallic or colour highlights to a pre-printed label you can open the label file that you have used to print the labels. Afterward you can add the black and white picture or any black text or shape you want to imprint.

1. Add a text, picture/graphic or shape to the desired position on the label



2. Easily align your text, shape or picture/graphic with the Align button in the top tool bar.



When the picture/graphic is covering the whole label, you can leave the label underneath the highlights box. If the original label is still visible you should delete it after positioning the text, shapes or graphics. You are now ready to print your label.

Note: *Objects will be layered in the order they are added to your document. To change the layering order right click on the object, choose "Arrange" and "Order".*

4 B Printing from NiceLabel

1. To print, click the Print button

or go to the File Menu and select "Print". The Print Dialogue window will appear.
2. Select the "DTM FX510e".
3. Set the number of copies.
4. Click "Printer Settings" to adjust darkness, speed, etc. These settings are explained in Section 4 D
5. Click "Print".

Congratulations! You have successfully created and printed your first label. Also, you can find more tips and hints by simply clicking Help in the main menu

4 C Printer Driver Settings

Once the printer driver has been successfully installed, you will need to setup the driver with the appropriate print options. Refer to the following steps to change or verify your default printer driver preferences. These settings will apply to all new designs created in NiceLabel or other programs after the preferences were changed. Existing labels saved in NiceLabel will not be affected since the preferences are saved with the label. To change these preferences you will have to change printer preferences through NiceLabel (File Menu – "Print" – "Printer Settings")

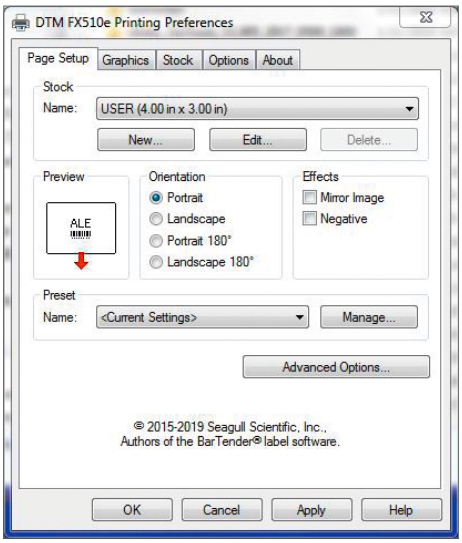
Find Driver Settings in Windows:

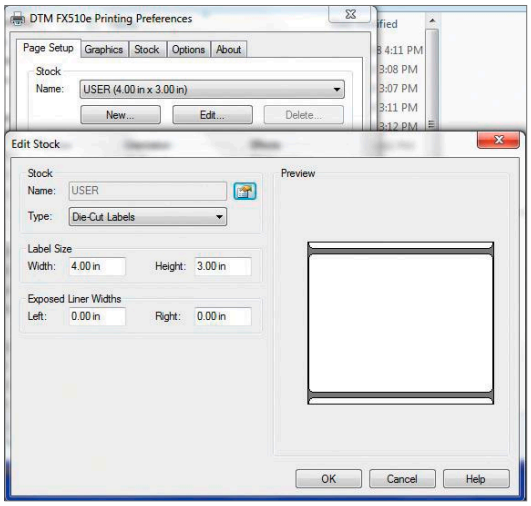
Click the Windows Start Menu button, search for "Devices & Printers" and click on "DTM FX510e". Choose "Manage" and a new window opens up. Select "Printing preferences". The preferences screen will appear.

Note: *Most applications allow you to change these same printing preferences from their "Print" and/or "Printer Setup" screens. Some applications such as NiceLabel save your settings with the label, others use settings only for the current print job just sent to the printer.*

The Printing Preferences menu includes plenty of options, but not all of them are really necessary to change or they even don't have any effects. This is because the driver was originally designed for extended professional use. So only the involved options will be explained.

Page Setup Tab





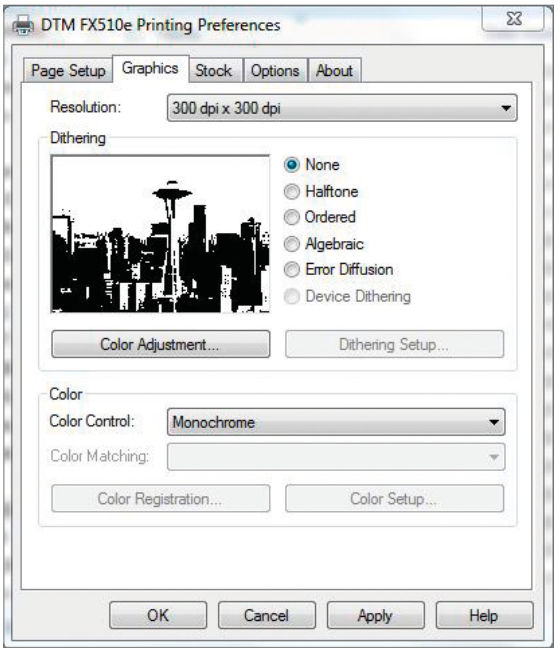
In the first area you can pre-define settings for specific label stock. The pre-defined settings are available in the Stock – Name drop-down menu. The button Edit… opens the window to edit stock. Choose the Sensor Type your label is using ("Die-Cut Labels" for labels that are die-cut with or without a black mark in the back and "Continuous (Fixed Length)" for continuous label stock without any sensor marks). Set the "Label Size" to the size of your label and set the "Exposed Liner Width" to "0".

There are two settings for orientation, Portrait and Landscape. If your text and graphics print left to right or as shown on the screen, select portrait. If you wish your printing to rotate 90° from what you see on the screen so it is printing horizontally, select landscape as orientation.

Remember: *This does not change the width and height in the Paper Size setting. It is only a tool for viewing a label upright on screen that will be printed sideways on the printer.*

Once you've done all settings in the following tabs, you want to come back to this tab for saving the present. Therefore choose "Manage…" in the bottom area of this Page Setup Tab

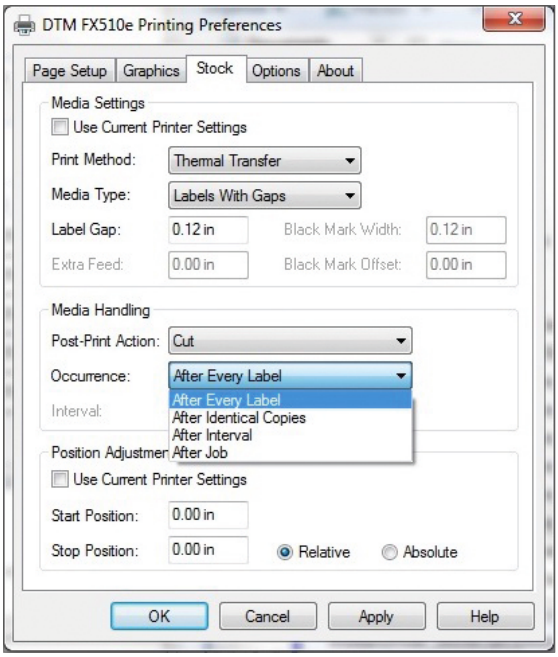
Graphics Tab



Adjust the Dithering type to your needs. For imprinting the foil as clear/smooth as possible to the label, choose the standard option "none".

Stock Tab

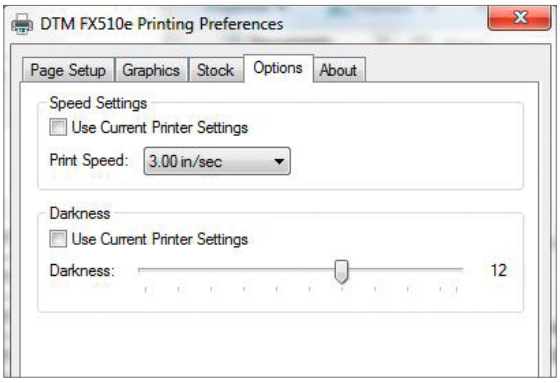
In this tab you can set your media settings.



Choose "**Direct Transfer**" as print method, when you're using direct thermal labels that don't require a transfer ribbon. These labels have a special heat-activated layer where a black print image is formed on the label as heat from the print head is applied. Choose "**Thermal Transfer**" as print method, when you're using usual pre-printed or blank label stock in combination to one of DTM's certified metallic, clear or spot colour ribbons.

With FX510ec you have the option to cut your media horizontally. Choose "**Cut**" in the Post-Print Action and select the right occurrence. It's obligatory to set the Stop Position in the Position Adjustments to "**Relative**" to get the best cut position. You may want to change the cut position by editing the values for Start and Stop Position.

Options Tab



Either use the Current Printer Settings or choose your own Darkness and Speed Settings. Adjust these values to your needs.

Recommended settings on Genuine DTM certified ribbon foils:

Ribbon	Darkness	Speed
Gold/Silver Metallic	8-9	3.00 in/sec
Blue/Red Metallic	8-9	3.00 in/sec
Clear Transparent	9-10	2.00 in/sec

This is only a recommendation. If the printout doesn't meet your requirements, try to reduce or increase the darkness and/or speed settings.

4 D Printing from Other Programs

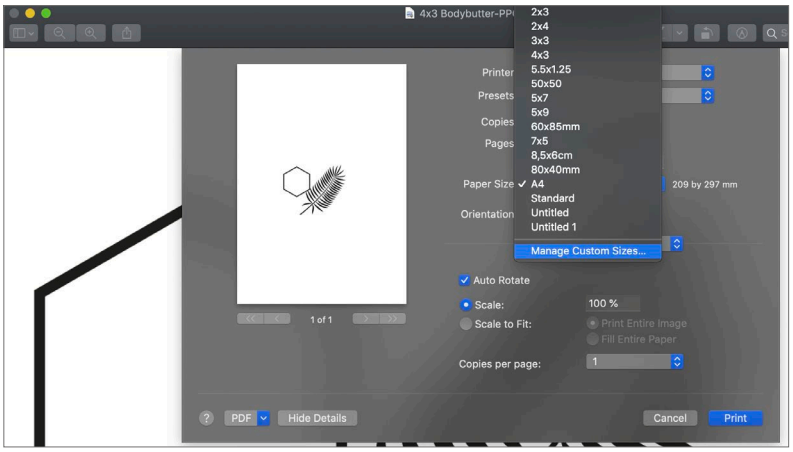
Since this printer uses a standard Windows printer driver you can print from any application you would like. There are just a few things to remember that will make it much easier.

1. **Set the Page/Label Size in the driver.** NiceLabel automatically prompts you for the size of the label that you are using. When printing from any other program you must do this manually.
2. **Check the image or document size.** The image size or document size should correspond to the Page/Label Size set in the driver.
3. **Choose the right printing program.** There are many different applications that are capable of printing to the FX510e. However there are only a few that are ideal printing applications. For example, Adobe Illustrator or Photoshop is an excellent design program but is not always the best printing program. It can be difficult to find the printing preferences or to know the exact size of the art board. It is best to save as a PDF file and print from Adobe Reader or export as a 300 dpi JPG and print from NiceLabel.

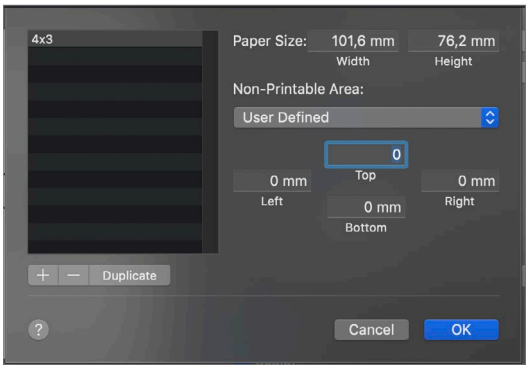
Section 5: Printing from Mac

5 A Printing from MAC using Preview

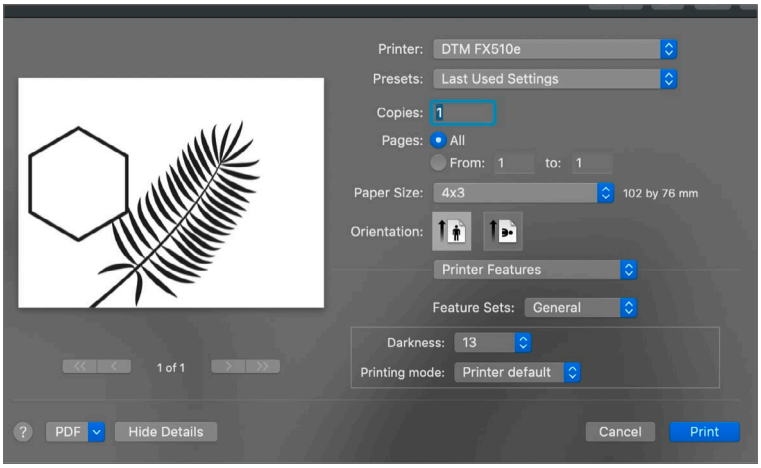
1. Open the print file.
2. Choose the FX510e. To change the label size, open the drop down menu for Paper Size and choose your label size.
3. If your label size is not in the list, click on Manage Custom Size to define a new paper size.



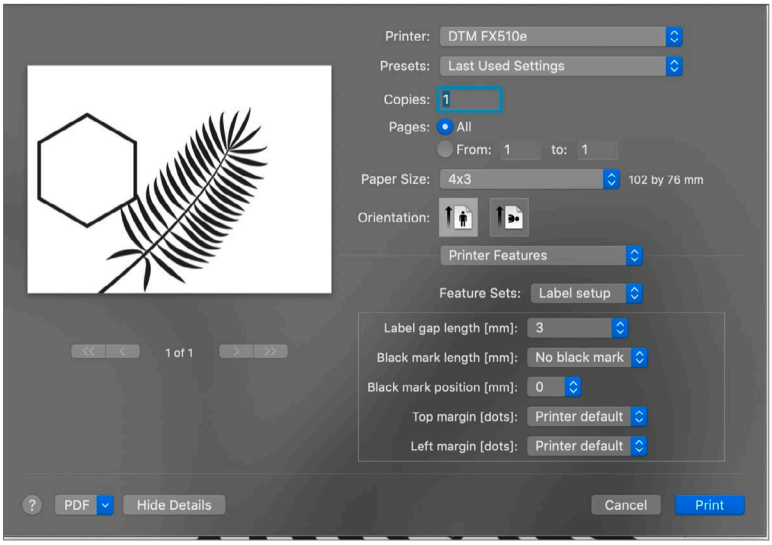
4 Add a new size by clicking the + icon. Rename your setting and set your size.
Important: Make sure that the Non-Printable Area is set to 0.



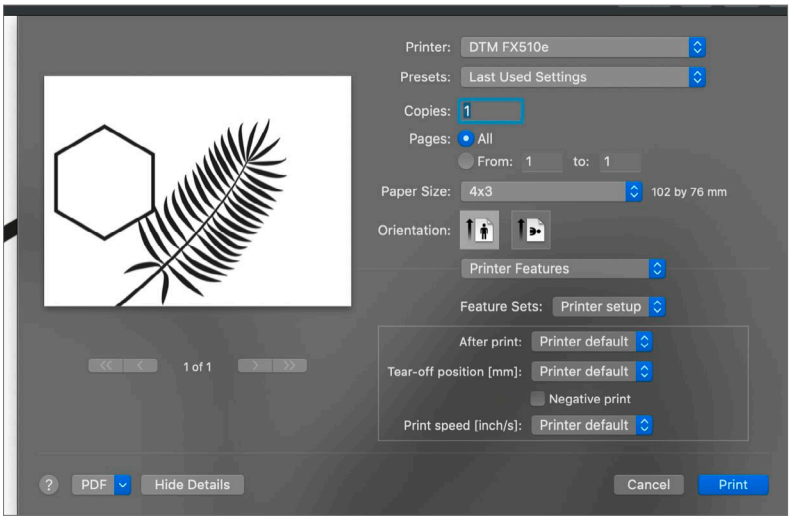
5. Open the drop down menu Preview and click on Printer Features to set the printer.
6. Change the darkness and the printing mode if necessary. Open the drop down menu Feature Sets to change the Label and the printer setup as well.



7. Change the Label setup if necessary. If you are using a label with black marks, make sure to set the Black mark length correctly and to set the Label gap length to Plain paper.



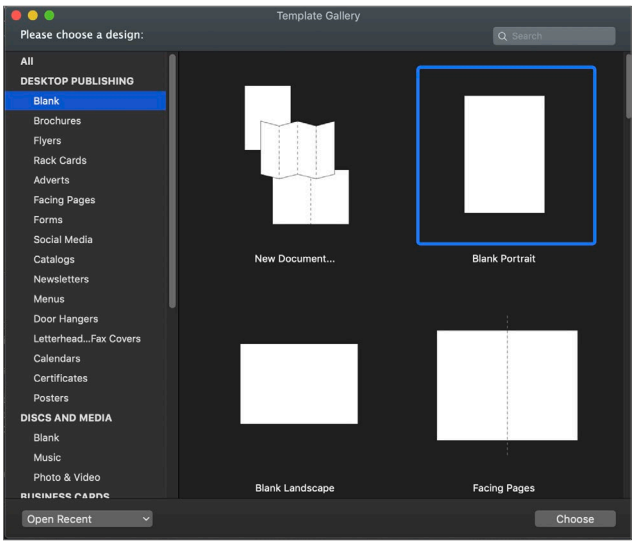
8. Change the Printer setup if necessary. If you are using a FX510ec model you can turn on the cutter by changing After print to Cut page or Cut set.



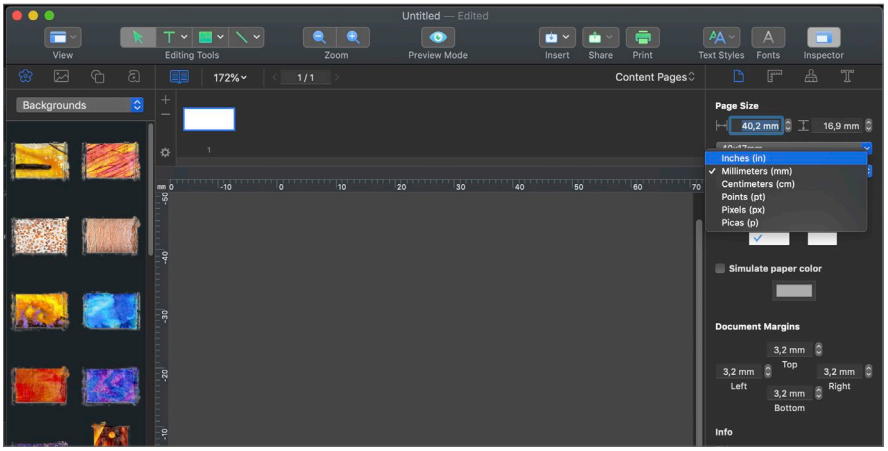
5 B Printing from MAC using Belight Swift Publisher 5

Swift Publisher is a super-intuitive, all-purpose page layout and desktop publishing app for Mac. It is very easy to use and saves a lot of time. You can download the latest version of Swift Publisher at the website: www.belightsoft.com.

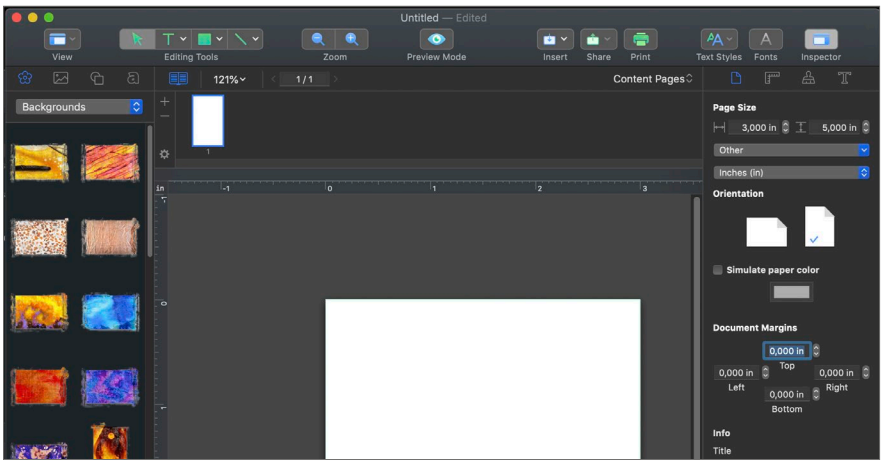
1. Double click the application icon to open the program.
2. Choose a blank page or a predefined layout and click Choose.



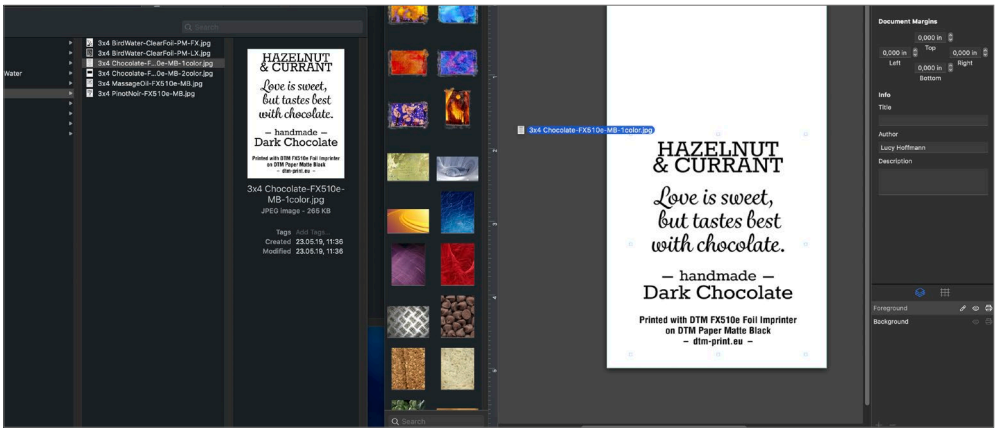
4. To change the page size, just type in the dimensions. To change the unit, open the drop down menu and choose your preferred measurement unit.



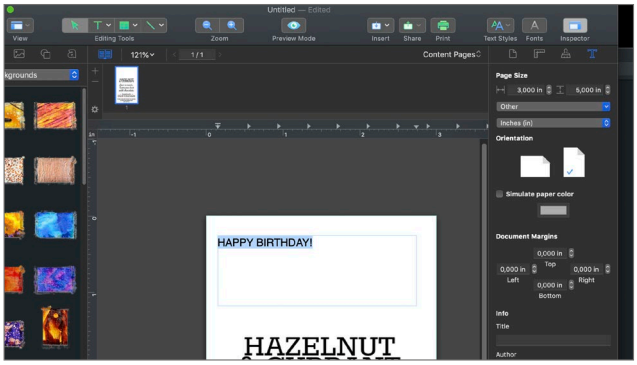
Note: Make sure that the Document Margins are set to 0.



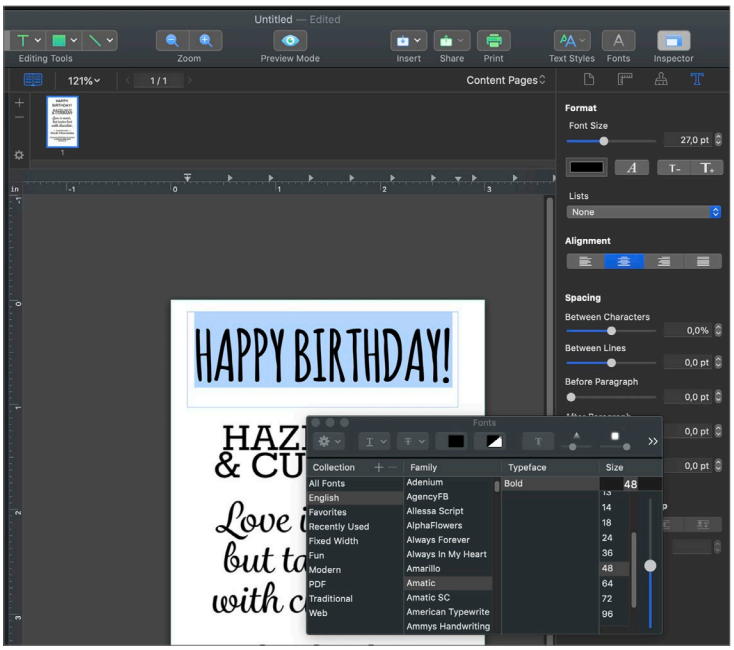
5. To import a image, just place it on your label by drag & drop the file.



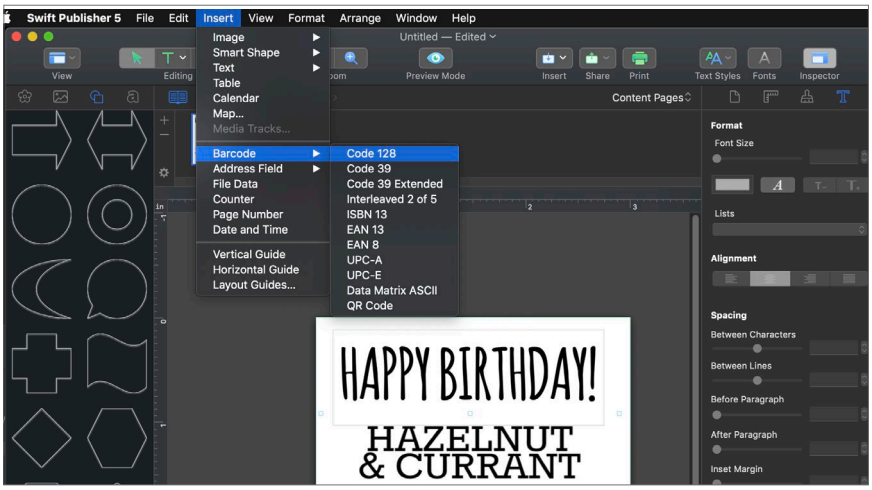
6. Click on the T icon to add a text field. Place the text field on your preferred position and start typing.



7. Go to the Text tab to change the font. Click on the font symbol to open the Fonts window.



8. To add a barcode go to Insert > Barcode and select your preferred barcode type.



9. Place the barcode on your label. Double click on the barcode to adjust the settings.

10. To print the label go to File > Print... .
11. Follow the steps on Section 5A to set your label correctly.

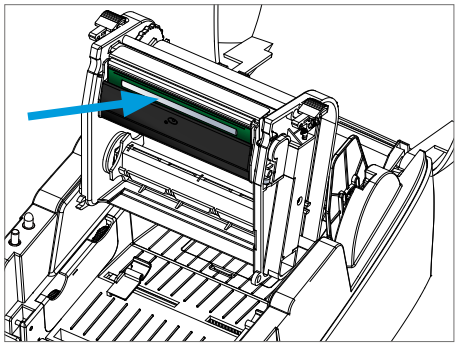
Section 6: Troubleshooting and Maintenance

6 A Cleaning The Print Head

Dirt on the print head or ribbon, or glue residue from the label stock may result in inadequate print quality. The printer cover must therefore always be closed during printing. Keeping dirt and dust away from the paper or labels ensures a good print quality and a longer lifespan of the print head.

Cleaning Steps

Here is how you clean the print head.



1. Switch off the printer.
2. Open the printer cover.
3. Release the printing mechanism and lift it.
4. Remove the ribbon.
5. To remove any label residue or other dirt from the print head (see blue arrow), please use a soft lint-free cloth dipped in isopropyl alcohol.

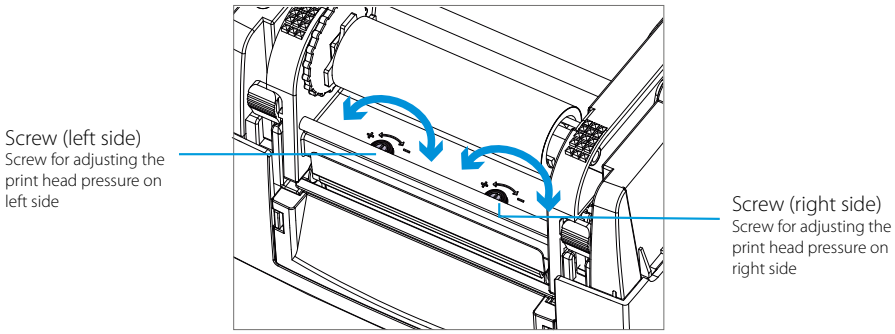
Note: *The print head should be cleaned once a week. Please make sure that there are no metal fragments or other hard particles on the soft cloth used to clean the print head.*

6 B Adjusting The Print Head Pressure

When printing on special media (with varying material thickness), the print quality may suffer. You will then need to adjust the print head pressure.

Adjustment Steps

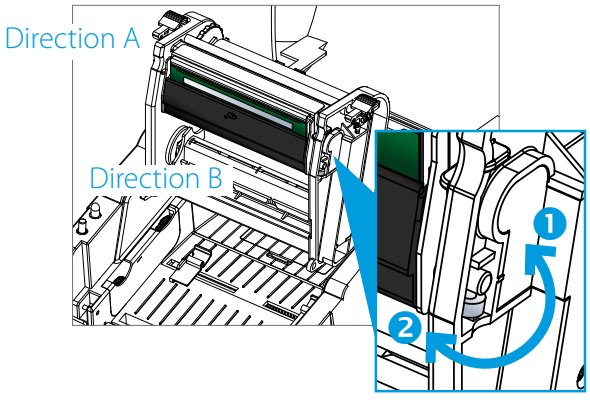
1. Open the printer cover.
2. Remove the ribbon.
3. Use a screw driver and slowly turn the adjustment screws for the print head to increase or reduce the print head pressure.



6 C Adjusting The Print Line

When the print line is incorrectly set, the print quality on one side of the medium may suffer. In such a case, the print line must be adjusted so it is positioned parallel to the paper feed roller

Adjustment Methods



1. To move the print head in direction **A** as indicated by the blue arrow, turn the adjustment wheel **anticlockwise** (see arrow 1).
2. To move the print head in direction **B** as indicated by the blue arrow, turn the adjustment wheel **clockwise** (see arrow 2).

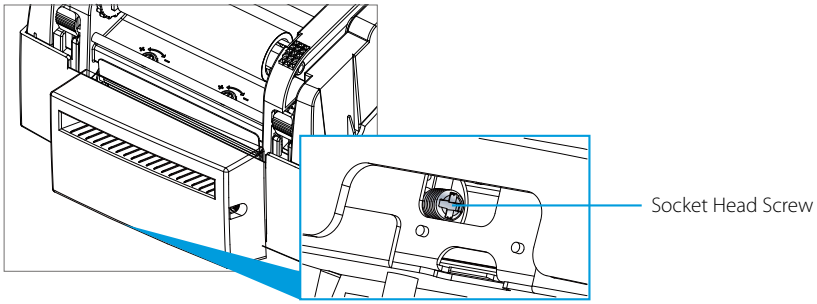
6 D Adjusting The Cutter (FX510ec Model Only)

While using the cutter, paper jams may occur. Please follow the below steps to clean the paper jam. A socket head screw for adjusting the cutter is located on the bottom of cutter module, as shown in below illustration.

Cleaning Steps:

1. Switch off the printer.
2. Use a Phillips (cross-head) screwdriver to turn the socket head screw and release the knife.
3. When you have cleared the paper jam, switch on the printer again. The cutter will automatically reset.

Note: *Labels should be at least 30 mm high to ensure correct functioning of the cutter.*

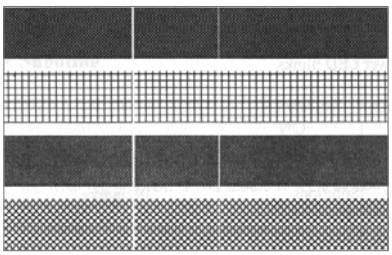


6 E Troubleshooting

Problem	Solution
The printer is switched on but the LED does not light up	Check the power supply.
The LED lights up red and printing is interrupted	Check the software settings (driver settings) or command codes.
	Look for the error alert in the table in Section 3C Error alerts.
	Check whether the cutter is functioning normally and whether it is cutting at all. (FX510ec only)
The label stock passes through the printer but no image is printed.	Please make sure that the label stock is loaded the right way up and that it is suitable material.
	Please make sure that the ribbon is loaded correctly.
The label stock jams during printing.	Clear the paper jam. Remove any label material left on the thermal print head and clean the print head using a soft lint-free cloth dipped in alcohol
There is no printed image on part of the label or the image is blurred.	Check the thermal print head for dust or other dirt (label material or ribbon residue).
	Check for errors in the application software.
	Check the ribbon for wrinkles.
	Check the power supply.
	Run a self test (Section 3B) and check the test print pattern to see whether the print head prints over the entire width of the medium.
	Check the quality of the print medium
The printed image is positioned incorrectly or a label is missed out during printing.	Run the Label size calibration function. (Section 3 B)
	Check the label height setting.
	Check whether there is paper or dust covering the sensor.
	Check the paper guide settings.
The cutter does not cut off the labels completely (FX510ec only).	Check whether the label stock is positioned straight
The cutter does not cut off the labels completely (FX510ec only).	Check whether the label is more than 0.2 mm thick
When using the cutter, the labels are not fed through or cut off incorrectly. (FX510ec only).	Check whether the paper guides are functioning correctly.

6 F Miscellaneous

Vertical streaks in the printout usually indicate a dirty or faulty print head. (Refer to the following examples.)



Clean the print head as described in Section 5 A. If the problem persists, replace the print head.

Poor printout quality:

- The ribbon may not be qualified.
- The media may not be qualified.
- Adjust the Darkness (heat temperature).
- Slow down the print speed.
- Refer to Section 5A and clean the print head.

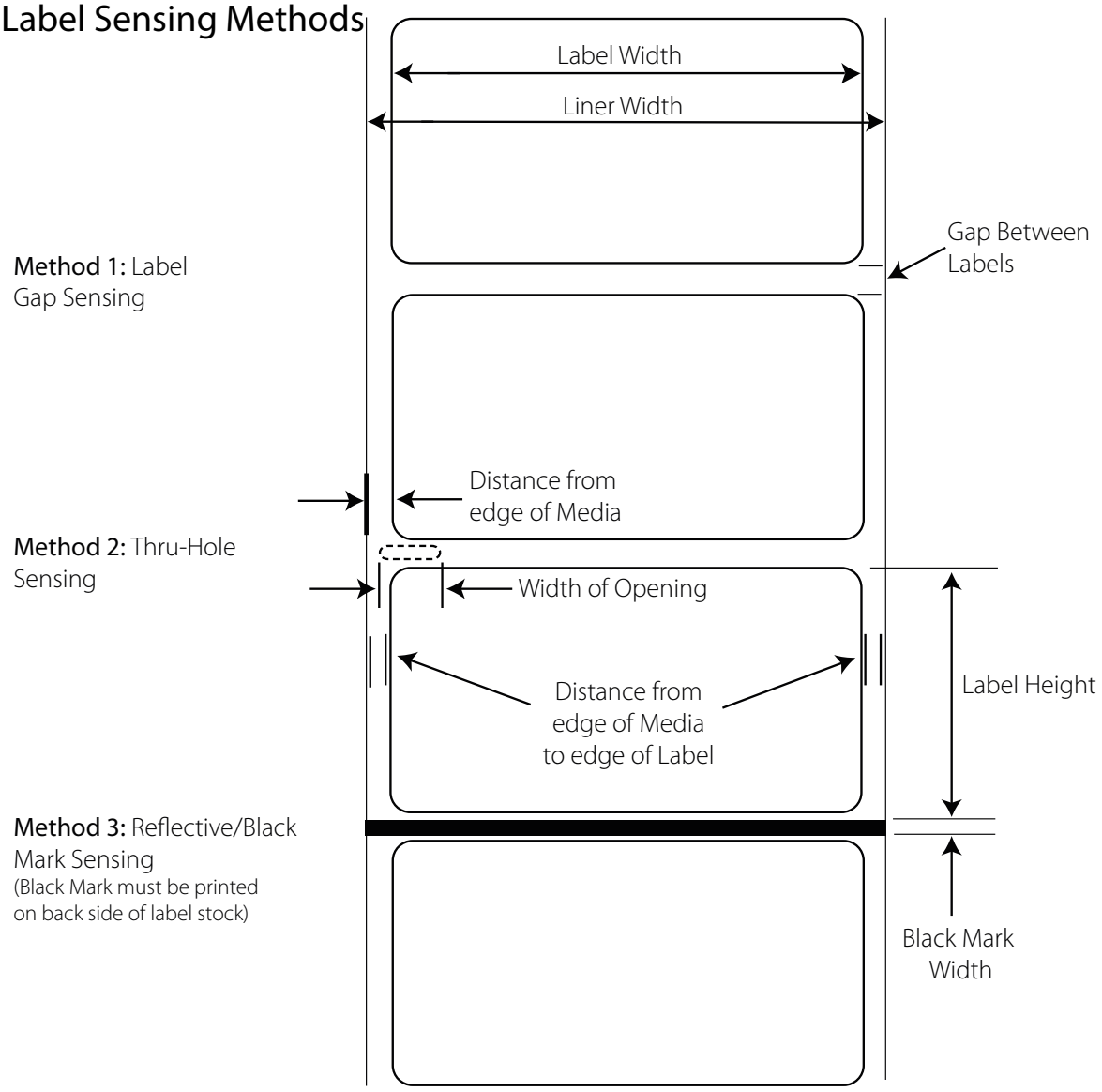
6 G Technical Support

If you have difficulties in operating your printer, the procedures in this manual and the software User's Guide should, in most cases, solve the problem. If you still have difficulty, feel free to contact the DTM Print Support Team using one of the methods listed below. This service is free for all DTM Print customers:

NiceLabel Free DTM Edition:	*Open the software. Click on the "Help" tab in the upper right.*
Email Support:	*support@dtm-print.eu*
Chat Support:	*dtm-print.eu – look for the chat prompt on the lower right*

Section 7: Label and Ribbon Specifications

7 A Label Sensing Methods



Note: See table below for Max and Min values in inches and mm.

Important: *Test all custom made label stock with the intended printer before ordering large quantities! DTM Print will only assume responsibility for custom label stock ordered from DTM Print.*

7 B Label Specifications

	Max	Min
Label/Print Width	105.7 mm (4.16")	N/A
Liner Width	118 mm (4.64")	25.4 mm (1")
Label/Print Height/Length	762 mm (30")	4 mm (0.16")
Gap between labels	19 mm (0.75")	2.5 mm (0.10")
Distance from edge of media to edge of through-hole	48.3 mm (1.90")	5.1 mm (0.20")
Reflective/Black Mark Width*	Equal to distance between labels	25.4mm (1")
Max. Outer Diameter (OD) internal feed	127 mm (5.0")	N/A
Max. Outer Diameter (OD) Passive Label Stand	250 mm (10.0")	N/A
Inner Core Diameter (ID)	76 mm (3")	25.4 mm (1.0")
Stock Thickness**	0.25 mm (10 mil)	0.06 mm (2.4 mil)
Distance from edge of media to edge of label	Printer driver assumes 2 mm gap. However, this is adjustable via the Printing Preferences "Stock" – "Media Settings" – "Label Gap"	

* The Reflective/Black Mark should be opaque to infrared light. The mark should be between the labels. The end of the mark should correspond with the beginning of the next label.

**This is the recommended maximum. There are two factors that determine whether the printer will accept any particular stock thickness.

1. The ability for the printer to pull the paper through the print area.
2. The ability for the sensor to read through the backing if the sensor is set to die-cut.

If you are printing in continuous or reflective label sensing mode number 2 does not apply. The fact that the printer must read through the backing in die-cut mode will limit the thickness much more than the printer's ability to pull the paper through the print area. However, if you adjust opacity level of the liner enough to allow the label to be seen by the stock sensor, the thickness will only be limited by the printer's ability to pull it through the printer area. For these reasons the weight or thickness of the liner is a variable that can not easily be defined. DTM Print recommends and uses 70# liner with most label stock.

7 C Ribbon Specifications

	Max	Min
Ribbon Length	300 m (981')	N/A
Ribbon Width	110 mm (4.33")	30 mm (1.18")
Max. Outer Diameter (OD)	68 mm (2.67")	N/A
Inner Core Diameter (ID)	25.4 mm (1")	25.4 mm (1")
Supported Ribbon Types	Wax, wax/resin, resin	

Section 8: Technical Specifications

Print Method:	Thermal transfer & direct thermal
Print Resolution:	300 dpi (12 dots/mm)
Max. Print Speed:	101.6 mm (4") per second
Max. Print Width:	105.7 mm (4.16")
Print Length:	4 - 792 mm (0.16" - 30")
Media Width:	25.4 - 118 mm (1"- 4.64")
Media Thickness:	0.06 - 0.25 mm (0.003" - 0.01")
Media Types:	Roll-fed continuous, die-cut or black mark labels or tags, roll-fed tags with punched hole; label length set by auto sensing or printer driver settings
Media Sensing:	Movable reflective sensor and two fixed and central aligned transmissive sensors
Supply Media Roll:	Internal: 127 mm (5") OD, anything from 25.4 - 76.2 mm (1" - 3") ID External: 254 mm (10") OD, anything from 25.4 - 76.2 mm (1" - 3") ID
Max. Ribbon Width:	30 - 110 mm (1.18" - 4.33")
Max. Ribbon Length:	300 m (981')
Supply Ribbon Roll:	25.4 mm (1") ID core with max. 68 mm (2.67") OD
Ribbon Types:	Wax, wax/resin, resin Recommended Ribbons: DTM Print certified thermal transfer ribbons in metallic colours (gold, silver, blue, red), spot colours and clear foil
Included:	Passive Label Stand for 25/76 mm (1"/3") cores with max. 254 mm (10") OD and media max. 114 mm (4.5") wide
Data Interface:	USB 2.0
Electrical:	AC input: 100-240 VAC, 50/60 Hz DC output: 24 VDC, 2.4A
Software (included):	NiceLabel Free 2019 DTM Edition for Windows Belight Swift Publisher 5 for Mac

Operating Systems:	Windows 7/10, Mac OS X 10.9 or higher
Printer Language:	EZPL, GEPL, GZPL
Indicator Lights:	One bi-colour status-LED
Controls:	Feed Button
Certifications:	CE, FCC Class A, RoHS
Operating Environment:	5°C - 40°C (41°F - 104°F) at 30-85% non-condensing humidity
Storage Environment:	-20°C - 50°C (-4°F - 122°F) at 10-90% non-condensing humidity
Weight:	2.5 kg (5.51 lbs)
Dimensions:	226 mmW x 171 mmH x 285 mmD (8.9"W x 7.32"H x 11.2"D)
Foil Supplies:	Thermal transfer ribbons in metallic colours (gold, silver, blue, red), spot colours and clear foil
Note:	Colour label printers are not included in the price of the FX510e Foil Imprinting System.
Options:	FX510e FX510ec (with cutter module) RW-7 Passive Label Rewinder RW-4 Passive Label Rewinder
Manufacturer:	DTM Print GmbH

Specifications are subject to change without notice. All company and/or product names are trademarks and/or registered trademarks of their respective owners.
Minimum print height specification compliance can be dependent on non-standard material variables such as label type, thickness, spacing, liner construction, etc. DTM Print is pleased to test non-standard materials for minimum height printing capability.

DTM Print GmbH
Mainzer Strasse 131
65187 Wiesbaden
Germany
support@dtm-print.eu
dtm-print.eu