

AFINIA L502



ОБЩИ СПЕЦИФИКИ:

- **Производителност:** 2,500 – 20,000+ етикета /месец;
- **Технология на печат:** HP Thermal Inkjet
- **Скорост на печат:** Средна - 13.2 см./сек /5.6 см. широко изображение в нормален режим/
- **Касети с мастила:** багрилни или пигментни > 1C-1M-1Y (26 ml) + Black (78.4 ml)
- **Резолюция на печат:** до 4800 dpi
- **Размери на печат:** 2.54 см. – 21.59 см. /ш/ 1.9 см. – 12.19 см. /д/
- **Разход на печат:** Среден
- **Диаметър на ролка:** до 20.3 см

ПРЕДИМСТВА:

- Възможност за работа с 2 вида мастила – пигментни и багрилни, съвместими със съответния вид принтираща глава.

- Пигментите багрила са със Сертификат BS5609¹, т.е. изпълнили са най-строгите тестове за издръжливост в индустрията - висока устойчивост на химикали, абразия, температурни амплитуди и дори UV светлина. Така етикетите запазват своята цялост и четливост независимо от условията, на които са подложени. Затова са изключително подходящи за напитки, продукти за баня, силни химически препарати.
- Багрилните мастила от своя страна дават живост, цвят и яркост на етикета, като по този начин го прави въздействащ и хващащ окото, идеално предимство за търговския вид на един продукт.

Взаимозаменяемостта на мастилата на L502 предлага ниво на гъвкавост, невиджано досега в света за печат на етикети. Една принтираща глава след като бъде заредена с определен вид мастила, впоследствие може да работи само с тях. Всяка нова печатаща глава се доставя с пълен набор от посочените касети с мастила.

- Стоманена индустриална конструкция с подобрени сензори за по-голяма съвместимост със специални медии с отразяващи или метални ефекти. Подобренията се разпростират и върху софтуера за работа с принтера, който за по-голям контрол позволява функциите „Пауза“ и „Изрежи“

- L502 се предлага и във версия за работа с Fanfold медия, която е със същото качество на изработка и набор от функции.

- Отделните касети за мастила допринасят за по-ниската цена на етикет, тъй като само празните цветове трябва да бъдат заменени.

РАБОТА С ПРИНТЕРА:

1. Подравняване на принтиращата глава: прави се с обикновена матова хартия А4 или непрекъснатата матова медия за етикети с ширина поне 4“ (т. е. над 10 см). След подравняването на дисплея трябва да изпише „Alignment Successful“. Ако се появява „Alignment Failed“ или „Alignment Finished“, трябва да повторите процеса.

Чистенето и подравняването е хубаво да се прави още при инсталирането на нови касети. Може да се направи както от контролния панел на принтера, така и чрез софтуера.

1Съгласно Глобалната система за хармонизация на ООН (GHS) и Международния кодекс за морски опасни товари (IMDG), производителите на химикали, превозващи опасни товари в международни води, трябва да отговарят на спецификациите BS 5609 за етикетирание, което означава, че етикетите трябва да могат да издържат на тримесечен тест за потапяне в солена вода. Сертифицирането BS5609 установява дали етикетите остават лепилни и четливи върху контейнери и бъчви след продължително излагане на океанската среда, включително морска вода и абразия на пясък. Съответствието с BS5609 означава, че етикетът е изпълнил най-строгите тестове за издръжливост в индустрията - висока устойчивост на химикали, абразия, лошо време и дори UV светлина.

Повечето GHS принтери за етикети използват само основните червени и черни цветове, достатъчни за изпълнение на целите им. С принтера за етикети Afinia можете лесно да включите персонализирани логота, графики, GHS символи, текст, баркод и сериализации - за да се откритите от конкуренцията.

Tools

Highlight **Tools** and press **OK**.

Clean Printhead *(requires minimum 4" wide continuous stock)*

Select this function to clean the printheads and print the Print Quality Report when complete. The report should show no gaps in the printed output.

Align Printheads

Alignment can be done using plain paper or continuous stock

- **Plain Paper** *(requires 1 sheet 8.5" x 11" plain paper)*
Turn the stock mandrel so the flat surface is facing the rear of the printer, then load the sheet of paper until the printer starts to feed
- **Continuous stock** *(requires minimum 4" wide matte continuous stock)*
Matte paper stock must be used when aligning the printheads. Glossy media will cause the alignment to fail. Load stock normally.

A series of patterns will be printed and scanned, with the alignment done automatically.

If the display reads **Alignment Successful**, remove the paper or stock.

If the display reads **Alignment Finished** or **Alignment Failed**, repeat the alignment. If using plain paper, a new sheet will be needed.

Print Reports

Highlight **Print Reports** and press **OK**.

Print Quality Report *(requires minimum 4" continuous stock)*

Select this function to print a grid showing the pen health of each color.

If any lines are missing in any of the colors, Clean Printheads should be run.

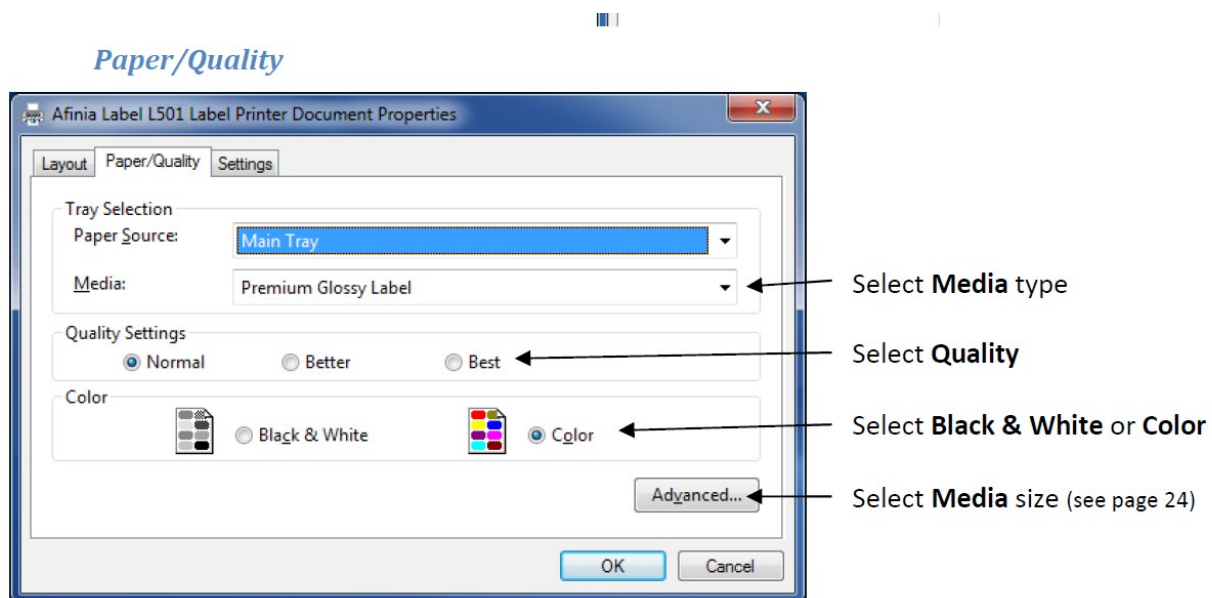
Network Configuration Page *(requires minimum 4" continuous stock)*

Select this function to print the Ethernet settings for the printer.

Нивото на мастилата също може да се следи от контролния панел и от ToolBox-а. Може да се добави аларма за нивата на мастилата (КП). По подразбиране е автоматично, но може и да се зададат лични стойности. От Cartridge Details (КП) можете да видите наличностите на всяка отделна касета.

2. Настройки при принтиране:

- За многостранични документи поръчката за печат може да бъде избрана с помощта на Page Order.



The image shows a screenshot of the 'Afinia Label L501 Label Printer Printing Preferences' dialog box. The 'Settings' tab is active. The dialog is annotated with several text boxes and arrows pointing to specific settings:

- Set Top and Left print offsets (see below)**: Points to the 'Offsets' section where 'Top Offset' is set to -0.044 and 'Left Offset' is set to 0.060.
- Select Units of measurement**: Points to the 'Units' section with radio buttons for 'Inches' (selected) and 'MM'.
- Select Media Type**: Points to the 'Media Type' section with radio buttons for 'Die Cut' (selected), 'Black Mark', and 'Continuous'.
- Set Continuous Gap Size Adjustment**: Points to the 'Continuous Gap Size Adjustment' field, which is set to 0.125. Below it is the text 'Adds space between continuous labels'.
- Set Cutter Adjustment**: Points to the 'Cutter Adjustment' field, which is set to 0.060. Below it is the text 'Shifts cutting stop position up or down. Increase to move cut farther from last label printed, Decrease to move cut closer to last label printed'.
- Select Media**: Points to the 'Media' section with radio buttons for 'Roll to Cut', 'Roll to Roll', and 'No Cut' (selected). Below 'Roll to Cut' is a 'Labels per Cut' field set to 2. An arrow points from the text 'For Roll to Cut, select the number of Labels per Cut' to this field.

At the bottom of the dialog are 'OK', 'Cancel', and 'Apply' buttons.



Adjusting Alignment for Printing

NOTE: Offsets are made looking at the printed labels right-side up, not as they are printed.

NOTE: Top Offset does not apply to Continuous media. Use the **Cutter Adjustment** to change the amount of unprinted space at the top of continuous labels.



Left Offset

Increase to move image right
Decrease to move image left



3. Full Bleed Printing:

Full Bleed е отпечатване от единия край на хартията до другия без стандартните граници, с които повечето принтери са ограничени. Това е полезно за отпечатване на брошури, плакати и други маркетингови материали.

Ако коригирането с офсетите, не дава резултат, то тогава трябва да се коригира самото изображение – по височина и ширина с 0.040“. *Пример: ако изображението е 3“ x 4“ => трябва да го промените на 3.04“x 4.04“.* След това трябва да се зададат и толкова големи размери на медията, върху която ще се отпечатва (Manage Custom Sizes).

4. Промяна на настройките на принтиране по подразбиране:

Change Default Settings in Printer Driver

Make changes in the printer driver to set the default for all print jobs.

To select the default print settings that will be used for all print jobs:

1. From the Windows **Start** menu, select **Devices and Printers**.
2. Right-click the printer and select **Printing Preferences**.
3. The printing preferences contain three tabs as shown on page 21.
4. Make the changes and click **OK** to save.

It is recommended that any adjustments needed for individual print jobs be made during printing rather than changing the defaults.

5. Грешна или свършила медия:

L502 L501 Printer

Wrong Media

If the media loaded in the printer does not match the Media Type selected in the Preferences, the printer may not print.

Media mismatches that will result in an error state are:

- **Continuous** loaded, **Die Cut** or **Black Mark** selected
- **Die Cut** loaded, **Black Mark** selected
- **Black Mark** loaded, **Die Cut** selected

Media may feed through the printer past the cutter before the error state occurs.

1. Media will unload after cutting
2. Display will show Out of Paper message
 - a. Use Out of Paper recovery steps from page 26

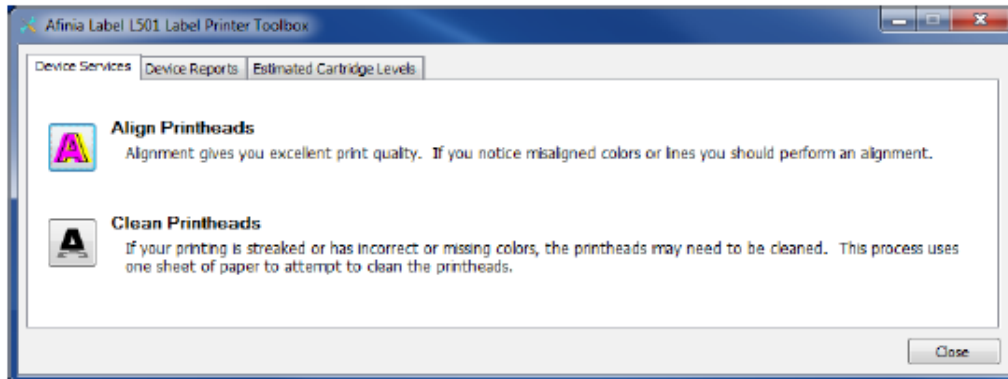


End of Roll

If the media runs out during printing, print will stop and the printer will enter an error state.

1. Media will unload after cutting
2. Display will show Out of Paper message
 - a. Use Out of Paper recovery steps from page 26

ДИАГНОСТИКА НА ПРИНТИРАНЕ ПОДРАВНЯВАНЕ И ПОЧИСТВАНЕ НА ПЕЧАТАЩАТА ГЛАВА:



Device Services: Align Printheads (requires paper or stock: see below)
Press this button to align the printheads.

Alignment can be done using plain paper or continuous stock

- **Plain Paper** *(requires 1 sheet 8.5" x 11" plain paper)*
Turn the stock mandrel so the flat surface is facing the rear of the printer, then load the sheet of paper until the printer starts to feed
- **Continuous stock** *(requires minimum 4" wide matte continuous stock)*
Matte paper stock must be used when aligning the printheads. Glossy media will cause the alignment to fail. Load stock normally.

A series of patterns will be printed and scanned, with the alignment done automatically.

If the display reads **Alignment Successful**, remove the paper or stock.

If the display reads **Alignment Finished** or **Alignment Failed**, repeat the alignment. If using plain paper, a new sheet will be needed.

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Device Services: Clean Printheads
(requires minimum 4" wide continuous stock)

If the Print Quality Diagnostic Page shows horizontal gaps in Test Pattern 2, press this button to clean the printheads.

When the first cleaning round is complete, the Diagnostic Page will print again.

Examine Test Pattern 2; if the problems are cleared up, press **Done**.

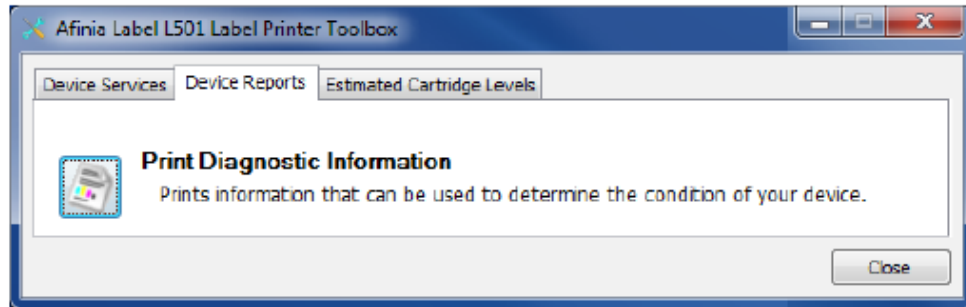


Test Pattern 2

Click **Second-level Clean** if gaps in the printed pattern are still visible.



A **Third-level Clean** is available if the Second-level Clean does not clear up the gaps in Test Pattern 2. However, this level of cleaning will use a large amount of ink.



Device Reports: Print Diagnostic Information
(requires minimum 4" wide continuous stock)

Click this button to print two test patterns showing the pen alignment and health of each color.

If any lines in Test Pattern 1 are not straight or disconnected, the printheads should be aligned.

If there are any horizontal white lines across the color blocks in Test Pattern 2, Clean Printheads should be run.

Estimated Cartridge Levels

This tab shows an estimate of the remaining ink in the cartridges.

Click the **Refresh** button if the toolbox has been open during printing to show the current estimated levels.



КАЛКУЛАТОР ЗА МАСТИЛО:



Afinia L501 Ink Cost Calculator

The Afinia Label L501 Label Printer includes an Ink Cost Calculator tool.

Unless you are monitoring the full production print job, these numbers will be estimates only; many factors could change the actual ink usage during a longer print job.

The Calculator can be used to help estimate the cost of ink for printing a specific label. This will help in estimating the cost of the job based on the number of labels to be printed.



	1	2	3	4	5
Color Cartridge Cost		Cyan	Cyan Cost	Total ml used	Pages per Cyan Cartridge
	30	0.00953	0.0072	0.04957	3145.8
Black Cartridge Cost		Magenta	Magenta Cost	Total ml used	Pages per Magenta Cartridge
	55	0.02295	0.1377	0.11934	1307.2
		Yellow	Yellow Cost	Total ml used	Pages per Yellow Cartridge
		0.03524	0.21145	0.18327	851.2
		Black	Black Cost	Total ml used	Pages per Black Cartridge
		0.0058	0.0048	0.00684	68817.2

The main window shows you:

1. Cost per cartridge
2. Cost per label per cartridge
3. Total cost per cartridge
4. Total ml used per cartridge
5. Number of labels that could be printed for each cartridge
6. Total Job Cost
7. Total Labels Printed
8. Cost per Label
9. Printer being monitored

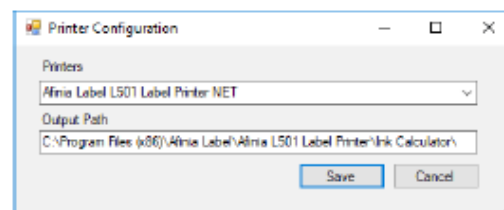
Open the Calculator before printing a number of the labels you want to estimate – a minimum of 6 labels is recommended. The more labels printed, the more accurate the results will be.

Once the job is finished printing, the ink usage and cost information will appear.

Configuration Menu : Configuration

Click the **Configuration** menu and select **Printer** from the sub-menu to set or change the printer being monitored or to change the Output directory location.

Only printers installed with the Afinia L501 drivers will appear in the Printer list; the name of the printer itself does not matter.

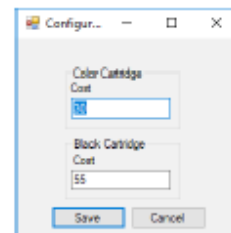


You cannot open this menu option while the printer you are monitoring is printing.

Configuration Menu : Cost

The **Cost** of the ink cartridges used by the calculator can be changed in this window.

You cannot open this menu option while the printer is printing.



Manual Menu : Manual End Capture

If for some reason the Calculator doesn't give you the results of a job that completed printing, click the **Manual** menu and select **Manual End Capture** to force an ink usage check. Note that the ink usage data may not be accurate.

Export Job List

Click this button to export all jobs printed while the Calculator has been running to a .csv file. This type of file can be opened in Microsoft Excel.

The export file will be created in the directory set in the **Output Path** set in the *Configuration : Printer* menu.

Show Advanced Info / Hide Advanced Info

This button will show the job data from all jobs printed since the Calculator was opened, as well as the raw ink usage data.

The button will change between Show and Hide depending on whether the data is being displayed or not.

ПОДДРЪЖКА НА ПРИНТЕРА:

1. Смяна на принтираща глава и касети:

Dye or Pigment Ink Cartridges

The Afinia L501 can use either the supported Dye-based or Pigment-based ink cartridges. However, each type must be used in separate printheads.

To use a different type of ink, you will need to install the second printhead (see [Changing Printheads](#) on page 34).



Installing a new Printhead requires a new set of ink cartridges for priming!



Once a printhead has been primed with one type of cartridge, that printhead will not recognize the other type of cartridge!

Only Afinia cartridges can be used!

Ink Type	Ink color	Reorder Number
Dye	Cyan	30636
	Magenta	30643
	Yellow	30650
	Black	30657
Pigment	Cyan	30664
	Magenta	30671
	Yellow	30678
	Black	30685

If you will be using both ink types, it is strongly recommended that you label each printhead accordingly.

Cartridges should be replaced when a cartridge reports being low or out of ink.

- Open the Ink Cartridge Access Door
- Press and release the cartridge that needs to be replaced; it will unlock and eject a short way
- Remove the ink cartridge
- Remove the new cartridge from the packaging
- Push in the new cartridge into the carriage until it and locks
- Close the Ink Cartridge Access Door



Changing Printheads

The printhead should be changed if you are switching between dye-based ink and pigment-based ink or if print quality issues persist after cleaning and replacing cartridges.



- Open the Ink Cartridge Access Door
- Remove ink cartridges



If you are changing from one ink type to another, it is recommended that you keep the ink cartridges in the printhead being removed. Storage of a used printhead with the cartridges removed can lower the life span of the printhead.

- Lift the grey lever on the right to release the printhead assembly and remove
- Lower replacement printhead into the carriage
- Lower the grey lever to lock printhead in place
- If the printhead is:
 - **NEW:** Install *new* ink cartridges of the type with which the printhead is to be used (Dye-based or Pigment-based) – **new cartridges *must* be used!**
 - **USED:** Install ink cartridges of the same type as has been previously used in the printhead
- Close the Ink Cartridge Access Door to prime the printhead



If a previously used printhead does not recognize the ink cartridges as valid and doesn't begin priming, the printhead was initially used for the other ink type.



Tip: For the best print results, run the **Toolbox Printhead Alignment** (see page 28) when you replace the Printhead.

Purchasing Printheads

Printheads can be purchased through your Reseller.

Each new printhead comes with a full set of ink cartridges as the initial priming of the Printhead requires a new set of cartridges. Be sure to order the Printhead based on the ink type you will be using.

Ink Type	Afinia Printhead Part Number
Dye	30986
Pigment	30993

2. Почистване на пътя на етикета:

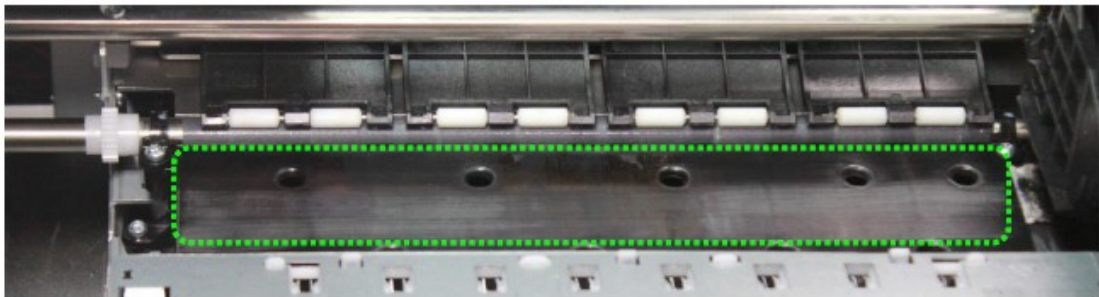
Afinia Label

Print Path Maintenance

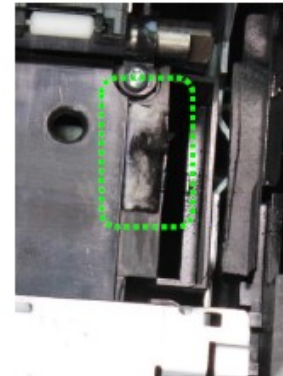
With use, ink may accumulate on the plate below the print path.

Tools: Lint-free cloth; isopropyl alcohol

1. Turn off printer and unplug
2. Open Cartridge Access door
3. Clean the plate below the print path with a lint-free cloth dampened with alcohol



4. Clean ink pad to right of print plate
 - a. Replace if necessary (see Troubleshooting)
5. Close Cartridge Access door

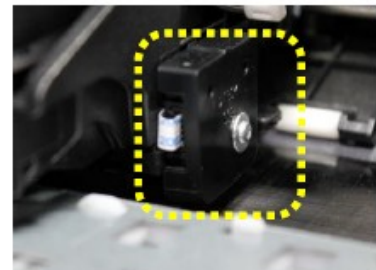


Print Carriage Sensor Maintenance

The sensor is on the right side of the print carriage

Tools: Compressed air for electronics; lint-free cloth; isopropyl alcohol

1. Open Cartridge Access door
2. Blow dust or debris from bottom of sensor (circled in yellow)
3. For more cleaning, gently wipe bottom of sensor with a lint-free cloth dampened with isopropyl alcohol
4. Close Cartridge Access door

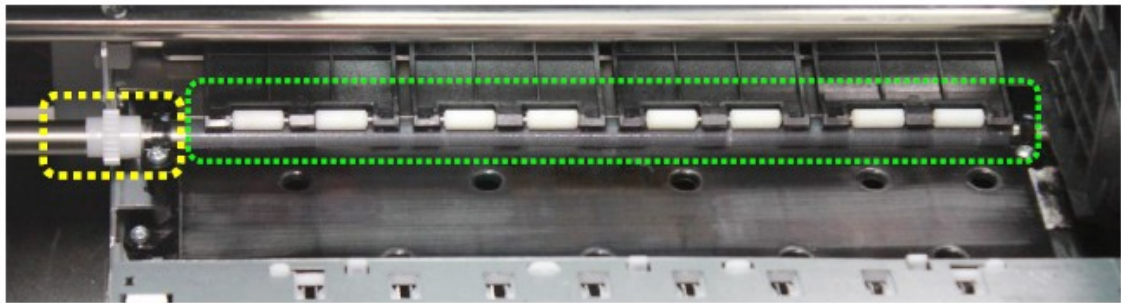


3. Почистване на ролките:

Pinch Roller Maintenance

Tools: Lint-free cloth; isopropyl alcohol

1. Close Cartridge Access door
2. Turn off and unplug printer
3. Open Cartridge Access door
4. Clean each white pinch roller (outlined in green) using lint-free cloth dampened with alcohol



5. Clean grit roller underneath the pinch rollers by manually turning the white gear (outlined in yellow) to the left of the print plate
6. Close Cartridge Access door
7. Plug in and turn on printer

Unwinder Maintenance

Tools: Lint-free cloth; isopropyl alcohol; compressed air for electronics

1. Remove loaded stock
2. Turn off and unplug printer
3. Using lint-free cloth and isopropyl alcohol, remove any adhesive residue on the mandrel or end caps
4. Using compressed air, blow dust or debris from sensor
5. Plug in and turn on printer



4. Почистване на тавата с мастило:

Ink Tray Maintenance

With use, the waste Ink Tray pad may become saturated and need to be cleaned.

Tools: Nitrile or latex gloves; paper towels, plastic spoon

1. Turn off printer
2. Remove tray from right side of printer
3. Using the paper towels, absorb as much ink from the tray as possible
4. For more solid ink deposits, scoop out of tray with plastic spoon
5. If pad in tray will not clean easily, contact Technical Support to purchase a new pad
6. **Replace the tray!**

Printing without the tray in place can result in ink leaks

7. Turn printer back on



5. Почистване на задръстена хартия:

Clearing a Media Jam

If the media jams, follow these steps to clear the printer:

1. Turn off printer from control panel and unplug power cord
2. Open Cartridge Access door
3. Cut any media past the print zone and pull slowly out through front
4. Remove remaining media by gently pulling stock back toward unwinder
5. Close Cartridge Access door
6. Plug in power cord and turn on printer

Грешки:

Troubleshooting



See the full L501 Label Printer [Troubleshooting video](#) here

Control Panel LED

The LED on the control panel indicates a number of printer states:

LED	Display	
Off	Off	1. Power cable not plugged in 2. Plugged in, but power button not pressed
Always On	On	Printer on, stock loaded (ready)
Blink	On	No stock in paper path
Fast Blink	On	Paper unloaded but paper sensor blocked. Remove stock from paper path
Pulsing	On	Printing

If an error message appears on the Control Panel, follow the instruction to clear the error.

Poor Print Quality or Incorrect Printout

Print Problem	Possible Cause	Resolution
Colors not aligned	Printhead alignment needed	1. Toolbox : Device Services : Align Printheads
Low or poor print quality	Printhead cleaning needed	1. Toolbox : Device Services : Clean Printheads 2. Run Second Level Clean if needed
	Printhead needs to be cleaned or replaced	1. Toolbox : Device Report : Print Diagnostic Information 2. If report shows missing lines, Toolbox : Device Services : Clean Printheads 3. Print Diagnostic Information again; if lines still missing, replace
	Quality setting too low for your artwork	Printer Preferences : Change Quality setting to Better or Best
Colors not correct	Printhead cleaning needed	1. Toolbox : Device Services : Clean Printheads 2. Run Second Level Clean if needed
	Wrong label stock selected	Printer Preferences : Check the Media selected before printing
Ink not drying or smearing	Wrong media coating	Only use media with inkjet-compatible coating
Print not correct size	Print settings incorrect	1. Verify label size selected is correct 2. Verify scaling is not set when printing
	Label and Image not same size	Resize image or load correct label size
Print not aligned to label	Offsets not correct	Printer Preferences : Adjust the Top or Left Offsets as needed
Print alignment is shifting during printing	Label is not moving in straight path	1. Verify label stock is inserted correctly 2. Verify adjustable core holder is secure 3. Verify core holders are tight against sides of core 4. Verify Label Guide is in correct position 5. Verify input roll is wound straight
Label not stopping in correct cut position	Cutter Offset not correct	Printer Preferences : Adjust the Cutter Offset as needed

Print Problem	Possible Cause	Resolution
Length of two labels fed through blank, cuts, media unloads; LED blinking	Wrong Media Type selected in Settings	Load correct media type and press OK , or press Cancel .
Printer not printing	No paper in printer when job is sent	Cancel job or load media and press OK <i>If using Die Cut or Black Mark media, the first label will be left blank</i>
Printer stops printing mid-job	End of Roll	Cancel job or load media and press OK <i>If using Die Cut or Black Mark media, the first label will be left blank</i>
	Media jam	Clear media jam (see page 42)
	PC disconnect	Verify PC is connected to printer and on
Media does not load	Printer still initializing	Wait until green LED is flashing slowly
	Media Guide in the way	Move the media guide to the left and reload
	Printheads being cleaned	Remove media and wait until the cleaning cycle completes. Retry loading