



Use of Zebra GK420t printer



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1 Introduction

This document presents how the GK420t printer is used in the COBISS system (connecting to power supply, changing paper, etc.).

2 Using the GK420t printer

2.1 Description of the printer

Power switch

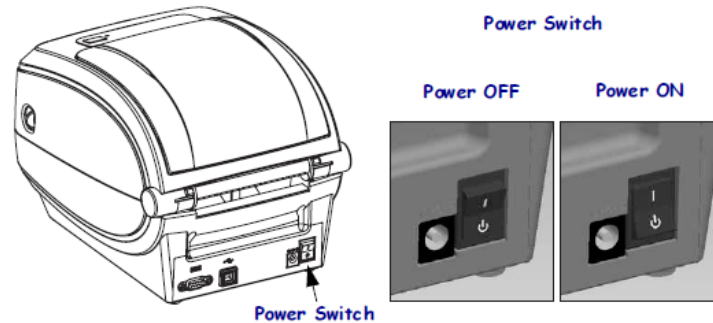


Figure 1: Back side of the printer

FEED button and status light

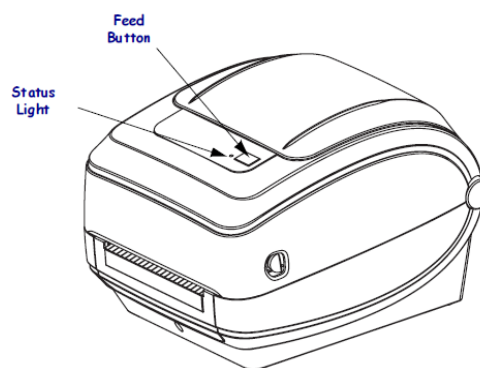


Figure 2: Front side of the printer

FEED Button – In normal operating mode, the label ribbon advances to the next label.

Status light – In normal operating mode the status light is green. If it turns red, an error has occurred: the printer either ran out of label ribbon or black ribbon cartridge or the service is needed because of a more complex error.

Opening and closing the printer

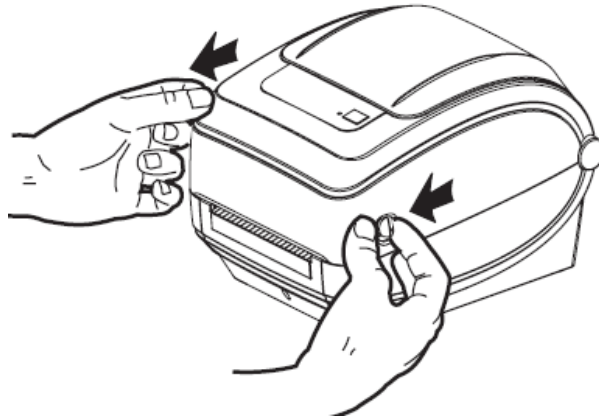


Figure 3: Opening the printer



Figure 4: Closing the printer

Printhead position

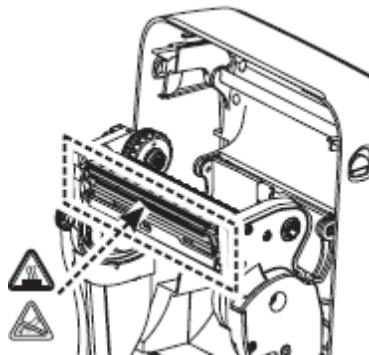


Figure 5: Printhead

2.2 Connecting to power supply and installing printer

To connect your printer to a computer use the USB cable supplied with the printer.

Connecting to power supply

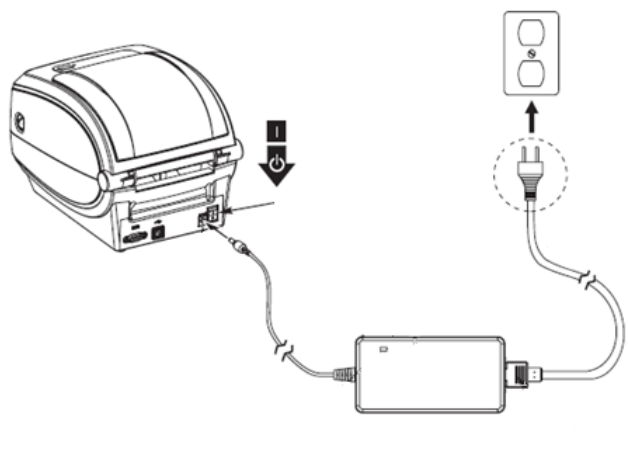


Figure 6: Connecting to power supply

USB connection

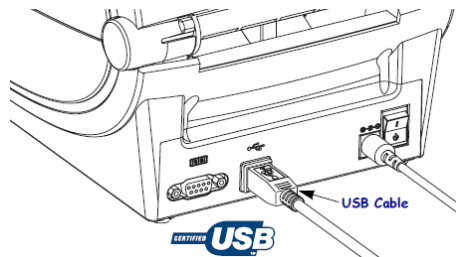


Figure 7: USB connection

During installation you can use the drivers available:

- via <https://www.zebra.com/us/en/support-downloads/printers/desktop/gk420t.html>,
- via <https://www.seagullscientific.com/support/downloads/drivers/>,

To use the printer from several workstations, it is recommended to connect it only to one workstation enabling shared use of the printer to other workstations. For help, call +386 (0)2 2520 333 (Call center) or send an email to podpora@izum.si.

2.3 Cleaning the printhead

To clean the printhead, use the cleaning pen supplied with your printer containing the cleaning solution. Use the cleaning pen tip to remove debris and dust that has built-up on the heater element of the thermal printhead.

The cleaning pen can be used only once and make sure that you use it only for this purpose. If you use it once again, the contaminants from previous uses may damage the printhead. Instead of a cleaning pen, you can also use a soft cloth and pure alcohol.

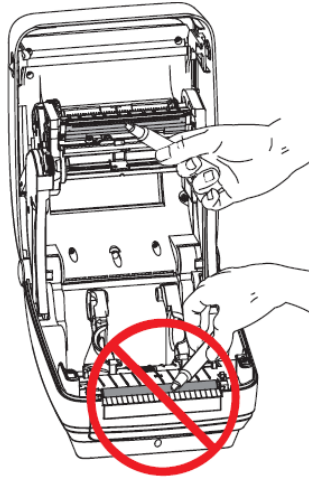


Figure 8: Cleaning the printhead

2.4 Placing the media roll and loading black ribbon cartridge

Go through the following steps of the procedure:

1. Open the printer lid. Place the media roll on the green roll holder.

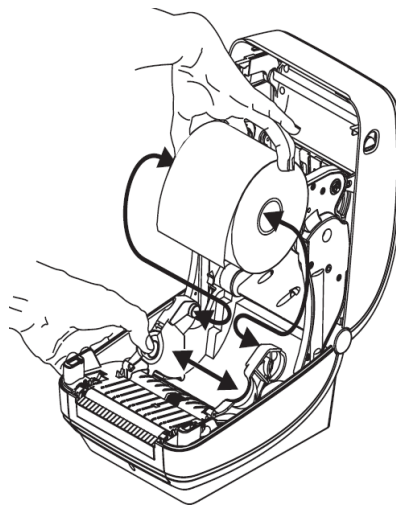


Figure 9: Opening the printer and placing the media roll

2. The media roll must go under both media guides.

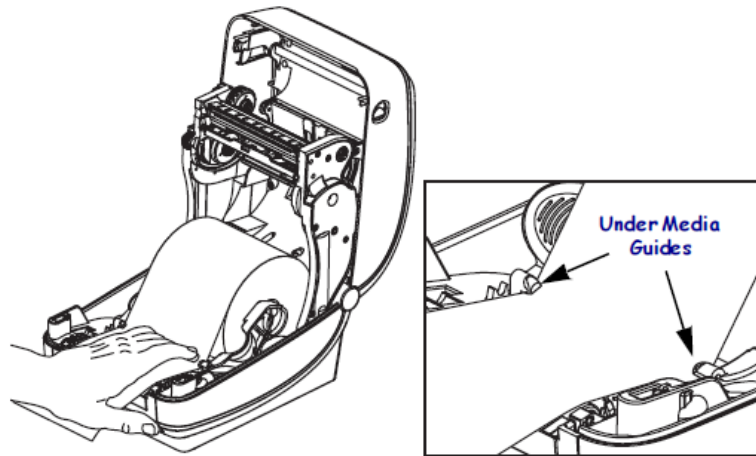


Figure 10: Pushing the media under the media guides

3. Place a new ribbon roll on the inner holder. Then, place an empty ribbon core, remained from the ribbon, on the front holder. Pay attention to lock the notches of the ribbon core properly. Attach the adhesive strip of the black ribbon cartridge to the empty ribbon core. Prior to use, pull the ribbon cartridge tight across the printhead.

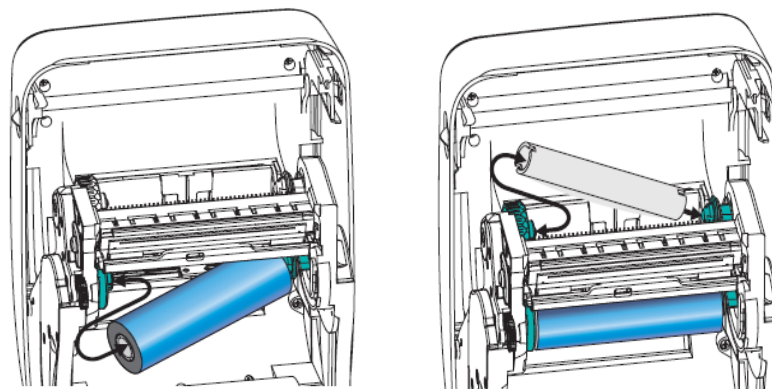


Figure 11: Loading black ribbon cartridge

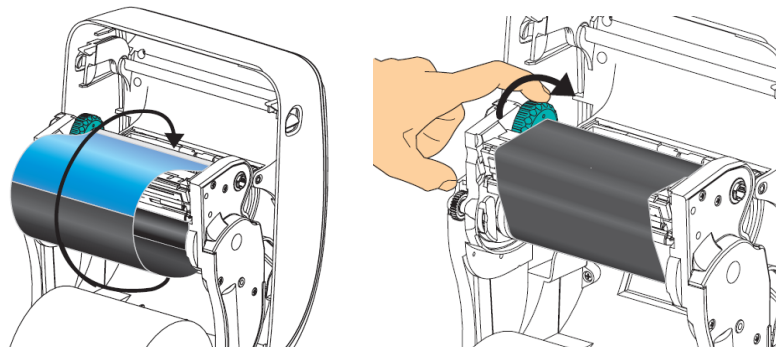


Figure 12: Final loading of the black ribbon cartridge

2.5 Resetting printer

Once the media roll is placed and the black ribbon cartridge loaded, go through the following steps (make sure that the printer's cover is closed and the status light is green):

1. Turn off the printer.
2. Press and hold the FEED button.
3. Turn on the printer.
4. The green status light flashes in sequences: once, then in the two-flash-, three-flash- and four-flash sequence.
5. Release the FEED button after the four-flash sequence.
6. The printer starts calibration process and advances the label ribbon to the next label.
7. Once the calibration process is complete, turn off and on the printer.

2.6 Status light

Table 1: Status light

Color	Status	Explanation and solution
None		Printer is turned off.
Green	Solid green	Normal functioning
Orange	Solid orange	It lights up for about ten seconds immediately after the printer is turned on. If it lasts for more than ten seconds, the printer requires service.
Green	Flashing	Normal functioning
Red	Flashing	Labels or ribbon cartridge ran out.
Green	Double flashing	The printer is idle.
Orange	Double flashing	The printer head is overheated.
Green and red	Alternately flashing	Flash memory is not programmed, the printer requires service.
Red and green	Flashing twice red and then once green	The printhead or motor has a failure, the printer requires service.

3 Setting up the driver

Once the driver is installed, the settings must be adjusted before you can start printing the labels. Go to **Control Panel**, select the area **Devices and Printers**. All available printers will be displayed. Select the printer *ZDesigner GK420t* and right-click on it. In the additional options, select **Printer properties** (see Figure 13).

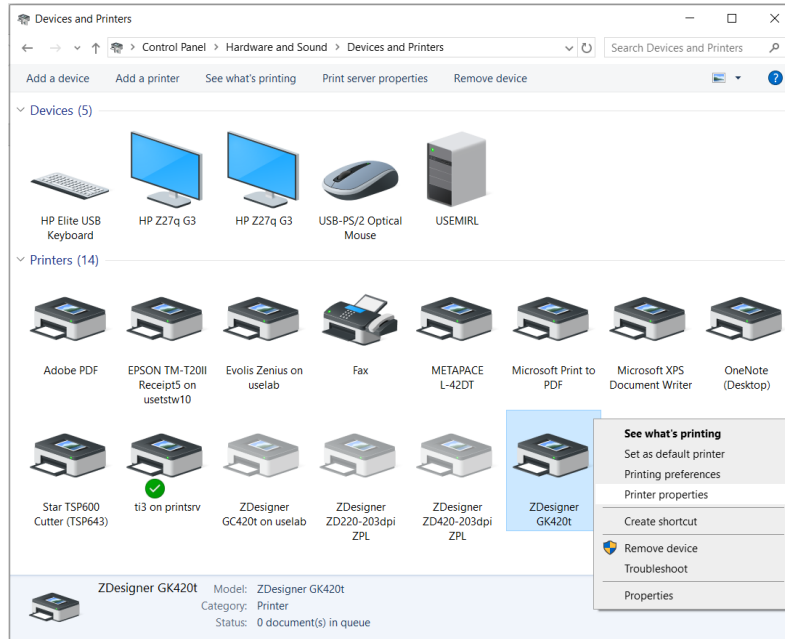


Figure 13: Control panel, devices and printers

Once you click **Printer properties**, a new window will open. In the **Advanced** tab, select the option **Printing Defaults ...** (see Figure 14).

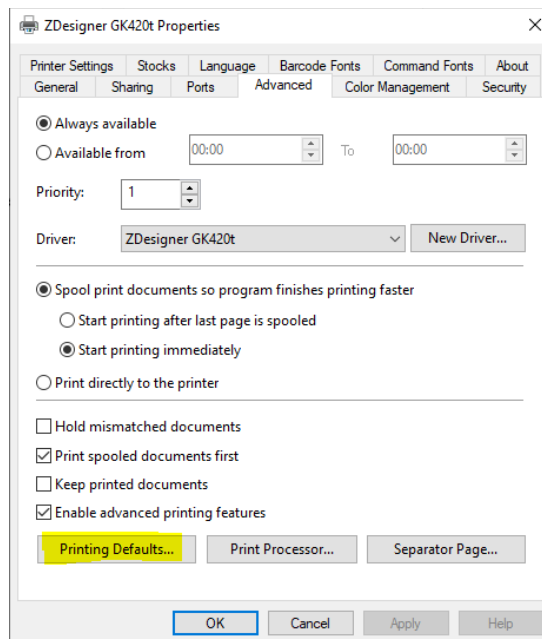


Figure 14: Printing Defaults

A new window will open where you can set up the required parameters (see Figure 15).

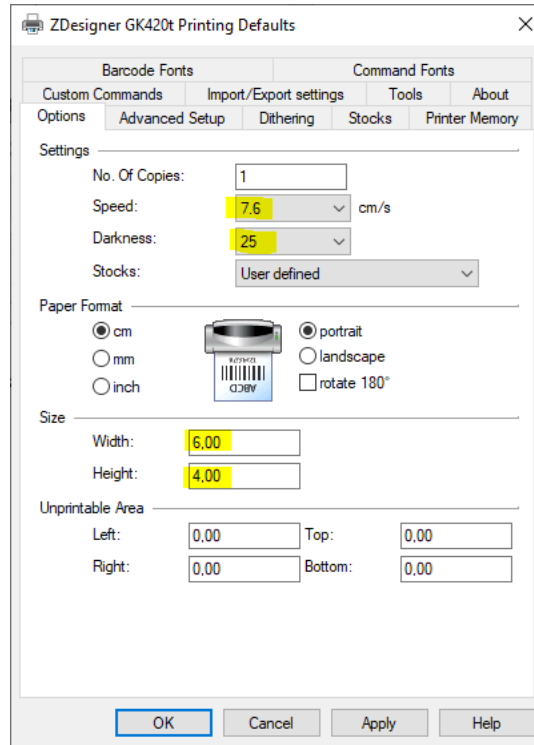


Figure 15: Printer properties

Once you edit the settings in the **Options** tab, click the **Advanced setup** tab, where you have to make sure that *Thermal Transfer* is selected for **Media type** (see Figure 16).

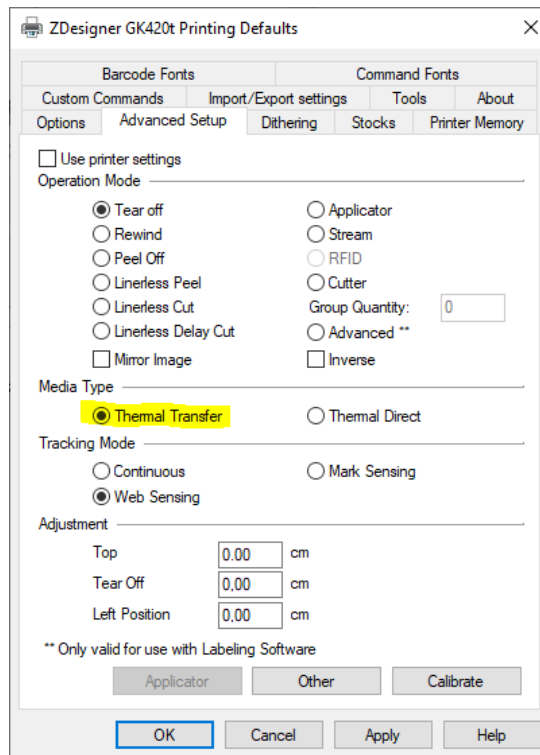


Figure 16: Advanced Setup

Lastly, check if *None* is selected under **Dithering type** (see Figure 17).

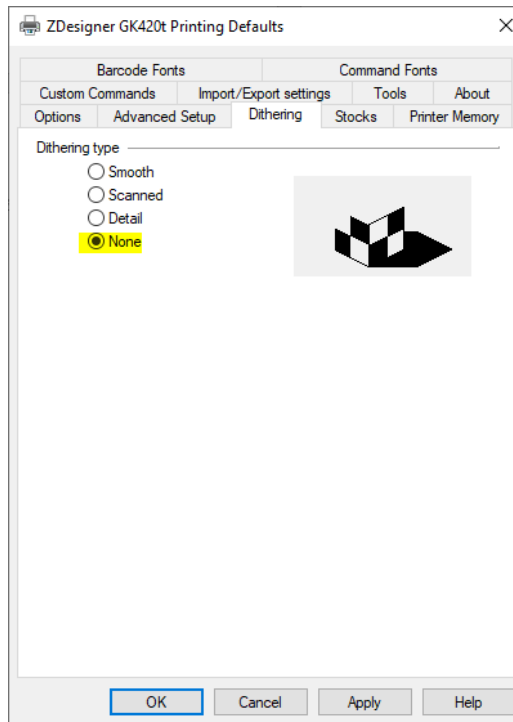


Figure 17: Dithering type

It is recommended to use the same settings for the **Printing preferences** option.

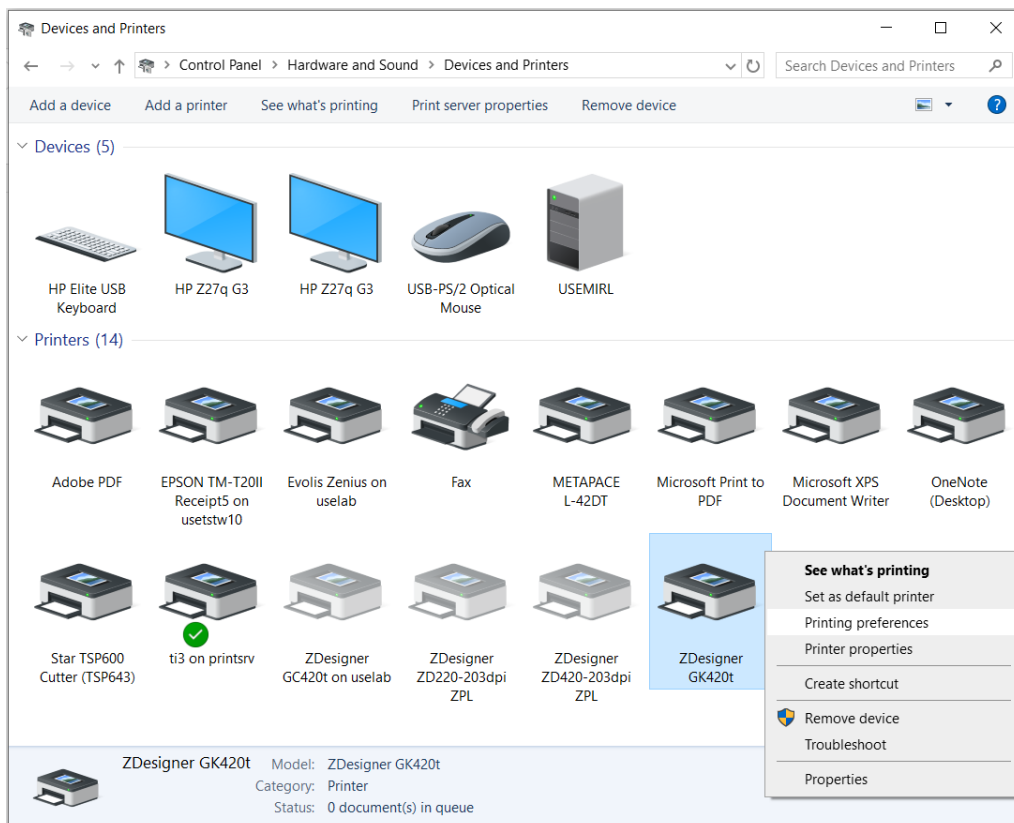


Figure 18: Control panel and printing preferences

4 Settings in the COBISS Lib application

To use the printers in COBISS Lib, the COBISS DGW service must be installed beforehand.

https://www.cobiss.net/doc/Namescanje_COBISS_DGW_EN.pdf

To check if the installation was successful, you can use the **Settings and administration / Server / Test connection with COBISS DGW** method in COBISS Lib. The message *COBISS DGW is connected!* means that the installation was successful and that you can continue adding printers to the logical destinations (see Figure 19).

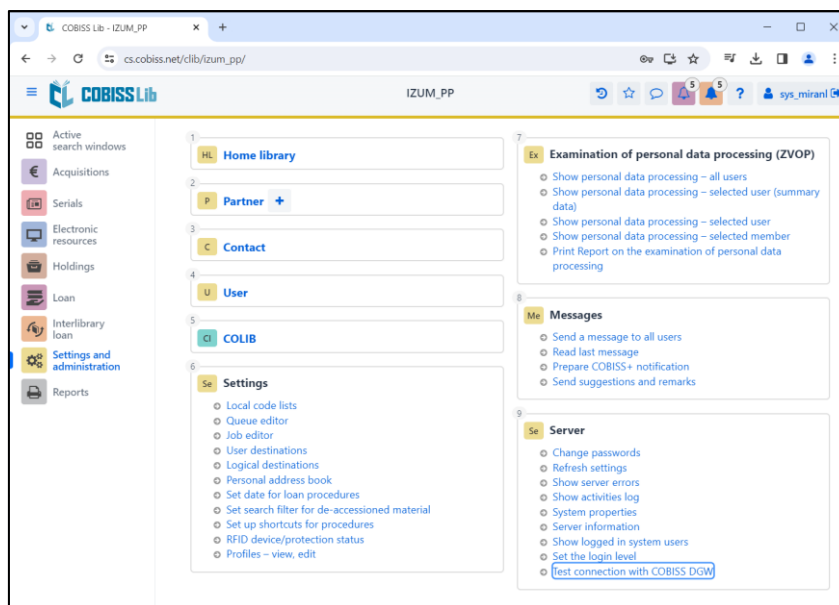


Figure 19: COBISS Lib user interface

In COBISS Lib select **Settings and administration / Settings / Logical destinations** (see Figure 20).

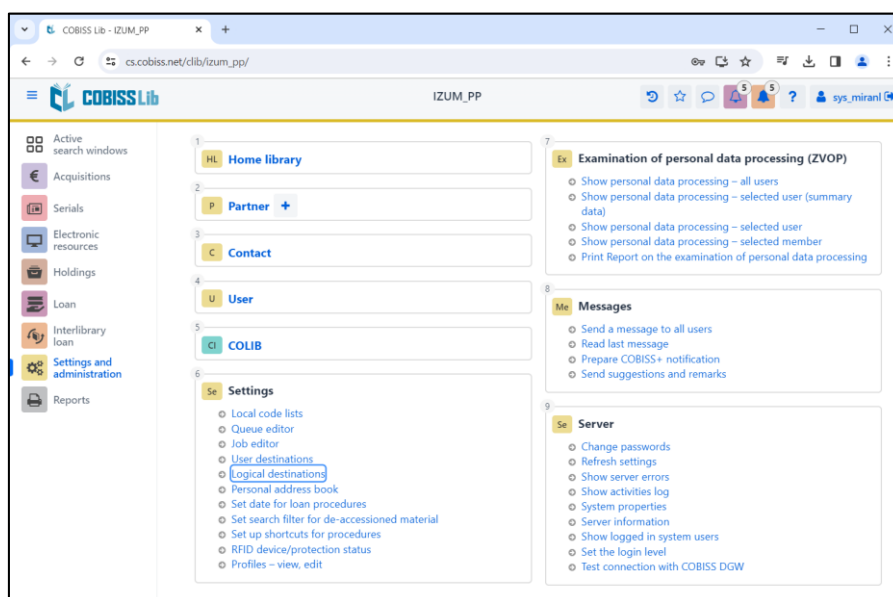


Figure 20: COBISS Lib user interface and logical destinations

The **Logical destinations editor** window will open where you select the option *Label – material: [default local printer]* and click **Edit** (see Figure 21).

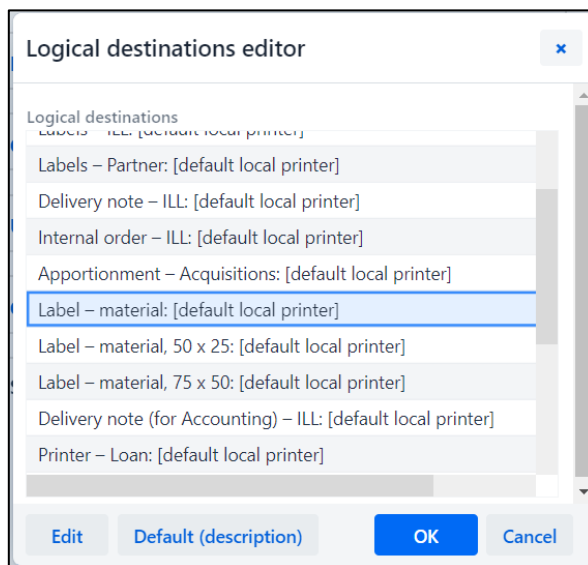


Figure 21: Logical destination editor

The **User destinations** windows will open, where you click the **Add printer** button. From the drop-down list, select the printer *ZDesigner GK420t*, with which you intend to print the labels for the material (see Figure 22).

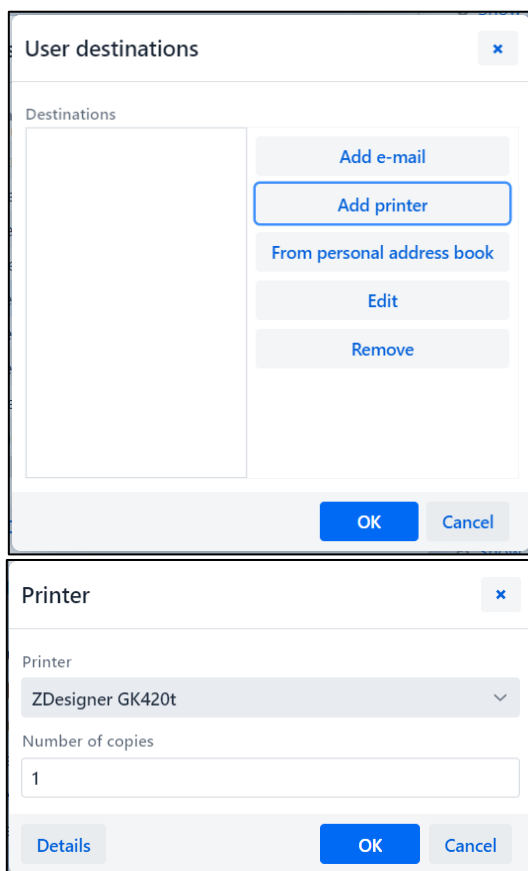


Figure 22: Logical destinations setup

Once you select the printer, click the **Details** button and check whether the additional settings for this printer type are correct (see Figure 23).

The 'Details' dialog box contains the following settings:

- Printing mode: graphics
- Printer type: (empty dropdown)
- Printer subtype: (empty dropdown)
- Printing style: single sided
- Orientation: portrait

Buttons: OK, Cancel

Figure 23: Details

Once you define all the settings, confirm each choice by clicking the **OK** button. At the end, select **Refresh settings** in the **Settings** (see Figure 24).

The screenshot shows the COBISS Lib user interface. The left sidebar contains a menu with the following items:

- Active search windows
- Acquisitions
- Serials
- Electronic resources
- Holdings
- Loan
- Interlibrary loan
- Settings and administration (highlighted)
- Reports

The main content area shows a list of settings categories:

- HL Home library
- P Partner +
- C Contact
- U User
- CL COLIB
- Se Settings
 - Local code lists
 - Queue editor
 - Job editor
 - User destinations
 - Logical destinations
 - Personal address book
 - Set date for loan procedures
 - Set search filter for de-acquisitioned material
 - Set up shortcuts for procedures
 - RFID device/protection status
 - Profiles – view, edit
- Ex Examination of personal data processing (ZVOP)
 - Show personal data processing – all users
 - Show personal data processing – selected user (summary data)
 - Show personal data processing – selected user
 - Show personal data processing – selected member
 - Print Report on the examination of personal data processing
- Me Messages
 - Send a message to all users
 - Read last message
 - Prepare COBISS+ notification
 - Send suggestions and remarks
- Se Server
 - Change passwords
 - Refresh settings (highlighted)
 - Show server errors
 - Show activities log
 - System properties
 - Server information
 - Show logged in system users
 - Set the login level
 - Test connection with COBISS DGW

Figure 24: Refresh settings in the COBISS Lib user interface

Now you can start printing labels for the material.

If you wish to use the same printer to print labels for members, the process remains identical to the one described in the previous steps. The only difference is setting the logical destination to *Label – Loan (member)* (see Figure 25).

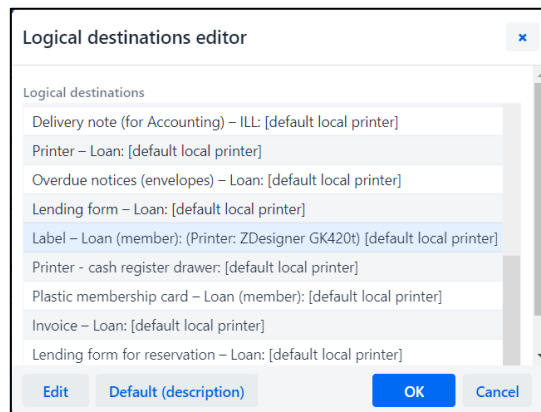


Figure 25: Logical destinations editor for member labels

5 Potential printing problems

5.1 Label misalignment

If labels cannot be printed properly after installing the drivers and setting the logical destinations (e.g. printing an extra blank label), the factory settings should be sent to the printer via original drivers.

The procedure is as follows: Go to **Control Panel** and click the **Devices and Printers** icon. Find the printer, that is the Designer GK420t icon and right-click on it.

Select *Printer properties* from the list of options. A new window should pop up in which you will click the **Preferences...** button (see Figure 26).

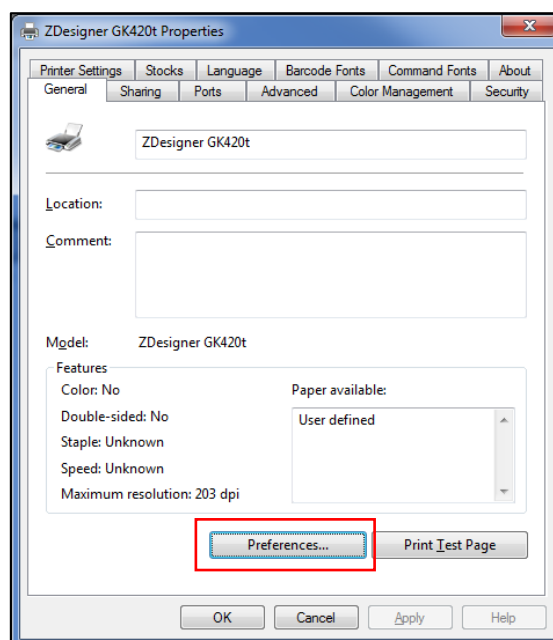


Figure 26: Setting the printer

By clicking the **Preferences...** button a new window with additional settings should pop up again, then select the **Tools** tab (see Figure 27).

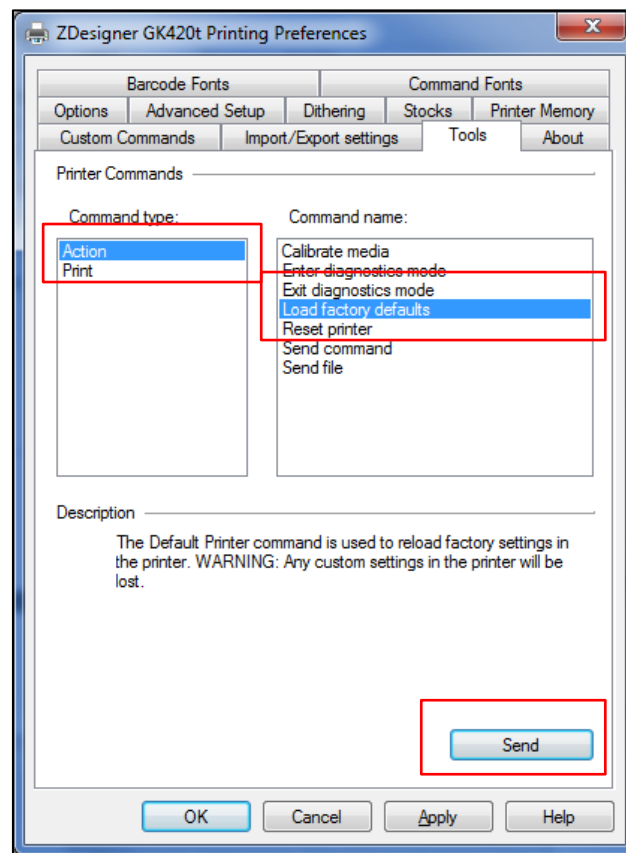


Figure 27: Sending factory settings

Select *Action* under **Command type** and *Load factory defaults* under **Command Name**, then click the **Send** button. This command sends the default factory settings to the printer. After that retry printing a label.

5.2 Skipping a label

If the settings do not resolve problems with an extra blank label, you can try with label calibration. You can use this method even if the printer prints one extra blank label besides the label for the material.

The procedure is as follows: go to the **Control panel** and click the **Devices and Printers** icon. Find the printer, that is the Designer GK420t icon and right-click on it. Select *Printer properties* from the drop-down menu.

When a new window pops up, click the **Preferences...** button (see Figure 28).

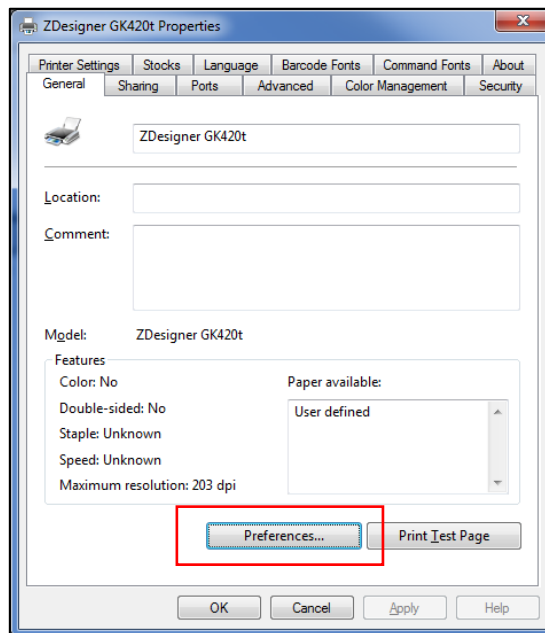


Figure 28: Printer settings

By clicking the **Preferences...** button a new window with additional settings should pop up again, then select the **Tools** tab (see Figure 29).

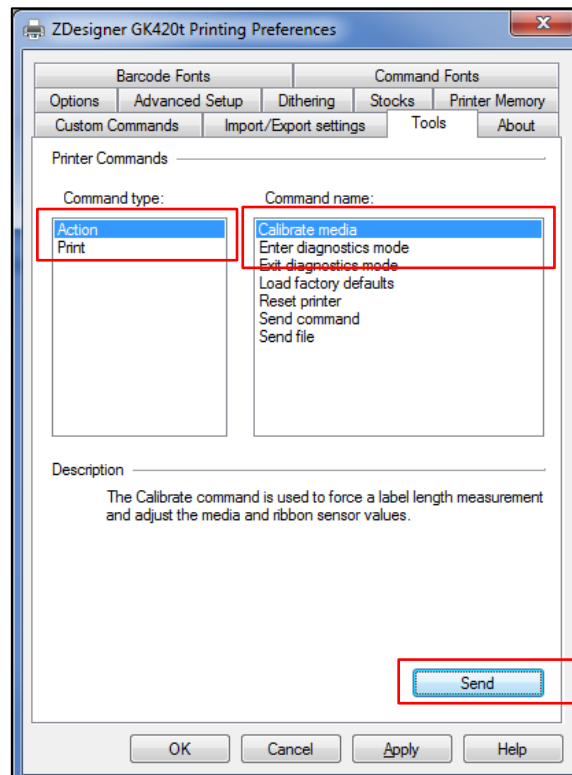


Figure 29: Media calibration

Select **Action** under **Command type** and **Calibrate media** under **Command name** as shown in Figure 29. By clicking the **Send** button new re-calibration parameters are sent to the printer.

After that retry printing a label.