

User manual



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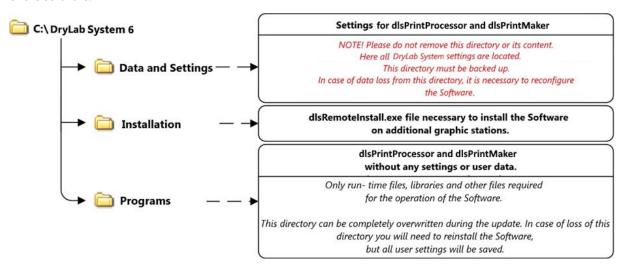
NOTE! This User manual is based on a *DryLab System 6 Pro* license type. Any differences from other license types will be indicated by appropriate messages.

1. Installation and first launch of the software

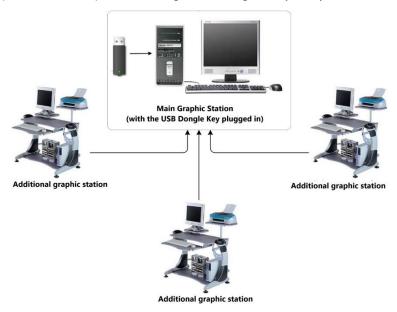
1.1 DryLab System 'Central Concept' – work on several computers

DryLab System 6 (hereinafter DLS) allows you to work on several computers at the same time, thanks to a DryLab System 'Central Concept' created by Pixel-Tech. It uses a division into a main graphic station and additional graphic stations (does not apply to Basic and Standard license types).

According to the concept, the software should be installed and activated on one computer only, which acts as the main graphic station. The installation process creates a directory structure with files necessary for a correct operation of the software.



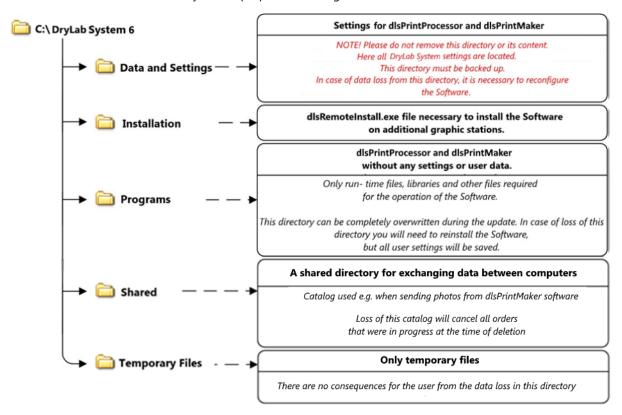
The diagram below presents an example of a working model using the DryLab System 'Central Concept'.



- A main graphic station a computer that has the fastest processor and the largest amount of memory on the hard drive. It will provide satisfying and efficient use of the DLS software. **NOTE! A printer must be connected to the main graphic station it is necessary to ensure a full functionality of the system**.
- Additional graphic stations a workplace of a user/users of the software. On additional graphic stations images are processed and then sent in a form of orders to the main graphic station. You can connect up to

9 graphic stations. **NOTE! Working on additional graphic stations is possible ONLY if the main graphic station is on.**

After installation on the main graphic station and after the first software launch, a new directory structure will be created. It is constant and necessary for the proper functioning of the DLS software.



1.1.1 Installation and first run of the software on the main graphic station

To install DLS on the main graphic station and run it with default settings, insert the DLS CD into the computer drive or, in the case of an electronic license, run the installer by double-clicking on "DryLab_Setup.exe" and follow the displayed steps.

NOTE! The software is installed as DEMO and will require activation (the activation process is described in chapter >> 1.4).

After the installation is completed, two software icons will appear on the desktop:

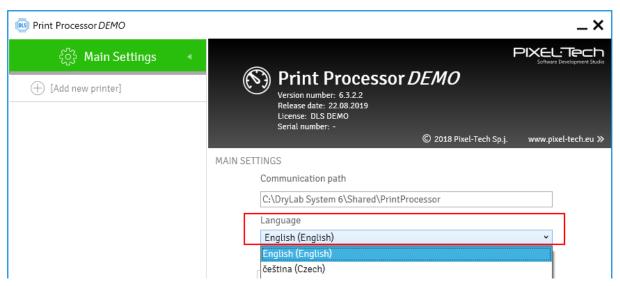
- dlsPrintProcessor is used to configure printers and is installed on one main computer the main graphic station. dlsPrintProcessor receives and processes photos sent from dlsPrintMaker (installed on one or more additional graphic stations, depending on purchased DLS license type). After the processing is complete, dlsPrintProcessor transfers the photos for printing.
- dlsPrintMaker - intended for processing graphic files (photos) by their correction, cropping, etc.
 Prepared photos are sent to dlsPrintProcessor or saved on the computer's hard drive. Depending on the DLS license type you purchased, dlsPrintMaker can be installed on several graphic stations.

NOTE! Always run dlsPrintProcessor first, and then dlsPrintMaker.

The first launch of dlsPrintProcessor is in English. To change the language, go to the software configuration.

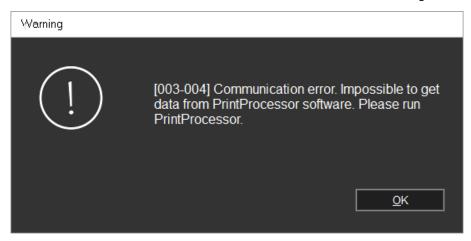


In the opened window, select a target language from the list, then close and run dlsPrintProcessor.

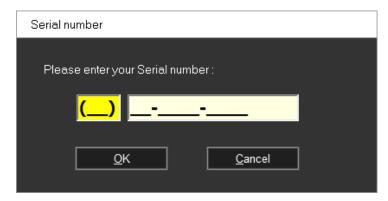


If the dlsPricProcessor is running, you can run dlsPrintMaker. **NOTE!** <u>The first after installation dlsPrintMaker</u> <u>launch</u> <u>must be done with elevated privileges - Administrator.</u>

If you receive an error message while running dlsPrintMaker, it means that dlsPrintMaker couldn't communicate with dlsPrintProcessor. Press the [OK] button and make sure that dlsPrintProcessor is running.

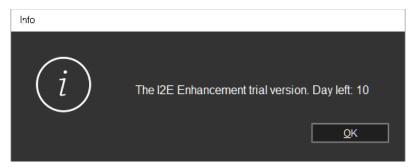


After the first dlsPrintMaker launch, you need to verify the software license. In the window that appears, enter a serial number provided with the software (in case of a license with a USB dongle key, the serial number is displayed in dlsPrintProcessor).



NOTE! The serial number must be entered on every additional graphic station during its first run (if the license type allows more than one graphic station). More information about the serial number you can find in chapter >> 1.5.

Furthermore, the first time you run dlsPrintMaker software, information about the 10 days of the I2E license test period appears.



NOTE! The trial period concerns an additional I2E feature (advanced colour corrections library, which can be purchased in a form of an additional license to the software >> 3.9.2.1), not the DLS software license itself. The test period will be automatically turned off after 10 days or you can turn it off immediately in the software configuration (>> 3.9.2)

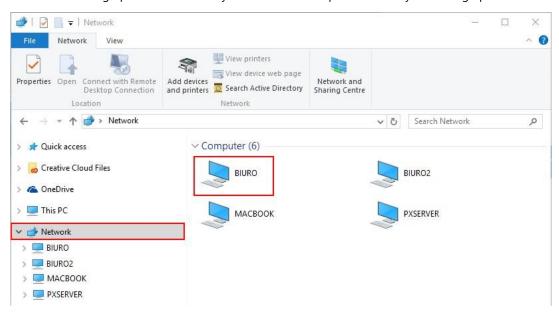
1.1.2 Software installation on additional graphic stations

After the correct installation of the DLS software on the main graphic station, you can proceed with a quick installation on additional graphic stations (does not apply to Basic and Standard license types). **NOTE! To install the software on additional graphic stations, dlsPrintProcessor must be run at least once on the main graphic station.**

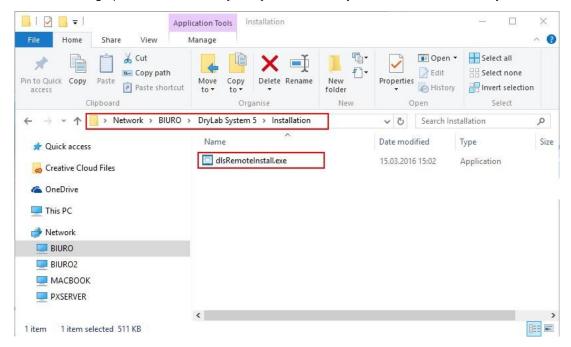
NOTE! Only dlsPrintMaker is installed on the additional graphic station.

To install the software on the additional graphic station, follow the steps below:

1. On the additional graphic station find in your Network a computer which is your main graphic station.

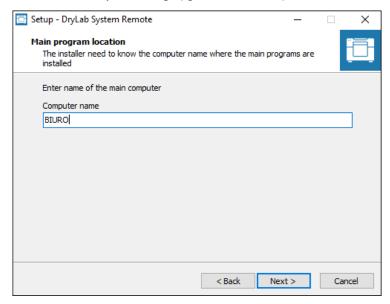


2. Go to the main graphic station, to the DryLab System 6 directory, to the Installation directory.



- 3. In the Installation directory run the dlsRemoteInstall.exe file. The installation process will begin.
- 4. In the first step you will be asked to choose the installation language. Select a language from the drop-down list and press the [OK] button. In the next window press the [Next] button to start the installation process or the [Cancel] button to delete it.

5. In the next step enter the name of your main grapgic station (a computer name).



- 6. Select a folder in the Menu Start where the software shortcut should be placed and decide whether dlsPrintMaker should be added to the Startup. The installation will proceed without user intervention.
- 7. After the successful software installation on the additional graphic station, complete it by pressing the [Finish] button.

The same steps should be repeated on each computer (additional graphic station) belonging to your system.

1.1.3 Backup of the settings

After configuring the software and adapting it to your needs, it is recommended to back up the settings. In the event of data loss, you can easily restore your settings without having to reconfigure from the beginning.

Making a copy of the configuration data in the DryLab System software is very easy. Copy the whole *Data and Settings* directory, which is located directly in the *C:\DryLab System 6* directory.

1.2 DryLab System license types

DLS comes in three types of licenses, differentiated in terms of functions and the number/type of supported devices. The differences between the types of licenses are discussed in detail on: https://www.pixel-tech.eu/drylab-system/#versions

DLS license types are:

- Basic dedicated to support only one printer and to work on one graphic station. Contains basic functions of the software.
- Standard dedicated to support only one printer and to work on one graphic station. Features extended compared to the Basic license type.
- Pro dedicated to support up to 8 printers and up to 9 graphic stations. The most advanced license type in terms of available features.

1.3 USB dongle key and a serial number

Each license of DryLab System software has a unique serial number, issued to the user in a form:

- programmed on the USB dongle key the key must be connected to the USB port of the main graphic station before starting the software and remain in it for the entire time of work with the DLS software (NOTE! Loss of the USB dongle key causes a total termination of the right to use the software. It is not possible to issue a second, replacement dongle key);
- electronic license, i.e. a number to be manually entered in the software.

After the activation process in dlsPrintProcessor (>> 1.4), information about the serial number and a license type of the DLS software are displayed in the dlsPrintProcessor configuration.

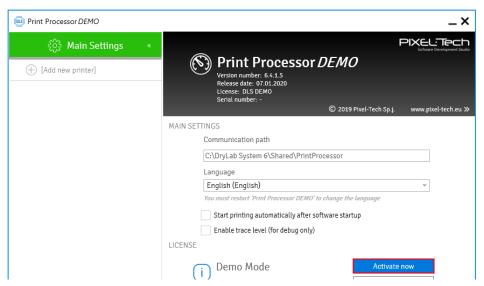


1.4 License activation

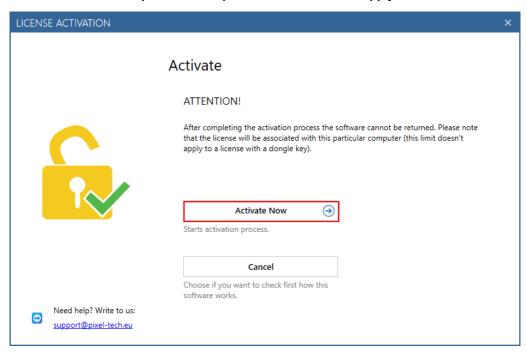
A license activation takes place in dlsPrintProcessor with the Internet access and is fully automatic. Run the software and go to the configuration (NOTE! If you purchased a license with the USB dongle key, insert the key into the computer's USB port before starting the software).



In the window that appears, press the [Activate now] button.



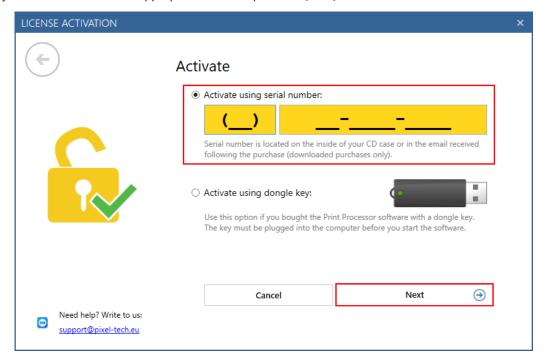
In the first license activation window press the [Activate now] button. **NOTE! After the activation, it is not possible to return the software.** Activation of a single license can be carried out only on one computer at a time. The license will be connected to this particular computer (this limit does not apply to licenses with a USB dongle).



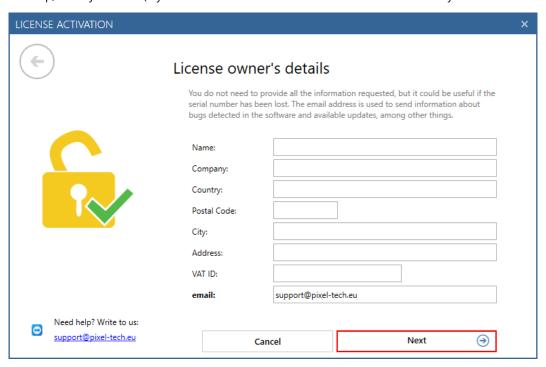
The next steps depend on the purchased license type.

1.4.1 Activation using a serial number

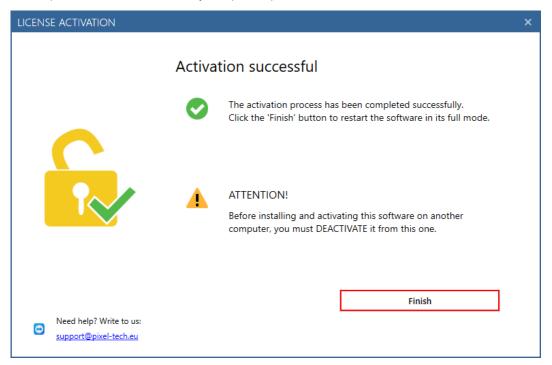
In case you bought an electronic license and you have a serial number (it was sent by email after your purchase), enter your serial number in the appropriate field and press the [Next] button.



In the next step, enter your data (if you lose the serial number we will be able to find it for you in our database).



The activation process has been successfully completed, press the [Finish] button to run the software in a full mode.

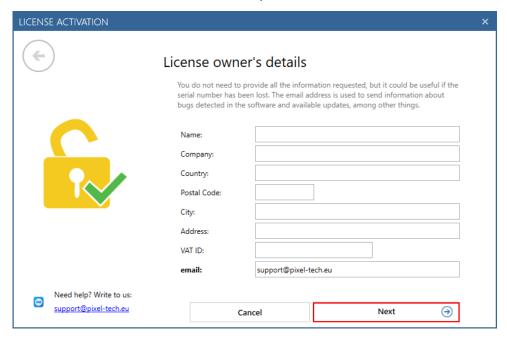


NOTE! The terms of the License Agreement allow the license to be transferred to another computer. To do this, DEACTIVATE the license on the computer where it is used, and then perform the activation process on the new (other) computer. To deactivate the license, use the [Deactivate] option available in dlsPrintProcessor (>> 1.4.3).

1.4.2 Activation using a USB dongle key

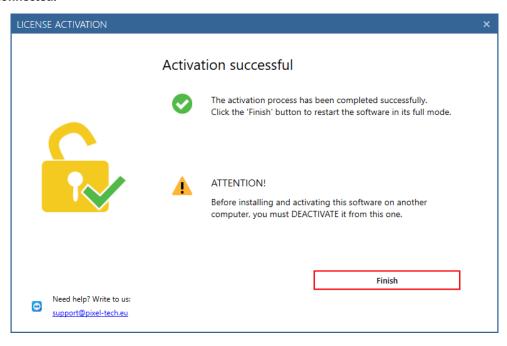
NOTE! Remember to insert the USB dongle key into the computer before running dlsPrintProcessor.

After pressing the [Activate now] button in the first window of the license activation process, the software reads data from the USB dongle key automatically. Enter your data in the window that appears (in case of problems with your license we will be able to find it in the database) and press the [Next] button.



The activation process has been successfully completed, press the [Finish] button to run the software in the full mode.

NOTE! Information about the possibility of deactivating the license should be ignored. The USB dongle key license is not associated with one computer. The software works in the full mode on a computer with a USB dongle connected.

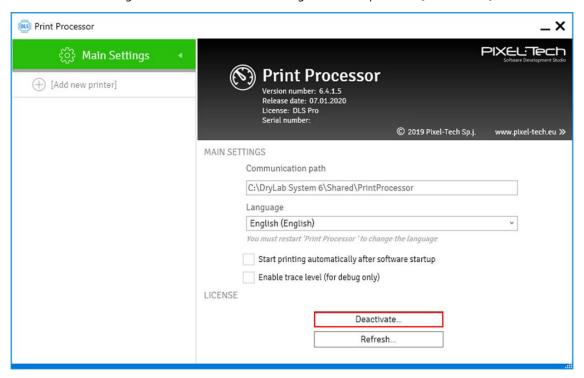


1.4.3 License deactivation

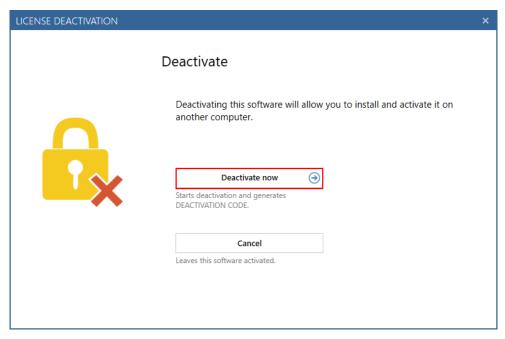
The license deactivation is done in dlsPrintProcessor with Internet access and is fully automatic.

The license deactivation feature allows you to transfer the license to another computer. **NOTE!** This option is only available for licenses activated with a serial number. The software with the USB dongle key is not associated with one computer and always works in the full mode on the computer to which the dongle key is currently connected.

To deactivate the license, go to the dlsPrintProcessor configuration and press the [Deactivate...] button.



In the next step press the [Deactivate now] button.



The license has been deactivated and it can be activated on another computer (>> 1.4).

2. dlsPrintProcessor software

dlsPrintProcessor is a photo processor for automatic processing of orders sent from dlsPrintMaker. Pictures are captured in a completely automatic way, without a user intervention. After receiving information about the arrival of the order, dlsPrintProcessor begins processing the photos and then passes them for printing or saving.

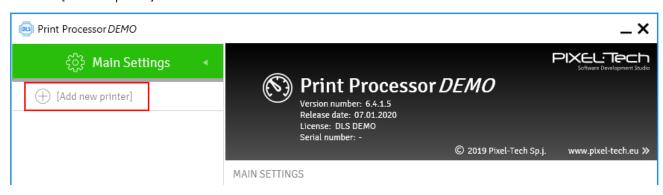
The dlsPrintProcessor software is installed only on one computer - the main graphic station, which must have a direct connection to a printer. On other computers in the system (in case of the Pro license type) only dlsPrintMaker software must be installed - from these computers (additional graphic stations) orders are sent to dlsPrintProcessor.

2.1 Configuration of printers and formats

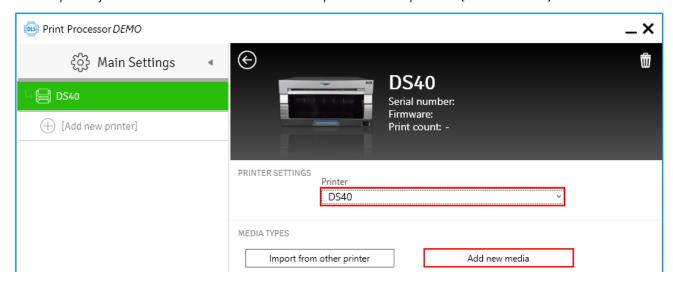
Go to the dlsPrintProcessor configuration to add your printers and their supported paper types and formats.



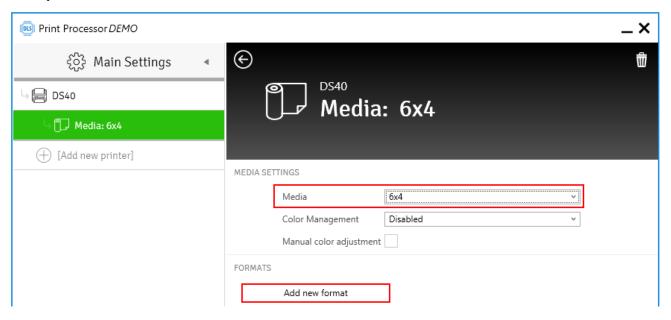
Press the [Add new printer] button on the left hand side of the window.



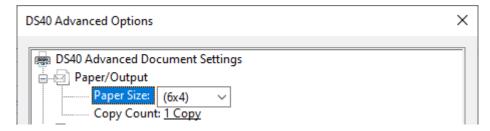
Select a printer you want to work with in DLS from the drop-down list and press the [Add new media] button.



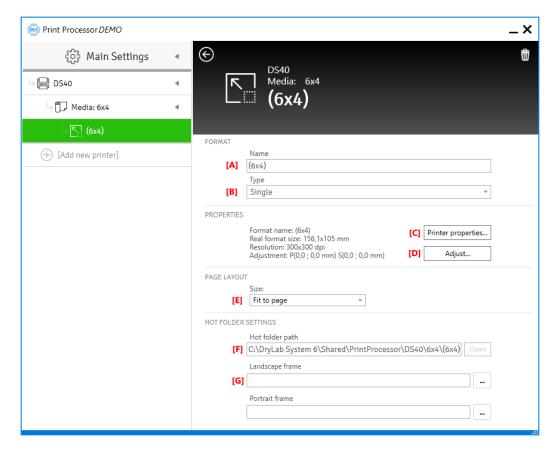
In the next step, select a medium on which you want to work from the drop-down list. **NOTE! The issues of color management and manual color correction are discussed in the chapter** >> **2.1.1**. Then press the [Add new format] button.



The printer driver window will be shown, where you must indicate the target paper size (and configure other options if needed) and confirm it with the [OK] button. **NOTE! dlsPrintProcessor saves its own printer driver settings.**These settings are not transferred to the printer driver available under Windows. Similarly, changes in the printer driver settings made under Windows are not transferred to the DLS settings automatically.



In the New format window you can:



- [A] change a format name,
- [B] choose a type of a printout (single photo or index). In case of the index, the photos will be printed as thumbnails (you must additionally indicate how many thumbnails should be on a single sheet),

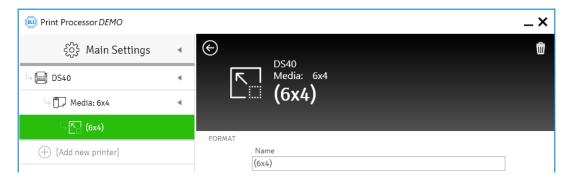


- [C] open the printer driver window,
- [D] perform a format calibration the calibration is used to make a detailed correction of a paper offset in the printer and its size, which allows you to eliminate incomplete printing of a page visible white borders on pictures (calibration instructions are presented in chapter >> 2.1.2),
- [E] define the way the page is printed (whole page or only a specific area of it is filled),

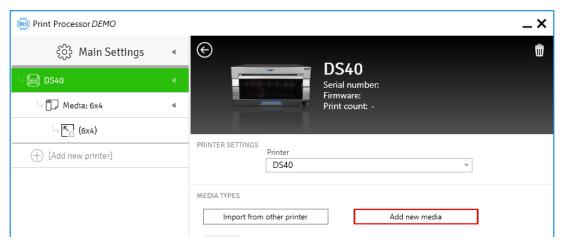


- [G] check the location of the HotFolder directory and open it orders prepared in dlsPrintMaker and sent to print are sent to this directory. Manually copying files to the HotFolder directory will also automatically transfer them to print,
- [H] set frames that will be automatically imposed on all printouts.

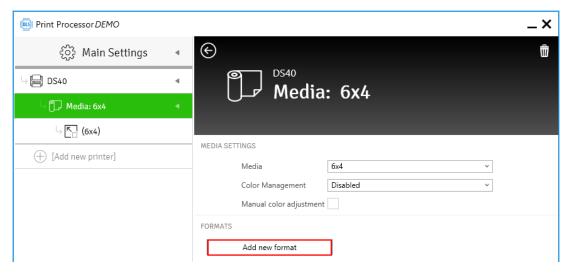
Configuration of printers, media and formats added is built in the form of a list on the left hand side of the window.



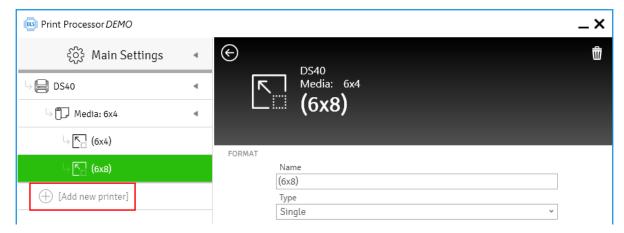
To add another medium for a given printer, select the printer in the list and press the [Add new media] button.



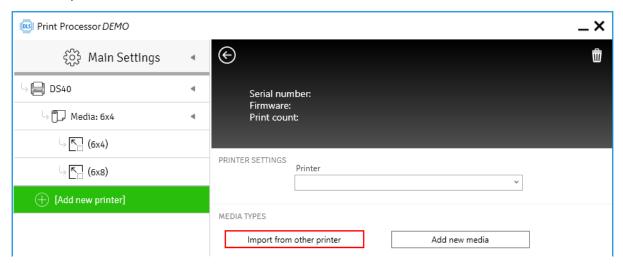
Similarly, to add a new format for a medium, select the medium in the list and press the [Add new format] button.



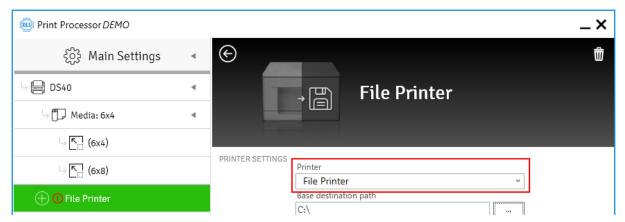
To add another printer (in case of the Pro license type), press the [Add printer] button available at the bottom of the list of printers and repeat the steps described above.



If you are adding several printers of the same type, you can copy once created media and formats using the [Import from other printer] button.



The Pro license type has an additional functionality: a file printer. It allows you to save the processed order (with imposed cropping and corrections) into the directory structure (instead of sending it to print). The file printer is available by default in the list of printers.

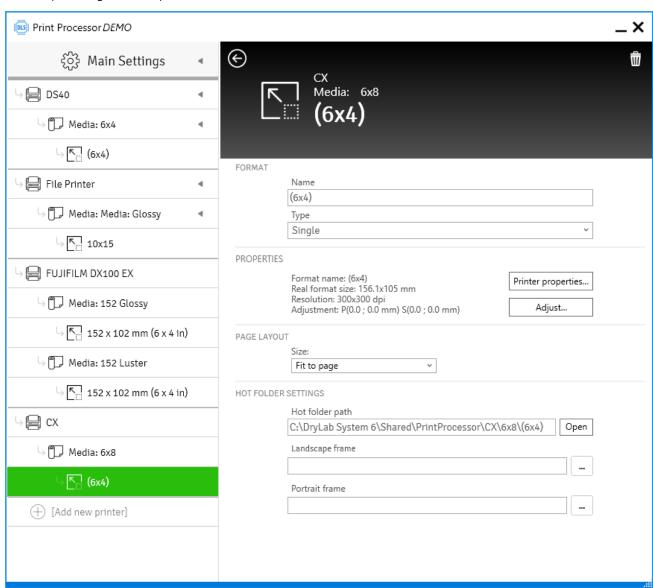


A position of printers, media and formats on the list can be changed - by dragging an item with the left mouse button pressed.

Deleting a printer, medium or format is possible by selecting it on the list and pressing the button at the top right corner of the window.



An example configuration of printers, media and formats looks as follows:

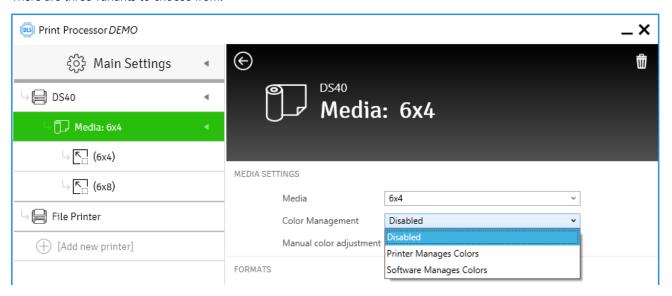


2.1.1 Color management

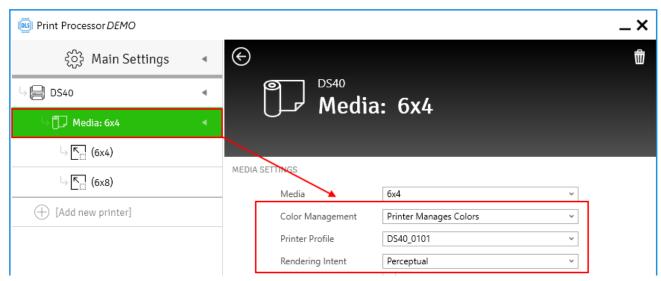
DLS processes photos in the Adobe RGB space, providing the ability to manage colors at the same time.

NOTE! By default, color management is disabled in the DLS 6 software. Furthermore, the software works on private settings - it does not transfer the printer driver settings from Windows to its configuration. If DLS 6 is to use profiling, it must be configured in it.

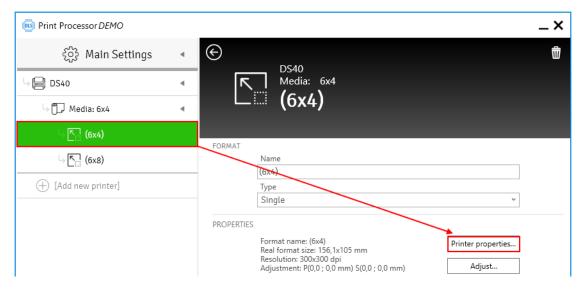
There are three variants to choose from:



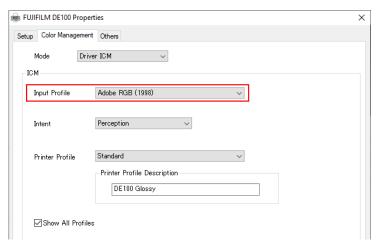
- Color management disabled the software does not affect a file sent for printing in any way, it does not
 change the colors (and other values) of the source file. At most, it can take into account manual corrections
 imposed during photo editing in dlsPrintMaker or imposed by I2E. Printing is done with the default printer
 settings (not the Windows printer driver settings).
- The printer manages colors color management must be set in the printer driver opened in DLS 6. The software does not affect the file sent for printing in any way, does not change the color (and other values) of the source file. At most, it can take into account manual corrections imposed during photo editing in dlsPrintMaker or imposed by I2E. Color management should be enabled at the medium level (an indicated ICC profile is only used for possible screen color simulation):



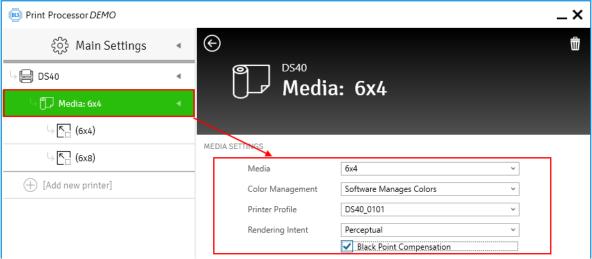
then go to the paper size level, open the printer driver, and make appropriate settings.



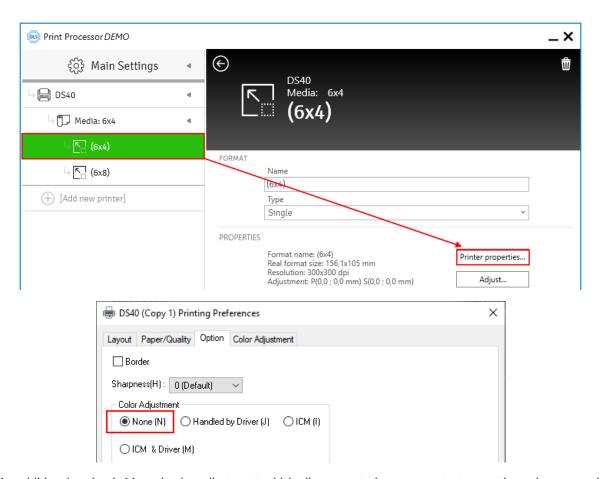
NOTE! If the driver gives the option to indicate the input file profile, choose Adobe RGB (not sRGB), because DLS 6 processes photos in the Adobe RGB space.



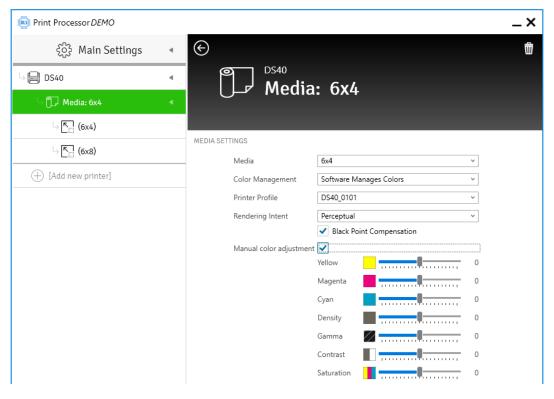
 The software manages colors (the most optimal setting) - DLS 6 performs all necessary color settings for the selected printer. It is recommended to enable [Black Point Compensation] too.



NOTE! You must turn off color management in the printer driver opened in DLS 6.

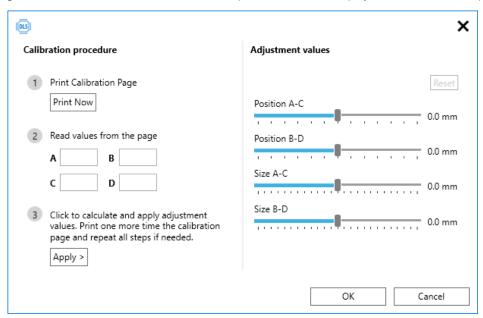


An additional option is Manual color adjustment, which allows you to impose constant correction values on each printout.

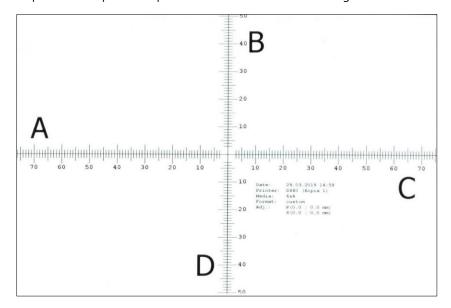


2.1.2 Calibrating the size and format offset

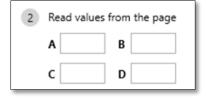
The DLS software allows you to make a format correction so that the entire area of the paper is precisely printed. After pressing the [Calibration ...] button, the calibration procedure will be displayed. Follow the description.



The calibration card printed in step 1 of the procedure contains the current image of the format settings.



Read the A, B, C and D values from the printout obtained (the value at the intersection of the axes with the edge of the paper) and enter them in the corresponding fields in step 2 of the procedure.



After entering all the values, press the [Apply] button and confirm the changes by clicking [OK].

2.2 Features available in the main software window

A view of the dlsPrintProcessor main window depends on the purchased license type but in every type the software communicates with printers and shows their availability status. There is possible to:

- open the user manual,
- open the software configuration,
- enable/disable orders sending to the printer,
- preview a current status of orders sent and cancel them if needed.

Basic license type (printer enabled):



Standard license type (printer disabled):

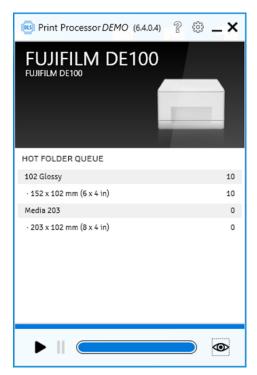


Pro license type (various printers):



2.2.1 Pending orders management

Orders that have not yet been printed can be canceled by the user from the dlsPrintProcessor main window. To be able to delete orders, stop the dlsPrintProcessor software by clicking the [Pause] button. Then press the button and double click on the selected item.



A directory will be opened from which you can delete pending orders.

3. dlsPrintMaker software

The dlsPrintMaker software is installed on the main graphic station, and in case of the Pro license type also on additional graphic stations. The software is used to prepare photos for printing by cropping them, imposing various types of corrections and inserting additional elements on the photos, and then sending them to dlsPrintProcessor.

3.1 Accepted input file formats

Graphic file formats accepted in the software are:

Graphic file format	s	File formats from digital cameras			
BMP, DIB (Windows Bitmap) DB (Windows XP Thumbnails) GIF JPG, JPE, JPEG, THM (JPEG) JP2, JPC, JPF, JPX, J2C (JPEG 2000) PDD, PSD (Adobe Photoshop) PNG (Portable Network Graphics) TIF, TIFF		MRW (Minolta Raw) ORF (Olympus Raw) PEF (Pentax *ist D) PMP (Sony Digital Camera) RAF (FujiFilm Raw S2 Pro) RAF2 (FujiFilm Raw S5000) RAF7 (FujiFilm Raw S7000) RAW (Leica Digilux 2) SRF (Sony DSC-F828)			
Others					
AWD (Microsoft FAX) BRK, BRT (Brooktrout FAX) CAL, CALS (CALS Type 1) CAM (Casio QVxx) DCX CRY (Fleeb Bit) CAM (Casto Bit) CAM (Casto Bit) CAM (Casto Bit)		iBitMap) map) pple PICT)	RGB, BW, RGBA (SGI Image File) SFW (Seattle Film Works) TGA (Truevision TARGA) WBM, WBMP WAP		
FPX (FlashPix) FXD, FXR, FXS (WinFax) ICO (Icon) IFF (Amiga IFF)	PGM (Portable Greymap) PNM, PPM (Portable Pixelmap) PSP, PSPIMAGE (Paint Shop Pro) RAS (Sun Raster)		WMF, EMF (Windows Metafile) XBM (X BitMap) XPM (X PixMap) XWD (X-Windows Dump)		

3.2 Software possibilities in the field of photo processing

Two types of photos can be prepared in the DLS software:

• **single photo** - a standard photo type printed on various paper sizes. Various types of corrections, cropping, frames and other forms of editing can be used in dlsPrintMaker;



• **index** - an ability to make a list of photos (in the form of thumbnails) that were printed as part of a given order. In the dlsPrintProcessor software it is possible to define the number of thumbnails to be included in a single photo.



Pictures can be varied with professional processing:

- SIMPLE frame (the ability of choosing any background's color and frame's color and size),
- ANY frame loaded from a graphic file (bmp, jpeg, tiff and many others),
- Ability of giving a frame to a cropped photo,
- The Text block feature the feature that allows you to place any text or graphics on one side of the photo (4 possible positions).



The software offers a number of possibilities:

- Three MODES for working with photos, accessible at any time (eg. the mode 6, 3 and 1 image in a row),
- AUTOMATIC CORRECTION of digital photos,
- Direct access to the colors CORRECTION (Y, M, C) and the density (D), gamma, saturation, contrast and sharpening,
- The red-eye reduction feature,
- Smooth Cropping with the possibility of twisting the crop and changing its position (Fit in mode),
- Smooth placing of image on a sheet in the selected format (Fill out mode),

- Automatic I2E color correction feature from Colour-Science to enhance the quality of digital images (additionally paid license for one computer, the I2E),
- Monitor's colors profiling, on which processing images to print is done,
- Possibility of connecting and displaying any reference photo,
- Possibility to run the ID Photos Pro 8 software.

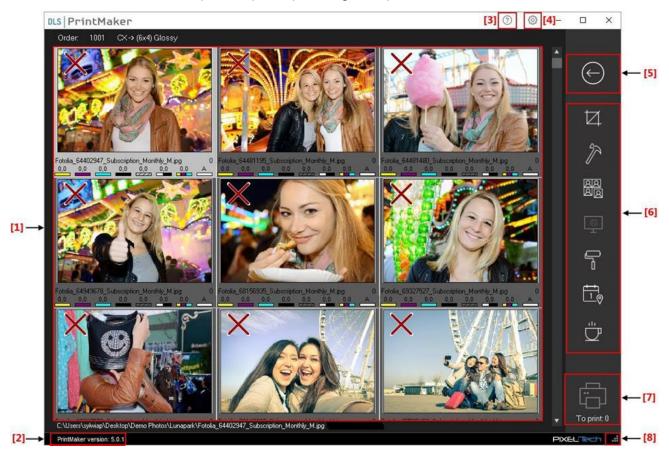
Photos in the dlsPrintMaker can be processed in many different ways. The available functions are:

- Working modes ability to work in one of two modes:
 - Fit in mode used while cropping, allows any cropping of the photo, moving the crop, changing its size and rotation. When operating in this mode, on the photo all the time a frame symbolizing a crop is visible, which helps the user to bring the photo into the desired appearance. It is also possible to add a frame to a photo in width from 3 to 15 mm and in a desired color (>> 3.7.3);
 - Fill out mode which allows you to place a photo on the page in any way: by changing the photo size, changing its position on the page, setting the background color, adding border to a photo, inserting a frame from a previously prepared file, and using the *Text block* feature (>> 3.7.4);
- Corrections the user can make corrections, such as: setting sharpness, saturation, contrast, density, gamma correction, and color (>> 3.7.1);
- Color presets function that allows you to create your own color preset or several presets. You can give
 them their own names, delete, or replace with new presets (>> 3.8.4);
- Use of ICC profiles the PrintMaker supports ICC profiles (both embedded in the image file, as well as profiles of printing devices (for viewing photos);
- Group editing work in the Software can be done in two ways: on the thumbnails or on a single photo. The window with the thumbnails view lets you work with a group of photos at the same time, and their simultaneous editing (selecting a group of photos and making changes, results in its application to all selected images). For a more detailed view of an edited photo, you can work on a single photo, but still all operations made will affect on the whole group (if previously selected) (>> 3.5).

3.3 GUI of the software

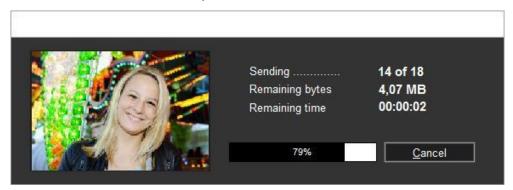
The dlsPrintMaker window is composed of fixed and variable elements. The fixed elements are available at every step of work with the software, the variable elements depend on the step in which the user is located.

The basic window in which the user performs photos processing is composed of several elements:



- [1] Working area a central place on the screen where all operations in progress are displayed. The content of the frame changes is based on user operations. In this part of the software are displayed pieces of information as follows (from the start of the software): a field with printer chooser and a format chooser, a field with the customer name (under this name the order is saved in the archive), selection of source for image files, a list of files in the source specified earlier (please indicate here files to be processed), then the main work area where you are working with photos (a thumbnail view).
- [2] **Software version** in the lower left corner some information about the installed dlsPrintMaker software version is displayed.
- [3] **Help** at any time during the work with the dlsPrintMaker software, you can use the help window. After opening you will see a list of keyboard shortcuts available in the dlsPrintMaker software.
- [4] Settings the user can customize the dlsPrintMaker software to his needs, which allows increasing the efficiency and comfort of work. To display the settings, press the button. After making configuration changes, you must restart the software
- [5] Back button to return to the previous step;
- **[6] Option buttons** on the right hand side of the dlsPrintMaker software option buttons are located. Their availability is changing depending on the step in the software in which the user is at the moment. Option buttons allow you to get to the functions, thanks to which the user can process photos.

- [7] **Printing / Saving buttons** clicking on this button opens a list, where the user can choose printing or saving processed order;
- [8] Changing window size to resize a window, press and hold the left mouse button on the target area and drag it in the desired direction the size of the window will change.
- **[9] Progress bar** a progress bar is invisible during photos processing. It always appears during sending photos from the dlsPrintMaker and is divided into two stages. Stage I is locking the work with the software during this stage photos are copied from the media to the archive directory. Stage II works in the background during this stage we can continue the work, and the software will continue in the background sending photos (the progress bar will be displayed on the title bar of the software). Placing the mouse cursor on the progress bar displays a window with additional information about sent orders: at what stage of processing the current order is (how many images were sent), as well as information about orders waiting to be sent. When the progress bar disappears it means that the order has been sent successfully.

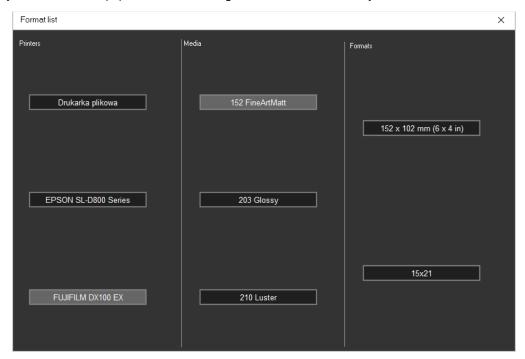


3.4 Working with the dlsPrintMaker

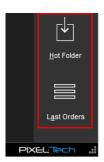
Working with the dlsPrintMaker is based on making 5 steps, which are described in the following chapters.

3.4.1 Step 1 – Choosing a printer and a format

Choose a printer, media and a format, on which a printing will take place (or in case of the PRO license type order will be saved to a directory structure). **NOTE! To be displayed, those elements must be previously (before starting work with the dlsPrintMaker) defined in the dlsPrintProcessor (>> 2.2)**. A list of printers is located on the left hand side of the software's window. To select a printer, click on it with the left mouse button. Then, in the same way, select media and paper format. Indicating a format will automatically switch the user to the next step.

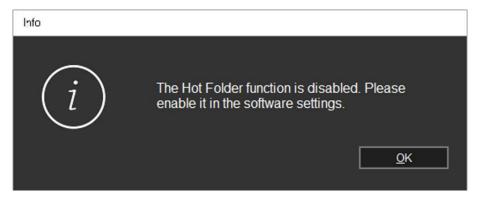


On the right hand side of the choosing Printer and format window, there are also two buttons giving additional features in the software: *Hot Folder* (description of the feature in the chapter >> 3.5.1.1) and *Last Orders* (description of the feature in the chapter >> 3.5.1.2).

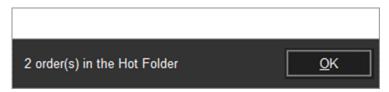


3.4.1.1 Hot Folder feature

The Hot Folder feature is disabled in the software by default. The Hot Folder is an additional input channel to receive orders in the software. After pressing the button, a new window will appear with a message that the Hot Folder feature must be enabled in the software's settings (>> 3.9.5).



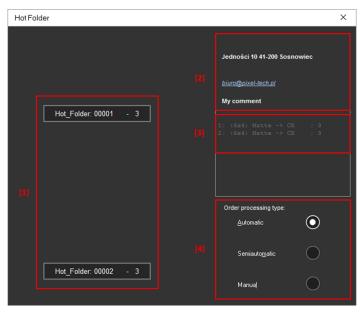
After enabling the *Hot Folder* feature, the software continuously monitors the directory specified in the settings. Upon receiving an order the software will generate a notification about new orders available (on the message a number of orders is given). The notification window can be closed by pressing the [OK] button.



To go to the window with orders, press the [Hot Folder] button in the main dlsPrintMaker window.



A window with a list of orders for printing / saving will appear.



The window is composed of the following elements:

[1] On the left hand side of the window a list of orders is displayed. Each order is described by 3 items:

- a. Source np. Internet
- b. Order number np. 000037
- c. Number of printouts in a given order

[2] In the upper right part of the window information about the customer and the way of order completion is displayed:

- a. Customer name
- b. Address
- c. E mail
- d. Possible customer comments
- e. For a preview of individual elements of the order: Printer, Format, Number of printouts
- [3] The list containing all the information about each of the elements of the order, divided into: Format -> Printer

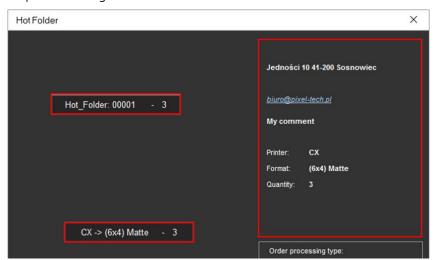
> Number of printouts

[4] In the bottom part of the window a panel of order completion is displayed. Depending on the customer settings, the order can be completed in 3 ways:

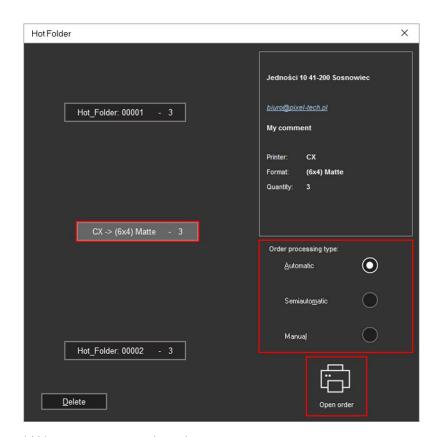
- a. Automatic the order is completed fully automatically without an operator intervention. After selecting this type of completion, the order is automatically sent to print / save;
- b. Semi-automatic the order is completed after the prior approval by an operator. During the completion of the order the operator can only affect on the crop of photo and has the ability to skip a photo in the order completion. To skip a photo, select the "0" number any other value sets the number at preset by the user. During sending the order the operator can enter a comment, which by some systems will be automatically converted into a report sent to the customer;
- c. Manual the order is completed by an operator. The operator has available the full software functionality during the completion of an order.

The choice of an order to completion takes place by clicking on it with the left mouse button. A printer will be displayed, on which the order can be completed, while on the right hand side details of the order will be shown. Each order is divided in terms of the format and method of cropping. All elements of the order are displayed and are described as follows:

- a. Name of a printer on which the printing of an order will take place
- b. Format on which the order will be completed
- c. Number of printouts in a given order.



Click on the choosing printer and format button, select a type of order completion and click on the [Open order] button.



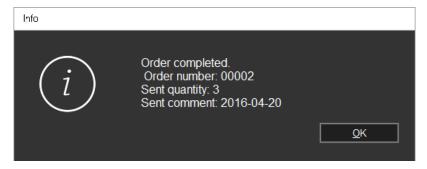
The user can also add his own comment to the order.



Orders sent from the Hot Folder are still visible in the orders archive as the Hot Folder orders and are treated with the same restrictions dependent on the completion way.

Available ways of an order completion depend on a way of sending the order by a customer. In case a customer sends an order in automatic or semi-automatic way, the manual way of completion won't be available.

After the completion of an order, it will be automatically removed from the list of pending orders. The operator will be informed with a message about the completed order.



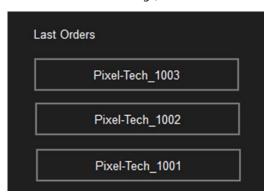
Information about the completed order includes:

- a. Order number
- b. Number of printouts sent in this particular order

c. The comment that was entered by the operator during the completion of the order If the order is already prepared on another graphic station, the software will display a message informing about this fact.

3.4.1.2 Last Orders feature

In the Last Orders all orders processed in the dlsPrintMaker are saved. After clicking on the [Last Orders] button, a list of orders is shown. The user has the ability to load any previously prepared order and reprint it (the number of memorized positions is dependent on the software's settings).

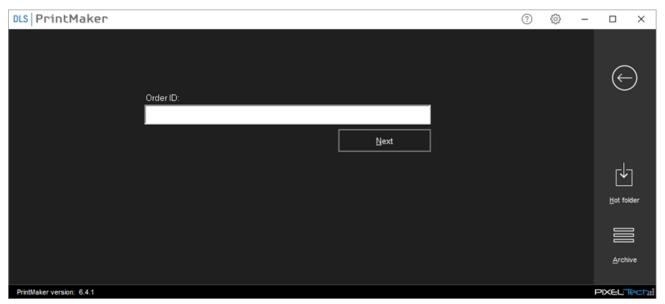


3.4.2 Step 2 - Opening a new order

Enter a customer's name to open a new order (the name is used to naming the order in the Last Orders) and press the [Next] button.

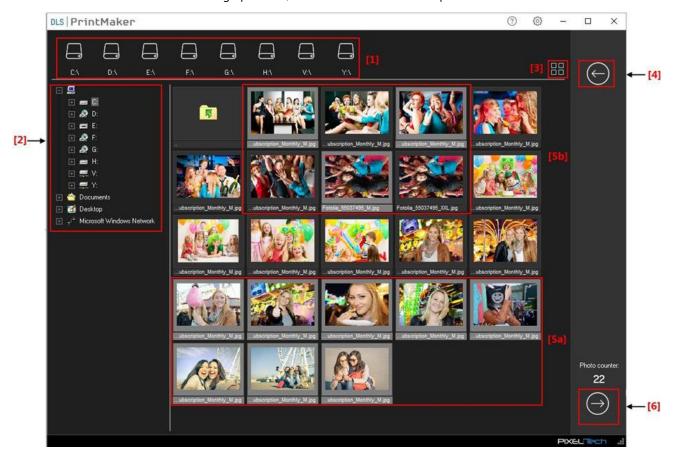
When filling out the [Order ID] field remember not to use the characters: '\' '/' ':', '*', '?', '''', '<', '>', ' If they are used in the text, the dlsPrintMaker converts them automatically into the '_' character.

NOTE! Entering a name is optional (the field can be left blank) - if a name is not specified, the order will have just a number in its name.



3.4.3 Step 3 - Indication of source files

In the next window indicate a source of graphic files, on which the work will take place.



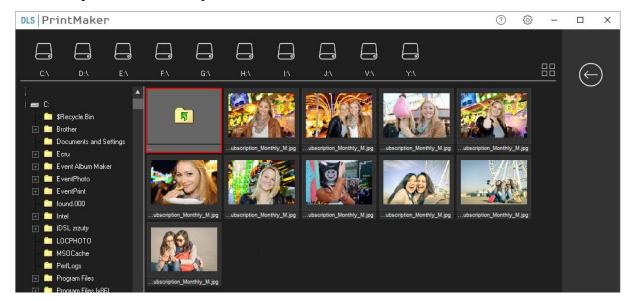
Indicating files is done in accordance with the standard method of selecting and opening folders and files in Windows. First, select the source where the files are located. In the upper part of the window quick access keys symbolizing drives are located [1].

Each drive is assigned to one button. Buttons can have the appearance in line with a user's requirements and facilitates the identification of the drives - the user configures these data himself (>> 3.10.4). The next step is to choose a folder. On the left hand side of the window a list of directories is available [2], on which you have to find the directory, where the files you need are located. Directories can be searched by using:

- keyboard using the buttons: [Down arrow] [Arrow up] [Left arrow] [Right arrow],
- mouse.

After selecting the folder, files located in it will be automatically shown. Files will be displayed depending on the state of the button [3] – if it is pressed, the files are displayed as a list, and when the button is disabled - the files are displayed as thumbnails. Files are displayed in the middle of the window, which allows the user to view selected files, even before they are loaded into the software.

NOTE! To processing can be transferred all files in a given location or only selected ones. If all photos from the directory should be selected, just click on the folder icon.



For files that follow one after the other, just select the first and the last file while holding the SHIFT key at the same time **[5b]** – all files between them will be selected. Once selected, click on the [Display the selected thumbnails] button. For files that are separate from other files, you must select all the files at once by holding down the CTRL key **[5a]**. Once selected, click on the [Display the selected thumbnails] button **[6]**.

The final image selection and their transmission to the processing takes place after pressing the button:



3.4.4 Step 4 - Processing orders window

In the next step, go to the detailed photos processing. Photos can be processed while working with thumbnails or working with a single image. In the upper left corner of the window information about the number of currently processed orders and about the chosen printer/ is shown.



Additionally, on each photo a sign X is shown - it means that the pictures haven't been selected for printing / saving yet (not specified number of copies to be printed / saved). **NOTE! In the software's settings you can set a default number of copies to be imposed on each photo, for example 1. In such case, the X sign will display only on photos with the 0 value.**

Feasible steps in the photos processing window are: cropping, any position of the photo on the page, changing the photo size, setting of color corrections, density, contrast, saturation, sharpness and gamma. In addition to photos we can attach items such as: frame, border, text created using the *Text block* feature (**NOTE! Available editing options and working modes are discussed in chapter** >> 3.7).

3.4.5 Step 5 - Sending files to print/save

Sending photos is the last stage of working with the dlsPrintMaker. After downloading photos from the source,

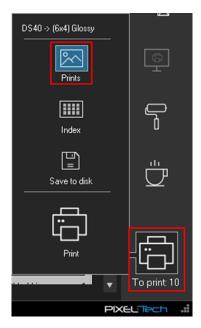
making the necessary edits, just press the To print: 10 button, to begin the process of sending. When you press this button, a window with sending options appears.



- [1] **Prints** used to send single photos (>> 3.4.5.1)
- [2] Index used to print a page with thumbnails of photos (>> 3.4.5.2)
- [3] Save to disk used to save photos as files (>> 3.4.5.3)
- [4] **Print** used for final acceptance and sending an order, the button is disabled until you select one of the options above.

3.4.5.1 Sending single photos

The sending single photos feature allows you to send traditional, standard photos. It does not require any additional settings after pressing the [Print] button, and the photos are sent in the form in which they were displayed in the thumbnails window. This option can be freely combined with any other during the same sending (e.g. at the same time the order can be saved to disk).

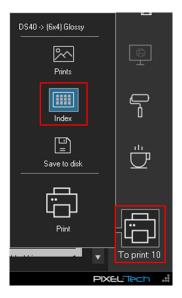


If you select the [Prints] option, and then press the [Print] button, the sending single photos process will start. A new window with information about the sending progress will appear. It can be read which photo is currently being sent, what the total files size (in megabytes) remained to be sent is, together with the approximate time to complete.

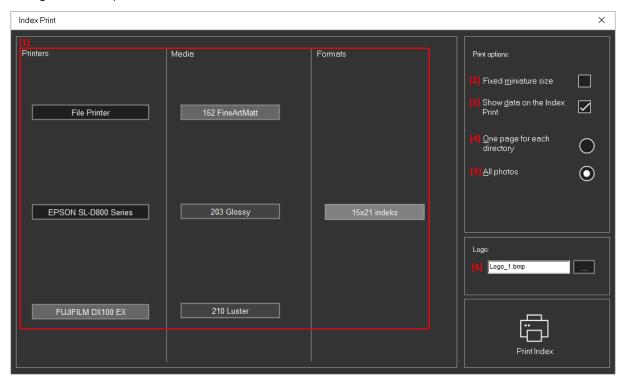


3.4.5.2 Sending photos as an Index

Images sent in this mode are in the form of thumbnails. This form can be treated as a list of photos made in a single order. This option can be freely combined with any other during the same sending (e.g. at the same time the order can be saved to disk).



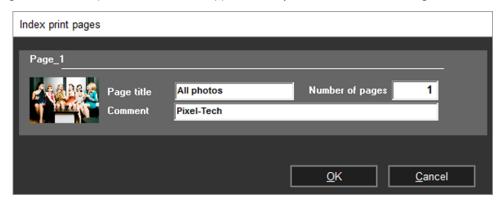
Selecting the [Index] sending type and then pressing the [Print] button will open a window with the possibility of setting additional options.



- [1] List of printers, media and formats on the left hand side of the window a list of printers and formats is visible, where the selection is performed in exactly the same way as in the Step 1 while working with the dlsPrintMaker ($\geq \geq 3.4.1$).
- [2] Adjusting the size of thumbnails into a page the button should be enabled if the images are to be matched and evenly spaced on the page. When the button is turned off, photos will be printed in the pre-defined size, and there is a possibility of leaving a blank space on the page (depending on the number of photos).

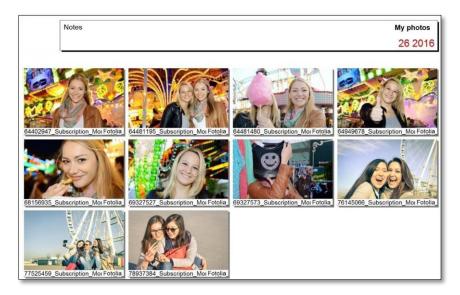
- [3] Adding the date onto printout on the page with thumbnails the current date (date of printing photos) will be printed).
- **[4] One page for each directory** creates one index page from each directory. On the index a number of photos defined during creating an index will be visible.
- [5] All photos creates an index from all the photos selected to be sent.
- [6] Logo the ability to select a logo that will be printed on the Index.

After setting all the above options a window will appear where you can enter the following information:



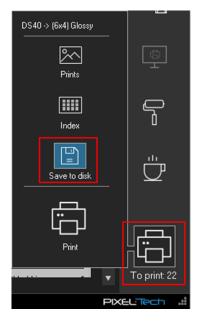
- [1] Page title by default this is a directory name where the images are placed, but it can be freely changed by the user;
- [2] Number of pages number of copies, in which the Index is to be printed;
- [3] Comment e.g. Customer name.

Below an example Index print is presented (using the date on the printout, and fitting in the thumbnail on a page):



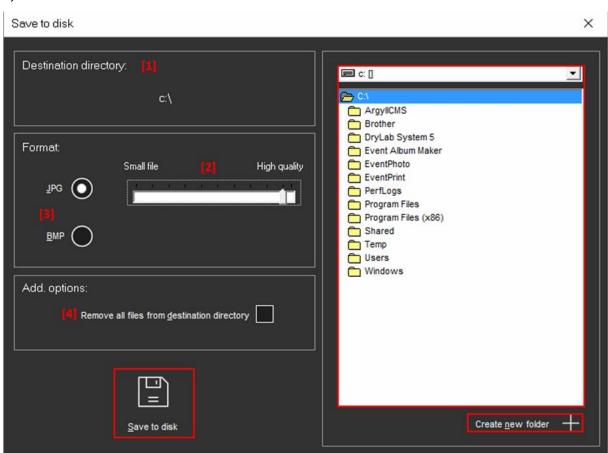
3.4.5.3 Saving files to disk

Selecting this option saves files to disk. This option can be freely combined with any other during the same sending (e.g. at the same time the order can be printed as an Index.



After preparing the images and pressing the [To print] button, select the [Save to disk] button and then click on the [Print] button.

A window with additional settings will appear. The user can save the files in a location, format and quality chosen by him.

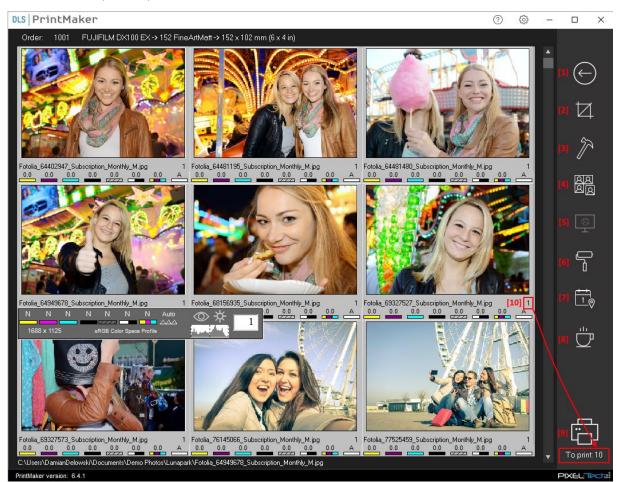


- [1] using the right hand side of the window select the destination directory in which files should to be saved. To add a new directory without having to switch to the Windows window, use the [Create new folder] button;
- [2] set the quality of photos in the JPG format lower for small images or higher for photos that require better quality;
- [3] select one of the two available file formats (BMB or JPG).
- [4] to save new photos, while simultaneously erasing the previous contents of the destination directory, select the *Remove all files from destination directory* option;

Saving to disk follows by pressing the [Save to disk] button.

3.5 Working with a group of photos (group editing)

The advantage of the photos processing window is the ability to view files in thumbnails. From there, all the work with photos is carried out: making all the corrections, cropping, changing the number of copies etc. The main window in this step is composed as follows:



- [1] the button to return to the previous window;
- [2] entrance to the editing tools (>> 3.7);
- [3] entrance to the additional tools (>> 3.8.1);
- [4] opening ID Photos Pro 8 software (>> 3.8.2);
- [5] print color simulation (>> 3.8.3)
- [6] color presets adding, editing and removing (>> 3.8.4);
- [7] timestamp (date taken from the EXIF file);

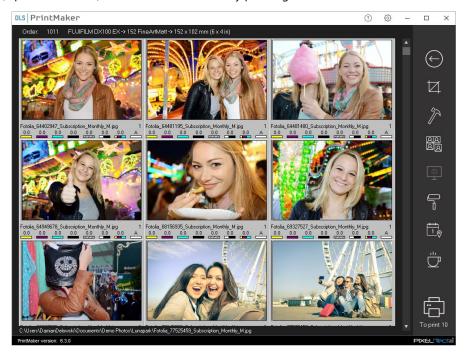
- [8] setting a validity (priority) status for an order (>> 3.8.5);
- [9] sending photos to print/save (>> 3.4.5);
- [10] the total number of copies of photos for printing / writing.

The user can choose from 3 viewing photos modes:

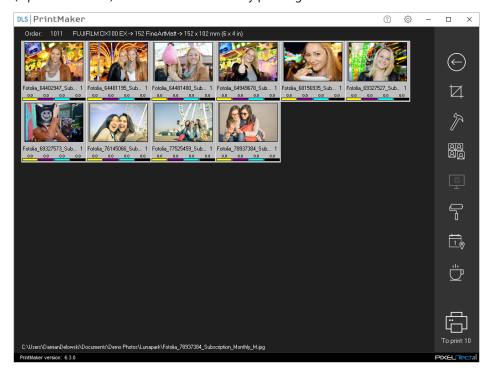
• VIEW 1 (single image) - switch into this mode by pressing CTRL+1;



VIEW 2 (3 photos in a row) - switch into this mode by pressing CTRL+2;



• VIEW 3 (6 photos in a row) - switch into this mode by pressing CTRL+3.



NOTE! Default views (1 image, 3 images, or 6 images) can be changed according to your needs in the software's settings (>> 3.9.1).

All operations performed while working in the thumbnails window can be applied to one selected photo or to a group of photos. To work with a group of photos, mark all the images that are to be a part of the group, and then make the necessary corrections. Images assigned to the group have a clear gray frame around – to those photos corrections made will apply.



Photos that should be combined into a group can be selected:

• using the [Shift] key - click on the first and the last photo, and all the images between them will be

selected;

• using the [Ctrl] key – press and hold down the [Ctrl] key and select photos one after another with a single click with the left mouse button - the option is used to select photos that aren't located consecutively.

NOTE! During a work with a group of photos, only the cropping requires a work on a single image. Despite selecting a group, the cropping will apply only to one, currently active photo.

3.6 Setting the number of copies for a photo

To define the number of photos to print, select the thumbnail (or a group of thumbnails) and then set the mouse cursor over the photo correction bar (the area that is marked on the image below in red).



A menu will occur where you can edit the number of photos and corrections value.



In the [Number of photos] field use the left and the right mouse buttons respectively to increase or decrease the value (left click increases the value, while the right one – decreases it).

The number of copies can also be changed using the keyboard: select a photo or group of photos - and then press the corresponding number on the keyboard – the desired number of copies for each photo (or photos).

3.7 Processing images - available functions in the software

In the DLS software, the user has access to a range of features that allow advanced photos processing - both in terms of color corrections, cropping, and additional elements inserted onto the photo. Part of the features are available directly in the main software's window, and some after clicking the [Editing tools] button, where there are two working modes available – Fit in and Fill out.



3.7.1 Corrections

The corrections bar is located at the bottom of the thumbnail of a photo (regardless of the working mode). To impose corrections, select the thumbnail(s), and then set the mouse cursor over the photo's correction bar (the area that is marked red on the image below).

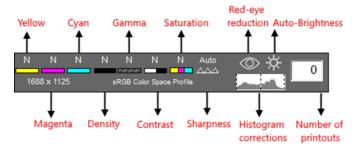


A menu will open where you can edit the values of the individual corrections.



Then, you can freely increase or decrease the value of a correction using the mouse. A single click with the left mouse button increases the value, while with the right one – decreases it. The number can also be changed using the keyboard (>> 3.10).

On the corrections bar the user can change such values as:



The scale of values for all parameters is within the range of: -9...0...+9. The exception is the sharpening, where between the 0 and -1 value the AutoSharpness option is available.

An additional help by determining the color correction is a preview of the color after pressing the SHIFT key, and placing the mouse cursor on a specifying place on the photo. The color value will be displayed in an RGB format.

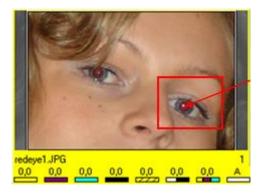
Another element supporting the imposition of corrections is the ability of displaying a reference image. It is defined in the software's settings (>> 3.9.1). It helps to compare whether the imposed color corrections include the appropriate values. To open a reference image press the [F10] key on the keyboard.



3.7.2 Red-eye effect

Red-eye on the photograph is an adverse effect of light reflection from the fundus of the eye. With the tools for photos processing in the dlsPrintMaker software it is possible to retouch red eyes.

After loading photos into the thumbnails view, the work should be done on a single photo (not on a group of photos). On the selected photo, place the mouse cursor in the middle of the eye, and then enlarge the image by pressing CTRL + Z:



While holding the CTRL + Z (then enlarging is active) - draw with the left mouse button a circle in such a way that the whole red pupil was covered.

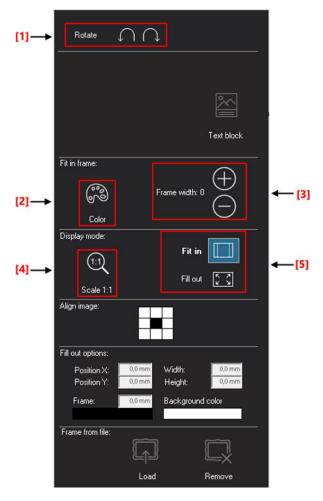


On the corrections panel a red-eye reduction icon is available, which is gray by default. If the function is used at least once – the eye icon turns to red. From this point you can change the function mode by clicking on the eye icon. There are three modes available:

Icon appearance	Action	Appearance on the screen
	DISABLING OF RED-EYE REDUCTION FEATURE. The reduction is not visible on the screen and won't be applied into a printout.	
⊕	Displaying points of reduction on the photo. In this mode it is possible to simply remove a reduction - just right-click on the area of the reduction point which has to be removed.	
	ENABLING OF RED-EYE REDUCTION FEATURE. All the changes are constantly observed by the user.	

3.7.3 Fit in mode

In this mode, first of all, the possibility of any cropping the photo is possible (>> 3.7.3.1). Other possibilities in Fit in mode:



- [1] buttons to rotate image preview by 90°
- [2] changing frame color, which can be added to photos in the Fit in mode
- [3] buttons to change the size of the frame
- [4] scale 1:1 using this option displays selected image in a 1:1 scale in relation to the resolution in which it is to be printed.
- [5] mode switcher switching between Fit in and Fill out modes takes place by pressing the appropriate button

3.7.3.1 Cropping of photos

It is a working mode, which allows you to set the cropping frame on the screen. The cropping feature allows the separation of an area from the entire photo, which will be the final printout (an area visible inside the frame will be printed on the final printout). Cropping is only available in the Fit in mode, so make sure it is turned on. The other use of this mode is described in chapter >> 3.7.3.



You can change the crop size, crop position and its inclination (angle).

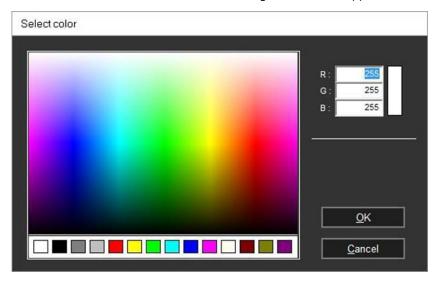
- To change the size of the crop, place the mouse cursor on the edge of the crop, press the left mouse button and while continuously holding it change the size.
- To change the position of the crop, place the mouse cursor on the area of the crop, press the left mouse button and while continuously holding it move the crop into the desired position.
- To change the angle, place the mouse cursor outside the crop, press the left mouse button and while continuously holding it rotate the crop at any angle. If during the rotation the [CTRL] button is pressed, the crop will rotate in every full 15°.

3.7.3.2 Frame in the Fit in mode



After pressing the

button a new window with a full range of colors will appear.



A color can be selected directly from the color palette, or by typing the corresponding RGB values. Next to the color palette, immediately after the changes a preview of the color preset will be visible.

The size range of such frame is from 3 to 15 mm, and it can be set by using the buttons:



The + button increases the size of the frame, and the – button decreases the frame.

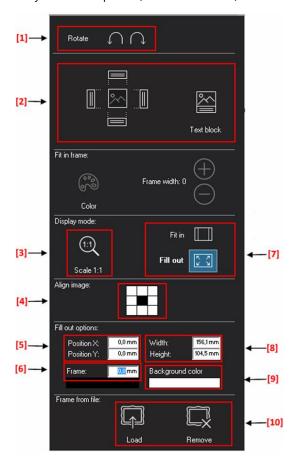
NOTE! After introducing all the changes in the frame color and size, the end result is invisible on the photo. Frame settings can be checked in the thumbnails window. Directly below the photo some information about the selected color and size of the frame is placed (presented in a graphical form).



3.7.4 Fill out mode

A working mode, in which the piece of paper representing the final printout is visible. This allows you to freely resize the photo and position it on a page and observe the changes in the preview all the time.

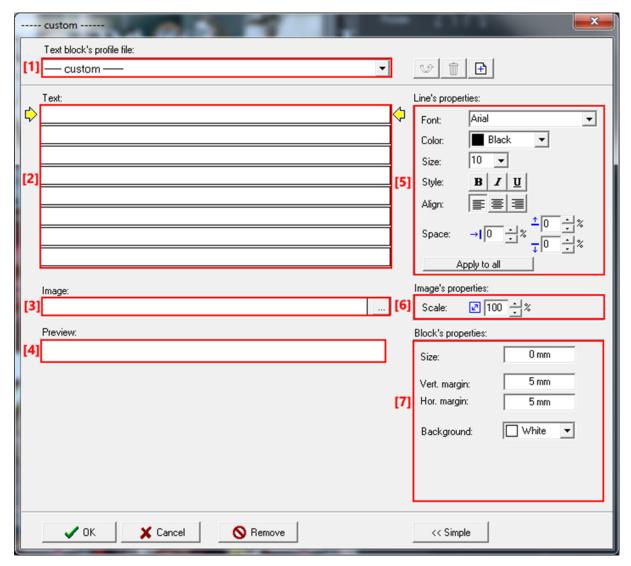
Additionally, you can also enhance the appearance of the final printout by adding your own frame, colored background or your own text on any side of the photo (*Text block* feature).



- [1] Photo rotation buttons to rotate image preview by 90°.
- [2] **Text block** feature it allows you to place an additional description on one side of the photo. It can be in the form of content (text) or graphic (e.g. the logo). Detailed description $\geq > 3.7.4.1$.
- [3] Scale 1:1 using this option causes print of an image at a scale of 1: 1 in relation to the resolution of which it will be printed.
- [4] Button to switch between Fill in and Fill out modes switching between modes is done by pressing the corresponding button.
- **[5] Aligning the position of an image** in this field you can align the position of the image on the page. Adjustments can be applied to one from sides of the paper, or by centering a photo.
- **[6] Position** it allows you to set the upper-left corner of the image in relation to the paper. Coordinates start from the 0,0 point in the upper left corner of the paper.
- [7] Size it allows you to adjust the printout size, without any distortion, while maintaining proportions.
- [8] Frame the ability of inserting a simple photo frame in a specific size and color;
- **[9] Background color** clicking on the [Background color] option gives you the opportunity to choose the background color (>> 3.7.4.3)

[10] Placing and deleting the prepared frame – this option gives you the ability to place (or remove) the previously prepared frame (stored as a file). Press the [Load] button to open the menu with directories and files, and locate the file containing the frame, then insert it into a photo and adjust its position (>> 3.7.4.3).

3.7.4.1 Text block feature



The screenshot above presents the view of a window where you can add a text block into a photo. Normally, after entering this feature, only the left part of the window is shown, where the following options are available:

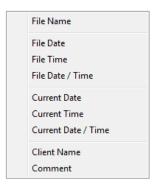
- [1] profile file the ability to choose a file with a text block's profile (from the drop-down selection list).
- [2] text the content entered here will be visible on one of the sides of the photo.
- [3] image path to the file with an image, which should be attached to the photo (e.g. a logo). This field can be filled by typing the path manually, or by browsing directories (after pressing the button).
- [4] preview shows the preview of the prepared Text block.

NOTE! Going to the advanced properties of a text block is possible by pressing the [Advanced] button. On the right hand side of the screen you will see more options to use:

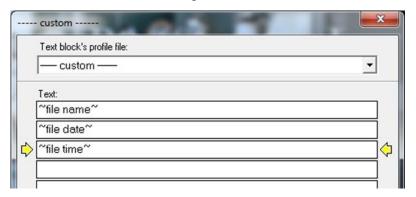
- **[5] text's cropping** a panel with the standard elements for a text formatting (i.e. fonts settings, color, size, style, alignment, etc.).
- [6] scale the ability to change the scale of a photo.

[7] text block's properties – its size, background's color, and margins. With image size set to 0, the automatic adjustment applies.

NOTE! In the Text field it is possible to use ready-variables that can be positioned as a text on a photo. Rightclick on one of the fields and choose a variable from the list. This can be a file name, date, time, client name and a comment.



After selecting one of the options, in the preview window a view of what will be included is shown. Removal takes place by clearing the command from the text block (e.g. ~file name~).



Below a sample printout with a *Text block* feature is presented:



The text block can be located on one of the four sides of the photo. The choice of its location is made by selecting one of the location buttons:



3.7.4.2 Changing the size and position of a photo

A feature that allows you to plan the printable area in an unusual way. The photo can be resized, and can be placed anywhere on the printout.

Make sure that you are working in the Fill out mode (other uses of this mode are described in the chapter >> 3.7.4). In this mode, you can change the size and position of a photo:

- To change the photo size put the cursor at the edge of the photo, then press the left mouse button and while continuously holding it change the size.
- To change the position of the photo place the cursor on the area of the photo, then press the left mouse button and while continuously holding it move the photo to any place on the printout.



3.7.4.3 Adding a frame or a background color

Make sure that you are working in the Fill out mode (other uses of this mode are described in the chapter >> 3.7.4).

NOTE! To add a frame into a photo – a frame must be earlier prepared by the user, and saved as a graphic file.

Press the [Editing tools] button and in the *Frame from file* section, press the [Load] button. A standard window for browsing directories and files will open, where you have to find and open a prepared file with the frame. Confirm your selection by pressing the [OK] button.

A photo with the applied background looks as follows:



NOTE! The transparent color in the prepared frame will be the color in the middle of the prepared file (the color of the center pixel). In the case of frames an Alpha transparency channel for 32-bit files isn't working. Such files are automatically flattened into a 24-bit file.

To select the background color, press the [Editing tools] button and click on the [Background color] field. A window with a rainbow of colors will appear (see image below). Please select a color from a palette of colors or enter RGB values in the RGB fields (if they are known), and then confirm with the [OK] button.



NOTE! Clicking on the leftmost square will set the color of a background into transparent.

3.8 Additional features

Additional features are related to photos and formats in prepared orders.

3.8.1 Features available under the [Additional tools] button



- [1] Deleting photos with the null value this option is useful when working with lots of photos. After using this function all the photos that have a value of zero will be removed from the thumbnails window, which will allow for "ordering" of photos left to send.
- [2] Changing format the ability to change the paper size during the work with the dlsPrintMaker. Despite the format change this function does not require to repeat all operations that were previously made on the photos (except for cropping).
- [3] Adding photo an option that allows loading additional photos from digital files. When you press the [Add photo] button the software will open the selecting files dialog, and the selected files will be added at the end of the list of processed photos.

3.8.2 Open in the ID Photos software

The DryLab System software has a built-in feature of connecting to the ID Photos Pro 8 software.

After processing a photo, or a group of photos (imposing corrections), press the button on the option bar on the right hand side of the window. This will open the photo/photos in the ID Photos Pro 8 software.

3.8.3 Printer color simulation

With this feature, you can view photos using an ICC profile, if it was previously set in the dlsPrintProcessor. If the ICC profile wasn't defined, the feature will be disabled. The result of using the simulation is a preview of a photo on the screen, which will be as similar as possible to the final effect.

To start the color simulation feature press the button on the panel, on the right hand side of the dlsPrintMaker window.

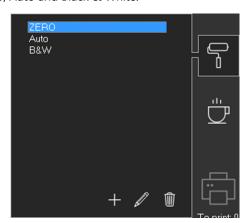


3.8.4 Color presets

This feature gives the possibility to create your own color preset. With your own defined presets, the work is easier, and the preparation of photos is much faster.

To create a color preset, select a representative photo, on which the preset will be set up. Make the appropriate

corrections on the photo and press the button on the right hand side of the dlsPrintMaker window. You will see three default presets: Zero, Auto and Black & White.



To apply the preset to the photo/photos, double-click on the selected preset with the left mouse button.

The user can add, edit or delete color presets.

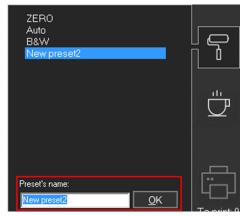
• To add a new preset (after having made the appropriate correction on the photo), press the [Add] button.

In the field that appears, enter a name for a new preset and press the [OK] button.

• To rename the preset, press the [Edit] button, and then type the new name. **NOTE! Changing the name** will overwrite the settings of a preset with the current corrections values.



• To delete a preset, go to the [Color presets], then select the preset on the list and click the [Delete] button [3].



3.8.5 Sending photos mode

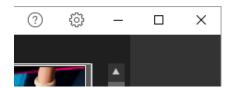
This button is used to set the priority of print. Normally, photos are sent in the [Normal] mode



button to change the priority of sending into the Express mode. An order sent with such a priority will be printed first in the queue.

3.9 The dlsPrintMaker configuration

This chapter describes how to configure the software to achieve the most satisfactory results of work. To go to the configuration window, click the button located in the upper right corner of the main dlsPrintMaker window (the button is visible in all stages of work with dlsPrintMaker):



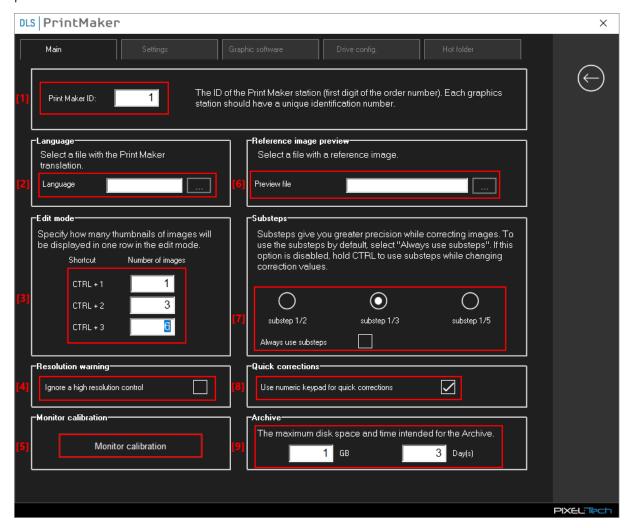
After entering the settings, a new window will appear, where in its upper part tabs are located. Each tab corresponds to a specific setting, and all are described in detail in the following sections:

• Main (>> 3.9.1);

- Settings (>> 3.9.2);
- Graphic software (>> 3.9.3);
- Drive config. (>> 3.9.4);
- Hot Folder (>> 3.9.5).

3.9.1 Main

In the *Main* tab the general software settings are available, which allows for easier and more efficient work with photos.



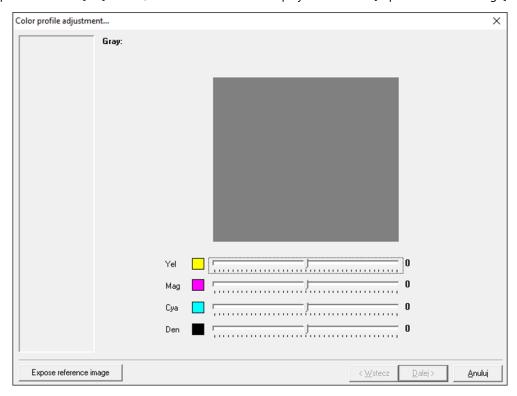
- [1] dlsPrintMaker ID each graphic station operating in the network must have its own ID, which is a unique identifier (the number should be in the range from 0 to 9). Automatically, it will be the first digit by numbering orders.
- [2] Language function for loading the file containing the translation of the dlsPrintMaker interface. To change a language press the button and select your language file.
- [3] Setting the number of thumbnails in a row in the thumbnail window, it is possible to switch between the three available viewing modes ($\geq > 3.5$). In this field the user can configure his own viewing modes. Enter the number of photos to be displayed in one row for each view. NOTE! The amount should not be repeated, and in the case of view No. 2 should be different from the view No. 1.
- [4] High resolution warning if you open files with a very high resolution and send them to print, dlsPrintMaker may not be able to process them correctly (due to the amount of memory allocated to it by Windows). In such

a case, the software displays an appropriate message. To disable file resolution control, select the [Ignore a high resolution control] field.

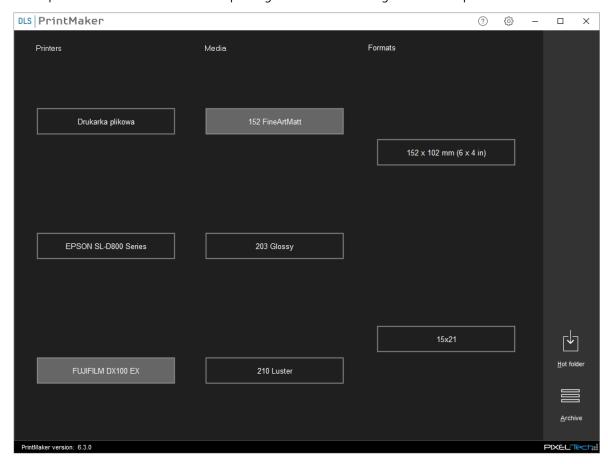
[5] Monitor calibration – option allowing calibrating the colors of the monitor based on the prepared reference image. After pressing the [Monitor calibration] button, a new window opens with information that the reference image must be printed.



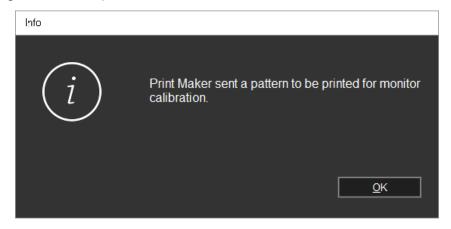
After approval with the [OK] button, a new window will be displayed. Press the [Expose reference image] button.



Select a printer and a format on which the printing of the reference image should take place.



A reference image will be sent to print.



Compare the representation of colors, density, contrast, gamma, etc. on the reference printout and on the monitor. Another options displayed in separate windows should be approved with the [Next] buttons (after making possible corrections). In the last window press the [Finish] button to confirm the calibration.

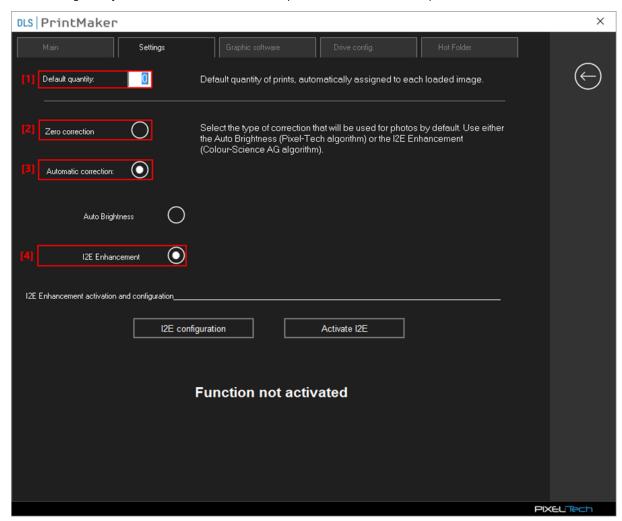
- [6] Reference image preview preview of a photo, with which photos processed in the software will be compared;
- [7] Substeps if this button is disabled, you should hold down the CTRL key while entering the correction after the decimal point. If the button is enabled, the correction will always be selected in decimal values. Additionally, you can choose a substep value choice of stroke of decimal values, e.g. 0.2; 0.3; 0.5.
- **[8] Quick corrections** You can use the numeric keypad to quickly impose color corrections. Shortcuts are described in chapter >>3.10

[9] Last Orders – set the maximum disk space for the Last Orders, where processed orders will be stored.

After configuring the current settings, press the [Back] button and restart the dlsPrintMaker to save the changes; or go to the next tab to continue the changing of settings.

3.9.2 Settings

In the Settings tab, you can set these features which provide a fluent work with photos.



- [1] **Default quantity of copies of photos** the value entered here will be the default number of copies of photos. This amount will automatically be entered after loading files.
- [2] Zero correction enabling zero values of corrections for photos as default. If this option is enabled all uploaded photos won't have automatically plotted any corrections. Enabling this option excludes the enabling of the *Auto Brightness* feature.
- [3] Automatic correction turn on the automatic correction of photos. If the function is enabled photos right after loading are analyzed and automatically corrected. Enabling this option excludes the enabling of the *Zero correction* feature. You should define here the default method, which will be applied to photos (Auto Brightness or I2E Enhancement).
- [4] I2E Enhancement I2E correction feature is discussed in chapter >> 3.9.2.1.

After configuring the current settings, press the [Back] button and restart the dlsPrintMaker to save the changes, or go to the next tab to continue to change settings.

3.9.2.1 Activation and configuration of I2E license

Automatic correction I2E is an additional tool implemented in the DLS system. After the installation each user also has an installed 10-day trial version of I2E. During this period the user has the opportunity to check it and determine whether he will use it in the future. **NOTE! To use the full version of the I2E you must purchase an additional license for each graphic station – please ask about the cost and how to purchase an I2E license by contacting the dealer who supplied the DLS system.**

In order to activate the purchased I2E license:

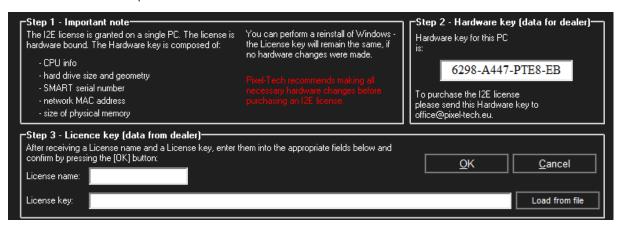
1. In the Settings tab select Automatic correction, and then the I2E Enhancement".



2. An additional part of the window will appear where you should press the [Activate I2E] button]



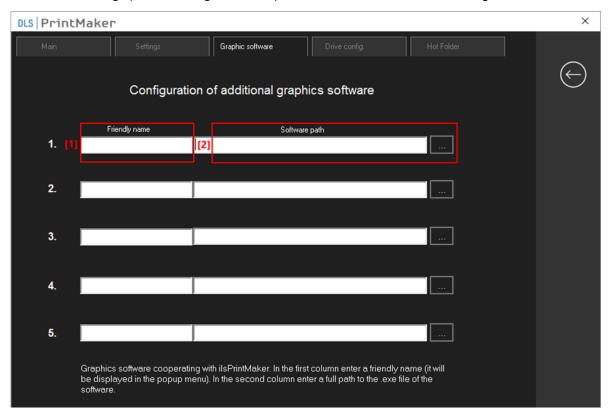
3. Then follow the steps described below:



3.9.3 Graphic software

The dlsPrintMaker can cooperate with other graphic software (e.g. Adobe Photoshop, Corel Draw, Paint). The user can define additional software in the dlsPrintMaker software to save time on switching between them. In addition, each software can be attributed with a friendly name, to be easy to recognize by the user.

To define additional graphic software go to the Graphic software tab and fill in the following fields:



- [1] Friendly name enter your own name for the defined software;
- [2] software path if you know the exact path of the directory for the defined software you can enter it manually.

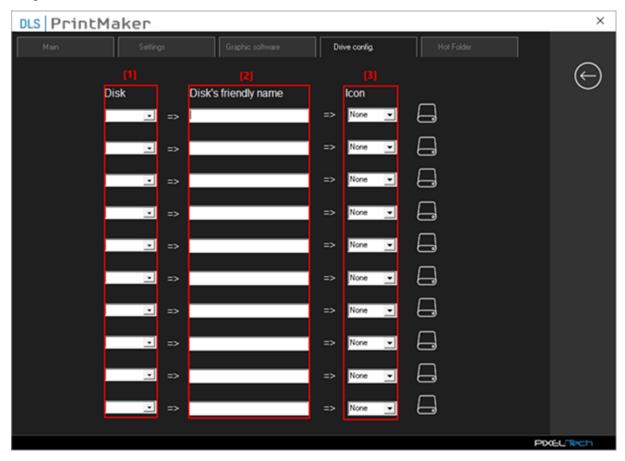
The path can also be found after pressing the button.

After saving changes and restarting the dlsPrintMaker, the name given by the user in the settings will be displayed in the thumbnails view (click on the thumbnail with the right mouse button).

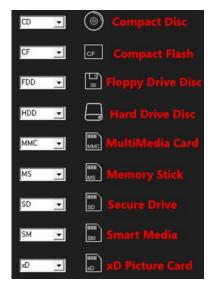


3.9.4 Configuration of drives / disks

The main task of the configuration is to create work environment that is suited to a user needs. For this reason the user can describe with his own names all available drives, and - in addition – he can give them appropriate designation buttons.



- [1] Drive's list a list, in the form of a drop-down menu, of all drives / disk visible in the software.
- [2] **Disk's friendly name** in this field the user can enter the name, which allows him to distinguish the drive / disk from others.
- [3] Selecting the type of media on the drop-down list various storage media, with the assigned graphics, are available. The available media types are:



After restarting the dlsPrintMaker software you can enjoy the new look of the buttons. This view is available at the stage of selecting files from digital sources (>> 3.4.3). Below is an example of the appearance of the window after the disks / drives configuration is visible:

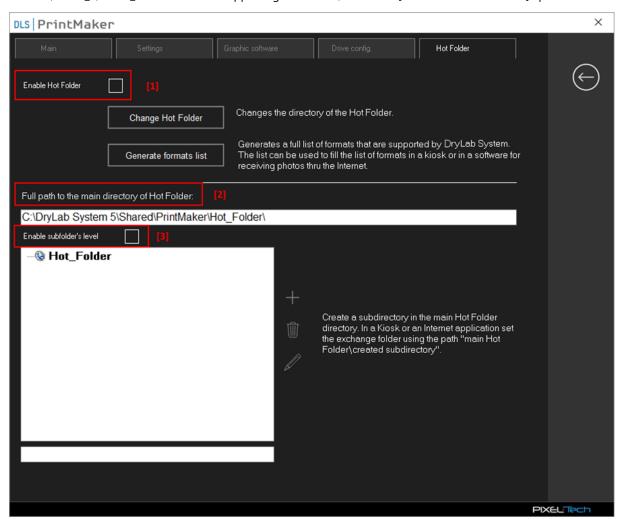


3.9.5 Hot Folder configuration

The DryLab System software is equipped with an automatic photos capture to print. The capture and identification of photos is performed based on an information file, which is located in the directory with the order. The mechanism is based on the principle of work of the DPOF standard (Annex nr 1).

To use the Hot Folder feature, go to the Hot Folder tab:

- [1] Select the Hot Folder feature.
- [2] Enter the full path to the orders directory. This directory with all its subdirectories will be monitored in search of orders based on the DPOF standard.
- [3] Additionally, the software allows you to create subdirectories that are the identifier of a source of photos e.g. Internet, Kiosk_1, Kiosk_2 etc. To enable supporting subfolders, select the [Enable subfolder's level] option.



In order to facilitate the configuration of external software, the possibility to generate a list of available formats has been prepared. To generate a file with the available formats, press the [Generate formats list] button – the generated file named "Device" contains the identification data of all formats that are available in the software (the file structure is described in the Annex 2). The "Device" file will be saved in the main Hot_Folder directory. It should be applied in the "external" software for generating orders. After uploading into the Hot_Folder directory an order together with the identification file, the dlsPrintMaker software will automatically capture such order and depending on the setting will display the order on the screen or will automatically release them to print.

3.10 Keyboard shortcuts

In the dlsPrintMaker software you can perform various operations using the mouse or using the keyboard – with the keyboard shortcuts. In the following table a list of shortcuts that can be used when working with the dlsPrintMaker software is available.

FEATURE	SHORTCUT	ADDITIONAL INFORMATION				
SELECTING FILES WINDOW						
Go to the thumbnails view (after selecting files)	Alt + S					
Switching viewing files modes: list/thumbnails	Alt + L					
Return to the previous window	Alt + R					
THUMBNAILS WINDOW						
Return to the previous window	Alt + R					
Show the cropping tools	Alt + C					
Printer color simulation	Alt + I					
Color presets	Alt + P					
Normal/Express mode	Alt + E					
Show printing options	Alt + S					
Show Additional Tools	Alt + T					
Set sharpening	A					
Set saturation	S	Enter corrections in the following manner: select a photo, select a type				
Set contrast	D					
Set gamma	F	of correction using the appropriate				
Set yellow	Q	shortcut, change the value using the				
Set magenta	W	arrow keys: up [1] - to increase the				
Set cyan	E	correction or down [1] - in order to reduce the correction.				
Set density	R					
Change correction value	1↓					
Increase the number of photos to send	+	To change the number of photos to print, select a photo, and then use				
Decrease the number of photos to send	-	the +/- or type the number on the keyboard.				
Delete photo	Delete	To delete a photo from the thumbnails view, use the Delete key.				
Select / Deselect	SPACE					

Select all photos	CTRL + A				
Show single photo	ENTER	Go to the single photo mode (the same effect can be achieved by pressing CTRL+1 or double-clicking).			
Return to the previous window	ESC	The ESC key operates in two phases: 1. in the case of placing in thumbnails window – returns to the choosing files window, 2. in the case of placing in the VIEW 1 mode – returns to the thumbnails view.			
Go to the photo without selecting	CTRL + navigation key				
Navigate to the picture by selecting all between	Shift + navigation key				
Red-eye reduction	CTRL + Z				
Auto-Brightness	CTRL + R				
Reference Photo to the digital photo thumbnails window	F10				
ADDITIONAL TOOLS WINDOW					
Deleting photos with zero number of copies	Alt + Z	Shortcuts are active directly in the digital photos thumbnails window			
Change format	Alt + F	and scanned photos.			
CROPPING T	OOLS WINDOW				
Rotate 90°	Alt + []	Shortcuts are active directly in the digital photos thumbnails window. Parenthesis [rotates the photo to the left, while parenthesis] to the right.			
SENDING PHOTOS TO PRINT					
Printouts	Alt + 1	Shortcuts are active when entering			
Sending as an Index	Alt + 2	to the sending options, so after			
Save to disk	Alt + 3	pressing the key combination: Alt + S			
MAIN					
Open orders from Hot Folder	Alt + H				
Go next	Alt + N				
Go to the Last Orders	Alt + A				
INDEX					
Select all photos	Alt + A				
One page from each directory	Alt + O				

Fixed miniature size	Alt + M				
NUMERIC KEYPAD					
Substract gamma	1				
Reset gamma	2	There will be a change of 1 compared to the previous value (does not apply to the Reset option)			
Add gamma	3				
Substract contrast	4				
Reset contrast	5				
Add contrast	6				
Substract saturation	7				
Reset saturation	8				
Add saturation	9				
As above	Above + CTRL	There will be a change of 0.3 compared to the previous value (does not apply to the Reset option)			

Annex 1 - Specification for the Hot Folder feature

Specification of the DPOF standard

Orders for the machine are stored in separate directories containing the "IMAGE" subdirectory - with photos, and the "MISC" subdirectory - containing only the control file for the dlsPrintMaker software.

The software converts only those orders in which the file autprint.mrk appears. As long as the file does not exist the order is ignored.

The "AUTPRINT.MRK" file consists of a header and sections describing individual files of the order. Below is a description of the header section and the file section:

[HDR]

GEN DTM = [ORDER_DATE]

USR NAM = [CLIENT_NAME]

USR CMM = [COMMENT]

PRT PCH = [CHANNEL]

PRT REL = [REALIZE]

PRT COR = [CORRECTION]

[JOB]

PRT QTY = [QUANTITY]

IMG SRC = [FILE_NAME]

The meaning of particular meta-commands (in square brackets) is as follows:

[ORDER DATE] - date of order

[CLIENT_NAME] - customer name

[FORMAT] – format of photos in the order

[CHANNEL] - channel

[QUANTITY] – the number of prints

[FILE_NAME] - the name of the file with a photo

[COMMENT] – user comment to the order

[REALIZE] – a field that describes how to implement the order. It can take the values:

- a) AUTO fully automatic implementation no operator intervention
- b) SEMIAUTO semi automatic implementation the operator can only reject photos by giving them an amount of 0
- c) MANUAL fully manual implementation the operator can make any corrections in the order

[CORRECTION] – additional corrections imposed by the user. The field can take values:

- a) zero normal color print
- b) b&w black-and-white print
- c) sephia sephia print

In the absence of any of the fields, the software will take a default value. In the absence of the Channel number, the order will be rejected.

"Channel" is an identifier that defines the characteristics of the format (print format, gradation, how to frame - frame, fill, etc.).

Additional elements (beyond the DPOF standard) in the communication structures introduced in the dlsPrintMaker software:

1. A field describing an address, phone number and email

```
USR ADR - address
```

USR PHO – phone number

USR EML - email

2. The status of the online payment

JOB RDY - if the key does not exist, the order is processed

- jeżeli = 0 - the order is locked

- jeżeli = 1 - the order is sent

The structure for the feedback between the dlsPrintMaker software and a commissioning software

The structure for the feedback between the dlsPrintMaker software and an external software:

- 1. Communication directory this directory will be a sub-directory of the orders directory. It will have a permanent name "CALLBACK" callback directory and device.info are in the (the) source directory (separately for each source).
- 2. The name of the communication file will be closely related with the order concerned it will consist of order number and an extension. "001234.clb".
- 3. When monitoring a directory, ignore files with extension *.tmp
- 4. After reading the return information, the file with this information should be removed.
- 5. The return file will contain the following information:

[HDR]

REL DAT = "12.04.2007 12:57:00" – date of execution of the order

REL QAN = xxx – the number of prints made in the order

REL IGN = xxx – the number of prints ignored in the order

JOB FIL = xxx – the number of files in the order

REL CMM = " operator's comment

JOB FIN – 1 if last in the order, 0 if there are suborders

JOB NUM - "" file number

[FILE_x] – where x – is another file number

FLN NAME = "abc" - file name

FLN QAN = xxx – the number of prints made from this file

The structure of the "Device" file with a list of formats implemented by the system

[PRTPCH_x] – channel number (section)

FMT NAM=89x127 - format name

PAP NAM=Printer – printer name

FMT WDH=890 – format size in mm * 10

FMT HGH=1270 – format size in mm * 10

FMT ID=2 – format identifier

PAP ID=3 – printer identifier

CRP MOD=1 – cropping mode (1 – FIT_IN; 0 – FILL_OUT)

CRP FRM=0 – frame mode (0 – without frame; 3 – frame (3mm))

In case of questions please contact:

support@pixel-tech.eu

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