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1 Flip Book Photobooth Help

Overview

Flip Book Photobooth is software for capturing short clips of moving images and printing them out so that they can be bound into a flip book during an event such as a wedding reception or a Bar Mitzvah party.

The software is designed to use a Canon EOS digital SLR to capture a short video (actually a sequence of still images grabbed from the camera's live view) and then format and print the images in such a way that they can be easily cut and bound into flip books during an event. The screen design presented to users is highly customizable and the flexible formatting and printing options accommodate a variety of different work flows.

This guide is divided up into the following sections:

- Printer setup and printer pooling
- Page layout
- · Screen design
- · Operating the photo booth

Supported Canon Cameras

Flip Book Photobooth supports all recent Canon EOS digital SLR cameras with live view capability and some recent PowerShot camera. Currently this includes the following camera models:

DSLR Cameras:

Canon EOS 450D/Rebel XSi Canon EOS 500D/Rebel T1i Canon EOS 550D/Rebel T2i Canon EOS 600D/Rebel T3i Canon EOS 650D/Rebel T4i Canon EOS 700D/Rebel T5i Canon EOS 750D/Rebel T6i Canon EOS 760D/Rebel T6s Canon EOS 800D/Rebel T7i Canon EOS 100D/Rebel SL1

Canon EOS 250D/Rebel SL3/200D Mark II

Canon EOS 1000D/Rebel XS Canon EOS 1100D/Rebel T3 Canon EOS 1200D/Rebel T5 Canon EOS 1300D/Rebel T6

Canon EOS 200D/Rebel SL2

Canon EOS 1500D/EOS 2000D/Rebel T7

Canon EOS 3000D/EOS 4000D

Canon EOS 50D Canon EOS 60D Canon EOS 70D Canon EOS 77D Canon EOS 80D Canon EOS 90D

Canon EOS 40D

Canon EOS 5D Mark II

Canon EOS 5D Mark III

Canon EOS 5D Mark IV

Canon EOS 5DS Canon EOS 5DS R Canon EOS 6D

Canon EOS 6D Mark II

Canon EOS 7D

Canon EOS 7D Mark II

Canon EOS-1D Mark III

Canon EOS-1D Mark IV

Canon EOS-1Ds Mark III

Canon EOS-1D X

Canon EOS-1D X Mark II

Mirrorless and PowerShot Cameras:

Canon EOS M6 Mark II

Canon EOS M200

Canon EOS M50

Canon EOS R

Canon EOS RP

Canon PowerShot SX70 HS

Canon PowerShot G5 X Mark II

Canon PowerShot G7 X Mark III

Equipment required

The following equipment is needed for a basic flip book photo booth:

- A computer or laptop running Microsoft Windows. This does not need to be particularly powerful e. g. a mid-range computer with a 2GHz dual core i5 processor and 4GB RAM
- A Canon DSLR with live view. The Canon Digital Rebel T6 (aka Canon EOS 1300D) is currently
 the best value and is capable of producing excellent results. It is also suitable for running a stills
 photo booth using our DSLR Remote Pro for Windows software. If you also want to run a video
 booth then the slightly more expensive Canon Digital Rebel T6i (aka Canon EOS 750D) is currently
 the best option.
- A fast printer, ideally a dyesub printer capable of cutting 6x2 strips from 6x4 media. The twin deck Mitsubishi CP-D707DW is ideal as it can print two 28 page flip books in about 70 secs. The single deck version, the Mitsubishi CP-D70DW, can print one 28 page flip book in about 70 secs or the slightly cheaper DNP DS-RX1 can print a 28 page flip book in about 130 secs. You can also use a fast color laser printer but this will probably have higher print costs than a dyesub printer and the cutting and binding process will be more labor intensive and will require an expensive cutter to cut the pages. The software includes printer pooling which allows two or more printers to be used to speed up printing when printing multiple flipbooks.
- Continuous studio lighting (you can't use flash or studio strobes for flip books). A pair of 500W fluorescent studio lights should be sufficient for a small setup.
- A stack cutter (aka ream cutter) to cut the 6x2 strips into half to create 3x2 flip book pages. A good
 quality stack cutter should have no problem cutting the 14 sheets of dyesub paper required to
 create a 28 page book. If you are using a color laser printer to print the pages you will need a
 specialized cutter to cut the pages.
- A heavy duty stapler to staple the pages together. A good quality manual stapler costing around \$30 is suitable. Most power staplers aren't powerful enough to staple 28 pages of dyesub paper together (we've tried power staplers costing over \$400 and they were no good).

If you already have a photo booth with a Canon DSLR camera and a fast dyesub printer capable of 6x2 cut strip printing you already have most of the equipment you need to create flip books. This means that you can offer your clients a standard photo booth, a video booth or a flip book service using the same basic equipment.

2 Installing, Registering and Activating Flip Book Photobooth

When you use Flip Book Photobooth v2.0 and future releases you need to activate your license on each PC. Activating the software is a quick and simple procedure if the PC has access to the internet, however, we recommend activating the PC at least 48 hours before an event. You can still activate a computer which does not have access to the internet, but this involves sending an email to sales@breezesys.com and will take longer than activating the software online. The software can be activated on up to two computers at any given time.

Topics covered in this section:

- · Installing the software
- Uninstalling the software
- · Evaluating the software
- Registering
- Activating
- Deactivating
- Moving the software to a different PC
- Making changes to your PC
- Decommissioning a PC
- · Checking for updates
- · Activation problems

Installing the software

The latest version of Flip Book Photobooth can be downloaded from www.breezesys.com.

To install Flip Book Photobooth simply download and run the setup program then follow the onscreen instructions.

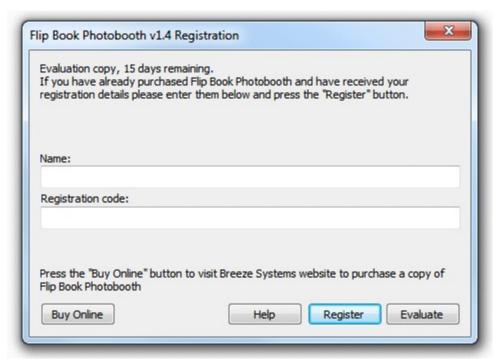
Uninstalling the software

Flip Book Photobooth can be uninstalled using the standard Windows "Uninstall a program" option in the Programs section of the Windows Control Panel.

IMPORTANT: Please deactivate Flip Book Photobooth before uninstalling otherwise you may not be able to activate the software on another computer. If you forget to deactivate the software you should be able to reinstall the software, deactivate it and then uninstall.

Evaluation Version

The trial evaluation version of the software is identical to the registered version and is fully functional for 15 days. Each time you run the software it will display the registration dialog allowing you to enter a registration code or press the "Evaluate" button to continue evaluating the software:



At the end of the 15 day trial period you must purchase a license to continue using the software.

Registering the software

To purchase a license for Flip Book Photobooth please visit our website: http://www.breezesys.com/purchase_flipbook.htm. You will be sent an email containing your registration details when your payment has been received.

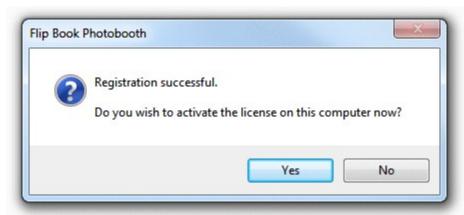
To register Flip Book Photobooth run the application enter your registration name and code exactly as they appear in your registration email. You may find it easier to copy and paste both the registration name and code directly from your registration email to avoid mistakes when entering it. Please keep a copy of your registration email safe in case you need to re-enter your registration details.



Click on the "Register" button after entering your name and registration details. If the details are correct the message below will be displayed. An error message will be displayed if the name and registration code are not valid (e.g. they were not entered correctly) or if you need to purchase an upgrade to use this version of the software.



Click on the "Yes" button to register the software and the following message will be displayed asking you whether you want to activate the software on this computer:



Click on the "Yes" button to activate the software on this computer (see the section below for details).

Activating the software

The software must be activated on the computer before it can be used. The software can be run without activating for up to 10 days after the the date when the registration code was issued. After that time the software will not run unless it is activated. The software can only be activated on up to two computers at any given time. If you wish to move the software to a different computer you must deactivate it from the old computer before activating it on the new computer. Once the software has been activated on a computer you can run it normally.

To activate the software click on the "Activate..." button in the registration dialog

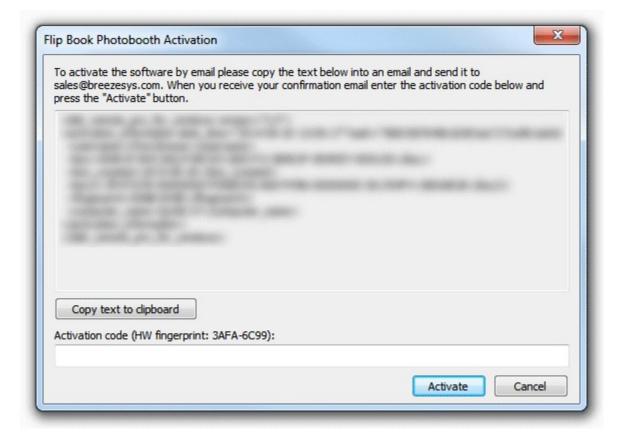


and the activation dialog below will be displayed:



The quickest and simplest way to activate the software is to do it online by pressing the "Activate Online" button. Please note that the computer must have an internet connection and the program must be allowed to access the internet in order to activate the software online. Please note that it may take up to 30 seconds to activate the software online.

If the computer is not connected to the internet you can activate the software by email by clicking on "Activate by email" button and the dialog below will be displayed:



It is important that you copy all of the text and email it to sales@breezesys.com. Please do not modify the text otherwise we may not be able to validate it. The simplest way to copy the text is to press the "Copy text to clipboard" button and then paste it into the email by typing Ctrl+V. If the computer

doesn't have email you can copy the activation text to a USB memory stick and then read it on a computer which does have email.

You should normally receive an email containing your activation code within 12 hours of sending the activation request email. Paste your activation code into the "Activation code" text area at the bottom of the activation dialog and click on the "Activate" button to activate the software. If you have closed the activation dialog you can display it again by running the software and then clicking on the "Activate..." button in the registration dialog followed by the "Activate by email" button.

Deactivating the software

The software can only be activated on up to two computers at any given time. If you wish to move the software to a different computer you must deactivate it from the old computer before activating it on the new computer.

It's a good idea to deactivate the software before upgrading or repairing the PC, reinstalling Windows or reformatting a hard disk. The software can then be reactivated after the work has been done.

To deactivate the software select "Register..." from the Help menu in the main window to display the registration dialog:

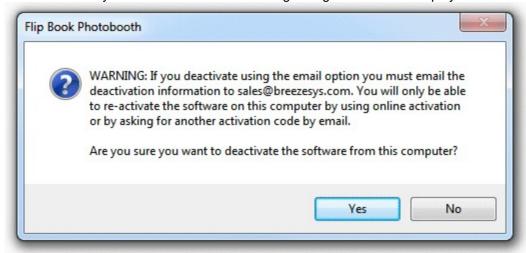


Then click on the "Deactivate..." button to display the deactivation dialog:

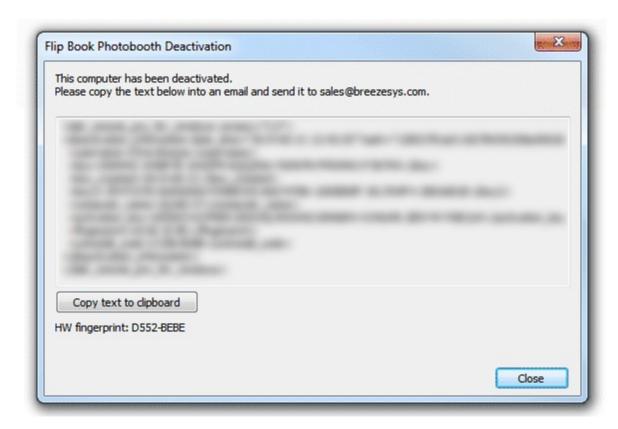


The quickest and simplest way to deactivate the software is to do it online by pressing the "Deactivate Online" button. Please note that the computer must have an internet connection and the program must be allowed to access the internet in order to deactivate the software online. Please note that it may take up to 30 seconds to deactivate the software online.

If the computer is not connected to the internet you can deactivate the software by email by clicking on "Deactivate by email" button and the warning dialog below will be displayed:



Click on the "Yes" button if you want to continue and the deactivation dialog below will be displayed:



It is important that you copy all of the text and email it to sales@breezesys.com. Please do not modify the text otherwise we may not be able to validate it. The simplest way to copy the text is to press the "Copy text to clipboard" button and then paste it into the email by typing Ctrl+V. If the computer doesn't have email you can copy the text to a USB memory stick and then read it on a computer which does have email.

You should normally receive an email acknowledging the deactivation code within 12 hours of sending the request email. If you forget to copy the deactivation information and email it to sales@breezesys.com you can display it again by selecting "Register..." from the Help menu in the main window and clicking on the "Display" button. Please note that the copy of the deactivation information will be not be available after another registration code has been entered.

Moving the software to a different PC

The software can be activated on up to two computers at any given time and so if you are moving the software to a different PC you should deactivate the software from the old PC first. Then install the software on the new PC, then register and activate the software.

If you are planning to move the software to a different PC permanently please following the instructions for decommissioning a PC.

Making changes to your PC

You need to deactivate the software before making changes to your PC such as upgrading the PC hardware, reformatting a hard disk, reinstalling Windows, upgrading Windows or getting a PC repaired.

Simply deactivate the software online (or by email if the PC doesn't have access to the internet), make the changes and then re-activate the software. If Windows has been reinstalled or the hard disk has been replaced or reformatted you may need to re-install Flip Book Photobooth, re-enter your name and registration code and then activate the software.

The latest release and previous releases of the software can be downloaded from the upgrades page on the Breeze Systems website.

IMPORTANT: Please make sure you have a copy of your name and registration code before making changes to your PC just in case you need to re-enter them later

Decommissioning a PC

If you are decommissioning a PC and planning to sell it or give it to somebody else you need to deactivate the software and remove your registration details. It is very important that you remove your registration details even if you have uninstalled the software otherwise the new owner may be able to reinstall the software and gain access to your registration details. If someone obtains your registration details they will be able to register and activate the software on their computer and could prevent you from using it on your computer.

After deactivating the software you can remove your registration details by entering the special registration code below:

Name: Uninstall

Code: 00000G-MGVKUC-G5XYU9-60M48V-QRGK68-FRKHQT-G133DM-RV5G8P-XWGD4M

This will install a special old code which replaces your registration details and will cause the software to display an "Upgrade required" message when it is run.

If you decide to use the computer again you can reinstall the software, enter your registration details and activate software.

Checking for updates

You can check for updates by selecting "Check for updates online". This will connect to the internet and display details of the latest version Flip Book Photobooth in your web browser. Alternatively go to the Flip Book Photobooth page on our website: http://www.breezesys.com/Flipbook

Activation problems

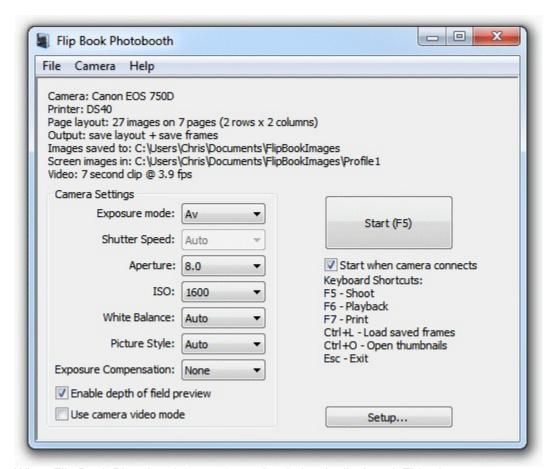
If the error message "The server name or address could not be resolved" is displayed when you try to activate or deactivate the software online it means that the PC is unable to access the internet. Please check that that the computer is connected to the internet and check your firewall settings to make sure that "Flip Book Photobooth.exe" (the Flip Book Photobooth program) is allowed to access the internet. If you are still unable to activate the software online you may need to activate it by email instead.

If a different error message is displayed please follow the instructions displayed in the error message. If you are not sure what to do please email sales@breezesys.com and include your registration name and code and details of the error message.

Please also see the support page on the Breeze Systems website for help with activation problems.

3 The Main Window

The Main Window



When Flip Book Photobooth is run the main window is displayed. This shows a summary of the current printer and layout settings and the camera settings (if connected). Click on the "Setup..." button to setup the software or "Start" to enter fullscreen mode ready to start capturing and printing images.

Loading and Saving Settings

The current settings can be saved for future reference by selecting "Save Settings..." from the File menu and previously saved settings can be loaded by selecting "Load Settings...".

Connecting to the Camera

By default Flip Book Photobooth will attempt to connect to the camera when it starts up and will not try again. Select the "Connect" option from the "Camera" menu to manually connect to or disconnect from the camera. Alternatively select the "Auto reconnect" option from the "Camera" menu and the software will connect to the camera automatically when it is detected.

When the "Start when camera connects" option is selected the software will automatically switch to full screen mode when the camera connects.

4 Printer Setup and Printer Pooling

Suggested Printers

The following fast dyesub printers capable of 6"x2" printing are ideal for printing flip books: DNP DS40 - prints a 28 page flip book in approximately 70 secs
Mitsubishi CP-D70DW - prints a 28 page flip book in approximately 70 secs
Mitsubishi CP-D707DW - twin deck printer which prints two 28 page flip books in approximately 86 secs or one book in 70 secs

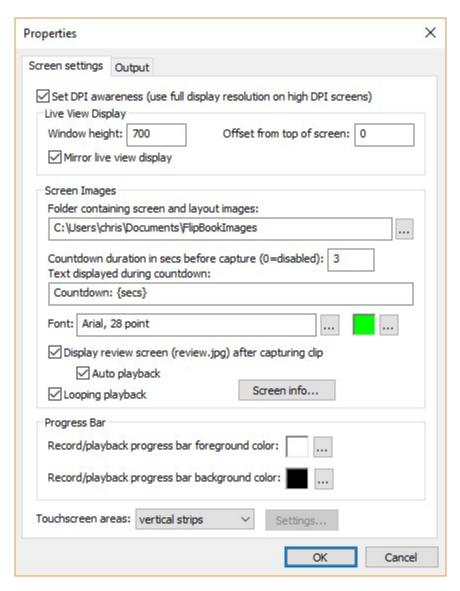
The following dyesub printers are also capable of 6"x2" printing and are suitable for printing flip books but are slower than the printers listed above:

DNP DS-RX1 - prints a 28 page flip book in approximately 130 secs

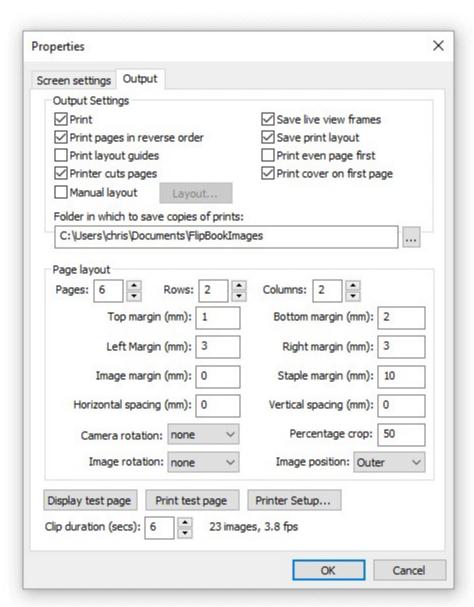
HiTi P510L - prints a 28 page flip book in approximately 130 secs

Selecting the printer

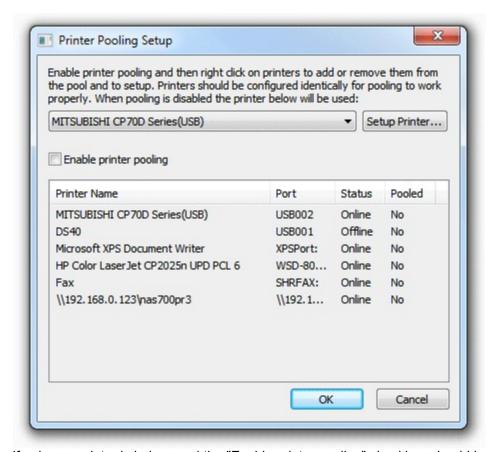
The printer can be selected in Flip Book Photobooth by clicking on the "Setup..." button in the main window to display the setup dialog:



Next click on the "Output" tab to display the output settings:



Then click on the "Printer Setup..." button to display the printer and printer pooling setup dialog:



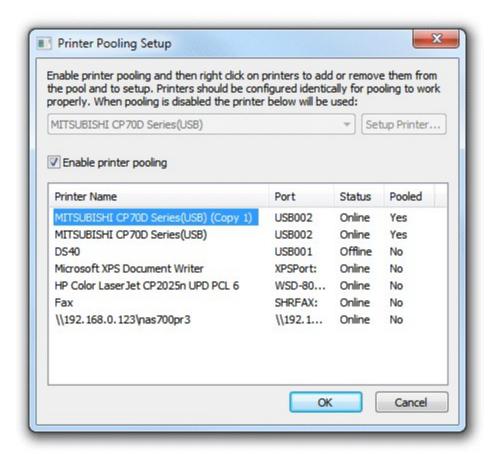
If only one printer is being used the "Enable printer pooling" checkbox should be unchecked and the appropriate printer selected from the dropdown list.

Printer Pooling

Flip Book Photobooth can share the printing between two or more printers by using the printer pooling option. This will improve the printing speed by sending each new book to be printed to each printer in the pool in turn. Prints won't be sent to printers that are off line so if one printer runs out of paper and is off line new print jobs will be sent to the remaining printers that are online.

To add printers to the printer pool, first enable printer pooling then right click on the printer in the list and select "Add to pool". Printers that already in the printer pool can be removed by right clicking on the printer in the list and selecting "Remove from pool".

The screenshot below shows printer pooling enabled with two Mitsubishi CP70D printers:



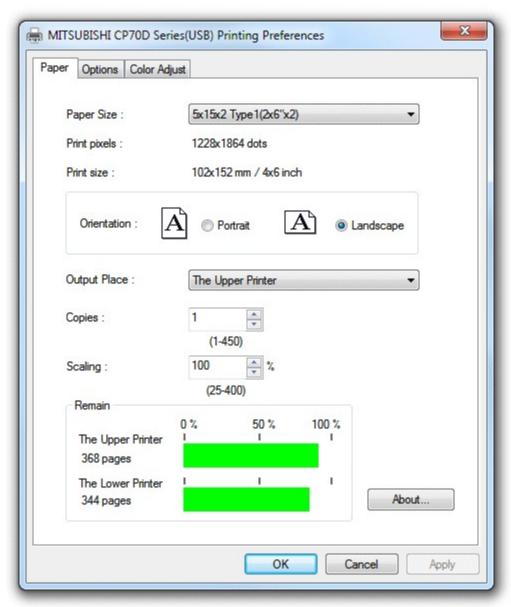
Please note: The print layout routines assume that all printers in the printer pool are of the same type and have the same settings and paper.

Printer Setup

The examples in this help file use the Mitsubishi CP-D707DW twin deck printer which is a fast dyesub printer capable of printing 6x2 inch strips when loaded with 6x4 inch paper. This is ideal for printing flip books as the printer will do most of the cutting of the pages and save time when assembling the books. When using both decks the Mitsubishi CP-D707DW can print two 28 page books in approximately 86 secs or a single book in approximately 70 secs. The DNP DS40 is also an ideal printer for flip books and can print a 28 page flip book in approximately 70 secs. Other dye sublimation printers also support 6x2 inch printing (e.g. the Shinko S2145, DNP DS-RX1, Hiti P510L, Sony UP-DR200).

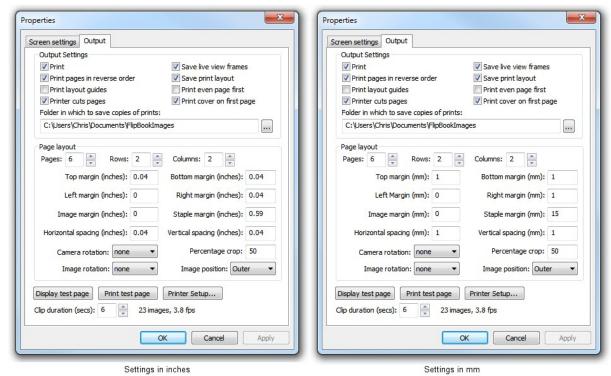
Mitsubishi CP-D707DW and CP-D70D settings

The examples below use the Mitsubishi CP-D707DW twin deck dye-sublimation printer loaded with 6"x4" paper in both decks. The Mitsubishi CP-D707DW printing properties dialog is shown below:



The Mitsubishi CP-70D printer has very similar settings but doesn't have the option to use the upper or lower printers.

Suggested output settings:

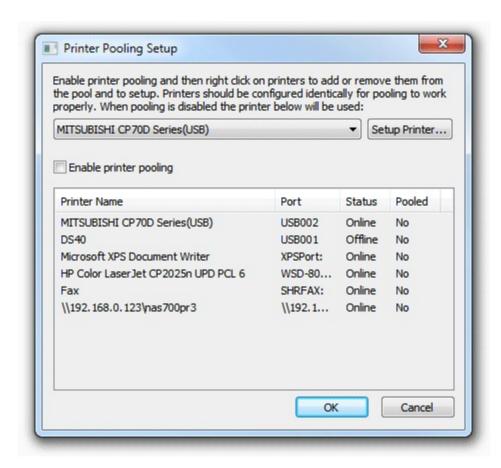


Approximate timings for printing a 24 page book (six 6"x4" pages cut to 6"x2") using a Mitsubishi CP-70D printer: 60 secs

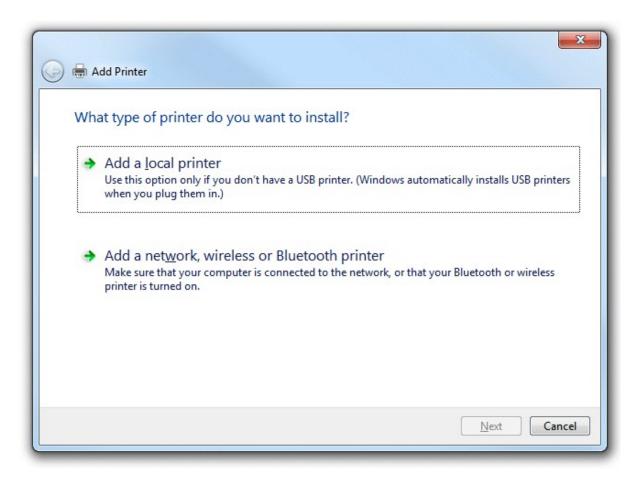
Using both decks on a Mitshubishi CP-D707DW printer

Due to limitations in the way the printer drivers work for the CP-D707DW it is necessary to create a duplicate copy of the printer and use printer pooling to make use of both decks. If you try to use one printer and set the "Output place:" to "Auto select" the flip book printing will be shared by both printers and half the pages will be printed by one printer and half by the other printer which makes it difficult to sort the pages into the right order before cutting and binding. This can be avoided by creating a copy of the printer in Windows and using printer pooling as described below.

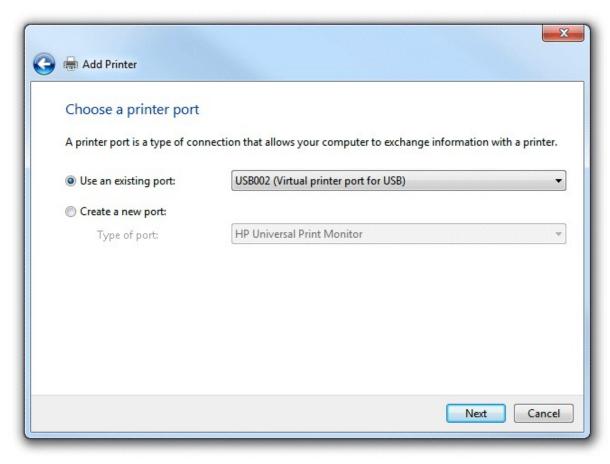
Step 1: Make a note of the port used by the printer. This is displayed in the port column in the printer pooling setup window. The screenshot below shows the port to be "USB002":



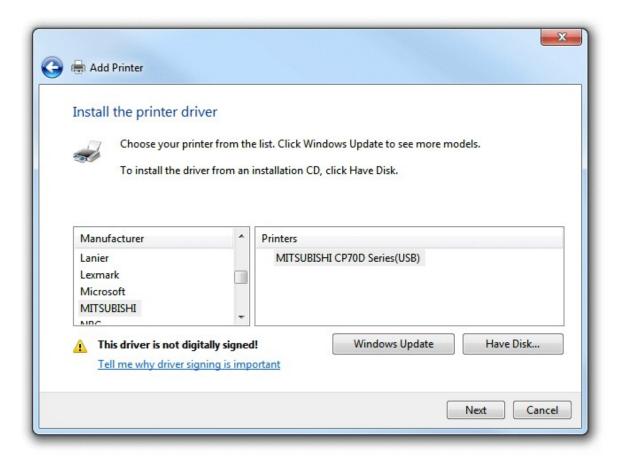
Step 2: Select "Devices and Printers" from the Windows Start menu and click on the "Add a printer" button:



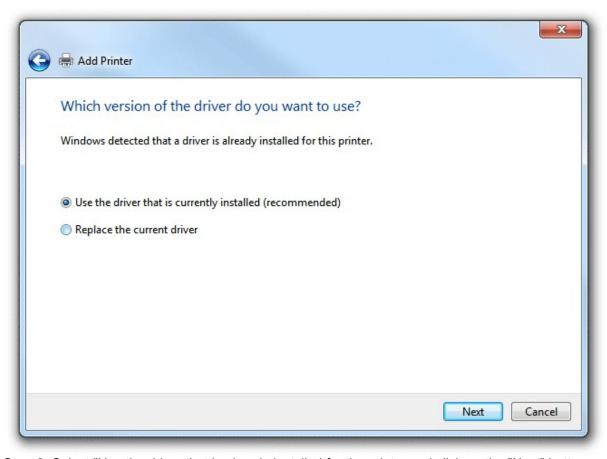
Step 3: Click on "Add a local printer":



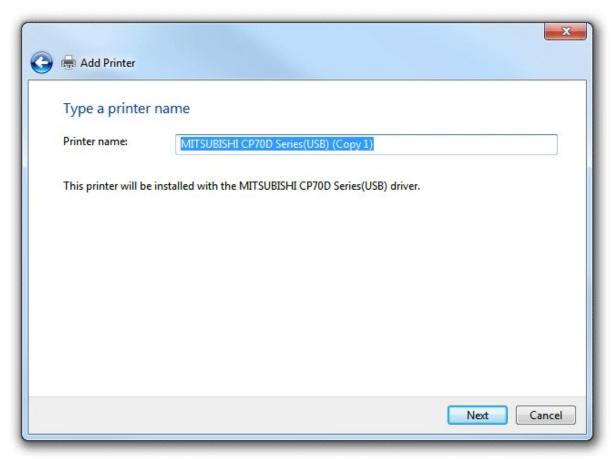
Step 4: Click on "Use an existing port:" and select the port noted in step 1 in the drop down list as shown above. Then click on the "Next" button:



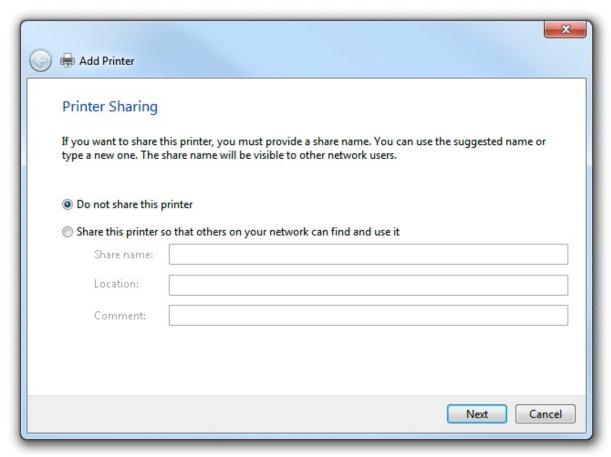
Step 5: Select the printer manufacturer and printer model as shown above and then click on the "Next" button:



Step 6: Select "Use the driver that is already installed for the printer and click on the "Next" button:



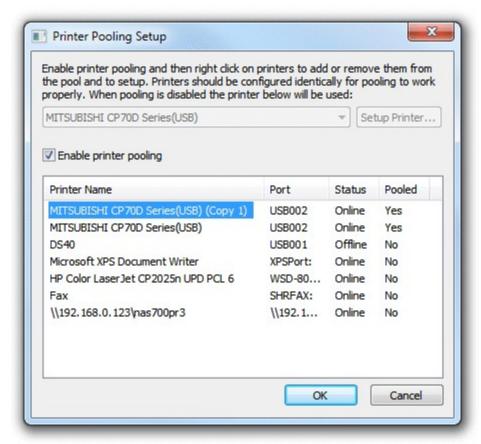
Step 7: Edit the printer name if required and then click on the "Next" button:



Step 8: Share the printer if required (this isn't necessary for printer flipbooks) and click on the "Next" button and then the "Finish" in the next dialog. The printer pooling setup window should now look something like this:



Step 9: Click on the "Enable printer pooling" checkbox and then right click on the MITSUBISHI CP70D entries in the list and select "Add to pool". The printer pooling setup window should now look like this:



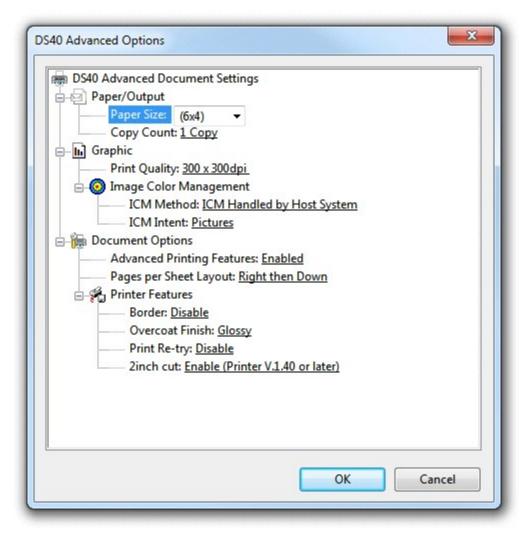
Step 10: Setup the two copies of the printers by right clicking on the entries and selecting "Setup printer". Use identical page settings for the two copies of the printer but set the "Output place:" for one printer to "The upper printer" and set the other to "The lower printer"

Approximate timings for printing two 26 page books using both printer decks (two books of six 6"x4" pages cut to 6"x2"): 86 secs

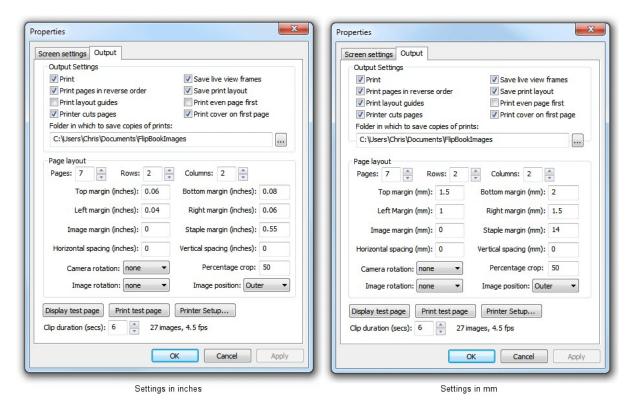
DNP DS40 settings

Please note that the DNP DS40 has three settings for the print quality: 300×300 dpi, 300×600 dpi and 600×600 dpi. The best setting for flip books is 300×300 dpi because it gives the fastest printing speed. The 300×600 dpi setting is not suitable because it has different resolutions in the horizontal and vertical directions which will confuse Flip Book Photobooth's print layout. The 600×600 dpi gives slightly better print quality but requires four times more data to be transferred from the PC than the 300×300 dpi setting and is significantly slower.

Current DS40 printers support 2 inch cuts to print two 6"x2" strips from a 6"x4" page. Older DS40 printers don't support this but can be upgraded (this is a hardware and a firmware upgrade). Please contact your printer supplier or DNP if you have an older DS40 printer that needs upgrading to support 6"x2" printing.

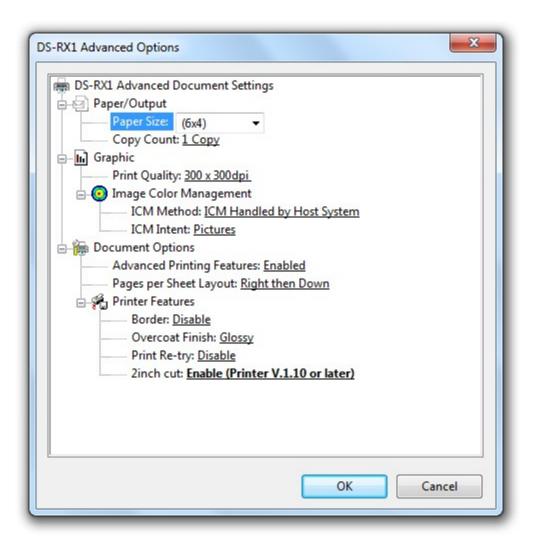


Suggested output settings:

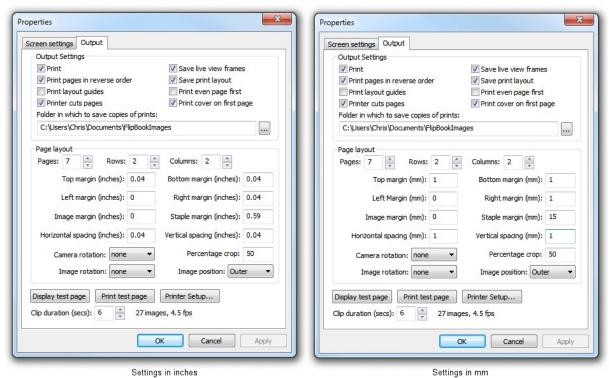


Approximate timings for 28 page book (seven 6"x4" pages cut to 6"x2"): 70 secs

DNP DS-RX1 settings

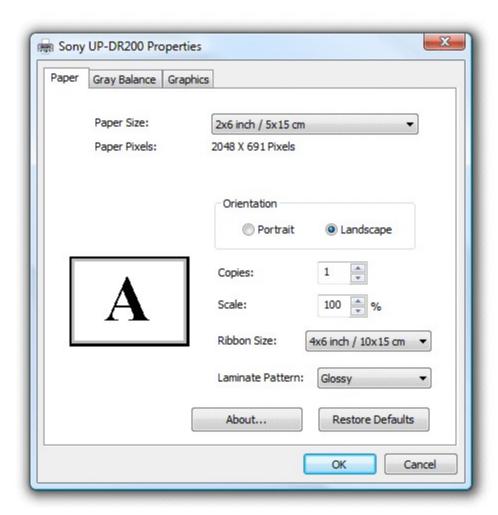


Suggested output settings:



Approximate timings for 28 page book (seven 6"x4" pages cut to 6"x2"): 130 secs

Sony UP-DR200



For this printer the paper size should be set to 2x6 inch and the ribbon size to 4x6 inch. The laminate pattern should be set to glossy not matte for faster printing.

5 Page Layout

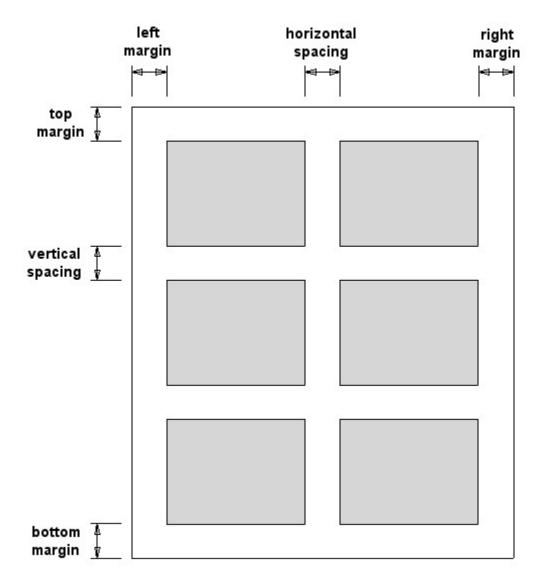
5.1 Basic Page Layout

First setup the printer before designing the page layout as the paper size and other settings may affect the layout.

Next decide on how the images should be arranged on each sheet of paper so that they can be cut and bound easily. The example in this help file uses a Sony UP-DR200 dye-sublimation printer loaded with 6" x 4" paper and set to print 6" x 2" strips. Each sheet of paper will contain two pages for the flip book which are later cut in half using a stack cutter or a heavy duty guillotine. The example flip book will contain 24 pages and so we will need to print 12 printer pages each containing 2 flip book pages. After printing the 12 pages are stacked together and cut using a stack cutter or a heavy duty guillotine to give 2 piles of 12 flip book pages. These piles are then stacked together in the right order, a front and back cover is added and stapled together to make the flip book. As a finishing touch book binding tape is wrapped around the spine to cover up the staple and the ends of the

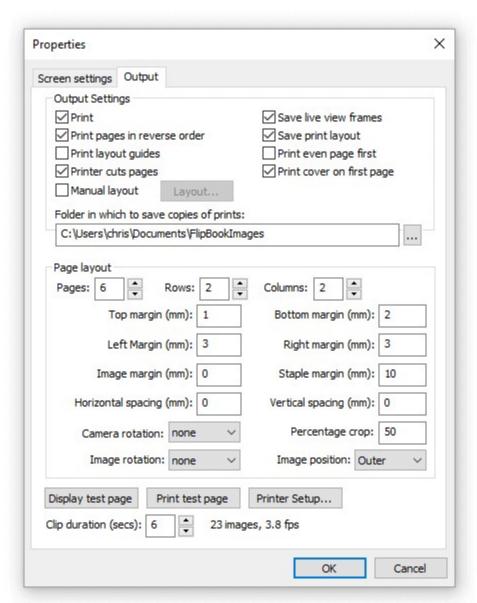
pages.

To make it easier to cut and bind the book the pages will be arranged so that the images are on the outside and the spine of the book is on the inside. This means that if the pages aren't cut exactly any errors will be on the binding side and won't affect the flipping of the pages. To do this we set the image position to 'outer'.



Settings used to layout flip book pages

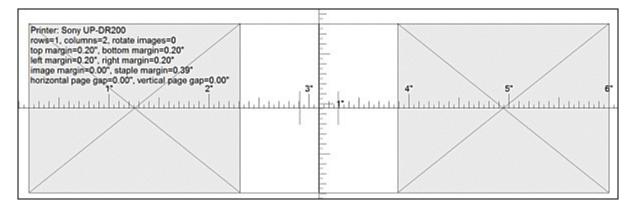
The page layout is setup using the output section of the properties dialog. This can be displayed by clicking on the "Setup..." button in the main window and then clicking on the "Output" tab:



The first step is to set the number of pages and the number of rows and columns for the page layout. The example used in this help file prints 24 page flip books with two pages laid out on twelve 6" x 2" prints. To do this we set the number of pages to 12, the number of rows to 1 and the number of columns to 2.

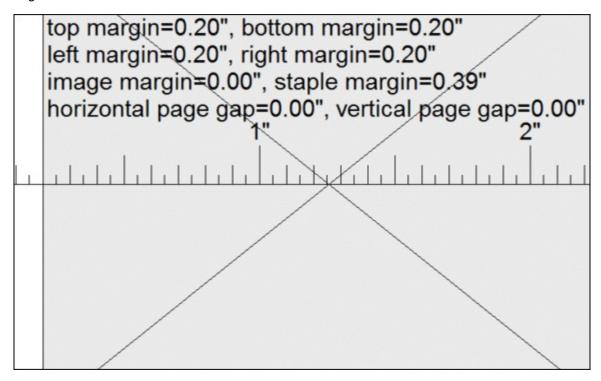
Note: Flip Book Photobooth can use mm or inches to specify the page layout. It uses whichever is the default setting for the computer (this can be set via the "Regional and Language Options" from the Windows Control Panel). The examples in this help file use US units. Using metric or US units does not affect the accuracy of the page layout.

At this stage we don't know the precise settings to use for the various page margins. The easiest way to determine the correct margin settings is to set them to an initial value that is too large (e.g. 0.2 inch), print a test page and then adjust the margins to suit the printer. Press the "Print test page" button to print a test page showing the initial settings:

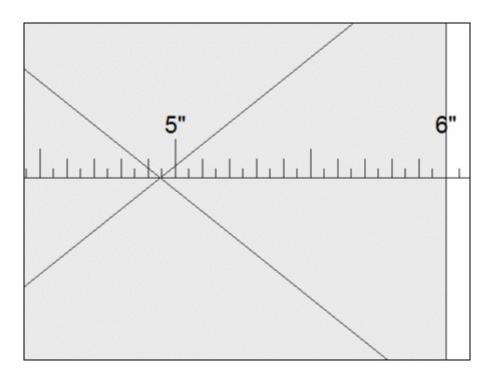


We need to adjust the top, bottom, left and right margins so that images fit the printable area of the printer.

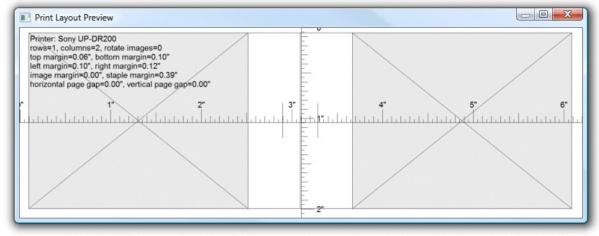
The area around the left margin where the horizontal ruler meets the edge of the page is shown larger below:



From this we can see that the printer starts printing at about 0.1". The area around the right margin where the horizontal ruler meets the edge of the page is shown larger below:



From this we can see that the printer prints to 6.1" giving a total printed width of 6 inches (the right extent of 6.1" less the left extent of 0.1"). Therefore we need to set the left margin to 0.1" and the right margin to 0.1". We do the same thing for the top and bottom margins and can check the so far on screen by pressing the "Display test page" button:

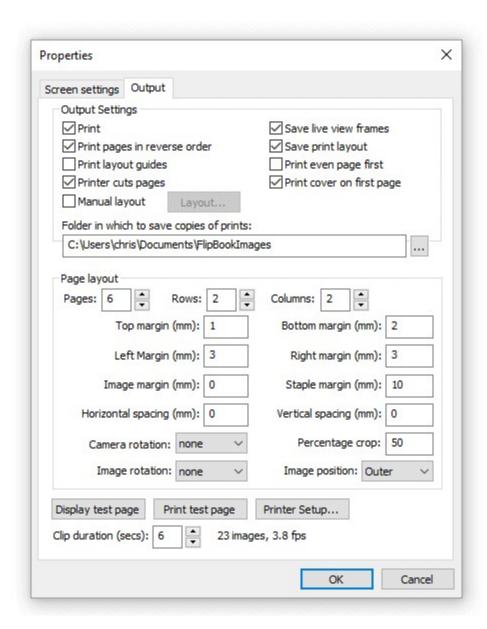


The layout looks reasonable and so the next stage is to print another test page to check the settings and make any minor adjustments to the margins.

If the layout so far is OK it is probably a good idea to save the settings before moving on to the next stage. To do this click on the "OK" button and save the settings to disk by selecting "Save settings..." from the File menu.

5.2 Output Options

Once the basic page layout has been defined the clip duration, image size and position and output options need to be set. To do this click on the "Setup..." button in the main window and then click on the "Output" tab in the properties dialog:



For testing purposes the output settings should probably be set to save capture images and print layouts to disk without printing them. To do this we need to uncheck the "Print" checkbox and check the "Save live view frames" and "Save print layout" checkboxes.

The "Save live view frames" option will save a copy of the individual frames captured in the sequence. This is useful if you need to be able to reload the images after capture and wish to reprint later or to reprint using a different layout.

The "Save print layout" option saves the formatted pages to disk and is useful if you want to be able to reprint the flip book using the same layout. It is also useful during setup as it allows the printed layout to be checked without having to waste paper by printing it out each time.

The images are saved in the subfolders of the folder specified in the properties dialog. The subfolders are named using the date and time the clip was captured. For example a clip captured at 8:56:52pm on March 17, 2010 would be saved in the folder: C:\Users\Chris\Documents\FlipbookImages\20100317-205652

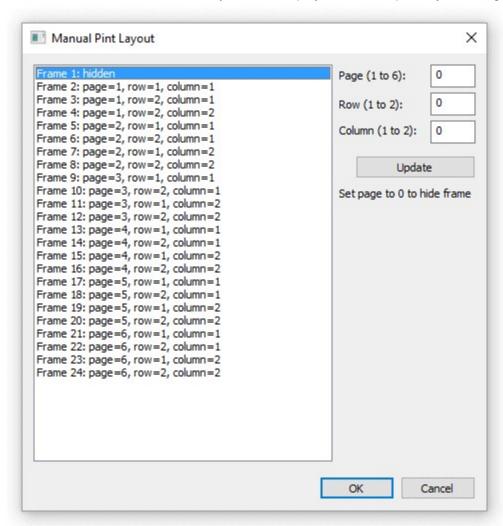
The "Print pages in reverse order" option is useful when using a printer that outputs pages face up on stacks them on top of each other (e.g. most inkjet and dye sublimation printers). Setting this option will print the last page first so that the stack of pages ends up with the first page on the top. Most laser printers output the pages face down and don't need this option.

Some printers don't print the pages in the right order e.g. the Sony UP-DR200 when set to 6"x2" strips prints four pages in the following order: page 2, page 1, page 4, page 3. To compensate for this select the "Print even page first" option.

Select the "Printer cuts pages" if you are using a printer that prints 6"x4" pages and cuts them into two 6"x2" strips. This option tells the software to adjust the printing to ensure that pages come out in the right order after they have been cut by the printer.

Manual Page Layout

Select the "Manual Layout" option if the automatic layout options are not suitable for the type of printing being used e.g. using a color laser printer to print large sheets which are then cut using a business card cutter. Click on the "Layout..." to display the manual print layout dialog:



Select each frame in turn from the list and enter the page, row and column number where it should be printed and press the "Update" button to save the setting. A warning will be displayed if two frames

have the same placement i.e. the page, row and column numbers are the same. Enter 0 for the page number if a frame should not be displayed (e.g. if the position where it would be displayed will be replaced by a title page).

Press the "OK" button to save the settings.

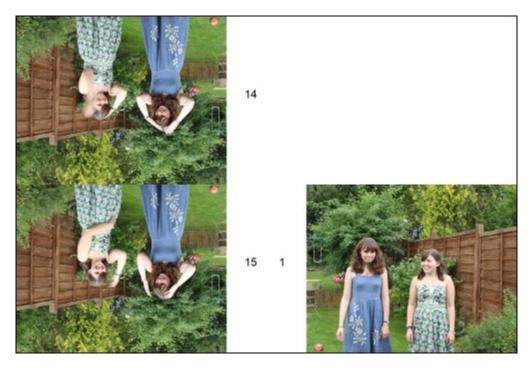
Printing a front cover on the first page of the flipbook

Select the "Print cover on first page" option if you want to print a cover page. When this option is selected the software does not print a photo on the first page of the flip book. There are two options for adding the graphics for the cover:

Option 1: printer page background image

The background image should be named background1.jpg so that it is only added to the first page printed by the printer.

The simplest way to create the background1.jpg image is to select the "Save printed layout" option and unselect the "Print" option then print a test flip book. This will save JPEG copies of each page from the printer named page_01.jpg, page_02.jpg etc. Each page from the printer will consist of several pages for the flip book e.g. the output from a 6x4 dyesub printer will contain four flip book pages and will look something like this:



Copy page_01.jpg to your screen images folder and rename it background1.jpg. Then edit it in an image editor and replace the empty space with the graphics for the front cover and clear the rest of the image. The background1.jpg for a flip books printed using a 6x4 dyesub printer should look something like this:



The background1.jpg image should be saved in the screen images folder which is defined in the "Screen settings" tab of the settings dialog. Its location is also displayed in the main window under the heading "Screen images in:".

Option 2: Flip book page cover image

The cover page should be a JPEG image named flipbook_cover.jpg and should be placed in the screen images folder. If the cover image is larger than the flip book page it will be resized to fit and then displayed in the center of the page area. The size of the flip book pages in pixels can be displayed by clicking on "Display test page" of the "Output" settings.

A cover image suitable for the page layout shown above would look something like this:



Clip Duration and Frame Rate

The frame rate of the captured clip is determined by the number of images and the duration of the clip. Increasing the duration of the clip while keeping the number of images the same will decrease the frame rate. If the frame rate is too low the movement in the final flip book won't be smooth. If the frame rate is too high the camera may not be able to capture them fast enough and the clip will take longer than the specified time to capture. The maximum frame rate depends on the camera being used and the speed of the computer and is normally limited to around 10 frames/sec. A good starting

point is a clip duration of around 6 seconds with a frame rate of about 5 frames/sec to give a flip book of about 30 pages.

Rotation and Cropping Settings

The "Camera rotation" setting specifies whether the live view images presented to the user should be rotated. If the camera is in normal landscape orientation this should be set to "none". If the camera is in portrait orientation this setting should be set to "90 CW" or "90 CCW" depending on which way the camera has been mounted. This setting can also be set using the Ctrl+Left and Ctrl+Right keyboard shortcuts when the live view is displayed on the computer's screen.

The percentage crop setting specifies how the captured images are cropped and affects both the display of live view images and the size of the printed images. A value of 0 represents no cropping and images will have the standard 3:2 aspect ratio. The percentage cropping has a range of -150 to 100.

Setting the percentage crop to a positive value will crop equal amounts from the left and right, making the image squarer. Setting the percentage crop to 100 will give a completely square image.

Setting the percentage crop to a negative value will crop equal amounts from the top and bottom of the image to produce a letterbox or panoramic effect.

This setting can also be adjusted using the + and - keyboard shortcuts when the live view is displayed on the computer's screen.

Setting the percentage crop to 0 will use the full field of view of the camera without any cropping. The aspect ratio of the live view images will depend on whether the video mode setting is selected. If the camera's normal photo mode is used the live view images will have an aspect ratio of 3:2. If video mode is selected the aspect ratio will depend on the video resolution set in the camera. The 1080p and 720p video resolutions have an aspect ratio of 16:9.

The "Image rotation" option controls whether the image is rotated before printing. The normal setting is "none" which will typically give a right handed flip book where the spine is held in the left hand and the pages are flipped using the right hand. A left handed book can be created by setting the image rotation to 180. Vertical format books where the spine is held at the bottom in one hand and the pages flicked with the other hand can be created by setting the image rotation to "90 CW" or "90 CCW".

The"Image position" option specifies where the image should be placed on the page and has the following options:

Right - the image is positioned on the right of the page with space on the left for binding the book **Center** - the left hand column of pages have images on the right of the page and the right hand column of pages have the images on the left of the page

Bottom - the image is positioned on the bottom of the page with space on the top for binding the book

Outer - the left hand column of pages have images on the left of the page and the right hand column of pages have the images on the right of the page

5.3 Backgrounds and Overlays

Adding backgrounds and overlays to each printer page

An optional background and overlay image can be added to each page from the printer. Please note that each page from the printer may contain multiple pages for the flip book.

The background image should be a JPEG image named background.jpg. A different background

image can be used for each page by naming it background<page number>.jpg e.g. background1.jpg for page 1, background2.jpg for page 2 etc. This could be used to add simple animations to the pages or to make the last page with a bold border to make it easier to identify the last page of each book when the pages are stacked together.

A title page for the book cover can be printed with each book by selecting the "Print front cover" option and then creating a background1.jpg image with the artwork for the front cover in the position where the first page is printed.

The overlay images should be a PNG image with transparency information stored in the alpha channel. The alpha channel of the PNG file controls its transparency and allows 256 levels of transparency from fully transparent to fully opaque. The overlay image should be named overlay.png. A different overlay image can be used for each page by naming it overlay<page number>.png e.g. overlay1.png for page 1, overlay2.png for page 2 etc.

Both background and overlay images should be the same size as the printed output and should be placed in the same folder as the screen and layout images.

When printing the background image is added to the page first then the images and page numbering is placed on top of the background and finally the overlay image is placed on top. The overlay can be used to add borders to the images such as in the examples below:





Image cropped with round corners using overlay:



Drop shadow (this can be added using an overlay or a background):



Vignetted image added using an overlay (alpha channel shown on the right):





Please note: Adding a background to an image will use more ink when printing with an inkjet printer or more toner when using a laser printer and may take longer to print. It will have no effect on the speed or cost of printing when using a dye sublimation printer.

Adding optional overlays to flip book pages

An optional overlay image can be added to each page of the flip book. Each overlay image should be a PNG image with transparency information stored in the alpha channel. The alpha channel of the PNG file controls its transparency and allows 256 levels of transparency from fully transparent to fully opaque. The overlay image should be named named flipbook_page_<page_number>_overlay.png e. g. flipbook_page_1_overlay.png (or flipbook_page_01_overlay.png) for page 1, flipbook_page_2_overlay.png for page 2 etc.

If the overlay is larger than the flip book page it will be resized to fit and then displayed in the center of the page area. The size of the flip book pages in pixels can be displayed by clicking on "Display test page" of the "Output" settings.

Adding an optional cover image

Please see this see the Output Options section for details of how to add a cover page.

How to create PNG images using Photoshop

First create a new image with a transparent background. Then create a mask by clicking on the "Add layer mask" in the layers palette.

Next add the graphics such as text overlays and picture frames to the image layer and use the layer mask to control the transparency. In the layer mask white represents opaque, black represents fully transparent and values between white and black represent increasing transparency.

Save a copy of the image as a PSD file for future reference and then save the image as a PNG file named overlay.png.

6 Saving Settings and using Profiles

Saving and Loading Settings

The current settings can be saved to file for future reference by selecting "Save Settings..." from the File menu and reloaded by pressing "Load Settings...". This is makes it possible to define a number of different layouts, screen designs or green screen backgrounds which can be selected before entering fullscreen mode or when the ready screen is displayed.

You can use the tokens {photoboothDir} and {photoboothSubdir} to specify a different directory for each profile:

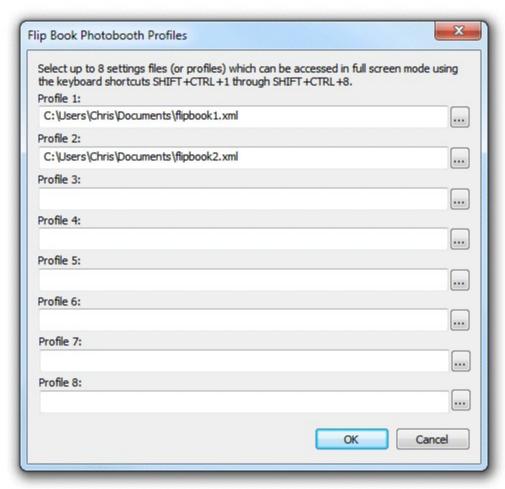
{photoboothDir} gives the full path of the screen images folder e.g. C:

\Users\Chris\Documents\FlipBookImages

{photoboothSubdir} gives the name of the screen images subfolder e.g. if the screen images folder is C:\Users\Chris\Documents\FlipBookImages then {photoboothSubdir} would become FlipBookImages

Profiles

Profiles allow you to use a keyboard shortcut to switch between different sets of saved settings. To assign a profile to a keyboard shortcut select "Profiles..." from the File menu to display the following dialog:



Then click on "..." button for the appropriate profile and select a previously saved set of Flip Book Photobooth settings. In the screenshot above profile 1 (keyboard shortcut SHIFT+CTRL+1) loads the settings file flipbook1.xml and profile 2 (keyboard shortcut SHIFT+CTRL+2) loads the settings file flipbook2.xml. Profiles can be used to allow users to selects different sets of settings e.g. profile 1 might define a small book of 28 pages and profile 2 might define a larger book with 40 images. Alternatively different profiles could be used to select different screen image folders to allow users to choose different green screen backgrounds.

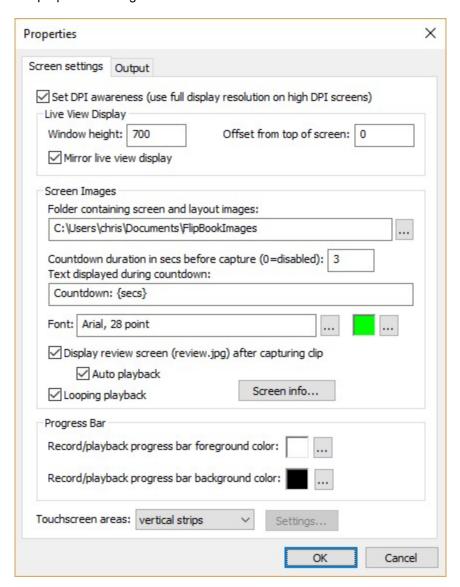
The tokens {photoboothDir} and {photoboothSubDir} can be used to specify the pathname of the profile file to be loaded. The tokens are replaced with the value of current photo booth images folder and provide a way to use more than 8 profiles.

The following keyboard shortcuts can be used to select profiles when the ready screen is displayed:

```
Shift+Ctrl+1 - select profile 1
Shift+Ctrl+2 - select profile 2
Shift+Ctrl+3 - select profile 3
Shift+Ctrl+4 - select profile 4
Shift+Ctrl+5 - select profile 5
Shift+Ctrl+6 - select profile 6
Shift+Ctrl+7 - select profile 7
Shift+Ctrl+8 - select profile 8
Shift+Ctrl+N - select next profile
Shift+Ctrl+P - select previous profile
```

7 Screen Design

The screen settings can be adjusted by clicking on the "Setup..." button in the main window to display the properties dialog:



High DPI Awareness

Some tablets and laptops have very high resolution screens and the way Windows displays applications will depend on whether they are "DPI aware" or not. Older applications which are not high DPI aware are scaled up to avoid the text being too small to read. This means that the resolution of the screen available to the application is less than the actual screen resolution. The amount of display scaling depends on the "size of text, apps and other items" setting in the Windows display settings.

Newer applications that are high DPI aware automatically scale the text so that it can be read and can use the full resolution of the screen.

Flip Book Photobooth has the option to operate as a "DPI aware" application and use the full screen resolution or to behave like a legacy application with a display that is scaled by Windows.

Example: Microsoft Surface Pro 4 tablet has a screen resolution of 2736x1824 pixels

If Flip Book Photobooth is run with the "Set DPI awareness" option set the screen images used in photo booth mode will need to be 2736x1824 pixels in size to fill the screen.

If the "Set DPI awareness" option is not set the size of the screen images will depend on the "size of text, apps and other items" selected in the Windows display settings:

If it is set to 150% the screen images need to be 1824x1216 pixels

If it is set to 200% the screen images need to be 1368x912 pixels

Recommendation: select the "DPI aware" setting for all new screen designs and only disable it if you have old designs which don't fill the screen (you may also need to adjust the "size of text, apps and other items" Windows display setting)

Live View Display

The "Window height" specifies the height of the live view display and should be less than the height of the screen. The width of the live view images will depend on whether they have been rotated or cropped. The live view display is always centered horizontally and its vertical position can be adjusted using the "Offset from top of screen setting".

Most people are more used to seeing themselves in mirrors and may get confused as to which way to move if they see the live view images straight from the camera. The "Mirror live view display" option will mirror the live view display so that the images appear the same as they would in a mirror.

Screen Images

Flip Book Photobooth will display basic screens to the user showing the state of the photo booth and which keys to press. These can be replaced with user defined JPEG images to customize the look of the photo booth.

The following screens can be defined:

ready.jpg - the main startup screen when the photo booth is ready for the next capture but is not displaying live view images

start.jpg - screen displayed when the photo booth is displaying live view images and is ready to capture the next sequence

countdown.jpg - screen displayed during the countdown before capturing a clip

capturing.jpg - screen displayed while capturing a clip

review.jpg - optional screen displayed after capturing a clip

replay.jpg - screen displayed after capturing a clip or when replaying a previously captured clip printing.jpg - screen displayed while the flip book is being printed

camera not connected jpg - screen displayed when the camera is not connected or is turned off

Normally the ready.jpg screen is displayed after capturing a clip and has options to shoot another clip, play the clip that has just been captured or to print a flip book. If the "Display review screen (review.jpg) after capturing clip" option is selected the review.jpg screen will be displayed instead. The review screen has options to return to the main menu (i.e. the ready.jpg screen), play the clip that has just been captured or to print a flip book.

To define custom screens first specify the folder to use by clicking on the "..." browse button. Then create suitable JPEG screen images using the names above and save them in the screen folder. The JPEGs should be the same size as the PC's screen. This can be displayed by clicking on the "Screen info..." button.

Using movie files to animate screens

Movie files can be displayed on the screens by placing a movie file in MP4 or QuickTime MOV format in the screen images folder and giving it the same name as the screen image. For example, to play an MP4 movie file when the ready.jpg screen is displayed the movie file should be named ready.mp4. Movie files can't overlap the live view display and so if live view is active the movie will be displayed in the area below the live view.

Append "_loop" to the filename, e.g. ready_loop.mp4, if you want the movie to automatically restart from the beginning and play continuously.

By default movie files are displayed centered on the screen unless live view is active in which case they are displayed below the live view. Movie files can also be positioned manually by appending the offsets from the left and top of the screen to the filename in the form _{LeftOffset}+{TopOffset} e.g. to position the ready.mp4 movie 200 pixels from the left of the screen and 100 pixels from the top the file should be named ready_200+100.mp4 (or ready_loop_200+100.mp4 if you want it to play continuously). If the movie is larger than the screen it will be automatically scaled to fit the screen.

Troubleshooting: If a video does not play properly it could be a video CODEC problem. Please try downloading and installing the K-Lite CODEC pack which should fix the problem. The K-Lite CODEC pack can be download it from: http://www.codecguide.com/download kl.htm

Countdown Text

Set the number of seconds in the "Countdown duration" text box to display countdown text before starting the clip capture. Then specify the countdown text to be displayed in the "Text displayed during countdown" edit box. The token {secs} is replaced by the number of seconds remaining before the capture starts. Click on the "..." buttons to specify the font type, size and color for the countdown text.

The countdown text is displayed below the live view images. If the live view images have an offset from the top of the screen and there is more space above the live view images than below them the countdown text will be displayed above the live view images.

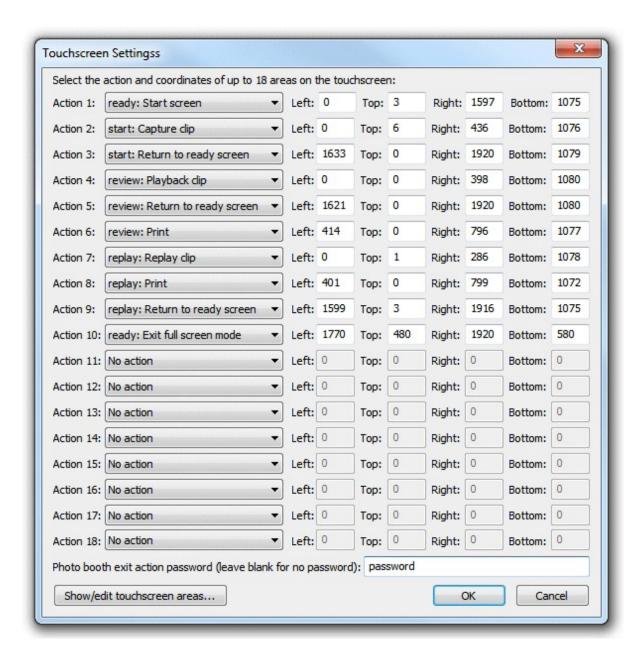
Progress Bar

A progress bar is displayed along the bottom of the screen during recording and playback. The color can be specified by clicking on the "..." buttons to the right of the foreground and background displays. The progress bar display can be disabled by setting the foreground and background colors to the same color.

Touchscreen Areas

Flip Book Photobooth can be operated using a touchscreen and following the prompts in the default screen layouts. The touchscreen areas can be setup to divide the screen into three vertical columns (the default setting) or three horizontal rows. The prompts in the default screen layouts will be displayed across the bottom of the screen when the vertical strips option is selected and down the left hand side of the screen when the horizontal strips option is selected.

Alternatively up to 18 user defined areas can be defined on a touchscreen to control the different settings. First select the "user defined" option in the "Touchscreen areas" dropdown list and then click on the "Settings..." button to display the touchscreen settings dialog:



Select the action using the dropdown lists on the left and the area on the touchscreen that activates the action using the corresponding "Left", "Top", "Right" and "Bottom" edit boxes. The values entered in the edit boxes are the screen coordinates in pixels with the origin in the top left corner. The example in the screenshot above defines several touchscreen areas including the following actions when the ready.jpg screen is displayed:

- 1. An action to switch from the ready screen to the start screen that fills most of the screen
- 2. A smaller area on the right of the screen to exit full screen mode

Touchscreen actions can also be viewed or edited interactively using a mouse by clicking on the "Show/edit touchscreen areas..." button. When the touchscreen action editor is first opened it will display the ready.jpg screen and the touchscreen actions for as boxes with white outlines and green text indicating the action. The action can be moved by clicking in the box and moving the mouse with the left button held down. The size of the box can be adjusted by dragging the corners with the left mouse button held down. Touchscreen actions can be deleted by right clicking on the action and

selecting "Delete action" from the menu. New actions added by right clicking the mouse and selecting the "Add action...". Different screens can be displayed by right clicking the mouse and selecting the required screen.

Exit the touchscreen action editor by pressing the escape key or by right clicking the mouse and selecting "Exit" from the menu. If the touchsrceen actions have been modified a confirmation dialog will be displayed asking you if you want to save the changes.

Please note: the touchscreen action editor only edits the positions of the touchscreen actions. It doesn't edit the JPEG screen images which display the graphics for the touchscreen buttons - to do this you need to use an image editor such as Photoshop Eelements.

An optional password can be used to protect the "Exit full screen mode" action by entering the password in the "Photo booth exit action password" field. Many photo booth operators define a secret touchscreen action on the screen to exit photo booth mode which can cause problems if users find it because it will allow them to break out of full screen mode. Using a password to protect this should prevent problems if users manage to find the secret exit photo booth mode touchscreen action.

8 Operating the Photo Booth

The photo booth can operated using a keyboard or a wireless presenter such as the Kensington wireless presenter shown below. A wireless presenter provides a convenient way to operate the photo booth and can control clip capture, replay and printing.



Basic Operation

Connect the camera and then press the "Start" button in the main window to start full screen photo booth mode and display the Ready Screen. On a dual monitor system move the main window onto the monitor where you want to display the screens before pressing the "Start" button.

The various screens and commands available are described below:

Ready Screen

Displays the ready jpg screen image with the camera's live view off.

Press F5 or the wireless presenter laser button to switch to the Start Screen

Press F6 or the wireless presenter play button to switch to the Playback Screen and start replaying the current clip (if available)

Press F7 or the wireless presenter stop button to switch to the Printing Screen and start printing the current clip (if available)

Press 1, 2, 3, 4 or 5 to switch to the Printing Screen and start printing 1, 2, 3, 4 or 5 copies of the current clip (if available)

Press Ctrl+L to load previously saved live view frames for display or reprinting (using a directory browser)

Press Ctrl+O to load previously saved live view frames for display or reprinting (using a thumbnail browser)

Press Esc to exit full screen photo booth mode and return to the main window

Shift+Ctrl+1 - select profile 1

Shift+Ctrl+2 - select profile 2

Shift+Ctrl+3 - select profile 3

Shift+Ctrl+4 - select profile 4

Shift+Ctrl+5 - select profile 5

Shift+Ctrl+6 - select profile 6

Shift+Ctrl+7 - select profile 7 Shift+Ctrl+8 - select profile 8 Shift+Ctrl+N - select next profile Shift+Ctrl+P - select previous profile

Start Screen

Displays the start.jpg screen image with the camera's live view on.

Press F5 or the wireless presenter laser button to switch to the Countdown Screen and start the countdown before capturing a clip

Press F6 or the wireless presenter play button to switch to the Playback Screen and start replaying the current clip (if available)

Press F7 or the wireless presenter stop button to switch to the Printing Screen and start printing the current clip (if available)

Press 1, 2, 3, 4 or 5 to switch to the Printing Screen and start printing 1, 2, 3, 4 or 5 copies of the current clip (if available)

Press the spacebar to display the current camera settings and keyboard shortcuts for changing the settings. Press the spacebar again to hit the settings display

Press Esc or the wireless presenter back button to return to the Ready Screen

Countdown Screen

Displays the countdown.jpg screen image and the countdown text during the countdown then changes to the Capturing Screen. The camera's live view is on

Press Esc or the wireless presenter back button to cancel the countdown and return to the Ready Screen

Capturing Screen

Displays the capturing.jpg screen image during capture together with a progress bar then switches to the Ready Screen after capturing the clip. The camera's live view is on

Press Esc or the wireless presenter back button to cancel the clip capture and return to the Ready Screen

Review Screen (optional)

Displays the review.jpg screen image with the camera's live view off.

Press F5 or the wireless presenter laser button to switch to the Ready Screen and start the countdown before capturing a clip

Press F6 or the wireless presenter play button to switch to the Playback Screen and start replaying the current clip

Press PageUp, S or the wireless presenter back button to swap the current clip with the previous clip and start playing it (if available)

Press F7 or the wireless presenter stop button to switch to the Printing Screen and start printing the current clip

Press 1, 2, 3, 4 or 5 to switch to the Printing Screen and start printing 1, 2, 3, 4 or 5 copies of the current clip

Press Esc or the wireless presenter back button to return to the Ready Screen

Playback Screen

Displays the replay.jpg screen image and a progress bar during playback. The camera's live view is off

Press F6 or the wireless presenter play button to start replaying the current clip

Press PageUp, S or the wireless presenter back button to swap the current clip with the previous clip and start playing it (if available)

Press F7 or the wireless presenter stop button to switch to the Printing Screen and start printing the current clip

Press 1, 2, 3, 4 or 5 to switch to the Printing Screen and start printing 1, 2, 3, 4 or 5 copies of the current clip

Press Esc or the wireless presenter laser button to cancel the clip capture and return to the Ready Screen

Printing Screen

Displays the printing.jpg screen image when printing then switches to the Ready or Playback Screen. The camera's live view is off. If the print option is selected in the properties dialog the flip book will be printed out using the current printer. If the "Save live view frames" option is selected the live view frames will be saved to disk for future reference. If the "Save print layout" option is selected the print layout will be saved to disk for reprinting in another app or for debug purposes.

Please note: live view frames and the print layout are only saved to disk when print is selected. They are not saved when the clip is captured.

Camera Not Connected Screen

Displays the camera_not_connected.jpg screen if the camera connection is lost or the camera is turned off. If the auto reconnect option is selected (from the Camera menu in the main window) it will switch to the Ready Screen if the camera connection is restored or the camera is turned on. Press Esc to exit full screen photo booth mode and return to the main window

Recommended Camera Settings

It is recommended that the camera is set to manual exposure mode with the lens set to auto focus. This will allow the exposure and focus to be adjusted from the Start Screen.

Ideally the ISO should be set to a low value (e.g. 800 or less) to reduce noise and give the best image quality. The aperture should be set to a mid value (e.g. f/8) to give good depth of field. For best results the camera's white balance should be set to custom using a gray card to set the color balance with the photo booth's lighting on. Please see the camera manual for details on how to set a custom white balance.

The camera's picture styles can be setup to give different image styles e.g. one could be set to normal colors, another to high contrast highly saturated colors, anther to standard balck and white and another to black and white with sepia toning for a retro look.

Using Live view Auto Focus

Live view auto focus with face detect can be used during capture by setting the camera live view to continuous AF. You also need to uncheck the "Enable depth of field preview" setting in the main window. This is because live view AF is only available when the lens is at its maximum aperture. Unfortunately this means you can't use a smaller aperture to maximize the depth of field and use continuous AF in live view.

Use Camera Video Mode to Reduce Motion Blur

The default setting is to use the camera's normal photo mode when capturing clips. This gives clear, high quality live view images but has the disadvantage that the camera will use a slow shutter speed for the live view images which can result in motion blur. You can reduce motion blur by selecting the "Use camera video mode" option in the main window and setting the camera's exposure mode so that you can choose a fast shutter speed. With Rebel series cameras you need to set the exposure mode to M (manual) and then select the required shutter speed. The suggested settings are: manual exposure mode, 1/200 shutter speed, f/8 aperture and auto ISO. It is important to make sure there is plenty of light when using a faster shutter speed otherwise the ISO setting will be very high in order to give the correct exposure and this could result in a reduction of image quality.

Please note: with older Rebel series cameras (ones which don't have a power switch with Off, On and Movies) you need to enable manual exposure in video mode using the camera settings. (please see the camera manual for details).

Adjusting the Camera Settings

Pressing the spacebar when the Start Screen is displayed will display a summary of the current camera settings together with a list of keyboard shortcuts for adjusting the camera settings. Pressing

the spacebar again will hide this display.

- Pressing A decreases the aperture and pressing Shift+A increases the aperture. Decreasing the
 aperture (e.g. a smaller number for the Av setting) will let more light into the lens and make the
 image brighter but will decrease the depth of field. Increasing the aperture increases the depth of
 field but reduces the amount of light causing the image to become darker.
- Pressing T decreases the shutter speed and pressing Shift+T increases the shutter speed.
 Increasing the shutter speed will darken the picture but should reduce the amount of blur due to movement in the captured images. Increasing the shutter speed will lighten the picture but may increase the chances of blurred images and may also reduce image quality due to noise.
- Pressing I decreases the ISO setting and pressing Shift+I increases the ISO setting. Increasing the ISO setting will make the images brighter but will also reduce image quality by increasing the amount of noise in the image. Ideally the ISO should be 800 or less.
- Pressing E will decrease exposure compensation and pressing Shift+E increases exposure compensation. This setting only has an effect if an auto exposure mode is selected in the camera. It will have no effect if the camera is set to manual exposure. If the camera is set to Av exposure mode adjusting the exposure compensation will have the same effect as varying the shutter speed. If the camera is set to Tv exposure mode adjusting the exposure compensation will have the same effect as varying the aperture. If the camera is set to one of the program settings adjusting the exposure compensation may change the shutter speed or aperture depending on the lighting conditions and the program mode selected.
- Pressing P or Shift P will switch to a different picture style. Depending on how the picture styles are setup in the camera this could be used to switch between B&W, sepia and color images.
- Pressing Ctrl+left/right will rotate the live view display. Use this option to display the images the right way up if the camera is mounted in portrait orientation.
- Pressing left and right cursor keys will adjust the lens focus. Please note that this will have no effect if the lens is set to manual focus.
- Pressing the + and keys will increase or decrease the cropping of the live view images. In landscape orientation cropping reduces the width of the images. In portrait orientation the top and bottom of the images but because the live view display is zoomed to a fixed height the images will appear to get larger and the width will increase.

Binding and Finishing

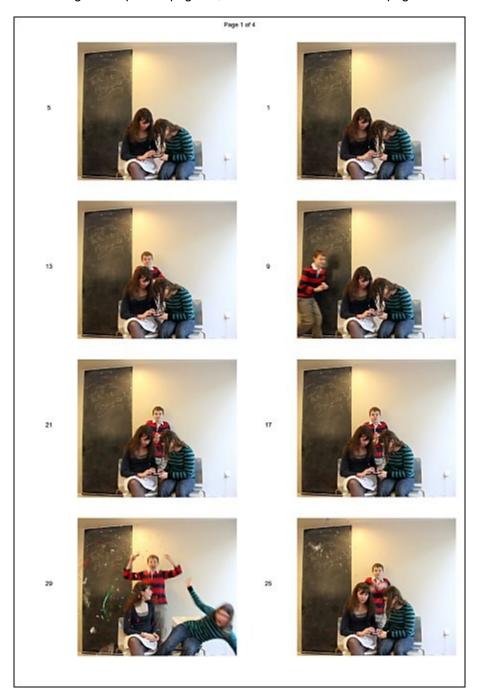
The pages are printed so that when all the pages are gathered up after printing they can be cut to give piles of pages in the right order e.g. a 30 page flip book printed on ten 6" x 4" pages will have pages 1, 11 and 21 on the top sheet; 2, 12, 22 on the second sheet; 3, 13 and 23 on the third sheet and so on. If these are stacked in order and then cut into three you end up with three piles: the first has pages 1 to 10, the second has 21 to 20 and the third has 21 to 30. These can be stacked together, a cover added and then stapled to give the final flip book. The pages have the page number printed in the staple area to help put them in the right order. The final page has the date and time printed so that the book can be easily identified if someone asks for another copy (this corresponds to the date and time used to name the folder where the live view frames and print layout are saved if enabled).

The cover could be made up pre-cut sheets added to the top and bottom of the pile to form the front and back covers or you could use a single pre-cut and pre-folded sheet which wraps around the book to form the front and back covers.

A heavy duty manual stapler should have no problem stapling a book with 30 to 40 pages. When stapling the book together it is important to make sure the end of the book which is flicked has evenly aligned pages. It doesn't matter if the edges of the pages at the binding end are uneven as this can be covered by a wraparound cover or book binding tape.

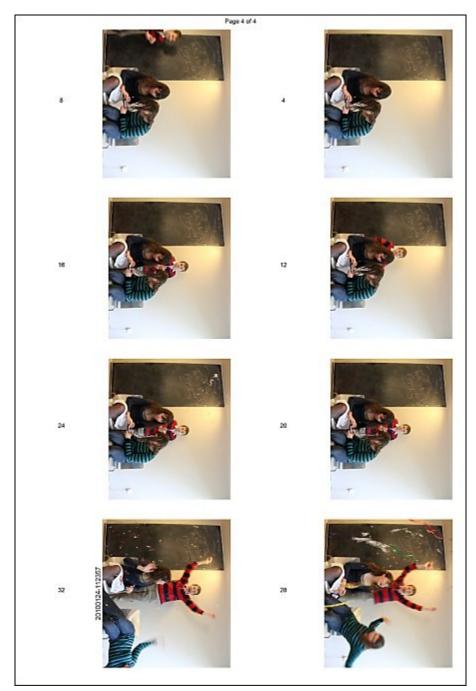
Example Pages

The page below was created using a dye sublimation printer loaded with 6"x9" media and is the top page of a set of four 6"x9" pages with 8 images per page. The printed page number is shown at the top ("Page 1 of 4") and the individual flip book pages are to the left of each image. Flip book page 1 is in the top right hand corner and page 5 is in the top left hand corner. When printed pages are stacked together flip book pages 2, 3 and 4 will be underneath page 1.



The page below has the images rotated by 90 degrees clockwise to give a flip book which is held at the bottom in one hand and flipped at the top using the other hand. This shows the last page ("Page 4 of 4") with flip book page 4 in the top right hand corner. The last page in the flip book is in the bottom left hand corner and this has the date and time of capture printed beside the image to make it

easier to identify a book if someone wants another copy.



9 Printing flip books from other sources

Flip Books can be printed from video files, from boomerang GIFs captured by DSLR Remote Pro and from DSLR Remote Pro Multi-Camera.

Printing a flip book from a video file

Type Ctrl+V when in full screen mode to load a video file. The frames to make the flip book will be

extracted from the video file and displayed in the playback screen where they can be printed. Please note: it may take several seconds to load the video and extract the frames before displaying the playback screen.

Printing a flip book from a boomerang GIF captured by DSLR Remote Pro

Type Ctrl+B when in full screen mode to load the XML summary file saved when DSLR Remote Pro created the boomerang GIF. The frames listed in the XML summary file will be loaded into Flipbook Photobooth and displayed in the playback screen where they can be printed.

If the number of frames captured by DSLR Remote Pro is less than the number of frames required for the flip book they will be repeated until there are enough frames. If the animated GIF captured by DSLR Remote Pro is a boomerang GIF (one that plays forwards and backwards) the frames will be copied in forwards and reverse order.

Printing a flip book from photos captured by DSLR Remote Pro Multi-Camera

Before capturing the photos make sure the "Save calibration settings with photos" option is selected in the Multi-Camera Animator.

For the best result also select the "Create PNG copies of stabilized photos" option in the Multi-Camera Animator. When this option is selected Flipbook Photobooth will load the stabilized PNG copies instead of the unstabilized JPEGs straight from the cameras.

Type Ctrl+B when in full screen mode to load the XML calibration settings file saved in the same folder as the photos saved by DSLR Remote Pro Multi-Camera. The frames listed in the XML summary file will be loaded into Flipbook Photobooth and displayed in the playback screen where they can be printed.

If the number of frames captured by DSLR Remote Pro Multi-Camera is less than the number of frames required for the flip book they will be repeated until there are enough frames. The frames will be repeated in a forward/backwards sequence.

Automatically Printing Movies, Animated GIFs or Multi-Camera Photos as Flip Books

Movie files, animated GIFs and photos from DSLR Remote Pro Multi-Camera can be printed automatically using the auto_print.ahk or auto_print_with_prompt.ahk AutoHotKey scripts which can be found in the installation folder (usually C:\Program Files (x86)\Breezesys\Flip Book Photobooth). AutoHotKey needs to be downloaded before using this script. This is a free download from: https://autohotkey.com

The auto_print.ahk automatically prints the flip book. The auto_print_with_prompt.ahk displays a prompt asking the user whether to print the flip book and has a timeout in case the user does not respond.

To use the script first run Flip Book Photobooth and select full screen mode (a camera is not required for importing and printing flip books). Then run the script with the pathname of the import file e.g.

To import and print a movie file as a flipbook add the full pathname of the movie file to the command line:

auto print.ahk C:\movie.mp4

To import and print an animated GIF from DSLR Remote Pro as a flipbook add the full pathname of the XML summary file to the command line:

auto_print.ahk C:\Users\chris\Documents\PhotoboothImages\2018-08-01\IMG_0001.xml This can be automated using the PhotoboothStatusCmdXML option in DSLR Remote Pro. Please see the section headed "Running External Commands" in the "Advanced Photo Booth Settings" page of the DSLR Remote Pro help file for details.

To import and print photos from DSLR Remote Pro Multi-Camera as a flipbook add the full pathname of the XML calibration settings file to the command line: auto_print.ahk C:\multi-camera\20180801_001\20180801_103456_calibration.xml This can be automated using the "Run command" option in Multi-Camera Animator. Please see the DSLR Remote Pro Multi-Camera help file for details.

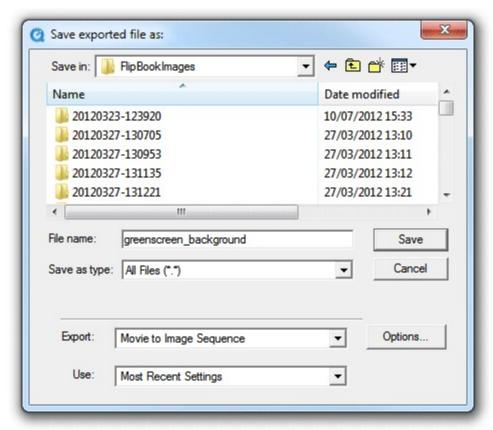
10 Green Screen

Flip Book Photobooth can be used for green screen or blue screen shooting. The subjects are photographed in front of a green (or blue) background and this is automatically replaced with a new background. The new background can be a single, fixed image or a movie made up of a series of still images to give an animated background.

Background Images

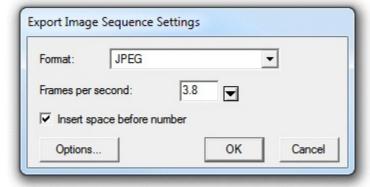
A single static background can be defined by a single JPEG image named greenscreen_background. jpg saved in the folder containing the screen and layout images. Alternatively an animated background can be used by creating a green screen background image for each frame in the clip e.g. if the clip contains 28 frames the background images should be named greenscreen_background 001.jpg, greenscreen_background 002.jpg, greenscreen_background 003.jpg etc.

Inexpensive tools such as Apple's QuickTime Pro Player can be used to create the background images from a movie file. To do this load the movie into QuickTime Pro then select "Export..." from the "File" menu. Select the folder in which to save the images and set the file name to greenscreen background. The "Save exported file as:" window should look something like this:



Apple Quick Time Pro "Save exported file as:" dialog

Next set the "Export:" option to "Movie to Image Sequence" and click on the "Options..." button:



Apple Quick Time Pro "Export Image Sequence Settings" dialog

Set the "Format:" to JPEG and type in the number of frames per second to use. If you want the animation to play at normal speed the frames per second should be set to the same frame rate as the flip book clip (this is displayed in the main Flip Book Photobooth window). The animation can be played in slow motion by setting frames per second to a higher value than the frame rate of the flip book clip (or high speed by setting it to a lower value). Click on "OK" and then "Save" to save the movie as a series of JPEG images.

For best performance the green screen background images should be the same size as the live view images from the camera. If the green screen background images are a different size from live view images from the camera the software will need to resize them which could cause delays or reduced image quality. Please see the Remote Live View Display page on the Breeze Systems' website for a

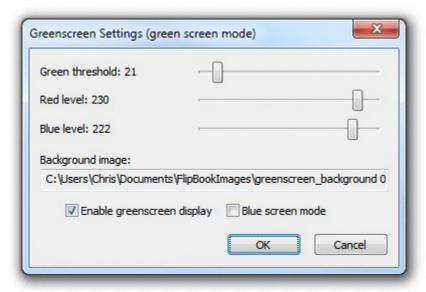
list of the live view image sizes for different Canon camera models. The background images can be cropped and resized using an image editor or you could use the proofs tool in our BreezeBrowser Pro software.

Optional Overlay

An optional static overlay can be added to the live view and the green screened images by placing a PNG file named live_view_overlay.png in the folder containing the screen and layout images. The overlay image should be a 24-bit PNG file an 8-bit alpha channel containing transparency information. It should be in landscape orientation with an aspect ratio of 3:2 e.g. 1056x704 pixels in size. If the aspect ratio of the overlay image isn't the same as the live view images it will be stretched to fit and may appear distorted.

Live view settings

The green screen setup dialog can be selected by typing Ctrl+G when the live view window is displayed:



The green screen background should be saved in the folder containing the screen and layout images and its path will be displayed in the "Background image:" field. Click on the checkbox to enable green screen display then adjust the sliders so that all of the green screen background is replaced with the background image but the foreground subject is unaffected. The easiest way to do this is to move the "Green threshold" slider to the left until most of the background is replaced and then fine tune the settings by moving the "Red level" and "Blue level" sliders to the right. The best settings to use will depend on the lighting conditions and the quality of the green background. If areas of the subject show the background the settings are too strong and should be reduced by moving the red and blue sliders to the left of the green slider to the right.

For best results the green background should be evenly lit and the subject should be positioned to minimize shadows falling on the background.

Select the "Blue screen mode" if you are using a blue background instead of a green one.

Allowing users to choose different green screen backgrounds

The green screen background is defined by the green screen JPEG images stored in the current screen images folder. Green screen backgrounds can then be selected by changing the screen images folder using profiles. For example four different green screen backgrounds could be defined by creating four screen images folders:

C:\Users\Chris\Documents\FlipBookImages\greenscreen1

C:\Users\Chris\Documents\FlipBookImages\greenscreen2

C:\Users\Chris\Documents\FlipBookImages\greenscreen3

C:\Users\Chris\Documents\FlipBookImages\greenscreen4

Each screen folder should have contain different green screen background images and you should also create a different ready.jpg screen in each so that the user knows which background has been selected.

Then save four different sets of settings, each with a different screen images folder:

C:\Users\Chris\Documents\FlipBookImages\bg1.xml - with the screen image folder set to C:

\Users\Chris\Documents\FlipBookImages\greenscreen1

C:\Users\Chris\Documents\FlipBookImages\bg2.xml - with the screen image folder set to C:

\Users\Chris\Documents\FlipBookImages\greenscreen2

C:\Users\Chris\Documents\FlipBookImages\bg3.xml - with the screen image folder set to C:

\Users\Chris\Documents\FlipBookImages\greenscreen3

C:\Users\Chris\Documents\FlipBookImages\bg4.xml - with the screen image folder set to C:

\Users\Chris\Documents\FlipBookImages\greenscreen4

Finally assign profiles 1 to 4 to the saved settings:

Profile 1: set to load C:\Users\Chris\Documents\FlipBookImages\bg1.xml

Profile 2: set to load C:\Users\Chris\Documents\FlipBookImages\bg2.xml

Profile 3: set to load C:\Users\Chris\Documents\FlipBookImages\bg3.xml

Profile 4: set to load C:\Users\Chris\Documents\FlipBookImages\bq4.xml

When the photo booth is running the different profiles (and hence green screen backgrounds) can be selected using the following keyboard shortcuts:

Shift+Ctrl+1 - select profile 1

Shift+Ctrl+2 - select profile 2

Shift+Ctrl+3 - select profile 3

Shift+Ctrl+4 - select profile 4

Shift+Ctrl+N - select next profile

Shift+Ctrl+P - select previous profile

These keyboard shortcuts could also be selected using an arcade button interfaced to the computer using a StealthSwitch 3 (please see this page for details). You could use four buttons, one for each background generating key presses Shift+Ctrl+1, Shift+Ctrl+2, Shift+Ctrl+3 and Shift+Ctrl+4, and then press the appropriate button the select the different backgrounds directly. Alternatively you could use a single button generating Shift+Ctrl+N which can be pressed repeatedly to step through the different backgrounds.

11 Printers

There are three main types of printers that can be used for printing flip books: dye sublimation printers, laser printers and inkjet printers.

Dye Sublimation Printers

Dye sublimation printers produce high quality prints that look and feel like traditional photos. The

printer is loaded with paper and ribbon and each set of media will give a set number of prints. This means that the cost per print is fixed and the cost won't change however much is printed on each page. The cheaper dye sublimation printers (e.g. DNP DS-RX1) typically take rolls of 200 prints and will print a 6"x4" in around 16 seconds. More expensive dye sublimation printers (e.g. DNP DS40, Mitsubishi CP-D70DW, Mitsubishi CP-D707DW, Sony UP-DR200) are faster (a 6"x4" print takes about 9 secs) and can take rolls of 400 to 700 prints depending on model. The cost per print is less for the more expensive printers. Some dye sublimation printers, such as the Mitsubishi CP-70D, Mitsubishi CP-D707DW, DNP DS40, DNP DS-RX1, HiTi P510L, Sony UP-DR200, can print 6"x2" strips when loaded with 6"x4" media. This greatly simplifies the process of creating the flip books as most of the cutting is done by the printer.

Example US costs using a DNP DS40 dye sublimation printer:

Printer: DNP DS40 Cost: US \$1195

Media: 400 6"x4" prints per roll @ \$0.15/print

Weight: 31 lbs (14 Kg)

A flip book of 24 pages cut from twelve 6"x2" prints takes approximately 70 secs to print and costs about \$1.04

(Prices taken from the Imaging Spectrum website, http://www.imagingspectrum.com, March 2013)

The print catchers that come with dyesub printers aren't suitable for collecting the pages in the order that they are printed. It's worth making a replacement which has a lip so that each page drops down allowing the next page to drop on top. This is simple to make using stiff clear plastic from a craft shop:



The top deck of a Mitsubishi CP-D707DW printer showing the special print catcher made from thin plastic The step (highlighted in red) allows each strip drop out of the way so that the prints come out in the right order.

Laser Printers

Color laser printers are cheaper to buy than dye sublimation printers and generally print faster but the output is lower quality than with dye sublimation printers or inkjets. Lasers require toner and paper which have to purchased separately and will also need the drum replacing periodically. Toner is the main cost and the amount used will depend on what is printed on each page. Small changes such as using a white background for the photo booth will save toner and reduce the cost of printing. It is also possible to get special drivers for some printers which reduce the amount of toner to save costs. Paper is relatively cheap and a good quality 170 gsm to 200 gsm paper such as Xerox Colotech works well.

Example UK costs using an HP CP2025 Color Laser Printer:

Full set of black, cyan, magenta, yellow cartidges: £392 (source Amazon.co.uk, June 2012) 1000 sheets Xerox Colotech 200 gsm A4 paper: £28.90 (source ebay.co.uk June 2012)

Printer weight: 23 Kg (48 lb)

Printer cost: £311 (source Amazon.co.uk, June 2012)

A flip book of 30 pages cut from 3 A4 prints takes approximately 45 secs to print. Estimated cost per book £1.40

Tips:

- 1. A free software utility like "Save Toner" can save toner usage by up to 50%
- 2. Use a white background to reduce toner usage
- 3. Pre-cutting pages into strips using a stack or ream cutter will save time during an event as it reduces the amount of cutting required after printing. e.g. cut US letter 8.5"x11" paper into 4.25"x11" strips before printing and then cut into 2" strips after printing to give the flip book pages

Inkjet Printers

Inkjet printers are usually the cheapest printers to buy and can give very high quality results when used with good quality inks and paper. However they tend to be slower than dye sublimation printers and laser printers. There is a huge range of different inkjet printers on the market and the cost per print depends on the printer, ink and paper used.

The slower printing speed can be offset to a degree by using Flip Book Photobooth's printer pooling with two or more printers. Individual books are printed on one printer and will take the same time as only using one printer but if several printers are used together several books can be printed in the time it would take to print one book on a single printer. It's also worth looking at more expensive printers as they often have faster printing speeds than cheaper models.

Tips:

- 1. Use a white background to reduce ink usage
- 2. Pre-cutting pages into strips using a stack or ream cutter will save time during an event as it reduces the amount of cutting required after printing. e.g. cut US letter 8.5"x11" paper into 4.25"x11" strips before printing and then cut into 2" strips after printing to give the flip book pages

Note: Prices are for guidance only and are based on advertised web prices in GB pounds and USD. The relative costs of printers and media may be different in other countries.

12 Cutting and Binding

Recommended Workflow

A fast dye sublimation printer capable of printing 6"x2" strips is ideal for creating flip books because it does most of the cutting of the pages for you. Each 6"x"2 strip holds two flip book pages and the

printer will print them in the correct order so that they only need to be cut in half using a stack cutter (aka ream cutter) or a heavy duty guillotine.



The Mitsubishi CP-D707DW dye sublimation printer can print 6"x2" strips using both printer decks (Shown here with special printer catchers made from thin plastic to catch the strips in the right order)



Trimfast RE3943 Ream Cutter. This model has no problem cutting through twenty 6"2" strips and has a quick release paper clamp and a safety guard

Alternative Workflows

Fast inkjet or laser printers can also be used to print the flip books but will require additional work to cut the pages. These printers will usually print 8 or 10 flip book pages on larger sheets of paper which then need to be cut. The pages can be cut using a guillotine or rotary cutter but this can be slow and labor intensive. After cutting the individual piles of pages are gathered up ready for binding.

Binding

A heavy duty stapler should have no problem stapling books of 30 to 40 pages. Pre-cut front and back covers can be added to the book before stapling. The front covers can be pre-printed with the name of the event, photos of the bride and groom for a wedding etc. and your contact details can be printed on the back page.

A simple jig like the one shown below makes it much easier to hold the pages together when stapling.



Simple jig for holding the pages for stapling



A heavy duty stapler used to bind the books shown here with a jig to hold the pages

After stapling the books can be finished off by wrapping bookbinding tape around the spine. This may add a little time to the binding process but produces a more professional looking finished product.

13 Release History

Flip Book Photobooth v1.8.2, released 22 October 2019

- · Added support for the Canon EOS 90D
- Added support for the Canon EOS M6 Mark II and Canon EOS M200
- Added support for the Canon PowerShot SX70 HS, Canon PowerShot G5 X Mark II and Canon PowerShot G7 X Mark III
- Fixed a reliability issue with playing video screen animations that was caused by recent Windows updates

Flip Book Photobooth v1.8.1, released 24 July 2019

- Added support for the Canon EOS 250D/200D Mark II/Rebel SL3
- Added support for the Canon EOS R
- Added support for the Canon EOS RP
- Fixed issues with reading some video file formats when printing flip books from video files

Flip Book Photobooth v1.8, released 3 August 2018

- Added support for the Canon EOS 6D Mark II
- Added support for the Canon EOS 200D/Rebel SL2
- Added support for the Canon EOS M50
- Added support for the Canon EOS 1500D/EOS 2000D/Rebel T7
- Added support for the Canon EOS 3000D/EOS 4000D
- Added the ability to print flip books from DSLR Remote Pro boomerang GIFs and DSLR Remote Pro Multi-Camera photos
- · Added the ability to print flip books from video files

Flip Book Photobooth v1.7, released 28 June 2017

- Added support for the Canon EOS 77D
- Added support for the Canon EOS 800D/Rebel T7i
- · Added optional overlay images for each flip book page
- Added optional cover image for the first page of the flip book
- Added auto playback option after capturing the clip
- Live view images can now be cropped top and bottom as well as left and right
- Reduced the delay before displaying live view when the camera's video mode is selected
- Fixed a problem where loading saved settings could cause the software to crash

Flip Book Photobooth v1.6, released 27 July 2016

- Added support for the Canon EOS 1300D/Rebel T6
- Added support for the Canon EOS 80D
- Added manual print layout option
- Fixed a problem with the "playback clip" and "return to ready screen" custom touchscreen actions
- Fixed a problem with next/previous profile not working

Flip Book Photobooth v1.5, released 26 August 2015

- Added support for the Canon EOS 7D Mark II
- Added support for the Canon EOS 750D/Rebel T6i and Canon EOS 760D/Rebel T6s
- · Added user definable touchscreen actions
- · Added live view continuous AF option to allow auto focus during image capture
- · Added video mode option to allow control over the shutter speed in order to reduce motion blur
- Added the option to play back clips in a continuous loop

Flip Book Photobooth v1.4, released 12 September 2014

- Added support for the Canon EOS 70D
- Added support for the Canon EOS 1200D/Rebel T5
- · Added the option to play movie files on the screens displayed to the user
- · Added optional live view overlay for normal and green screen shooting
- Now disables touchscreen edge gestures on Windows 8 and Windows 8.1 systems
- Fixed a problem with the "Image position: Outer" print layout option not working if the left margin is set to 0

Flip Book Photobooth v1.3.3, released 30 July 2013

Added support for the Canon EOS 700D/Rebel T5i and Canon EOS 100D/Rebel SL1

Flip Book Photobooth v1.3.2, released 22 March 2013

- Added sample settings for DNP DS40 printer
- Touchscreen sensitive areas can now be arranged horizontally or vertically
- The color of the record/playback progress bar is now user definable
- Camera status message now visible when using screen images with white backgrounds

Flip Book Photobooth v1.3.1, released 8 January 2013

- Added support for the Canon EOS 6D and Canon EOS-1D X
- Fixed a problem with corrupted prints when the capture width is not a multiple of four pixels

Flip Book Photobooth v1.3, released 13 September 2012

- Added support for green screen shooting with a static or animated background
- Added profiles to allow keyboard shortcuts to load different settings when the photobooth is running
- Added optional review.jpg screen which is displayed after capturing a clip
- Fixed a problem with live view sometimes not working with the Canon EOS 650D/Rebel T4i

Flip Book Photobooth v1.2, released 12 July 2012

- Added "Printer cuts pages" option for printers which print 6x4 and cut to make two 6x2 strips
- Added sample settings for DNP DS-RX1 and Mitsubishi CPD707DW printers
- Added support for Canon EOS 5D Mark III and Canon EOS 650D/Rebel T4i
- Now saves printer settings

Flip Book Photobooth v1.1.1, released 20 October 2011

- Added support for the Canon EOS 600D/Rebel T3i and Canon EOS 1100D/Rebel T3
- Changed software protection method from dongle to registration code

Flip Book Photobooth v1.1, released 2 December 2010

Added support for the Canon EOS 60D

Flip Book Photobooth v1.0.2, released 30 September 2010

 Added thumbnail browser for loading previously saved images. Type Ctrl+O to display the thumbnails.

Flip Book Photobooth v1.0.1, released 2 September 2010

- Increased the maximum number of pages from 20 to 50
- Fixed an intermittent problem playing back previous clips which resulted in them being played too fast

Flip Book Photobooth v1.0, released 28 June 2010

- Changed software protection system to use a dongle
- Added print even page first option for printers that print pages in the wrong order

Flip Book Photobooth v1.0 beta 2 (build 20100521), released 21 May 2010

- Added the ability to use different background images for each page
- Added auto-start option when camera connects
- Added keyboard shortcuts to print 1, 2, 3, 4 or 5 copies of the current clip
- Added S keyboard shortcut to swap the current clip with the previous clip
- Added 'Outer' image position option for use with dye sub printers that support 6"x2" strip printing

Flip Book Photobooth v1.0 beta 1 (build 20100318), released 18 March 2010

 First beta version with support for Canon EOS 450D/Rebel XSi, Canon EOS 500D/Rebel T1i, Canon EOS 550D/Rebel T2i, Canon EOS 1000D/Rebel XS, Canon EOS 40D, Canon EOS 50D, Canon EOS 5D Mark II, Canon EOS 7D, Canon EOS-1D Mark III, Canon EOS-1D Mark IV and Canon EOS-1Ds Mark III