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1 Webcam Photobooth

Introduction

Webcam Photobooth is fully featured software for using a standard USB webcam on a Windows PC to run a photobooth. The software displays live images on the screen and runs an automated picture taking sequence before formatting and printing out the results. Webcam Photobooth is suitable for a wide range of professional and semi-professional photo booths from simple setups printing a traditional 4 photo strip right through to more sophisticated photo booths with green screen shooting and touchscreen controls.

Webcam Photobooth also supports video booth shooting to record short video clips, complete with sound, and save it as a standard AVI file. In operation the booth and switch between stills photo booth mode and video booth mode.

The software works in a similar way to our other photobooth software ([DSLR Remote Pro for Windows](#) for Canon DSLRs, [PSRemote](#) for Canon PowerShot cameras and [NKRemote](#) for Nikon DSLRs). Please see this series of [articles on photobooth shooting](#) for lots of useful information about setting up the software, selecting a suitable printer and designing the print layouts.

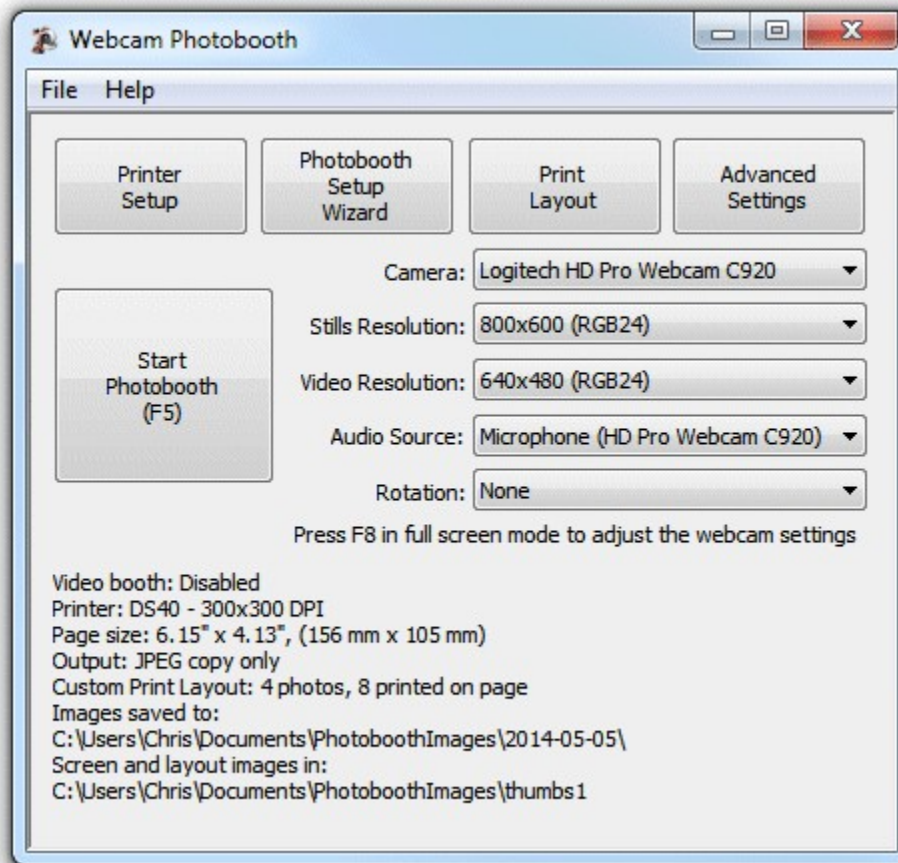
Suitable Cameras

Any Windows compatible USB webcam should work with Webcam Photobooth. For best results use a high quality webcam such as the Microsoft Lifecam Cinema HD, Microsoft LifeCam Studio, Logitech Webcam Pro 9000 HD or Logitech C910 HD Webcam. These webcams give good quality results even in poor lighting conditions and have autofocus and a wide angle lens making it easier to take pictures of groups of people in the photobooth.



Start here

When Webcam Photobooth is run the main window shown below is displayed.



Use the camera drop down list to select your webcam and the resolution drop down list to select the resolution for still photos and video. The media type is shown in brackets in the resolution drop down list. Please note that not all media types will work but most webcams should support RGB24, YUYV or MJPG. If the live view display is sluggish you may need to select a lower resolution or use a more powerful computer.

For video booth shooting you need to select both the video resolution and the audio source.

The rotation setting can be used to rotate the images for stills pictures only. This is useful if you want to take portrait orientation images by turning the webcam.

The quickest way to get started is to setup your printer and then use the [photobooth setup wizard](#) to set everything else up for you.

You can then change the appearance of the screens by editing the JPEG screen images in an image editor such as Photoshop or Photoshop Elements.

Then use the [print layout editor](#) to edit the print layout or to load a different preset print layout.

The [advanced settings](#) can be used to fine tune the settings.

2 Installing and Registering Webcam Photobooth

When you install Webcam Photobooth you need to activate your license on each PC it is running on. 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. Each license can be activated on two computers, providing only one computer is used at once.

You must deactivate the software before **making any hardware changes, upgrading or repairing the PC**, reinstalling Windows or reformatting a hard disk. The software can then be reactivated after the work has been done.

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 Webcam Photobooth can be downloaded from www.breezesys.com.

To install Webcam Photobooth simply download and run the setup program then follow the on-screen instructions.

Uninstalling the software

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

IMPORTANT: Please deactivate Webcam 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:

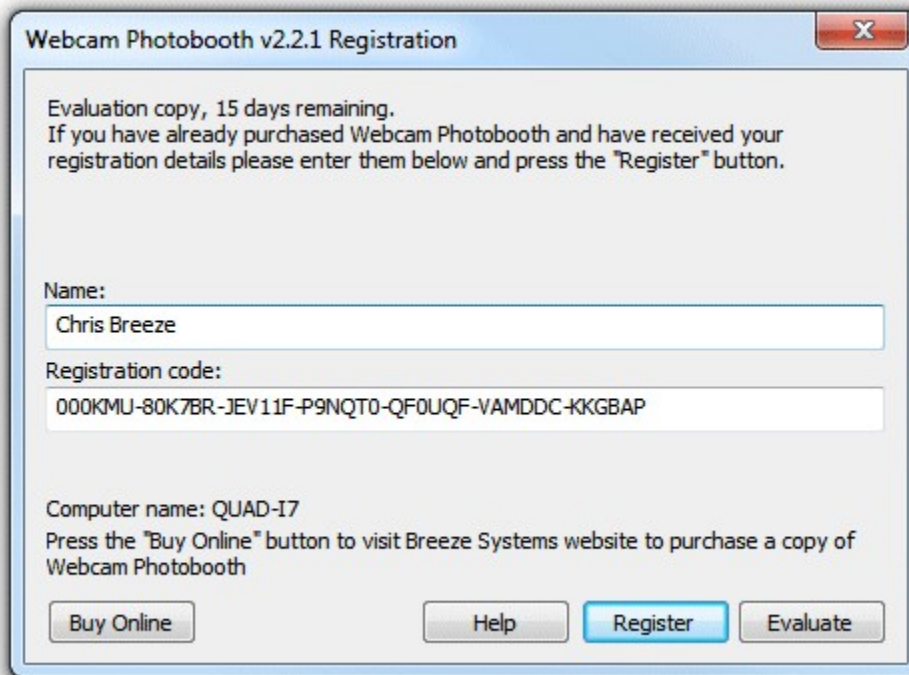


At the end of the 15 day trial period you must purchase a license to continue using the software.

Registering the software

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

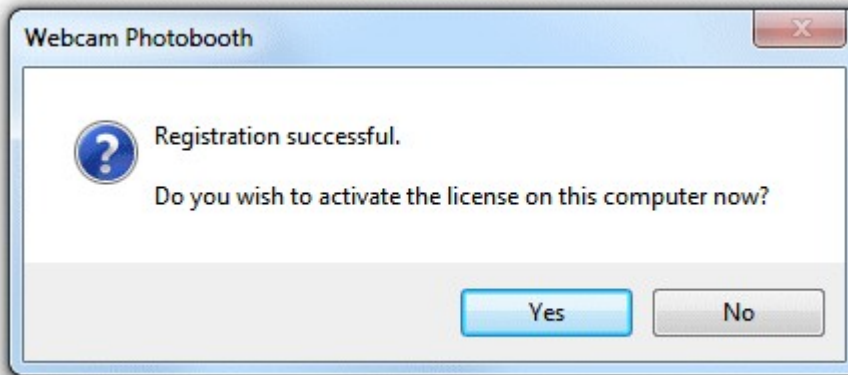
To register Webcam Photobooth run the application enter your registration name and code exactly as they appear in your registration email. You may find it easier to copy and paste both the registration name and code directly from your registration email to avoid mistakes when entering it. Please keep 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:

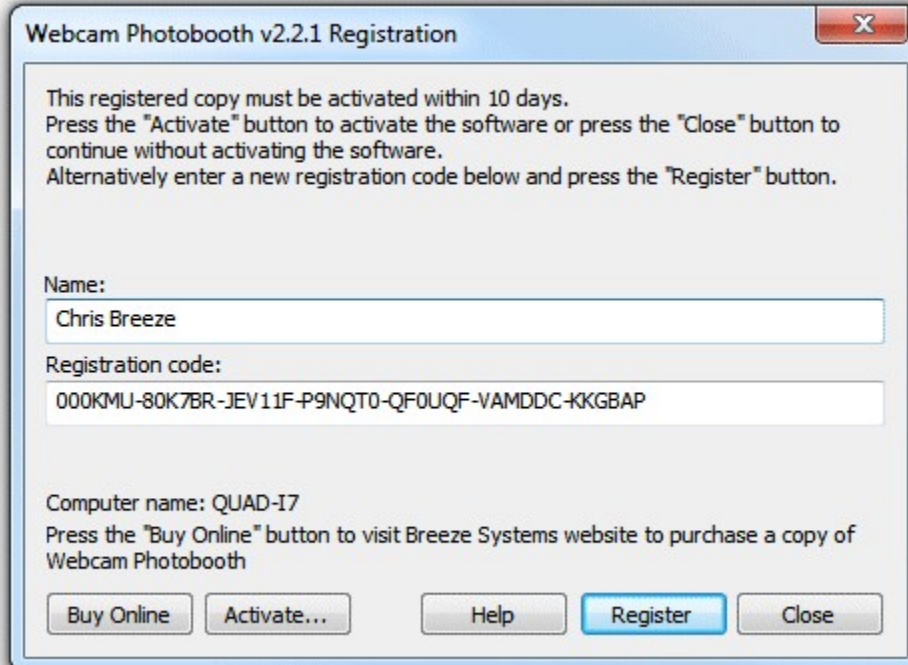


Click on the "Yes" button to activate the software on this computer (see the section below for details).

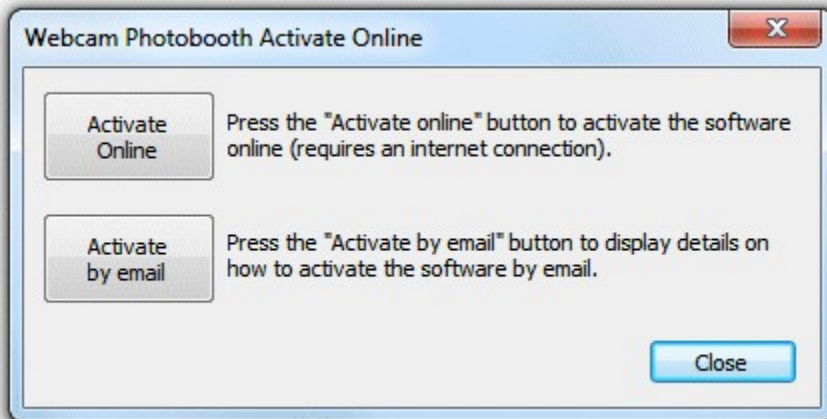
Activating the software

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. Each license can be activated on two computers, providing only one computer is used at once. 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

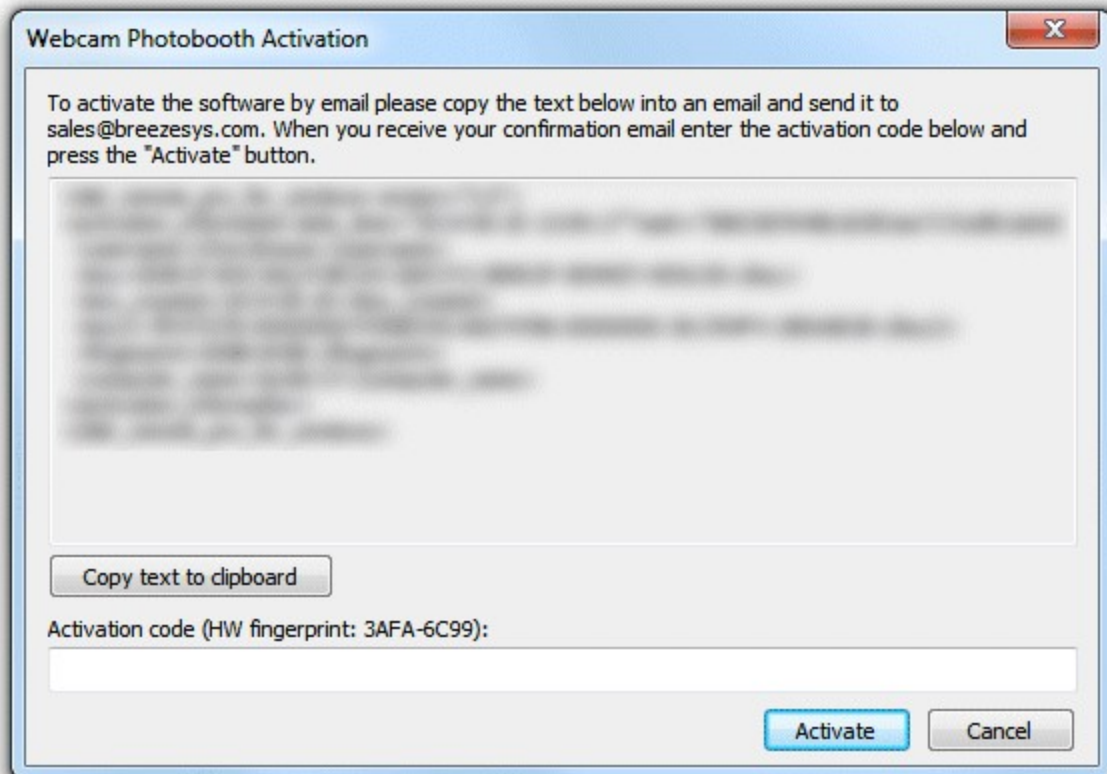


and the activation dialog below will be displayed:



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

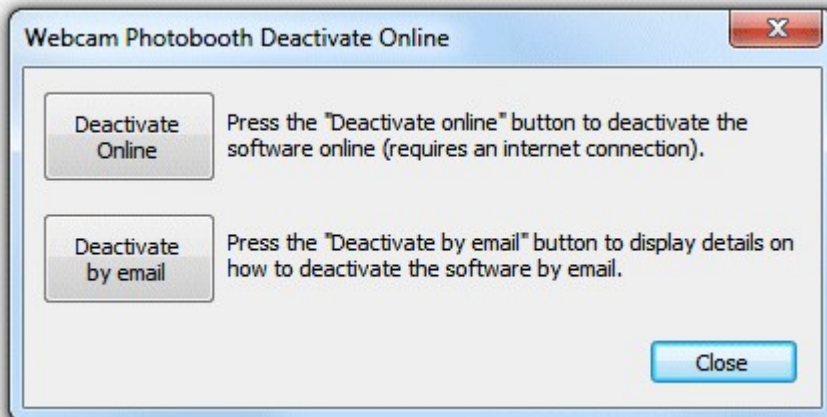
The software can only be activated on up to two computers at any given time. If you wish to move the software to a different computer you must deactivate it from the old computer before activating it on the new computer.

You also need to deactivate the software before **making any hardware changes, 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:

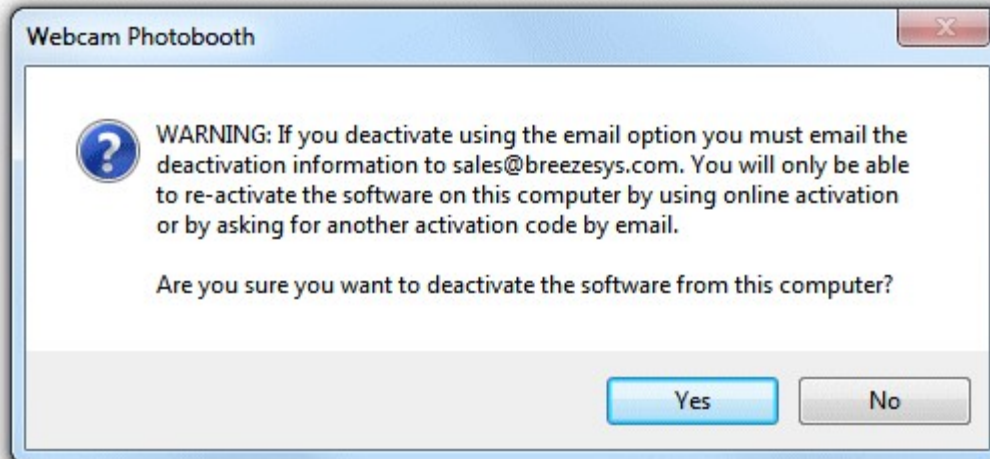


Then click on the "Deactivate..." button to display the deactivation dialog:

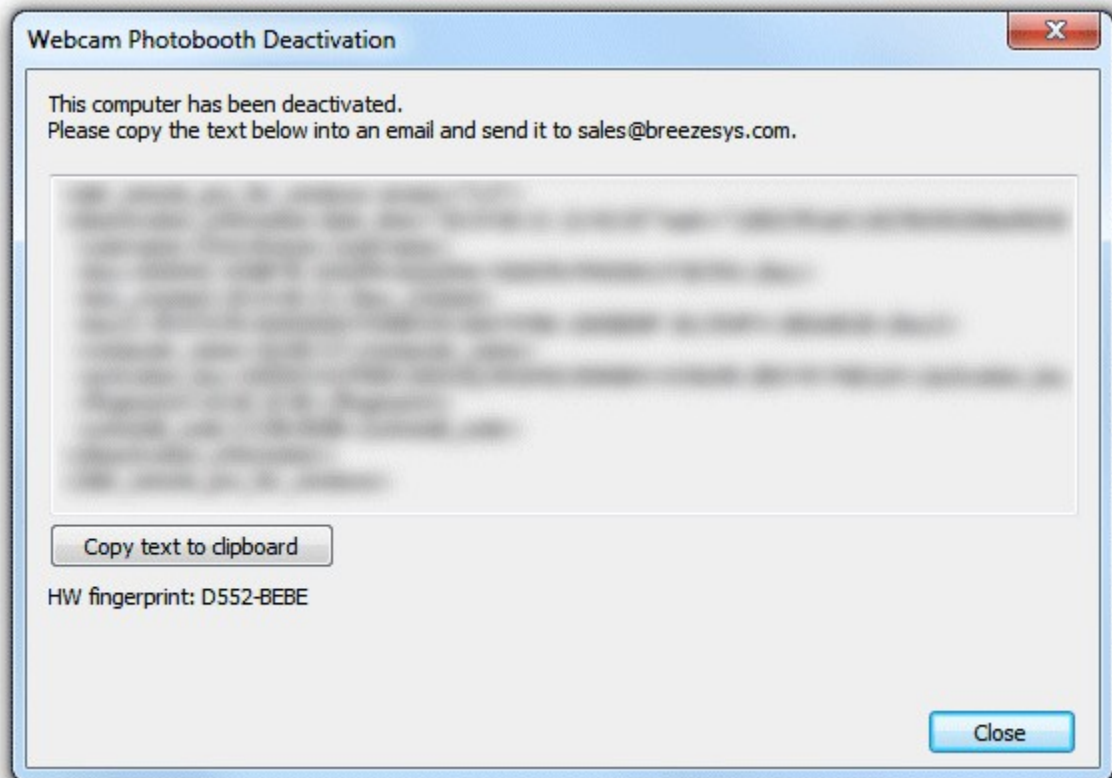


The quickest and simplest way to deactivate the software is to do it online by pressing the "Deactivate Online" button. Please note that the computer must have an internet connection and the program must be allowed to access the internet in order to deactivate the software online. Please note that it 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 Webcam 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: 000JJ3-ED5Y4G-PJAPFB-1YYQJ7-05N0HC-XWW7YT-JKZZBV

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 Webcam Photobooth in your web browser. Alternatively go to the Webcam Photobooth page on our website: <http://www.breezesys.com/Webcam>

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 the computer is connected to the internet and check your firewall settings to make sure that WebcamPhotobooth.exe (the Webcam 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 Photobooth Setup Wizard

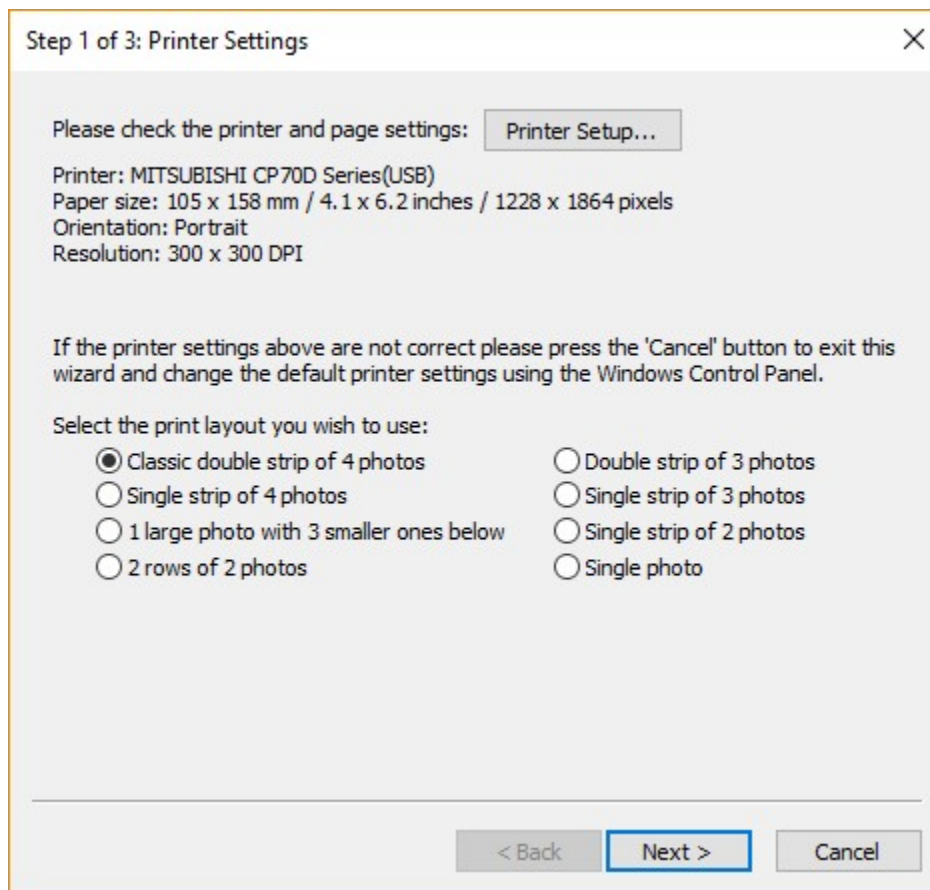
The photobooth setup wizard provides a fast and simple way of creating the screens and the print layout for common photobooth configurations.

Before you start

Before running the setup wizard please ensure that your printer is setup correctly. The photo booth software uses the Windows default printer and page settings. These can be setup by selecting "Devices and Printers" from the Windows Start menu. Right click on the printer you wish to use and check that "Set as default printer" is selected. Then select "Printing preferences" and setup the layout, paper and quality settings ready for for photo booth printing. Then select "Photobooth Setup Wizard..." from the File menu to start the setup wizard.

Step 1: Printer Settings

This step displays the current printer settings and asks you to select a print layout. The settings for a Mitsubishi CP70D printer loaded with 6x4 paper are shown below:



First check the printer settings and click on the "Setup printer..." button if they need changing.

Please note: if you printing a double strip of 3 or double strip of 4 photos and are using a dyesub printer which can cut a 4"x6" sheet into two 2"x6" strips you need to select this option in the printer driver by clicking on the "Setup printer..." button.

Next select one of the seven print layout options:

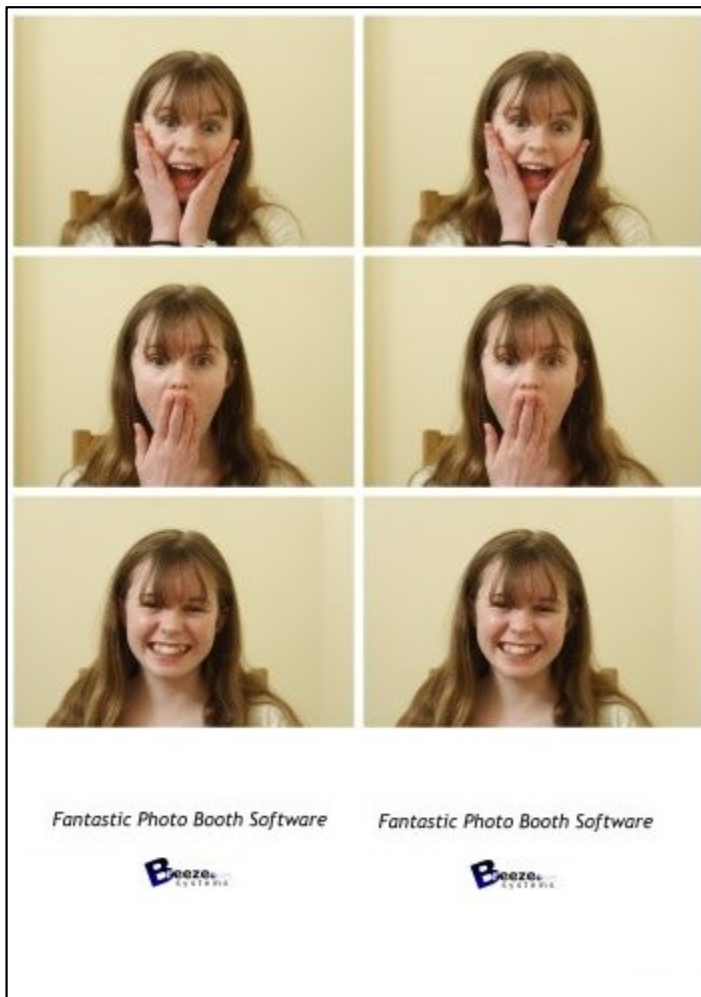
"Classic double strip of 4 photos" - This prints two columns of four images side by side as shown below:



"Single strip of 4 photos" - This prints a single column of four images as shown below. This option is useful for printers like the DNP DS-RX1 which can cut 6x2 strips from 6x4 paper and treat these as 6x2 pages.



"Double strip of 3 photos" - Similar to the "Classic double strip of 4 photos" but with only three photos and more space for logos etc.



"Single strip of 3 photos" - Similar to the "Single strip of 4 photos" but with only three photos and more space for logos etc.



"1 large photo with 3 smaller ones below" - This layout gives plenty of space for logos and captions as shown below:



"2 rows of 2 photos" - This option fills the page with four equally sized photos arranged in a 2 x 2 grid:



"Single photo" - This option fills the page with a single photo:



When you have selected your preferred layout press the "Next >" button to go to step 2.

Step 2: Specify the photo booth images folder

This step allows you to specify the name of the folder where the various screen and layout images should be stored and looks like this:

Step 2 of 3: Specify Photo Booth Images Folder ✕

Please enter the name of the folder where the photo booth images will be stored:

The photo booth images folder will be created as a subfolder of:
C:\Users\chris\Documents\PhotoboothImages

The photo booth images folder is where screen designs and layout images are stored. A folder containing simple screen and background images will be created in the PhotoboothImages subfolder of your documents folder.

Screens are simply JPEG images which can be edited in any image editor. The ready screen is defined by a JPEG named ready.jpg.

Logos can be added by editing the background.jpg layout image. This is the same size in pixels as the printed output and is placed on the page before the photos, captions and overlays.

Please edit these images to customize the look of your booth.

< Back Next > Cancel

Enter the name of the photo booth images folder. The screens for the photo booth and the optional

layout images will be saved in this folder and can be edited later using an image editor to personalize the look of your booth.

Press the "Next >" button to go to step 3.

Step 3: Specify user interface options

This step allows you to specify the options available to users of your photo booth and looks like this:

Step 3 of 3: Specify user interface options

Please select the photo booth options from the following list:

- DSLR template compatibility mode (3:2 aspect ratio)
- Use touchscreen
- Allow users to select B&W or color prints
- Preview each photo after it is taken
- Display thumbnails of the photos taken so far
- Display print preview and ask for confirmation before printing
 - Max number of print copies:
- Add print option in sharing screen
- Facebook upload (requires touchscreen option)
- Twitter tweet (requires touchscreen option)
- MMS/SMS (requires touchscreen option)
- Email photos (requires touchscreen option)
- Add a background.jpg image which can be edited to add logos etc.
- Enable video booth mode Capture "boomerang" animated GIFs
- Inactivity timeout in secs (0=disabled):

< Back Finish Cancel

Select the options you wish to use and then press the "Finish" button to create the photo booth settings. The settings are saved to a file named settings.xml in the photobooth images folder. These settings can be loaded again by pressing the "Load..." in the photobooth settings dialog.

"Use touchscreen" - select this option if your booth has a touchscreen. The setup wizard will automatically add buttons and touchscreen actions to the screens shown to users.

"Allow users to select BW or color prints" - If the "Use touchscreen" option is selected this option will add buttons and touchscreen actions to allow users to choose color or B&W prints. If "Use touchscreen" is not selected this option will do nothing but users will be able to select B&W or color using the keyboard shortcuts Ctrl+B and Ctrl+C.

"Preview each photo after it is taken" - when this option is selected a full screen preview will be displayed for 3 secs after each shot is taken.

"Display thumbnails of the photos taken so far" - select this option to display a small thumbnail of each shot taken so far down the right hand of the screen. Each screen will have a series of small gray rectangles added to show where the thumbnails will be placed. Please see the section on the optional [thumbnail display](#) for more information.

"Display print preview and ask for confirmation before printing" - when this option is selected a full screen preview of the print layout will be displayed before printing. If the "Use touchscreen" option is selected buttons and touchscreen actions allowing users to print or reject the photos will be added. If the "Use touchscreen" option is not selected users need to press A to accept the print or X to reject it. If the "Use touchscreen" option is selected you can also define the maximum number of copies the user can select in the confirm printing screen. The photo booth wizard will create buttons and touchscreen actions for increasing the number of print copies and display these on the right hand side of the screen. Multiple confirm_printing.jpg screen will be created: confirm_printing_1.jpg which is displayed when 1 copy is selected, confirm_printing_2.jpg for 2 copies, confirm_printing_3.jpg for 3 copies etc.

"Add print option in sharing screen" - select this option to allow users to print photos from the sharing screen.

"Twitter tweet" - select this option to allow users to post photos their personal Twitter feed direct from the photobooth (requires an internet connection). Please see the section on [uploading photos to social networks](#) for more information on posting photos to Twitter.

"MMS/SMS" - select this option to allow users to text photos to their cellphone via MMS or SMS (requires an internet connection and an account with Twilio.com). Please see the section on [uploading photos to social networks](#) for more information texting photos.

"Email photos" - select this option to allow users to email photos direct from the photobooth (requires an internet connection). Please see the section on [uploading photos to social networks](#) for more information on emailing photos.

"Add a background.jpg image which can be edited to add logos etc." - select this option if you want to add logos etc. to the prints. This will create a background.jpg image the same size in pixels as the printed output and place it the photo booth images folder. Please edit the background.jpg to add logos etc.

"Enable video booth mode (10 sec video capture)" - select this option if you are using a camera which supports video (e.g. a Rebel T3i/EOS 600D) and wish to offer users the option to record a 10 second video (the settings can be adjusted later using the "Video Booth Settings" dialog). Select the "Capture 'boomerang' animated GIFs to capture boomerang style animated GIFs instead of normal videos. This will set everything up to create a an animated GIF that is approximately 3 secs long and plays forwards then backwards at approximately double speed.

The inactivity timeout can be set to switch the booth to standby mode and display the welcome.jpg screen after a preset number of seconds if there is no user input. Set this to 0 to disable the inactivity timeout. The booth can be switched back to the ready screen by pressing F6 or touching the screen (if available).

What happens next?

Please try running the booth and taking a set of photos to check the print layout. If the photos aren't correctly centered on the page or the gaps between the photos is too large you can adjust the settings by clicking on the "Print Layout" shortcut button (or by selecting File->Photobooth settings... and clicking on the "Settings..." button to the right of the "Custom layout" checkbox. Please see the section on the [print layout editor](#) for more details.

Logos and other graphics can be added to the prints by creating a background.jpg image and editing this in an image editor. The background.jpg image needs to be the same size in pixels as the print output. If you selected the "Add a background.jpg image which can be edited to add logos etc." option when running the setup wizard there will already be a dummy background.jpg image in the photobooth images folder.

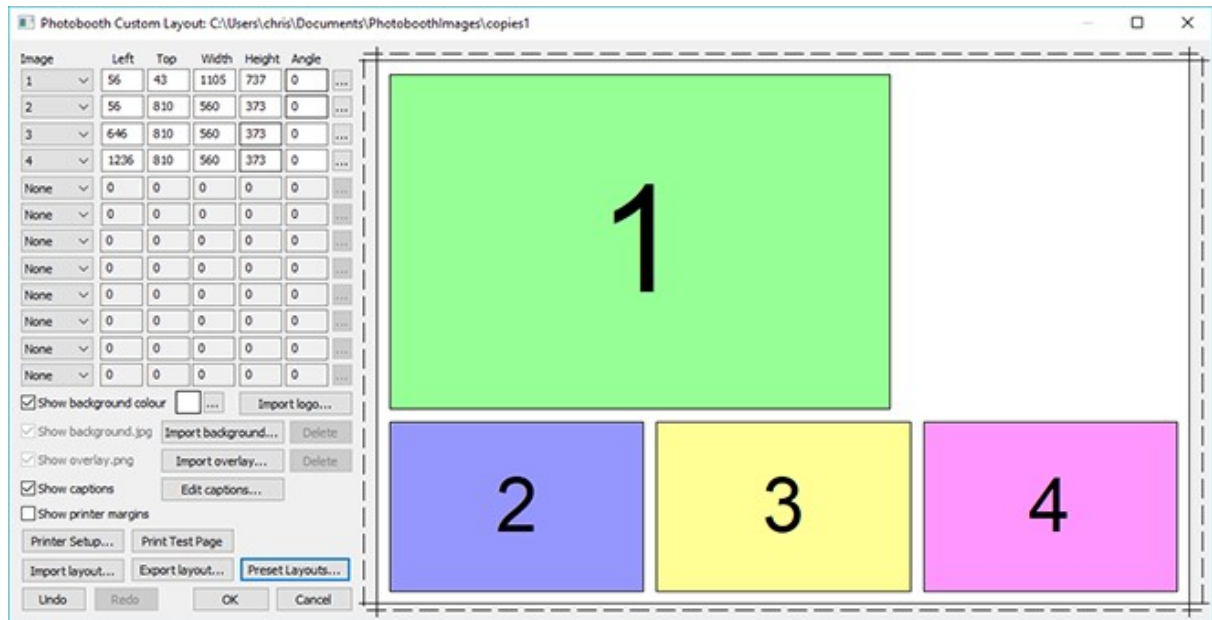
The various screens presented to the user are defined using JPEG images saved in the photobooth images folder. The look of your booth can be customized simply by editing the screen JPEGs using an image editor such as Photoshop Elements. The screen that is shown when the booth is ready to take the next set of photos is called ready.jpg. Please see the section on [images displayed to the user](#) for more details.

There are many other settings that can be adjusted. Please see the section on [photobooth setup](#) for more information. There is a series of [articles on our website](#) which includes lots of useful information about photobooth shooting and a section giving answers to [frequently asked questions](#).

4 Print Layout Editor

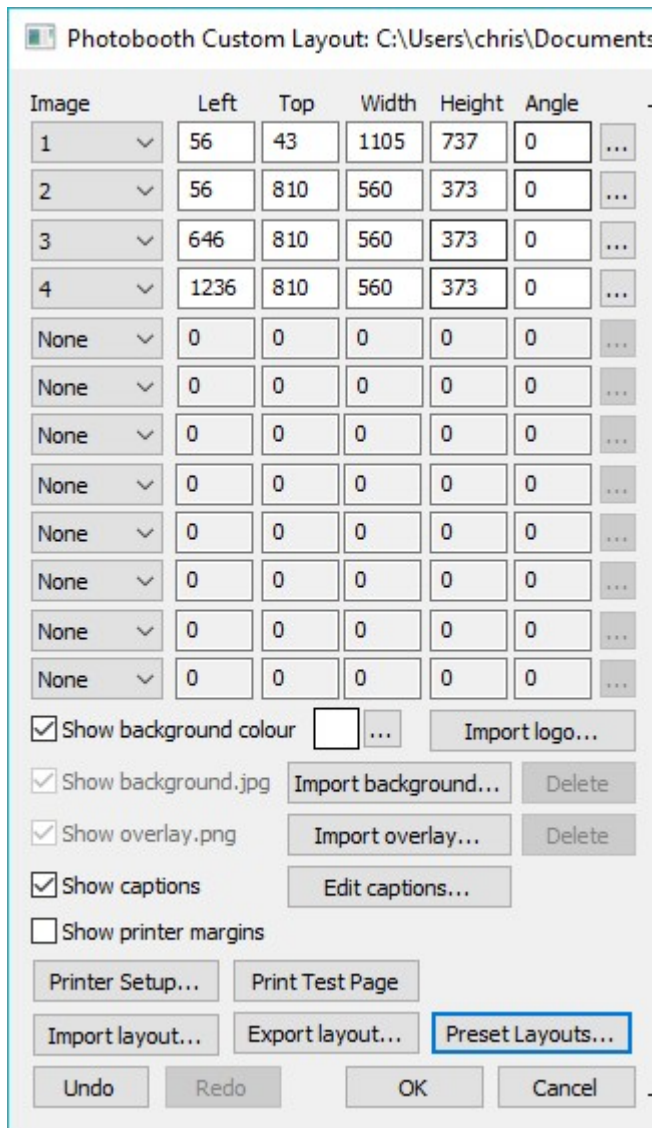
The print layout editor can be displayed by clicking on the "Print layout" photobooth shortcut button in the main window or by displaying the "Photobooth settings" dialog (File->Photobooth settings...) and clicking on the "Settings..." button to the right of the "Custom layout" checkbox.

Note: if the photobooth shortcut buttons aren't displayed in the main window you can display them by selecting View->Photobooth Shortcuts



The right hand side of the window displays the print layout. Photos and captions can be edited interactively by clicking on them using a mouse and then dragging to position, resize or rotate them.

The left hand area of the window contains controls to help with the layout and for loading and saving settings:

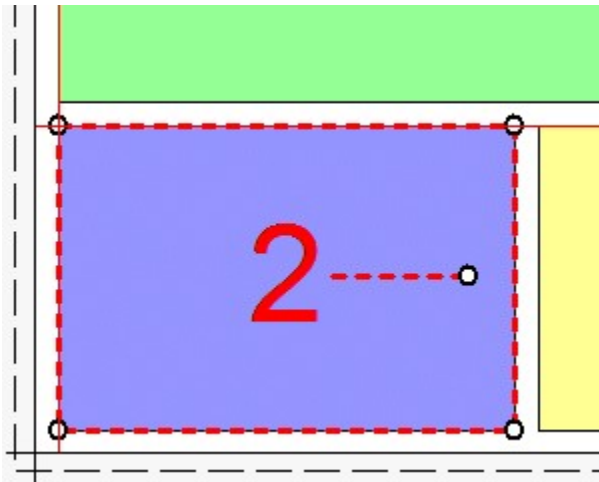


A Quick tour of the editor

This section gives a quick overview of some of the ways to edit the layout.

Click on the "Preset layouts..." button, select one of the preset layouts (e.g. "1 large, 3 small") and then click on the "OK" button. The right hand side of the editor should show the page layout similar to the screenshot above.

Left click the mouse on photo 2 to select it:



The photo will be highlighted with a dashed red line to show that it has been selected. It will also have a resize control in each corner and a dashed line in the center with a control for rotating the image.

Move the mouse over the center of the photo (a hand cursor will be displayed) and then click on hold down the left mouse button and drag the photo to a new position and then release the left mouse button. The keyboard cursor keys can also be used to adjust the position of the photo e.g. pressing the left cursor key will move the photo one pixel to the left. Hold the shift key down and press one of the cursor keys to move the photo 10 pixels in that direction.

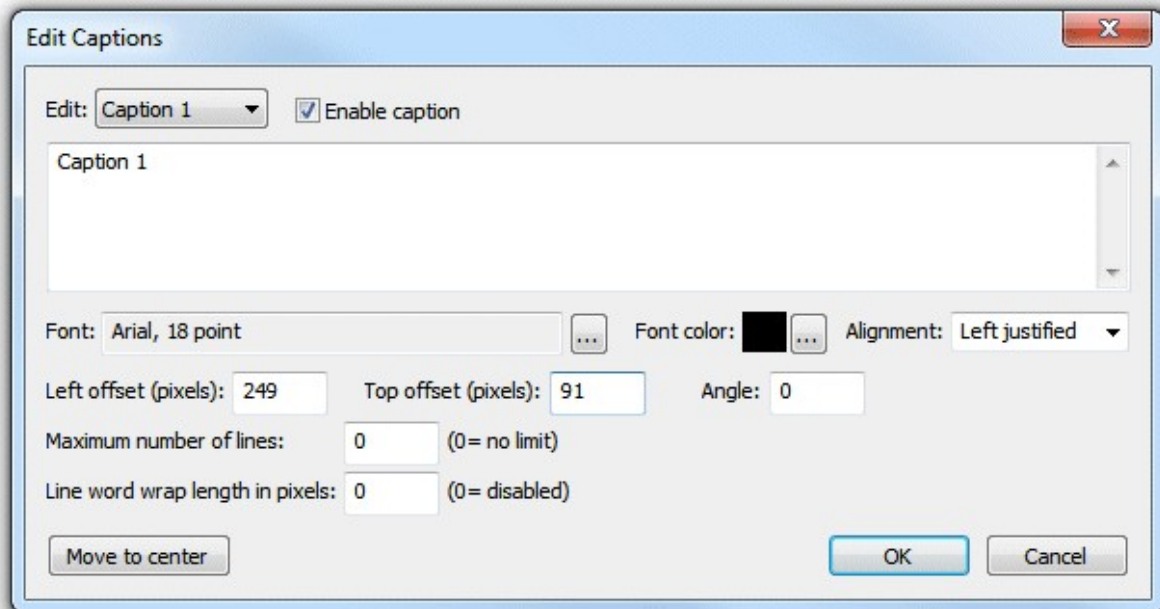
Resize the photo by moving the mouse over one of the corners of the photo (a resize cursor will be displayed) and then click on hold down the left mouse button and drag the corner to resize the photo and then release the left mouse button.

Rotate the photo by moving the mouse over the control area at the end of the dashed line in the center of the photo (a rotate cursor will be displayed) and then click on hold down the left mouse button and move the mouse to rotate the photo and then release the left mouse button. The keyboard cursor left and right keys can also be used to rotate the photo when the ctrl key is held down e.g. hold down the ctrl key and press the left cursor key to rotate the photo 1/2 degree to the counter clockwise. Hold the ctrl and shift keys down and press cursor left or right to snap the rotation to the nearest 15 degrees and then rotate in 15 degree steps.

Select all the photos by typing Ctrl+A or by right clicking on a photo as selecting "Select all". The selected photos will be highlighted with dashed red lines and can be dragged as a group by holding down the left mouse button.

When a photo is selected it is also highlighted in the image position display in the top left corner of the edit window. The size, position and rotation of the photo can be entered directly by clicking on the "..."
button for that image. Click on the dropdown list to change the photo number (or select "None" to remove it or "QR code" set it to a QR code).

Add a caption by clicking on the "Edit captions..." button and the dialog below will be displayed:



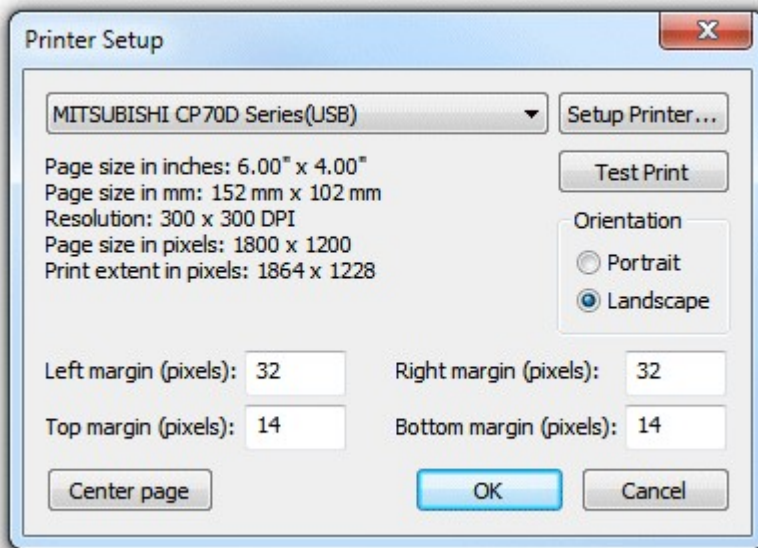
Check the "Enable caption" checkbox if it is not already checked. Caption 1 should now be displayed highlighted on the print layout (if it isn't visible click on the "Move to center" button). Type in the edit box to change the caption text or click on the "..." button to the right of the "Font:" label to change the font or to the right of the "Font color:" display to change the color. Click on the "OK" button and the font should remain highlighted. You can drag, resize and rotate the text using the mouse just the as with a photo.

Click on the "Undo" button a few times (or type ctrl+Z) a few times to undo the changes. Then click on the "Redo" button (or type ctrl+Y) to redo the changes.

Note: The dashed line around the layout shows the full printing extent of the printer including any overlap over the edges of the paper for borderless printing. The inner solid line represents the area of the final print.

Printer setup and margins

It is a good idea to check the printer settings and printer margins before designing the layout or running the photobooth setup wizard. To do this click on the "Printer Setup..." button and the "Printer Setup" dialog will be displayed:



Select the required printer from the dropdown list. If your printer isn't listed you may need to install the printer drivers first (please see the Windows help files or printer manuals for information on how to do this).

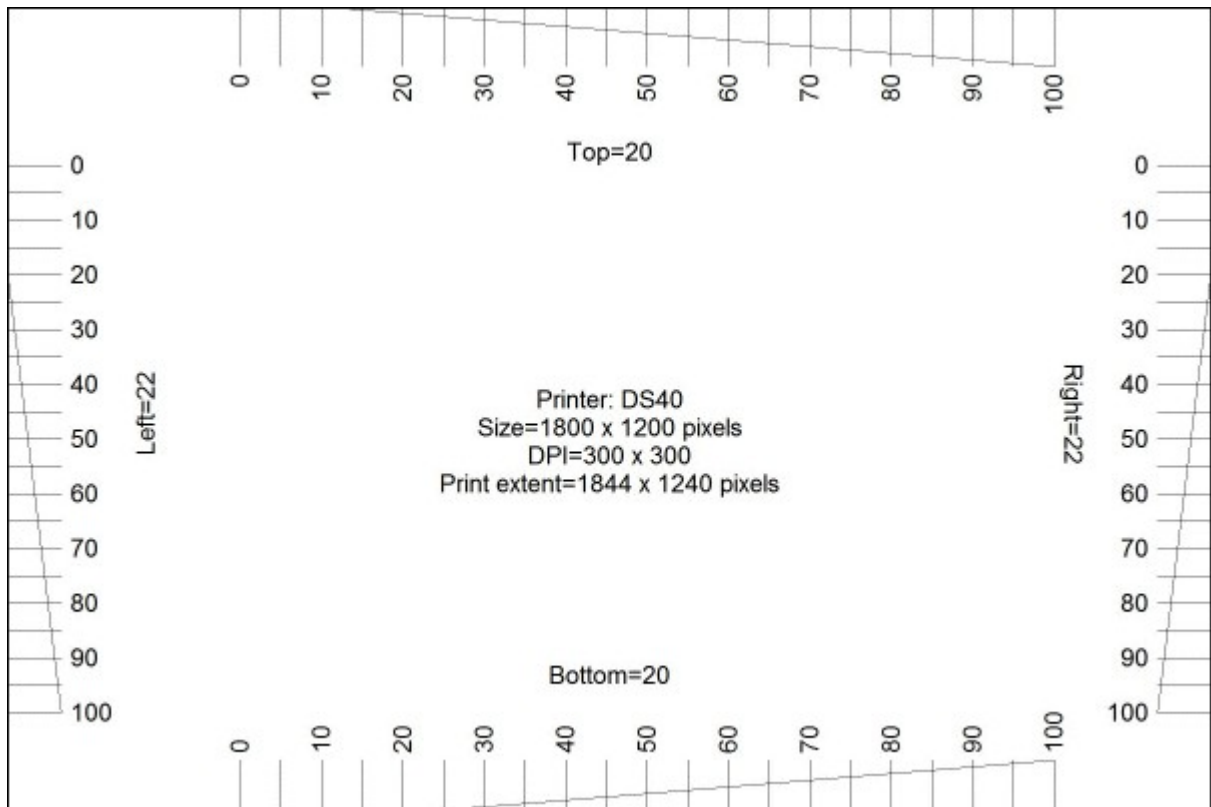
Click on the "Setup Printer..." button to select the page size, print orientation, print resolution and other printer settings.

Note: if you want to print a double strip of three or four images and are using a dyesub printer that can cut 4"x6" pages into two 2"x6" strips you need to select the 2x6 cut option in the printer driver.

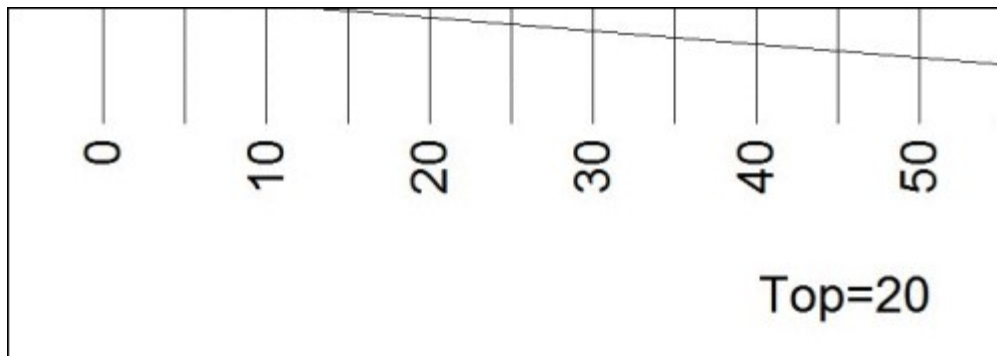
Click on the "Portrait" or "Landscape" radio buttons to change the printer page orientation.

If the selected printer is setup with a page size of 4"x6" and a print resolution of 300 DPI or 600 DPI (most professional dyesub printers support this) the "Center page" button will be enabled. You can press this button to setup the margins to center the page in the printable area. This should produce correctly centered prints with most printers.

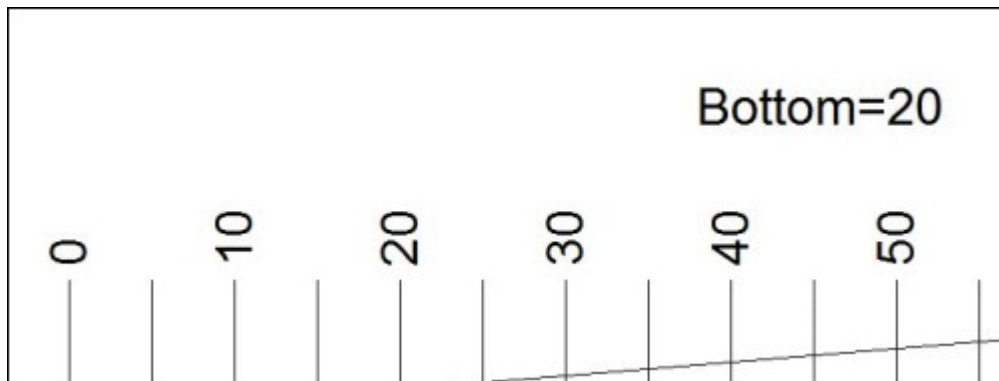
Click on the "Test Print" button to print a page to help setup the printer margins. The test print from a DNP DS40 printer will look something like this:



In the enlarged view of the top margin shown below the top margin can be read off the ruler as 14 pixels:



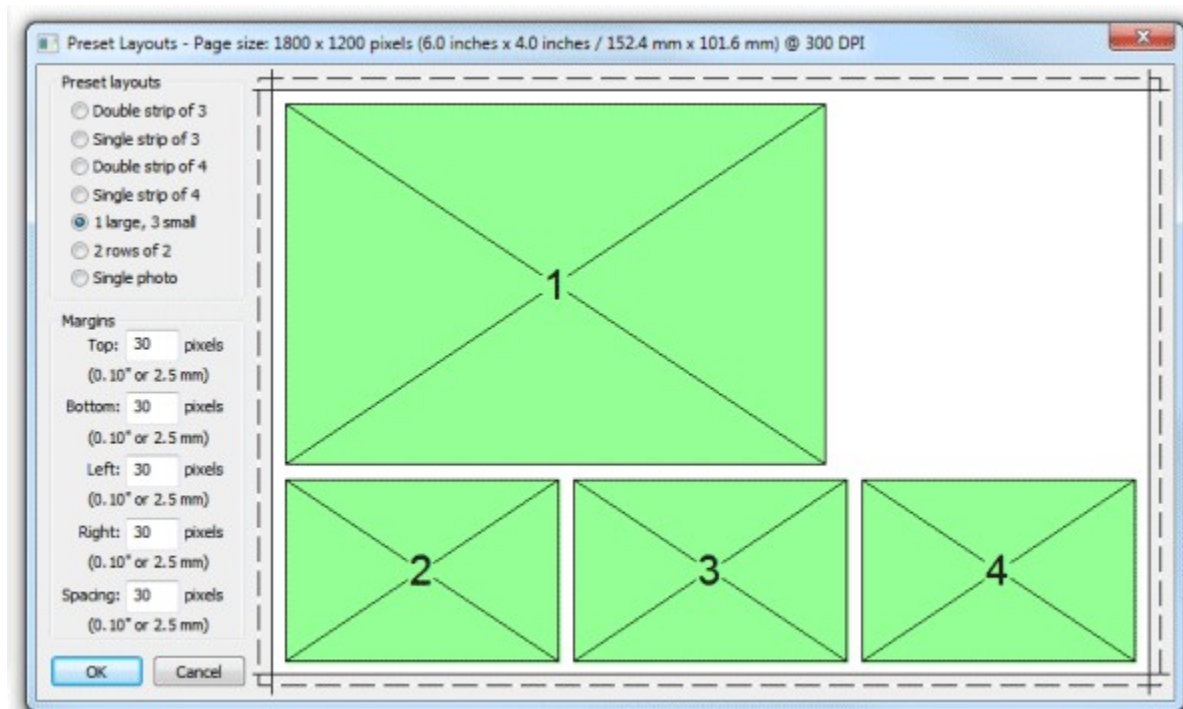
And in the enlarged view of the bottom margin shown below the bottom margin can be read off the ruler as 26 pixels:



Check the top, left, right and bottom margins and enter the values in the printer setup dialog, It is worth spending time setting up the print margins accurately as this will save time later.

Preset Layouts

The "Preset layouts..." button can be used to help design a number of different popular layouts using three or four photos. These include a double strip of three or four photos, a single strip of three or four photos, one large image with a row of three smaller images below and two rows of two images. Simply select the layout you want, adjust the page margins and image spacing and then press the OK button and the software will work out the settings for you:



Select the preset layout from the list of layouts in the top left of the window. The right side of the window shows a preview of the selected layout. The spacing between photos and the top, left, right and bottom margins can be adjusted using the edit boxes on the left of the window.

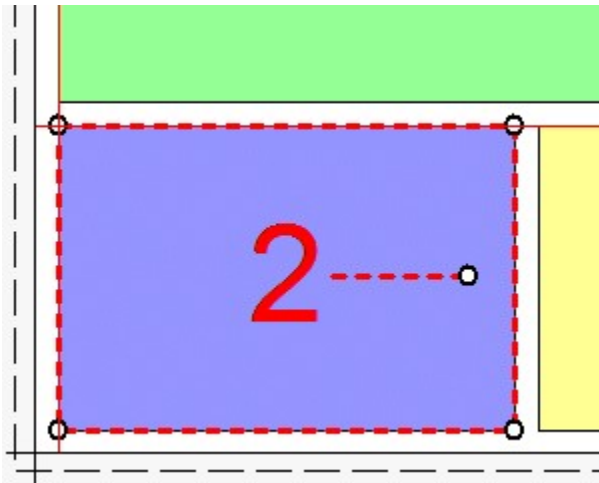
Note: The dashed line around the layout shows the full printing extent of the printer including any overlap over the edges of the paper for borderless printing. The inner solid line represents the area of the final print.

Click "OK" to copy the layout to the print layout editor.

Editing Photo Positions

A photo can be added to the layout by selecting the photo number from one of the spare image dropboxes showing "None" in the top left corner of the editor window. Alternatively a photo can be hidden by setting its dropdown list to "None".

The size, position and rotation of the photo can be edited by left clicking on the photo to select it and then using the mouse or keyboard cursor keys:



Move the photo by moving the mouse to the center of the photo (a hand cursor will be displayed) then hold down the left mouse button and drag the photo to the new position.

Tip: Hold down the shift key to limit the movement to a horizontal or vertical direction only. Alternatively use the left, right, up and down cursor keys to move the photo one pixel at a time. Hold down the shift key and use the cursor keys to move the photo 10 pixels at a time.

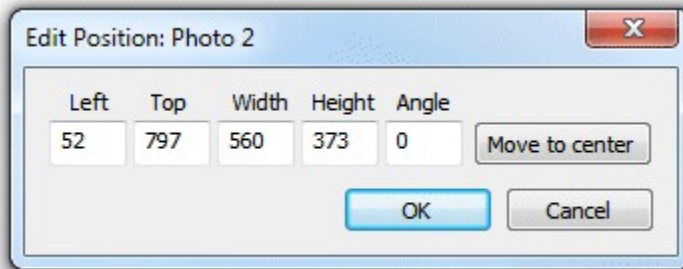
Resize the photo by moving the mouse to one of the circular control handles in the corners (the resize cursor will be displayed) then hold down the left mouse button and drag the corner to resize the photo. The aspect ratio of the photo will be preserved (i.e. the ratio of the width to the height). Hold down the shift key if to resize the photo without preserving the aspect ratio (this may result in the photos being cropped when they are printed).

Rotate the photo by moving the mouse to the circular control handle at the end of the red dashed line in the center of the photo (the rotate cursor will be displayed) then hold down the left mouse button and move the mouse to rotate the photo.

Alternatively hold down the ctrl key and use the left and right cursor keys to rotate the photo in 1/2 degree increments. Hold down the ctrl and shift keys and use the cursor left and right keys to rotate the photo in 15 degree increments.

Photos are printed in the order in which they are defined and so if the second photo's position overlaps the first photo the second photo will be printed on top of the first photo. You can change the order in which photos are printed by right clicking on a photo and selecting "Move to back", "Move back", "Move forward" or "Move to front".

You can also enter the photo position and angle directly by clicking on the "..." button for that photo on the left side of the editor window and it will display the "Edit Position" dialog:



You can also edit the position by right clicking on the photo and selecting "Edit image position..." from the popup menu.

The left and top entries specify the distance in pixels of the photo from the left and top edges of the page respectively. The layout in the print editor window will be updated automatically as you change the settings. If the photo isn't visible you can press the "Move to center" button to center it on the page.

The width and height entries specify the width and height of the photo in pixels. To preserve the aspect ratio of the photo you can enter 0 for the width or height and the software will replace this with the correct value when you press the "OK" button.

Note: Entering a width and height with a different aspect ratio from the photos taken by the camera (3:2) will result in the photo being cropped when it is printed.

The angle entry specifies the clockwise rotation of the photo in degrees.

Editing QR Codes

A QR code can be added to the layout by selecting "QR code" in one of the spare image dropboxes showing "None" in the top left corner of the editor window. Alternatively the QR code can be hidden by setting its dropdown list to "None". The size, position of the QR code can then be edited in exactly the same way as a photo (described in the section headed "Editing Photo Positions" above).

The text encoded in the QR code can be edited by right clicking on the QR code and selecting "Edit QR code..." from the popup menu. The "QR Code" dialog shown below will be displayed:



Type in the text you want to be encoded in the QR code. Normally this is a URL which needs to be prefixed with `http://`

The QR code display will be updated automatically as you type in the text. You can test the QR code by pressing the "Test URL" button to open it in a web browser. You can also test the QR code by scanning it with a cell phone.

The error correction dropdown list specifies amount of error correction encoded in the QR code. A "Medium" setting should be suitable for most uses. You may wish to use the "Low" setting if the URL is very long or the QR code is to be printed very small.

Note: The QR code text can also be edited by selecting File->Edit QR code from the main program window.

Adding Logos and Pictures

Click on "Import logo..." to import a PNG or JPEG image into the print layout. Logos can be moved, resized and rotated just like photos in the print layout.

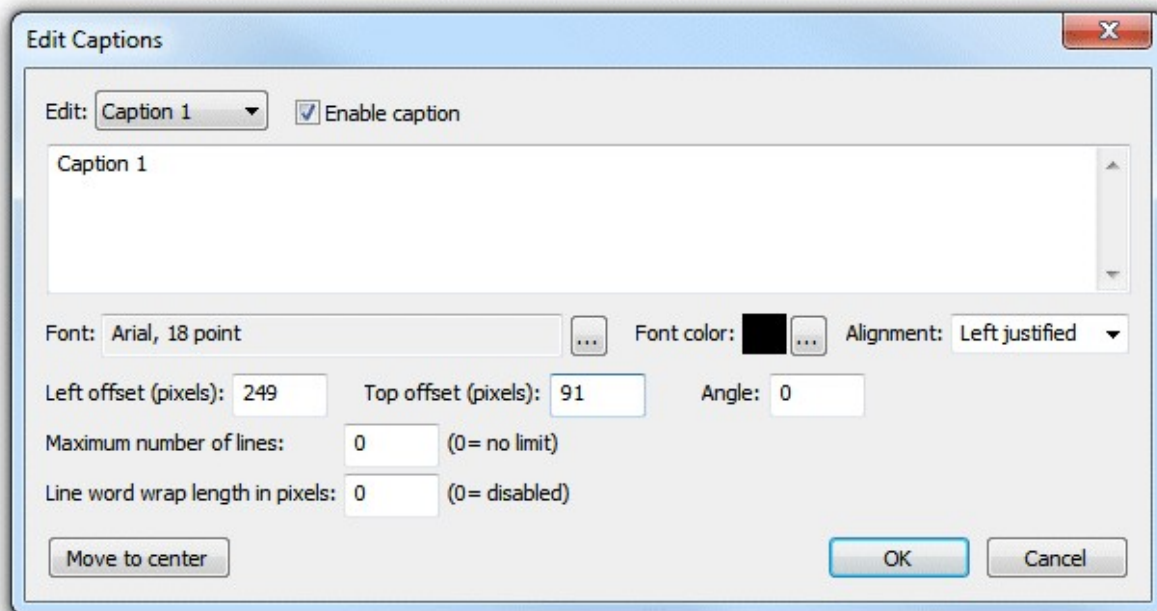
When a logo image is imported the PNG or JPEG image is copied into the current photo booth images folder and its filename is prefixed with "logo_". If the photo booth images folder already contains a file with the same name you are asked whether to overwrite the file. Any copies of the logo in the print layout will be removed from the layout and replaced by a single copy of the new logo image in the center of the layout.

If the photo booth images folder already contains one or more PNG or JPEG images with a logo_ prefix they can be added to the print layout by right clicking on the background of the print layout and selecting "Add logo...".

Please note: logos are added to the print layout after the optional overlay and will appear on top of the photos and overlay.

Editing Caption Positions

Add a caption by clicking on the "Edit captions..." button and the dialog below will be displayed:



You can also edit the caption by right clicking on the caption and selecting "Edit caption..." from the popup menu.

Select the caption you wish to edit using the dropdown box at the top and then check the "Enable caption" checkbox if it is not already checked. The caption should now be displayed highlighted on the print layout (if isn't visible click on the "Move to center" button). Type in the edit box to change the caption text. Captions span more than one line and can contain tokens such as such as %d for the date and %t for the time the sequence started, {comment} for the comments entered in the main screen and {filename} for the filename used for the JPEG copy of the print layout. Please see the [section on tokens](#) for a list of tokens available.

Click on the "..." button to the right of the "Font:" label to change the font, size and style or to the right of the "Font color:" display to change the color.

Use the "Left offset" and "Top offset" entries to specify the position of the text. This is specified in pixels from the top left corner of the page. Use the angle entry to specify the angle of the text. This is specified as degrees rotation in a clockwise direction.

Normally text is left justified (the "Alignment" dropdown list is set to "Left justified") and its position on the screen is measured from the top left corner of the text area.

If the "Alignment" dropdown list is set to "Centered" the text will be center justified and the position will be measured from the top center of the text area.

If the "Alignment" dropdown list is set to "Right justified" the text will be right justified and the position will be measured from the right side of the text area.

Click on the "OK" button to save the changes. The caption will be selected in the print layout:



The size, position and rotation of the can then be edited using the mouse or keyboard cursor keys similar to moving and resizing photos.

Move the caption by moving the mouse to the center of the caption (a hand cursor will be displayed) then hold down the left mouse button and drag the caption to the new position.

Tip: Hold down the shift key to limit the movement to a horizontal or vertical direction only.

Alternatively use the left, right, up and down cursor keys to move the caption one pixel at a time. Hold down the shift key and use the cursor keys to move the caption 10 pixels at a time.

Resize the caption by moving the mouse to one of the circular control handles in the corners (the resize cursor will be displayed) then hold down the left mouse button and drag the corner to resize the caption.

Alternatively hold down the ctrl key and use the up and and down cursor keys to resize the caption.

Rotate the caption by moving the mouse to the circular control handle at the end of the red dashed line in the center of the caption (the rotate cursor will be displayed) then hold down the left mouse button and move the mouse to rotate the caption.

Alternatively hold down the ctrl key and use the left and right cursor keys to rotate the caption in 1/2 degree increments. Hold down the ctrl and shift keys and use the cursor left and right keys to rotate the caption in 15 degree increments.

Aligning, sizing and moving multiple items

All the currently defined photos, captions and QR codes can be selected by typing ctrl+A (or by right clicking and selecting "Select all"). Alternatively just photos can be selected by typing Ctrl+P (or by right clicking and selecting "Select all photos"). You can refine the selection by holding down the ctrl key and clicking on the item to be added or removed from the selection.

Tip: All captions can be selected by typing Ctrl+P to select all photos followed by Ctrl+I to invert the selection (this will unselect all photos and select all captions).

A group of selected images can be moved by holding down the left mouse button and dragging them to the new position or by using the keyboard cursor keys.

There are various options for aligning a group of selected items e.g. left align so that a group of images are arranged in a column. To align the currently selected elements right click the mouse on the reference element and select the required alignment from the "Alignment" menu of the popup menu. The selected elements will be moved to align them with the reference element.

Note: If this doesn't produce the required result simply type ctrl+Z to undo the changes.

A group of photos can be spaced evenly by selecting them in order and then right click on any of the selected images and select "Space photos evenly". The order in which the photos are selected is important because the middle photos will be spaced evenly between the positions of the first and last photos in the selection. To select the photos in the right order simply left click on the first photo and then add the remaining photos to the selection in order by holding down the ctrl key and clicking on them.

A group of photos can be set to the same size and angle as a reference photo by selecting them and then right clicking on the reference photo and selecting "Make photos same size and angle".

Background Color and background.jpg

Normally the page background is white but it can be set to any color by clicking on the "..." button next to the colored square besides the "Show background color" checkbox.

A JPEG image named background.jpg can also be used as a background. This is useful for adding logos or fancy captions to the print or to add frames around the photos. Ideally the background.jpg

should be the same size in pixels as the printed output (e.g. 1844 x 1240 pixels for a 6"x4" print from a DNP DS40 printer). The background.jpg will be centered on the page and so if it is bigger the excess will be cropped from the top, left, right and bottom or if it is smaller it won't fill the page.

Tip: Set the background color to the same color as the edges of the background.jpg to avoid white strips on the edges of the page if the background.jpg doesn't fill it.

The background.jpg should be saved in your photobooth images folder (this is displayed in the title bar of the print layout editor window). You can copy a JPEG image into your photobooth images folder by clicking on the "Import background..." button.

To delete a background.jpg image first press the "OK" button to save the print layout and close the print layout editor window. Then delete the background.jpg from your photobooth images folder.

Note: If the positions of photos and captions don't quite line up with an imported background.jpg they can be moved by typing ctrl+A (to select all) and then pressing the cursor keys.

Headers and footers

For backwards compatibility with previous releases the print layout can also display a header image named header.jpg at the top of the page and a footer image named footer.jpg at the bottom of the page. It is recommended that you avoid using headers and footers and use the background.jpg instead. This will make it easier save layouts for future reference without them being specific to a particular printer model.

Overlay

An option overlay can be placed over the photos by placing an PNG image named overlay.png in your photobooth images folder. You can copy a PNG image into your photobooth images folder by clicking on the "Import overlay..." button.

The overlay.png should be saved as a 24-bit color PNG file with an 8-bit alpha channel containing transparency information.

To delete an overlay.png image first press the "OK" button to save the print layout and close the print layout editor window. Then delete the overlay.png from your photobooth images folder.

There is an example PNG file named example_overlay.png in the installation folder which can be used for testing.

Tip: The current layout can be saved as a JPEG file by holding down the Shift and Ctrl keys and then clicking on the "Print Test Page" button. This JPEG image can then be loaded into a photo editor such as Photoshop to add logos, captions etc. and then saved as a background.jpg or overlay.png image which can be imported into the layout.

Hiding and showing elements

Use the various "Show" checkboxes to control what is displayed in the print layout preview. This is useful if you want to simplify the preview display to make it easier to adjust the photo positions.

Please note: Unchecking the "Show" checkbox for an element only affects the print layout preview and does not affect the final prints.

Undo and Redo

Most actions can be undone by clicking on the "Undo" button or by typing ctrl+Z and redone by clicking on the "Redo" button or typing ctrl+Y.
You can't undo the "Printer setup", "Import background...", "Import overlay..." or "Import layout..." actions.

Exporting and importing layouts

You can save a print layout for future reference by clicking on the "Export layout..." button. This will save the entire layout including any overlay and background images to a single file with a .pblt file extension.

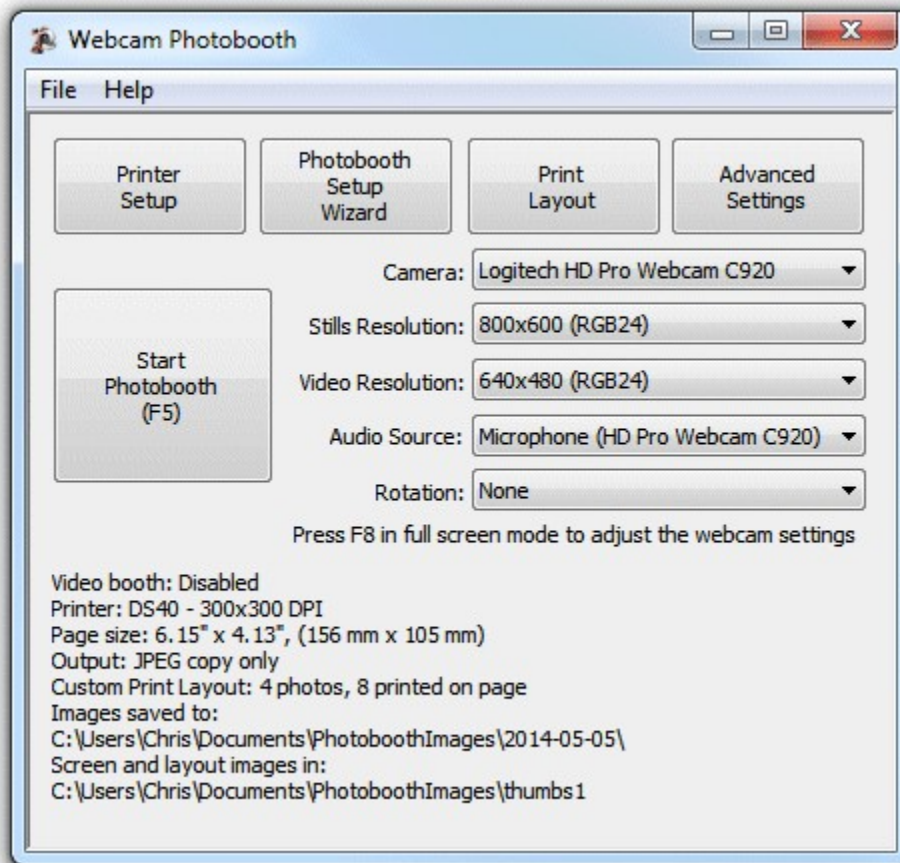
A previously saved layout can be imported by clicking on the "Import layout..." button. It should be possible to import layouts defined for any similar printer (i.e. one with the same page size and print resolution) provided the print margins were set accurately.

Please note: If your photobooth images folder contains a background.jpg or overlay.png image they will be deleted or overwritten when importing a print layout.

5 Advanced Photobooth Setup

This section gives detailed information about the various photobooth settings. If you want to get started as quickly as possible you can use the [photobooth setup wizard](#) to set everything up and then come back to this page later to find out more about tweaking the various settings.

When Webcam Photobooth is run the main window shown below is displayed.



Click on the "Advanced Settings" button to setup the photobooth.

Display Settings

The display settings tab in the photobooth settings dialog is used to setup the number of photos, the input options and how the photobooth screens are displayed:

Webcam Photobooth Settings

Display Output Video Booth

Number of images [1 to 10]: Inactivity timeout in secs (0=disabled):

Delay before taking first photo: Delay before taking remaining photos:

Seconds to display preview after each photo (0 = disabled):

Minimum duration before closing 'processing' screen (secs):

Text displayed when counting down to taking photo:

Font: ... Font color: ...

Position of countdown text from top of screen (in pixels, 0=auto position):

Height of live view image (pixels):

Live view offset from top of screen:

Live view offset from left of screen (-1=centered):

Enter full screen photobooth mode automatically at startup

Enable live view in full screen mode Mirror live view image

Disable live view when printing DSLR template compatibility mode

Auto standby Clicker mode

Start options: ▾

Set DPI awareness (use full display resolution on high DPI screens)

First select the number of images to be taken and the delay before taking each photo. The delay before taking the first photo can be set to a different value than that for the remaining photos. This is useful when using a touchscreen as it means a longer delay can be set before the first photo to give people time to move back from the touchscreen.

After taking each photo a preview can be displayed on the screen for a specified number of seconds (set this to 0 to disable the preview). When the "Minimum duration in seconds before closing 'processing' screen is set to 0 the 'processing' screen will be close as soon as the data has been sent to the printer. The 'processing' screen can be displayed for longer by adjusting this value. This is useful if you want to keep displaying a message such as "Thank you! Your photos are being printed, please leave the booth now" for longer than it takes to print the images.

The inactivity timeout can be enabled by setting the "Inactivity in secs" value to the required number of seconds e.g. 120. When the inactivity timeout is enabled the photobooth will automatically switch to standby mode and display the welcome.jpg screen if there is no activity (e.g. touching the screen to select different options) within the timeout.

A preview can be shown after taking each photo. To enable this set the "Seconds to display preview after each photo" to the time in seconds the preview should be displayed.

When the "Minimum duration in seconds before closing 'processing' screen is set to 0 the 'processing' screen will be close as soon as the data has been sent to the printer. The 'processing' screen can be displayed for longer by adjusting this value. This is useful if you want to keep displaying a message such as "Thank you! Your photos are being printed, please leave the booth now" for longer than it takes to print the images.

The countdown text is displayed before shooting each image and is updated every second. The following tokens can be used when defining the countdown text:

@imageNumber@ - the shot number in the photobooth sequence

@numberOfImages@ - the number of images in the photobooth seconds

@secsToNextPhoto@ - the number of seconds until the next photo in the sequence is taken

By default the live view images are displayed at the top of the screen with the countdown text beneath. The position of the live view images can be adjusted using the "Live view offset from the top of the screen" setting.

If the count down text offset is set to 0 the count down text is automatically displayed centered in the spare space above or below the live view images (depending on whether there is more space above or below the live view images). Please make sure there is enough space for the count down text when setting the live view size and position.

Alternatively the countdown text can be manually positioned on the screen by setting the offset to a non-zero value. This value is the number of pixels the text is offset from the top of the screen. If required, the countdown text can be positioned so that it overlays the live view images.

Select "Enable live view for fullscreen photobooth shooting" to display live view images in the fullscreen photobooth shooting mode. The live view image can be mirrored so that the user sees the image the same way round as when looking in a mirror. Use the height setting to resize the live view images. The live view images can be positioned by using the settings for the offset in pixels from the top and the left of the screen. If the left offset is set to -1 the live view will be automatically centered on the screen.

The live view display can be cropped if required by selecting fullscreen photobooth mode and holding down the Shift key and using the cursor left and right keys to increase or decrease the cropping. Cropping removes equal amounts from the left and right of the live view image when displaying live view images in landscape orientation and from the top and bottom when using portrait orientation. When adjusting the live view cropping a status message showing the amount of cropping is shown briefly in the bottom right hand corner of the screen.

The live view display can be disabled during printing by selecting the "Disable live view when printing" checkbox. Disabling the live view during printing and displaying a suitable message in the 'processing' screen is a good way of encouraging people to leave the booth after the photos have been taken. For example you could disable live view during printing, set the minimum duration before closing the 'processing' screen to 15 secs and display the message "Thank you! Your photos are being printed and will be ready outside shortly, please leave the booth now" by editing the 'processing screen (processing.jpg).

Select the "Auto standby" option to have the booth automatically switch to standby mode at startup and after each set of photos. You can switch back to ready mode by typing F6 (toggle between standby and ready modes) or Ctrl+Alt+F6 (switch from standby to ready mode) or by using the "Toggle standby mode" or "Switch from standby to ready" touchscreen actions.

Clicker mode allows users to choose when to take each photo rather than the standard operation where the software automatically takes the photos at preset intervals. When clicker mode is selected the software will wait until each photo is taken either by users pressing a wireless remote (the "clicker"). The wireless remote (e.g. a wireless presenter) should be set up to send Ctrl+Z. The shooting sequence in clicker mode is:

1. The ready.jpg screen and live view displayed as normal until the start button is pressed (e.g. by

- pressing F4)
2. When the start button is pressed the 1.jpg screen will be displayed with no countdown text and the software will wait until a photo is taken by pressing the button on the wireless remote and sending Ctrl+Z
 3. After each photo is taken a preview is displayed on the screen if enabled in the photo booth settings and then the screen for the next photo is displayed e.g. 2.jpg
 4. After the last photo has been taken the processing.jpg screen will be displayed and the photos printed as normal

The following start options are available:

- "Keyboard only (ignore mouse or touchscreen clicks)"** This is the default setting where the photobooth sequence can be started using the normal keyboard shortcuts e.g. F4
- "Left click anywhere to start"** This setting allows a mouse or a touchscreen to start the photobooth sequence. The user simply needs to click the left mouse button or press anywhere on the display if using a touchscreen
- "Left click to start, right click to toggle B&W mode"** This setting allows a standard mouse to be used to start the sequence (left click) or to toggle between B&W and color modes (right click)
- "Left click top left to start"** This setting is designed for touchscreens and requires the user to click in the top left fifth of the screen to start the sequence. The ready.jpg image should be edited to show the user where to touch the screen to start the sequence.
- "Left click top left to start color sequence, bottom left for B&W"** This setting is designed for touchscreens and requires the user to click in the top left fifth of the screen to start the sequence in color and the bottom left fifth to start it in black and white. The ready.jpg image should be edited to show the user which areas to touch to start the sequence.
- "Touchscreen"** This setting allows up to 10 areas on a touchscreen to be given different actions (described in more detail below)

Touchscreen Settings

Up to 18 areas can be defined on a touchscreen to control different photo booth settings such as starting the sequence, switching between color and B&W, selecting the number of print copies etc. First select the "Touchscreen" option in the "Start options" dropdown list and then click on the "Settings..." button to display the touchscreen settings dialog:

Touchscreen Settings ✕

Select the action and coordinates of up to 45 areas on the touchscreen: Display actions 1 to 15 ▾

Action 1:	Start photobooth ▾	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 2:	Select color mode ▾	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 3:	Select B&W mode ▾	Left: 0	Top: 384	Right: 191	Bottom: 575
Action 4:	Select video booth mode ▾	Left: 1728	Top: 0	Right: 1919	Bottom: 191
Action 5:	Confirm printing ▾	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 6:	Cancel printing ▾	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 7:	Confirm printing (+ # prints) ▾	Left: 1728	Top: 0	Right: 1919	Bottom: 191
Action 8:	Confirm printing (- # prints) ▾	Left: 1728	Top: 288	Right: 1919	Bottom: 479
Action 9:	Sharing: Facebook upload ▾	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 10:	Sharing: Close sharing screen ▾	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 11:	Select photobooth mode ▾	Left: 1728	Top: 0	Right: 1919	Bottom: 191
Action 12:	Accept video ▾	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 13:	Reject video ▾	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 14:	Stop video capture ▾	Left: 215	Top: 514	Right: 1864	Bottom: 1078
Action 15:	No action ▾	Left: 0	Top: 0	Right: 0	Bottom: 0

Photo booth exit action password (leave blank for no password):

Touchscreen keyboard: Not displayed ▾ Timeout (secs):

Show mouse cursor

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 three sensitive areas on the touchscreen:

1. A square area 300x300 pixels set in 10 pixels from the top left corner of the screen which starts the photobooth sequence (action is set to "Start photobooth")
2. A smaller rectangular area 300x150 pixels in size located below the first area which selects B&W mode
3. A second area similar to item 2 which selects color 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 touchscreen 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 Elements.

An optional password can be used to protect the "Exit fullscreen photobooth" 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 photo booth mode. Using a password to protect this should prevent problems if users manage to find the secret exit photo booth mode touchscreen action.

An optional touchscreen keyboard can be displayed at the start or end of the photo booth shooting sequence to allow users to enter information such as their email address. This information is stored in the XML file saved after each shooting sequence. Use the dropdown list to select when the touchscreen keyboard should be displayed and the "Test keyboard..." button to test it. The "Timeout (secs):" value allows a timeout for the keyboard to be specified. If the user does not touch the touchscreen before the timeout the touchscreen keyboard will be automatically closed. Please see the section describing the [touchscreen keyboard](#) for more details.

Select the "Show mouse cursor" option to display a mouse cursor in screens that accept touchscreen input to allow a mouse to be used to control the photo booth. This can be convenient for testing when a touchscreen is not available or for allowing a mouse to have full control over a photo booth that does not have a touchscreen. Note: this setting is not saved in the XML settings files and is ignored when loading profiles.

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.

Webcam 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 Webcam Photobooth is run with the "Set DPI awareness" option set the screen images 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:

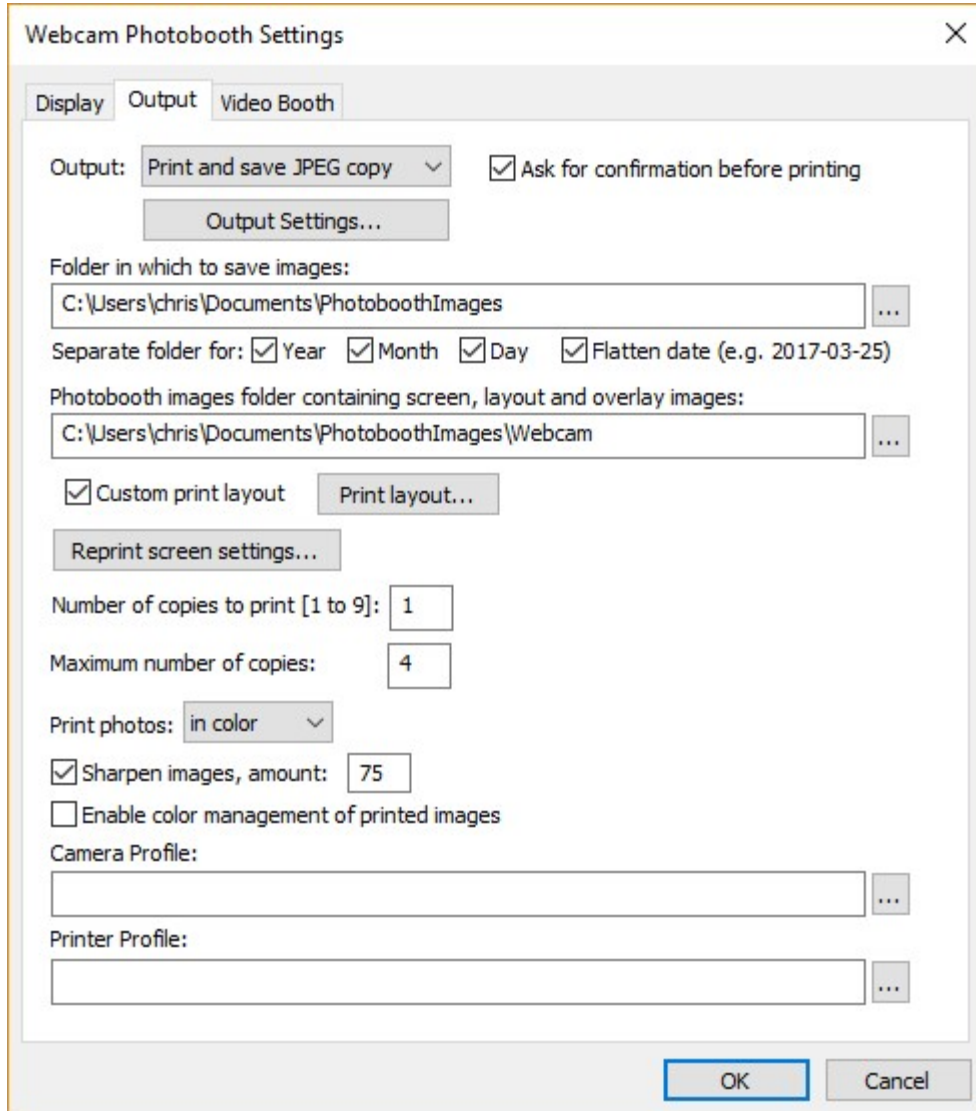
If it is set to 150% the screen images need to be 1824x1216 pixels

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

Recommendation: select the "DPI aware" setting for all new 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)

Output Settings

The output settings tab in the photobooth settings dialog is used to setup where the photos are saved and they are printed:



The output option can be set to "Print only", "Print and save JPEG copy" or "JPEG copy only". In normal use it is probably best to set this to "Print and save JPEG copy" so that each set of photos is printed and a JPEG copy is saved making it easier to print reprints later. The "JPEG copy only" option is useful for taking test shots and checking the layout without having to print them out each time.

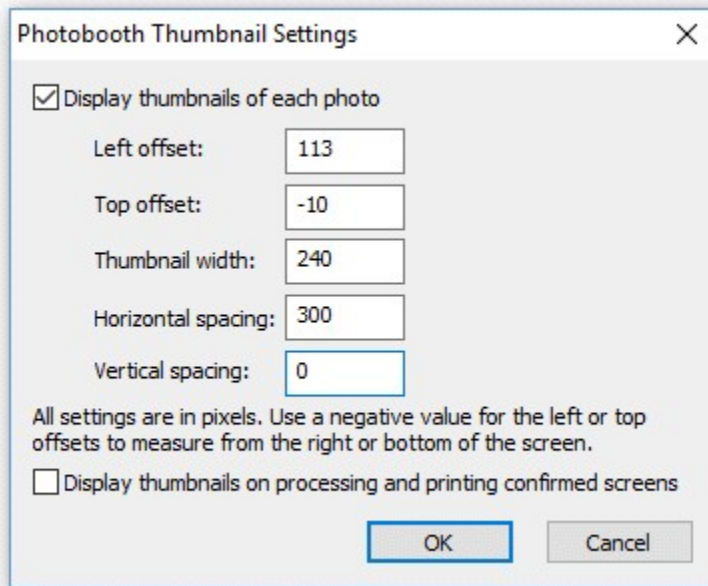
Select "Ask for confirmation before printing" if you want to be able to decide whether to print the images or not. When this option is selected the print layout will be displayed on the screen with "Print" and "Cancel" buttons in the top left hand corner. Click on the "Print" button (or press the Enter key) to print the images or click on the "Cancel" button (or press the Esc key) to continue without printing.

Output Settings

Click on the "Settings..." button to the right of the output options to display the output settings dialog which allows you to configure the print preview and how JPEG copies of the printed output are handled and to configure the sharing of photos by Twitter, text or email:

The "Output:" drop down list allows you to specify whether photos are printed only, printed with a JPEG copy of the layout saved in "prints" sub folder, a JPEG copy of the layout is saved in the "prints" sub folder without printing or no output action is taken. (This is the same as the "Output:" drop down list displayed in the main photo booth settings dialog).

Select "Display thumbnails" to display a small thumbnail of each photo. The thumbnails can be arranged vertically down one side of the screen or horizontally across the top or bottom of the screen. Click on the "Settings..." button to



The left offset specifies the distance in pixels of the first thumbnail from the left edge of the screen. If a negative value is specified the distance will be measured from the right edge of the screen e.g. and value of -1 will place the first thumbnail on the right of the screen. The top offset specifies the distance in pixels of the first thumbnail from the top edge of the screen. If a negative value is specified the distance will be measured from the bottom edge of the screen e.g. and value of -1 will place the first thumbnail on the bottom of the screen.

The thumbnail width specifies the width of the thumbnail in pixels (the height of the image will be calculated automatically using the aspect ratio of the photo).

The horizontal and vertical spacings specify the positions of the remaining thumbnails relative to the first thumbnail. The settings in the screenshot above will place four thumbnails 240 pixels wide across the bottom of the screen and will be centered horizontally if the screen resolution is 1366 x 768.

The default setting is to only display thumbnails during the photo booth countdowns when taking the photos and not to show them at the end of the shooting sequence on the processing or printing confirmed screens. Select the "Display thumbnails on processing and printing confirmed screens" if you also want the thumbnails to be displayed at the end of the shooting sequence when the processing or printing confirmed screens are displayed.

The "Delay before creating print layout (secs):" setting is normally set to 0 so that photos are printed as soon as possible. This setting is useful if the photos need to be modified by another program (e.g. by running a Photoshop droplet to edit the photos or using a green screen program to create high quality green screen photos) before they are printed by Webcam Photobooth. Please see the section on "[Modifying Photos Before Printing](#)" for information on how to use this option.

Select the "Sign or draw on photos before printing" option if you want to allow users to draw on the print layout before it is printed. This option is useful for letting users sign their photos when running a magic mirror photo booth with a touchscreen. Please see the section on "[Signing or Drawing on the Prints](#)" for more information on using this setting.

Select "Display print preview and wait for confirmation before printing" in the "Output Settings" dialog if you want to be able to decide whether to print the images or not (this is the same as the "Confirm before printing" checkbox displayed in the main photo booth settings dialog). When this option is selected the print layout will be displayed on the screen with "Print" and "Cancel" buttons in the top left hand corner. Users should click on the "Print" button (or press the Enter key or A key) to print the images or click on the "Cancel" button (or press the Esc or key or X key) to continue without printing. Users can also press the P key (or tap on the "Confirm printing (no JPEG copy)" touchscreen action)

to print without copying the JPEG copy of the printed output to a separate folder. This is useful if you want to offer users the choice of printing only or printing and copying the output to a separate folder (e.g. copying to a folder on another computer running Breeze Kiosk).

The "Maximum number of copies" setting limits the maximum number of print copies the user is allowed to select.

If the touchscreen input mode is selected and touchscreen actions for confirm or cancel printing are defined the "Print" and "Cancel" buttons will not be displayed. The touchscreen sensitive areas can be displayed using the confirm_printing.jpg screen image.

If a confirm_printing.jpg screen image is in the photo booth images folder this will be used for the background to the print confirmation window to allow instructions or touchscreen buttons to be displayed.

If a printing_confirmed.jpg screen image is in the photo booth images folder this will be displayed if the user selects printing. This allows the processing.jpg screen to show a message like "Processing, please wait..." and the printing_confirmed.jpg to display a message like "Thank you, please leave the booth now. Your photos are being printed outside."

Please note that if the "Sign or draw on photos before printing" option is selected the drawing screen can be used to accept or reject the photos and to select the number of copies to print. In most cases the print confirmation screen is not required if the "Sign or draw on photos before printing" option is used.

Click on the "Preview size and position..." to specify how the print preview image should be displayed:

Print Preview Size and Position

Crop print preview:

Left: 0 Top: 0 Width: 0 Height: 0

Rotation: None

Position and size of print preview (sizes in pixels):

Left: 0 Top: 0 Width: 0 Height: 0

Set left to 0 to center the preview horizontally, set top to center the preview vertically.

Set width and height to 0 to automatically size the preview to fit the screen.

OK Cancel

The print preview can be cropped by enabling "Crop print preview" and specifying the top left corner and the width and height of the cropped area (these settings are in pixels). This is useful when printing double strips where two 2"x6" strips are printed on a single sheet of 4"x6" paper and automatically cut into two 2"x6" strips by the printer. The print preview would normally show the whole 4"x6" print with the two strips side by side, but by cropping the print preview just one strip can be displayed. For example a typical dyesub printer prints at 300 dpi giving a print size of 1200x1800 pixels when printing 4"x6" media in portrait orientation. This can be cropped so that only the left half of the strip is displayed in the print preview by setting left=0, top=0, width=600, height=1800.

The print preview can be rotated by 90 degrees CW, 90 degrees CCW or 180 degrees using the rotation setting. Normally this can be set to "None". If the print preview is displayed on its side it probably means that the page orientation is set incorrectly in the printer settings. The rotation setting can be used to compensate for this, but it would be better to change the page orientation setting in the printer settings and update the print layout.

The size and position of the print preview can be set print preview offset, width and height settings. If

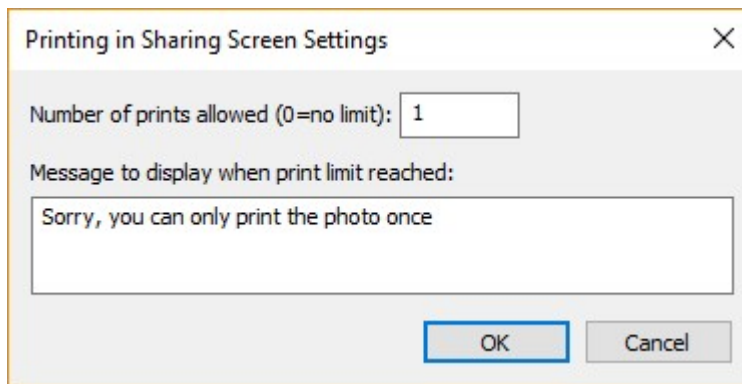
these are all set to zero the print preview will be sized to fill the window and will be centered on the screen. The print preview can be moved on the screen, e.g. to make space for the print confirmation buttons, using the left and top offset settings. For example to leave a space 200 pixels wide on the left of the screen set the print preview left offset to 200. If the print preview width and height settings are set to 0 the print preview will be resized to fill the rest of the screen. Set the print preview width and height settings to values other than 0 to specify the size of the print preview image.

Use the "Timeout (secs):" to specify a timeout for how long the print preview should be displayed (the default timeout is 300 secs). Set the timeout action dropdown list to the action that should be performed when the timeout occurs (the default setting is to cancel the print).

Use the sharing options to enable the sharing of photos by Tweeting, texting (MMS or SMS) or by sending photos email. Please see the section on [uploading to social networks](#) for information on how to set this up.

Select the "Share animated GIFs" to enable the sharing of animated GIFs by email, Twitter or texting. **Please note:** When sharing animated GIFs please note that the files can be large and so it is best to keep the image size small to avoid excessively large files for sharing. This can result in the animated GIF appearing very small in the sharing screen. The preview can be made large by increasing the "Max percentage upscaling setting" e.g. set this to 200 to display the animated GIF 2x normal size or 300 for 3x normal size.

Select the "Printing" option to give users the option to print photos in the sharing screen. Users can print the photos by typing P or by using the "Sharing: Print photos" touchscreen action. Photos can be printed if the output is set to "Print and save JPEG copy" or "JPEG copy only". The share_printing.jpg screen is displayed for a minimum of 5 seconds each time the user selects printing from the sharing screen. The number of prints that can be made from the sharing screen can be limited by clicking on the "Settings..." button:



Set the "Number of prints allowed" to the maximum number of prints allowed or to 0 if there is not limit. Then enter the message that is displayed if the user tries to print more copies than is allowed.

If the user prints the photos one or more times from the sharing screen the photos additional copies won't be printed if the output is set to "Print and save JPEG copy". If the user doesn't print the photos from the sharing screen and the output is set to "Print and save JPEG copy" the photos will be printed when the sharing screen is closed using the currently selected number of print copies.

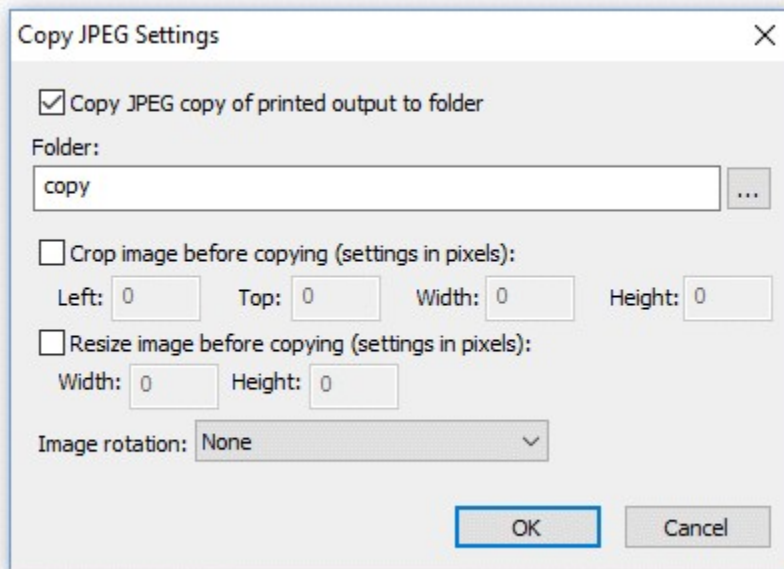
By default the sharing screen shows a print preview image centered on the screen with a height of no more than 2/3 the height of the screen. This setting can be overridden by setting the preview left, top, right and bottom settings to non-zero values. The left value is the offset in pixels from the left edge of the screen. The top value is the offset in pixels from the top edge of the screen. The width and height values specify the maximum width of the preview image in pixels.

Select the "Create animated GIF of photos" option to created an animated GIF of the photos taken with an optional overlay and title page.

Please see the [Animated GIF section](#) for details on how to set up animated GIFs in stills photo booth mode and in video mode.

When the output option is set to "Print and save JPEG copy" or "JPEG copy only" the filename of the JPEG copy of the printed output can be specified using the "Filename for JPEG copy of output:" edit box. This value can use tokens to specify values which are determined at run time e.g. %d represents the date and %t the time. Please see the [section on tokens](#) for a list of available tokens. The JPEG copy of the printed output is an exact copy of what is sent to the printer and can be used for reprints after an event.

An optional second copy of the printed output can be saved in a different folder by selecting the "Copy JPEG copy of printed output to folder:" option. Click on the "Settings..." button to display the "Copy JPEG Settings" dialog:



You can specify the folder where the additional copy of the printed output is saved using the "Folder:" edit box. If this is left empty the JPEG will be saved in a sub folder named "copy". You can also enter the full pathname of the folder where the images should be copied to (e.g. "C:\Print copies") or the name of a different sub folder (e.g. "Backup"). The folder name can also use tokens to specify values which are determined at run time. The second copy of the print output can also be cropped, resized and rotated before it is saved.

Specifying the output folder

These settings control where images are stored on the computer's hard disk. The edit box displays the base folder for images and can be changed by typing directly into the edit box or by clicking on the "..." button and using the directory browser. If the Year, Month and Day checkboxes are not checked this will be the folder in which all images are stored.

Note: If the directory does not already exist it will be created when the photo is saved.

The Year, Month and Day checkbox control the automatic generation of subfolders according to the computer's date. The example image name shown at the bottom of the dialog shows how the various settings are combined. Select the "Flatten date" checkbox to combine the year, month and day into a single subfolder e.g. on November 30, 2010 with "Flatten date" unchecked images would be saved in "C:\Photobooth\2010\03\30" and when it is checked they would be saved in "C:\Photobooth\2010-03-30".

When the output option is set to "Print and JPEG copy" or "JPEG copy only" the JPEG copy of the print layout will be saved in the "Prints" subfolder e.g. "C:\Photobooth\2010\03\30\Prints" or

"C:\Photobooth\2010-03-30\Prints" in the example above.

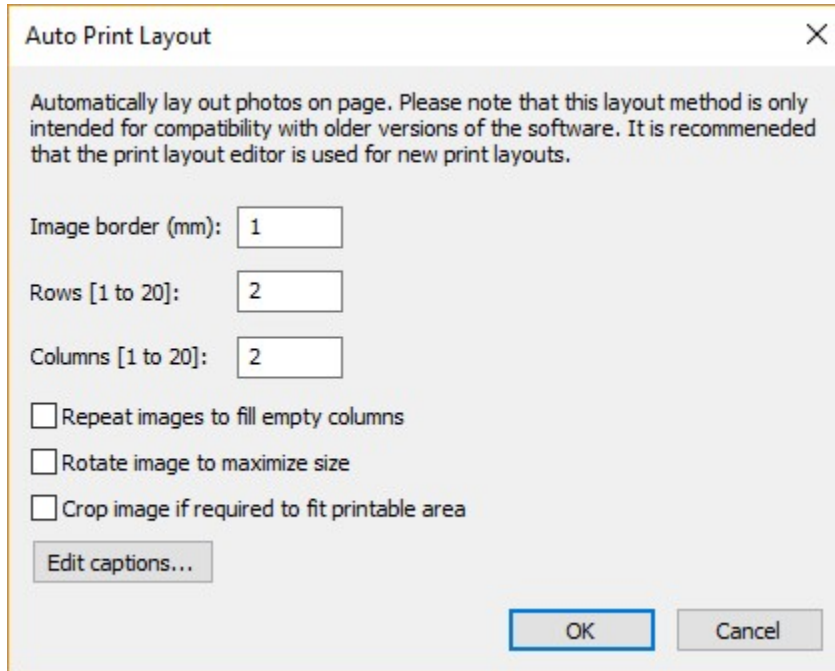
Color Management

Select the "Enable color management of printed images" checkbox to color manage the printing of photos for more accurate colors. Then select suitable color profiles for the camera and printer. If your camera does not come with a color profile the standard sRGB color profile can be used instead.

IMPORTANT: Please disable color management in the printer driver when selecting color management in Webcam Photobooth otherwise the colors may be adjusted twice.

Print layout

The recommended method for creating a print layout is to use the [print layout editor](#) and one of the preset print layouts. The automatic print layout method described below as been retained for compatibility with older versions of Webcam Photobooth. The automatic print layout option is used if the "Custom layout" checkbox is not selected and the options can be accessed by clicking on the "Print layout.." button:



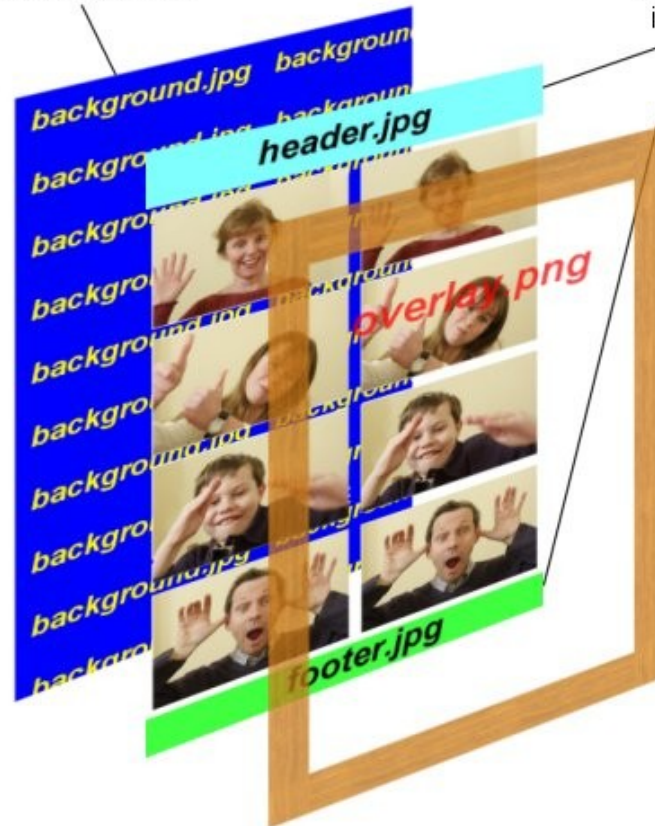
The print can have an optional background with a header and or footer image. When Webcam Photobooth prepares the image for printing it looks for the following files in the photobooth images folder:

background.jpg - optional image which is tiled to fill the background of the printed page
 header.jpg - optional image which is centered and placed at the top of the page
 footer.jpg - optional image which is centered and placed at the bottom of the page
 left.jpg - optional image which is centered vertically and placed on the left of the page between the header and footer
 right.jpg - optional image which is centered vertically and placed on the right of the page between the header and footer
 middle.jpg - optional image which is centered vertically and placed between each column of images
 image_overlay.png - optional image which is overlays each photo and uses transparency information stored in the alpha channel

overlay.png - optional image which is overlaid on the page and uses transparency information stored in the alpha channel

Background tiled with optional background.jpg image

Optional header.jpg and footer.jpg images at the top and bottom of the page



Optional overlay.png image overlays the page with transparency defined in the alpha channel

The images are then arranged in a grid which fills the printable area of the page less any space taken up by a header or footer image. If the "Rotate image to maximize size" checkbox is selected the images are rotated through 90 degrees if this would give a larger image. e.g. if the printable area for the image within the grid is 80mm high and 50mm wide and the image was shot in landscape orientation it would be rotated by 90 degrees to better fill the printable area.

If the number of images matches the number of rows the images can be repeated in each column by selecting "Repeat images to fill empty columns". This is useful when printing strips of images on paper from a dye sublimation printer e.g. two copies of 4x1 strips on a sheet of 8x6 paper.

Other output options

If the "Crop image if required to fit the printable area" checkbox is selected the image will be cropped to fill the printable area within the grid. e.g. if the printable area within the grid is square equal portions of the left and right of the image will be cropped to make it square. Please note that this option is disabled when custom layout is selected.

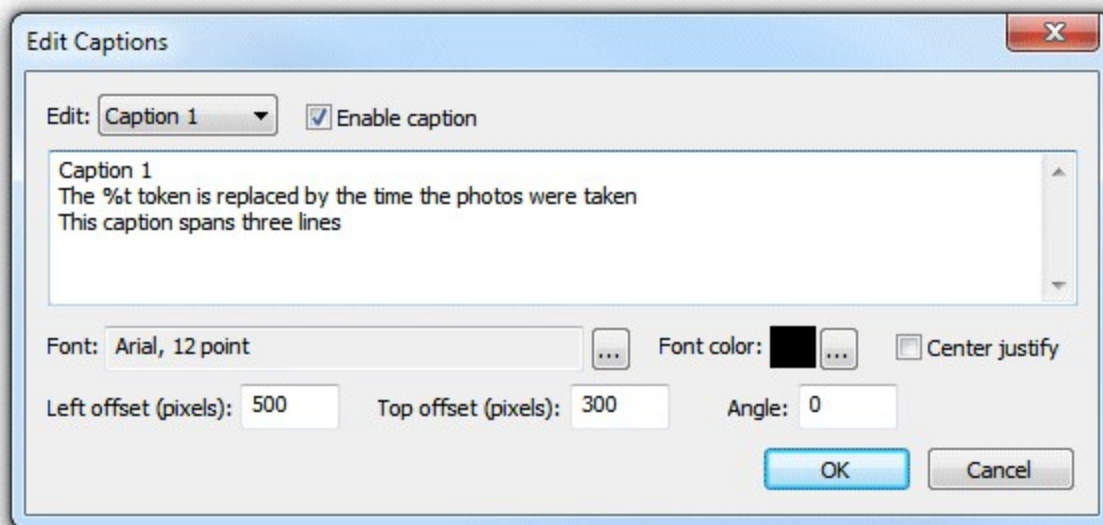
Photos can be printed in color, pure black and white or toned black and white by selecting the appropriate option from the dropdown list headed "Print photos:". You can also switch between these options when the software is running in fullscreen photobooth mode by using the following keyboard shortcuts: Ctrl+C to select color, Ctrl+B to select black and white, Ctrl+T to select toning. When the "toned" option is selected you can specify the hue (i.e. the color of the toning) and the saturation (i.e. the strength of the toning). For sepia toning a value of around 200 for the hue and 40

for the saturation is a good starting point. The hue and saturation settings can also be adjusted when the software is running in fullscreen photobooth mode by using the following keyboard shortcuts: Ctrl+cursor left/Ctrl+right to adjust the hue and Ctrl+cursor up/Ctrl+down to adjust the saturation. A status message showing the current settings is briefly displayed in the bottom right hand corner of the display when adjusting the hue and saturation in fullscreen photobooth mode.

The images can be sharpened by selecting the "Sharpen images" checkbox and specifying a sharpening amount in the range 0 to 100. The amount of sharpening required depends on personal taste, the camera and the printer. A value of around 75 is a good starting point.

Captions

Up to 8 captions can be added by selecting the "Edit captions..." button:



To enable a caption select it from the "Edit:" drop down list. Then check the "Enable caption" checkbox to enable the caption or uncheck it to disable the caption.

Each caption can occupy more than one line if required and is left justified by default. Select the "Center justify" checkbox to center justify multiple lines. The size, font, color and rotation (in degrees clockwise) of the caption text can also be specified. The font size is calculated using the printer resolution and so a 72 point font should give text one inch high (one 'point' is 1/72 of an inch). The caption is printed in the selected font color with a transparent background. Tokens can be used in the caption text to insert values such as %d for the date and %t for the time the sequence started, {comment} for the comments entered in the main screen and {filename} for the filename used for the JPEG copy of the print layout. [Please see the section on tokens](#) for a list of tokens available. Enter the position for the captions as offsets in pixels from the top and the left of the page.

The easiest way to see how this all fits together is to run Webcam Photobooth and take some test shots. First setup the printer settings by selecting "Printer Setup..." from the File menu and then set basic photobooth settings using the setup dialog. Set the output mode to "JPEG copy only" then take a test sequence by pressing F5 to start fullscreen photobooth mode and F4 to start the picture taking sequence. This will take a sequence of images and save the layout in the prints subfolder where images are saved. Load this image into an image editor (or BreezeBrowser Pro) to view the layout. Then make any changes to the background.jpg, header.jpg, footer.jpg or overlay.png images and the photobooth settings and take more test shots until you're happy with the layout.

Tip: To save having to setup the printer preferences every time Webcam Photobooth is run you can

go to the Windows Control Panel, select "Printers and Faxes" then right click on the printer to change its preferences.

Some example layouts using four shots arranged in two columns of four:



With left.jpg down the left border, middle.jpg placed between the columns, right.jpg down the right border and footer.jpg at the bottom



Same layout as the first example but with no left.jpg or right.jpg images defining the left and right borders



Same layout as the previous example but with no middle.jpg image placed between the columns



Same layout as the previous example but with a 2mm border around each image



A custom layout where the size and position of each photo is specified individually

Running External Commands

External commands can be used to customize the way the photobooth works e.g. by emailing images or turning lights on and off. There are two different ways external commands can be run when shooting in full screen photobooth mode:

1. When the photobooth screen changes during the photobooth shooting sequence
2. When the XML summary file is written after the photobooth output has been printed or saved

Running commands when the photobooth screen changes (experimental)

This allows a command to be run each time the photobooth screen changes during the photobooth shooting sequence. The full pathname of the screen image is passed as a command line argument to the command e.g. C:\Program Files\BreezeSys\Webcam Photobooth\PhotoboothImages\ready.jpg. To enable this two values need to be stored in the Windows registry: PhotoboothStatusCmdEnable and PhotoboothStatusCmd (see below for details).

Running a command when the XML summary file is written (experimental)

This allows a command to be run after the photobooth output has been saved or printed and the [XML summary file has](#) been written. The full pathname of the XML summary file is passed as a command line argument to the command. To enable this two values need to be stored in the Windows registry: PhotoboothStatusCmdEnable and PhotoboothStatusCmdXML (see below for details).

Windows registry settings

To enable the photobooth screen change or XML summary file commands the following REG_DWORD value in the Windows registry should be set to 1:
 HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\101
 \PhotoboothStatusCmdEnable

The photobooth screen change command is defined using the following REG_SZ value:
 HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\101\PhotoboothStatusCmd

The XML summary file command is defined using the following REG_SZ value:
HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\101
\PhotoboothStatusCmdXML

Enter an empty string or delete the registry value for PhotoboothStatusCmd or PhotoboothStatusCmdXML if you want to run one command but not the other. The values can be edited using the Windows regedit utility or by creating a registry file like the one below, giving it a .reg file extension and then double clicking on the file in Windows Explorer to copy the settings to the registry:

Windows Registry Editor Version 5.00

```
[HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\101]
"PhotoboothStatusCmdEnable"=dword:00000001
"PhotoboothStatusCmd"="C:\\Program Files\\BreezeSys\\Webcam Photobooth\\PhotoboothImages\\status.exe"
"PhotoboothStatusCmdXML"="C:\\Program Files\\BreezeSys\\Webcam Photobooth\\PhotoboothImages\\statusXML.exe"
```

6 Screens displayed to the user

Screens displayed to the user

If full screen mode is selected (by pressing Ctrl+F4 to enter full screen mode and display the ready image) a series of images can be displayed to the user to show them what's happening and to advertise the photo booth. These images are held in the same folder as the background, header and footer images and are as follows:

ready.jpg - image displayed when DSLR Remote Pro for Windows is ready to take the next set of photos

ready_overlay.png - optional screen overlay displayed over the ready.jpg screen and live view display (see below for more information)

1.jpg, 2.jpg etc. - image displayed before taking the first, second, third etc. images together with the text specified in the setting dialog

taking.jpg - image displayed for approximately 1 sec before taking each shot

release.jpg - optional image displayed as the photo is taken (live view is hidden when this screen is displayed)

preview.jpg - optional background image displayed with the preview photo

processing.jpg - image displayed after taking the photos while DSLR Remote Pro for Windows formats and sends the page to the printer

reprint.jpg - optional image displayed at the bottom of the reprint selection dialog

reprinting.jpg - optional image displayed when reprinting photos (processing.jpg will be displayed if reprinting.jpg isn't found)

camera_not_connected.jpg - image displayed when the camera is turned off or disconnected

welcome.jpg - image displayed when the inactivity timer has canceled live view or standby mode has been selected by pressing F6

confirm_printing.jpg - optional background image when displaying print confirmation screen

printing_confirmed.jpg - image displayed if user selects printing from the print confirmation screen

keyboard_input_ok.jpg - image displayed if user selects 'ok' from the on screen keyboard after the photos have been taken

keyboard_input_cancel.jpg - image displayed if user selects 'cancel' from the on screen keyboard after the photos have been taken

share.jpg - displayed after taking the photo and after the print confirmation screen (if enabled) when the text or email sharing options are selected

share_printing.jpg - displayed for at least 5 seconds when the user selects printing from the sharing screen

email_photo.jpg - displayed while emailing photos

email_offline.jpg - displayed after user has entered the email address and email offline mode is

selected

email_success.jpg - displayed for a few seconds after the photos have been successfully emailed

email_error.jpg - displayed if there was an error emailing the photos

twitter_login.jpg - screen displayed when logging in to Twitter

twitter_login_failure.jpg - screen displayed if there is an error logging in to the user's Twitter account

twitter_upload.jpg - screen displayed while the photo is being uploaded to the user's Twitter feed

twitter_success.jpg - screen displayed after a successful post to Twitter

twitter_cancel.jpg - screen displayed if the user cancels a post to Twitter

twitter_error.jpg - screen displayed if there is an error posting the photo to Twitter

twitter_timeout - screen displayed if the user does nothing and the Twitter timeout occurs

mms.jpg - screen displayed when sending an MMS

mms_success.jpg - screen displayed after an MMS has been sent successfully

mms_as_sms.jpg - screen displayed in if MMS isn't supported and SMS is being used instead

mms_offline.jpg - screen displayed in offline mode after the user has entered their cellphone number to send an MMS

mms_error.jpg - screen displayed if there is an error when sending an MMS

video_ready.jpg - displayed when the video booth is ready to capture the next clip

video_countdown.jpg - displayed together with the countdown text during the countdown before capturing the clip

video_capture.jpg - displayed together with a progress bar while the video clip is being captured

video_processing.jpg - displayed after video capture while the movie file is being transferred to the PC

video_playback.jpg - displayed when playing back the video that has just been captured

video_playback_finished.jpg - optional screen image displayed after playback or after downloading the video if auto playback is not enabled

GIF_processing.jpg - optional screen displayed when creating animated GIFs in video mode

A typical photo booth shooting sequence will display screens in the following order:

ready.jpg - the photo booth is ready to take the next set of photos

1.jpg - displayed during the countdown for the first photo in the sequence

taking.jpg - displayed approximately 1 sec before taking the photo

release.jpg - displayed when the command to take the photo is sent to the camera

2.jpg, taking.jpg, release.jpg - screens displayed during the countdown for the second photo repeated for the remaining photos in the sequence...

processing.jpg - displayed after taking the photos while preparing them for printing

confirm_printing.jpg - screen asking the user to confirm or reject the prints

share.jpg - screen displayed asking the user to share the photos by email, text etc.

printing_confirmed - displayed after user has accepted the prints and has exited the share.jpg screen

ready_overlay.png - this is an optional overlay file that is displayed over the ready.jpg screen and the live view display. This screen image should be the same size as the ready.jpg screen and should contain transparent areas so that the live view screen may be seen. The ready_overlay.png screen makes it simple to add buttons, text or graphics that appear over the live view display.

Please note that areas of the ready_overlay.png screen must be either fully opaque or fully transparent. You can't use an alpha channel to provide semi-transparent areas.

A different screen for the taking.jpg, release.jpg and preview.jpg screens can be displayed for each photo in the sequence for by appending the photo number to the end of the filename. e.g. taking1.jpg, release1.jpg, preview1.jpg for the first photo; taking2.jpg, release2.jpg, preview2.jpg for the second photo etc.

Please note that it is not always necessary to define all the screen images e.g. share.jpg and the email screens are not required if the email options are not used. The simplest way to get started is to run the [photo booth setup wizard](#) which will automatically create all the screens for you. You can then edit the screens in an image editor to customize the look of your photo booth.

These images can be JPEGs containing any information you like and are displayed centered on the display with a black background. The images 1.jpg, 2.jpg etc are displayed together with the text

defined in the settings dialog which can be used to give a count down timer before each picture. The text is displayed centered on the screen below the live view display, if applicable, as white text on a transparent background. The following tokens can be used in the text:

@imageNumber@ - the number of the image in the sequence starting from 1

@numberOfImages@ - the number of images in the sequence

@secsToNextPhoto@ - the number of seconds until the next photo is taken

The images displayed to the user should be the same size or bigger than the computer's display. If the images are too small they will be expanded to fit with a black border and a small warning message will be displayed in the bottom left corner showing the image size and the display size.

When using live view in photo booth mode the live view images will not be updated while the camera is actually taking each picture. This will cause the live view display to freeze for a couple of seconds and can confuse some users as it shows the live view just before the picture is taken and this will be slightly different from the actual photo. To avoid this problem the live view display will be blanked out when the photo is taken if you define a release.jpg image.

It is also possible to display different screens depending on whether color, black and white or monochrome toned mode is selected and the number of print copies. This provides a way of giving feedback to the user when different settings have been selected.

The way it works is to check for a suffix after the filename for the appropriate screen image in the form <screen>_<b|c|t><1..9>.jpg where <screen> is the name of the screen image e.g. "ready", <b|c|t> is the color mode: "b" for black and white, "c" for color, "t" for monochrome toned or f, g, h, i, j, k for filters 1 to 6 and <1..9> is the number of print copies e.g. "1" is one copy is selected.

For example when the ready.jpg image is to be displayed, the color mode is set to black and white and the number of print copies is set to 2 the software will look for a suitable screen image in the following order:

ready_b2.jpg - i.e. "ready" + black and white + 2 copies selected or if this isn't found it looks for:

ready_b.jpg - i.e. "ready" + black and white or if this isn't found it looks for:

ready_2.jpg - i.e. "ready" + 2 copies selected or if this isn't found it looks for:

ready.jpg

So to have screens to indicate the color mode and the number of print copies from 1 to 3 you need the following "ready" screens: ready_c1.jpg, ready_c2.jpg, ready_c3.jpg, ready_b1.jpg, ready_b2.jpg, ready_b3.jpg.

When a setting is changed, e.g. the color mode is set to black and white, the screen image is updated automatically to show the user the current status.

This technique can also be used for the confirm_printing.jpg screens when displaying the print confirmation screen e.g. confirm_printing_1.jpg is used for 1 copy, confirm_printing_2.jpg is used for 2 copies etc. The touchscreen actions "Confirm printing (+ # prints)" and "Confirm printing (- # prints)" can be used to increase or decrease the number of copies to print and the screen will be updated to show the confirm_printing.jpg background to provide the user with visual feedback of the selected number of copies. The maximum number of copies that can be selected in the "Output Settings" dialog.

Using animated GIF files to animate screens

Animated GIF files can be displayed on the screens by placing an animated GIF in the photo booth images folder and giving it the same name as the screen image. For example, to play an animated GIF when the ready.jpg screen is displayed the file should be named ready.gif. Animated GIFs can be displayed over the live view images and the live view will be visible behind transparent areas of the animated GIF.

Append "_loop" to the filename , e.g. ready_loop.gif, if you want the animated GIF to play in a continuous loop.

By default animated GIFs are displayed in the top left corner of the screen. Animated GIFs 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 ready.gif 200 pixels from the left of the screen and 100 pixels from the top the file should be named ready_200+100.gif (or ready_loop_200+100.gif if you want it to play continuously).

When an animated GIF is displayed on the countdown screen (e.g. by naming it 1.gif) it replaces the normal countdown text and is only played once. Approximately 1 second before the end of the GIF the taking.jpg screen is displayed and then the photo is taken when the GIF reaches the end.

Important: The delay before taking each photo must be set to 2 secs or more otherwise the countdown movie will not be displayed.

Example animated GIFs (in the installation folder):

start.gif - displays a pulsating "Start" button. To test this copy start.gif to your photobooth images folder and rename it ready_loop.gif. This will display the button in the top left corner of the screen. It can be moved by appending the left and top offsets to the filename e.g. change the filename to ready_loop_200+100.gif to place it 200 pixels from the left of the screen and 100 pixels from the top.
1.gif - displays a 5, 4, 3, 2, 1 countdown with a progress ring. To test this copy countdown.gif to your photobooth images folder and rename it 1.gif. This will display the countdown in the top left corner of the screen during the countdown for the first photo. It can be moved by appending the left and top offsets to the filename e.g. change the filename to 1_200+100.gif to place it 200 pixels from the left of the screen and 100 pixels from the top. Make copies of the file and rename them 2.gif, 3.gif etc. to provide animated countdowns for photos 2, 3, etc.

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 photo booth 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.

When a movie is displayed on the countdown screen (e.g. by naming it 1.mp4) it replaces the normal countdown text and is only played once. Approximately 1 second before the end of the movie the taking.jpg screen is displayed and then the photo is taken when the movie reaches the end. There is a sample movie file called countdown.mp4 in the folder where DSLR Remote Pro is installed. To use this simply copy it to your photo booth images folder and rename it to 1.mp4, 2.mp4 etc.

Important: The delay before taking each photo must be set to 2 secs or more otherwise the countdown movie will not be displayed

Please note: If an animated GIF has been defined for the countdown the countdown movie file will be ignored.

Audio Prompts

Audio prompts can be added by placing a WAV sound file in the photo booth images folder and giving

it the same name as prompt screen. For example to play a sound when the photo booth is ready copy a WAV file named ready.wav into the photo booth images folder and it will be played when the ready.jpg image is displayed. You can also play an audio file when the touchscreen keyboard is displayed by naming it keyboard.wav and placing it in the photo booth images folder.

Note: There is no need to use a WAV file if you are already using a movie file (see above) because movie files can contain both pictures and sound.

The easiest way to see how this works is to try it out. To do this run DSLR Remote Pro for Windows then press Ctrl+F4 to display the ready screen. Then press Shift+F4 to take a test sequence or F4 to take the pictures and print them.

A typical 4 picture sequence would be:

At startup: "ready.jpg" image displayed on screen and "ready.wav" played once (if present)

Sequence started: "1.jpg" image displayed on screen together with countdown text and "1.wav" played once (if present)

Approx 1 sec before taking picture #1: "taking.jpg" image displayed on screen and "taking.wav" played once (if present)

After taking picture #1: preview image displayed for the required number of seconds (if enabled in the settings) then "2.jpg" image displayed on screen together with countdown text and "2.wav" played once (if present)

Approx 1 sec before taking picture #2: "taking.jpg" image displayed on screen and "taking.wav" played once (if present)

After taking picture #2: preview image displayed for the required number of seconds (if enabled in the settings) then "3.jpg" image displayed on screen together with countdown text and "3.wav" played once (if present)

Approx 1 sec before taking picture #3: "taking.jpg" image displayed on screen and "taking.wav" played once (if present)

After taking picture #3: preview image displayed for the required number of seconds (if enabled in the settings) then "4.jpg" image displayed on screen together with countdown text and "4.wav" played once (if present)

Approx 1 sec before taking picture #4: "taking.jpg" image displayed on screen and "taking.wav" played once (if present)

After taking picture #4: preview image displayed for the required number of seconds (if enabled in the settings) then "processing.jpg" image displayed on screen and "processing.wav" played once (if present). During this time the images are formatted ready for output and either saved to file or sent to the printer queue. When this has finished the screen goes back to the "ready.jpg" image and the ready.wav sound file is played ready for the next sequence.

It is also possible to display different screens depending on whether color, black and white or monochrome toned mode is selected and the number of print copies. This makes it possible to show the user which settings have been selected and could be used as part of a touchscreen menu system. The way it works is to check for a suffix after the filename for the appropriate screen image in the form <screen>_<b|c|t><1..9>.jpg where <screen> is the name of the screen image e.g. "ready", <b|c|t> is the color mode: "b" for black and white, "c" for color or "t" for monochrome toned and <1..9> is the number of print copies e.g. "1" is one copy is selected.

For example when the ready.jpg image is to be displayed, the color mode is set to black and white and

the number of print copies is set to 2 the software will look for a suitable screen image in the following order:

ready_b2.jpg - i.e. "ready" + black and white + 2 copies selected or if this isn't found it looks for:
 ready_b.jpg - i.e. "ready" + black and white or if this isn't found it looks for:
 ready_2.jpg - i.e. "ready" + 2 copies selected or if this isn't found it looks for:
 ready.jpg

So to have screens to indicate the color mode and the number of print copies from 1 to 3 you need the following "ready" screens: ready_c1.jpg, ready_c2.jpg, ready_c3.jpg, ready_b1.jpg, ready_b2.jpg, ready_b3.jpg.

When a setting is changed, e.g. the color mode is set to black and white, the screen image is updated automatically to show the user the current status.

7 Saving settings for future reference and using profiles

Saving settings for future reference and using profiles

Settings can be saved to file for future reference by pressing the "Save..." button and reloaded by pressing the "Load..." button in the "Photobooth Settings" dialog. This is makes it possible to define a number of different layouts which can be selected before entering full screen photo booth mode. When saving the settings to file you have the option to include a copy of the current printer settings and when you load these settings the printer settings will also be loaded. This makes it possible to use profiles to select different printers or printer settings e.g. profile one could print single photos on 6x4 paper, profile 2 could select a double strip of 4 printed on the same printer but using the 6x2 cut strip option and profile three could select a different printer to print jumbo 6x9 photos.

Please note that layout depends on the size of the page which is affected by the printer settings. The values saved for one setup may not produce the same results if a different printer is used or the page or resolution settings have changed. Also the printer settings saved to file are specific to that printer model and you may get strange results if the printer is no longer available or the settings are copied to a different computer.

The image download directory specified in the [photobooth setup dialog](#) is not saved with the photobooth settings, but you can use the tokens {photoboothDir} and {photoboothSubdir} to specify a different output directory for each profile.

{photoboothDir} gives the full path of the photobooth images folder e.g. C:
 \Photobooth\Layouts\MyLayout

{photoboothSubdir} gives the name of the photobooth subfolder e.g. if the photobooth images folder is C:\Photobooth\Layouts\MyLayout then {photoboothSubdir} would become MyLayout

For example:

strips_profile: outputs standard photobooth strips to the default printer and uses C:

\Photobooth\Layouts\strips as its photobooth images dir

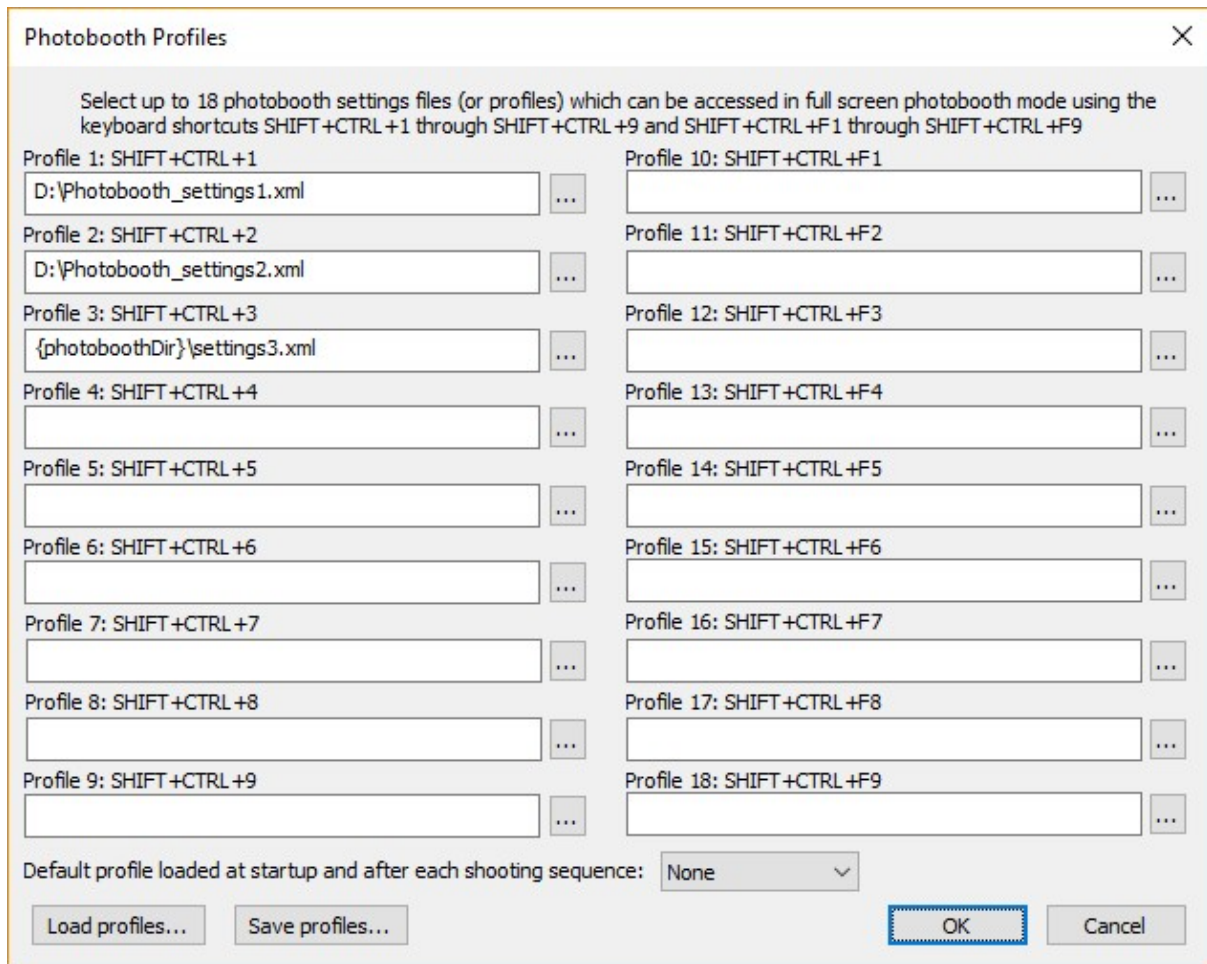
cubes_profile: takes four photos with the output set to 'none' and uses C:\Photobooth\Layouts\cubes as its photobooth images dir. Its output directory is then monitored by the [Hot Folder Prints](#) utility which formats the images as a photo cube and sends them to a different printer.

To make this work the download directory in [photobooth setup dialog](#) could be set to C:

\Photobooth\Output\{photoboothSubdir}. This would save images from the strips_profile to C:

\Photobooth\Output\strips and the cubes_profile to C:\Photobooth\Output\cubes. The [Hot Folder Prints](#) utility could then be setup to monitor the C:\Photobooth\Output\cubes folder for images and print them out automatically when the required number of images are available.

Profiles allow you to use a keyboard shortcut (or touchscreen action) to automatically switch between different sets of saved settings. To assign a profile to a keyboard shortcut select "Profile Settings..." from the File menu:



Then click on "..." button for the appropriate profile and select a previously saved set of photo booth settings. In the screenshot above profile 1 (keyboard shortcut SHIFT+CTRL+1) loads the settings file photobooth_settings1.xml and profile 2 (keyboard shortcut SHIFT+CTRL+2) loads the settings file photobooth_settings2.xml. Profiles can be used to allow users to select different sets of photo booth settings e.g. profile 1 might be a traditional layout of two columns of four images and profile 2 might be a custom layout with one large image and several smaller ones. Profiles can be selected using the touchscreen actions (described above) allowing a user to easily switch between different settings.

The tokens {photoboothDir}, {photoboothSubDir} and {documents} can be used to specify the pathname of the profile file to be loaded.

{photoboothDir} is replaced with the value of current photo booth images folder and provides a way to use more than 18 profiles by allowing profiles to be loaded from the current photo booth images folder
 {photoboothSubDir} is replaced with the parent folder of the current photo booth images folder
 {documents} is replaced with the path of the current user's Documents folder

The default profile setting can be used to ensure the photo booth starts up in a known state and is reset to a known state at the end of each photo booth shooting sequence e.g. setting the photo booth to stills mode, color photos and one set of prints.

The default profile option also has settings for randomly selecting a different profile each time. The "Random" setting will randomly choose a profile to use from the full set of 18 profiles, "Random 1..10" chooses a random profile from profiles 1 to 10 and "Random 10..18" chooses a random profile from profiles 10 to 18. The random profile options will only choose a profile from profiles that reference a settings file that exists e.g. using the "Random" option with the profiles set up in the screenshot above will randomly select profile 1, profile 2 or profile 3.

Select "Load default profile when launching DSLR Remote Pro" to automatically read the settings from the default profile when running DSLR Remote Pro.

You can also load a profile file by dragging and dropping the settings file onto the DSLR Remote Pro main window or you can launch DSLR Remote Pro and load a profile by dragging and dropping the settings file onto the DSLR Remote Pro desktop shortcut. Alternatively right click on the DSLR Remote Pro desktop shortcut, select properties and add the pathname to settings file to the "Target" (or command line).

Please note: The settings from when DSLR Remote Pro was last run will be replaced with the settings read from the profile file loaded at startup.

Using Profiles to Set Up a Photo Booth

This section describes how to edit the XML settings files to make them easier to transfer to other photo booths and to create a settings file which can be dragged and dropped onto the main Webcam Photobooth window to install the settings.

The problem

A complete photo booth set up normally includes several photo booth images folders and settings files for different configurations which are loaded using profiles. There needs to be a way for the settings files to specify the photo booth images folders in a relative way (so that each photo booth doesn't have to use exactly the same folders for each configuration) and for the loading the profile definitions and other settings.

Specifying the photo booth images folder as a relative path

When the settings are saved to file the <photoboothImageDir> tag specifies the location of the photo booth images folder as an absolute pathname e.g. C:\users\Chris\Documents\PhotoboothImages\MyBooth. In DSLR Remote Pro v3.7 onwards the pathname will be replaced with {documents} if the photo booth images folder is in the current user's documents folder e.g. C:\users\Chris\Documents\PhotoboothImages\MyBooth will be saved as {documents}\PhotoboothImages\MyBooth if the current user login is Chris. The files can be copied to the Documents folder of another user, e.g. John, and when the settings are loaded the {documents} token will be replaced with path of the current user's Documents folder e.g. C:\users\John\Documents\PhotoboothImages\MyBooth.

A more flexible method which allows the folders to be copied to any location is to edit the settings file in a text editor and replace the <photoboothImageDir> tag with '.' e.g. <photoboothImageDir>.</photoboothImageDir>

When the settings file is loaded the '.' is replaced with the pathname of the settings file and so as long as the settings file is in the same folder as the screen images the photo booth images folder will be set correctly.

Please note: if the settings file is saved again using the "Save..." button in the "Photobooth Settings" dialog the <photoboothImageDir> value will be saved as an absolute pathname and you will need to edit it again in a text edit to set it back to '.'.

Specifying profile paths and other settings

There are some additional tags that can be added to settings files to define profiles, photo booth shortcut buttons, the download folder and image filenames. These tags are read when the settings file is loaded but are not saved with the other settings when the "Save..." button is pressed.

The easiest way to explain this is to use an example of a simple three profile set up which consists of three photo booth images folders:

C:\Photobooth\simple\menu - this contains screens for the initial menu screen

C:\Photobooth\simple\single - this contains the files for a single photo print layout

C:\Photobooth\simple\2x2 - this contains the files for a print layout with two rows of two photos

The settings files for each folder are:

C:\Photobooth\simple\menu\settings.xml - set this as profile 10 and make it the default profile so that it is displayed at startup and after each set of photos. Include touchscreen actions to load profile 11 for single photos and profile 12 for the 2x2 layout

C:\Photobooth\simple\single\settings.xml - set this as profile 11 and include a touchscreen action to load profile 10 to go back to the main menu

C:\Photobooth\simple\2x2\settings.xml - set this as profile 12 and include a touchscreen action to load profile 10 to go back to the main menu

Each of the settings.xml files needs to be edited to set the <photoboothImageDir> to '.' so that the photo booth images folder is set to the same folder as the settings.xml file.

The final step is to create an XML settings file that can be used to install the profile definitions and other settings required. This file will be saved in the C:\Photobooth\simple folder and named install_me.xml. Dragging and dropping this file onto the Webcam Photobooth main window will load the settings required to use the simple three profile set up. The install_me.xml file will look something like this:

```
<?xml version="1.0" encoding="UTF-8"?>
<dslr_remote_pro build_date="May 15 2017" version="3.4">
  <photobooth_settings>
    <!-- Profiles -->
    <defaultProfile>10</defaultProfile>
    <profile10>.\menu\settings.xml</profile10>
    <profile11>.\single\settings.xml</profile10>
    <profile12>.\2x2\settings.xml</profile10>

    <!-- Folders and filenames -->
    <photoboothImageDir>.</photoboothImageDir>
    <downloadFolder flattenDate="1" day="1" month="1" year="1">{documents}\PhotoboothImages</downloadFolder>
    <filenamePrefix>{uid}</filenamePrefix>

    <!-- Disable the image editor command -->
    <editorCommand></editorCommand>

    <!-- Enable and label the photo booth shortcut buttons -->
    <shortcutButton1 displayOrder="1" enable="1">Printer Setup</shortcutButton1>
    <shortcutButton2 displayOrder="2" enable="0"></shortcutButton2>
    <shortcutButton3 displayOrder="3" enable="0"></shortcutButton3>
    <shortcutButton4 displayOrder="4" enable="0"></shortcutButton4>
    <shortcutButton5 displayOrder="5" enable="0"></shortcutButton5>
    <shortcutButton6 displayOrder="6" enable="0"></shortcutButton6>
    <shortcutButton7 displayOrder="7" enable="1">Reprint Photobooth Photos</shortcutButton7>
    <shortcutButton8 displayOrder="8" enable="1">Start Photobooth</shortcutButton8>
    <shortcutButton9 displayOrder="9" enable="1">Take Test Photo</shortcutButton9>
    <shortcutButton10 displayOrder="10" enable="0"></shortcutButton10>
    <shortcutButton11 displayOrder="11" enable="0"></shortcutButton11>
    <shortcutButton12 displayOrder="12" enable="0"></shortcutButton12>
    <shortcutButton13 displayOrder="13" enable="0"></shortcutButton13>
    <shortcutButton14 displayOrder="14" enable="0"></shortcutButton14>
    <shortcutButton15 displayOrder="15" enable="0"></shortcutButton15>
    <shortcutButton16 displayOrder="16" enable="0"></shortcutButton16>
    <shortcutButton17 displayOrder="17" enable="0"></shortcutButton17>
    <shortcutButton18 displayOrder="18" enable="0"></shortcutButton18>
    <shortcutButton19 displayOrder="19" enable="0"></shortcutButton19>
    <shortcutButton20 displayOrder="20" enable="0"></shortcutButton20>
    <shortcutButton21 displayOrder="21" enable="1">Camera Settings...</shortcutButton21>
  </photobooth_settings>
</dslr_remote_pro>
```

What each tag does:

Tag: defaultProfile

Description: defines the default profile that is loaded at startup and after each set of photos (from 1 to 18)

Example: <defaultProfile>10</defaultProfile>

Tag: profile1 to profile18

Description: defines the settings file loaded by each profile. The path can be an absolute path or start with {documents}, '.' or '..'

Example: <profile10>./menu/settings.xml</profile10>

Tag: photoboothImageDir

Description: defines the path of the photo booth images folder. The path can be an absolute path or start with {documents}, '.' or '..'

Example: <photoboothImageDir>./</photoboothImageDir>

Tag: downloadFolder

Description: defines the folder where photos taken by the camera are saved. The path can be an absolute path or start with {documents}, '.' or '..'. The optional attributes for flattenDate, day, month and year can be used to specify how date based folders are created

Example: <downloadFolder flattenDate="1" day="1" month="1" year="1">{documents}
\\PhotoboothImages</downloadFolder>

Tag: filenamePrefix

Description: defines the prefix added to the filename of the JPEG copy of the printed output:

Example: <filenamePrefix>IMG</filenamePrefix>

Tag: editorCommand

Description: defines the pathname of the command that is run on each image after it has been downloaded. The path can be an absolute path or start with {documents}, '.' or '..'. An empty string will disable the editor command

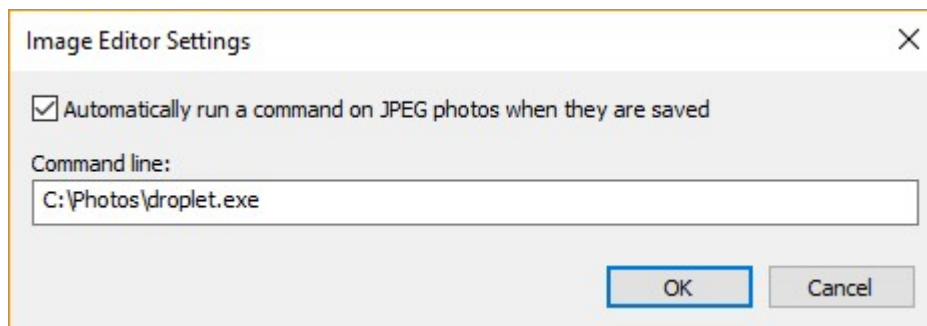
Example: <editorCommand><editorCommand>

8 Modifying Photos Before Printing

Sometimes it is necessary to modify the photos using another application before they are printed by Webcam Photobooth. This could be to run a Photoshop droplet to apply a special effect or to produce a specific "look" to the photos or to run a green screen application to create high quality green screen images.

Step 1 - Run a command on each photo after it has been downloaded

The Photoshop droplet or other command can be automatically run after downloading each photo by selecting "Setup Image Editor..." from the File menu:



Select "Automatically run a command on JPEG photos when they are saved" option and set the command line to the executable file, .BAT batch file or AutohotKey script to run. This will run the

command on every time a photo is taken downloaded to the computer.

Step 2 - Delay the printing of the photos to allow time for the photo to be processed

Normally Webcam Photobooth will start preparing the print layout immediately after downloading the last photo in the shooting sequence and this can result in the last photo not being modified before it is placed in the print layout if the command takes too long to process the photo. This problem can be avoided by setting a delay before printing in the "Output Settings" dialog:

Output Settings

Output: JPEG copy only

Display thumbnails Thumbnail settings...

Delay before creating print layout (secs): 30

Sign or draw on photos before printing

Display print preview and wait for confirmation before printing

Timeout (secs): 300 Timeout action: Cancel

Max copies: 4 Preview size and position...

Sharing (preview sizes in pixels, 0=auto)

Print Print settings...

Facebook Facebook settings...

SMS/MMS SMS/MMS settings... MMS/SMS offline mode

Twitter Twitter settings...

Email Email settings... Email server settings... Offline email mode

Preview: Left: 0 Top: 0 Width: 0 Height: 0

Share animated GIFs Max percentage upscaling: 200

Sharing screen timeout (secs): 30

Create animated GIF of photos Animated GIF settings...

Filename for JPEG copy of output: %d_%t.jpg

Copy JPEG copy of printed output to folder Settings...

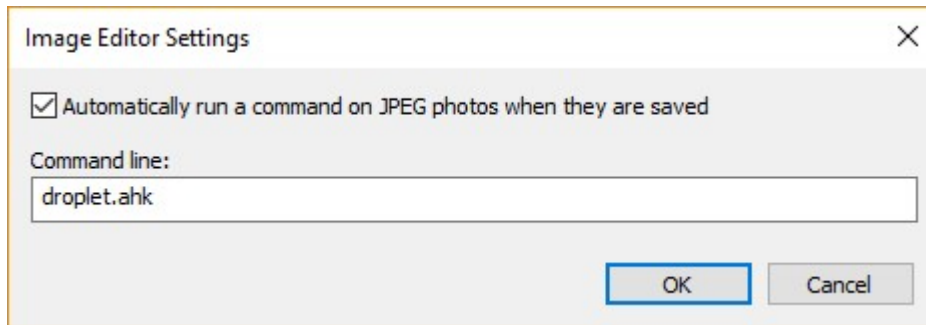
OK Cancel

Set the delay before printing to sufficient time to allow the command to modify the photo. After taking the last photo Webcam Photobooth will wait for the specified number of seconds before it starts to create the print layout. The delay can be cut short by sending the key sequence Ctrl+Z to Webcam Photobooth. This is useful if a script is used to run the command because the delay before printing can be set to a time that is guaranteed to always be long enough (e.g. 30 secs) and the script can send Ctrl+Z to Webcam Photobooth when the command to modify the photo has finished, thus minimizing

the time Webcam Photobooth waits before printing the photos.

Running Photoshop Droplets

The recommended way to run Photoshop droplets in photo booth mode is to use the droplet.ahk AutoHotKey script in the installation folder by setting the command line to droplet.ahk:

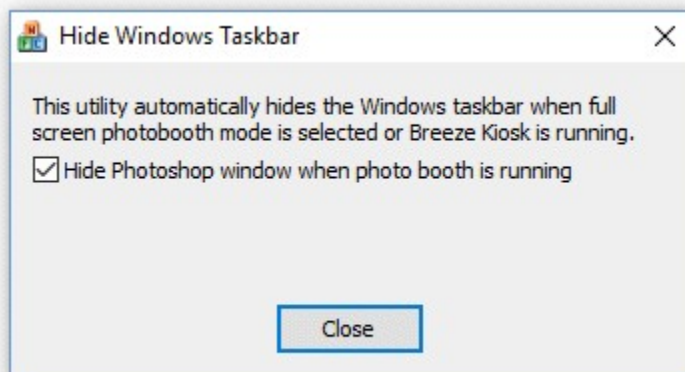


Please note that AutoHotKey needs to be installed before using the droplet.ahk script. This is a free download from <https://autohotkey.com>

The droplet.ahk will look for .exe file starting with the name droplet in the current photo booth images folder. If it finds a single file (e.g. droplet.exe) it will run the droplet on the image that has just been downloaded. If multiple .exe files with filenames starting with droplet are found (e.g. droplet1.exe, droplet2.exe etc.) they will be sorted into alphabetical order and the first droplet file will be used. After running the droplet the script will send Ctrl+Z to the photo booth window if the processing screen is displayed so that Webcam Photobooth can start printing the photos.

Alternatively the command line can be set to the absolute path of the droplet to run e.g. droplet.ahk C:\Photobooth\RunThisDroplet.exe

When a Photoshop droplet is run it will launch Photoshop if it is not already running and the Photoshop Window will appear on the photo booth screen. To avoid this happening run the "Hide Window Taskbar" utility. This can be run by double clicking on HideWindowsTaskbar.exe in the Webcam Photobooth installation folder (usually C:\Program Files (x86)\BreezeSys\Webcam Photobooth):



Select the option to "Hide Photoshop window when photo booth is running". The Hide Windows Taskbar utility will monitor Webcam Photobooth and when it is running in full screen photo booth mode the utility will hide the Windows task bar and the Photoshop window if Photoshop is running. When you exit full screen photo booth mode the utility will automatically restore the Windows taskbar and show the Photoshop window again.

Please make sure no tool windows are open in Photoshop otherwise these may appear on the photo booth screen when running the droplet.

The Hide Windows Taskbar hides the Windows task bar when full screen photo booth mode is selected to avoid problems with the taskbar appearing on screen during photo booth shooting on some computers. This function is deliberately not built into the main Webcam Photobooth program because if Webcam Photobooth exits prematurely it won't be able to restore the Windows taskbar which then makes it very difficult to control the computer. This problem is avoided by using a separate utility which is simple and very reliable.

The droplet.ahk script will also help to hide the Photoshop window.

Running Different Photoshop Droplets using Profiles

Different droplets can be used for different profiles by placing the droplet in the photobooth images folder selected by the profile and running the droplet.ahk from the editor command. If the script cannot find the droplet in the current photobooth images folder it will look for it in the same folder as the script.

A different droplet can be run on each photo in the shooting sequence by setting the command line to droplet.ahk {photoboothImage}

The {photoboothImage} token is set to the number of the photo in the sequence (1, 2, 3, 4 etc.).

The droplet.ahk will list all .exe files starting with droplet found in the photo booth images folder, sort them into alphabetical order and then use the photo number to decide which one to run.

e.g.

droplet_effect_1.exe - run on photo 1

droplet_effect_2.exe - run on photo 2

droplet_effect_3.exe - run on photo 3

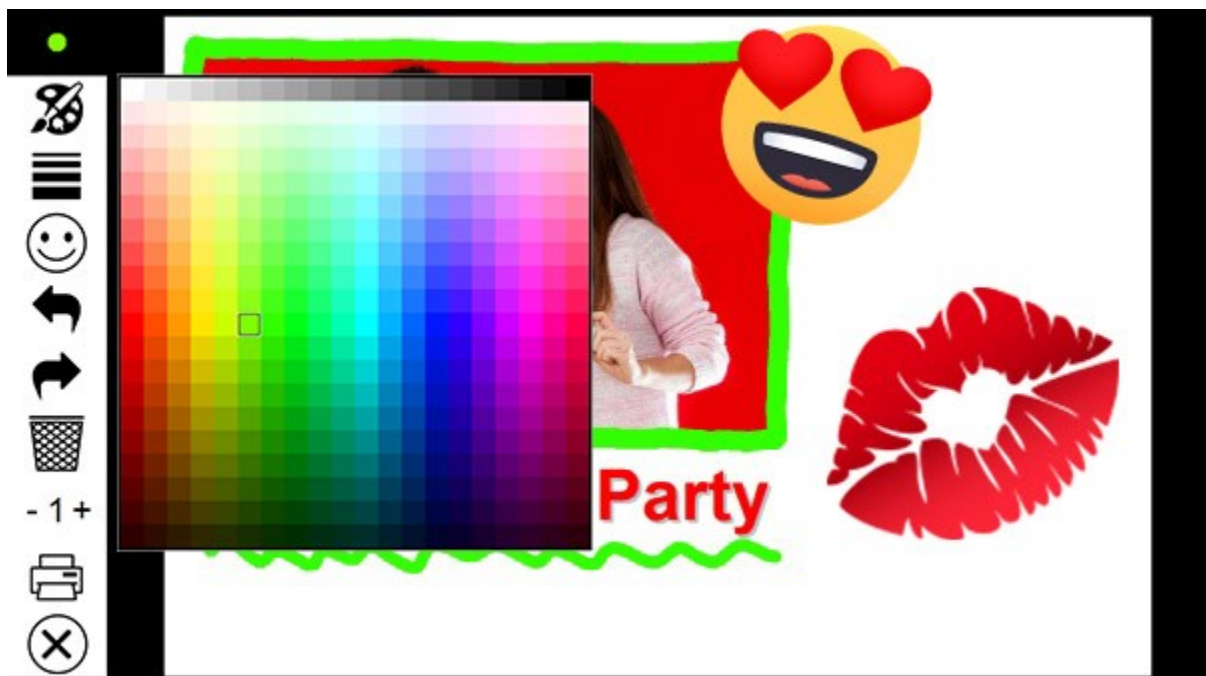
droplet_effect_4.exe - run on photo 4

9 Signing or Drawing on the Prints

After taking the photos a screen allowing users to sign the prints or draw on them can be displayed by selecting the "Sign or draw on photos before printing" option in the "[Output Settings](#)" dialog.



The print layout is displayed full screen with a menubar down the left hand side. The current line width and pen color is displayed in the top left hand corner. Users can sign their print or draw on it using a touchscreen or mouse. Tapping the color palette icon in the menubar will display a panel of colors allowing users to choose the pen color:



When the user taps on a color in the panel it is highlighted and the pen width and color indicator in the top left corner is updated to show the color. The color panel can be dismissed by tapping anywhere in the menubar or by drawing on the print.

Tapping the line width icon in the menu bar will display a slider allowing users to adjust the line width:



The pen width can be adjusted by moving the slider left or right and the pen width and color indicator in the top left corner is updated to show the new pen width. The pen width slider can be dismissed by tapping anywhere in the menubar or by drawing on the print.



Users can add emojis/stickers/virtual props by clicking on the emoji icon in the menu and then selecting the required image. The image is placed in the center of the print preview and can be moved by dragging the center and resized or rotated the image by dragging the corners. Tap outside the image to fix it. The emoji can be removed by tapping the undo button.

If the user makes a mistake they can undo the last action by tapping the "Undo" icon (the red arrow in

the menubar). Alternatively they can start again by tapping the trashcan icon. Actions that have been undone by tapping on the undo or trashcan icons can be re-done by tapping the "Redo" icon (the blue arrow in the menubar).

The number of copies to print can be increased by tapping the + symbol to the right of the number of copies display in the menubar and decreased by tapping the - symbol.

Tapping the printer icon accepts the photos together with any drawing added by the user and prints the selected number of copies.

Tapping on the cancel icon (the red cross in the menubar) will reject photos and the photo booth will return to the ready screen without printing the photos.

Modifying the appearance of the screen

The default screen appearance is a black background with a white menubar area. The icons for the actions in the menubar are defined using PNG files in the icons subfolder of in the installation folder:

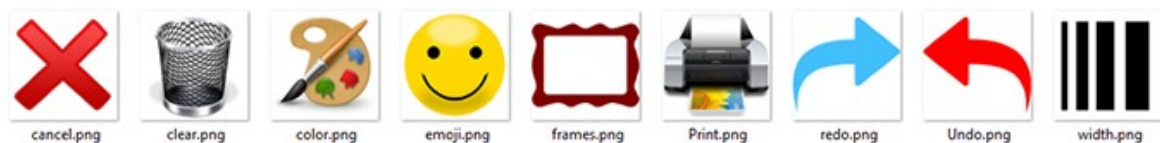
color.png - image used for the color palette icon
width.png - image used for the pen width icon
emoji.png - image used for the emoji icon
frames.png - image used for the frames icon
redo.png - image used for "Redo" icon
undo.png - image used for the "Undo" icon
clear.png - image used for the clear/trashcan icon
print.png - image used for the print icon
cancel.png - image used for the cancel icon

The appearance of the icons can be changed by replacing the PNG images in the icons subfolder with new images or by placing PNG images in the current photobooth images folder.

The appearance of the whole screen can be modified by creating a JPEG screen image named usermodifyprint.jpg and placing it in the current photobooth images folder. The screen image should be the same size in pixels as the screen on which the photo booth will be displayed.

An optional overlay can be placed on top of the background and print layout by creating a PNG screen image named usermodifyprint_overlay.png and placing it in the current photobooth images folder. The overlay image should be the same size in pixels as the screen on which the photo booth will be displayed and should contain transparency information in the alpha channel. The overlay can be used to display instructions to the user and will appear on screen but not in the final prints.

A set of color icons is available in the "color icons" subfolder of the installation folder:



These can be used by renaming the "icons" subfolder to "b&w icons" and renaming the "color icons" subfolder to "icons" in the installation folder. Alternatively the icon PNG files can be copied into the current photo booth images folder.

Editing the settings

Hold down the shift and ctrl keys and left click the mouse to display the settings dialog:

Use the checkboxes in the "Menu Items" area to select which actions should be made available to the user in the menubar area.

The initial color setting specifies the pen color that is selected when the screen is displayed. Click on the "..." button to choose a different color.

The initial line width specifies the line width in pixels of the pen when the screen is first displayed. The min line width and max line width settings specify the range of line widths the user can select if the "Line width selector" menu option is enabled.

Select "Automatically close color selector when user selects color" to close the color selector menu when a color is selected.

Select "Automatically close frame selector when user selects a frame" to close the frame selector menu when a frame is selected. If this option is not selected the frame selector menu will continue to be displayed when a frame is selected and the print preview is updated to show the selected frame.

Select "Default to first frame" to add the first frame to the print layout when opening the drawing/signing screen.

The "Inactivity timeout (secs):" setting allows a timeout to be set. If the user does not touch the screen for a period longer than the timeout value the screen will be closed and the photos either printed or canceled depending on the timeout action setting. Setting the timeout to 0 will disable the timeout.

Select "Emojis" to add the option to add emojis/stickers/virtual props to prints and specify the folder where the emoji images are stored in "Emoji folder:". The images should be PNG images with an optional alpha channel for transparency information. The recommended image size for the emoji images is between 128x128 pixels and 1024x1024 pixels.

The folder name can be a relative path (e.g. "emoji") to use images in a subfolder or an absolute path

(e.g. C:\emoji_images) if they are stored elsewhere. If it is set to a relative path it looks for the subfolder in the current photo booth images folder first and then looks in the installation folder. This allows different sets of emojis to be made available for each profile if required.

Emoji icons supplied by [EmojiOne](#)

The max copies setting specifies the maximum number of print copies the user can select by tapping the + symbol in the menubar.

The position of the print preview can be adjusted using the "Preview position:" dropdown. The default setting is to center it vertically. Select the "Top" option to place the preview at the top of the screen or "Bottom" to place it at the bottom of the screen.

By default users can draw anywhere on the print, but this can be limited by enabling the clipping and exclusion clipping regions. The clipping region is used to specify a region where the user is allowed to draw. The exclusion region allows an area within the drawing area to be protected e.g. to stop people drawing on corporate logos. The clipping and exclusion clipping regions can be edited by clicking on the "OK" button. The clipping region will be displayed by a green rectangle and the exclusion clipping region by a red rectangle. Click on one of the rectangles to select it and then adjust its size and position by dragging its corners. Click in the menubar area to save the settings and return to drawing mode.

Select the "Show mouse cursor" to display the mouse cursor to allow users to draw on the prints using a mouse.

Frames

The frames option allows users to choose a frame to apply to the print layout. The frames are defined by overlay PNG images in the current photo booth images folder with filenames starting with frame_ e.g. frame_1.png, frame_2.png etc. The frame overlays are sorted into alphabetical order when they are displayed in the frame selector menu.

The frames menu icon will only be displayed if the "Frames" option is selected in the settings and one or more frame overlay images are found in the current photo booth images folder.

The frame overlay images should be the same size in pixels as the print layout and have transparent areas where the photos are positioned so that the photos can be seen underneath the frame overlay. **Please note:** The frame overlay is added to the print layout after captions, logos etc. have been added and may obscure them. If you wish to add a logo or caption to the prints and use the frames option in the drawing/signing screen you either need to leave transparent areas in frames or to add the logos or captions to each of the frame overlay images.

Implementation notes

The signing and drawing screen is implemented using a dynamic library named UserModifyPrint.dll and saves its settings in the Windows registry using the following registry key:

HKEY_CURRENT_USER\SOFTWARE\BreezeSystems\WebcamPhotobooth\100\UserModifyPrint

If different drawing and signing functionality is required it can be implemented by creating a new dynamic library to replace the default UserModifyPrint.dll library without requiring a custom build of DSLR Remote Pro.

Copyright information for icons used by UserModifyPrint.dll:

Undo/Redo/Cancel/Frames icons: These icons are provided by icons8 as Creative Commons Attribution-NoDerivs 3.0. You can copy, use and distribute this icon, even for commercial purposes, all without asking permission provided you link to icons8.com website from any page you use this icon. You may not alter, transform, or build upon this work. <https://icons8.com>

Color Palette/Trashcan icons from <http://downloadicons.net>

Printer icon: royalty free icon purchased from <http://artistsvalley.com>. This icon may only be used with Breeze Systems' products unless a separate license is purchased from Artists Valley.

Line width: Copyright Breeze Systems Limited. This icon may only be used with Breeze Systems' products.

10 Touchscreen Keyboard

An optional touchscreen keyboard can be displayed at the start or end of the photo booth shooting sequence to allow users to enter information such as their email address. To enable the keyboard set the photo booth start options in the photo booth settings dialog to "Touchscreen" and click on the "Settings..." button. The touchscreen settings dialog will be displayed:

Touchscreen Settings

Select the action and coordinates of up to 45 areas on the touchscreen: Display actions 1 to 15

Action 1:	Start photobooth	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 2:	Select color mode	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 3:	Select B&W mode	Left: 0	Top: 384	Right: 191	Bottom: 575
Action 4:	Select video booth mode	Left: 1728	Top: 0	Right: 1919	Bottom: 191
Action 5:	Confirm printing	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 6:	Cancel printing	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 7:	Confirm printing (+ # prints)	Left: 1728	Top: 0	Right: 1919	Bottom: 191
Action 8:	Confirm printing (- # prints)	Left: 1728	Top: 288	Right: 1919	Bottom: 479
Action 9:	Sharing: Facebook upload	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 10:	Sharing: Close sharing screen	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 11:	Select photobooth mode	Left: 1728	Top: 0	Right: 1919	Bottom: 191
Action 12:	Accept video	Left: 0	Top: 0	Right: 191	Bottom: 191
Action 13:	Reject video	Left: 0	Top: 192	Right: 191	Bottom: 383
Action 14:	Stop video capture	Left: 215	Top: 514	Right: 1864	Bottom: 1078
Action 15:	No action	Left: 0	Top: 0	Right: 0	Bottom: 0

Show/edit touchscreen areas...

Photo booth exit action password (leave blank for no password): breeze

Touchscreen keyboard: Not displayed Test keyboard... Timeout (secs): 30

Show mouse cursor OK Cancel

Then select the required touchscreen keyboard option from the dropdown list:

"Not displayed" - the touchscreen keyboard is not displayed

"Email input at start of sequence" - the email input touchscreen keyboard is displayed when the user presses the start button before any of the photos are taken

"Email input at end of sequence" - the email input touchscreen keyboard is displayed after the photos have been taken and the optional print confirmation screen has been displayed (it isn't displayed if the user chooses not to print the photos)

"Email input after taking photos".- the email input touchscreen keyboard is displayed immediately after taking the photos before the optional print confirmation screen

"Message input at end of sequence" - the message input touchscreen keyboard is displayed after the photos have been taken and the optional print confirmation screen has been displayed (it isn't displayed if the user chooses not to print the photos)

The "Timeout (secs):" setting allows an inactivity timeout to be specified. If the user does not tap the touchscreen for a while the timeout will automatically close the touchscreen keyboard. This is useful if the user leaves the photo booth without using the touchscreen keyboard as it allows the booth to automatically close the touchscreen keyboard and display the ready screen ready for the next user.

The touchscreen keyboard can be tested by pressing the "Test keyboard..." button and selecting the keyboard to test. The default keyboard layout will fill the screen and look similar to the screenshot below:



The keyboard used for entering the user's email address when using the email option can be displayed by clicking on the "Test keyboard..." button and selecting "email keyboard...".

The text entered by the user is saved in the <user_data> tag (and the <user2_data> tag if two text fields are defined) in the XML file written at the end of the photo booth shooting sequence. If any checkboxes are defined (see below) their status will be saved in <checkbox1>, <checkbox2> etc. tags e.g. if the user selects the first checkbox the XML will contain <checkbox1>1</checkbox1>. The XML file is saved in the same folder as the photos downloaded from the camera (see [photobooth setup](#)) e.g.

```
<?xml version="1.0" ?>
<breeze_systems_photobooth version="1.0">
<photo_information>
  <date>2011/01/26</date>
  <time>16:37:19</time>
  <user_data>sales@breezesys.com</user_data>
  <photobooth_images_folder>C:\Photobooth\PhotoboothImages</photobooth_images_folder>
  <photos>
    <photo image="1">20110126_163719.JPG</photo>
```

```

    <photo image="2">20110126_163724.JPG</photo>
    <photo image="3">20110126_163729.JPG</photo>
    <photo image="4">20110126_163734.JPG</photo>
    <output>prints\20110126_163719.jpg</output>
  </photos>
</photo_information>
</breeze_systems_photobooth>

```

There is a default timeout of 300 secs after which time the touchscreen keyboard will be automatically canceled. This timeout is stored in the Windows registry key:
 HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\102
 \PhotoboothKeyboardTimeout

Customizing the keyboard

The layout of the keyboard can be customized by creating an XML settings file called keyboard.xml and putting this in the photo booth images folder. This gives control over the size and position of the keys, the background color etc. A series of keyboard images can also be used if you need more control of the appearance of the keyboard.

The easiest way to customize the keyboard is to save a copy of the XML file and TIFF screen images used to define the default keyboard layout and then edit them as required. The files can be saved by first displaying the keyboard by pressing the "Test keyboard..." button and then holding down both the Shift and Ctrl keys and pressing the left mouse button. The keyboard.xml file will look something like:

```

<?xml version="1.0" ?>
<breeze_systems_photobooth version="2.2">
<photobooth_settings>
  <keyboard>
    <text_point_size>480</text_point_size>
    <prompt1>Please enter your email address:</prompt1>
    <text1_y>411</text1_y>
    <text1_x>50</text1_x>
    <text1_r>300</text1_r>
    <background_color>0x000080</background_color>
    <transparent_color>0x000080</transparent_color>
    <text_color>0xFFFFFFFF</text_color>
    <show_cursor>0</show_cursor>
    <show_mouse_cursor>0</show_mouse_cursor>
    <key>
      <left>58</left>
      <top>630</top>
      <width>112</width>
      <height>89</height>
      <legend>q</legend>
      <shifted_legend>Q</shifted_legend>
      <code>q</code>
      <shifted_code>Q</shifted_code>
    </key>
    <key>
      <left>186</left>
      <top>630</top>
      <width>112</width>
      <height>89</height>
      <legend>w</legend>
      <shifted_legend>W</shifted_legend>
      <code>w</code>
    </key>
    ...
    <key>
      <left>1296</left>
      <top>840</top>
      <width>160</width>
      <height>89</height>
      <legend>Shift</legend>
      <shifted_legend>Shift</shifted_legend>
      <code>Shift</code>
      <shifted_code>Shift</shifted_code>

```

```

</key>
<key>
  <left>400</left>
  <top>945</top>
  <width>368</width>
  <height>89</height>
  <legend>Send email</legend>
  <shifted_legend>Send email</shifted_legend>
  <code>OK</code>
  <shifted_code>OK</shifted_code>
</key>
<key>
  <left>784</left>
  <top>945</top>
  <width>368</width>
  <height>89</height>
  <legend>No thanks!</legend>
  <shifted_legend>No thanks!</shifted_legend>
  <code>Cancel</code>
  <shifted_code>Cancel</shifted_code>
</key>
</keyboard>
</photobooth_settings>
</breeze_systems_photobooth>

```

The `<prompt1>` tag defines the text that is displayed above the user input area and defaults to "Please enter your email address:". The `<text1_x>` and `<text1_y>` tags specify the position of the user input area. This is specified as the number of pixels down from the top, left corner of the screen. The right hand side of the user input area can be specified using the `<text1_r>` tag.

Additional prompts can be added by including `<prompt2>`, `<text2_x>`, `<text2_y>`, `<text2_r>` etc. tags up to a maximum of 10 user input areas.

The prompt tags can have an optional `password` attribute which if set to "1" will display the text in the user input area as * characters e.g. `<prompt1 password="1">Please enter your password:</prompt1>`.

The prompt tags can have an optional `mandatory` attribute which if set to "1" means that the prompt must contain text e.g. `<prompt1 mandatory="1">Please enter your name:</prompt1>`.

The prompt tags can have an optional `email_address` attribute which if set to "1" will check that the text looks like an email address in the form `name@domain.com` e.g. `<prompt1 email_address="1">Please enter your email address:</prompt1>`. If the text does not appear to be an email address an error message saying "Please enter a valid email address in the form `name@domain.com`" will be displayed. The text of this error message can be changed in the [email settings dialog](#).

The input text area is normally on a single line. Multiple lines can be used by setting the prompt tag's `rows` attribute to 2 or more e.g. `<prompt1 rows="3">Please enter a message:</prompt1>`.

When more than one user input area is defined users can switch between the input areas by touching them. The currently selected input area is highlighted in red.

The optional `<text_point_size>` tag defines the size of the text font used in the user input area. This is specified in tenths of a point and defaults to 480 (a point size of 48).

The text entered by the user is stored in the `<user_data>`, `<user2_data>` etc. fields in the XML file saved with the photos.

Up to 10 checkboxes can be added using the `<checkbox1_prompt>`, `<checkbox1_x>`, `<checkbox1_y>`, `<checkbox2_prompt>`, `<checkbox2_x>`, `<checkbox2_y>` etc. tags. The `<checkbox1_prompt>` tag specifies the text displayed to the right of the text box and can include a `value` attribute to specify whether the checkbox is initially checked or not e.g. `<checkbox1_prompt value="0">Checkbox prompt (default off)</checkbox1_prompt>` or `<checkbox1_prompt value="1">Checkbox prompt (default on)</checkbox1_prompt>`. A checkbox can also be made mandatory (i.e. the user has to check the checkbox before pressing the "OK" button) by adding the `mandatory` attribute to the `<checkbox1_prompt>` tag e.g. `<checkbox1_prompt mandatory="1">I agree to the terms and conditions</checkbox1_prompt>`.

The `<checkbox1_x>` and `<checkbox2_y>` tags specify the position of the checkbox.

The checkbox status is stored in the `<checkbox1>`, `<checkbox2>` etc. fields in the XML file saved with the photos.

The `<background_color>` tag specifies the background color of the window and the `<key_text_color>`

specifies the color for the prompt text and key legends.

The optional `<text_foreground_color>` tag specifies the foreground color for text displayed in the user input areas. The default value if this tag is omitted is black (0x000000).

The optional `<text_background_color>` tag specifies the background color for the user input areas. The default value if this tag is omitted is white (0xFFFFFFFF).

The optional `<transparent_color>` tag specifies a color which will be made transparent when the keyboard is displayed.

All colors should be hexadecimal RGB values e.g. 0x000000 for black, 0xFF0000 for red, 0x00FF00 for green, 0x0000FF for blue, 0xFFFFFFFF for white.

The `<show_cursor>` tag specifies whether a gray cursor is shown in the user input area. Set this to 1 to display the cursor or 0 to hide it. The cursor display is useful if the keyboard allows the entry of spaces.

The `<show_mouse_cursor>` tag specifies whether a the mouse cursor is displayed, The default setting is for the mouse cursor not to be displayed.

The `<key>` tag specifies the size and position of each key, its legends and what should be typed when it is pressed. The top left corner of the key is defined using the `<left>` and `<top>` tags and the width and height are specified using the `<width>` and `<height>` tags (all values are in pixels). The `<shifted_legend>` tag specifies what is displayed on the key when the shift key is pressed and the `<legend>` specifies the key legend when shift is not pressed.

The `<shifted_code>` tag specifies what is typed when the key is pressed when shift is pressed and the `<code>` tag specifies what is typed when the shift key is not pressed. The following codes have special values:

"Shift" - puts the keyboard into shifted mode (i.e. upper case) when pressed

"OK" - closes the keyboard window and returns the user input if at least one text input field contains text

"OK all" - closes the keyboard window and returns the user input if all the input fields contain some text

"OK none" - closes the keyboard window and returns the user input even if none of the input fields contain text

"Cancel" - closes the keyboard window and cancels the user input

International and special characters need to be added in UTF-8 unicode format e.g. the Euro symbol, €, is defined in UTF-8 as 0x20AC. This needs to be added to the XML file as `€`; e.g.

```
<key>
  <left>58</left>
  <top>630</top>
  <width>112</width>
  <height>89</height>
  <legend>&#x20ac;</legend>
  <shifted_legend>&#x20ac;</shifted_legend>
  <code>&#x20ac;</code>
  <shifted_code>&#x20ac;</shifted_code>
</key>
```

The keyboard.xml can just include additional settings and the touchscreen keyboard will use the default layout (show

```
<?xml version="1.0" ?>
<breeze_systems_photobooth version="2.3">
<photobooth_settings>
  <keyboard>
    <checkbox1_prompt value="0">I agree to my photos being posted on a web site</checkbox1_prompt>
    <checkbox1_x>38</checkbox1_x>
    <checkbox1_y>70</checkbox1_y>
  </keyboard>
</photobooth_settings>
</breeze_systems_photobooth>
```

Keyboard images

Separate keyboard screen images can be defined if you need more control over the appearance of the keyboard. These images should be TIFF images the same size as the resolution of the screen and should be placed in the photo booth images folder. The keyboard images should be named as follows:

keyboard_uppercase.tif - keyboard image showing upper case key legends
keyboard_uppercase_pressed.tif - keyboard image showing upper case key legends with the keys pressed
keyboard_lowercase.tif - keyboard image showing lower case key legends
keyboard_lowercase_pressed.tif - keyboard image showing lower case key legends with the keys pressed

If TIFF keyboard images aren't found the software will attempt to load JPEG images instead (keyboard_uppercase.jpg, keyboard_uppercase_pressed.jpg, keyboard_lowercase.jpg and keyboard_lowercase_pressed.jpg).

When the email option is used (see [Uploading to social networks...](#)) the touchscreen keyboard will look for the following keyboard xml definition file and keyboard images:

email_keyboard.xml - XML file defining the keyboard layout
email_keyboard_uppercase.tif - keyboard image showing upper case key legends
email_keyboard_uppercase_pressed.tif - keyboard image showing upper case key legends with the keys pressed
email_keyboard_lowercase.tif - keyboard image showing lower case key legends
email_keyboard_lowercase_pressed.tif - keyboard image showing lower case key legends with the keys pressed

Please note that for compatibility with previous releases the email option will use the standard XML definition file and keyboard images if versions with an email_ prefix aren't found.

When the Twitter upload option is used (see [Uploading to social networks...](#)) the touchscreen keyboard will look for the following keyboard xml definition file and keyboard images:

twitter_keyboard.xml - XML file defining the keyboard layout
twitter_keyboard_uppercase.tif - keyboard image showing upper case key legends
twitter_keyboard_uppercase_pressed.tif - keyboard image showing upper case key legends with the keys pressed
twitter_keyboard_lowercase.tif - keyboard image showing lower case key legends
twitter_keyboard_lowercase_pressed.tif - keyboard image showing lower case key legends with the keys pressed

When the send SMS/MMS option is used (see [Uploading to social networks...](#)) the touchscreen keyboard will look for the following keyboard xml definition file and keyboard images:

mms_keyboard.xml - XML file defining the keyboard layout
mms_keyboard_uppercase.tif - keyboard image showing upper case key legends
mms_keyboard_uppercase_pressed.tif - keyboard image showing upper case key legends with the keys pressed
mms_keyboard_lowercase.tif - keyboard image showing lower case key legends
mms_keyboard_lowercase_pressed.tif - keyboard image showing lower case key legends with the keys pressed

When the "Message input at end of sequence" option is used the touchscreen keyboard will look for the following keyboard xml definition file and keyboard images:

message_keyboard.xml - XML file defining the keyboard layout
message_keyboard_uppercase.tif - keyboard image showing upper case key legends
message_keyboard_uppercase_pressed.tif - keyboard image showing upper case key legends with the keys pressed
message_keyboard_lowercase.tif - keyboard image showing lower case key legends
message_keyboard_lowercase_pressed.tif - keyboard image showing lower case key legends with the keys pressed

Please take care that the keys are in the same positions in each of the keyboard images and that these also correspond to the values in the keyboard.xml file. The <background_color>, <text_color>, <prompt>, <legend> and <shifted_legend> tags in the keyboard.xml file are ignored when keyboard images are used to define the appearance of the keyboard.

Note: If you only need to change the keyboard layout and are happy with the default keyboard display you only need to create a keyboard.xml file in the photo booth images folder and can delete the keyboard screen images (keyboard_uppercase.tif, keyboard_uppercase_pressed.tif, keyboard_lowercase.tif and keyboard_lowercase_pressed.tif). If keyboard images are defined the <prompt> tags in the keyboard.xml file will be ignored.

11 Animated GIFS

Animated GIFs provide a way of displaying a short sequence of images that are displayed in a continuous loop. Webcam Photobooth has two options for creating animated GIFs:

1. As a simple slideshow showing the photos taken during the shooting sequence with an optional overlay and title page
2. As a short video clip captured in video booth mode. Please note that the animated GIF don't include sound

The animated GIFs can be viewed using our [Breeze Kiosk software](#) and then shared by email, text (MMS in USA and Canada, SMS elsewhere) or uploaded to Twitter.

An MP4 movie file can also be created from the animated GIFs. The MP4 files can be sent as an email attachment by selecting the "Use MP4 copy of animated GIF if available" setting in the ["Email Settings"](#) dialog.

Creating Animated GIFs in Photo Booth Mode

Select "Create animated GIF of photos" on the ["Output Settings"](#) dialog and then click on the "Animated GIF settings..." button to configure the settings:

Animated GIF Settings

Photo width (pixels):

Photo left offset: Photo top offset:

GIF width (0=use photo width): GIF height (0=use photo height):

Backgrounds/overlays per photo:

Image interval (1/100 sec):

Title display time (1/100 sec):

Display title at end of the animation

Play GIF in a continuous loop

"Ping-pong" forwards/backwards display (aka "boomerang" GIFs)

Create PNG copies of GIF frames in 'GIF_frames' subfolder

Save GIF in 'prints' subfolder

Dither GIFs to give better color (but reduced detail)

Create MP4 copy of the animated GIF

Minimum duration (secs): Save MP4 in:

The animated GIFs will show the photos in the same orientation as the live view display. If the live view display is cropped or digitally zoomed the photos added to the animated GIF will be cropped and zoomed by the same amounts.

If green screening is enabled the green screened copy of the photos will be added to the GIF. If B&W mode, monochrome toning (e.g. sepia) or creative filters are used the photos will be added to the animated GIF with these effects applied.

Use the "Photo width (pixels):" setting to specify the width photos added to the animated GIF. The height of the photos will be calculated automatically in proportion to the width e.g. setting the width to 600 pixels will give a height of 400 pixels when the camera is horizontal or a height of 900 pixels if the camera is in portrait orientation.

The "Photo left offset:" and "Photo top offset:" settings specify the position the photos are added to the GIF. The offsets are measured in pixels from the left and top edges of the GIF.

The "GIF width" and "GIF height" settings specify the size of the animated GIF in pixels. If these settings are 0 the GIF will be created the same size as the photos.

An optional overlay can be displayed over each photo by placing a PNG file named GIF_overlay.png in the photobooth images folder. A different overlay can be used for each photo by naming the overlays GIF_overlay_1.png for photo 1, GIF_overlay_2.png for photo 2 etc.

Multiple overlays can be added to each photo by setting "Overlays per photo" to more than 1 e.g. to display two overlays per photo set "Overlays per photo" to 2 and name the files as follows: GIF_overlay_1.png for the first half of photo 1's display time, GIF_overlay_2.png for the second half of photo 1's display time, GIF_overlay_3.png for the first half of photo 2's display time, GIF_overlay_4.png for the second half of photo 2's display time etc.

The PNG overlay images can be made transparent or semi-transparent by adding an alpha channel. If overlay images are larger than the GIF width setting they will be resized to the same width. If an overlay is smaller than the GIF it will be displayed bottom right justified i.e. in the bottom right hand corner.

The image interval setting specifies how long each photo should be displayed and is in units of 1/100 sec. A value of 75 (3/4 sec) to 100 (1 sec) is probably a good starting point.

One or more optional title pages can be displayed at the beginning or end of the photo sequence. To add a single title page place a JPEG image named GIF_title.jpg in the photobooth images folder. To add multiple title pages to create a short animation place JPEG images named GIF_title_1.jpg, GIF_title_2.jpg, GIF_title_3.jpg etc. in the photobooth images folder

If the title page image is larger than the GIF width setting it will be resized to the same width. Use the "Title display time" to specify how long each title page should be displayed.

The title page or pages can be displayed before or after the photos. It probably makes more sense to display titles after the photos because browsers that display animated GIFs will normally show a thumbnail generated from the start of the animation. Putting the title at the end will mean that the thumbnail will show the first photo whereas if the title is at the start of the animation the thumbnail will show the title page.

Select "Play GIF in a continuous loop" if you want the GIF to loop indefinitely. If this option is not selected the GIF will loop once i.e. it will play the animation twice by running through it once and then looping a single time to play it again.

Select the "Ping-pong" option to play the photo sequence forwards and then backwards e.g.

4 photos with no title and the ping-pong option selected will display photo 1, photo 2, photo 3, photo 4, photo 3, photo 2, photo 1, photo 2 etc.

4 photos with no title and the ping-pong option not selected will display photo 1, photo 2, photo 3, photo 4, photo 1, photo 2, photo 3, photo 4 etc.

4 photos with a title at the end and the ping-pong option selected will display photo 1, photo 2, photo 3, photo 4, photo 3, photo 2, photo 1, title, photo 1, photo 2 etc.

When using overlays with the "ping-pong" option the overlay files should be named as follows:
Overlay files for 3 photos with no title, the ping-pong option selected and overlays per photo set to 1:
GIF_overlay_1.png for photo 1, GIF_overlay_2.png for photo 2, GIF_overlay_3.png for photo 3,
GIF_overlay_4.png for photo 2

Overlay files for 3 photos with a title, the ping-pong option selected and overlays per photo set to 2:
GIF_overlay_1.png/GIF_overlay_2.png for photo 1, GIF_overlay_3.png/GIF_overlay_4.png for photo 2,
GIF_overlay_5.png/GIF_overlay_6.png for photo 3, GIF_overlay_7.png/GIF_overlay_8.png for photo 2,
GIF_overlay_9.png/GIF_overlay_10.png for photo 1

The animated GIF will be created in a subfolder named GIF in the [download folder](#). If you are using our [Breeze Kiosk software](#) to display the animated GIFs you need to set it up to monitor the GIF folder.

Select the "Create MP4 copy of the animated GIF" option to automatically create an MP4 movie file of the animated GIF. Set the minimum duration of the movie in secs or set this to 0 to make the movie as short as possible. This option is useful if the movie file is to be uploaded to a site which has a minimum length requirement (e.g. videos posted to Instagram must be at least 3 seconds long). If the movie file will be shorter than the minimum length the GIF frames, but not the title frames, will be repeated until the movie is long enough.

Use the "Save MP4 in" checkbox to specify where the MP4 files should be saved:

"same folder as GIF" will save the MP4 file in the same folder as the GIF (either the GIFs subfolder or the prints subfolder depending on the "Save GIF in 'prints' subfolder" setting)

"MP4" subfolder" will save the MP4 file in a subfolder named MP4

"prints" subfolder" will save the MP4 file the prints subfolder (where the JPEG copies of the prints are also saved)

Please note: The output setting must be set to "Print only", "Print and save JPEG copy" or "JPEG copy only" in order to create the animated GIF. The GIF will not be created if the output is set to "None". You also need to create a print layout which includes all the photos taken otherwise an error will be displayed when the software tries to create the animated GIF.

Dithered vs Indexed Color

Animated GIFs can only display 256 different colors per frame which causes a problem when trying to display photos which typically have many more colors. There are two ways to handle this limitation:

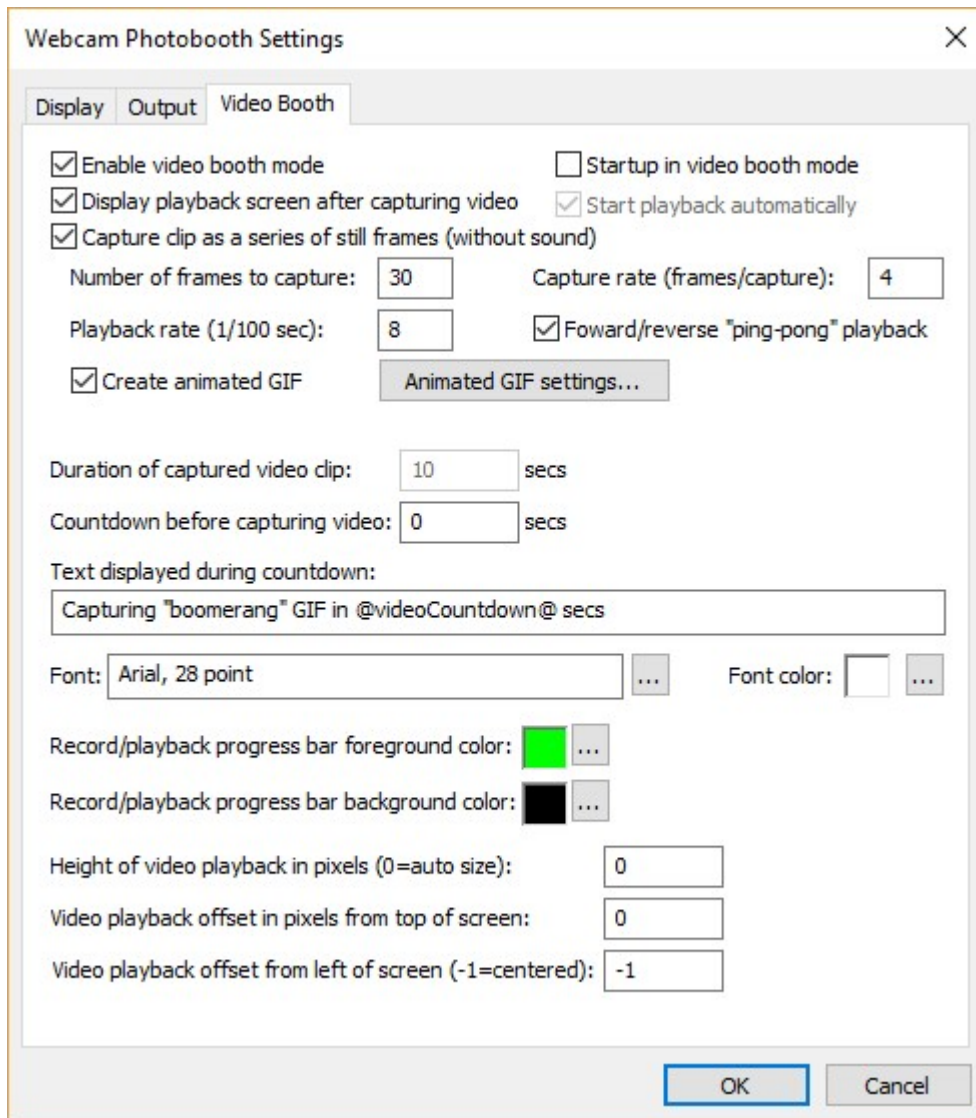
- 1) Dithered color where the color of each pixel is represented by several pixels
- 2) Indexed color where the 256 most common colors in the photo are used

Dithered images can give a better representation of the colors in the original photo but will provide less detail for a given image size. Indexed colors give better detail and usually give adequate colors but may show some contouring or shimmering with some photos, particularly if there are areas of graduated color in the original photo.

Indexed color is recommended for most applications for animated GIFs and so the "Dither GIFs to give better color" option should normally be left unchecked.

Creating Animated GIF "Movie" Clips in Video Booth Mode

Select "Capture clip as a series of still frames" and "Create animated GIF" in the ["Video Booth Settings" dialog](#) to create animated GIFs of short video clips:



Please see "[Videobooth Shooting](#)" section for details on how to set the video clip capture settings.

Select the "Create animated GIF" option and click on the "Animated GIF settings..." button to adjust the animated GIF settings:

Animated GIF Settings (Video Booth Mode) [X]

Photo width (pixels):

Photo left offset: Photo top offset:

GIF width (0=use photo width): GIF height (0=use photo height):

Capture rate (frames/capture): Image interval (1/100 sec):

Number of frames to capture: Title display time (1/100 sec):

Capture rate: 3.7 fps, playback rate: 12.5 fps, approx playback speed: 3.35x

Display title at end of the animation

"Ping-pong" forwards/backwards display (aka "boomerang" GIFs)

Create PNG copies of GIF frames in 'GIF_frames' subfolder

Save GIF in 'prints' subfolder

Dither GIFs to give better color (but reduced detail)

Create MP4 copy of the animated GIF

Minimum duration (secs): Save MP4 in: [v]

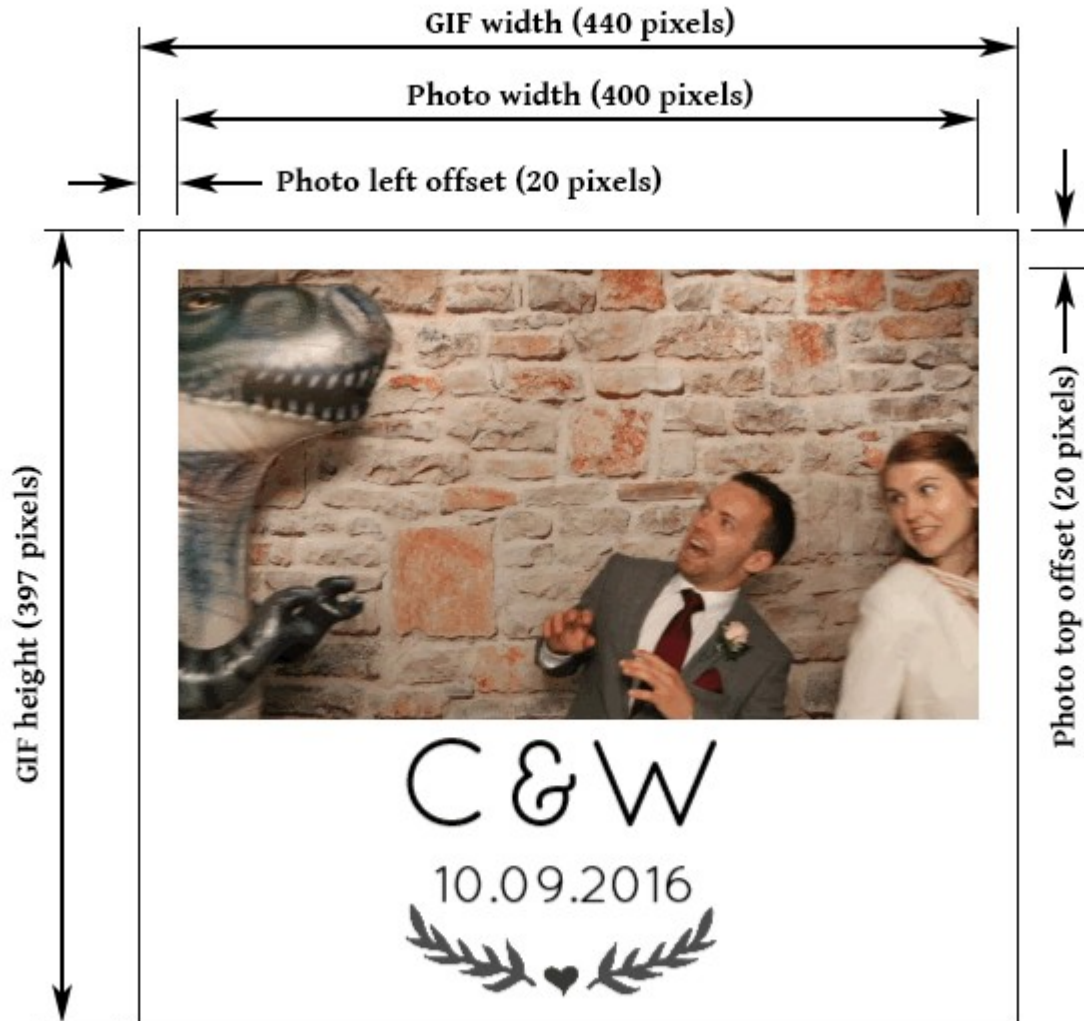
[OK] [Cancel]

Use the "Photo width (pixels):" setting to specify the width photos added to the animated GIF. The height of the photos will be calculated automatically in proportion to the width e.g. setting the width to 600 pixels will give a height of 400 pixels when the camera is horizontal or a height of 900 pixels if the camera is in portrait orientation. Please note that the aspect ratio of the live view images used to create the animated GIF may vary depending on the camera and whether it is set to video or photo mode. The aspect ratio will also change if the live view is cropped.

The "Photo left offset:" and "Photo top offset:" settings specify the position the photos are added to the GIF. The offsets are measured in pixels from the left and top edges of the GIF.

The "GIF width" and "GIF height" settings specify the size of the animated GIF in pixels. If these settings are 0 the GIF will be created the same size as the photos.

The diagram below shows how the various settings work:



The image interval setting specifies how long each frame should be displayed and is in units of 1/100 sec. In order to play back smoothly the frame rate needs to be at least 10 frames/sec which corresponds to an image interval of 10 1/100ths sec. Increasing the play back rate above 20 frames/sec (an image interval of 5) will have little visual improvement over GIFs played at lower frame rates and will result in larger file sizes.

The capture rate in frames/capture specifies how frequently frames for the animated GIF are grabbed from the camera's live view feed. Live view frames are downloaded from the camera at a rate of approximately 12.5 frames/sec. The speed of play back is defined by the live view frame rate, the capture rate and the image interval of the animated GIF. For a slow motion effect set the capture rate to 1 and the image interval to a value between 10 and 20. To play back the animated GIF at approximately normal speed set the capture rate to 1 and the image interval to 8. For high speed play back set the capture rate to 2 or more and the image interval to 8 or 10 (for smooth play back).

One or more optional title pages can be displayed at the beginning or end of the video clip. To add a single title page place a JPEG image named `video_stills_title.jpg` in the photo booth images folder. To add multiple title pages to create a short animation place JPEG images named `video_stills_title_1.jpg`, `video_stills_title_2.jpg`, `video_stills_title_3.jpg` etc. in the photo booth images folder. If the title page image is larger than the GIF width setting it will be resized to the same width. Use the

"Title display time" to specify how long each title page should be displayed.

The title page or pages can be displayed before or after the video clip. It probably makes more sense to display titles after the clip because browsers that display animated GIFs will normally show a thumbnail generated from the start of the animation. Putting the title at the end will mean that the thumbnail will show the first frame of the video clip whereas if the title is at the start of the animation the thumbnail will show the title page.

The "Ping-pong forward/backwards display" option specifies whether the animated GIF should display the clip forwards then backwards (e.g. frame 1, 2, 3, 4, 5, 4, 3, 2, 1, 2, 3) or forwards only (frame 1, 2, 3, 4, 5, 1, 2, 3, 4, 5, 1).

An optional overlay can be displayed over each photo by placing a PNG file named video_stills_overlay.png in the photo booth images folder. A different overlay can be used for each captured frame by naming the overlays video_stills_overlay_1.png, video_stills_overlay_2.png, video_stills_overlay_3.png etc.

The PNG overlay image can be made transparent or semi-transparent by adding an alpha channel. If the overlay image is larger than the GIF width setting it will be resized to the same width. If the overlay is smaller than the GIF it will be displayed bottom right justified i.e. in the bottom right hand corner.

Select the "Create PNG copies of GIF frames in 'GIF_frames' subfolder" option to create PNG copies of all the frames that make up the animated GIF. This is useful if the frames are to be processed by other software.

Please note: It is not necessary to select this option to create MP4 copies of the GIFs.

Warning: The PNG files created when this option is selected can be quite large and may fill up the computer's hard disk.

By default the animated GIF will be created in a subfolder named GIF in the [download folder](#). If you are using our [Breeze Kiosk software](#) to display the animated GIFs you need to set it up to monitor the GIF folder.

Select the "Save GIF in 'prints' subfolder" option to save the GIF in the prints subfolder with the JPEG copies of the printed output. This is useful if you are using kiosk software and wish to display the GIFs and the prints.

Select the "Create MP4 copy of the animated GIF" option to automatically create an MP4 movie file of the animated GIF. Set the minimum duration of the movie in secs or set this to 0 to make the movie as short as possible. This option is useful if the movie file is to be uploaded to a site which has a minimum length requirement (e.g. videos posted to Instagram must be at least 3 seconds long). If the movie file will be shorter than the minimum length the GIF frames, but not the title frames, will be repeated until the movie is long enough.

Use the "Save MP4 in" checkbox to specify where the MP4 files should be saved:

"same folder as GIF" will save the MP4 file in the same folder as the GIF (either the GIFs subfolder or the prints subfolder depending on the "Save GIF in 'prints' subfolder" setting)

"MP4" subfolder" will save the MP4 file in a subfolder named MP4

"prints" subfolder" will save the MP4 file the prints subfolder (where the JPEG copies of the prints are also saved)

Select "Dither GIFs to give better color (but reduced detail)" to used dithered colors in the GIFs.

Normally this setting is unchecked (see [above for more information](#)).

12 Keyboard Shortcuts

The photobooth mode in Webcam Photobooth can accept the following key presses:

Esc - exit full screen photobooth mode and return to the Webcam Photobooth startup screen
F2 - switch to B&W mode and start the photobooth sequence

F3 - switch to color mode and start the photobooth sequence
F4 - start the photobooth sequence using the current B&W or color setting
F5 - same as F4
F6 - reactivate live view and display ready.jpg screen if previously canceled or cancel live view and display welcome.jpg screen if live view currently active
Ctrl+Alt+F6 - switch from standby to ready mode
Ctrl+B - switch to B&W mode but don't start the photobooth sequence
Ctrl+C - switch to color mode but don't start the photobooth sequence
Shift+Ctrl+F - select "Instagram" style filter 1
Shift+Ctrl+G - select "Instagram" style filter 2
Shift+Ctrl+H - select "Instagram" style filter 3
Shift+Ctrl+I - select "Instagram" style filter 4
Shift+Ctrl+J - select "Instagram" style filter 5
Shift+Ctrl+K - select "Instagram" style filter 6
Ctrl+R - reprint the last set of photos without displaying the touchscreen keyboard or print confirmation screens
Ctrl+Alt+R - reprint the last set of photos with touchscreen keyboard and print confirmation screens if enabled
Shift+Ctrl+R - fast reprint of the last set of photos (if output option is set to "Print and save JPEG copy")
Ctrl+T - switch to tinted B&W
T - switch to tinted B&W mode and start the photobooth sequence
Ctrl+W - toggle between B&W and color modes
W - cycle through color, B&W and B&W (toned) modes
A - Accept print when print confirmation window is displayed
X - Reject print when print confirmation window is displayed
Ctrl+1 - select one copy of prints
Ctrl+2 - select two copies of prints
Ctrl+3 - select three copies of prints
Ctrl+4 - select four copies of prints
Ctrl+5 - select five copies of prints
Ctrl+6 - select six copies of prints
Ctrl+7 - select seven copies of prints
Ctrl+8 - select eight copies of prints
Ctrl+9 - select nine copies of prints
Ctrl+Alt+1 - select profile 1 and start shooting sequence
Ctrl+Alt+2 - select profile 2 and start shooting sequence
Ctrl+Alt+3 - select profile 3 and start shooting sequence
Ctrl+Alt+4 - select profile 4 and start shooting sequence
Ctrl+Alt+5 - select profile 5 and start shooting sequence
Ctrl+Alt+6 - select profile 6 and start shooting sequence
Ctrl+Alt+7 - select profile 7 and start shooting sequence
Ctrl+Alt+8 - select profile 8 and start shooting sequence
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+9 - select profile 9
Shift+Ctrl+F1 - select profile 10
Shift+Ctrl+F2 - select profile 11
Shift+Ctrl+F3 - select profile 12
Shift+Ctrl+F4 - select profile 13
Shift+Ctrl+F5 - select profile 14
Shift+Ctrl+F6 - select profile 15

Shift+Ctrl+F7 - select profile 16
Shift+Ctrl+F8 - select profile 17
Shift+Ctrl+F9 - select profile 18
Shift+Ctrl+N - select next profile
Shift+Ctrl+P - select previous profile
Shift+CursorLeft - crop live view display (reduce the amount of cropping)
Shift+CursorRight - crop live view display (increase the amount of cropping)
Ctrl+CursorLeft/CursorRight - adjust the hue of the tint applied to monochrome images when the tinted option is selected
Ctrl+CursorUp/CursorDown - adjust the saturation of the tint applied to monochrome images when the tinted option is selected
Number pad '+' - increase the number copies of prints (up to a maximum of 9 copies)
Number pad '-' - decrease the number copies of prints (down to a minimum of 1 copy)
PageDown - increase the number copies of prints (up to a maximum of 9 copies)
PageUp - decrease the number copies of prints (down to a minimum of 1 copy)
B - reprint the last set of photos

Video booth keyboard shortcuts:

Ctrl+V - switch from stills photobooth mode to video booth mode
Ctrl+P - switch from video booth mode to stills photobooth mode
Ctrl+S - toggle between video and stills photobooth modes and back again
F4 - start video booth capture sequence in video booth mode or photobooth shooting sequence in stills mode
F5 - start video booth capture sequence
F7 - switch to video booth mode and start the video booth capture sequence
End - end the video recording now rather than wait for the full duration
A - accept the video and switch from the playback screen to the ready screen
P - play video from the start when in displaying the playback screen
X - reject the video, delete it from the computer and switch from the playback screen to the ready screen

13 Using external buttons to control the photobooth

This page describes a number of different options for connecting one or more pushbuttons to a PC and use them to control the photobooth mode shooting mode.

Note: For a simple setup you can use the PC's mouse to control the photobooth by selecting the "Use mouse left button to start and right button to toggle between B&W and color" option in the [photobooth settings](#).

StealthSwitch

The StealthSwitch is a robust foot switch which plugs straight into a USB port and makes an ideal switch for photobooth operation. It is very simple to use: just plug it in to any spare USB port, wait a few seconds for Windows to recognize it and you're ready to go. In full screen photobooth mode pressing the StealthSwitch button will start the photobooth sequence - that's all there is to it.

Note: If you have already installed the "desktop cloaking" software that comes with the StealthSwitch you need to disable it otherwise every time you press the button the photobooth display will be hidden.



Arcade Style Buttons

There are several ways arcade style buttons can be connected to a PC and used to control the photobooth including the StealthSwitch 3 and the serial port method. The StealthSwitch 3 is simpler to setup than the serial port method but is a little more expensive. Both the StealthSwitch 3 and the serial port methods are described in detail below.

StealthSwitch 3

The StealthSwitch 3 is similar to the original StealthSwitch described above but has two important differences:

- 1) You can connect external buttons which simply plug into standard 3.5mm sockets (the same as used by most MP3 players)
- 2) Each button is programmable allowing it to send any key press or sequence of key presses you like



StealthSwitch 3 showing the five 3.5mm sockets for connecting external buttons on the front and the USB port on the side

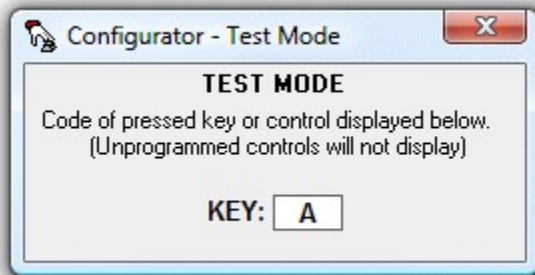
Please note: The StealthSwitch 3 is functionally identical to the StealthSwitch II which it replaces.

Instructions to add an arcade style button using the StealthSwitch 3:

These are the components required to add an arcade style button: the button, stereo cable with 3.5mm jacks and two female spade connectors



- 1) Cut off the jack plug from one end of the stereo cable and bare the wires
- 2) Plug the USB cable from the StealthSwitch II and plug the remaining 3.5mm jack from the stereo cable into one of the StealthSwitch sockets
- 3) Run StealthSwitch Configuration Utility and select "Keyboard test mode". When you press the each button you should see something like this:



- 4) Release the switch and identify the correct wires to use from the stereo cable by shorting two of them together. When the correct pair of wires are shorted together the keyboard test window will show A, B, C, D or E
- 5) Attach the spade connectors to each of the two wires identified in step 4. Use a crimp tool or solder them to ensure they are firmly attached
- 6) Connect the wire to the arcade switch using the spade connectors and press the button to check that the keyboard test window shows A, B, C, D or E

You should now have an arcade button attached to a cable with a 3.5mm jack plug which looks something like this:



Finally use the StealthSwitch Configuration Utility to program each of the buttons to send the required key strokes. The best way to do this is to right click on the required button in the main Configurator window and select "Macro 1", click on "1st KEY" and type the first key in the macro e.g. function key F4 to start the photobooth sequence. If the macro has more than one key, e.g. Ctrl+B to select black and white mode, click on "1st KEY" and press (and release) the Ctrl key then click on "2nd KEY" and press C. When you've finished press the Program button to program the StealthSwitch 3 (you only need to do this once - the StealthSwitch 3 will remember the settings and can be used on any computer). The StealthSwitch 3 is now ready to be used to control the photobooth.

Kensington Wireless Presenter

This provides a simple and effective way for the operator to wirelessly control the photobooth. The following keyboard shortcuts can be accessed using the Kensington Wireless Presenter:

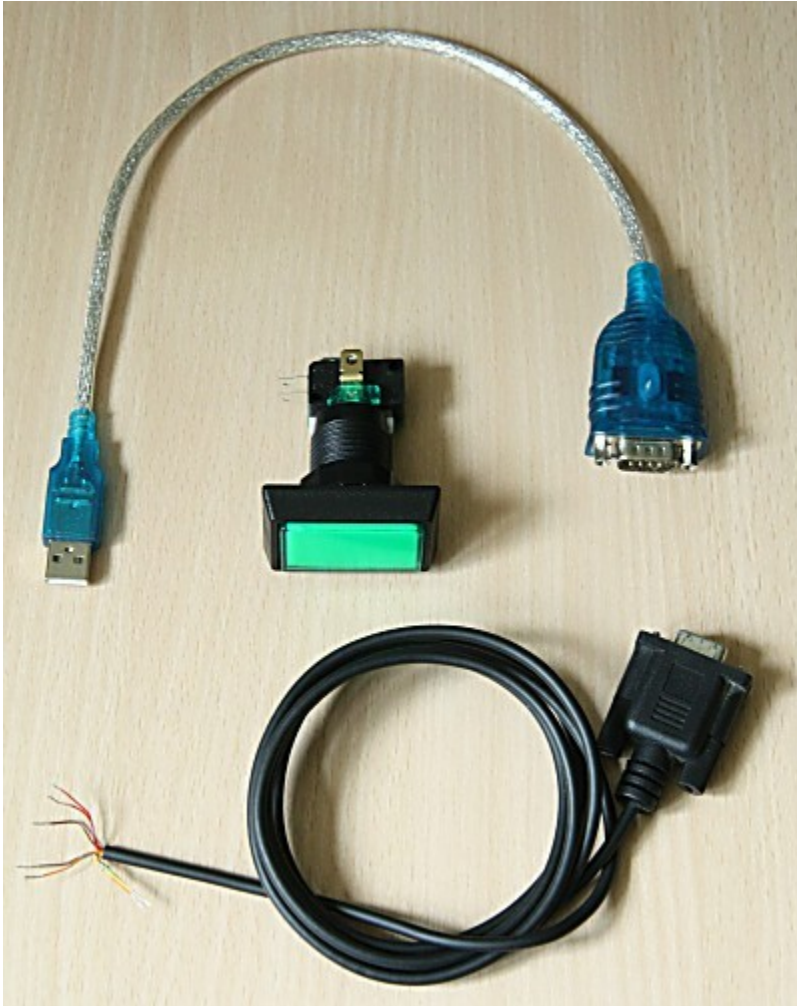
- laser pointer button (F5) - start the photobooth sequence
- left arrow (Page Up) - decrease the number of copies to print
- right arrow (Page Down) - increase the number of copies to print
- stop button (b) - reprint last set of photos



Serial Port Method

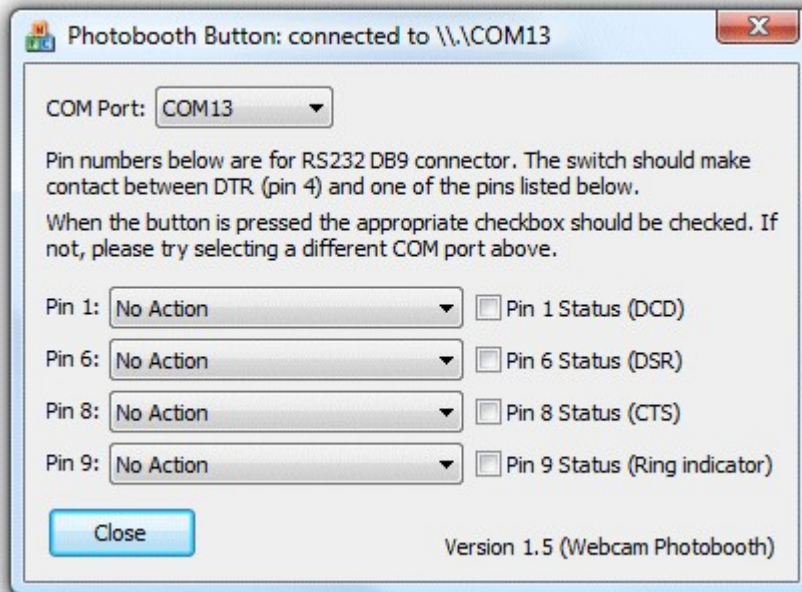
What you need

1. Unless the PC has a serial port you will need a USB to RS-232 adaptor such as the StarTech.com USB to RS-232 Serial DB9 Adaptor. This is not the cheapest adaptor available, but it does work on Windows XP and Windows Vista.
2. DB9 socket and wires or an old RS-232 cable with a DB9 socket
3. A suitable "push to make" button. The arcade style button below was purchased from [Gremlin Solutions](http://GremlinSolutions.com) in the UK. This site in the US has a good selection of buttons: www.happcontrols.com
4. Photobooth Pushbutton Utility, PhotoboothBtn_Webcam.exe, which can be found in the Webcam Photobooth installation folder

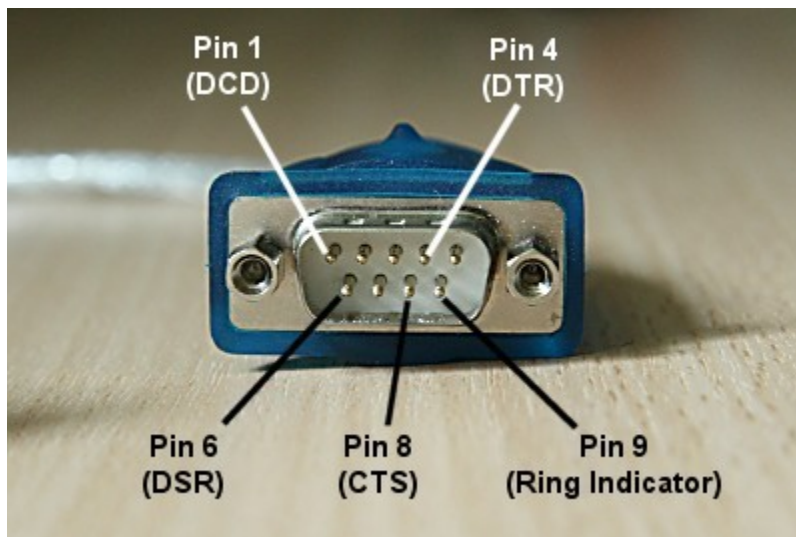


Connecting it up

First install the driver software that comes with the USB to serial to RS-232 adaptor and connect it to a USB port on your PC. Then run the Photobooth Pushbutton utility (PhotoboothBtn_Webcam.exe):



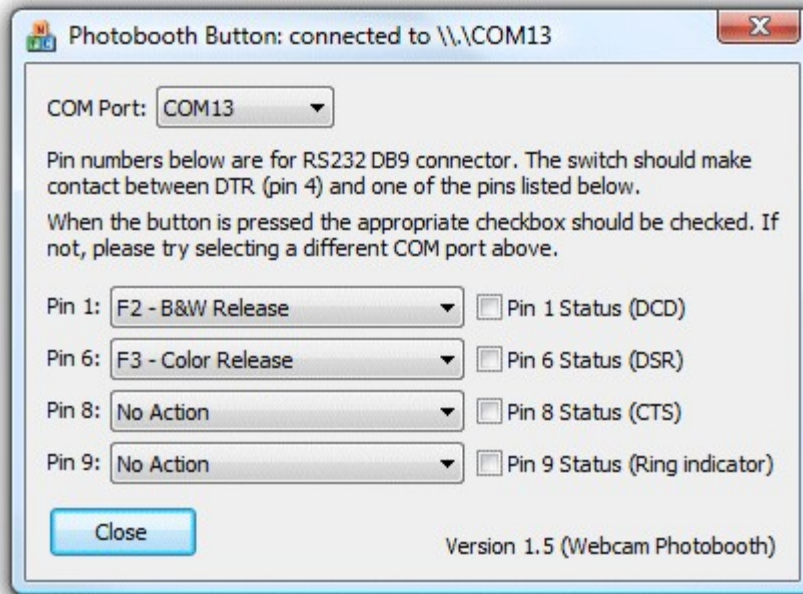
Next identify the correct COM port for the serial port. This can be done by using a small piece of wire and connecting pins 1 and 4 on the DB9 connector (shown below). If the correct COM port is selected the "Pin 1" checkbox in the Photobooth Pushbutton utility should be checked when pins 1 and 4 are connected. If nothing happens try selecting a different COM port from the drop down list.



Now wire up the button or buttons to the appropriate pins on the DB9 socket e.g. if you're using two buttons pin 4 should be connected to the "common" connections of the two buttons and pin 1 should be connected to the "push to make" connection of one button and pin 6 to the "push to make" connection of the other button. Normally the connections would be made by soldering the wires to the DB9 connector but if you're not happy with soldering you can use an RS-232 cable instead and simply cut off one end, identify which wires to use and then connect them to the spade connections on the buttons using crimp connectors.

Once the buttons are connected they can be tested by observing whether the appropriate checkboxes are checked in the pushbutton utility app when each button is pressed.

Finally, select the required action for each button using the drop down lists in the pushbutton utility e.g. for a two button setup with Webcam Photobooth where the user can select B&W or color prints you would use settings similar to those below:



In operation

Connect the USB to RS-232 adaptor to a USB port on the PC and, making sure no buttons are pressed, run the Photobooth Pushbutton utility. Before running Webcam Photobooth check that the buttons are working properly by pressing them and making sure the correct checkbox in the pushbutton utility is checked. It may be necessary to select a different COM port if the buttons don't work. Normally the same COM port is assigned provided the USB to RS-232 adaptor is connected to the same USB port each time.

Next run Webcam Photobooth, select fullscreen photobooth mode and you should be able to use the buttons to trigger the photobooth sequence. The Photobooth Button utility needs to be running at all times during photobooth operation so that it can detect the button presses and forward them to Webcam Photobooth.

14 "Instagram" Style Filters

"Instagram" Style Filters

In addition to the color, B&W and monochrome toned filters there are 6 different Instagram style filters that can be applied to images. The effects of these filters are shown in the live view images and are applied to photos in print layouts and in animated GIFs. The standard filters can be replaced with user defined filters if different effects are required.

The filters can be selected using the touchscreen actions "Select filter 1" through "Select filter 2" or the using keyboard shortcuts below:

Shift+Ctrl+F - select filter 1

Shift+Ctrl+G - select filter 2

Shift+Ctrl+H - select filter 3

Shift+Ctrl+I - select filter 4

Shift+Ctrl+J - select filter 5

Shift+Ctrl+K - select filter 6

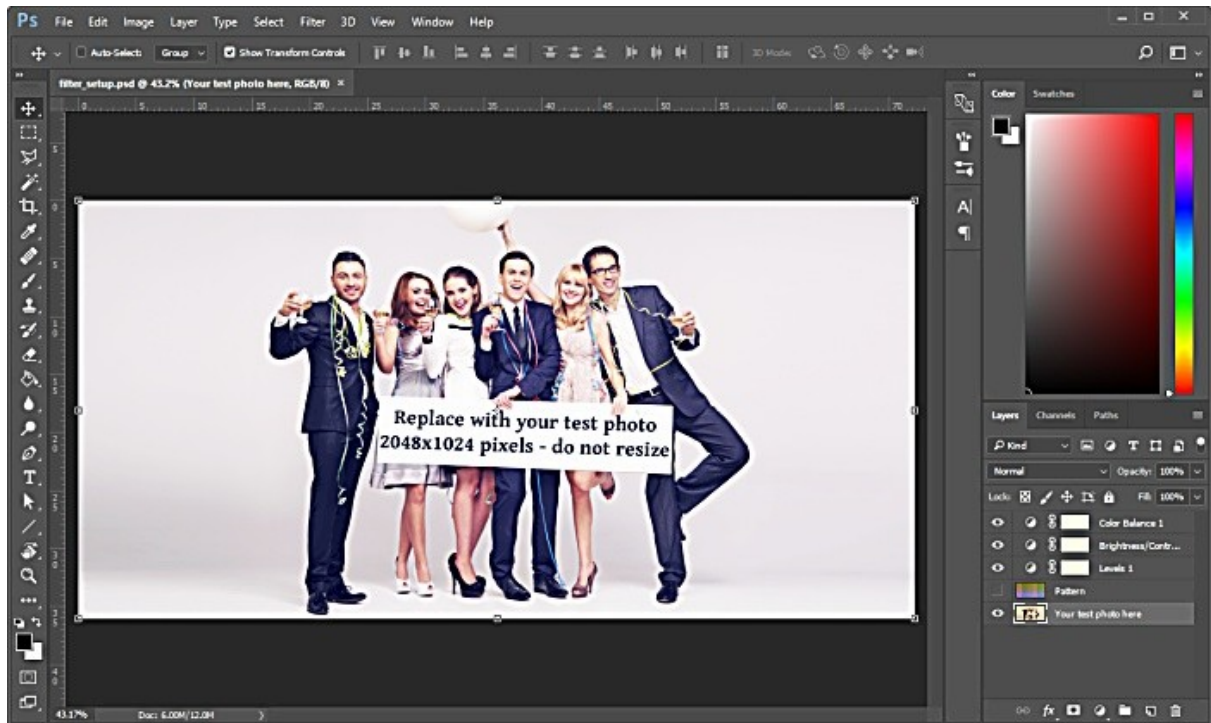
W - cycle through color, B&W, B&W (toned), filter 1, filter 2, filter 3, filter 4, filter 5, filter 6

User defined filters

The filters use a color lookup table to map each color in the photo to a new color and optionally darken the corners to create a vignetting effect. The lookup table is read from a JPEG image 2048x1024 pixels in size with the same name as the filter e.g. filter1.jpg, filter2.jpg, filter3.jpg etc. Vignetting is applied if the filename ends with _vignette e.g. filter1_vignette.jpg.

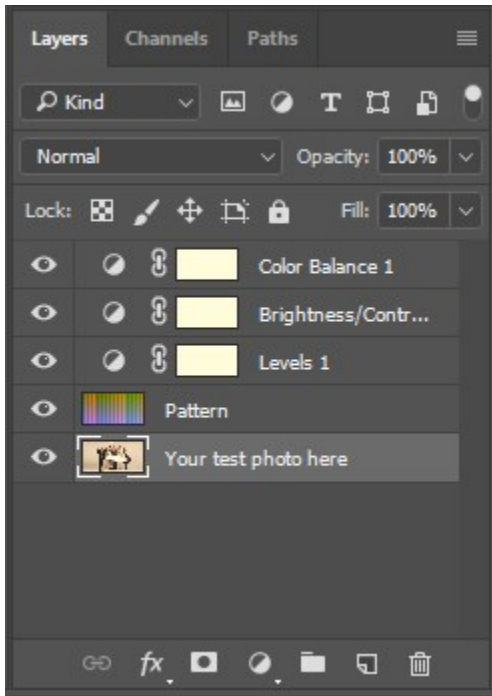
Webcam Photobooth will look for a filter file in the current photo booth images folder first. If a filter file is not found in the current photo booth images folder it will use the default filter in the installation folder.

The simplest way to create a new JPEG color lookup file is to download the following Photoshop PSD file and edit it in Photoshop: https://breezesys.com/downloads/filter_setup.psd



Then either use the test image in the "Your test photo here" layer or replace it with your own test photo. Add adjustment layers to modify the output as required. The adjustment layers can apply any adjustment that is applied to single pixels (e.g. level, curves, contrast, brightness, color fill, color balance etc.). Adjustments that apply to groups of pixels (e.g. sharpening, masking, blur, noise filters etc.) can't be used.

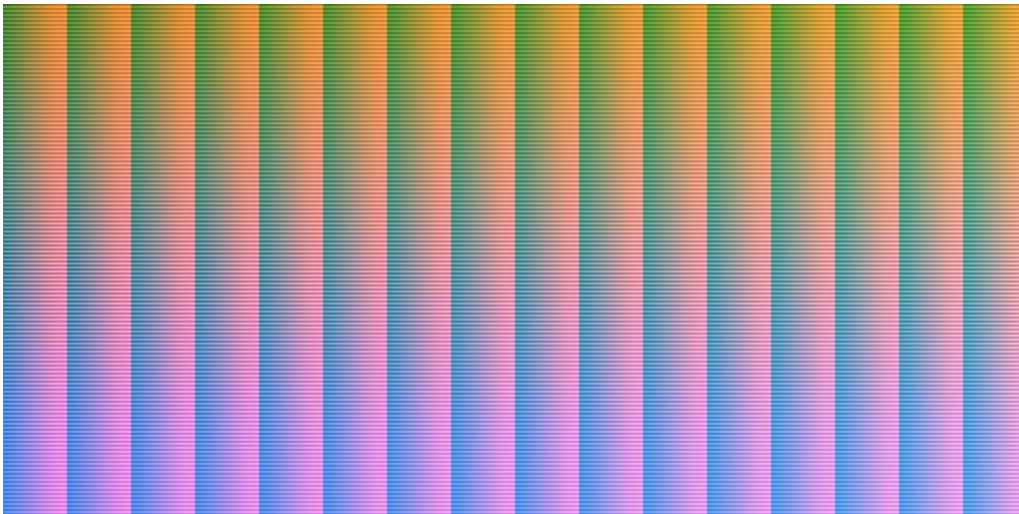
When you are happy with the changes, turn the visibility of the "Pattern" layer on:



Then save the file as a JPEG named filter1.jpg, filter2.jpg, filter3.jpg, filter4.jpg, filter5.jpg or filter1.jpg and save it in the current photo booth images folder. Append `_vignette` to the filename to darken the corners of the images.

Do not resize the `filter_setup.psd` image as this will prevent the filter from working.

The JPEG filter file should be 2048x1024 pixels in size and look something like this:



15 In Operation

In Operation

Once everything is setup simply run Webcam Photobooth and press F5 to enter full screen mode and display the ready screen. You probably don't want to have a keyboard on show otherwise users will be able to exit the photobooth mode and access your computer. There are a number of methods that can be used to start the photobooth shooting sequence:

1. The simplest option is to use a mouse and set the start option to "Left click to start, right click to toggle B&W mode" or one of the other left click options. Provided the keyboard is hidden away the users won't be able to access your computer but use the left mouse button to start the sequence and the right mouse button to toggle between B&W and color photos.
2. Alternatively you could use a programmable USB input device which can be setup to send an F4 key press to Webcam Photobooth:
 - a) The Powermate from Griffin Technology (<http://www.griffintechology.com/products/powermate/>) is an inexpensive and nicely made device which works very well.
 - b) The StealthSwitch (<http://www.stealthswitch.com>) is a very robust foot switch which simply needs to be plugged in to be used in fullscreen photobooth mode. No additional drivers need to be installed. The desktop hiding software that comes with the StealthSwitch should be disabled otherwise the photobooth screen will be hidden when the switch is pressed.
3. For a more professional setup you could use [external panel mounted buttons](#).
4. Use a touchscreen and one of the left click start options

The keyboard shortcuts Ctrl+1, Ctrl+2, Ctrl+3, Ctrl+4, Ctrl+5, Ctrl+6, Ctrl+7, Ctrl+8 or Ctrl+9 can be used to specify the number of copies of prints when running in full screen photobooth mode. The number pad "add" and "subtract" keys can also be used to increase or decrease the number of copies. A small confirmation message is displayed for approximately 2 seconds in the bottom right corner of the display when the number of copies is changed.

A [default profile](#) can be used to reset the photobooth to a known state after each shooting sequence.

To exit fullscreen photobooth mode either press the Esc key or hold down the SHIFT key and press the left mouse button.

Reprints

The last print layout can be reprinted by typing Ctrl+R in full screen photobooth mode. Alternatively select the output option to also save a JPEG copy and then use a browser or image editor to select and print the required layout.

Reprint Selection Screen

A reprint selection screen is available from the ready screen which allows users (or the photo booth operator) to quickly select a set of photos to be reprinted. The reprint selection screen can be displayed by typing Ctrl+Alt+P or by using the "Display reprint screen" touchscreen action. This will display a screen showing thumbnails of the JPEG copies of prints stored in the prints subfolder. The user can select one or more photos and the number of copies to be reprinted using the touchscreen or by using the cursor keys or mouse if no touchscreen is available. After selecting the photos they can be printed by pressing the Enter key or typing A or by clicking on the printer icon in the center bottom of the screen. The user can also cancel the reprint selection screen and return to the ready screen by typing Esc or X or by clicking on the cancel icon at the right bottom of the screen. The reprint selection screen will also cancel automatically if a timeout occurs. Clicking in the bottom left corner of the screen deselects all selected photos when using the ReprintMultiSelect option.

The reprint selection screen can be customized by clicking on the "Reprint screen settings..." button in the "Photobooth Settings" dialog and the "Reprint Selection Screen Settings" dialog will be displayed:

The bottom area of the reprint selection screen defaults to the Windows default background color with a printer icon and a red cross to cancel the screen. The icons can be replaced by putting PNG images named Printer-icon.png and Cancel-icon.png in your photo booth images folder. Alternatively you can use create screen image named reprint.jpg in your photo booth images folder (please note that only the bottom portion of the reprint.jpg screen will be visible).

The "Thumbnail size" setting specifies the width and height of the thumbnails and the "Thumbnail spacing" setting specifies the spacing between the thumbnails. These settings are in pixels.

The "Caption text size" specifies the size of the text used for the caption beneath each thumbnail.

The "Timeout" settings specifies how long it takes the screen to timeout and close when there is no user input.

The "Maximum number of copies" specifies the maximum number of copies the user is allowed to select. If this is set to more than 1 the currently selected number of copies will be displayed together with a - and a + sign for decreasing or increasing the number of copies to print. If a reprint.jpg screen is in the current photo booth images folder this will be displayed instead of the - and + signs.

When "Display newest prints first" is selected the thumbnails will be sorted by their file creation timestamp with the most recently created thumbnails displayed first. When this option is not selected the order will be reversed and the oldest thumbnails will be displayed first.

Select "Allow multiple prints to be selected" if you want users to be able to select more than one print. When this is selected users can select a thumbnail by tapping on it and deselect it by tapping on it a second time.

When "Allow multiple prints to be selected" is not selected only one thumbnail can be selected at a time. If another thumbnail is tapped it will be selected and the original thumbnail deselected.

Select the "Show mouse cursor" option to display the mouse cursor to make it easier to select reprints when using a mouse.

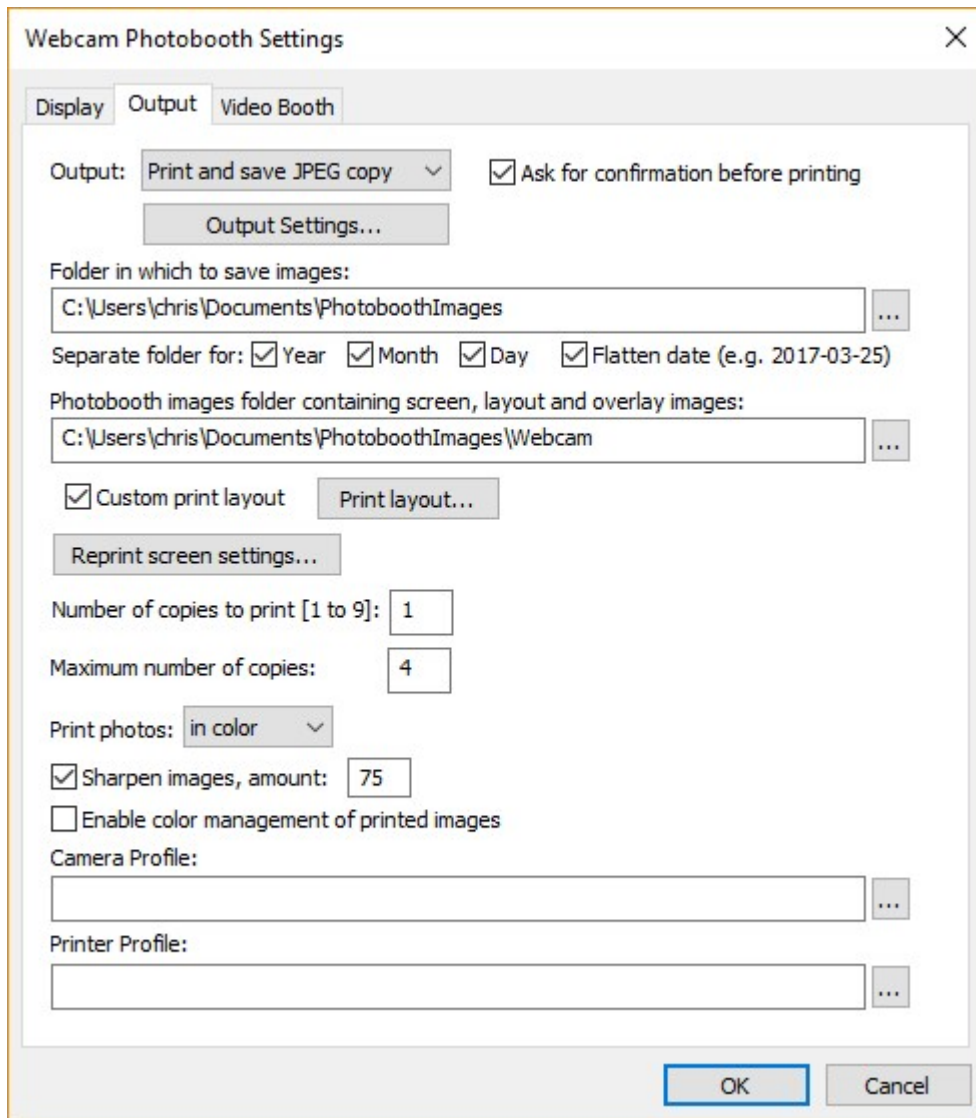
Use the "Caption text color" and "Caption color when selected" settings to set the color used to display the captions. Click on the "..." buttons to change the colors.

The thumbnails are displayed on a white background and if the thumbnails themselves have a white background it can be difficult to see them properly. By default a thin black outline is displayed around the thumbnails to make them easier to see. Use the "Outline color" setting to change the color. A different color can be used for the outline when a thumbnail is selected to help highlight it.

Use the "Background color when selected" setting to specify the color of the background used to highlight thumbnails that have been selected.

Where Photos, Videos and GIFs are Saved

Photos and videos taken by the webcam are downloaded to the PC and saved in the download folder. The location of the download folder is set in the "Output" tab of the "Webcam Photobooth Settings" dialog:



The settings shown above will save photos in a separate subfolder of C:\Users\chris\Documents\PhotoboothImages for each date.
 e.g. photos and videos captured on June 15, 2016 are saved in:
 C:\Users\chris\Documents\PhotoboothImages\2016-06-15
 The XML shooting information file (see below) is also saved in the download folder.

If the output is set to "Print and Save JPEG copy" or "Jpeg copy only" the JPEG copy of the printed output will be saved in a subfolder of the download folder named "prints"
 e.g. the JPEG copy of prints from photos taken on June 15, 2016 are saved in:
 C:\Users\chris\Documents\PhotoboothImages\2016-06-15\prints

Videos are saved in a subfolder of the download folder named "video"
 e.g. the videos captured on June 15, 2016 are saved in:
 C:\Users\chris\Documents\PhotoboothImages\2016-06-15\video

If one of the [GIF animation options](#) is selected the animated GIFs are saved in a subfolder of the download folder named "GIF"
 e.g. GIFs created on June 15, 2016 are saved in:
 C:\Users\chris\Documents\PhotoboothImages\2016-06-15\GIF

XML Shooting Information

After each set of shots an XML file containing information about the set of photos is written to the folder where the photos are downloaded from the camera. The XML file has the same filename as the first shot in the sequence (but with a .XML file extension). An example XML shooting information file is shown below:

```
<?xml version="1.0" ?>
<breeze_systems_photobooth version="1.1">
<photo_information>
  <date>2011/01/26</date>
  <time>16:37:19</time>
  <user_data>sales@breezesys.com</user_data>
  <photobooth_images_folder>C:\Photobooth\PhotoboothImages</photobooth_images_folder>
  <caption1>First caption</caption1>
  <caption2>Second caption</caption2>
  <photos>
    <photo image="1">20110126_163719_1.JPG</photo>
    <photo image="2">20110126_163719_2.JPG</photo>
    <photo image="3">20110126_163719_3.JPG</photo>
    <photo image="4">20110126_163719_4.JPG</photo>
    <output>prints\20110126_163719.jpg</output>
  </photos>
</photo_information>
</breeze_systems_photobooth>
```

The <date> and <time> tags contain the date and time of the first shot in the sequence. Please note that the date and time will only be correct if the PC's clock is set correctly.

The <user_data> tag contains the text entered by the user if the [touchscreen keyboard option](#) is used.

The <photobooth_images_folder> contains the full pathname of the photo booth images folder.

The <caption1> and <caption2> tags contain the text used for the captions printed on the photos or empty strings if these are not defined.

The <photo> tags contain the filenames of the photos taken in the shooting sequence.

The <output> tag contains the filename of the JPEG copy of the printed output (if selected).

The writing of the XML shooting information file can be suppressed by setting the following value in the Windows registry to 1:

```
HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\101
\PhotoboothSuppressXml
```

This can be done by creating a text file named SuppressXML.reg containing the following and then double clicking on the file in Windows Explorer to copy the information to the registry:

```
Windows Registry Editor Version 5.00
```

```
[HKEY_CURRENT_USER\Software\BreezeSystems\WebcamPhotobooth\101]
"PhotoboothSuppressXml"=dword:00000001
```

Please note that this setting will be ignored and the XML will be written if the touchscreen keyboard option is used.

16 Green Screen Shooting

Green screen photography works by taking photos of the subject in front of a green background and then automatically replacing the background with a background image. The background image can be anything you like such as an exotic location, a cityscape or even a photo of the President of the United States.

Webcam Photobooth also supports blue screen shooting. This works in exactly the same way but uses a blue background instead of a green background. To enable blue screen shooting select the "Blue

screen mode" checkbox when the green screen settings dialog is displayed.

Webcam Photobooth will automatically replace the green background with the chosen background and add an optional overlay when using live view in photobooth mode. This means that the users will see what the final picture will look like with the new background as opposed to the green background that the cameras sees.

A basic green screen setup is shown below:



Basic green screen setup with green screened live view images displayed on the monitor

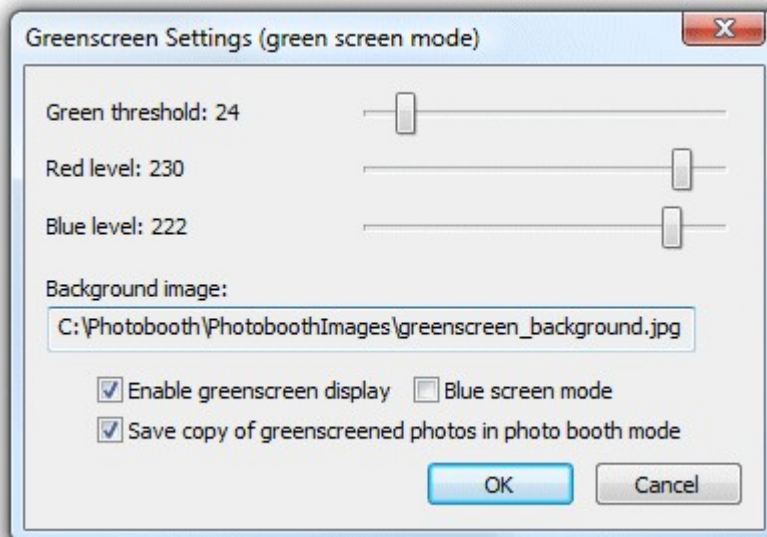
When the images are printed out as a double strip they look like this:



Please note: The greenscreening is optimized for speed not quality in order to be able to display the greenscreened images in the live view window in realtime. The quality should be good enough for small photos and prints, but if you want large high quality results you may need to use specialist green screen software such as FxHome PhotoKey.

Greenscreen settings

To display the green screen settings in photobooth mode first connect a camera and then select full screen photobooth mode. Then type Ctrl+G to display the green screen settings:



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

Select the "Save copy of greenscreened photos in photo booth mode" option to save a of the photo downloaded from the camera with the green background replaced with the background image. The greenscreened copies are saved the "greenscreen" subfolder of the folder where the images from the camera are saved.

Green Screen Backgrounds and Overlays

In fullscreen photobooth mode the green screen background and overlay images are loaded from the photobooth images folder. The background image should be named greenscreen_background.jpg and the overlay image should be named greenscreen_overlay.png. Different overlays and backgrounds can be used for each shot by appending the shot number to the filenames e.g.

Shot 1: background filename: greenscreen_background_1.jpg, overlay filename: greenscreen_overlay_1.png

Shot 2: background filename: greenscreen_background_2.jpg, overlay filename: greenscreen_overlay_2.png

Shot 3: background filename: greenscreen_background_3.jpg, overlay filename: greenscreen_overlay_3.png

Shot 4: background filename: greenscreen_background_4.jpg, overlay filename: greenscreen_overlay_4.png

Backgrounds and overlays can also be switched by saving a number of different profiles each using a different photo booth images folder containing different greenscreen_background.jpg and greenscreen_overlay.png images. The user can then select the different backgrounds using the profile shortcut keys. You can also switch green screen backgrounds and overlays by copying the new greenscreen_background.jpg and greenscreen_overlay.png images into the photo booth images folder while the booth is running.

Printing the Images

There are two methods to print out the green screened shots:

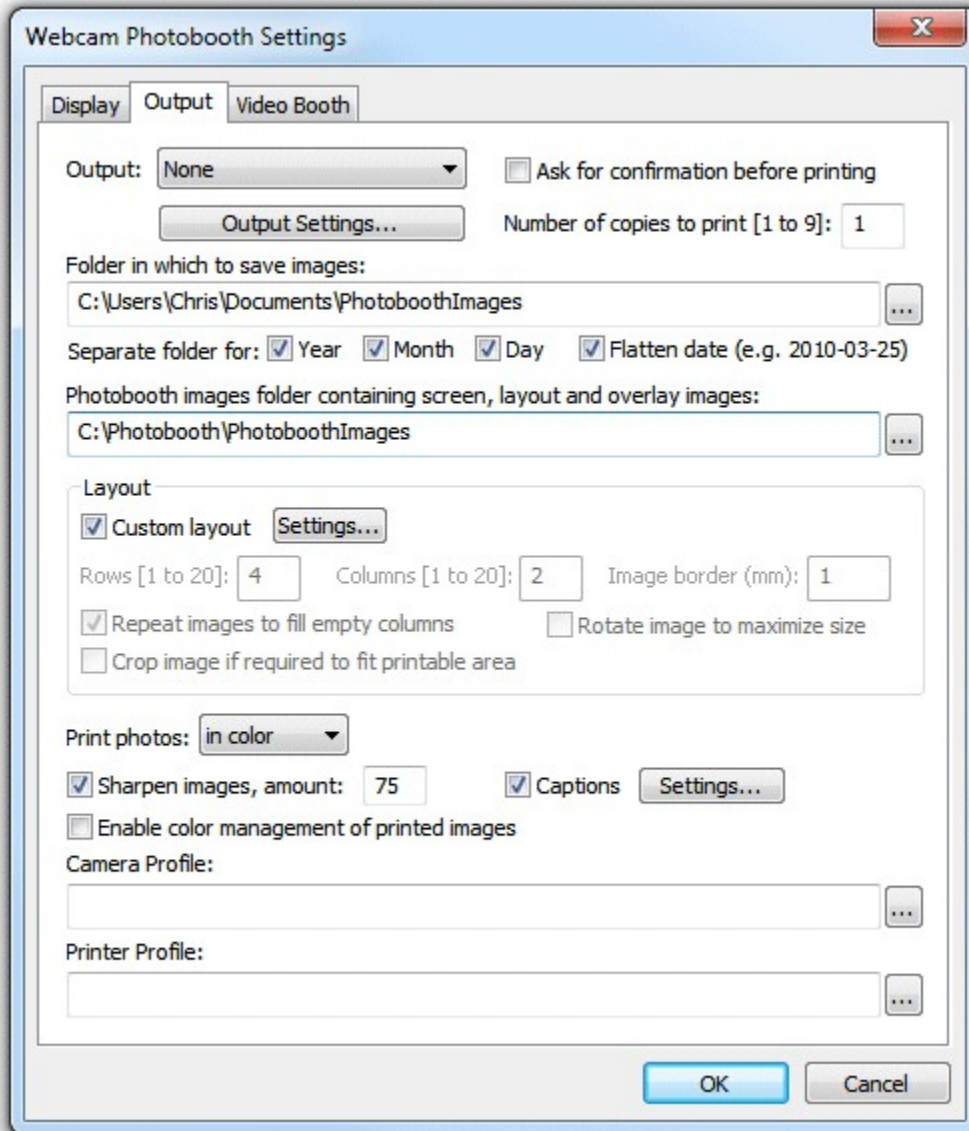
Method 1: Webcam Photobooth takes the photos, performs the green screen removal and prints the images. Webcam Photobooth can perform simple green screen removal and print the images without the need for any other software. This is simple to setup and is fine for small photobooth prints under good lighting conditions. When green screen is enabled Webcam Photobooth will automatically replace the green background with the background image when printing out the photobooth images unless the photobooth output option is set to "None".

This method doesn't require any software other than Webcam Photobooth

Method 2: Webcam Photobooth takes the photos and saves them in a folder where another specialist green screen application replaces the background and passes the images to [Hotfolder Prints](#) for formatting and printing. This is more complicated to setup than method 1 but by using a specialist green screen application it will give superior results which are more suitable for larger prints.

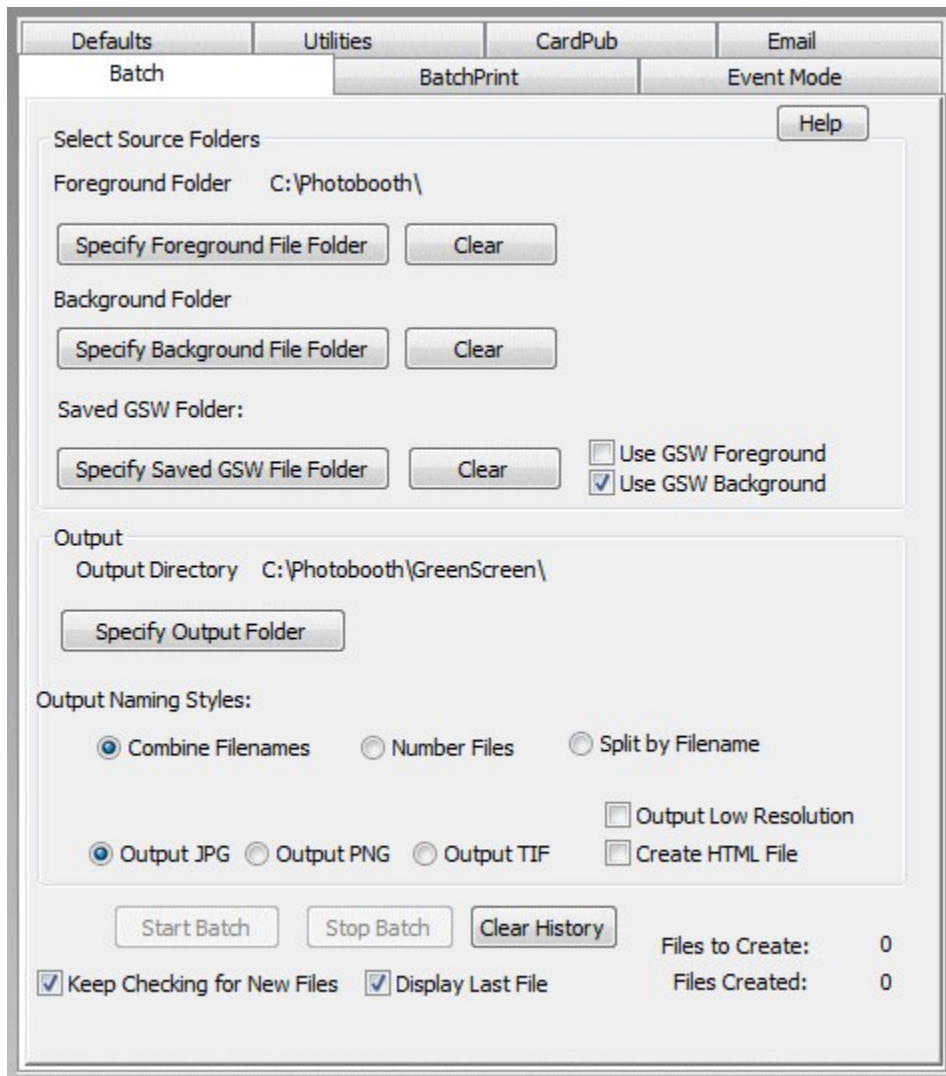
This method requires a separate green screen application such as Green Screen Wizard Pro Batch and [Hotfolder Prints](#).

When using method 2, green screen printing in Webcam Photobooth can be disabled by setting the output option to "None" in the [output settings](#) page. Webcam Photobooth will run the fullscreen photobooth complete with green screened live view images and save the photos to the folder specified in [the output settings](#) e.g. to save the images in the folder C:\Photobooth the preferences should be set to:



Webcam Photobooth preference settings to save the images in C:\Photobooth

The green screen app should be setup to monitor the folder where the photos are saved, automatically replace the green background with the selected image and save them in a separate folder. The settings for Green Screen Wizard Pro Batch to monitor photos in C:\Photobooth and save the green screened images in C:\Photobooth\GreenScreen would be:



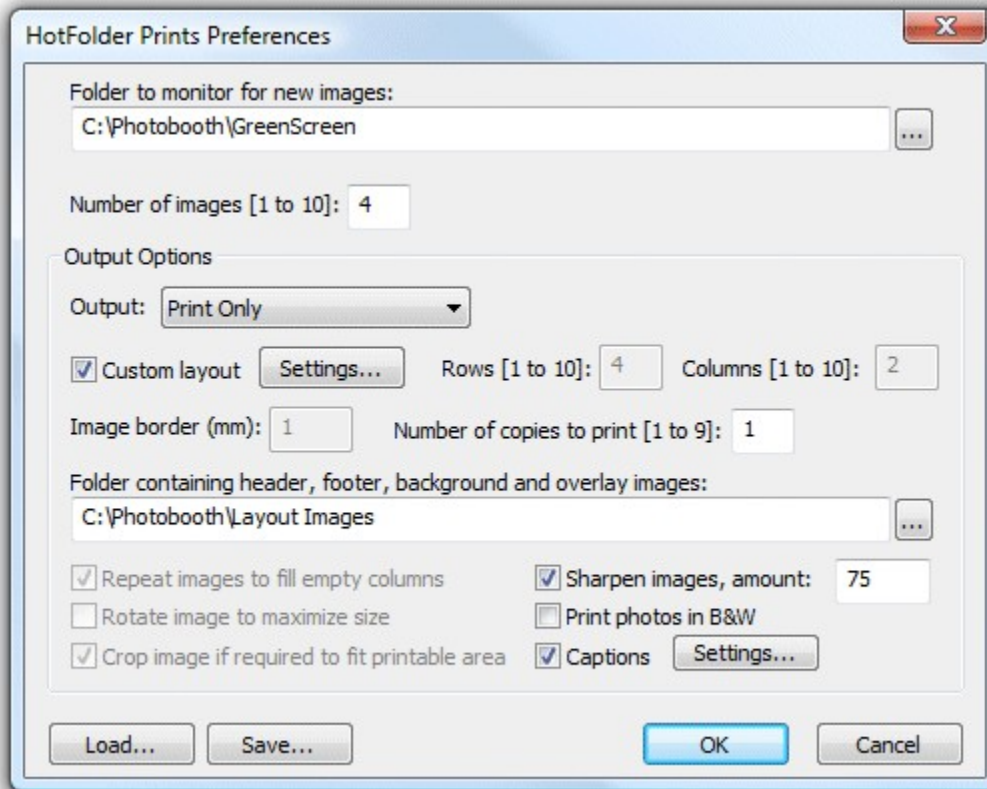
Green Screen Wizard Pro Settings (click on Tools in the main window to display the settings)

Please see the Green Screen Wizard website for information about [Green Screen Wizard Pro Batch](#) and to purchase a copy. Please make sure you purchase the Green Screen Wizard Pro Batch version as this is the only version which can monitor a folder for new photos and automatically replace the green background.

Important: To ensure that what the user sees in Webcam Photobooth's live view display and the final printed output is the same the green screen background image should have an aspect ratio of 3:2. If a different aspect ratio is used the alignment of the background image may be different in the live view display and the green screened prints. If the images are to be printed on 6"x4" paper at 300 dpi the background image should be a JPEG which is 1800 pixels wide by 1200 pixels high.

The green screen application will have its own settings for optimizing the green screen removal and will need to be setup separately. The settings used in Webcam Photobooth's live view display will only affect what the user sees, not the final prints when using a separate app to perform the green screen removal.

Hotfolder Prints should then be setup to monitor the folder where the green screened images are saved so that it can automatically format and print them as required. The Hotfolder Prints preferences screen to monitor C:\Photobooth\GreenScreen for four new images and then automatically format and print them would be:



17 Live View Overlay

An optional overlay image can be displayed over the live view images in fullscreen photobooth mode to add fun effects such as superimposing a body builder's body with the user's head. It can also be used to create fancy borders for the live view images to give the booth a more custom feel.

The overlay image should be a PNG file with transparency information in the alpha channel. It should be in landscape orientation with the same aspect ratio as the webcam resolution. 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.

The overlay file should be named `live_view_overlay.png` and saved in the photobooth images folder.

Please note: The live view overlay image only affects the live view images displayed to the user and won't appear in the printed output. To overlay the images in the printed output create a copy of the `live_view_overlay.png` file called `image_overlay.png` and save it in the the photobooth images folder.

Overlays can also be used in conjunction with [green screen shooting](#) to provide effects such as foregrounds or overlays to mock up a magazine cover.

18 Videobooth shooting

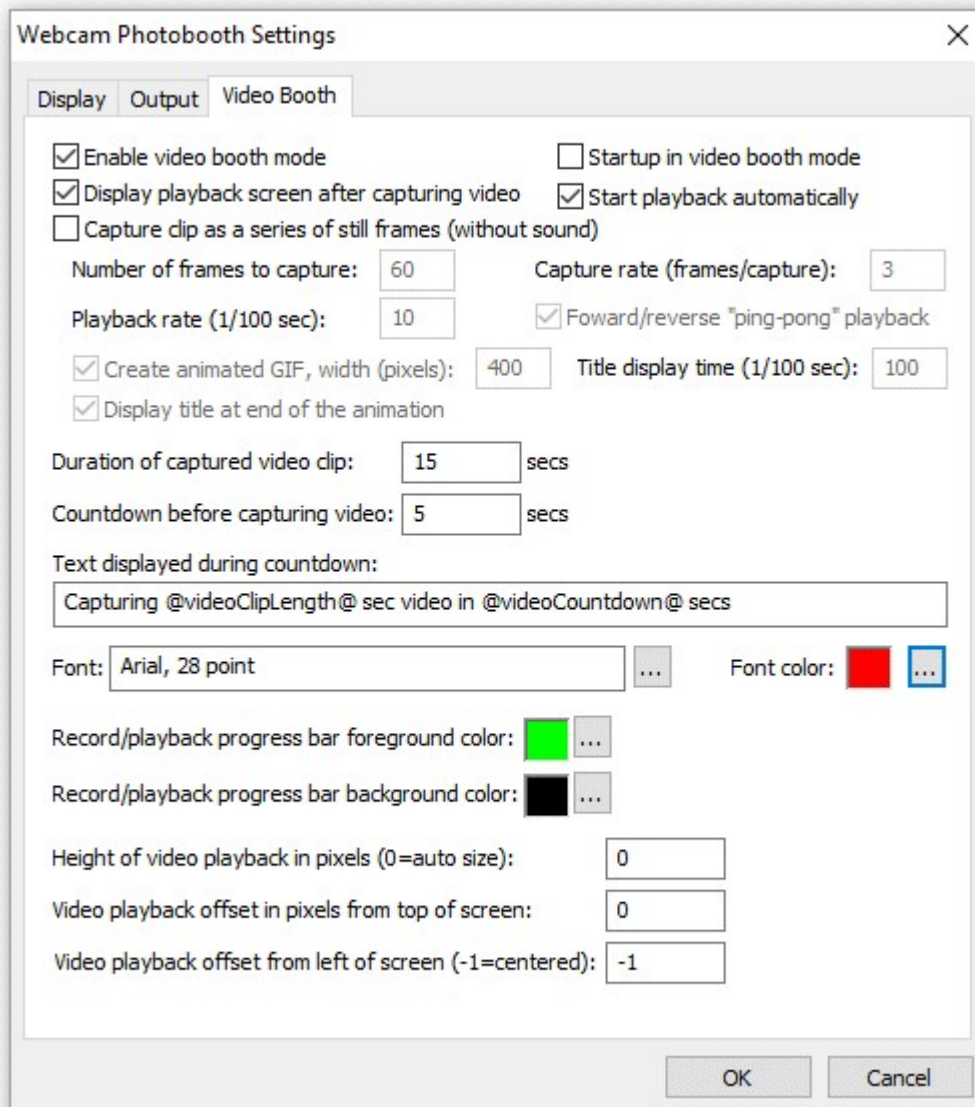
A video booth is similar to a photobooth except instead of taking one or more stills pictures it captures a short video clip. Video booth shooting is available with all webcams and can be used to record a video clip complete with sound.

Overview

The video booth mode works in a similar way to photobooth mode. Users are presented with a ready screen with a live view display showing what the camera sees. When the user presses the start button a countdown screen is displayed together with countdown message. At the end of the countdown the capture screen is displayed together with a progress bar that shows how much time is remaining. After the video clip has been captured the processing screen is displayed and the AVI movie file is saved to the computer's hard disk. After downloading an optional playback screen can be displayed allowing users to review the video clip and decide whether to keep it or to try again. After playback the ready screen is displayed ready for the next video capture.

Video Booth Settings

The video booth settings page can be displayed by clicking on the "Video Booth" tab in the Webcam Photobooth settings dialog:



In order to use the video booth mode it must be enabled by selecting "Enable video in photobooth mode". Normally when you enter fullscreen photobooth mode (by typing F5) the photobooth ready screen will be displayed. If you wish to startup in video booth mode select the "Startup in video booth mode when selecting full screen photobooth" checkbox.

Select the "Display playback screen after capturing video" to allow users to play back the video and decide whether to accept it or reject it. The playback screen will be displayed until the user either accepts or rejects the video. When the video is rejected it is automatically deleted from the computer. When the "Start playback automatically" option is selected video playback will start automatically when the playback screen is displayed.

Use the "Duration of captured video clip" setting to specify the duration of the video clip in seconds. This can be any value up to 120 seconds (2 minutes). A touchscreen action can be defined to allow users to stop recording the clip before it reaches its preset duration. The recording can also be stopped by pressing the End key.

Use the "Countdown before capturing video" setting to specify the length of the countdown before

video capture starts. The countdown text is displayed during the countdown and is updated every second. The following tokens can be used:

@videoClipLength@ - the duration of the video clip in seconds

@videoCountdown@ - the number of seconds remaining before video capture starts

Use the "..." buttons after the font and font color displays to change the font and color of the countdown text.

Use the "..." buttons after the record/playback progress bar foreground and background color displays to change the colors of the progress bar displayed during recording and playback.

Note: the progress bar can be hidden by setting the foreground and background colors to the same values.

The size and position of the video playback window can be specified using the height, top offset and left offset settings. If the height is set to 0 the video will be sized to fit the screen or up to twice the size of the video data, whichever is smallest. This is to avoid a poor quality display due to enlarging the video too much. If the left offset is set to 0 the video window will be centered horizontally on the display.

The size and position of the live view display during video capture uses the same settings as the stills photobooth and can be specified by clicking on the ["Display" tab](#). The various screens used by the video booth should be saved in the photobooth images folder which can be specified by clicking on the ["Output" tab](#).

Capturing a Series of Still Photos to Create an Animated GIF

Video booth mode can also be used to capture a series of still photos which can be combined to create an animated GIF which plays in a continuous loop. The animation can play the clip continuously, repeating from the start (e.g. frames 1, 2, 3, 4, 5 then frames 1, 2, 3, 4, 5 again) or it can play the clip forwards then backwards (e.g. frames 1, 2, 3, 4, 5, 4, 3, 2, 1, 2, 3, 4, 5 etc.).

The still frames are captured from the live view display and will be green screened if "Enable green screening of live view images" is selected. The size of saved photos will depend on the resolution of the live view images for the camera being used. Recent Canon DSLRs have a live view resolution of 960x640 pixels.

To enable this select the "Capture clip as a series of still frames (without sound)" option. Then select the number of frames to capture in the sequence. Setting the number of frames to between 5 and 10 works well for a 1 sec or 2 sec clip. A higher value will give a smoother animation but will result in a larger file size. A smaller value may cause the clip to appear as a series of jumps from frame to frame rather than as an animation.

The "Capture rate (frames/capture)" setting specifies how often the live view frames should be saved. The live view frame rate is approximately 12 frames/sec, but this may depend on the webcam and the speed of the computer. Setting the capture rate to 5 frames/capture will capture a frame approximately every 0.4 secs. The duration of the clip depends on the live view frame rate, the capture rate and the number of frames to capture e.g. with a live view frame rate of 12fps, capturing a total of 6 frames at a rate of one frame every 5 live view frames the clip would take $6 * 5 / 12 = 2.5$ secs.

Select the "Display playback screen after capturing video" option to play back the clip after capture. The playback rate is specified as the time each frame is displayed in 1/100 sec e.g. setting this to 8 will play the clip back at approximately normal speed (approx 12fps), 16 will play it back in approximately half speed slow motion (approx 6 fps) etc.

Examples:

Number of frames to capture=10, capture rate=5, playback rate=40. This will capture a clip lasting approximately 4 secs and play it back at normal speed

Number of frames to capture=10, capture rate=1, playback rate=40. This will capture a clip lasting

approximately 1 sec and play it back in slow motion lasting about 4 secs
 Number of frames to capture=10, capture rate=5, playback rate=10. This will capture a clip lasting approximately 4 sec and play it back at high speed lasting about 1 sec

Normally the clip is played back in the forward direction in a loop e.g. frame 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1, 2, 3 etc.

Select the 'Forward/reverse "ping-pong" playback' option to play the clip forwards then backwards before repeating e.g. frame 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 9, 8, 7 etc.

If the user accepts the clip in the playback screen the captured live view images are saved as JPEG files together with an XML video booth summary file. The XML summary file contains the following information:

```
<?xml version="1.0" encoding="UTF-8"?>
<breeze_systems_photobooth version="3.5">
<video_information>
  <date>2016/05/04</date>
  <time>13:50:24</time>
  <photos>
    <photo image="1">FYQ65498_0001_01.JPG</photo>
    <photo image="2">FYQ65498_0001_02.JPG</photo>
    <photo image="3">FYQ65498_0001_03.JPG</photo>
    <photo image="4">FYQ65498_0001_04.JPG</photo>
    <photo image="5">FYQ65498_0001_05.JPG</photo>
    <photo image="6">FYQ65498_0001_06.JPG</photo>
    <photo image="7">FYQ65498_0001_07.JPG</photo>
    <photo image="8">FYQ65498_0001_08.JPG</photo>
  </photos>
  <evf_interval_ms>80</evf_interval_ms>
  <num_frames>10</num_frames>
  <capture_freq>5</capture_freq>
  <image_delay>10</image_delay>
  <ping_pong_playback>1</ping_pong_playback>
  <gif_file>GIF\FYQ65498_0001_01.GIF</gif_file>
  <user_data></user_data>
  <photobooth_images_folder>C:\Users\Chris\Documents\PhotoboothImages\animated_gif_example</
  photobooth_images_folder>
</video_information>
</breeze_systems_photobooth>
```

Animated GIFs

Select the "Create animated GIF" option and set the width to create an animated GIF of the video clip. Please see the [Animated GIF section](#) for details on how to set this up. Breeze Systems' [Breeze Kiosk software](#) can be used to view the animated GIFs as a slideshow or interactively so that users can email the animated GIFs.

Images displayed to the user

The following screen images are displayed to the user at different stages of the video capture:

video_ready.jpg - displayed when the video booth is ready to capture the next clip

video_countdown.jpg - displayed together with the countdown text during the countdown before capturing the clip

video_capture.jpg - displayed together with a progress bar while the video clip is being captured
video_processing.jpg - displayed after video capture while the movie file is being transferred to the PC
video_playback.jpg - displayed when playing back the video that has just been captured
video_playback_finished.jpg - optional screen image displayed after playback or after downloading the video if auto playback is not enabled

The images displayed to the user should be the same size or bigger than the computer's display. If the images are too small they will be expanded to fit with a black border and a small warning message will be displayed in the bottom left corner showing the image size and the display size.

Audio prompts can be added by placing a WAV sound file in the photobooth images folder and giving it the same name as prompt screen. For example to play a sound when the video booth is ready copy a WAV file named video_ready.wav into the photobooth images folder and it will be played when the video_ready.jpg image is displayed.

In Operation

Once everything is setup simply run Webcam Photobooth and press F5 to enter full screen mode and display the ready screen. If the "Startup in video booth mode when selecting full screen photobooth" is not set the window will start in photobooth mode. You can switch from photobooth mode to video booth mode by typing Ctrl+V and from video booth mode back to photobooth mode by typing Ctrl+P. In video booth mode press F4 or F5 to start the video capture sequence. The user can then press the "End" key to stop the recording or wait until it reaches the duration setting and stops automatically. When the video playback screen is displayed the user can type P to play the video, A to accept it or X to reject it.

Please see [keyboard shortcuts](#) for a complete list of keyboard shortcuts.

To exit fullscreen photobooth mode either press the Esc key or hold down the SHIFT key and press the left mouse button.

Please note: The black and white and image rotate options are not available when using video booth mode. These settings can only be used in stills photobooth mode.

19 QR Codes and Contactless Operation

QR codes can be displayed on prints and in the sharing screen to provide a quick way for guests to visit your website or online gallery simply by scanning the QR code with their phone. QR codes can also be used for sending commands to the photo booth together with information such as email addresses. This makes it possible to run a contactless photo booth where users can select the session type (e.g. photos or boomerang GIFs) and send emails and texts without having to touch the photo booth.

Contactless Operation

QR codes can be generated on a user's phone and used to run the photo booth and send emails and texts without the user having to touch the photo booth.

Webcam Photobooth reads the QR codes using the webcam. The QR codes can be used to trigger any touchscreen action defined for the event and to enter email addresses for sending the output directly to the user.

The QR codes can be created using the QR code generator on the website contactlessbooth.com. Please see [this page for information customizing the QR code generator](#). Alternatively you can create a QR code generator on your own website using Wordpress plug-ins or scripts such as this [sample PHP script](#).

Quickstart Guide

1. Setup the event

Please make sure your event has touchscreen actions defined for "Select photobooth+start" and "Select video booth+start".

Enable "Scan QR codes for commands" in the "Photobooth Settings" dialog to enable the scanning of QR codes to run photo booth commands.

Enable the email sharing option and setup the [email server settings](#).

2. Run the photo booth and start scanning QR codes

Visit contactlessbooth.com using the web browser on your phone (or scan the QR code below using your phone's camera), enter your email address and choose the session type and then hold your phone in front of the photo booth's camera so that it can scan the QR code. If everything is setup correctly the photo booth will start the countdown, take the photos and then automatically email them when it displays the sharing screen.



<https://contactlessbooth.com>

Resources

- For more information please see the section on [Scanning QR Codes](#) below
- For notes on customizing the QR code generator, hosting your own QR code generator etc. please visit <https://contactlessbooth.com/qr>

Displaying QR Codes

QR codes can be provide a quick and convenient way for users to view their photos in an online gallery or website simply by scanning the QR code with their phone. Dynamically generated QR codes can be displayed on prints and in the sharing screen. If you use a microsite system that displays photos using UIDs (e.g. [Photobooth Gallery Plugin for Wordpress](#)) the QR code can be used to jump straight to the user's photos.

QR codes can be displayed on prints by adding a QR code in the [print layout editor](#). A QR code can also be displayed in the sharing screen by selecting the "Display QR code" option in the "Output Settings" screen where the email and other sharing settings are specified. The size and position of the QR code displayed in the sharing screen can be adjusted using the [touchscreen editor](#). The QR code text can be edited by selecting "Edit QR code..." from the File menu. The QR code text can be dynamically generated to include a photo's filename or UID by using tokens. Please see the [Editing QR Codes section in the Print Layout Editor](#) for details.

Scanning QR Codes

Webcam is able to scan QR codes in photo booth mode when the live view images are displayed. QR codes can be used to scan in information such as names, unique ids or email addresses. QR codes can also be used to scan in commands to control the photo booth e.g. select a profile and start the countdown.

QR codes should be defined as URLs with the commands and strings defined as percent encoded parameters. The URL parameters can be made up of strings only, commands only or a mixture of both.

Scanning strings

Up to 10 strings can be defined in the URL by naming the parameters s1, s2, s3 etc. The URL below gives an example with s1 set to "John" and s2 set to "Doe":

`https://example.com?s1=John&s2=Doe`

These strings can be accessed using [tokens](#) e.g. {qr1} for s1, {qr2} for s2 etc. One way to use these tokens is in captions added to [print layouts](#) e.g. to print the name scanned from QR code on the print the caption text could be set to "Name: {qr1} {qr2}".

The parameters should be percent encoded e.g. to define a single parameter that includes two words separated by a space the space is encoded as %20 e.g.

`https://example.com?s1=John%20Doe`

If you are using the photo booth as a data capture device which prints a QR code you can use the {urlencode,str} token to percent encode the responses e.g. if the user enters their name in survey screen 1 in a text field with id "name" this can be percent encoded and included in the QR code text as:

`https://example.com?s1={urlencode,{survey1_text1}}`

The QR tokens are cleared after each shooting session.

Scanning commands

Up to 5 commands can be defined in the URL by naming the parameters c1, c2, c3 etc. The values of the commands should be the same as the names of the touchscreen commands displayed in the [touchscreen editor](#).

e.g. `selectPhotobooth+start` or `selectProfile1`.

The URL below gives an example with c1 set to "selectProfile1" and c2 set to

"selectPhotobooth+start". This will tell the photo booth to select profile 1 and then switch to stills mode and start the countdown:

`https://example.com?c1=selectProfile1&c2=selectPhotobooth%2bstart`

Please note: a command scanned in from a QR code will only be executed by the app if there is a corresponding touchscreen keyboard action defined e.g. the command `c1=selectProfile1` will only be executed if there is a touchscreen action for `selectProfile1`.

The app ignores upper and lower case, spaces and punctuation when comparing the command string with the touchscreen actions e.g. the following strings will all match the touchscreen action "Select photobooth+start":

`c1=Select%20photobooth%2dstart`

`c1=select%20photobooth%2dstart`

`c1=selectphotobooth%2dstart`

`c1=selectphotoboothstart`

The %20 and %2d above are to represent the space and plus characters. This is because parameters added to URLs need to be urlencoded. For simplicity you can omit spaces and punctuation from the commands e.g. use `selectphotoboothstart` instead of `Select%20photobooth%2dstart`.

Scanning email addresses

Email addresses can be scanned in from the ready screen to automatically send an email message when the sharing screen is displayed. The parameters for email addresses are:
autoemail - automatically send the email when the sharing screen is displayed if the QR code is scanned when the ready screen is displayed e.g. read the email address, start the countdown and automatically send the email when the sharing screen is displayed.

Scanning phone numbers for texting

Phone numbers can be scanned in from the ready screen to automatically send a text message when the sharing screen is displayed. The parameters for texting phone numbers are:
autotext - automatically send the text when the sharing screen is displayed if the QR code is scanned when the ready screen is displayed e.g. read the phone number, start the countdown and automatically send the text when the sharing screen is displayed.

Examples

Example 1: Switch to photo mode, start the countdown and automatically send an email to sales@breezesys.com when the sharing screen is displayed:

```
https://breezesys.com/qr.php?c1=Select+photobooth%2Bstart&autoemail=sales%40breezesys.com
```

Example 2: Set the token {qr1} to string to identify the guest (e.g. ABCDE123) then switch to photo mode, start the countdown and automatically send an email to sales@breezesys.com when the sharing screen is displayed:

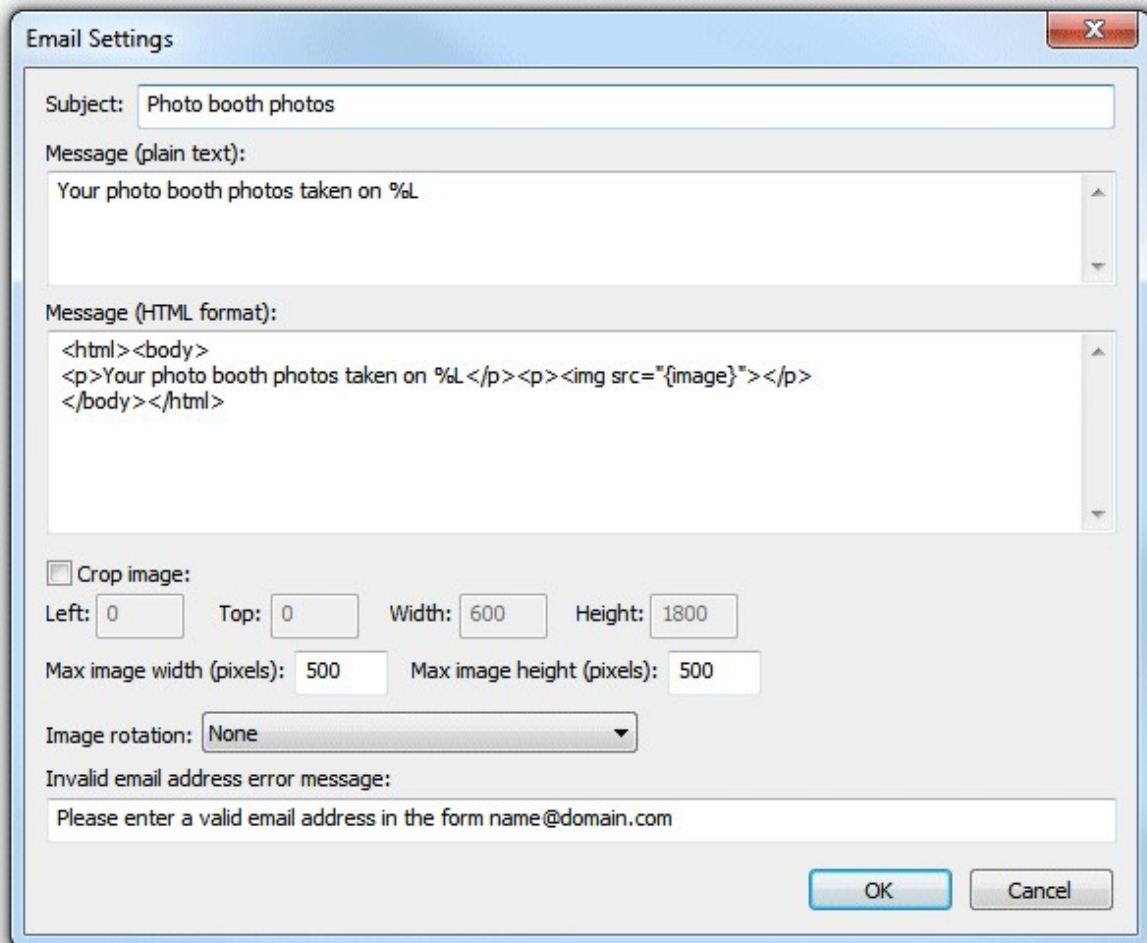
```
https://breezesys.com/qr.php?s1=ABCDE123&c1=Select+photobooth%2Bstart&autoemail=sales%40breezesys.com
```

Please note that QR codes can only be scanned when live view images are displayed e.g. in the ready screen but not in the standby screen.

20 Uploading to social networking and photo sharing sites

Emailing photos

Users can email photos directly from the photo booth if it has an internet connection and either a touchscreen or a keyboard to enter their email address. The simplest way to set this up is to use the [photobooth setup wizard](#) and then adjust the settings if required. After running the photobooth setup wizard the email settings can be edited using the dialog below. This dialog can be opened by opening the "Photobooth Settings" dialog (File->Photobooth Settings... or Ctrl+S) then opening the "Output Settings" dialog clicking on the "Settings..." button to the right of the output options and then clicking on the email photo "Settings..." button.



The "Subject:" text box defines the text in the subject line of the email.

The body text of the message can be specified in plain text or in HTML format to provide more control over its appearance. When using the HTML format the token {image} represents the URL of the photo to be emailed and can be used with HTML tag e.g. .

Tokens for the date and time can be included in the email subject and message text fields and will be replaced with the date or time the photos were taken when they are uploaded e.g.

%L will be replaced with the long date representation for your computer's locale e.g. Wednesday, January 08, 2014

%I will be replaced with the long date and time representation for your computer's locale e.g. Wednesday, January 08, 2014 20:23:56

{sharingMessage} is replaced with contents of the second text entry field (if defined) in the touchscreen keyboard used for entering the user's email address. This allows the user to enter an optional message when emailing photos.

Please see the [tokens section](#) for a list of available tokens.

The photo that is emailed is based on the JPEG copy of the printed output. You can crop, resize and rotate the image before it is emailed to the user.

To crop the image first check the "Crop image:" checkbox and then specify the left offset and top offset in pixels for the top left corner of the cropped image. Then specify the width and height of the image in pixels. For example if the photobooth is setup to print a double strip of 4 images on 6"x4" paper you may wish to crop the image so that only a single strip is emailed to the user. If the printer is

set to a resolution of 300 dpi the image will be 1200 pixels wide (4" x 300 dpi) by 1800 pixels high (6" x 300 DPI) and so to crop it into a single strip you need to set left=0, top=0, width=600 and height=1800. You can also specify a maximum size for the image being uploaded using the "Max width (pixels):" and "Max height (pixels):" settings. The JPEG copy of the printed output will be resized so that it is no bigger than these settings before it is emailed. Keeping these values relatively small, e.g. 500 x 500 pixels, will reduce the time it takes to send the email.

Depending on your printer page settings the JPEG copy of the printed output may not be saved in the correct orientation. If this is the case it can be rotated using the "Image rotation:" dropdown list. If you are also using print preview (the "Confirm before printing" option in the "Photobooth Settings" dialog) this can be set to "Same as print preview" and it will use the same rotation settings as the print preview.

Please note that the image is cropped first, then resized and finally rotated before being emailed to the user.

The email server settings also need to be setup so that the program can email the photos. The "Email Server Settings" dialog can be opened by selecting "Email Server Settings..." from the File menu or by clicking on the "Email server settings..." button in the "Output Settings" dialog. The "Email Server Settings" dialog shown below will be displayed:

Email Server Settings [X]

Host: Port:

Username: Use SSL for secure email

Password: Hide password

Email Addr:

Enter an email address below and click on the "Send test email to:" button to send an email to check the settings.

Send test email to:

Log email addresses to file:
 ...

Save XML copy of email

To send an email you need to specify the host name and port number of your email server. Most email servers also require a username and a password to prevent unauthorized users from sending spam emails. For additional security select the "Use SSL for secure email" option to send the email using SSL. The port number should normally be set to 587 when using SSL secure email or 25 otherwise (please check the port numbers used by your ISP). Google's free GMail service is a convenient way to

send emails and can be set up using the settings shown above and replacing yourname@gmail.com with your GMail email address and entering your password. Set the "Email addr:" to the sender's email address. Most ISPs require the sender's email address to be the same as that of the email account specified by the username and password.

Using GMail to send emails

In spring 2020 Google withdrew support for standard SMTP emails and replaced it with a more secure service linked to your Google account. Webcam Photobooth v2.6 has received app approval from Google which allows it to send emails using this new secure method. To use GMail to send emails you need to authorize it with your Google account. To do this first set the "Host" to GMail and then click on the "GMail authenticate..." button. This will open a web browser window guiding you through the acceptance process. If the PC has already been authenticated pressing the "GmailL authenticate..." button will refresh the GMail access token and display its status.

If you decide to stop allowing Webcam Photobooth to send emails using GMail you can revoke its access by logging in to your Google account and going to the Security settings and "Third-party apps with account access". You should see an entry for Breeze Booth which you can click on to review its access. If you decide to remove access this will prevent all copies of Webcam Photobooth from sending emails using GMail and you will need to re-authenticate them if you to use GMail on them again.

Webcam Photobooth only has permission to send emails on your behalf using GMail. It is not able to read, modify or delete your emails and does not have access to any other Google services you may use.

Please note: Google limit the number of emails that can be sent from a GMail account to 500 emails in a 24 hour period which may not be enough if you are running several photo booths. If this is a problem please consider using a dedicated email service such as sendgrid.com.

The settings can be verified by sending a test email by entering the destination email address and then clicking on the "Send test email to:" button. The email status and any error messages will be displayed in the status area at the bottom of the dialog.

Select the "Log email addresses to file:" checkbox to log the email addresses to a CSV file. Then either type in the filename of the log file in the editbox or click on the "..." to open a file browser. The log file contains a line for each email containing the following comma separated values: the date in the format YYYYMMDD, the time in the format HHMMSS, the email address, the status (1=success, 0=failure) and the filename of the image file e.g.

```
20190114,174842,test@gmail.com,1,C:\Users\Chris\Documents\PhotoboothImages\2019-01-14
\prints\190114_174826.jpg
```

Select "Save XML copy of email" to save an XML copy of the email including the message text, subject, email address and user inputs. The XML file is saved in the same folder as the photos being emailed and is given a filename prefix of email_YYYYMMDD_hhmmss_. Please note that this option is experimental and the details may change in a future release.

Click on the "Attachment settings..." button to display the "XML Email Attachment Settings" dialog to specify how email attachment is saved in the XML copy of the email:

Select "Attach print layout with slideshow GIFs" to add an attachment for the JPEG copy of the print layout when emailing slideshow GIFs (or their MP4 copies). The size and cropping information in the email settings dialog is saved with the attachment information.

Select "Attach original photos" to add attachment information for the individual photos taken in stills photo booth mode. Select "Attach processed photos (if available)" to also include copies of the photos after they have been processed. Use the "Max size of photos (pixels)" settings to specify the maximum width and height of the photos.

Select "Attach thumbnails of photos" to add attachment information for thumbnails of the individual photos taken in stills photo booth mode. Use the "Max size of thumbnails (pixels)" settings to specify the maximum width and height of the thumbnails.

Select the types of attachments to be included when emailing MP4 videos. The options are: "MP4 only" which attaches the MP4 file to the email, "JPEG preview only" which extracts a preview image from the MP4 movie and attaches it to the email, "MP4 and JPEG preview" which attaches both the MP4 file and the JPEG preview to the email. Use the "Max size of MP4 preview (pixels)" settings to specify the maximum width and height of the JPEG preview extracted from the MP4 file.

The XML copies of the emails can be processed automatically using Breeze Hub. This allows emails to be sent in the background so that users don't have to wait before taking the next set of photos in the photo booth. This method also allows for more sophisticated emails to be sent e.g. sending a JPEG preview of a movie with the movie attached to the email or sending a slideshow GIF together with copies of the individual photos.

Attachments for JPEG images (including preview created from MP4 videos) and GIF images can be embedded in HTML emails using the {image} token followed by the attachment number e.g. {image} or {image1} for the first attachment, {image2} for the second attachment e.g.

```
<p>Attachment 1: </p>
```

```
<p>Attachment 2: </p>
```

If there is no corresponding {image} token for the attachment in the HTML email text or if the attachment is a MP4 movie file it will be attached to the email and won't be embedded in the email text.

Breeze Hub is free and is included included with the Breeze Booth for iPad Event Editor which can be downloaded from <https://www.breezesys.com/support>

In Operation

When the photobooth is run and the photos have been taken the print preview screen will be displayed first (if "Confirm before printing" is selected) and then when the user selects "Print" the sharing screen (share.jpg) will be displayed. If the user selects "Cancel" in the print preview screen the sharing screen

won't be displayed and the booth will return to the ready screen (ready.jpg). If the "Confirm before printing" option is not selected the sharing screen will be displayed after taking the photos.

When the sharing screen (share.jpg) the user has the option to email the photo by touching the email button on the touchscreen or by typing E if they are using a normal keyboard. The sharing screen can be exited by touching the "Cancel" button on the touchscreen or by typing X or Esc on a normal keyboard. The sharing screen will also exit automatically if the user does nothing and the screen timeout occurs. The sharing screen timeout can be specified in the "Output Settings" dialog.

When the user selects email photo the touchscreen keyboard will be displayed allowing them to enter the email address. The user can enter the email address by tapping on the touchscreen keyboard or by typing it in using a normal keyboard. The user can then either tap on the "Cancel" button (or type Esc) to cancel the email or tap on the "Send email" button (or press the keyboard Enter key) to start the upload. The touchscreen keyboard will cancel automatically if the user doesn't tap the touchscreen or type anything and the keyboard timeout occurs. The keyboard timeout can be specified in the "Touchscreen Settings" dialog which can be displayed from the "Photobooth Settings" dialog.

When the user has entered their email address and selected "Send email" the email upload screen (email_photo.jpg) will be displayed and the photo will be emailed. If the email is successful the email success screen (email_success.jpg) will be displayed for a few seconds and then the screen will return to the sharing screen. If there is an error (e.g. the internet connection was lost) the email error screen (email_error.jpg) will be displayed together with an error message in the bottom right hand corner. After a few seconds the screen will return to the sharing screen.

The sharing screen can also be displayed from the ready screen using the keyboard shortcut Shift+Ctrl+S or the "Display sharing screen" touchscreen action.

Email "Offline Mode" and sending emails after an event

If no internet connection is available at an event you can save user's email addresses and send the emails later when an internet connection is available. To do this you need to enable "Email photo" in the "Sharing" section of the "Output Settings" dialog and also select the "Offline mode" option. You also need to select the "Log email addresses to file" in the "Email Server Settings" dialog - this will save the user's email address together with the filename of their photos.

The emails can be sent when an internet connection is available by selecting "Send emails..." from the "File" menu in the main window. When you select this you will be asked the log file to read (this defaults to the email log file specified in the "Email Server Settings"). The "Unsent Emails" dialog will be displayed listing the date/time, email address and photo for unsent emails found in the log file. Select the emails you wish to send and then press the "Send" button to send them.

Sending an MMS (or SMS)

MMS messages can be sent in the US and Canada using a web-based service called Twilio (www.twilio.com). In other countries the message can be sent as an SMS message with a link to the photo. Most cellphones should recognize the link as a link to a web server and open a web browser on the user's cellphone to view the photo. Please note that the image link in an SMS will only be valid for 7 days.

To use this service you need an account with Twilio and enter your Twilio account details in the MMS setting dialog. Twilio charge for each MMS or SMS message sent using their service. Please see their website for pricing information.

The maximum image file size that can be sent is 1 MB, but Twilio may resize the image file to conform to the cellphone service provider's size requirements.

When the user taps the MMS icon in the sharing screen a touchscreen keyboard will displayed to allow the user to enter their cellphone number. Please see the [touchscreen keyboard section](#) for information

on how to customize its layout and appearance.

The MMS settings need to be setup so that the program can send the texts via Twilio. The "MMS Settings" dialog can be opened by clicking on the "SMS/MMS settings..." button in the "Output Settings" dialog. The "MMS Settings" dialog shown below will be displayed:

Enter your Twilio message phone number, AccountSID and AuthToken in the "MMS Settings" dialog. You can find your Twilio message phone number, AccountSID and AuthToken by logging into your Twilio account.

Set the country prefix to your country prefix e.g. +1 for the US and Canada, +44 for the UK, +49 for Germany etc. When users enter their cellphone numbers they can either enter the number with their country prefix e.g. +1234567890 or without it e.g. 23456789 and the country prefix will be added automatically before sending the text.

Select the message type from the "Message type:" dropdown list. The available options are:

1. MMS - send the message as an MMS with the image attached to the message. Currently Twilio only supports MMS messaging in the US and Canada. If this option is used in a country which doesn't support MMS messaging through Twilio the message will be sent as an SMS + image.
2. SMS - send the message as an SMS. You will need to include a link to a website in the message text so that the user can view their photos e.g. <http://mywebsite.com/photos/{fullFilename}>

3. SMS + image - send the message as an SMS with a link to the photo. The photo will only be available for viewing for 7 days. Use the {url} token to include the URL to the image in the text message. If the {url} token is not included in the message the URL will be appended to the end of the message.

Photos sent using the "MMS" and "SMS + image" options must be no more than 1MB in size after resizing and cropping. An error message will be displayed if the 1MB file size limit is exceeded. Twilio may resize the photo to conform with the cellphone service operator's MMS size limits. Photos sent using the "SMS + image" option will be hosted on the Breeze Systems' website for 7 days.

You can specify a maximum message length to ensure the 160 character SMS message length is not exceeded. In some countries SMS messages of more than 160 characters may be sent as multiple SMS messages and will cost more. In other countries the SMS message will be truncated to 160 characters.

You can crop, resize and rotate the photos before they are sent to the user.

To crop the image first check the "Crop image:" checkbox and then specify the left offset and top offset in pixels for the top left corner of the cropped image. Then specify the width and height of the image in pixels. For example if the photos are from a photobooth which is setup to print a double strip of 4 images on 6"x4" paper you may wish to crop the image so that only a single strip is emailed to the user. If the printer is set to a resolution of 300 dpi the image will be 1200 pixels wide (4" x 300 dpi) by 1800 pixels high (6" x 300 DPI) and so to crop it into a single strip you need to set left=0, top=0, width=600 and height=1800.

You can also specify a maximum size for the image being uploaded using the "Max width (pixels):" and "Max height (pixels):" settings. The JPEG copy of the printed output will be resized so that it is no bigger than these settings before it is emailed. Keeping these values relatively small, e.g. 500 x 500 pixels, will reduce the time it takes to send the email.

If required, the photo can be rotated using the "Image rotation:" dropdown list.

Please note that the image is cropped first, then resized and finally rotated before being sent to the user.

Select the "Use MP4 copy of animated GIF if available" option to enable the uploading of the MP4 copy of animated GIFs. Please see the [animated GIF section](#) for details of how to create animated GIFs. GIFs and MP4 files will be sent without being resized or cropped.

You can specify a timeout for uploading the photo to prevent a slow or broken internet connection from jamming the photo booth.

By default the screens displayed when sending an MMS or SMS will have a simple status message shown on a black background. This can be overridden by placing the following JPEG screen images in the screen images folder:

mms.jpg - screen displayed when sending an MMS

mms_success.jpg - screen displayed after an MMS has been sent successfully

mms_as_sms.jpg - screen displayed in if MMS isn't supported and SMS is being used instead

mms_error.jpg - screen displayed if there is an error when sending an MMS

MMS/SMS "Offline Mode" and sending texts after an event

If no internet connection is available at an event you can save users' cellphone numbers and send the texts later when an internet connection is available. To do this you need to enable "SMS/MMS" in the "Sharing" section of the "Output Settings" dialog and also select the "Offline mode" option. You also need to select the "Log uploads to file" in the "MMS Settings" dialog - this will save the user's cellphone number together with the filename of their photos.

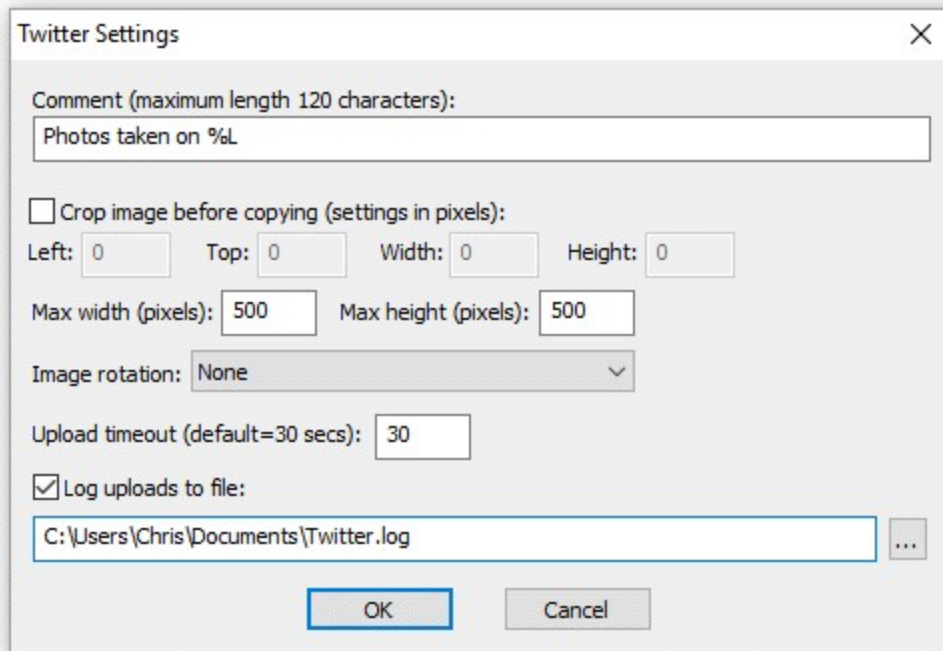
The texts can be sent when an internet connection is available by selecting "Send emails and MMS/SMS messages..." from the "File" menu in the main window. When you select this you will be asked the log file to read (this defaults to the email log file specified in the "Email Server Settings"). The "Unsent Emails and MMS/SMS Messages" dialog will be displayed listing the date/time, cellphone number and photo for unsent texts found in the log file. Select the texts you wish to send and then

press the "Send" button to send them.

Please note: The email and text log files have the same formats and so email addresses and cellphone numbers can be saved in the same log file.

Posting photos to the user's Twitter account (tweeting)

Users can post photos to their personal Twitter account directly from the photo booth if it has an internet connection and either a touchscreen or a keyboard to enter their Twitter login information. The simplest way to set this up is to use the [photobooth setup wizard](#) and then adjust the settings if required. After running the photobooth setup wizard the Twitter settings can be edited using the dialog below. This dialog can be opened by clicking on the "Advanced Settings" button to open the "Webcam Photobooth Settings" dialog then clicking on the "Output" tab and opening the "Output Settings" dialog clicking on the "Settings..." button to the right of the output options. Then click on the Twitter "Settings..." button.



The comment setting specifies text that will be used in the tweet. Twitter limits messages to 140 characters but approximately 20 characters are required for the URL when posting photos and so the maximum usable message size is 120 characters. Tokens for the date and time can be included in text and will be replaced with the date or time the photos were taken when they are uploaded e.g. %L will be replaced with the long date representation for your computer's locale e.g. Wednesday, June 08, 2015

%I will be replaced with the long date and time representation for your computer's locale e.g.

Wednesday, June 08, 2015 20:23:56

Please see the [tokens section](#) for a list of available tokens.

The photo that is tweeted is based on the JPEG copy of the printed output. You can crop, resize and rotate the image before it is tweeted.

To crop the image first check the "Crop image:" checkbox and then specify the left offset and top offset in pixels for the top left corner of the cropped image. Then specify the width and height of the image in pixels. For example if the photobooth is setup to print a double strip of 4 images on 6"x4" paper you may wish to crop the image uploaded to Twitter so that only a single strip is sent. If the printer is set to a resolution of 300 dpi the image will be 1200 pixels wide (4" x 300 dpi) by 1800 pixels

high (6" x 300 DPI) and so to crop it into a single strip you need to set left=0, top=0, width=600 and height=1800.

You can also specify a maximum size for the image being uploaded using the "Max width (pixels):" and "Max height (pixels):" settings. The JPEG copy of the printed output will be resized so that it is no bigger than these settings before it is tweeted. Keeping these values relatively small, e.g. 500 x 500 pixels, will reduce the time it takes to upload the file.

Depending on your printer page settings the JPEG copy of the printed output may not be saved in the correct orientation. If this is the case it can be rotated using the "Image rotation:" dropdown list. If you are also using print preview (the "Confirm before printing" option in the "Photobooth Settings" dialog) this can be set to "Same as print preview" and it will use the same rotation settings as the print preview.

Please note that the image is cropped first, then resized and finally rotated before being tweeted.

Select the "Log uploads to file:" checkbox to log tweets to a CSV file. Then either type in the filename of the log file in the editbox or click on the "..." to open a file browser. The log file contains a line for each tweet attempt containing the following comma separated values: the date in the format YYYYMMDD, the time in the format HHMMSS, the Twitter username prefixed with TWITTER_USERNAME: and with @ characters replaced by _ , the status (1=success, 0=failure) and the filename of the image file e.g.

```
20151214,174842,TWITTER_USERNAME:test_gmail.com,1,C:
```

```
\Users\Chris\Documents\PhotoboothImages\2015-12-14\prints\151214_174826.jpg
```

Please note: The log file only contains the date/time, username, filename and whether the upload was successful. The user's password is **NOT** recorded and therefore the log file cannot be used to tweet the photos after the event.

In Operation

When the photobooth is run and the photos have been taken the print preview screen will be displayed first (if "Confirm before printing" is selected) and then when the user selects "Print" the sharing screen (share.jpg) will be displayed. If the user selects "Cancel" in the print preview screen the sharing screen won't be displayed and the booth will return to the ready screen (ready.jpg). If the "Confirm before printing" option is not selected the sharing screen will be displayed after taking the photos.

When the sharing screen (share.jpg) the user has the option to tweet the photo by touching the Twitter button on the touchscreen or by typing T if they are using a normal keyboard. The sharing screen can be exited by touching the "Cancel" button on the touchscreen or by typing X or Esc on a normal keyboard. The sharing screen will also exit automatically if the user does nothing and the screen timeout occurs. The sharing screen timeout can be specified in the "Output Settings" dialog.

When the user selects the Twitter option the touchscreen keyboard will be displayed allowing them to enter their Twitter user name and password. The user can enter their user name and password by tapping on the touchscreen keyboard or by typing them in using a normal keyboard. The user can then either tap on the "Cancel" button (or type Esc) to cancel the upload or tap on the "Upload photo" button (or press the keyboard Enter key) to start the upload. The touchscreen keyboard will cancel automatically if the user doesn't tap the touchscreen or type anything and the keyboard timeout occurs. The keyboard timeout can be specified in the "Touchscreen Settings" dialog which can be displayed from the "Photobooth Settings" dialog.

When the user has entered their Twitter user name and password and selected "Upload photo" the Twitter login screen (twitter_login.jpg) will be displayed together with a small web browser window showing the Twitter login page. The user must tap the "Ok" button or press the Enter key on the keyboard to login to Twitter and give the application to tweet the photo.

After the user has logged in and authorized the PhotoboothUploader app the upload will start and the Twitter upload screen (twitter_upload.jpg) will be displayed. If the upload is successful the Twitter success screen (twitter_success.jpg) will be displayed for a few seconds and then the screen will

return to the sharing screen. If there is an error (e.g. the internet connection was lost) the Twitter error screen (twitter_error.jpg) will be displayed for a few seconds and then the screen will return to the sharing screen.

If there is a timeout waiting for the user to login and authorize the PhotoBoothUploader app the upload will be aborted and the timeout screen (fb_timeout.jpg) will be displayed for a few seconds and then the screen will return to the sharing screen.

The sharing screen can also be displayed from the ready screen using the keyboard shortcut Shift+Ctrl+S or the "Display sharing screen" touchscreen action.

If you have problems with the Windows Taskbar appearing when uploading photos to Twitter you can run the HideWindowsTaskbar.exe utility to hide the Windows taskbar. HideWindowsTaskbar.exe will automatically hide the Windows taskbar when Webcam Photobooth is running in full screen photobooth mode. HideWindowsTaskbar.exe can be found in the Webcam Photobooth installation folder (usually C:\Program Files (x86)\BreezeSys\Webcam Photobooth on 64-bit Windows).

Please note: The user's Twitter username and password are private and are not saved by the photobooth software. There is no offline option for Twitter tweets because users need to enter both their username and password to allow posting to their Twitter account and no system should ever keep a record of users' passwords.

Notes on using a normal keyboard for testing and emailing photos

The texting and email photo options are designed to be used with a touchscreen, but can also be operated using a normal keyboard. Please note that if you give users access to a keyboard you need to prevent them from causing problems by exiting out of the photobooth program (e.g. by typing Ctrl+Alt+Delete, Ctrl+tab or pressing the Windows key). One way to do this is to take a basic USB keyboard and either wedge or glue the Ctrl, Alt, Win etc. keys so that they can't be pressed.

The following keys can be used to navigate the print preview, and sharing screens:

Print preview:

Type A to print the photos

Type X or Esc to cancel printing

Sharing screen:

Type E to upload to email the photos

Type X or Esc to exit the sharing screen and return to the ready screen

Touchscreen keyboard:

Type in the user name and password using the normal keyboard keys

Type Tab to switch between the username and password input

Type Esc to exit and return to the sharing screen

Uploading photos to your personal or business Facebook page

There are a number of free tools for automatically uploading photos to your personal or business Facebook page or to other social networking or photo sharing sites:

1. **Dropbox** - Dropbox is a free service for synchronizing files across multiple computers and devices. When a file is copied into the Dropbox folder on your computer it is automatically uploaded to online storage in the Cloud. If a photo is copied to a subfolder in the Photos Dropbox folder it will automatically create an online gallery which can be viewed using a web browser. Dropbox comes with 2 GB of free online storage which can be increased for a monthly fee. Please

visit the [Dropbox website](#) for more details.

2. **IFTTT + Dropbox/Box/Google Drive-** IFTT (If This Then That) is a free web based automation tool that works in conjunction with free online storage services such as Dropbox, Box and Google Drive. It uses "recipes" to perform actions when files are added to your online storage. It can link to many services including Facebook (to access your personal Facebook page), Facebook pages (to access a business Facebook page), Flickr, YouTube and Twitter. The recipes are run every 15 minutes and can upload a maximum of 15 photos each update. Please visit the [IFTTT website](#) for more details

All of the above services work by monitoring a folder on you PC and automatically uploading the photos to the Cloud or directly to a Facebook album. The output options in Webcam Photobooth can be used to automatically crop and resize the prints from the photobooth and copy the image to the folder being monitored for uploading to the Cloud and/or Facebook. The output settings dialog can be displayed by setting the output option in the photobooth settings to "Print and save JPEG copy" or "JPEG copy only" and pressing the "Settings..." button:

Output Settings

Output: **Print and save JPEG copy** ▾

Display thumbnails **Thumbnail settings...**

Delay before creating print layout (secs):

Sign or draw on photos before printing

Display print preview and wait for confirmation before printing

Timeout (secs): Timeout action: **Cancel** ▾

Max copies: **Preview size and position...**

Sharing (preview sizes in pixels, 0=auto)

Print **Print settings...**

SMS/MMS **SMS/MMS settings...** MMS/SMS offline mode

Twitter **Twitter settings...**

Email **Email settings...** **Email server settings...** Offline email mode

Preview: Left: Top: Width: Height:

Share animated GIFs Max percentage upscaling:

Sharing screen timeout (secs):

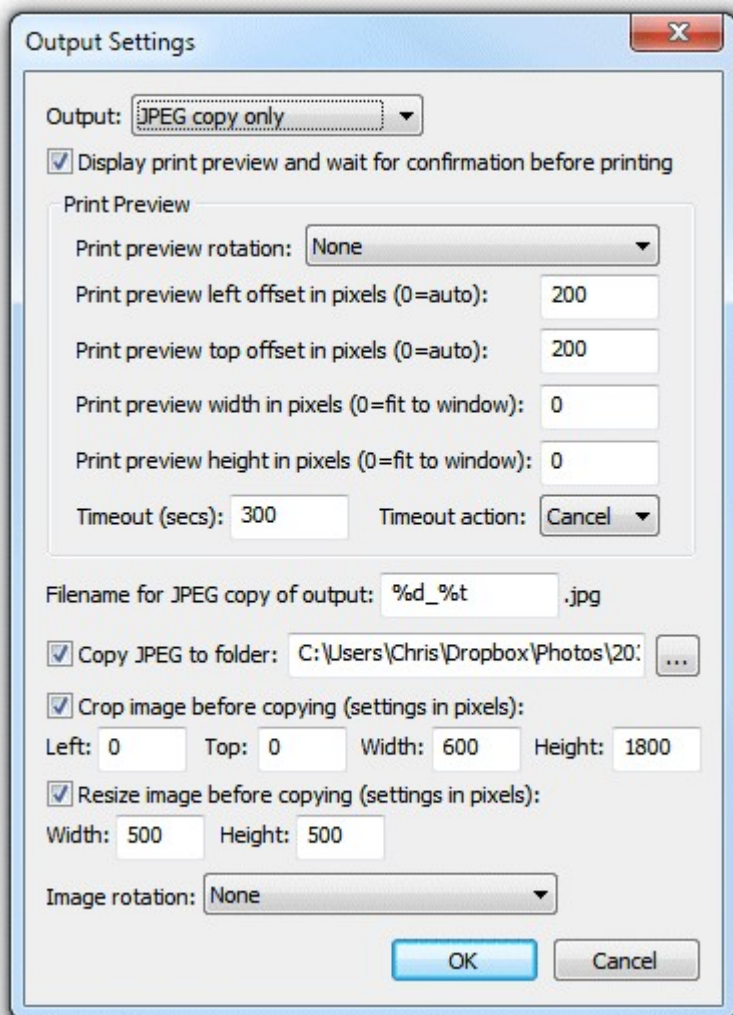
Create animated GIF of photos **Animated GIF settings...**

Filename for JPEG copy of output: .jpg

Copy JPEG copy of printed output to folder **Settings...**

OK **Cancel**

Select the "Copy JPEG to folder:" option and enter the name of the folder where the JPEG copy of the printed output should be copied to. This should be the folder that is being monitored by your the online storage service. The JPEG copy of the printed output is formatted for sending to a printer and may be larger than you want for uploading to Facebook. For example a typical double strip of 4 images printed at 300 DPI on 4"x6" paper will be 1200 x 1800 pixels in size and will show two strips of 4 photos side by side. You may want to limit the size for faster uploading and viewing on guests' cell phones etc. and to crop the image so that it only shows a single strip of 4 photos. You can do this using the "Crop image before copying" and "Resize image before copying" options as shown below:



If you need more control over the layout...

Please take a look at our [Hotfolder Prints](#) software if you need more control over how the photos are formatted before being uploaded to Facebook and other social networking sites. [Hotfolder Prints](#) allows you to create a completely new layout optimized for uploading (e.g. formatting on a 452x440 pixel page to look great in Facebook's timeline) and to add logos or other information that doesn't appear in the printed strips. [Hotfolder Prints](#) can also email photos to users (using the email address entered using the [touchscreen keyboard](#)) and run a slideshow which is automatically updated as new photos are taken.

Online Storage Services

The free IFTTT web automation tool can be used in conjunction with the following free Cloud based online storage services:

- [Dropbox](#): 2 GB of free online storage, more available for a monthly fee
- [Box](#): 5 GB of free online storage, more available for a monthly fee
- [Google Drive](#): 5 GB of free online storage, more available for a monthly fee

Please note the information above was correct at the time of writing but may have changed since. Please check the relevant websites for the latest information about the various services described on this page.

21 Tokens

The following tokens can be used to specify the folder where images are saved and in captions added to prints.

Date and time tokens

%a	Abbreviated weekday name	e.g. Fri
%A	Full weekday name	e.g. Friday
%b	Abbreviated month name	e.g. Jun
%B	Full month name	e.g. June
%d	Date in the form YYMMDD (equivalent to %y%m%D)	e.g. 110617 for June 17, 2011
%D	Day of the month (01 to 31)	
%H	Hour (00 to 23)	
%I	Hour (01 to 12)	
%j	Day of the year (001 to 366)	
%l	Long date/time representation of locale	e.g. Monday, January 17, 2011 19:03:47
%L	Long date representation for locale	e.g. Monday, January 17, 2011
%m	Month (01 to 12)	e.g. 06 for June
%M	Minutes (00 to 59)	
%p	am/pm indicator	e.g. PM
%S	Seconds (00 to 59)	
%t	Time in the form HHMMSS (equivalent to %H%M%S)	
%W	Week number (00 to 53)	
%x	Date representation for locale	e.g. 06_17_11 for June 17, 2011
%X	Time representation for locale	e.g. 14_39_29
%y	Year without century	e.g. 11
%Y	Year with century	e.g. 2011

%z	Time zone name	e.g. GMT Standard Time
%Z	Time zone offset wrt UTC	e.g. +0100 for GMT during DST
%n	Time 'now' in the form HHMMSS	
{yearNow}	Year 'now' in the form YYYY	e.g. 2011
{monthNow}	Month 'now' (01 to 12)	e.g. 06
{dayNow}	Day 'now' (01 to 31)	e.g. 17
{yearLess8h}	Year with century 8 hours ago - useful when shooting events which continue after midnight	e.g. 2012
{monthLess8h}	Month (01 to 12) 8 hours ago - useful when shooting events which continue after midnight	e.g. 01
{dayLess8h}	Day of the month (01 to 31) 8 hours ago - useful when shooting events which continue after midnight	e.g. 19
{dateLess8h}	Date less 8 hours in the form YYYY-MM-DD	e.g. 2010-01-19

Tokens for modifying strings

The tokens below can be used to modify tokens or strings:

Token	Description	Example
{left,n,str}	Extracts the first n characters from str (which can be a string or token).	{left,4,{filename}} for filename IMG_1234.jpg would give IMG_
{mid,n,m,str}	Extracts m characters starting from the n'th character from str (which can be a string or token).	{mid,5,4,{filename}} for filename IMG_1234.jpg would give 1234
{right,n,str}	Extracts the last n characters from str (which can be a string or token).	{right,3,{filename}} for filename IMG_1234.jpg would give .jpg

Other tokens

{photoboothNumImages}	Number of shots defined in photobooth mode	e.g. 4
{photoboothImage}	Shot number in photobooth shooting sequence	e.g. first photo returns 1
{photoboothDateTime}	Date and time at the start of the current photobooth shooting sequence	e.g. 20110126_190509
{photoboothDate}	Date at the start of the current photobooth shooting sequence	e.g. Jan 26, 2011 returns 20110126
{photoboothTime}	Time at the start of the current photobooth shooting sequence	e.g. 7:05:09 pm returns 190509
{photoboothDir}	The value of the full pathname of the photobooth images folder	e.g. C:\Photobooth\Profile1
{photoboothSubdir}	The value of the photobooth images subfolder	e.g. C:\Photobooth\Profile1 gives Profile1

{photo1}, {photo2} etc.	Filename (without file extension or directory path) of each photo	
{filename}	Filename of the saved print layout	
{uid}	Unique id in the form ABC12345 updated at the start of each photobooth shooting sequence. Can be used in captions and the filename prefix. The id is guaranteed not to repeat within 72 hours and is very unlikely to repeat within 10 years.	

22 Release Notes

Webcam Photobooth v2.6, released 1 July 2022

- Added support for [contactless operation](#) for running the photo booth and sending emails and texts using QR codes
- Now supports the latest [secure method for sending emails via Gmail](#)
- Sending emails via standard SMTP now supports TLS 1.2
- Removed references to sharing via Facebook because it is no longer supported due to the Cambridge Analytica scandal

Webcam Photobooth v2.5.1, released 4 December 2019

- Added the option to create XML copies of emails and texts so that they can be sent in the background using Breeze Hub
- Fixed an issue with logo images added to prints being printed incorrectly as QR codes

Webcam Photobooth v2.5, released 23 September 2019

- Added the option to let users select different frames for the print layout in the drawing/signing screen
- Added emojis/stickers/virtual props to the signing and drawing on prints
- Added touchscreen actions in the photo preview screen to accept the photo, retake the photo or abort the shooting sequence
- PNG logos and JPEG images can now be added to print layouts
- Fixed a problem with the {uid} token working when sharing photos by email or text
- Fixed a problem with the "Email input after taking photos" touchscreen keyboard setting

Webcam Photobooth v2.4, released 17 May 2017

- Added support for displaying an animated GIF in photo booth screens
- Animated countdowns can now use an animated GIF which can be displayed over the live view display
- Ready screen can now display an optional overlay (ready_overlay.png)
- Added new [Instagram style filters](#) in photo booth mode
- Photo booth setup wizard enhanced to support choosing the number of copies to print in the print confirmation screen and the creation of 'boomerang' animated GIFs
- Optional tags added to the XML settings format to allow advanced users to create location independent settings files to make it easier to share settings on different photo booths
- Fixed a problem with Facebook users not being logged out after uploading photos
- Added support for drawing on or signing the print layout before printing or sharing
- Added support for modifying photos before printing e.g. using Adobe Photoshop droplets
- Live view cropping now supports vertical "letter box" style cropping in addition to horizontal cropping
- New touchscreen actions added for increasing or decreasing the number of copies to print in the print confirmation screen. The print confirmation screen now uses different backgrounds according to the number of copies .e.g confirm_printing_1.jpg, confirm_printing_2.jpg etc.
- The number of touchscreen actions has been increased from 18 to 45
- Now uses unicode for improved support for different languages

- Added a "[DPI aware](#)" display option when running on high DPI screens

Webcam Photobooth v2.3, released 23 August 2016

- Added fast stills capture option in video booth mode for creating fun animated GIFs
- Added the option to create an [animated GIF of the video clip](#) when using the "Capture clip as a series of still frames" in video booth mode
- Added the option to create an [animated GIF slideshow](#) of the stills photo booth shooting sequence
- Added support for posting photos to Twitter
- Added support for sending photos by MMS (US and Canada only) or SMS via Twilio.com
- Now supports MP4 or MOV files for animated screens and countdowns
- Movie file display no longer requires Apple's QuickTime libraries
- Fixed a problem in v2.2 where the default profile is not loaded at the end of the shooting sequence

Webcam Photobooth v2.2.2, released 15 December 2015

- Added a clicker mode option allowing users to choose when to take each photo instead of using the automated countdown
- Fixed a problem with image attachments not displaying in emails sent to Outlook.com
- Replaced %1, %2, %3, %4, %5, %6 tokens with {yearNow}, {monthNow}, {dayNow}, {yearLess8h}, {monthLess8h}, {dayLess8h} to avoid problems with unwanted substitutions in emails
- Fixed a typo in the default text for HTML emails: correcting <image src="{image}"> to

Webcam Photobooth v2.2.1, released 9 November 2015

- Fixes a problem in Webcam Photobooth v2.2 with setting the print preview size and position in the print confirmation screen

Webcam Photobooth v2.2, released 19 October 2015

- Added new [touchscreen action editor](#)
- Added "Message input at end of sequence" touchscreen keyboard option to allow users to enter a message which can be added to the printed output (using the {message} token)
- Added an option to print photos from the sharing screen (this can also be selected when running the photobooth setup wizard)
- Added optional password to protect "[exit photobooth mode](#)" touchscreen action
- Added touchscreen actions and keyboard shortcuts to select a profile and start the shooting sequence (profiles 1 to 8 only)
- Added the option to log Facebook uploads to file
- The default touchscreen keyboard for entering the user's Facebook login name and password now displays punctuation characters when the shift key is pressed (US keyboard layout)
- Email message text can now be specified in HTML format and plain text format
- Added offline email mode and the ability to send the emails after the event
- Added mandatory option to <prompt> tag in touchscreen keyboard XML definition to indicate that an input field must contain text
- Added Inactivity timer which automatically switches the photo booth to standby mode after a user definable period of inactivity
- Now supports up to 12 captions in the print layout, options to change the caption display order and the option to right justify the caption text
- Fixed a problem loading a profile with "video booth mode at startup" set when video mode is already active

Webcam Photobooth v2.1, released 9 October 2014

- Added the option to crop the photo before uploading to Facebook or sending by email
- Added "Single strip of 2" preset layout option
- Fixed a possible problem where uninstalling a printer driver could cause the program to crash
- The body text for emails now allows return characters

- Improved error reporting when testing and sending emails and improved support for services such as free email services like yahoo.com

Webcam Photobooth v2.0, released 9 September 2014

- Added [interactive editor for photobooth print layouts](#)
- Added the importing and exporting of photobooth print layouts
- Added the ability to print QR codes on photobooth prints
- Added optional [thumbnail display](#) in photobooth mode
- Added new photobooth dashboard to provide quick access to the main photobooth settings
- Increased the number of photobooth profiles from 8 to 18
- Increased the number of photobooth captions from 2 to 8

Webcam Photobooth v1.7, released 20 February 2014

- Added the ability to [upload photos to a user's Facebook page](#) in photobooth mode
- Added the ability to [email photos](#) in photobooth mode
- Added "Confirm printing (no JPEG copy)" print option in photobooth mode

Webcam Photobooth v1.6.3, released 28 November 2013

- Added a single photo layout option in the photobooth setup wizard and preset layouts tool
- Improved the performance of printing custom layouts in photobooth mode when images are printed multiple times e.g. the double strip of four layout
- Now disables touchscreen edge gestures when running in full screen photobooth mode on Windows 8 and Windows 8.1 systems
- Fixed a problem saving the touchscreen keyboard layout to file

Webcam Photobooth v1.6.2, released 21 October 2013

- Added the option to rotate as well as crop and resize the additional JPEG copy of the printed output
- Fixed a problem with the ready screen not being displayed after a fast reprint
- Fixed a problem with the sizing of the optional video_ready.mov file when using profiles to switch to video booth mode

Webcam Photobooth v1.6.1, released 20 March 2013

- Fixed a problem with post processing options affecting the printed output
- Fixed a problem with an "ActiveMovie" window being displayed when switching to video mode on some systems

Webcam Photobooth v1.6, released 27 November 2012

- Added the ability to use [movies to animate photobooth screens](#)
- Fixed a problem with the date and time values saved in the XML summary file
- Added next/previous profile keyboard shortcuts and touchscreen actions in photobooth mode
- Added two new preset photobooth layouts: double strip of 3 photos and single strip of 3 photos

Webcam Photobooth v1.5, released 8 November 2012

- Fixed a problem where stills mode uses the video resolution when switching from video to stills mode
- Fixed a problem with touchscreen actions when using the photobooth setup wizard with the touchscreen and video options
- Added fast resize option in photobooth mode - provides faster print processing with minimal reduction in image quality
- Added [post processing options](#) in photo booth mode for easier website and social networking site uploads

Webcam Photobooth v1.4, released 16 May 2012

- Added [Photobooth Setup Wizard](#) which automatically creates all the screens and the print layout for

common photobooth configurations

- Added an option to include the current printer settings when saving the photobooth settings to file
- Added a quick reprint option (keyboard shortcut: Ctrl+Shift+R) when the output option is set to "Print and save JPEG copy"
- Added {uid} token which generates a unique id for filenames and captions when shooting in photobooth mode

Webcam Photobooth v1.3.2, released 3 February 2012

- Added <caption1> and <caption2> tags to the XML photobooth summary file
- Added an option to the touchscreen keyboard to hide text when entering a password
- Greenscreen backgrounds can now be replaced by copying the new greenscreen_background.jpg image into the photo booth images folder while the booth is running
- Fixed problems using 8 profiles in photobooth mode

Webcam Photobooth v1.3.1, released 11 January 2012

1. Added timeouts in photobooth mode for print confirmation, touchscreen keyboard input and video confirmation
2. Displays optional reprinting.jpg screen image and skips the print confirmation screen when reprinting photobooth images
3. Added optional checkboxes to the [touchscreen keyboard](#) in photobooth mode
4. Fixed a problem with the software crashing on some systems when switching between video booth and stills photobooth modes

Webcam Photobooth v1.3, released 30 September 2011

1. Increased the number of profiles from 6 to 8
2. Added the option to use {photoboothSubDir} or {photoboothDir} tokens when specifying the profile pathname to allow the use of more than 8 profiles
3. Now displays the video_playback_finished.jpg screen image, if defined, after video playback
4. Added the ability to specify the size and position of the playback window in video booth mode
5. Added the ability to specify a horizontal offset for the live view display
6. Added a separate delay for the first photo in the sequence
7. Added optional [color management](#) of printed images
8. Fixed a problem in Webcam Photobooth v1.2 that affected the loading of profiles
9. Fixed a problem with incomplete screen refreshes when switching profiles

Webcam Photobooth v1.2, released 26 July 2011

1. Added preset layouts when using the custom layout option to help design popular layouts using four photos
2. Added [monochrome tint option](#) to support printing in sepia and other tints
3. Fixed problems with touchscreen actions not being processed in video booth mode
4. Fixed a problem writing user entered data from the touchscreen keyboard to the XML summary file

Webcam Photobooth v1.1, released 8 June 2011

1. Added [video booth mode](#)

Webcam Photobooth v1.0.1, released 4 May 2011

1. Added [blue screen shooting](#)
2. Added [default profile](#) option to reset the photobooth to a known state after each shooting sequence
3. Enhanced touchscreen keyboard in photobooth mode to allow multiple input fields and the use of a normal keyboard

Webcam Photobooth v1.0, released 28 February 2011

1. Webcam interface completely rewritten to allow the full range of resolutions supported by the webcam to be used
2. Added green screen shooting
3. Added touchscreen keyboard option

Webcam Photobooth v1.0 beta 3, released 8 December 2010

1. Fixed a problem with the countdown timer not running

Webcam Photobooth v1.0 beta 2, released 7 December 2010

1. Added countdown text positioning, cropping of live view images and first draft of the help files

Webcam Photobooth v1.0 beta 1, released 8 October 2010

1. Initial beta release