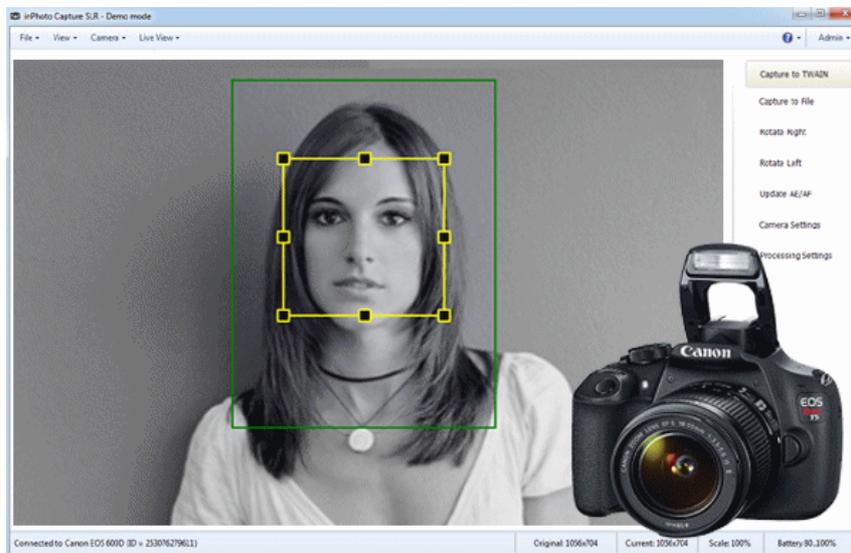


inPhoto ID SLR



Automatic ID photography
With Canon SLR camera

User Guide

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1. INTRODUCTION

Thank you for purchasing **inPhoto ID SLR** software!

inPhoto ID SLR is designed for **full control** of Canon SLR (reflex) cameras, automatic ID photography, image transfer to TWAIN compatible applications (e.g. ID card management software and image databases), or save to disk.

inPhoto ID SLR can work both as the stand alone application and as TWAIN driver with any program supporting TWAIN protocol (e.g. Asure ID, ID Works, EPISuite, ID Flow, Incardex, etc.). Connect your Canon SLR camera to computer, install **inPhoto ID SLR** software, and enjoy working with your camera from within any application supporting image acquisition via TWAIN.

Basic features of **inPhoto ID SLR** software:

- Ability to work as TWAIN driver.
- Ability to work as stand alone software.
- Camera settings control from computer. Note: only limited number of settings important for ID photo application can be controlled.
- Live image preview.
- Image rotation: manual by 90 / 180 degrees.
- Automatic face detection on live image in preview window
- Automatic image capture.
- Automatic face crop on the captured image.
- Photo enhancement and resizing.
- Photo export to the TWAIN compatible software (e.g. to ID card design and management software).
- Save images to the specified folder.

2. SOFTWARE PACKAGE AND PC REQUIREMENTS

Software package includes the following:

1. Setup file (inphotoidsr.exe),
2. User guide (inPhotoIDSLR_Userguide.pdf file),

PC requirements:

- Windows 2000, Windows XP, Windows Vista, Windows 7 (incl. 64 bit), Windows 8
- Free 20MB on hard disk for inPhoto ID SLR software files,
- Microsoft .NET Framework 3.5 Service Pack 1
- One free USB 1.0 (or higher) port to connect Canon camera to PC. For some new cameras supporting USB 2.0 it is recommended to use USB 2.0 port. Otherwise the image transfer speed will be much lower than it is allowed by camera.

Supported cameras:

inPhoto ID SLR software supports the following **Canon SLR** cameras:

Canon EOS 1D Mark III
Canon EOS 40D
Canon EOS 1Ds Mark III
Canon EOS 450D / Canon EOS DIGITAL REBEL Xsi
Canon EOS 1000D / Canon EOS DIGITAL REBEL XS
Canon EOS 1100D / Canon EOS DIGITAL REBEL T3
Canon EOS 1200D / Canon EOS Rebel T5
Canon EOS 50D
Canon EOS 5D Mark II
Canon EOS 500D / Canon EOS REBEL T1i
Canon EOS 550D / Canon EOS REBEL T2i
Canon EOS 7D
Canon EOS 1D Mark IV
Canon EOS 60D
Canon EOS 600D / Canon EOS DIGITAL REBEL T3i
Canon EOS 5D Mark III
Canon EOS 1D X
Canon EOS 650D / Canon EOS DIGITAL REBEL T4i
Canon EOS 100D / Canon EOS Rebel SL1
Canon EOS 700D / Canon EOS Rebel T5i

3. CAMERA AND SOFTWARE INSTALLATION

InPhoto ID SLR software installation

Run **inphotoidsr.exe** and follow the instructions you will get. Activate your license using on-line or off-line activation and enjoy working with **inPhoto ID SLR**.

Canon SLR camera installation

- 1 Insert batteries to your Canon camera or connect it to power using standard power supply cable.
- 2 Install your Canon camera on the tripod photo stand.
- 3 Remove a cap from the camera lens.
- 4 Connect your Canon SLR camera to PC with the USB cable. Turn the camera on.

Camera preparation

In order to be able to use **inPhoto ID SLR** software to control your **Canon SLR** camera from computer connect your camera to PC with USB cable, switch the camera on, and run **inPhoto ID SLR** software. The live image shall be displayed in the software window.

Attention!

- Canon SLR cameras having live image preview ability shall be set in "Auto" (P) mode. The live image preview will not be displayed in the software window if **Canon SLR** camera is set in other modes.

Final check

After you perform all above steps please check the following:

- 1 Your Canon SLR camera is installed on the tripod stand.
- 2 The USB dongle is plugged into the USB port of your PC (if the software was supplied with the USB dongle).
- 3 **inPhoto ID SLR** software is installed on PC.
- 4 Canon SLR camera is turned on and connected with the USB cable to your PC.

inPhoto ID SLR start up

Now you can run **inPhoto ID SLR** software as TWAIN source from all TWAIN compatible applications.

- If you work in Adobe Photoshop go to File / Import / inPhoto ID SLR
- If you work in Jasc Paint Shop Pro go to File / Import / TWAIN / Select Source, and select inPhoto ID SLR. After the source is selected use Acquire command (File / Import / TWAIN / Acquire)
- If you work in other graphic applications supporting TWAIN please refer to the corresponding documentation supplied with your graphic software.

You can also run **inPhoto ID SLR** as stand alone software (Start – All programs – inPhoto ID SLR).

After **inPhoto ID SLR** is started up you will get the live image in the image preview window.

Attention! The live image can be not sharp, dark, with not natural colors, etc. In order to get proper image in the preview window and start capturing photos please read the next Chapter.

4. INPHOTO ID SLR OPERATION

inPhoto ID SLR window

The **program window** view has two sections: the **Image Preview** area (on the left) and the **Control Panel** (on the right).

The menu in the upper part of the software window provides access to **inPhoto ID SLR** commands and settings.

In the bottom part of the software window information on connected camera and battery level is displayed.

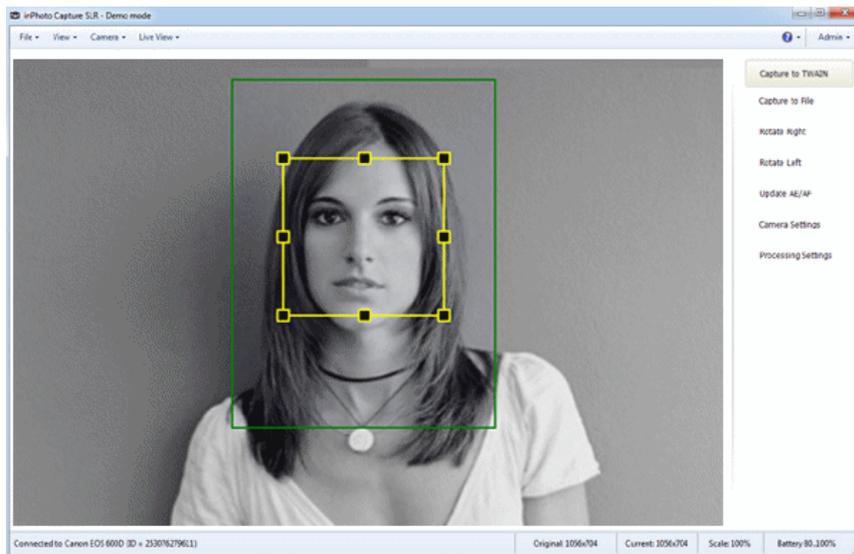


Figure 1. inPhoto ID SLR window.

In the **Image preview** area you can see live image of the object to be captured. Live image preview provides an ability to control image quality before capture and change camera settings if necessary. When you change camera settings you can see live preview changing in Image preview area.

The **Control Panel** has 7 controls: Capture to TWAIN, Capture to file, Rotate right, Rotate left, Update AE/AF, Camera settings, Processing Settings. Press **Capture to TWAIN** to capture image to TWAIN compatible application. Press **Capture to file** to shoot the photo and save image file to disk. Press **Rotate right** or **Rotate left** to rotate live image in the Image preview area.

Use Update AE/AF to update automatic exposition and focus.

Capture to TWAIN button will be disabled if inPhoto ID SLR is started as stand alone application. In order to be able to capture photos to TWAIN compatible software inPhoto ID SLR shall be run from a TWAIN compatible software.

If you press **Camera settings** button the **Camera settings** window will open (see Figure 2). This window provides an ability to control the

settings of **Canon SLR camera** from the personal computer with **inPhoto ID SLR** software.

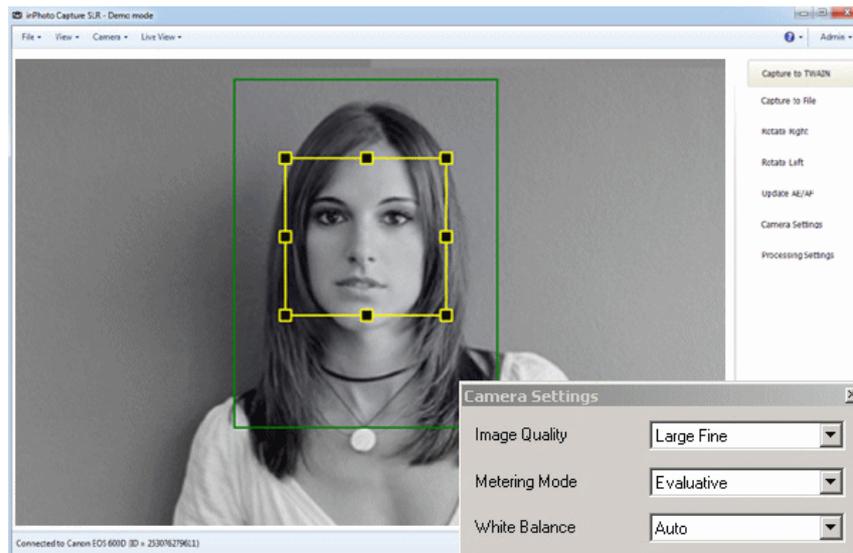


Figure 2. **inPhoto ID SLR** window
With **Camera Settings** window.

When you select all Canon SLR camera settings as you need for your application it is possible to close the **Camera settings** window by pressing **Camera settings** button again or by clicking Close button in the upper right corner of **Camera settings** window.

Image processing settings

Press **Processing settings** to display the **Image Processing** window. In this window you will be able to setup the face crop and image enhancement settings. They will be saved and used by **inPhoto ID SLR** to process the photos.

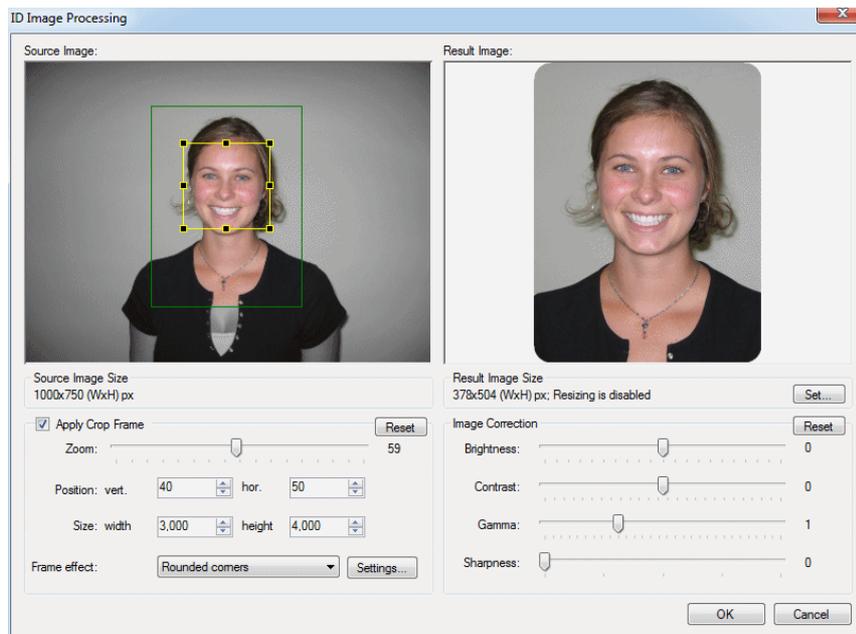


Figure 3. Image Processing window: general view

The cropped image can be enhanced if you are not quite satisfied with the resulting image quality. It is possible to adjust image brightness, contrast, gamma, and sharpness using the corresponding controls in the right part of the **Image Processing** window.

The **Image Processing** window has the following areas:

- Source image area. If **Apply Crop Frame** is checked the human face will be outlined by the yellow frame (shows the face found) and by the green (or red) frame (cropping frame).
- Processed (cropped) image area.
- Information on the source image size.
- Information on the image resizing options.
- The crop frame parameters area.
- The photo enhancement and resizing area.

Make the desired settings in the **Image Processing** window and they will be used for the automatic processing of the source images.

Source image and crop frame

The face area is automatically outlined by the yellow frame. The user can change the yellow frame size and position if necessary. The green (crop) frame outlines the result image area on the source image. The **Crop frame** is built automatically and can not be changed manually.

This ensures a constant position of the person face on the resulting image. If the face on the image is not recognized automatically you have an option to outline the face area manually. If the face is located too close to the image frame and the area to be cropped is cut by the image border, the frame color will change from green to red.

You can turn the crop frame on and off by checking **Apply Crop Frame** checkbox.

Zoom

Using the **Zoom** slider set up the face percent on the resulting ID photo. **"70"** value means that the human face center will be at **70%** height of the full cropped photo.

If you use the same **Zoom** value for the photos to be processed you will get the consistent resulting images having the same size and the same surrounding area / face area ratio. The faces of a small child and a large adult person will have the same size in the resulting images. This is in full compliance with the requirements for ID images, and also allows better identification when these images are used in electronic or printed form.

Position Vertical and Horizontal

Position Vertical and Horizontal controls allow you to change the face position on the resulting image. Using these controls you can change the position of the yellow frame center to the crop (green) frame center. In other words you can shift the green frame horizontally or/and vertically.

Adjust **Position vertical** and **Position horizontal** values to set up the face position on the resulting photo. The left bottom corner of the resulting photo corresponds to Position vertical **"0"** and Position

horizontal "0". Set the Position vertical and Position horizontal to "50", and the face center will be located in the center of the resulting ID photo. Set the Position vertical to "25", and the distance above the face center will equal to 25% of the total photo vertical size.

Size

Set the **actual photo size**. You can use either round values (e.g. 3 x 4) or fractional values (e.g. 3,5 x 4,5).

Rounded corners.

The ID photo corners can now be rounded. The corners color and roundness radius are optional.

To reset all the settings to default values, click Reset button.

Frame effect.

For now the **Rounded corners** option is available. New options will be added in the future.

Image Correction

The cropped image can be enhanced if you are not quite satisfied with the resulting image quality. It is possible to adjust image brightness, contrast, gamma, and sharpness using the corresponding controls in the right part of the **Image Processing** window.

Brightness control allows you to make the image brighter or darker. Contrast is used if a face has little gradation. Gamma allows for both options - at the same time increasing or decreasing the brightness and contrast.

Sharpness allows you to emphasize image details. It can improve the image when shooting was not enough in focus, or shooting conditions and camera quality do not allow to get a good focus image. For example, if the image was captured by the low-end webcam, the small value of sharpness can help to improve the image details and make result image of better quality.

WARNING! These improvements are only based on information obtained from the image. So it can not fix a broken shot, to restore the

image, or to correct shooting errors. It is always preferable to capture an image of the best quality to minimize the necessity of any improvement. To reset all the settings to default values, click Reset button.

Resizing

You can customize the resulting image size in pixels. This allows all produced files to be the same size, as well as reduce file size. File size is important in order to save disk space or database size. In the case of large database ID image size reduction can strongly reduce overall database size, which prevents the slow down and improves its reliability.

Resizing in **ID Photo Processor** reduces the size of resulting image. Image size increasing can not be performed.

Resizing can also increase the image quality. You can shoot the image with maximum size, regardless of the size required, and then resize it to desired value. In this case resizing leads to improved output image quality.

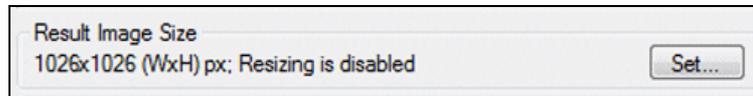


Figure 5.

To enable resizing click Set button in Result Image Size box. In the Resizing options dialog box enable the corresponding checkbox and set the desired image size. All resulting images with the bigger size will be resized. Resizing always keeps image proportion. Actual image size after resizing will be displayed in the **Result Image Size**.

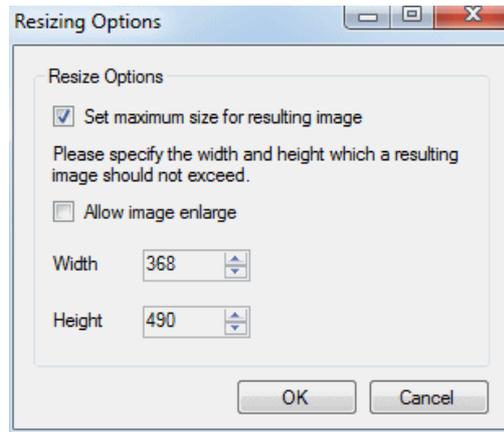


Figure 6.

Click OK to complete setting up resizing options and save it. Options will be applied to each processed image.

Live image preview

Image preview (see Figure 1) is very important for image quality control and adjustment before capture.

All supported **Canon SLR** cameras excluding Canon EOS 40D have an ability of live image preview on camera LCD and in the software window.

inPhoto ID SLR software provides the **dynamic image preview**. The image preview size depends on the camera model.

The dynamic preview mode provides an ability to control the image quality before capture. All changes made to the Canon SLR camera settings have effect on the previewed image immediately after they are performed.

The rotated image will be displayed in the preview window if the corresponding controls are selected (**Rotate right** or **Rotate left**).

The automatic face detections will be performed in the preview window if the corresponding settings are made on the **Processing** tab of the Options dialogue box (see **Options**).

The yellow frame on live image in the preview window automatically outlines the face area. The green frame outlines the image area which will be cropped. The green/yellow frame ratio is adjusted by the sliders in the **Image Processing** window (see Figure 8). If it is necessary to change the green/yellow frames position and aspect ratio, capture an image (the **Show Processing Window** option shall be selected on the **Processing** tab of the **Options** window) and make required adjustments in the **Image Processing** window. After that press **Back** button to return to the **Image Preview** window. If the face is located too close to the image frame and the area to be cropped is cut by the image border, the frame color will change from green to red.

Press **Capture to TWAIN** button to capture the image and transfer it to the TWAIN compatible software.

Press **Capture to TWAIN** button to capture the image and transfer it to the TWAIN compatible software. **Capture to TWAIN** control will be disabled if **inPhoto ID SLR** is started as stand alone application.

Press **Capture to file** button to capture the image and save it in a folder specified on the **Save file** tab of the **Options** window (see **Options**).

Image rotation

Working with **inPhoto ID SLR** software the user can rotate the image in the Preview window. The rotated image will be captured either to the TWAIN compatible application (if the software is run as TWAIN driver) or to file (if the software is run as stand alone application). There is an option of manual image rotation by 90 degrees.

The ability of manual image rotation is very useful for different applications including the object photography, and jewel photography in particular. The user can easily select the desired angle for the best presentation of the object.

In order to rotate the image click **Rotate right** or **Rotate left** controls on the Control panel.

Camera settings control

The **full control** of your Canon SLR camera settings is performed with the commands of the **Camera settings** window.

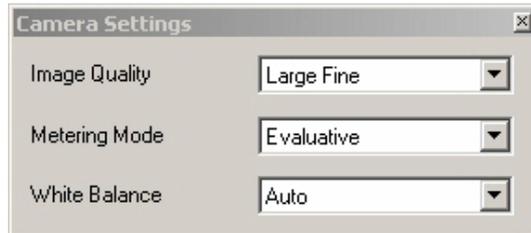


Figure 7. Camera settings.

To zoom the image in or out use camera zoom. It is not possible to control Canon SLR camera zoom with the software.

The **Camera settings** window contains the following fields:

- **Image Quality.** Select the image format and compression from the drop down list. The speed of image transfer to the TWAIN compatible software will depend on the selected image format and compression.

Recommendation: When you capture ID photos the low image resolution of 640x480 can be used in most cases.

- **Metering Mode.**
- **White Balance.** Ability to select the best white balance setting from a list of available options (depending on the Canon camera used). The image colors will be reproduced better if the white balance is selected in accordance with the lighting conditions.

Face crop and image enhancement

After the image is captured **the face area can be cropped.**

Upon pressing the **Capture to TWAIN** button in the image preview window the Image Processing window will be invoked. This window can

be skipped off if the corresponding settings are made in the **inPhoto ID SLR** options.

This window provides an ability to crop the face area (automatically or manually), and enhance the resulting image if necessary.

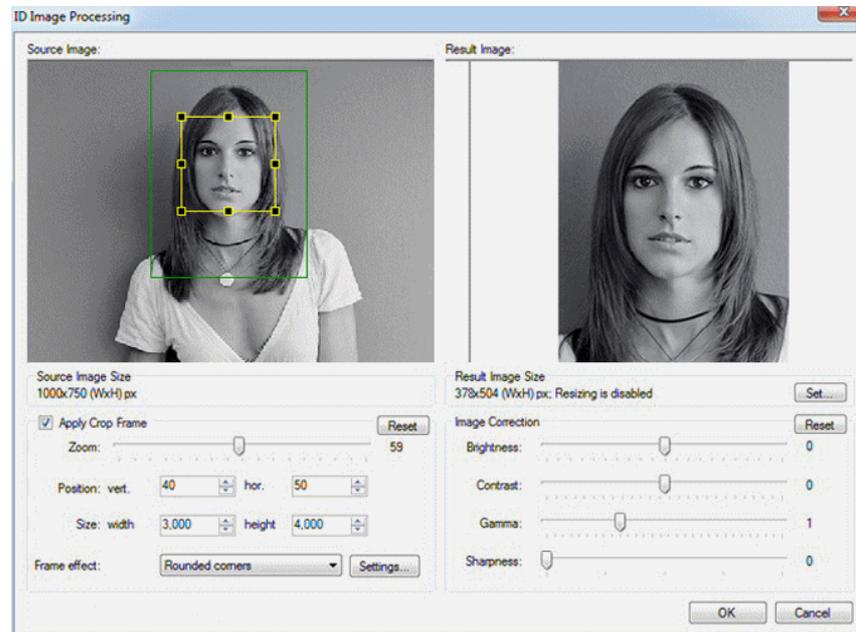


Figure 8. **Image Processing** window.

The face area is automatically outlined by the yellow frame. The user can change the frame size and position if necessary. If the face on the image is not recognized automatically the user has an option to outline the face area manually.

The green frame outlines the image area to be cropped. The yellow frame / green frame ratio and position are adjusted by Zoom, Vertical offset, and Horizontal offset controls. The aspect ratio control is used to set the resulting image ratio.

If the face is located too close to the image frame and the area to be cropped is cut by the image border, the frame color will change from green to red. In this case the user has three options: ignore, modify the

image frame, or press Back button and return back to the image preview window.

The cropped image will be displayed in the right part of the Image Processing window.

The cropped image **can be enhanced** if you are not quite satisfied with the resulting image quality.

It is possible to adjust image brightness, contrast, gamma, and sharpness using the corresponding controls in the right part of the Image Processing window.

Press OK in order to transfer the cropped and enhanced photo to the TWAIN compatible application from which **inPhoto ID SLR** was started up.

Image transfer and save

inPhoto ID SLR software provides an ability to transfer the captured images to TWAIN compatible applications for further processing. It is also possible to automatically save captured images to file.

Press **Capture to TWAIN** button, and the previewed image will be captured and transferred to the TWAIN compatible software for further processing and saving.



Figure 9. Photo acquired to Incardex (ID card software).

When the image is captured and transferred the **inPhoto ID SLR** window will either stay open or get closed (if the **Close on capture** option is selected on the Genera tab of the Options dialogue box).

To reduce the software activation time for the next image capture check **Hide to tray instead of close** to hide **inPhoto ID SLR** to tray when it is closed.

The captured image will be displayed in the TWAIN compatible software (e.g. Incardex).

When **Capture to file** option is used the image will be captured and saved to file on the disk.

The user can set up the folder, and the rules for file naming. These settings are made on the Save tab of the Option dialogue box. See Options section for more details.

Options

The **Options** dialogue box (File menu) is used to set the options of **inPhoto ID SLR** operation.

The **Options** dialogue box contains 6 tabs. On the **General** tab it is possible to select the options of **inPhoto ID SLR** start up and close process.

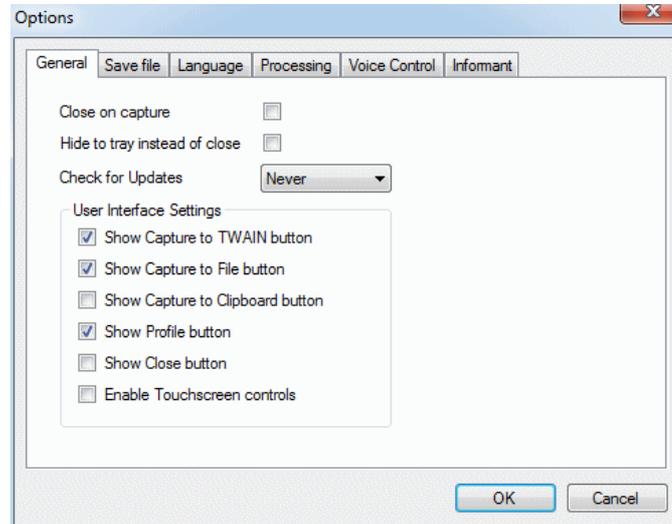


Figure 10. **Options** dialogue box, **General** tab.

If **Close on capture** is checked the **inPhoto ID SLR** will be closed after the image is captured and transferred to the TWAIN compatible software (or saved to file).

Check **Hide to tray instead of close** to hide **inPhoto ID SLR** to tray when it is closed. It reduces tremendously the software activation time for the next image capture.

The **Save file** tab is used to define the save to file settings. It is possible to select the folder to save images to upon pressing **Capture to file** button and create separate folders for the year / month / day.

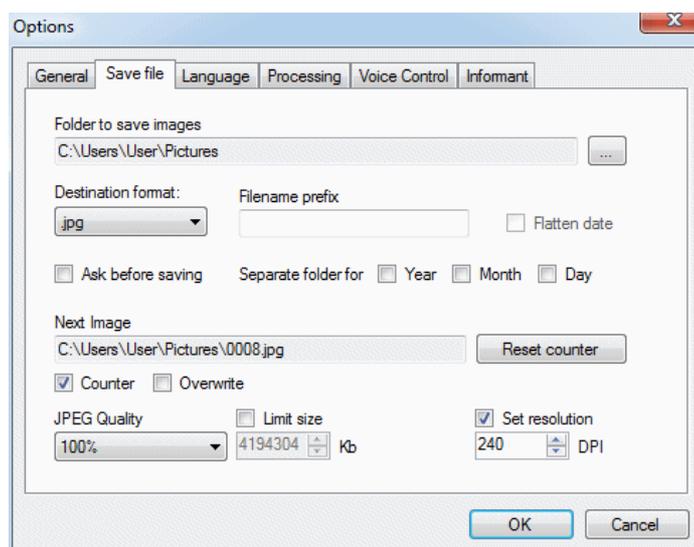


Figure 11. **Options** dialogue box, **Save file** tab.

Check **Ask before saving** box on the **Save file** tab of the **Options** dialogue box, and after the image is captured the **Save as** window will be displayed, and you will be able to give a name to the image file before saving. The file will be saved on disk in the specified folder with the name assigned.

On this tab it is also possible to set the JPEG image quality and set the size limit for the resulting photo.

The **Processing** tab contains controls to set up face detection and image processing options.

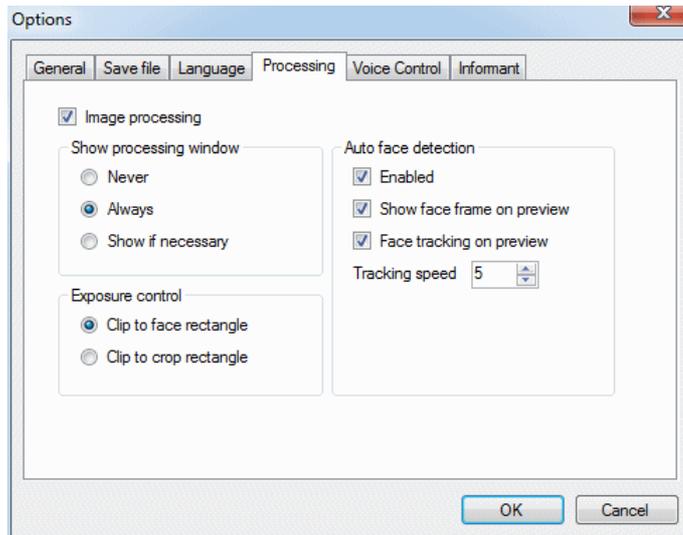


Figure 12. **Options** dialogue box, **Processing** tab.

Check **Image Processing** to enable image processing after capture.

The **Show Processing Window** group includes the following options:

- **Never:** the Image Processing window will not be displayed (will be skipped off), and the image will be processed according to the last settings made. If the face has not been found automatically the full image will be captured,
- **Always:** the Image Processing window is always invoked,
- **Show if necessary:** the Image Processing window is displayed when necessary, e.g. when the face is not recognized on the image, when the face is too close to the image frame, etc.

Check **Auto Face Detection** to activate the automatic face recognition and detection.

Check **Face Tracking on Preview** to enable dynamic face detection in the preview window.

The **Language** tab provides an ability to select the software language. New language settings will take effect after the software is restarted.

The **Voice control** tab is used to select the commands to control the web camera by the voice.

The **Informant** tab is used to enable/disable the voice informer.

The **Select camera** dialogue box called up from the Camera menu is used to select the Canon SLR camera to be controlled from the **inPhoto ID SLR** software.

The **inPhoto ID SLR** software provides an ability to control several cameras connected to the computer. Select camera in the drop down list and control all settings of the selected camera model from your computer.

5. MOST COMMON DIFFICULTIES

Problem:

inPhoto ID SLR software is installed, Canon SLR camera is connected to PC and switched on. When **inPhoto ID SLR** is started up the live image preview remains blank.

Possible reason:

The cameras live image preview is possible only in P camera mode.

Solution:

Please make sure that your camera is set in P mode and only then start **inPhoto ID SLR**.

6. ABOUT COMPANY

We hope that you install **inPhoto ID SLR** software and learn how to use it with no problems, and that your work will be more effective and comfortable than before.

ID Photo Software

- inPhoto ID PS
- ID Photo Processor
- inPhoto ID Webcam

Camera control software

- inPhoto Capture SLR
- inPhoto Capture PS

ID card software

- Incardex

Information on all above products can be found on www.akond.net.

Please feel free to contact us

- If you have any problems or questions concerning **inPhoto ID SLR** operation,
- If you have any comments on **inPhoto ID SLR** operation,
- If you need any help on selection of software and hardware for your application.

We will be happy to help you.

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