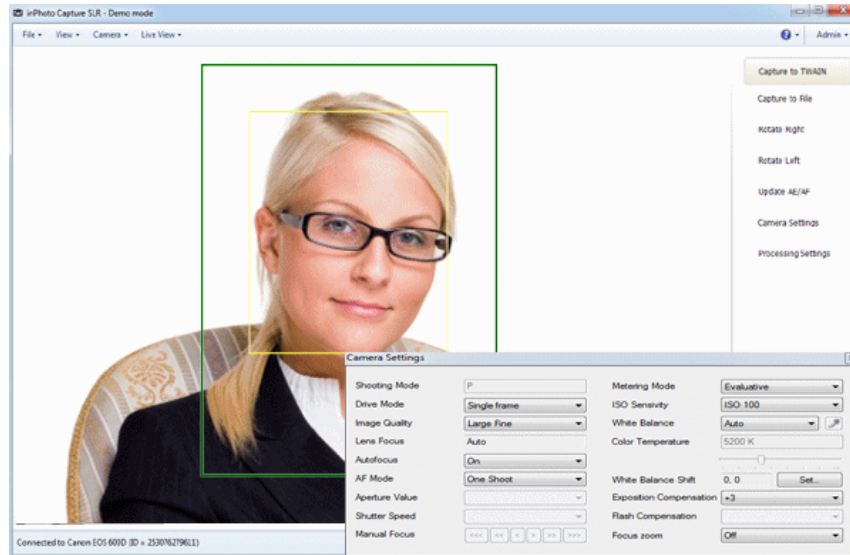# inPhoto Capture SLR

Full control of Canon SLR camera and
ID photo software

User Guide

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Content

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1. INTRODUCTION

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

inPhoto Capture SLR is designed for full control of Canon SLR (reflex) cameras, automatic image capture, transfer to TWAIN compatible software and image databases or save to disk.

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

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

- Ability to work as TWAIN driver.
- Ability to work as stand alone software.
- **Full control of all camera settings** from computer.
- Live image preview.
- Image rotation: manual by 90 degrees.
- Automatic face (object) detection on the live image in preview window.
- Automatic image capture.
- Automatic face (object) crop on the captured image.
- Photo enhancement, resizing. Image compression control.
- 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 (inphotocaptureslr.exe),
2. User guide (inPhotoCapture_Userguide.pdf file),

PC requirements:

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- Windows 2000, Windows XP, Windows Vista, Windows 7 (incl. 64 bit), Windows 8.
- Free 20MB on hard disk for inPhoto Capture 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 Capture 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 Capture SLR software installation

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

Canon SLR camera installation

1   Insert batteries to your Canon camera or connect it to power using standard power supple cable.
2   Install your Canon camera on the tripod photo stand.
3   Remove a cap from the camera lens.
4   Set the camera lens to AF mode.
5   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 Capture 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 Capture SLR** software. The live image shall be displayed in the software window.

Canon SLR cameras shall be set in

- "Auto" (P),
- "Exposition priority" (Tv),
- "Aperture priorirty" (Av),
- or "Manual" (M) mode.

The live image preview will not be displayed in the software window if **Canon SLR** camera is set in "Full Auto" mode or any of the special 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 Capture SLR** software is installed on PC.
4   Canon SLR camera is turned on and connected with the USB cable to your PC.

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inPhoto Capture SLR start up

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

- If you work in Adobe Photoshop go to File / Import / inPhoto Capture SLR.
- If you work in Jasc Paint Shop Pro go to File / Import / TWAIN / Select Source, and select inPhoto Capture 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 Capture SLR** as stand alone software (Start – All programs – inPhoto Capture SLR).

After **inPhoto Capture 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 CAPTURE SLR OPERATION

inPhoto Capture 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 Capture SLR** commands and settings.

In the bottom part of the software window information on connected camera and battery level is displayed.
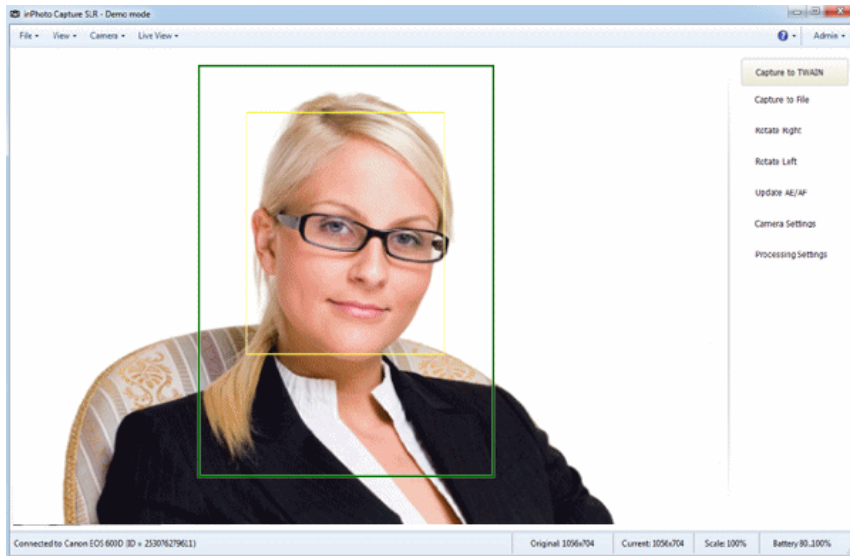
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Figure 1. **inPhoto Capture SLR** window.

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** includes 7 controls: Capture to TWAIN, Capture to file, Rotate right, Rotate left, Update AE/AF, Camera settings, and 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.

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

If you press **Camera settings** button the **Camera settings** window will open. This window provides an ability to control the settings of **Canon**

SLR camera from the personal computer with **inPhoto Capture SLR** software.
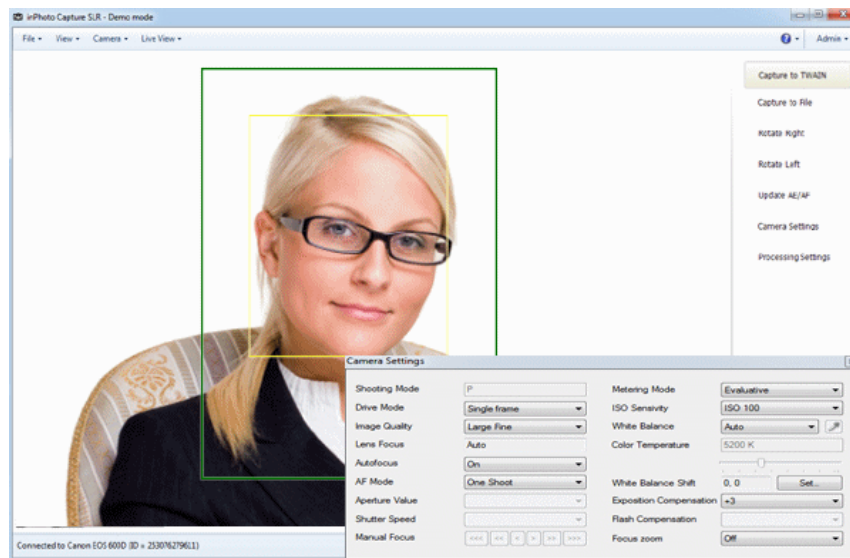

Figure 2. inPhoto Capture SLR with Camera Settings window.

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 **ID Photo Processor** to process the photos.
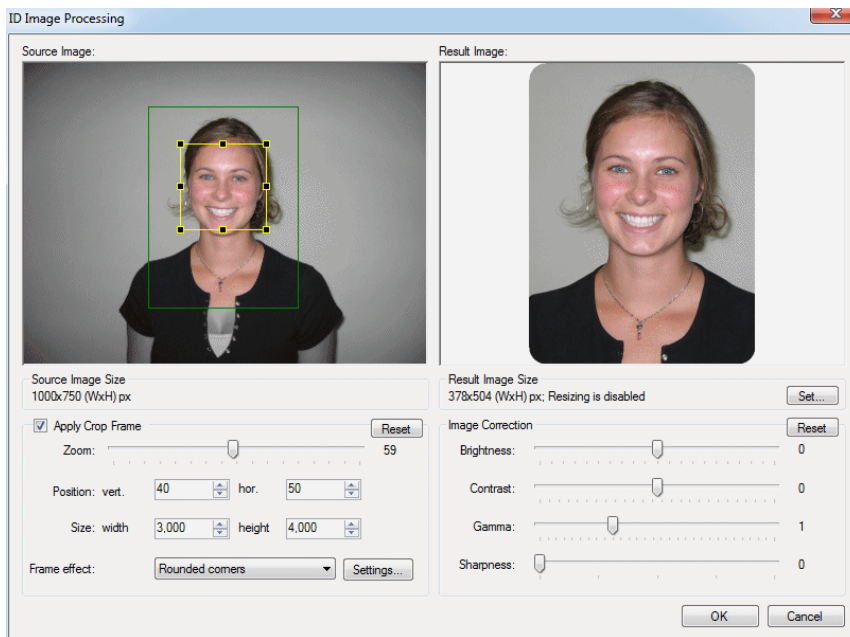
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Figure 3. Image Processing window

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.

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.

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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

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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 allows 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. 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.

Result Image Size
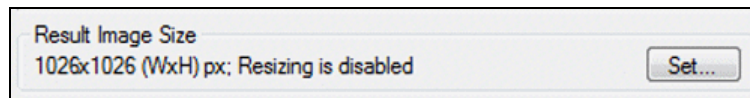1026x1026 (WxH) px; Resizing is disabled   Set...

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**.
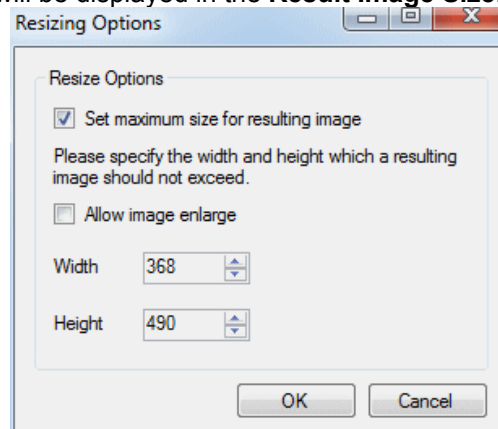
Resizing Options

Resize Options

☑ Set maximum size for resulting image

Please specify the width and height which a resulting image should not exceed.

☐ Allow image enlarge

Width   368

Height   490

OK   Cancel

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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 Capture 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**).

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 Capture 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 Capture 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.
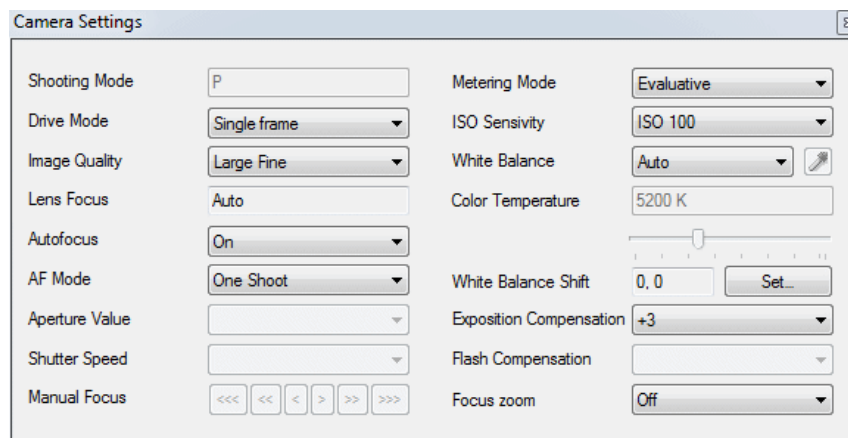

Figure 7. Camera settings.

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:

- **Shooting Mode.** The shooting mode options are defined by the camera model. Usually you can select between:
  - Automatic (P) when the shutter and aperture are set automatically by the camera,
  - Sutter priority when you have an ability to set the shutter speed manually, and the aperture value will be calculated automatically,
  - Aperture priority when you have an ability to set the aperture manually, and the shutter speed will be calculated

automatically,
- and Manual (M) mode when you have an ability to set both
shutter speed and aperture manually.

- **Drive Mode.** In this fiels it is possible to select the shooting
  type: single shoot, several shoots, shooting by timer.

- **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.

- **Lense Focus. Auto** or **Manual** depending on the camera lense
  position (**A** for Automatic or **M** for Manual). In order to control
  camera focus from within **inPhoto Capture SLR** software set
  camera lense switch to **A**.

- **Autofocus.** Set to **On** for full automatic camera focusing. Set to
  Off to be able to control camera focus manually using the
  control buttons in the software window.

- **AF Mode.**

- **Aperture Value.** In this field it is possible to set the aperture
  value if you work in Manual or Aperture priority shooting mode.

- **Shutter Speed.** In this field it is possible to set the shutter value
  if you work in Manual or Shutter priority shooting mode.

- **Manual Focus.** The manual focus buttons are active if the
  Autofocus option is **Off**. In this case the camera can be
  focused manually using the corresponding controls.

- **Metering Mode.**

- **ISO Sensitivity.** It is recommended to increase the ISO value if
  you capture with the high shutter speed or if you want to
  minimize the risk of image blurring when the camera is shaked.

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Recommendation: Select minimum ISO value (typically ISO 100).

- **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.

   Up: the white balance is set for tungsten lighting. Below: the white balance is set for daylight.

- **Color temperature.** The color temperature settings can be controlled with a slider if Color Temperature option is selected in the White Balance list.

- **White Balance Shift.** Use the white balance shift for white balance slight compensation.

- **Exposition Compensation.**
   Play with the exposure compensation values (varying from -2 to +2) when you capture the dark objects on the bright background to get the maximum image quality.

Recommendation: When you capture ID photos the automatic shooting mode can be used in most cases. It is also possible to use the Aperture priority mode (select the maximum aperture value to get shaper images).

Up: the exposure compensation is set to +1.00.
Below: the exposure compensation is set to -1.00.

- **Flash Compensation.**

- **Focus Zoom.** Select **On** to digitally zoom the image area for better manual focusing.

Image transfer and save

inPhoto Capture 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 8. Photo transferred to Incardex (ID card software).

When the image is captured and transferred the **inPhoto Capture 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 Capture 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 Capture SLR** operation.

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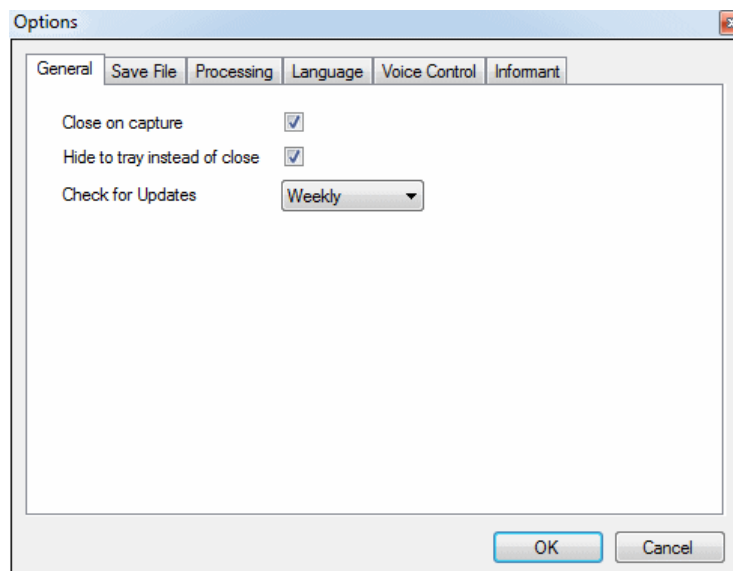

Figure 9. **Options** dialogue box, **General** tab.

If **Close on capture** is checked the **inPhoto Capture 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 Capture SLR** to tray when it is closed. It reduces tremendously the software activation time for the next image capture.

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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.
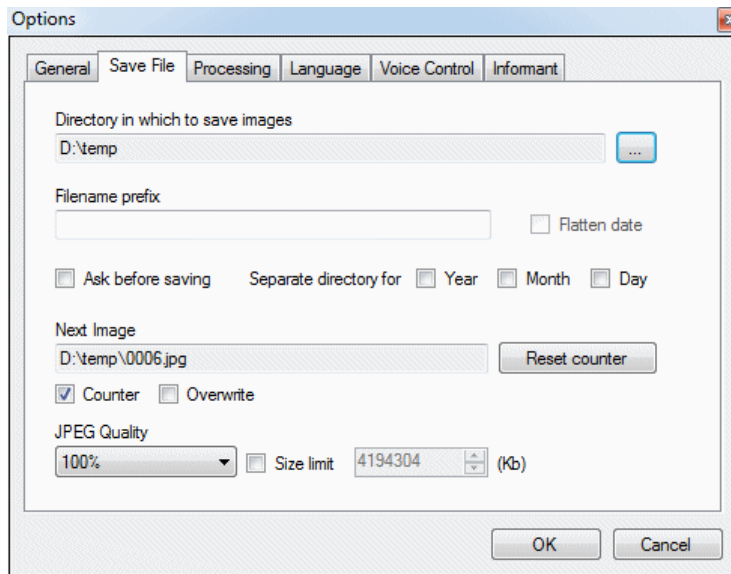

Figure 10. **Options** dialogue box, **Save file** tab.

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.
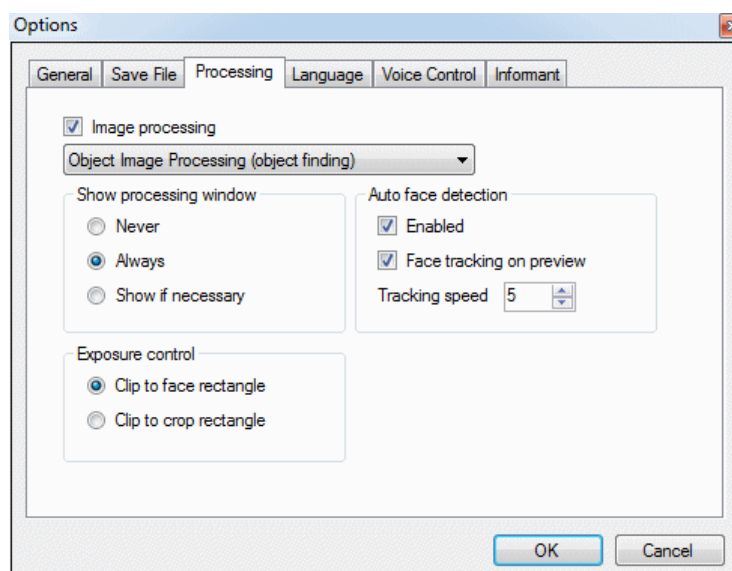
Figure 11. **Options** dialogue box, **Processing** tab.

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.

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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 Capture SLR** software.

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

Possible reason:

Live image preview is possible only in M, Av, Tv, and P camera modes. If to use other modes (Full Auto or special modes) the live image preview is not available.

Solution:
Please make sure that your camera is set in M, Av, Tv, or P modes and only then start **inPhoto Capture SLR**.

6. ABOUT COMPANY

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

Other software products offered by our company:
- inPhoto ID SLR (automatic ID photo with Canon SLR cameras),

- inPhoto ID PS (automatic ID photo with Canon Powershot cameras),
- inPhoto ID Webcam (automatic ID photo with web cameras),
- ID Photo Processor (batch photo processing),
- inPhoto Capture PS (full control of Canon Powershot camera and automatic ID photo),
- Incardex (ID card design and printing software).

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 Capture SLR** operation,
- If you have any comments on **inPhoto Capture SLR** operation,
- If you need any help on selection of software and hardware for your application.

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