

inPhoto Capture



Canon camera control software

User Guide



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inPhoto Capture User Guide © 2008 A.V. Povarkova

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1. INTRODUCTION

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

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

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

Basic features of inPhoto Capture software:

- Ability to work as TWAIN driver.
- Ability to work as stand alone software.
- Camera settings control from computer.
- Live image preview:
dynamic mode with 320x240 pixels resolution (Canon cameras).
- Image rotation: automatic (depending on the camera orientation) and manual by 90 and 180 degrees.
- Save and load user profiles.
- Automatic image capture.
- Time lapse image capture.
- Image 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 (inphotocapture.exe),
2. User guide (inPhotoCapture_Userguide.pdf file),
3. USB dongle (if key protected version is supplied).

PC requirements:

- Windows 2000, Windows XP, Windows Vista (see below the list of cameras supported in Windows Vista),
- Free 20MB on hard disk for inPhoto Capture software files,
- 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. If the software is supplied with the USB dongle your computer shall have the second free USB port.

Supported cameras:

inPhoto Capture software supports the following **Canon PowerShot** cameras:

- Pro series - Pro90 IS, Pro1
- G-series - G1, G2, G3, G5, G6, G7, G9
- S-series - S30, S40, S45, S50, S60, S70, S80, S1 IS, S2 IS, S3 IS, S5 IS, SX100 IS
- A-series - A10, A20, A30, A40, A60, A70, A75, A80, A85, A95, A100, A200, A300, A310, A400, A510, A520, A620, A640
- Digital IXUS - SD100 (Digital IXUS II), SD110 (Digital IXUS IIs), S230 (Digital IXUS 330), S400 (Digital IXUS 400), S410 (Digital IXUS 430), S500 (Digital IXUS 500).

Attention! **Canon G7, G9, S3 IS, S5 IS, SX100 IS, A620, and A640** cameras are supported under Windows 2000, XP, Vista.

All other cameras are supported **under Windows 2000 and XP only**.

3. CAMERA AND SOFTWARE INSTALLATION**InPhoto Capture software installation**

If the software is supplied with the Serial Number:

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

If the software is supplied with the USB dongle protection:

Run **inphotocapture.exe** and follow the instructions you will get. If the installation went all right you will get the corresponding notification. After inPhoto Capture is installed plug the USB dongle (USB Guadrant Stealth) into the USB port of your computer. The New Hardware Installation Wizard will start up. Select "Automatic installation" and press Next.

The Wizard will search for New Hardware installed (USB Guadrant Stealth dongle). The box notifying that the drivers are not signed by Microsoft will be invoked next. Select "Continue anyway" to continue the dongle driver installation, and the USD Guadrant Stealth driver will be installed.

Canon 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 camera to PC with the USB cable. Turn the camera on.

Camera preparation

CANON cameras

In order to be able to use **inPhoto Capture** software to control your **Canon** camera from computer set your camera to Play back mode using the corresponding switch on your camera body. Connect your camera to PC using the USB cable. Switch on your camera. The new hardware (Canon camera) will be detected by your computer and installed.

If you miss to set your **Canon** camera to Play back mode the message "Cannot connect to the camera" will be displayed when you run inPhoto Capture software.

Attention!

If your operation system is **lower** than Windows XP you must also install the Canon USB drivers from the CD that came with your camera in order to be able to connect to the camera. The latest Canon USB drivers can also be downloaded from <http://www.powershot.com>.

Final check

After you perform all above steps please check the following:

- 1 Your Canon 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 software is installed on PC.
- 4 Canon camera is turned on, connected with the USB cable to your PC, and set to Play back mode.

inPhoto Capture start up

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

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

After **inPhoto Capture** 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 OPERATION

inPhoto Capture window

The **program window** view has two sections: the upper **Image Preview** area and the bottom **Control Panel** (see Figure 3).

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

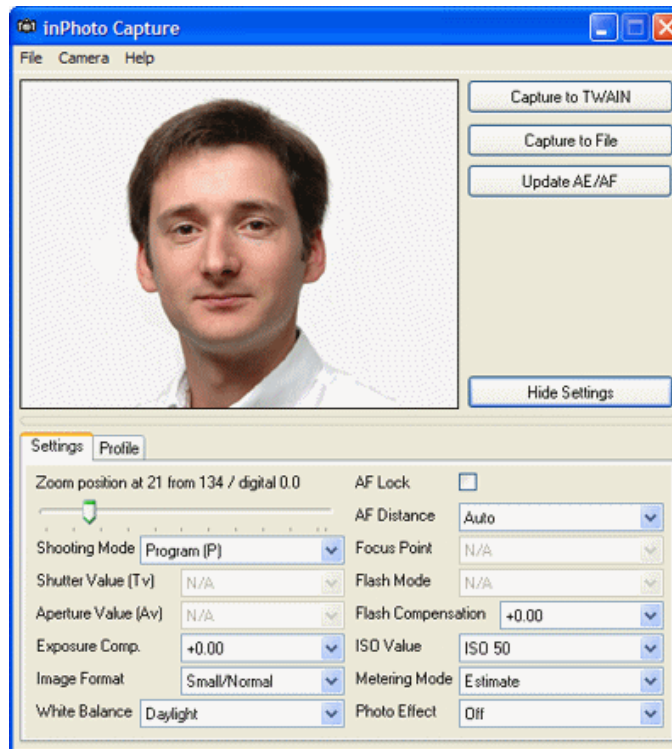


Figure 3. **inPhoto Capture** window in **Show Settings** mode (Canon camera used).

In **Preview** area you can see the image to be captured. The preview image size is 320x240 pixels.

The **Control Panel** has two tabs: **Settings** and **Profile**. The Settings tab contains the drop-down lists used to control the Canon camera settings. The Profile tab contains the list of all User Profiles created.

When you select all camera settings you need for your application it is possible to minimize the **inPhoto Capture** software window by pressing **Hide Settings** button. The **inPhoto Capture** window will be minimized to Image Preview area.

To restore the **inPhoto Capture** window press **Show Settings**.

Live image preview

Image preview (see Figure 4) is very important for image quality control and adjustment before capture.

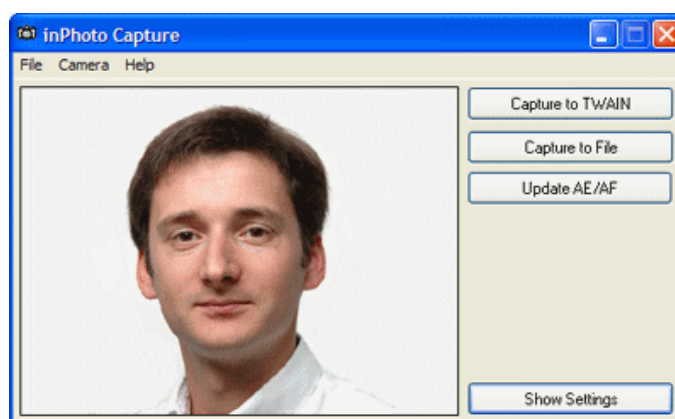


Figure 4. Live image preview (Canon camera used).

inPhoto Capture software provides the **dynamic image preview**. The preview window size is 320x240 pixels.

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

The **Update AE/AF** button is used to update the automatic exposure and focus settings when the image scene is changing.

The **Show/Hide Settings** button is used to show or hide the Control Panel in the bottom part of the program window (hidden on this image).

The rotated image will be displayed in the preview window if the corresponding settings are made on the **Camera** tab of the Options dialogue box (see **Options**).

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

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** 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 two options of image rotation control:

- automatic, when the image in Preview window is rotated depending on the camera orientation,
- manual, by +90, -90 and 180 degrees.

The ability of automatic image rotation is very useful for ID photography application. When the camera is rotated vertically, the previewed and captured image will have the portrait orientation as it is usually required for ID photo.

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, check the appropriate option in **Menu Camera** (see Figure 5). To disable the image rotation, check **Rotation off**.

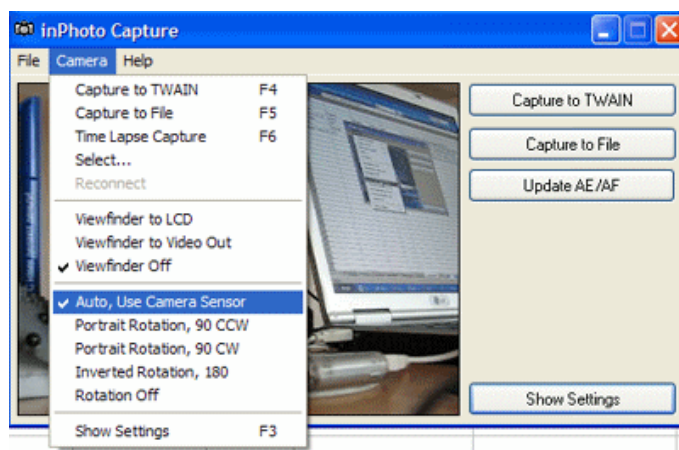


Figure 5. Image rotation options (Auto rotation is possible only if the Canon camera is used).

The user can also enable the image preview on the camera LCD and camera video output in **Menu Camera**.

Camera settings control

The **full control** of your Canon camera settings is performed with the commands on the **Settings tab** of the Control Panel (see Figure 6).

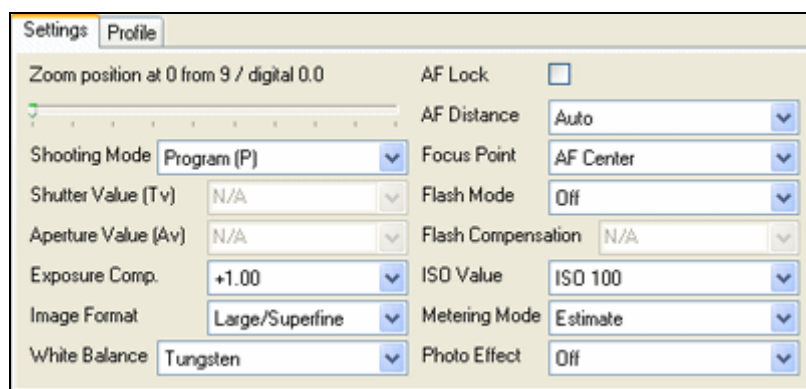


Figure 6. Settings Tab.

To zoom the image in or out move the Zoom slider.

Check **AF Lock** box to lock the automatic focus. With the AF locked the camera focus will not change when you select the different scene to capture.

The **Settings tab** contains the following fields:

- **Shooting mode.** The shooting mode options are defined by the camera model. If you use the sophisticated camera you will be able to select between
 - Automatic (Program) 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 mode when you have an ability to set both shutter speed and aperture manually.
- **Shutter value.** In this field it is possible to set the shutter value if you work in Manual or Shutter priority shooting mode (not applicable for simple Canon camera models).
- **Aperture value.** In this field it is possible to set the aperture value if you work in Manual or Aperture priority shooting mode (not applicable for simple Canon camera models).
- **Exposure 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).

- **Image format.** 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.

- **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.
- **AF distance.** Select the automatic focusing distance corresponding to the scene you photograph (remote or close up objects) or use the Auto option.
- **Focus point.** Depending on the option selected the Canon camera will be focusing automatically on the whole image or on its central part.
- **Flash mode.** Select the flash setting required. The camera flash can be always on or off, or can be activated automatically if the light is too low. The red eye reduction mode is also available. The flash mode settings are defined by the Canon camera model.

Recommendation: When you capture ID photos the flash shall be used in most cases. Select Red Eye correction mode. The White balance mode shall correspond to the lighting conditions you have.

- **Flash compensation.**
- **ISO value.** 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 shaken.

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

- **Metering mode.** This is the exposition metering mode. The values in the list depend on the camera model.
- **Photo effect.** You can capture images using various photo effects which will influence on color saturation and contrast. The list values depend on the camera model

Work with User Profiles

The **Profile** tab (see Figure 7) contains a list of all User Profiles created. Once you select the best camera settings for your specific applications you can **save these settings to profiles** and use them easily later on without spending time on camera settings adjustment.

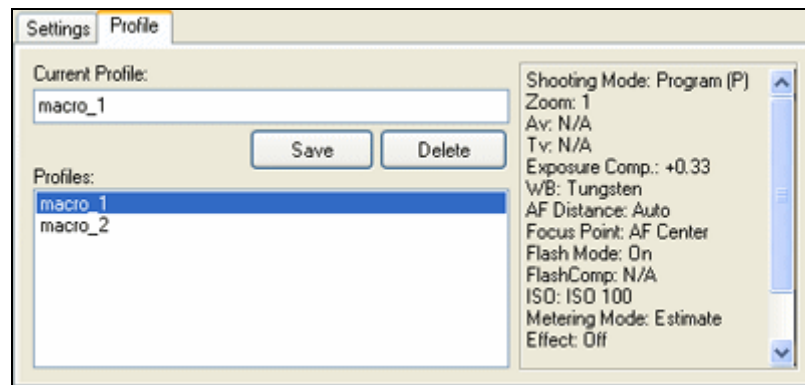


Figure 7. **Profile** Tab.

Save your camera settings to profile and you will not need to strain yourself by moving sliders and switching the checkboxes on and off again and again. Just select the necessary profile and enjoy the best image quality without any troubles.

To save the current camera settings to profile, enter name of profile to Current Profile field and press Save button. To select the saved profile, double click its name in Profiles area and **inPhoto Capture** software will adjust camera settings to the values stored in the profile. To delete profile, highlight its name in Profiles area and click Delete button.

Recommendation: Adjust all camera settings to capture images of high quality and save them to a User profile. Afterwards just select this profile from the list of profiles and the camera will be set up automatically.

All changes made to the camera settings on the **Settings** tab will have effect on the live image displayed in the image preview window.

Time lapse capture

inPhoto Capture software enables the user to perform automatic image capture with the set time interval between shots. The **Time Lapse Capture** dialogue box (Menu Camera / Time Lapse Capture) provides an ability to select the time lapse shooting settings.

In this box you can specify the number of shots and the time lapse between the shots (see Figure 8a). Press **Start** to start automatic image capture and export to the TWAIN compatible application (if inPhoto Capture is used as TWAIN driver).

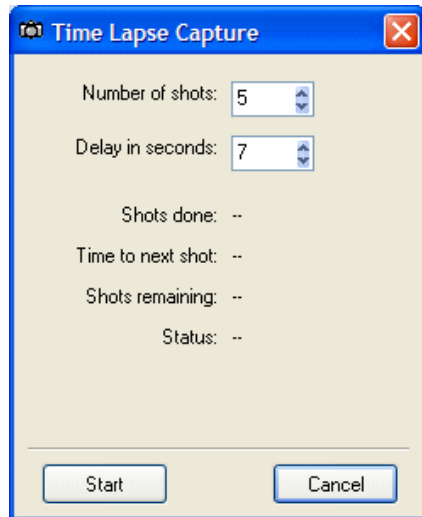


Figure 8a

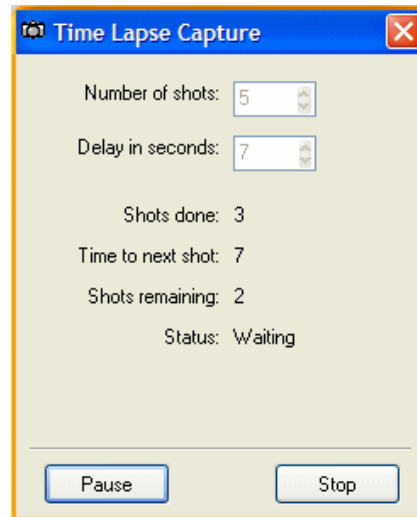


Figure 8b

If inPhoto Capture is used as stand alone application press **Start**, and the images will be automatically captured and saved to the folder specified on the **Save file** tab of **Options** dialogue box.

The time lapse capture starts (see Figure 8b). Press **Pause** to suspend shooting if necessary. To continue image capturing press **Continue** button. To stop image capturing press **Stop** button.

The time lapse image capture mode is very useful for the applications when you need to get a series of images automatically. The example of such application is the routine photography of books. Adjust your camera settings, set the number of shots and time you need to turn

book pages, and your camera controlled by the **inPhoto Capture** software will perform image shooting and saving automatically.

Image transfer and save

inPhoto Capture 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 in the upper right corner of inPhoto Capture window, and the previewed image will be captured and transferred to the TWAIN compatible software for further processing and saving.

The progress bar showing image transfer progress will be displayed. The transfer time depends on the selected image resolution and compression.

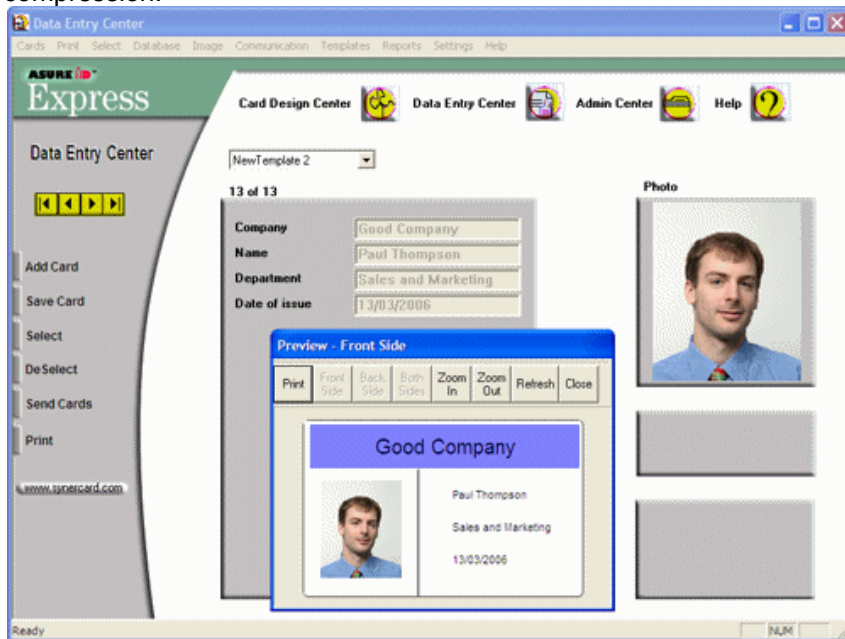


Figure 9. Image transferred to Asure ID card management software.

When the image is captured and transferred the **inPhoto Capture** window will either stay open or get closed (if the **Close on capture** option is selected on the General 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** to tray when it is closed.

The captured image will be displayed in the TWAIN compatible software (e.g. Asure ID, see Figure 9).

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** operation.

The **Options** dialogue box contains 2 tabs. On the **General** tab it is possible to select the options of inPhoto Capture start up and close process (see Figure 10).

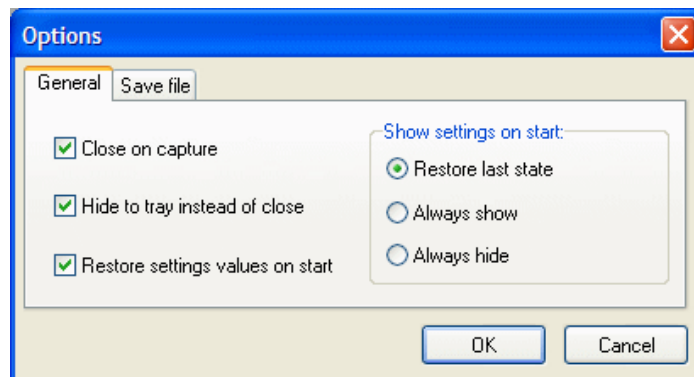


Figure 10. **Options** dialogue box, **General** tab.

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

If **Restore settings value on start** box is checked the Canon camera settings will be restored to the last state used when the software was closed.

On the right part of **General** tab it is possible to set the **inPhoto Capture** window view on start. If **Restore last state** box is checked the **inPhoto Capture** window on start will correspond to the last state before close.

If **Always show** box is checked the **Control panel** (bottom part of the software window) will be always displayed.

If **Always hide** box is checked the **Control panel** (bottom part of the software window) will be always hidden.

The **Save file** tab (see Figure 11) 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.

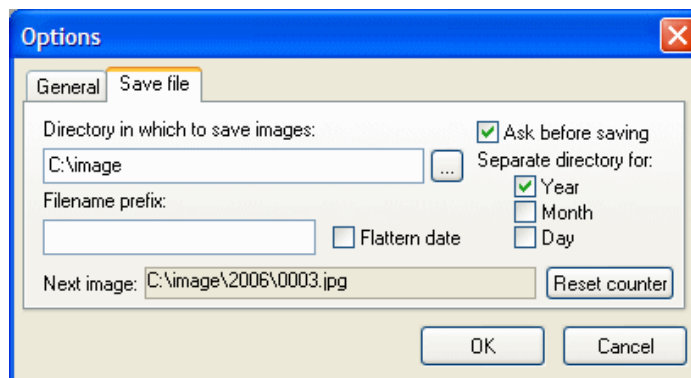


Figure 11. Options dialogue box, Save file tab.

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.

The **Select camera** dialogue box (see Figure 12) called up from the Camera menu is used to select the Canon camera to be controlled from the **inPhoto Capture** software.

The **inPhoto Capture** 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.

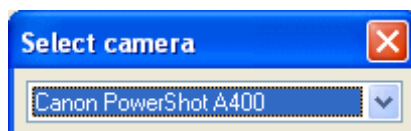


Figure 12. Select camera box.

5. MOST COMMON DIFFICULTIES

Canon cameras

Problem № 1.

inPhoto Capture is installed and the Canon camera from the supported cameras list (see Chapter 2) is connected to your computer and turned on. When you try to run inPhoto Capture you get the following message: "Cannot connect to the camera."

Possible reason:

Your camera is not set to Play back mode.

Solution:

Set your Canon camera to Play back mode. Read Chapter 3, **Camera preparation**.

Problem № 2.

inPhoto Capture is installed and the Canon camera from the supported cameras list (see Chapter 2) is connected to your computer, turned on,

and set to Play back mode. When you try to run inPhoto Capture software nothing happens.

Possible reason:

The USB dongle is not plugged in.

Solution:

Plug the USB dongle in the USP port and check if its light is on.

6. ABOUT COMPANY

We hope that you install **inPhoto Capture** 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
- inCard

inPhoto ID is designed for full control driver control of Canon digital cameras, automatic ID photography and image transfer to TWAIN compatible ID card management software and image databases.

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

Basic features of inPhoto ID software:

- Ability to work as TWAIN driver.
- Camera settings control from computer.
- Live image preview:
dynamic mode with 320x240 pixels resolution.
- Image rotation: automatic (depending on the camera orientation) and manual by 90 and 180 degrees.
- Save and load user profiles.
- Face recognition on the live image in preview window.

- Automatic image capture.
- Face crop on the captured image.
- The cropped image enhancement.
- Image export to the TWAIN compatible software (e.g. to ID card design and management software).

inCard is designed for design, management and printing ID cards and ID badges.

Basic features of inCard software:

- Create ID card templates of the standards and user defined size. The following elements can be used in the ID card design: line, rectangle, image, bar-code, text.
- Create and manage the database of ID holders.
- Connect to the external database.
- Capture images to the database with the Canon camera controlled with **inPhoto Capture** software or with the web camera. Load image to the database from the file.
- Print ready ID cards.
- Two modes are supported: **Designer** (ID card design, database management) and **Producer** (data entry and ID card printing).

Please feel free to contact us

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

We will be happy to help you.

Contact details:

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