Digital Camera OCR

Alternative Way to Digitize and Repurpose Documents and Books

Have you ever think that your digital camera could successfully replace a scanner for document processing with OCR? Have you ever suspect that your digital camera could capture text which normally would be inaccessible?

With new ABBYY FineReader OCR and its adaptive recognition technology[1] for camera images, it's really time to think about it!

Digital cameras are becoming more and more popular and truly multipurpose. In addition to everything else, you can use your camera as a portable "scanner" to capture text from hardcopy documents, books, newspapers, as well as from banners, posters and other media. Then, with ABBYY FineReader OCR, you can convert your camera images into electronic text files for editing, archiving, creating new documents and for other purposes.

Using Digital Camera to Capture Text

A digital camera is an ideal alternative to a scanner, if you don't want to deal with a scanner each time when you need to convert a document into a text file, especially if you don't do it very often. Camera images can be easily opened in ABBYY FineReader OCR, ready for processing.

If you are working with books (for example, in a library), you can simply take you digital camera and capture all necessary text and images for further processing on you PC or notebook (even from those books that cannot be scanned at all).

 When you are traveling out of the office (for example, on a business trip) and need to digitize some important documents for editing, archiving, creating other documents, digital camera can be used as a portable scanner.

A digital camera can also be used **to capture text outdoors** from banners, posters, billboards, walls, timetables and so on.

At last, you will probably find your own way to use a digital camera and its new capabilities. But if you are going to use it like James Bond does, please don't forget about intellectual property rights and copyright laws.

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[1] More information is available at www.FineReader.com

Tips & Tricks for Shooting Text with Digital Camera

It is important to learn how to use a digital camera effectively for the best OCR results, even for skillful photographers. Camera images differ from scanned images by a range of characteristics, but ABBYY FineReader OCR, with its adaptive recognition technology for camera images, makes them appropriate for OCR and conversion into text formats.

So, if you have FineReader OCR installed on your PC and know some simple "secrets" on how to shoot documents and books, you will certainly receive perfect results. Well, the secrets are:

Your Digital Camera

Use a digital camera with 4-megapixel resolution or higher, ideally equipped with the following features:
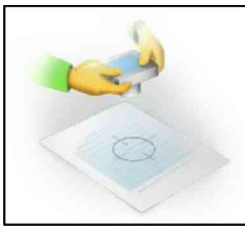- Flash disable mode
- Optical zoom
- An anti-shake feature
- Auto focus assist beam or manual focusing
- Manual aperture control or aperture priority mode

General Tips

Try to take 2-3 shots of the same document to make sure your hands are stable and an image didn't come out blurry or a corner of the document wasn't cut off.
Use the "close-up" or "macro" mode. In most cameras it is indicated by a flower icon.

Camera Positioning and Focus

- Position the lens parallel to the plane of the document.
- Fit the entire document into the frame.
- Focus on the center of a page.
- Use the camera's optical zoom to zoom in on the document and frame it tightly around the document.

Lighting and Flash
- Make sure there is sufficient lighting. Natural light is the best.
- Disable the flash (in most point-and-shoot digital cameras, the flash is on auto mode by default).
- If you have to take a picture of a document in poor lighting and need the flash, try to use the flash from 20 inches away and try to find additional light sources.
- Don't use the flash on glossy paper.

Extra Tips for Advanced Users
And finally, if you know your camera "inside out" and wish to improve your skills in photographing documents and books or wish to achieve good results in some special conditions, there are a few extra tips to follow:
- Use the white balance feature. If your camera has manual white balance, use a white sheet of paper to set white balance. Otherwise, select the appropriate balance mode for your lighting conditions.
- Enable the anti-shake setting: otherwise, use a tripod.

In poor lighting conditions:
- Auto focus may function incorrectly: therefore, you should switch to manual focus.
- Use the maximum aperture allowed by the camera (2.3 or 4.5). (In bright daylight, use smaller apertures: this will produce sharper images).
- If your camera gives you more than one choice of ISO speed, select the highest ISO setting.