

locr GPS Photo

– Automatic Geotagging Made Easy –

locr GPS Photo

Version 1.0

Quick Start Guide

© locr GmbH 2007

All rights reserved.

No part of this manual may be reproduced or transferred to other media without explicit written permission from locr GmbH, Braunschweig, Germany.

All brand or product names are trademarks or registered trademarks of their respective holders.

locr GmbH has written this manual to the best of its knowledge, but does not guarantee that the programs will fulfill the users' intended applications.

No warranty is made as to the specifications of features.

locr GmbH retains the right to make alternations of the content of the manual without obligation to inform third parties.

All quotes, sales, supply and manufacturing contracts from locr GmbH, including consulting, installation and other contractual services are subject exclusively to the General Sales and Delivery Terms of locr GmbH.

Contents

First steps	1
How to sign up at locr	1
How to install the locr GPS Photo software	2
Download and install the GPS Photo software from the locr web site.....	2
Geotagging with locr GPS Photo	3
Manual or automatic geotagging?.....	3
How to use manual geotagging	3
Geotagging using the address	3
Geotagging via “zoom and click”	5
How to use automatic geotagging.....	6
Further Settings	8
The “Settings” tab.....	8
Show large map control	8
Show small map control	8
Show overview map control	8
Upload a resized copy of the original photo.....	8
The “Time Adjust” tab.....	8
The locr GPS Photo software and Google Earth.....	9
Zoom in, zoom out, move map - the easiest way.....	10
Zooming and panning with the mouse	10
Zooming and panning using the buttons	10
Uploading photos with geo information	11
Help (FAQs)	11

I have a question ... 12

What does “Geotagging” actually mean?..... 12

What is a datalog GPS receiver and how does it work? 12

GPS 12

GPS receivers 13

Datalog GPS receivers 13

First steps ...

How to sign up at locr

Signing up at locr is easy.

- To sign up for the **first time** open the locr web site: <http://www.locr.com>.
- Click on “Sign up”.



The image shows a dark grey navigation bar with several orange text links: 'Log in', 'Upload', 'Downloads', 'Sign up', 'Forum', and 'Language'. A white mouse cursor is pointing at the 'Sign up' link.

- On the next page, please fill the compulsory fields (with *).
- The Anti spam verification is obligatory, too.
Therefore, in the list box please select the place name in the middle of the map.
- Click on “Create” to complete the registration.

Having successfully signed up locr will send you an e-mail.

You can change the password at any time.



If you have already signed up, just click “Log in”.

How to install the locr GPS Photo software

If you want to download, install, and use the locr GPS Photo software you need an account and a password, so sign up (“How to sign up at locr”, see page 1).

To install the locr GPS Photo software, you can download and open the installation program from the locr web site.

Download and install the GPS Photo software from the locr web site

- On the locr web site (<http://www.locr.com>) click on “Downloads” and follow the instructions on the screen.



- To install the locr GPS Photo software, double-click the “locrGPSPhoto.exe” file.



- Follow the instructions on the screen.

Geotagging with locr GPS Photo

To geotag your photos automatically you have to download and install the locr GPS Photo software.

Manual or automatic geotagging?

There are two ways to geotag your photos: The photos can be tagged manually or automatically. For automatic geotagging you need a datalog GPS receiver in addition to your digital camera. If you want to view your geotagged photos on Google Maps, you have to be connected to the internet.



Tip: Geotagging adds information to your photos. Therefore, locr recommends you to save the original photos to a backup folder before geotagging them with the locr GPS Photo software!

How to use manual geotagging

Geotagging using the address

Geotagging using the address is an easy way to find out the position where a photo was taken.

- Start the locr GPS Photo software:
“Start” > “Programs” > “locr” > “locr GPS Photo”.
On the left you see the “Photos” area.
- To open a photo, click “Add...” and select a photo/photos.
Photos, which already contain GPS information, will be flagged by an “x”, already uploaded photos by a “u”.
- In the list choose the photo/s you’d like to geotag.
You will see the photo in the “Photo Preview”.
- If you know exactly where the photo had been taken, enter the address and click “Search”.

Address can be:

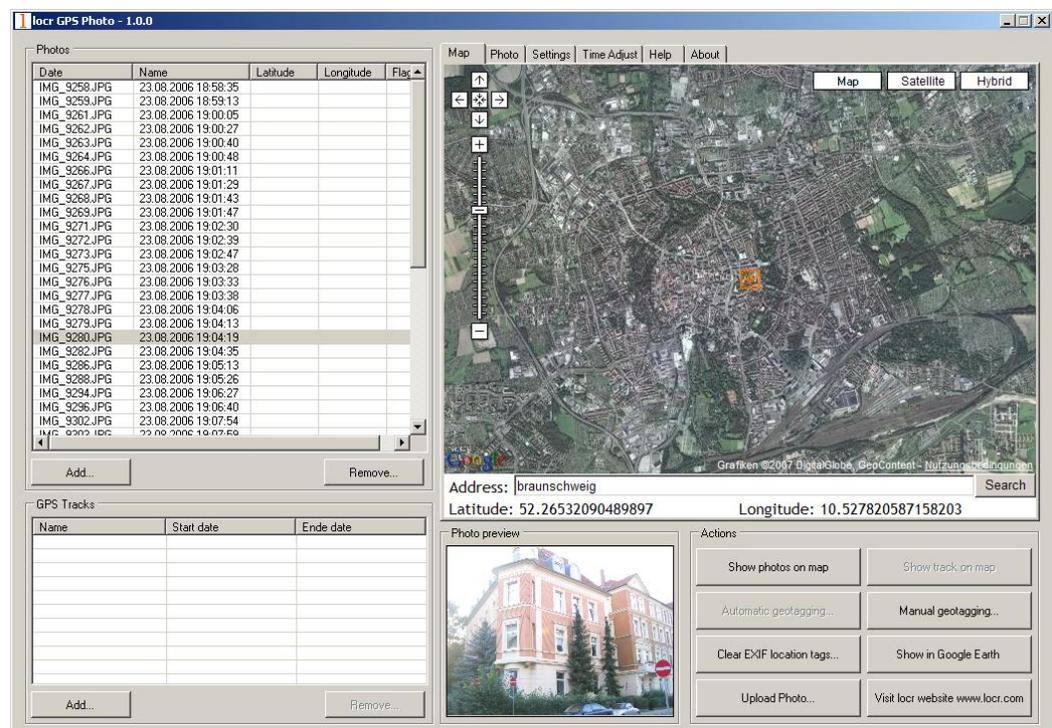
- Street, number, city, country, ...
Example: Kurfürstendamm 12 Berlin Germany
- Geographic locations, country
Example: Zugspitze Germany



Please note: The correct order is important, whereas a comma is not needed between the search criteria.

Tip: If a location cannot be found, omit the street information. Or, in addition, specify the country. If you specify the country, you should always use the English spelling. Doing so, the location will be found reliably. If you are not sure of the right English spelling, there is a simple trick to find out. Have a look at the FAQ topic “Some address cannot be found. What can I do?” on the “Help” tab.

- For final adjustment you can use the mouse to move the map. Drag it to the desired position. The crosshairs should be in the middle of the map.
- If necessary, zoom in/zoom out the section of the map, or select another view: map, satellite, hybrid (satellite view with locations).
- Then click on “Manual Geotagging” to save the new information. The marker will be set right in the middle of the map.



- Clicking the “Show Photos on Map” button, shows your photos in combination with their position on the map. Note: To show the position on the map, lochr uses Google Maps, which means you need a fast internet connection.
- The “Clear EXIF location tags...” button allows you to delete the latitude and longitude information. Caution: The information will be deleted for all photos, not only for the selected one/s!
- To view the photos in Google Earth, first click the “Show in Google Earth”, and then the “Yes” button.

- Now select the photo/s you want to upload and click the “Upload Photos” button.
- At least determine the privacy status, click “OK”, and then have a look at the locr web site.

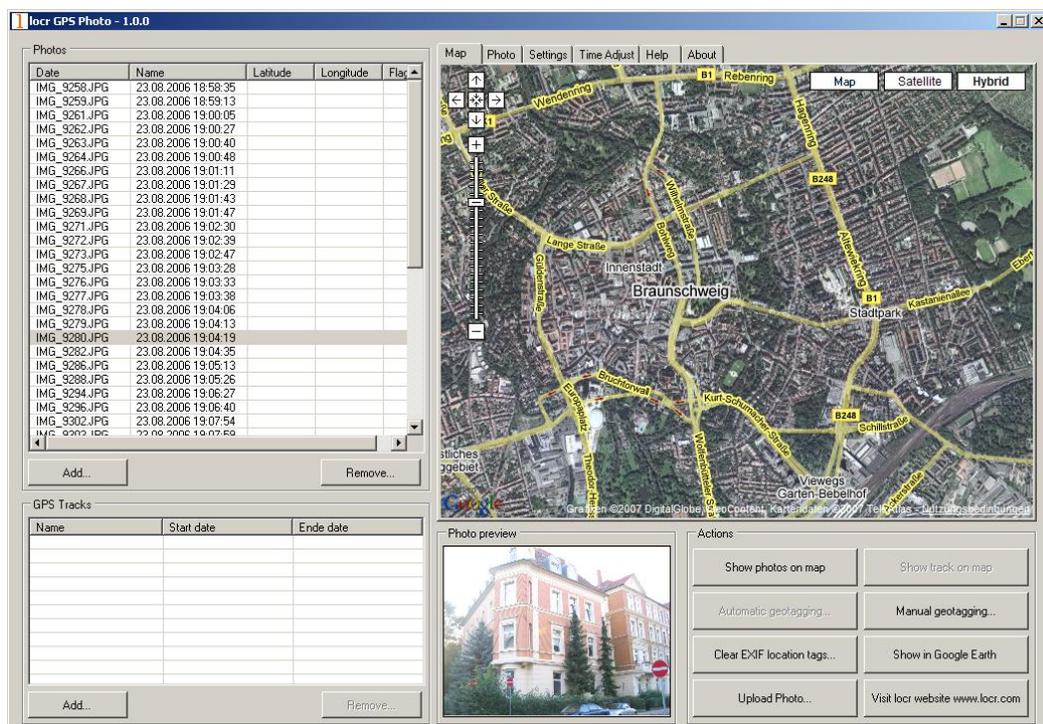


Please note: Uploading the photos may take a while.

Geotagging via “zoom and click”

Sure, geotagging using the address is the easiest way. But if you do not know the exact address, or rather prefer to look, where the photo may have been taken, do the following:

- Start the locr GPS Photo software:
“Start” > “Programs” > “locr” > “locr GPS Photo”.
On the left you see the “Photos” area.
- To open a photo, click “Add...” and select a photo/photos.
Photos, which already contain GPS information, will be flagged by an “x”, already uploaded photos by a “u”.
- In the list choose the photo/s you’d like to geotag.
You will see the photo in the “Photo Preview”.
- Zoom to the position where the photo has been taken.
- If necessary, select another view: map, satellite, hybrid (satellite view with locations).
- The located position should be in the middle of the map’s section.



- Click the “Manual Geotagging” button to save the new information.
- The marker will be set right into the middle of the section of the map.
- If necessary, you can drag the marker to the desired position for a final adjustment, and click “Manual geotagging” again.
- Clicking the “Show Photos on Map” button, shows your photos in combination with their position on the map. Note: To show the position on the map, locr uses Google Maps, which means you need a fast internet connection.
- The “Clear EXIF location tags...” button allows you to delete the latitude and longitude information. Caution: The information will be deleted for all photos, not only for the selected one/s!
- To view the photos in Google Earth, first click the “Show in Google Earth”, and then the “Yes” button.
- Now select the photo/s you want to upload and click the “Upload Photos” button.
- At least determine the privacy status, click “OK”, and then have a look at the locr web site.

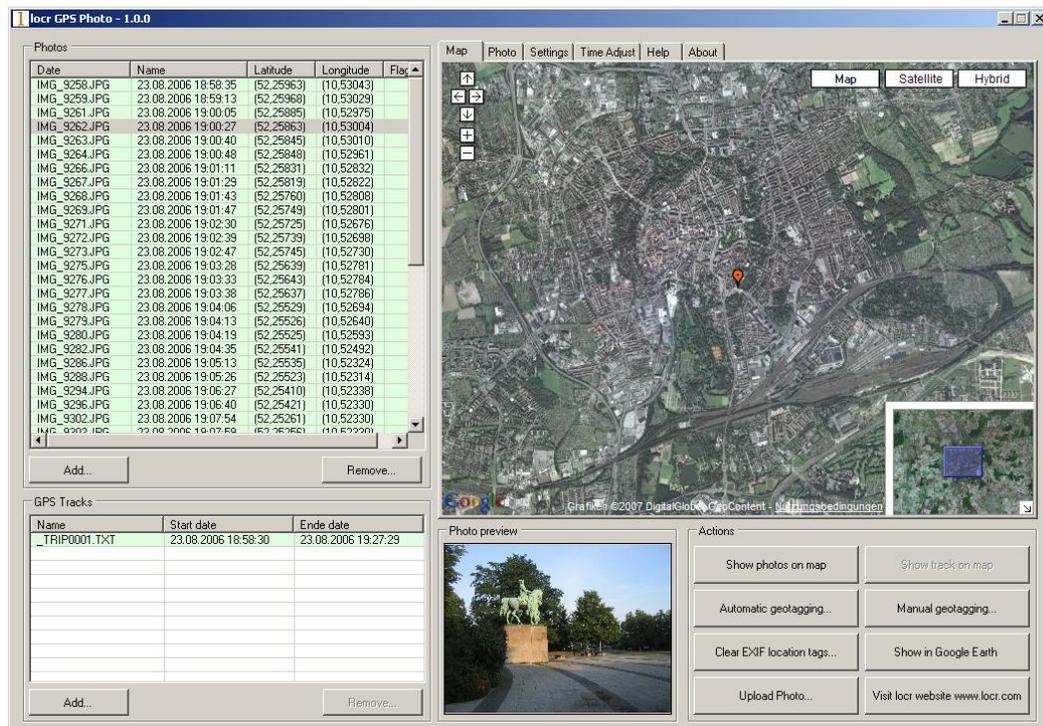
Tip: Double-clicking the left mouse button (zoom in), or double-clicking the right mouse button (zoom out) makes zooming much faster.

How to use automatic geotagging

- Connect the datalog GPS receiver to your PC.
- Save the GPS files to i.e. your hard disk. If necessary, convert the GPS files into a valid *.nmea format.
For more information, please refer to the user’s manual of your GPS device and to the FAQs (“Help” tab).
- Start the locr GPS Photo software:
“Start” > “Programs” > “locr” > “locr GPS Photo”.
On the left you see the “Photos” area.
- To open a photo, click “Add...” and select a photo/photos.
Photos, which already contain GPS information in the EXIF header, will be flagged by an “x”, already uploaded photos by a “u”.
- Now, you need the GPS information. In the “GPS Tracks” area click on “Add...” to read the needed files from the datalog.
Matching photos will be marked green and the calculated latitude and longitude will be displayed in “()”.



The position (latitude/longitude) has **not yet** been written into the EXIF header. This will **only** happen if you click the “Automatic geotagging” button.



- Then click “Automatic Geotagging”.
The locr software now automatically completes the given photo data with the GPS information. The information will be written into the EXIF header, the “()” in the “Latitude” and “Longitude” columns will disappear.
- Clicking the “Show Photos on Map” button, shows your photos in combination with their position on the map. Note: To show the position on the map, locr uses Google Maps, which means you need a fast internet connection.
- The “Clear EXIF location tags...” button allows you to delete the latitude and longitude information. This button is helpful in combination with the “Time Adjust” option (see page 9).
Caution: The information will be deleted for all photos, not only for the selected one/s!
- To view the photos in Google Earth, first click the “Show in Google Earth”, and then the “Yes” button.
- Now select the photo/s you want to upload and click the “Upload Photos” button.
- At least determine the privacy status, click “OK”, and then have a look at the locr web site.



Please note: Uploading the photos may take a while.

Further Settings

The “Settings” tab

Show large map control

If you select the “Show large map control” option, all zoom & pan controls will be displayed: the complete zoom buttons (, ) as well as all pan buttons (, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , , ,

, , , , , , , , , , , , , , , , , , , , , , , ,

- If your photos already contain GPS information in the EXIF header (Flag = “x”), that seem to be “wrong”, use the “Clear EXIF location tags...” button to delete these information.
Caution: The information will be deleted for all photos, not only for the selected one/s!
- Select the “Time Adjust” tab.
“System time” displays the current system time of your computer.
- Use “Days”, “Hours”, etc. to set the “Camera time” according to the time displayed on the camera, with which your photos were taken.
Based on this time correction an exact positioning can be made.
- Click the “Automatic Geotagging” button.
The calculated position will be taken over. It will be written into the EXIF header automatically, and will be saved on your hard disk as a part of the photo.



Important note: For an exact calculation of the position during the automatic geotagging you should **always** set and keep the camera time set according to the system time of your computer – *regardless, where you are driving or flying to!*

For better understanding: In order to match the GPS files with the photos locr GPS Photo uses the system time of the computer. Having set the camera time to a time different from the system time of you PC, locr GPS Photo will not be able to find matches, and the automatic geotagging will fail. Therefore, please always use the system time, or – if necessary – use the “Time Adjust” option.

The locr GPS Photo software and Google Earth

To be able to view locr photos in Google Earth, Google Earth has to be installed on your computer.

No matter whether you use the locr website, or the free locr GPS Photo software for geotagging, the information on the position (longitude and latitude) is saved. In order to position the photos correctly Google Earth needs exactly this information.

For data transfer with Google Earth locr uses the KML file format.

To view the photos on Google Earth, first click the “Export to Google Earth”, and then the “Yes” button.

Zoom in, zoom out, move map - the easiest way

Basically you can use either the buttons of GoogleMaps or the mouse solely. Zooming and panning using the mouse or the buttons can be used on the locr website as well as with locr GPS Photo.

Zooming and panning with the mouse

- **Zooming in/magnifying the map**
Double-click the left mouse button. The map view will be enlarged around the cursor.
- **Zooming out/de-magnifying the map**
Double-click the right mouse button. The map view will be reduced around the cursor.
- **Moving the segment of the map**
Press *left* mouse button, *keep it pressed*, and, at the same time, move the segment of the map into the desired direction.

Zooming and panning using the buttons

- **Zooming in/magnifying the map**
Mouse click the Magnifying  button. The map view will be enlarged.
- **Zooming out/de-magnifying the map**
Mouse click the Minimize  button. The map view will be reduced.
- **Moving the segment of the map**
Mouse click on one of the respective buttons: , , , . The visible section of the map will be moved left, right, up, or down.



Note: You can also zoom using the scroll wheel of your mouse - if you mouse has a scroll wheel. Try out. Exception: the overview page (Photo, Map, More information, More photos) does not allow zooming with the scroll wheel. There you scroll within the page instead.

Uploading photos with geo information

You have lots of geotagged photos with the exact geo coordinates? The respective coordinates are stored in the EXIF header of your files?

Great: So you don't have to geotag your photos manually again!

The information will be read automatically when uploading the photo via the locr GPS Photo software. Your photo will be displayed with the exact position on the map. If you want to know more about the place where the photo was taken, just have a look at the Wikipedia articles which are also automatically assigned to the picture on the locr website.



Note: Uploading photos is only possible if you have signed up, or are logged in. You haven't signed up yet? Have a look at "How to sign up at locr" on page 1.

Help (FAQs)

In case you need some help or find some answers, simply click the "Help" tab and you will find a comprehensive list of FAQs (Frequently Asked Questions).



I have a question ...

What does “Geotagging” actually mean?

The term “geotagging” is sometimes also referred to as “geocoding”.

Using “geotagging” e.g. photos, or videos, can be complemented with geographical coordinates (latitude and longitude, or physical address). This geographical identification data is saved together with the photos. Thereby photos can be assigned easily and explicitly to maps like GoogleMaps, or can be viewed on Google Earth.

Via the **locr web site** the coordinates are determined by manual geotagging. Together with the respective photo they are stored in the locr data base.

The **locr GPS Photo** software works differently. No matter whether the coordinates have been associated using manual or automatic geotagging, the information is written into the EXIF* header of the photo. Suitable software can read and use this information.

What is a datalog GPS receiver and how does it work?

A datalog GPS receiver is a device, which - as long as it is switched on - continuously receives and logs (stores) data concerning its current position.

The operating mode of a datalog GPS receiver is based on the principle of the global satellite-based positioning system (GPS).

GPS

GPS (Global Positioning System) uses satellites that permanently emit their changing position and time. On the basis of this information global positioning can be generated.

* Exchangeable Image File Format. Specification created by the Japan Electronic Industry Development Association (JEIDA) for the image file format used by digital cameras header of the photo.

GPS receivers

Based on the information emitted by the satellites GPS receivers generate their own position. Therefore they need the signals of at least three satellites.

Datalog GPS receivers

Contrary to a “pure” GPS receiver the datalog GPS receivers store the received data to an internal memory. Being switched on, datalog GPS receivers start writing the position, date, and time into a log file. This logged data can be read and saved on e.g. a PC. So the data is also available for other applications like the locr PGS Photo software.



Note: Different datalog GPS receivers create log files in different formats. How these files can be used with locr GPS Photo is explained in the FAQs: “Which GPS datalogger can I use for automatic geotagging anyway?”

