



## Embedding ICT across the curriculum

### Using a GPS Data logger in the Classroom

"Changing the way pupils use maps to gather and share information"

The I-Got U 120 GPS data logger is a super piece of hardware that not only calculates and displays routes created on the screen but also enables the user to add geo-tagged photographs and share these routes with other web users.



Linked to the Key Stage 2 programme of study teachers and pupils will increasingly use such devices in the future to:

- Collect and record evidence
- Create and label maps
- Analyse evidence and draw conclusions
- Accurately describe what settlements and habitats look like
- Compare and contrast settlements in and outside the United Kingdom



#### Possible field work activities might include:



- Record Field work trips
- Share information about their school grounds and local places of environmental interest
- Record and share information about Historical sites (including local museums, and galleries)
- Create Maths Trails
- Link projects with other schools
- Record and share information about wildlife habitats (birds, insects, mammals) and farming patterns

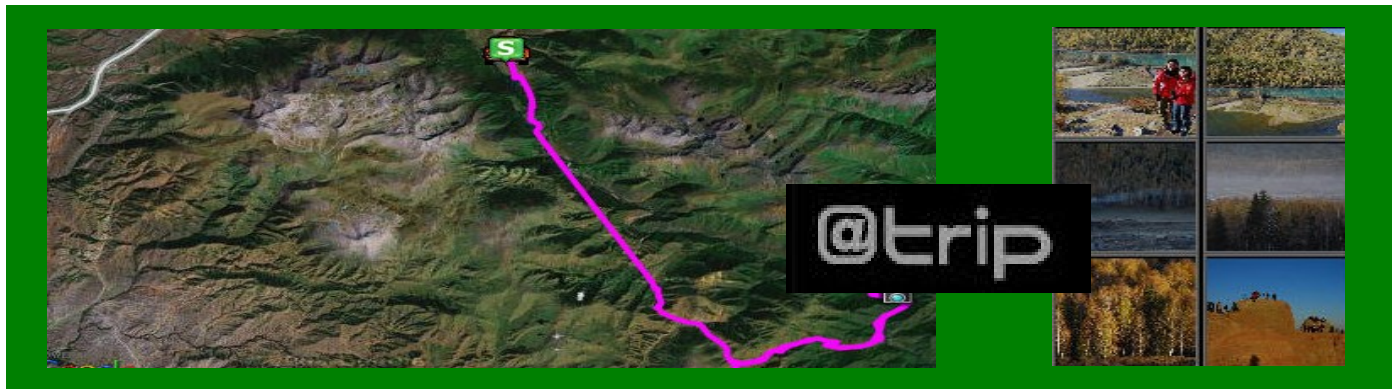
For an introduction on how to use the "I-Got-U data logger" read the accompanying "Starter Guide" or click on any of the web links below:

Mobile Action web-site	<a href="http://global.mobileaction.com/">http://global.mobileaction.com/</a>
I-GotU demo	<a href="http://global.mobileaction.com/product/product_i-gotU_USB.jsp">http://global.mobileaction.com/product/product_i-gotU_USB.jsp</a>
@trip PC Version 2 Software	<a href="http://global.mobileaction.com/download/i-gotU_download.jsp">http://global.mobileaction.com/download/i-gotU_download.jsp</a>
I-gotU GPS Travel Logger	<a href="http://global.mobileaction.com/download/i-gotU_download.jsp">http://global.mobileaction.com/download/i-gotU_download.jsp</a>

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## Create and Share your own routes and map

### Using the I-Got-U GPS Data Logger

The I-Got-U 120 Data logger is a very accurate GPS device that teachers and pupils can use to record journeys between fixed points. Data stored on the GPS data logger can be simply downloaded and shared with others using either the @trip software provided or be transferred and published on Google Maps.

#### Preparing to use the GPS Data logger for the first time

The **GPS Data Logger** is supplied with a **@trip PC CD-ROM** GPS data logger, **GPS Logger Dock/USB Cable** and colour case.

Prior to using the data logger for the first time you will need to install the drivers and @trip instructions required to create and edit your own maps.

The software successfully installed, now connect the USB cable to the data logger and the other end to the USB slot on your laptop or PC.

Note when this is done that the red LCD light will start flashing. This will continue for up to 4 hours whilst the device is charging. Once fully charged the red light will disappear.



#### Taking your first GPS Reading

To take your first GPS reading position the device on a balcony or any place where there is not an “over hanging” obstruction. Once a GPS reading has been taken both the blue and red indicators on the data logger will flash twice. The GPS data logger is now ready to be used.

#### Recording your first journey

To log a journey press the GPS button once. The blue LCD light will flash once followed by the two LCD indicators blinking blue twice.



Now proceed to commence your journey. While moving between points the blue and red LCD indicators will continue to flash every couple of the seconds.

To conclude your journey press the GPS button again. The red LCD indicator will flash once.

To record a new journey just repeat the steps listed above.

### How to create and share your first trip – “A 3 stage process”

Record your journey following the steps outlined on page

#### Stage 1 - Downloading a route

Load the @tripPC software

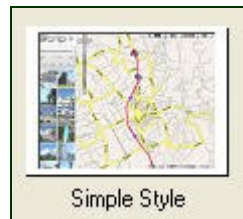
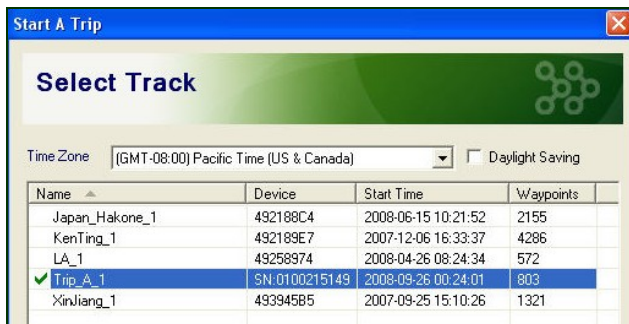
Click on “yes” to download GPS route data

Enter your @trip password

The page below will appear



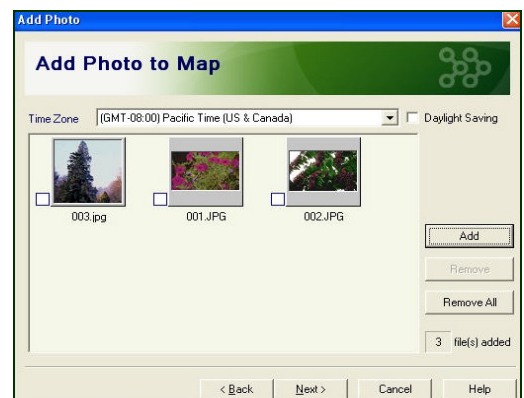
Select your chosen “track” (route) and map template (sporting, traditional or simple)



Now proceed to check Time Zone and import any photographs you plan to display later on the map.

Follow the on screen instructions to save and display your route map on the screen.

*Creating a trip map is that simple!*



#### Stage 2 - Composing a Route

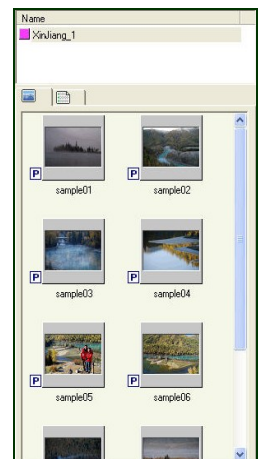


Click on the edit trip icon to edit the route map you have just created or the Import GPS Track to select another route



Now click on the Import Photos icon to add any additional photographs to your map

Note: All uploaded images will be displayed on the left hand side of the screen.

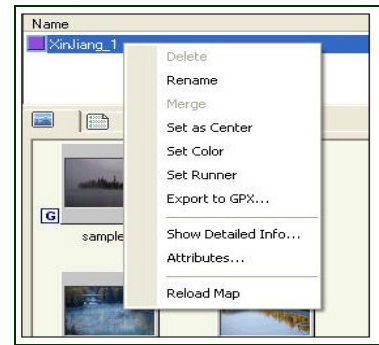


## Displaying photographic images on the route map

Right click on the route title.

Select **show detailed information**

A “Waypoints” table will now appear on your screen.



Time	Latitude	Longitude	Altitude	Distan...	Leg Ti...	Speed...	Course
2007/09/25 15:10:26	N 48.679779	E 87.026489	0.00	1109.1	63	59.0	168.4
2007/09/25 15:11:29	N 48.670010	E 87.029533	0.00	1057.9	63	53.8	166.4
2007/09/25 15:12:32	N 48.660763	E 87.032921	0.00	504.7	216	65.7	125.6
2007/09/25 15:16:08	N 48.658119	E 87.038506	0.00	92.0	221	0.6	271.6
2007/09/25 15:19:49	N 48.659726	E 87.039726	0.00	43.3	68	4.0	193.5
2007/09/25 15:20:57		7117	0.00	168.1	142	3.8	255.2
2007/09/25 15:23:19		1904	0.00	104.1	144	1.5	104.2
2007/09/25 15:25:43		3278	0.00	54.2	67	0.2	259.7
2007/09/25 15:26:50		3553	0.00	72.2	81	2.0	67.6
2007/09/25 15:28:11		3461	0.00	150.0	69	1.8	266.3
2007/09/25 15:29:20		1424	0.00	156.1	82	0.3	93.6
2007/09/25 15:30:42		3545	0.00	90.4	86	1.4	283.0
2007/09/25 15:32:08		3347	0.00	134.0	68	2.6	91.4
2007/09/25 15:33:16	N 48.657288	E 87.037170	0.00	71.8	61	1.8	267.6
2007/09/25 15:34:17	N 48.657261	E 87.036194	0.00	140.6	73	1.3	133.5
2007/09/25 15:35:30	N 48.656391	E 87.037582	0.00	154.2	81	3.0	314.6
2007/09/25 15:36:51	N 48.657364	E 87.036087	0.00	33.6	82	2.2	252.2

Note: Waypoints are the time intervals between GPS recordings. The gap between readings can be adjusted by the user.

To attach photos of your journey to any/all of the Waypoints just:

Select (highlight) a Waypoint

Click on the select a landmark icon



Now enter a title for the landmark

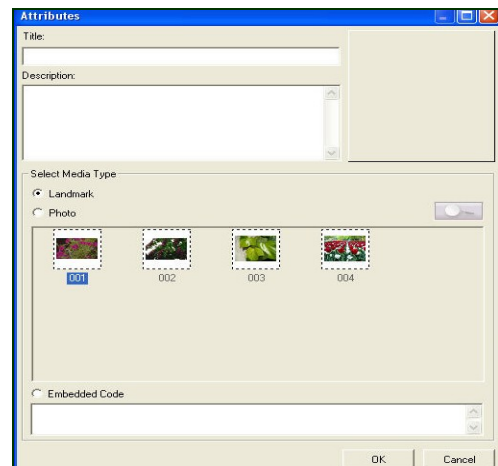
Select media type (photo)

Select a photo from your uploaded images and click on OK

Now save your edited map



Next time you reload this map a camera icon will appear next to the selected waypoint.



## How to re-position an image on a map

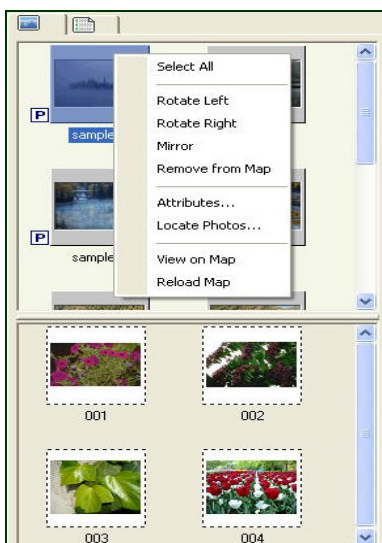
Position your cursor in the upper window (photo landmarks) on the left hand side of the screen page. Now right click in this box and select Locates Photo

The box opposite will appear.

Proceed now to change the time the photograph was taken

Now click on OK to confirm these changes.

The next time you view the map the edited image will appear on the route at the new “waypoint” location.



### Stage 3 - Sharing a Map

Click on the link below to visit the @trip web-site. Click on new user to create an account.

<http://www.a-trip.com/>

This will enable you to convert and display your routes on a Google Map



Load the @trip PC software

Click on the Share Trip icon

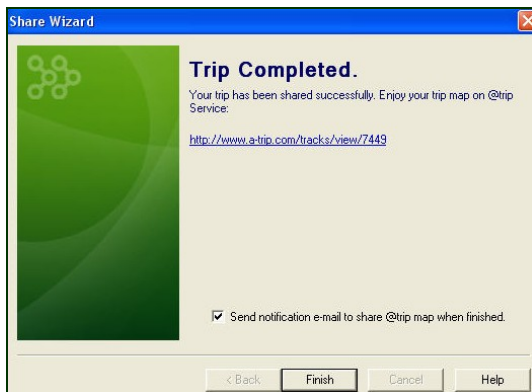
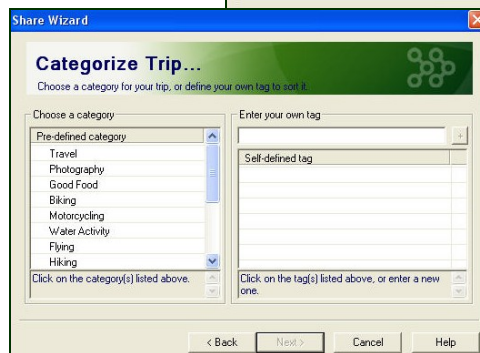
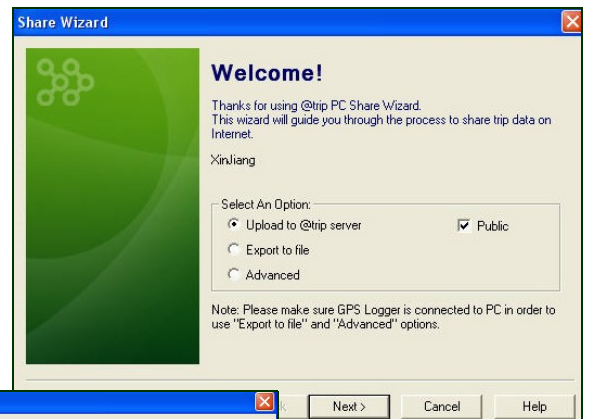


The page opposite will appear

Highlight **upload to @trip server** and highlight **public**

Now click next

Enter your log-in details and proceed to upload the map you have created



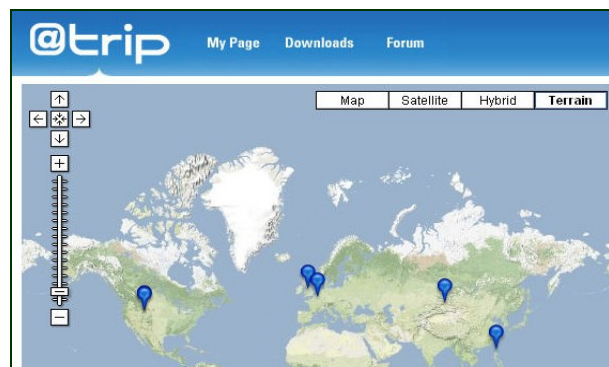
The map- will be saved and given its unique URL address

To view the map just type the unique URL address

### Uploading and Sharing photos

Images stored in a trip (route) can be uploaded and shared on either Picasso or Flickr.

For instructions click on the web link below and download the @trip help guide.



## How to create a Photo Trail

Have you ever wanted to create a "Photo Trail" on a map at the click of a button? This can be easily achieved using the @trip software.

Just follow the simple instructions below:

### Adjust your camera settings

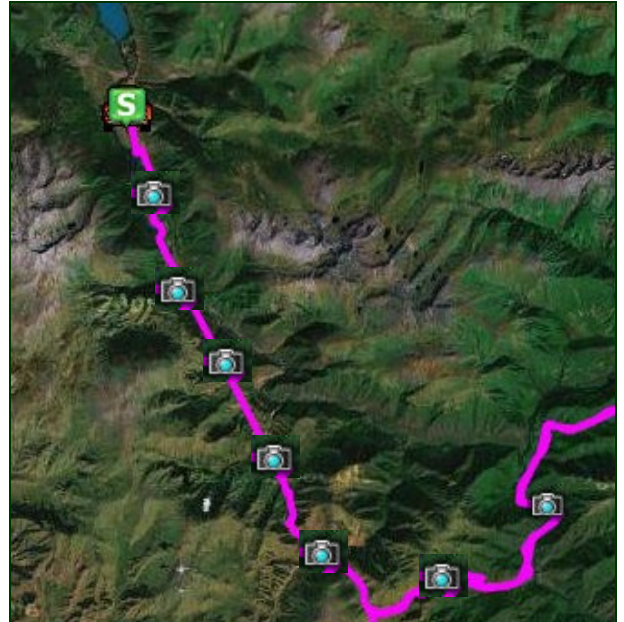
To instantly create a Photo Trail the time on your map must be the same as that displayed on the camera

To achieve this:

Select the adjust camera option



Reset your camera date and time to correspond with that displayed on the screen



Now click on the data logger to commence your commence.

Remember to take your camera!

Now every time you take a photo you will be able to immediately fix that image to the exact point on the route map!

### Adding the photos to your map

Download save your new trip (route.)

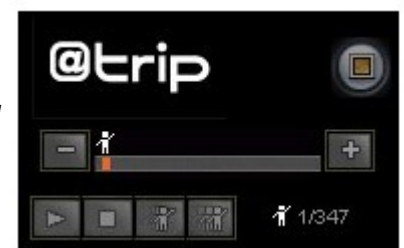
Click on Upload Images to add all photos to the trip folder.

*All photos taken on the route with the camera will be immediately tagged and fixed to the map*

**Remember:** You can annotate and display text with each photo on the map.

Click on the replay facility to review your work.

Now save your edited work.



*The replay facility*

To share, just upload the route to the @trip folder and copy to others the URL address displayed on screen.