



## Location in Digital Cameras

Digital cameras today come with a multitude of features and deciding which one to buy can be a pretty challenging task. However, no one is complaining as consumers get more features at ever reducing costs. Camera makers on their part have been working relentlessly to deliver innovative features to their users, for example, face recognition technology, shake reduction technology, high definition multimedia interface, direct printing from a camera and wireless connectivity.

With location technologies like Global Positioning Systems (GPS) becoming mainstream in consumer devices, camera companies can push the innovation envelope further by changing the way consumers use their camera. The applications for location in camera are varied - from location stamping of images to converting digital cameras into a personal navigation device.



### Where did you take this photo?

#### Location Stamping

How many times have we faced this question from an awestruck audience while displaying our photo album.

This question is easy to answer if one is talking of the Eiffel Tower, the Golden Bridge, the Taj Mahal or the Great Wall of China. In most cases, however, it is very difficult to identify the location, more so if many months have elapsed since you took the picture.

Now, cameras can insert location stamp - latitude and longitude - into images using a GPS receiver. And with software that can read location stamp and display them, users can view the exact location on a digital map where an image was taken.

So next time, some one asks this question, you have the answer !

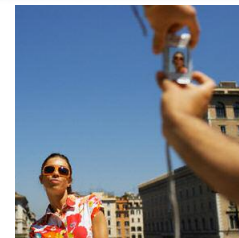


### How do we find those images from Rome last summer?

#### Location based Image Search

The number of images created using a camera phone and digital camera runs into billions annually. How do you make sense of the enormous digital library that has not been painstakingly catalogued. How do you, for example, locate images that you took in Rome last summer.

Thankfully, it is not a challenging problem anymore. Digital cameras are increasingly providing ways of inserting location stamp - latitude and longitude - into images using GPS receiver. Timestamps - when an image was taken has been around for a while. With location and time stamped in the image, one can now zero in on the image taken at specific location at a specific point of time.



### Is there a Sushi place close by?

#### Handy Travel Guide

Travel guides now come in digital form on memory cards. With the large screens now available on portable gaming devices, you can now view the travel guide on the handheld.

With a little help from GPS your portable gaming device becomes a smarter travel guide. For example, you could search for the nearest sushi restaurant, or locate all tourist points within a radius of 1 km. And since your current location is always known, you will never get lost on the way while wandering around.

Travel can be fun again!