Annex M - Alpha Channel (Alpha Channel)

The images are traditionally composed of three channels: red, green and blue. However, at
As use of digital images was improved joined a new channel to be
called alpha. This channel provides opacity to the image.

Vs. alpha channel. Color Key

It is commonly confused with a color transparency key (color key) with opacity with
an alpha channel, but nevertheless, this has a subtle but important difference. Transparency
obtained through a transparent colored key that all those pixels of that color. On the other
side, with the alpha channel are achieved different levels of transparency or partial transparency.

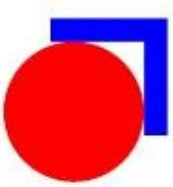
Opaque Image

Transparency through
a key color

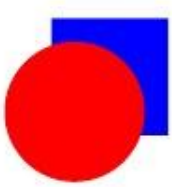
Transparency through
an alpha channel

Image Overlay

The most common use is for alpha channel image overlay. This channel allows
objects behind other objects, are also visible. The use of layers
generate final images is increasingly common and is made possible through the technique
just mentioned. Another feature of an image with alpha channel transparency is a
variable within the same image.



Overlay without
transparency



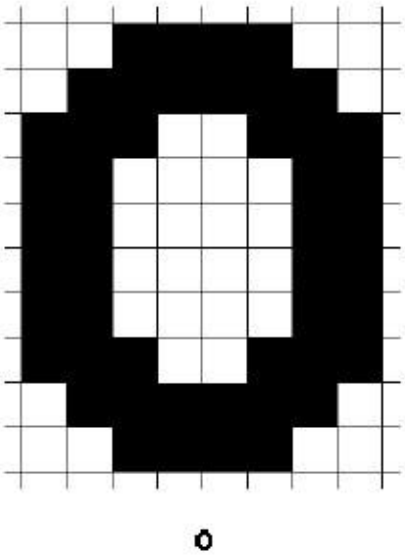
Overlap
with a key color

Overlap
with an alpha channel

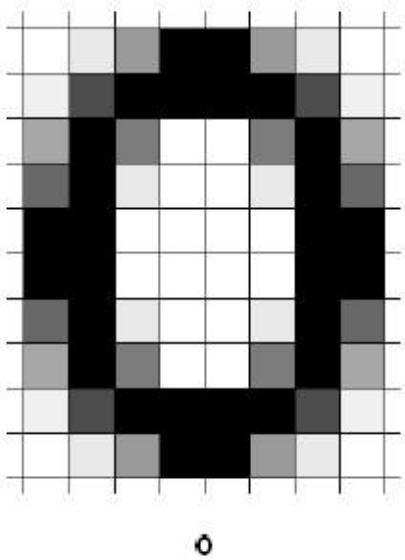
Overlap
with an alpha channel
variable within
the same image

Antialiasing

The use of an alpha channel is also common to achieve antialiasing. This is used to make the edges of a figure
softer and colors achieved through intermediate between those of the figure and its environment. It is very common to see this in
text or icons XP incorporating this channel while ago did not. That's why in these
icons was achieved more smoothly in contrast to the white background in the browser, or wallpaper
on the desktop.



A "or" anti-aliasing



A "or" anti-aliased

If these "or" are stored as image and superimposed on another image or background color can vary, the
only way to achieve this anti-aliasing, is through an alpha channel, as would be achieved otherwise rather gray
a combination of background color and the color of the "o".