

Coding Principles of Beacons and Indicators

A visual signal must be designed in such a way that anyone who sees it can recognise it and is able to react immediately to it. EN 60073 (IEC 60073:2002) defines the coding principles for indicators and actuators.

Colour and flashing are the most effective means of attracting attention, and so need to be applied consistently; colours for priority and flashing for attracting attention. When two levels of attention are required, two flash speeds can be used; normal for the highest priority signal (84-168 flashes per min) and slow for the lowest priority (24-48 flashes per min). Typically, the normal speed should be four times as fast as the slow speed.





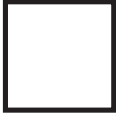
The colours Red/Amber/Green are the most standard form of visual signalling and most people can recognise and relate to each colour. The colours Blue and White give additional levels of indication.

Rather importantly, the position of each colour is vital. Red should always be at the top, Amber middle, and Green at the bottom. This is because in some cases, a person may be colour-blind and so will not be able to discern colour, but will know by the position of the light what it signals. Colours should also contrast with other colours in the same area to make them distinguishable, again, so that they can be immediately understood.



Alternatively standardised shapes, with or without colour, may be used to signify the meaning, this further aiding a person that is colour-blind.

As per EN 60073 (IEC 60073:2002) internationally used and recognised colours and shapes may be summarised as follows:

Colour	Shape	Safety Meaning	Condition of a process/State of equipment
Red		Danger	Emergency/Fault
Amber		Warning	Abnormal
Green		Safe	Normal
Blue		Mandatory Significance	
White		No specific meaning assigned	