

SWEDX Pixel defect Policy

General information

Some LCD modules may have defective pixels. These appear as either bright or black depending on what is displayed on the screen. Today there is a certain tolerance for broken pixels from all manufacturers. An international industry standards have been developed to equate the different manufacturers' view of broken pixels, ISO 13406-2

http://en.wikipedia.org/wiki/ISO_13406-2

SWEDX criteria for defective pixels

SWEDX offers 3 pixel policies

Pixel policy 1 (Applies for PP1 products)

Pixel policy 2 (Applies for PP2 products)

Pixel policy 3 (Applies for PP3 products)

A pixel consists of 3 pc sub-pixels, red, green and blue (RGB).

A pixel is defective if one or more sub-pixels can not be controlled. This means that the sub-pixel stuck in a state where it retains the same color regardless of which color has been selected but it may also be intermittent. Typically, these errors can be seen as bright dots on a black background, and if it's a white background so it can also be seen as black or colored dots.

SWEDX specifications for defective pixels for **pixel policy 1** are according below

Bright pixels (visible pixels on dark background)

3 assembled sub-pixels (white pixel) =	0. Not allowed
2 assembled sub-pixels =	2. Allowed
1 sub-pixel (red, green or blue) =	4. Allowed
Distance between the pixels =	Minimum 20mm
Total allowed bright pixels =	4 Allowed

Dark pixels (dark pixels on bright background)

3 assembled sub-pixels (black pixel) =	1 Allowed
2 assembled sub-pixels =	4 Allowed
1 sub-pixel (red, green or blue) =	4 Allowed
Distance between the pixels =	Minimum 20mm
Total allowed dark pixels =	6 Allowed

The maximum allowed defective pixels/sub-pixels (bright+dark) = 6 Allowed

Information:

A Full HD LCD module's resolution is 1920x1080 and contains 2073600 pixels

An Ultra HD LCD module's resolution is 3840x2160 and contains 83030400 pixels

