

Compucon 15" LCD Monitor A590ST

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LCD Quality Standards and Pixel Policy

Compucon uses selected high quality panels for the manufacture of its Compucon branded LCD monitors. Nevertheless, the display may have a few innate cosmetic imperfections that appear as small dark or bright spots. This is not a specific occurrence to Compucon monitors, but linked to the current state of the art of LCD manufacturing. In fact, LCD panels contain millions of small sub-pixels that are each turned on or off by a transistor which make up the picture on the screen. It is extremely difficult to manufacture millions of perfect transistors on a large surface. As an example, a 15" panel that has a native resolution of 1024x768 contains 2,359,296 sub-pixels and a 17" or 18" panel that has a native resolution of 1280x1024 contains 3,932,160 sub-pixels. Due to the immense number of sub-pixels, it is extremely difficult to eliminate non-performing pixels in spite of current high technology production processes. Therefore, no manufacturer can currently guarantee 100% non-performing pixel free panels at a reasonable price.

How visible a defect is depends on its type and location.

Each pixel is made up of one red, one green and one blue sub-pixel.

- A defect in a sub-pixel is not very visible, and can often only be seen against specific backgrounds.
- Adjacent sub-pixel defects appearing close in proximity are more visible than "geographically dispersed" defects.
- A full-pixel defect (all three R/G/B sub-pixels always on or always off) is quite visible.

Compucon does not accept any full-pixel defects upon shipment. The vast majority of Compucon monitors do not have visible imperfections. On the other hand, Compucon is obliged – for the reasons outlined before – to accept the possibility of a few sub-pixel defects.

Compucon has established clear standards for the maximum of imperfections per panel that can be tolerated. Your display has been checked to comply with these standards.

Details of Compucon's Pixel Policy: 15" LCD Monitor A590ST

(Applicable to the LCD Monitor sold within Australia & New Zealand only)

The Compucon monitor is evaluated on the number of acceptable non-performing pixels and the distance between each non-performing pixel. The terms "non-performing" and "defective pixels/sub-pixels" are used interchangeably for ease of identification. All monitors have been tested to ensure they comply with this standard.

To identify non-performing pixels, the monitor shall be viewed under normal operating conditions, preferably in its native resolution, and from a normal viewing distance of at least 50 cm (16 in.). Under these conditions the Compucon monitor shall not show more than (whichever of the following limits is reached first):

- a total of 4 non-performing pixels, or
- 4 dark non-performing pixels appearing as a black dot on a bright or white background, or
- 2 non-performing pixels of any type located less than 10mm from each other.

Compucon will entertain any warranty request concerning non-performing pixels. However, it should be noted that non-performing pixels are innate within the current LCD panel manufacturing process. As such, Compucon cannot guarantee that the return unit to our customers will be 100% free of pixel defects or have fewer numbers of defects than the accepted standard of non-performing pixels as outlined before.