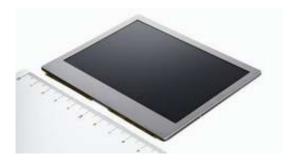


## **Sony To Begin Mass Production of Full-Color OLED Displays**

September 14 2004



## New Sony Thin Screens for Mobile Devices Realize CRT-Quality Picture Clarity and Color Gamut

This month, <u>Sony</u> Corporation will commence mass production of a fullcolor Organic Light Emitting Diode (hereafter <u>OLED</u>) display, which will be first implemented in the new Sony CLIE 'PEG-VZ90' personal entertainment handheld (also announced today for the Japanese market).



OLED display is a self-luminous display that does not require a backlight, offering high contrast ratio, a quick response time and wide viewing angle-all in a package slimmer than current LCD modules. To enhance this display, Sony has employed its unique Super Top Emission technology for outstanding brightness and greater color gamut. These translate into image quality and clarity that could previously viewed only on CRT (cathode ray tube) displays.

The new 3.8-inch (or 9.7 cm) screen measures 2.14 mm thin, and makes it possible for users to enjoy a variety of high-quality content such as TV programs and digital still images on mobiles products such as the new CLIE VZ90 handheld without compromising on the viewing experience.

## **Key Features**

## 1.Super Top Emission

As the name implies, Super Top Emission leads light emission from the upper side of the organic material, realizing a brightness level of 150cd per square meter. Also, by optimizing the thickness of the organic layer for each of the color components, RGB, Sony realized multiinterference of reflecting light. Additionally, with the cavity multi-reflection interference structure which enables emission of colors with high purity, bright and brilliant color gamut comparable to that of CRT is realized

2.Excellence in response time, viewing angle and contrast ratio As OLED works with self-luminous organic materials, it has outstanding response time, without producing any afterimage even when displaying moving images (movies). Also with wide viewing angle and contrast ratio as high as 1000:1, high quality images can be realized on mobile products which are used in various occasions.



Citation: Sony To Begin Mass Production of Full-Color OLED Displays (2004, September 14) retrieved 24 April 2024 from <u>https://phys.org/news/2004-09-sony-mass-production-full-color-oled.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.