

# SKorean TV giants tout differing technologies

6 September 2009, by Jun Kwanwoo



A Samsung 1.19-inch thick, 55-inch LED 8000 edge-lit television is seen at an electronics show at in Las Vegas, Nevada. The world's top two makers of flat-panel televisions are stressing the energy-saving virtues of different display technologies in their race to dominate a huge global market.

The world's top two makers of flat-panel televisions are stressing the energy-saving virtues of different display technologies in their race to dominate a huge global market.

With liquid crystal display (LCD) models storming the world market, attention is focusing on developing a greener version that needs less power.

South Korea's Samsung Electronics is talking up its LED (light emitting diode) -backlit model.

Korean rival [LG Electronics](#) hails what it calls next-generation technology using AM OLEDs (active matrix organic light emitting diodes).

Each firm is, however, developing both types of flat panel to meet ever-growing demand.

LCD televisions captured 67.3 percent of the world market in the second quarter to June, plasma display panels 6.9 percent and conventional cathode ray tube models 25.7 percent, according

to US-based market researcher DisplaySearch.

Samsung launched its new LED-backlit models in mid-March and says it sold 600,000 of them as of June.

Yoon Boo-Keun, president of its television business, said the multinational aims to sell more than two million LED-backlit units this year -- some 10 percent of its projected 22 million sales of all LCD units.

Yoon said LED televisions reduce energy consumption by up to 40 percent over traditional LCD screens.

"If every TV in the world switched to LED, we could save 13 million kilowatts of electricity -- enough to supply all 39 million households in Germany," he told a global electronics fair in Berlin on Friday, according to his company.

"Samsung has successfully promoted the LED TV as a whole new species of television," Shim Sue, senior vice president of sales and marketing for the television business, told a recent media briefing.

"I'm sure Samsung will continue to lead the LED TV market."

DisplaySearch figures show Samsung supplied 23 percent of all flat-panel models in the second quarter, LG Electronics 13.7 percent, Sony 11.8 percent, Panasonic 8.6 percent and Sharp 6.4 percent.

LCDs are power-greedy because they consist of two key units -- a backlit unit which shines a constant white light and a screen unit that filters out some of the light to create coloured images.

Samsung's latest models change the backlit source from power-gulping cold compact fluorescents to energy-efficient LEDs.

Kim Hyunsuk, senior vice president of the firm's research and development unit, said LED-backlit models could also save energy by arraying the diodes on the edges and not the back of the screen.

"The edge-type has significantly reduced the number of LEDs for the backlight unit and thus need less power and less cost," Kim said.

"The [Samsung Electronics](#) LED-backlit model is just another type of LCD TV," an LG Electronics official told AFP on condition of anonymity.

"They don't deserve to be called LED TVs. It's misleading."

Britain's Advertising Standards Authority agreed, telling Samsung last month to change its advert for the new model.

"We considered that the ad implied the TV displays were comprised totally of LEDs, similar to some outdoor displays, when that was not the case," it said.

The LG official said the "real post-LCD TVs" should use AM OLEDs for the display panel.

This, he said, does not need a backlit unit and thus requires less power. It can also guarantee a much thinner panel and a quicker response time for high definition.

LG engineers say an AM OLED television consumes less than half the power of existing LCD sets and its response time is vastly quicker.

AM OLEDs are used in cellphones and other small displays. But high production costs and other technological challenges have restricted their wider use.

Japan's Sony launched an 11-inch OLED TV in 2007 and last month LG Electronics launched a 15-inch model. It will be commercially produced from November.

"With the commercial production, we will lead the OLED TV market, the next-generation display

market," Kwon Hee-Won, vice president of LG Electronics' LCD TV business, said in a statement.

"We'll unveil a 40-inch (OLED) TV in the not too distant future."

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