

LIQUID  
CRYSTAL  
DISPLAYS  
FROM  
KOE AMERICAS...



**THE  
ADVANTAGES  
ARE  
PERFECTLY  
CLEAR.**

## JDI & KOE AMERICAS

Japan Displays Inc (JDI) is a new company formed by the merger of the display businesses of LCD innovators Hitachi, Sony and Toshiba---making JDI the single largest manufacturer of small-to-medium sized LCDs in the world today.

Kaohsiung Opto-Electronics (KOE) is a wholly owned subsidiary of Japan Displays that was established to advance and expand on exciting new developments in LCD technology begun by Hitachi. KOE Americas continues to manufacture high quality and performance industrial LCDs for the markets formerly served by Hitachi—and still offers the customization and integration services that Hitachi was known for.

JDI Americas now services the mobile device market in the United States.

## CLARITY IS JUST THE BEGINNING

Liquid Crystal Display technology has taken the world by storm. And LCD panels from KOE Americas deliver a unique combination of quality, economy, and technical backup, allowing manufacturers to develop truly competitive projects for the world stage.

We work with manufacturers to translate product concepts into reality. From hand-held consumer mobile devices, navigation systems, and video displays to ultra-sophisticated medical imaging equipment and high-definition broadcast monitors, we provide customized LCD solutions that dazzle the world.

We relish a challenge...and we're ready to partner with you.



Digital Cameras



Diagnostic Imaging



In-flight Entertainment



Handheld Computer Devices



Ultrasound

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High Definition Video



Navigation Systems



Security Systems



Cell Phones



Self-Serve Kiosks



Sonar



Video Gaming Devices

## A HISTORY OF INNOVATION

Ever since passive matrix LCD panels were introduced in the early seventies, Hitachi was at the forefront of Liquid Crystal technology. From developing early passive matrix mono-

chrome displays for digital watches and pocket calculators, to pioneering the thin film transistor (TFT) that enabled high-resolution active matrix color displays, we have spearheaded key innovations in display technology.

In the mid-nineties, Hitachi was the first to commercially employ in-plane-switching (IPS) technology to resolve viewing angle issues of earlier LCDs. Since that time, we have focused on evolving and perfecting IPS technology to improve the brightness, sharpness, contrast and color fidelity of our displays. Today, our LCDs set the world standard for quality and performance.



## TECHNOLOGY IS ONLY HALF OF THE STORY...

Recognizing the far-reaching impact that LCD display technologies would have on the world, we have forged a corporate culture that welcomes collaboration. We actively seek partnerships with product developers who wish to utilize not just our products but also our engineering know-how.

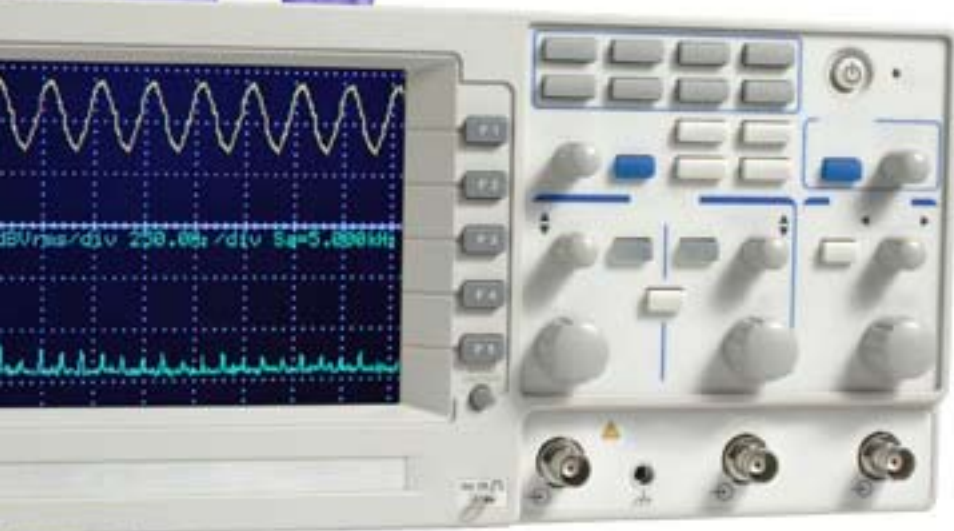
We have a long history of successful LCD and display panel sales. But KOE is much more than a sales organization. We know that when you succeed, we succeed. That is why we offer engineering support services, product customizations, even sub-assembly services. With four locations in the United States and ready access to KOE's global resources, we are uniquely positioned to assist product developers in converting concepts to reality. access to the global resources of Hitachi, we are uniquely positioned to assist product developers in converting concepts to reality.

Whether you need off-the-shelf LCD displays for a proven product or are in the earliest concept stages for a world-changing new product, KOE stands ready to help.





**KOE**  
JDI Group



**LCD SALES AND ENGINEERING SERVICES  
FOR THE AMERICAS**

[www.koe-americas.com](http://www.koe-americas.com)

770-409-3000

[info@koe-americas.com](mailto:info@koe-americas.com)



## IPS MAKES THE DIFFERENCE...

LCD *without* IPS Technology

LCD *with* IPS Technology



## IPS Technology



Liquid Crystal Display Technology took a major step forward when we introduced the first commercially viable LCD television in 1996. The secret

was a new technology called In-Plane-Switching (IPS) that was overlaid on the existing TFT liquid crystal technology. IPS significantly resolved viewing angle issues typical of other active matrix LCD displays where the contrast and color would change dramatically when the screen was viewed from oblique angles.

KOE has continued to develop and perfect IPS technology to the point where our screen images are exceptionally consistent when viewed at any angle. Not only do our LCDs boast wider viewing angles, they also deliver better color fidelity, enhanced brightness, deeper blacks, and excellent contrast.

### IPS TECHNOLOGY DELIVERS:

- Wider viewing angles
- Better color fidelity
- Enhanced brightness
- Deeper blacks
- Excellent contrast

## Tap into the Mind of KOE...

Many of our customers have sophisticated design and engineering departments. Others have more limited engineering resources. However, we invite all of our customers to take advantage of KOE's formidable product development and engineering expertise. If you tell us how you want your display to look and operate, we'll design a solution that meets your needs. In many cases, we'll have an off-the-shelf solution that works perfectly. We can also custom design enclosures, video and touch interfaces, and even "intelligent" displays with micros or full computer capabilities.

We're flexible when it comes to deliverables as well. We'll provide raw components or engineered assemblies---based on your needs, preferences and budget.

Our only objective is to create solutions that will earn your business.





**JDI AMERICA  
SALES HEADQUARTERS**  
San Jose, CA

**KOE AMERICAS  
REGIONAL SALES OFFICE**  
Las Vegas, NV

**KOE AMERICAS  
REGIONAL SALES OFFICE**  
San Diego, CA

**KOE AMERICAS  
SALES HEADQUARTERS (AMERICAS)**  
Lawrenceville, GA

**KOE AMERICAS  
OPERATIONS & MANUFACTURING  
CENTER**  
Greenville, SC

The JDI group is a worldwide enterprise with many manufacturing, sales and administrative facilities across the globe. Only the sales and manufacturing offices that are most directly related to production and sales of LCDs for KOE are shown on this map.

KOE America provides local, personalized sales support and engineering services for customers throughout the Americas while drawing on KOE's global resources as needed.

**KOE**  

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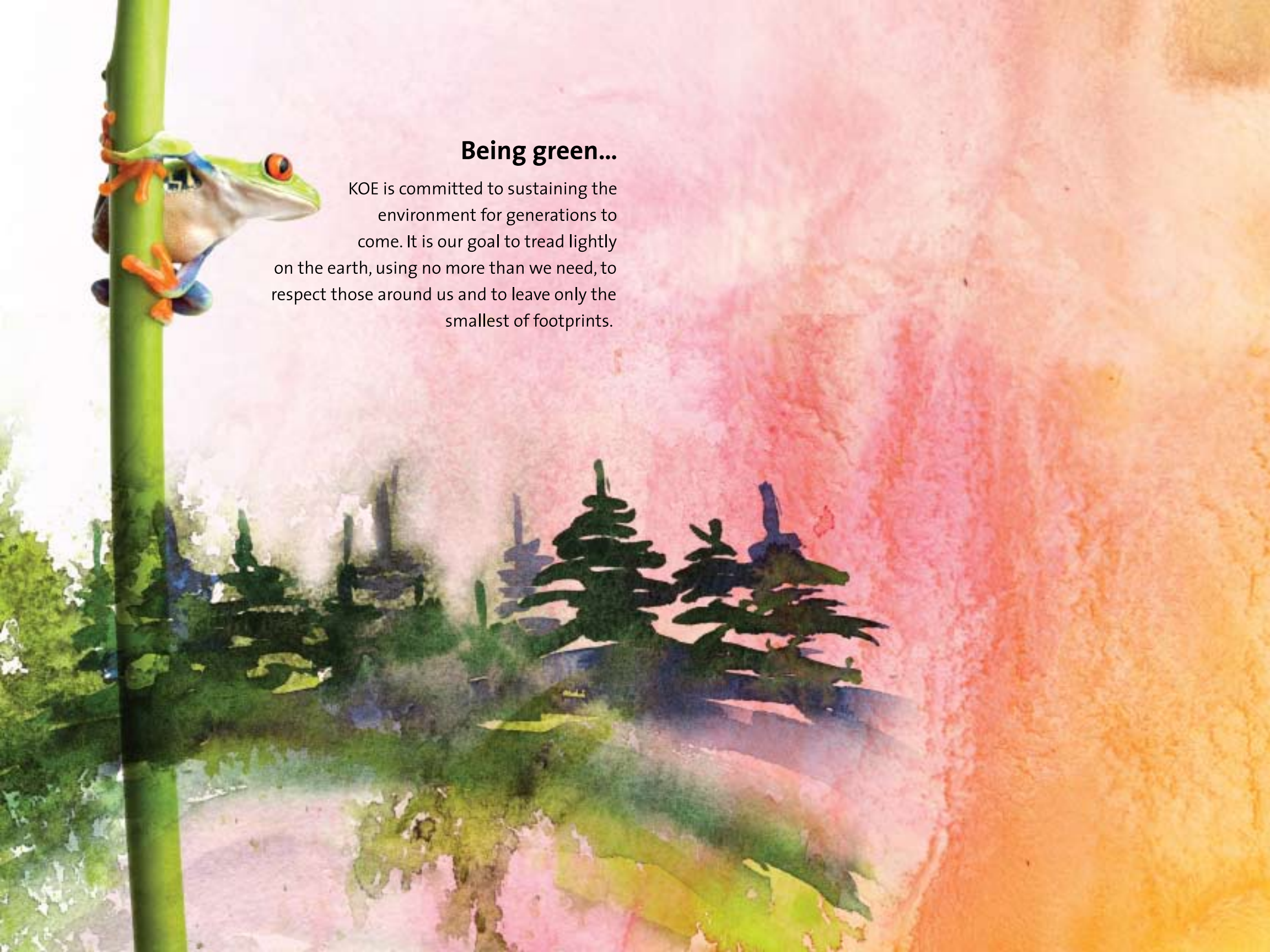
**JDI Group**

**KOE EUROPE LTD**  
**SALES HEADQUARTERS (EMEA)**  
Maidenhead, Berkshire, UK

**KOE ASIA LTD**  
**SALES HEADQUARTERS (ASIA)**  
Singapore

**JDI HEADQUARTERS**  
Tokyo, Japan  
(Various Manufacturing Facilities  
throughout Japan)

**KAOHSIUNG OPTO-ELECTRONICS INC.**  
**MANUFACTURING AND SALES  
HEADQUARTERS (TAIWAN)**  
Kaohsiung, Taiwan



## **Being green...**

KOE is committed to sustaining the environment for generations to come. It is our goal to tread lightly on the earth, using no more than we need, to respect those around us and to leave only the smallest of footprints.





KOE Americas, Inc.

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