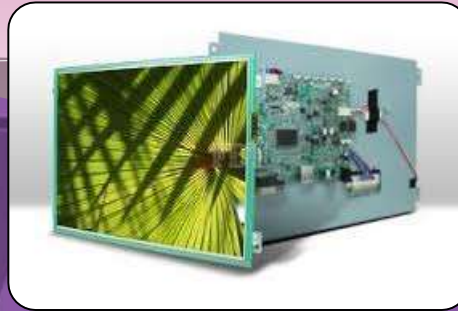# Crystal Display Systems

Product and Services Overview

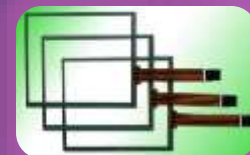### *Industrial, Gaming, Commercial, Retail & Digital Signage Displays*

Contents

In this presentation we give you an excellent overview of our products and services in the following sections:

1. Who is Crystal Displays and what do we do ?
2. Manufacturers and suppliers (linecard)
3. Industrial, Commercial, and Retail Monitors
4. Touchscreen Technologies
5. Interface card solutions
6. Ultra-Wide stretched displays Including interactive touch
7. Android Retail Tablets
8. Value Add Services - Optical Enhancements
9. Transparent Display Kits & Showcases
10. Retail / Digital Signage Products
11. Other products
12. Examples of Crystal Display Designs
13. Examples of Clients

Who is Crystal Displays and what do we do?

- ✓ **Crystal Displays is a leading U.K. Designer, and Value Added Reseller, and Distributor of Flat panel display solutions with global customers and partners.**

- ✓ **Crystal Displays offers Industrial, Retail and Digital Signage products as well as related products and services including stockholding and call off / KanBan options.**

- ✓ **Additional capabilities/services include:**
  - ✓ **Design consultation**
  - ✓ **Demo /Sample program**
  - ✓ **Customised Display kits**
  - ✓ **Complete after sales service**
  - ✓ **Repair services**
  - ✓ **Extended warranty program**
  - ✓ **Optical bonding services**
  - ✓ **Touch screen integration**
  - ✓ **Hibrite solutions**
  - ✓ **Widest range of transparent Display kits and showcases**
  - ✓ **Full range of Retail Displays**

Manufacturers and Suppliers

SAMSUNG ELECTRONICS · LG Display · EVERVISION · SGD · CHIMEI INNOLUX · SHARP

PRIME VIEW · KYOCERA · AUO · NEC

MITSUBISHI ELECTRIC · HYDIS

Touchscreens

ZYTRONIC · GENERAL Touch · DMC Co., Ltd · Leading Touch · 3M · Hantouch

Interface solutions & others

ESTECOM · C.VUE · DIGITALVIEW · CDS

"We are constantly adding products to our range and can supply other brands upon request so please contact our team."

Industrial, Commercial, and Retail Monitors

Crystal Displays offers a full range of standard and custom monitor products top meet your needs and requirements. Contact us about your project now.

CDS
Crystal Display Systems Ltd

Panel mount

Chassis and rear Mount

Waterproof sealed

Sunlight readable

Professional large format monitors

Industrial super slim SMART monitors

CDS

Open frame and Rack mount

Touchscreen Technologies

Analog resistive Touch Screens are especially suitable for cost sensitive, compact applications. 4 and 5 wire available.

Capacitive Touch Screens are resistant and suitable for outdoor and publicly accessible applications.

IR Infrared and SAW (Surface Acoustic Wave) technologies especially for hazardous environments, and IR for large sizes or applications without glass. IR and SAW Multi Touch products available.

Projected Capacitive for ruggedized and specific multi touch applications.
PCAP for stylish multi touch applications.

Touch Controllers are connecting the Touch Screens with an RS232 or USB interface over which they are connected to a computer. The touch sensitivity and other features can be set with the driver software. Multi touch capability.

Full range of interface card solutions

This excellent range of industrial interface offer high quality / high reliability solutions with all inputs required (see below) driving displays up to 4K (3840 x 2160). These are offered as stand alone boards, kits solutions with cables / connectors etc.. or as fully tested kit solutions including the TFT panel and / or touchscreens.

ESTECOM
Easy & Simple Technology

Product Name	PCB Dimension	Inputs	Outputs	Max Resolution
PI Series	100 x 150 x 16mm	RGB, DP, HDMI, Y/Pb/Pr, PC Sound	LVDS, Speaker	1920 x 1080
PO Series	96 x 96 x 15mm	RGB, DVI	LVDS, TTL	1920 x 1080
PS Series	100 x 120 x 7.2mm	RGB, DVI, CVBS, External I2C	LVDS, Audio	1920 x 1080
C Series	110 x 150 x 17mm	RGB, DVI, CVBS, SVHS, Y/Pb/Pr, 10W Audio	LVDS	1920 x 1080
O Series	100 x 150 x 16 mm	RGB, DVI 2W Audio	LVDS	1920 x 1080
M Series	257 186 mm	HDMI 1.4a/30Hz DP/DVI-D/RGB	Vby1	3840 x 2160 and 1920 x 1080

Ultra-Wide stretched displays Including interactive touch

Our range of stretched monitors, also known as BAR-Type displays offer an ultra wide aspect ratio which is perfect for grabbing your audiences attention, and the high brightness display gives perfect visual performance in a wide variety of applications. Having been used in a wide variety of applications including Bars, Casino's and elevators. Assembled with full industrial grade components to ensure the highest standards of reliability.

Android Retail Tablets

- Android based interactive touch tablets have been specifically designed and built for commercial and retail use.
- Available in sizes 10" up to 55"

Value Add Services - Optical Enhancements

CDS

This can be achieved through Anti-Reflection Enhancement Film, AR glass top layer or full optically bonded display. This currently available up to 46" but please ask for latest information – for more information please email: **info@crystal-display.com**

✓ <u>Some of the benefits of optical bonding</u>

✓ This has several major benefits:
✓ By filling the air gap between the LCD and the substrate, refraction and reflection of light between the layers is Removed, greatly improving the legibility of the display in direct sunlight. By using an anti-reflective substrate reflection can be reduced further. -by using this process even a standard brightness industrial LCD can be used in demanding outdoor applications- eliminating the need for costly and notably unreliable high brightness LCD panels.
✓ The bonding also acts as a barrier to stop the build up of condensation between the LCD and substrate (which is another common problem with outdoor applications caused by frequent temperature changes)
✓ The bonding has a wide temperature range making it suitable for the toughest environmental applications. The compound used also acts as a UV shield to protect the LCD from sunlight induced damage.
✓ By using optical bonding in conjunction with an LED backlit panel you can greatly reduce your energy consumption in comparison to a comparable high bright product, making it a great solution for mobile battery powered devices.
✓ The type of panel & substrate used is important and CDS can specify a solution dependent on the application. CDS can tailor the solution to meet your project needs, timescales, and budget.
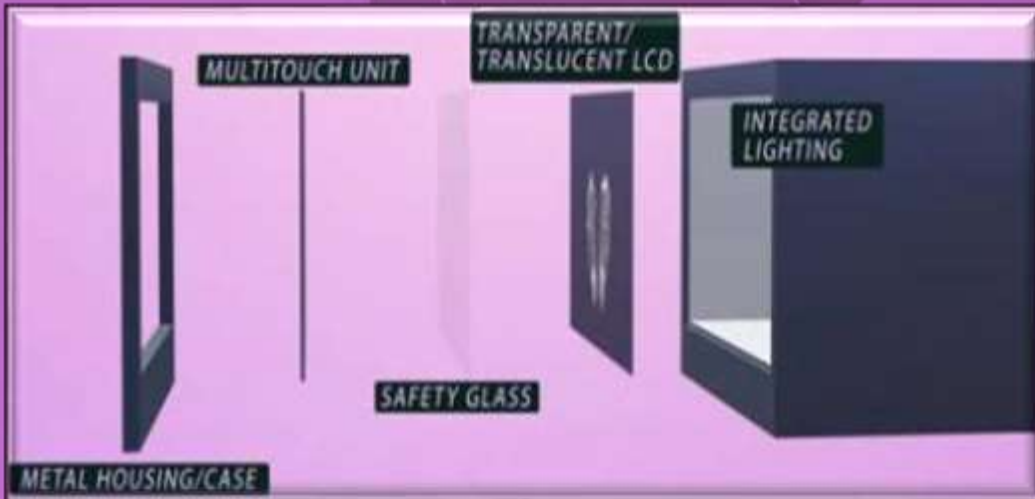
Transparent Display Kits

**Transparent Display kits from 5" up to 84"
for integrators and designers**

Innovative transparent (translucent) Display showcases

MULTITOUCH UNIT

TRANSPARENT/
TRANSLUCENT LCD

INTEGRATED
LIGHTING

SAFETY GLASS

METAL HOUSING/CASE

Click on the animation above to better understand our transparent solutions

Transparent showcase examples

"Enquire about custom solutions and designs"

Retail / Digital Signage Products

CDS

Wide range of excellent instore Media Players

Video wall and tiling solutions

Battery Powered Displays

Advertising Displays and Totem kiosks

Ultra wide stretched displays

Freestanding Slimline Screens

Attractive slimline appearance

Wide viewing angle

Built-in media player

LAUNCH OFFER

10% DISCOUNT

Foreign Exchange

SALE 10% OFF EVERYTHING IN STORE THIS WEEKEND!

TEA & SCONES

CDS

Wide range of digital adverting displays with built in Media players and / or PC

Digital multi Display shelf edge solutions

Other Crystal Displays products

Curved Displays

Display with PCAP

Outdoor IP6x Display solutions

imotion 65
Double Sided
Portrait

CASINO

Small slim TFTs for mobile applications

4.3 inch TFT w/o touch

'Square' Displays

Touch screen monitors

Power supplies

CDS

Other Retail / digital signage products

High resolution monitors

Clever Canvas – the easiest digital signage solution

Digital Transparent Display Fridge for Advertising and Promotions

Interactive White boards

Mini Totem

Double sided displays to save space

Panel PCs (AIOs)

We specialize in Panel PCs and have a vast range of options now available. We can supply our solutions in many different formats to suit your application. Our sizes start as small as 6.5″ diagonal, right up to 65″. We test all our panel PC's for each application for optimum performance and visual quality.

When choosing a Panel PC, you need to consider several elements including:
- ✓ The Display (Diagonal Size, Resolution, Brightness, Backlight etc..)
- ✓ The Format (Open Frame, Chassis Mount, Rack Mount, IP66 Sealed etc.) Touchscreen Required? Technology? (Resistive, Capacitive , IR, SAW etc.)
- ✓ The PC itself (Processing Power, Graphic Power, I/O, HDD etc..) Operating System Pre-installed? (Windows 7, Windows 7 embedded etc.)

Examples below but more upon request

Zero bezel Panel PCs and AIOs

Chassis mount Panel PCs

Open frame Panel PCs

IP67 Panel PCs

Examples of Crystal Display applications

CDS

- Industrial / Aviation / Military Segment
- Medical Segment
- Automotive / Marine / Industrial Segment

- Retail / Digital Signage segment
- Gaming market
- EPOS
- Instrumentation
- Advertising
- Multi touch
- Specialist / Custom
- + Others …

CDS

"Our International growth continues and we hope you will be a part of it in 2015"

Anyone can supply product but we offer a full personal consultation, design & installation service, where required, backed up by the experience of many designs and projects so YOU receive the best solution for YOUR project.

"CDS Team spirit and commitment there for YOU!!

For more information please contact our main office and technical sales support team

43 Riverside II
Sir Thomas Longley Road
Medway City Estate
Rochester ME2 4DP

info@crystal-display.com

Follow us on social media to receive all our latest product and news updates