

U-Touch

Optical sensing touch screen for large displays



Turn your large format display into an interactive experience by simply attaching an U-Touch screen over the front of your plasma or LCD flat panel monitor. Set-up and connection is fast and easy. Touch the screen and experience the immediacy and excitement of navigating through windows or multimedia programmes.

Applications are limitless, ranging from boardroom or conference room collaboration to public information kiosks. Also, because the touch frame is a lightweight slim-fit design, in keeping with the overall look and feel of your flat panel display – you barely notice it.

Further still, U-Touch takes full advantage of its specially developed optical sensing technology, maintaining bright high contrast picture quality, accuracy and sensitivity, providing for those greater demand applications.

U-Touch optical imaging technology uses two modules, rather than surface mounted or perimeter-based technologies, as a result the technology is extremely cost-effective. Not only is the technology cost effective for traditional applications such as point-of-sale, restaurant, medical imaging, industrial monitoring and kiosks, but it also scales effectively to allow the touch-enablement of very large Plasma and LCD displays.

This completely new technology opens up many opportunities for marketing presentations, interactive TV and advertising, large multi-purpose displays, and education whiteboard applications.

With no overlays, it provides excellent image clarity, is not susceptible to scratching, is easy to manufacture, and design-in to current screen technologies and is relatively inexpensive. Once calibrated, it does not require any adjustment, and any object can be used as a stylus, including a gloved finger.

Features of optical sensing U-Touch screen

- USB plug and play
- Four point calibration with no drift
- Fast response rate and tracking
- Accurate optical sensing with over 4 million touch points
- Any touch stylus can be used including gloved finger
- Wide range of screen sizes available
- Light touch no pressure required
- Protects display device when used with glass
- Single cable for power and connection to PC
- Suitable for use in high ambient light installations
- No overlay used maintaining full image quality
- Sensing medium not touched by user
- Can be easily modified and scaled to fit any display
- Landscape or portrait orientation

Technology for keeping in touch

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Standard sizes

LCD displays : 30 to 46" diagonal
Plasma displays : 42 to 65" diagonal

Other custom sizes available on request.

Manufacturers supported

LCD displays

Barco, Clarity, LG, NEC, Samsung, Sharp

Plasma displays

Fujitsu, Hitachi, LG, JVC, Orion,
Panasonic, Pioneer, NEC, Samsung, Sony,
Toshiba

Compatibility with other brands available
on request.

Minimum requirements

Pentium or higher PC
128 MB RAM
Windows 2000 or higher
10 MB free hard disk space
Spare serial COM or USB port

What's included

Touch Frame
USB Cable
Power Cable
Mounting Kit
Touch screen driver

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SPECIFICATIONS

Touchable	Touchable area, entire area inside bezel excluding 15 mm—20 mm below top edge.
Bezel Colour	Black or silver anodised, other colours available on request.
Construction	Aluminium, Glass, Nylon, Opel Acrylic, EMX 503 filled nylon, Annealed Polycarbonate, PVC, PCBs, and tempered glass.
Luminous transmission	100% without glass—>92% with glass (depending on AR coating).
Aspect Ratio	Usually 16:9 or 4:3 Can be any rectangular shape.
Touch screen type	Accurate optical sensing—no overlays.
Touch stylus	Finger, gloved hand, or soft stylus.
Touch Activation force	Nil.
Touch Accuracy	± 2mm (for 40" monitor) - over 90%. Resolution — 4 million touch points (i.e. sub pixel). Unlimited.
Touch durability	Unlimited.
Drag response time	Approx 50 milliseconds.
Operating Environment	
Temperature	Operating: 0°C to 55°C. Storage: -25°C to 85°C.
Humidity	Operating: 10% to 90% RH, noncondensing. Storage: 10% to 90% RH, noncondensing.
Supply voltage and current	+12Vdc, nominal (+11.5V to +12.5V). 900 mA rms (peaks of 8ms@ 1A), typical at +12 Vdc. Average power dissipation is 10W, typical. Note: 3 watt version, with the same performance available soon. Supply must be capable of sourcing 1.5A (peaks of 8ms@ 2A). Total noise and ripple requirement must be less than 100mV (p-p) for frequencies below 1MHz, and less than 50mV (p-p) for frequencies above 1MHz.
USB Resolution	32767 x 32767 (on screen).
Reporting speed	10 ms per coordinate set (max). Typical 15 ms (66 updates per second).
Calibration	Simple Driverless 4 point calibrator. Landscape orientation – portrait orientation available soon
ESD	Per EN 6100-4-2 1995: Level 4. Contact discharge 8kV, air discharge 15kV on USB connector pins.
Touch Glass	3.5 to 4.5mm Tempered Glass (Safety Glass).
Warranty	12 months parts and labour.
Interfaces	USB 1.1 (Full Speed) - plug and play compatible. USB compliant. HID compliant.
Software	No software required for installation or calibration. No drivers required. Works with Windows XP's native HID mouse driver.
Constructed weight	Constructed Weight for 32" (approx.) less than 1kg without glass.
Operating systems supported	Windows XP, Mac OS, Win 2000.

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