

4650 Series LCD Touch Screen Monitor

Large Format Interactive LCD

SAW Touch Technology

Part# 4650-TU-460PX-2S

Part# 4650-TU-460PXN-2S

displaywerks

quality and innovation in LCD integration

- 46" TFT AMLCD Touch Screen
- Integrated Rugged SAW (Surface Acoustic Wave) Touch Screen
- Supports multiple video inputs
- 1366 x 768 High Resolution
- High Quality Video Performance
- Superior Service and Support
- 3 Year Warranty (Monitor)
- 3 Year Warranty (Touch Screen Controller)
- 3 Year Warranty (Touch Screen)



Display Werks' line of video-viewing and interactive LCD flat panel displays are the best in their class for image quality, rugged design, service and support.

Display Werks' 46" integrated touch screen is a large format LCD display perfect for applications in financial institutions, retail spaces, facility directories, grocery stores, airports, restaurants and public spaces.

Unlike plasma displays, LCD displays offer higher resolution and less chance for image burn-in. The 4650 Series display can be used in portrait or landscape mode with the appropriate software.

Display Werks uses only high quality LCD glass and video processor components with superior performance characteristics. This ensures that video content is presented as it was originally intended.

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LCD Specifications:

Optical Information

Display Area - 46.0" diagonal

Panel - a-si TFT/PVA

Aspect Ratio -16:9

Display Colors - 16.7M

*Native Resolution (Optimum)
1360 x 768/1366 x 768 @ 60Hz

Pixel Pitch (mm) - 0.648H X 0.216V

Contrast Ratio - 800:1 (typical)

*Luminance - 500 cd/m2 (typical)

Viewing Angle - 170° or higher
horizontal & vertical

Signal Interfaces -

Analog RGB (computer graphics)

Composite Video CVBS

S-Video

Component (Y Pr Pb)

DVI

RS232C

Speaker Out

Mechanical Information

Module Size

Height - 25.90" - 658.00mm

Width - 43.38" - 1102.00mm

Depth - 4.96" - 126.00mm
(with touch screen)

Weight - 84.0 lbs - 38.1 kg
(with touch screen)

Electrical Information

110—120V

220-240V

Contact Display Werks for Various
Wall Mount Brackets and Stand
Options.

***Luminance and viewing angle are
measured prior to application of
touch screen or protective lens**

**Native resolution depends on
graphics card**

**Specifications are subject to
change without notice**

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Touch Screen interface connector is USB 1.1

What is SAW (Surface Acoustic Wave) touch screen technology?

Surface Acoustic Wave (SAW) touch technology is comprised of a glass substrate with transmitting and receiving transducers for both the X and the Y axes. The touch screen controller sends an electrical signal to the transmitting transducer, which converts the signal into ultrasonic waves. These waves are channeled across the surface of the touch screen by a series of reflectors. The waves are then directed to a receiving transducer which converts them back into an electrical signal creating a digital grid on the touch screen surface. When the screen is touched, a portion of the wave is absorbed, which is then calculated into independent X and Y coordinates.

Touch Screen Specifications:

- **Total additional weight to monitor:** 17.5 lbs (estimate).
- **Construction:** Glass panel with transducers attached to the front surface of the glass substrate.
- **Positional Accuracy:** Standard deviation of error is less than 0.080 in (2.03 mm) Equates to less than 1% error on most displays.
- **Light Transmission:** Up to 92%.
- **Operating Temperature:** -20°C to 50°C
- **Touch Active Force:** Less than 3 ounces
- **Operational Altitude:** 10,000 ft Above Sea Level
- **Expected Life Performance:** No known wear-out mechanism, as there are no layers, coating, or moving parts. This SAW technology has been operationally tested to more than 50 million touches in one location without failure, using a stylus similar to a finger.
- **Total Additional Depth to Samsung 460PX or 460PXN :** 1/4"

Connector Specifications:

- **USB 1.1**
- **Maximum Single Cable Length:** 5m (16.4 ft)
- **Overall Maximum Distance:** 30m (98.42 ft)

Note: Distances over 5m can be achieved by using one, to a maximum of five USB hubs.

Note: Power for the LCD monitor itself requires a connection to a 110 VAC receptacle. In addition, the 3250, 4050 and 4650 series SAW touch screen monitors require an external 5 Vdc @ 2A power supply to drive the integrated touch screen controller. This small form factor 110 VAC to 5 Vdc power supply is included with every 3250 and 4050 series SAW touch screen monitor.