



display werks

quality and innovation in LCD integration

4650 Series LCD Touch Screen Monitor

Large Format Interactive LCD

Display Werks Part #4650-TU-PN465U-2S, Based on the Sharp PN-465U

- 46" LCD Touch Screen
- Integrated Rugged SAW (Surface Acoustic Wave) Touch Screen
- Supports multiple video inputs
- 1920 x 1080 High Resolution
- USA Service and Technical Support
- Touch Screen Integrated within Factory Enclosure
- 3 Year Warranty (Monitor)
- 3 Year Warranty (Touch Screen and Controller)



LCD Monitor Model: Sharp PN-465U

LCD Element: 46" diagonal LCD

Max. Resolution: (pixels) 1920 x 1080

Pixel Pitch: 0.530mm (H) x 0.530MM (V)

Max. Colors: 16.7 Million colors (8 bits/color)

Display Response Time: 6ms

Viewing Angle: 176° right/left/up/down

Screen Active Area: inch (mm) 40-1/16 x 22-9/16 (1018 x 572.6)

Contrast Ratio: 1700:1

Brightness: 450 cd/m2 (before touch screen)

Power Requirements: AC 120VAC, 60 Hz

Operating Temperature: 0°C to 40° C

Operating Humidity: 20% to 80% (no condensation)

Fan: No Fan-less Architecture.

Power Consumption: 266W Standby mode 3.5 W

Dimensions: inch (mm) Approx. 43.88 x 25.88 x 5.75 (1114 x 657 x 146) with Touch Screen Installed.

Speakers: Optional (Optional Speaker attaches to the bottom in landscape mode)

Weight lbs.: (kg) Approx. 96.8 lbs (43.9) with integrated Touch Screen installed.

Display Werks is a Sharp authorized integrator.

Input Terminals		Output Terminals	
DVI-D	24 pin (DVI 1.0)	DVI-D (loop-through)	Mini D-sub 15 pin
RGB	Mini D Sub 15Pin x 1	Audio	Fixed audio line out (RCA L/R)
RGB	BNC X 5 shared with component video ** **2	Speaker Terminals	7W x &W Audio Out 6Ω minimum
Component	Y, Pb/Cb, Pr/Cr (480i/p, 576ip, 720p, 1080i) **2		
S-Video	x1	<p>Quality and Innovation in LCD Integration.™</p>	
Composite	BNC (Y, Cb/Pb, Cr/Pr) x 1		
Serial RS232C	Mini D Sub 15Pin x 1		
Audio AV	Line In for AV (RCA L/R)		
Audio PC	Line In for PC (3.5 mm mini Jack)		
		** Cannot be used simultaneously	**2 Does not support Plug and Play



display werks

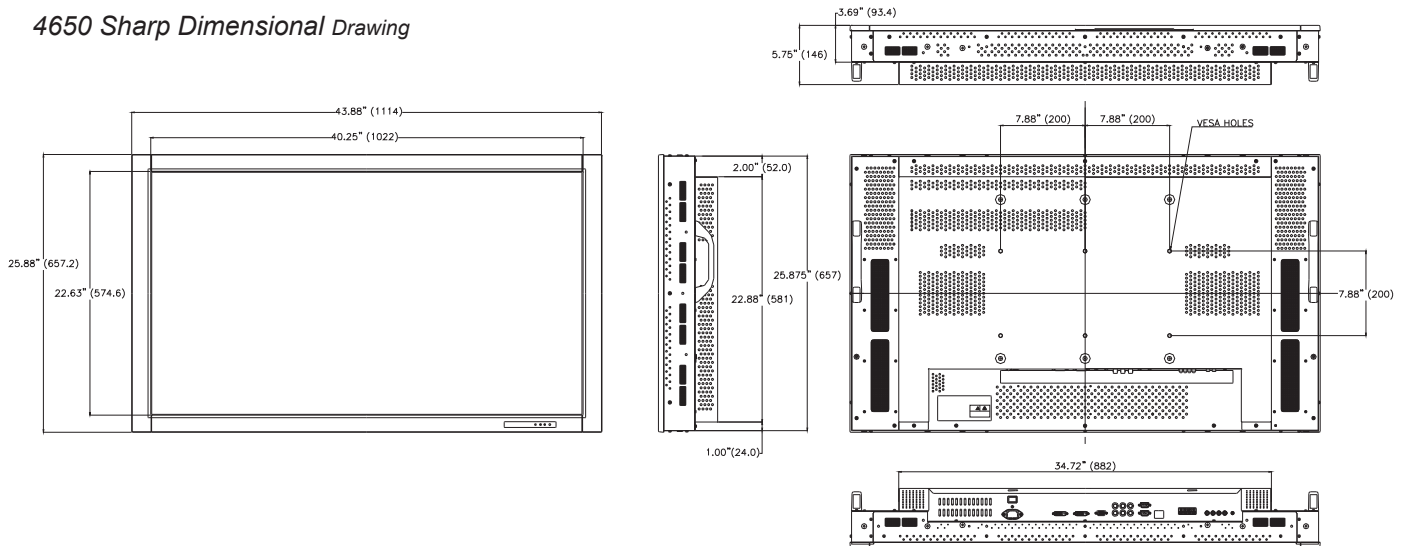
quality and innovation in LCD integration

4650 Series LCD Touch Screen Monitor

Large Format Interactive LCD

Display Werks Part #4650-TU-PN465U-2S, Based on the Sharp PN-465U

4650 Sharp Dimensional Drawing



Surface Acoustic Touch Screen Specifications:

- **Total additional weight to monitor:** 18.5 lbs.
- **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 Sharp PN-465U:** 1/4"

Touch screen Connector Specifications:

- **Interface:** USB 2.0
- **Maximum Single USB Cable Length:** 5m (16.4 ft)

Note: When using USB over distances of 5m, a USB extension system can be used.

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