

# display werks

quality and innovation in LCD integration

## 4650 Series LCD Touch Screen Monitor

Large Format Interactive LCD

Display Werks Part #4650-TU-460FP2-2S, Based on the Samsung 460FP-2 and  
Display Werks Part #4650-TU-460FPN2-2S, Based on the Samsung 460FPn-2

- 46" LCD Touch Screen.
- Professionally Integrated SAW (Surface Acoustic Wave) Touch Screen.
- Built In Speakers.
- Built in fans for extended run times.
- 1920 x 1080 High Resolution.
- Low Power Consumption.
- USA Service and Technical Support.
- Touch Screen Integrated within Factory Enclosure.
- 3 Year Warranty (Monitor).
- 3 Year Warranty (Touch Screen and Controller).



Also Available in the following Samsung Monitors:

Additional Models Coming Soon

### LCD Monitor Model: Samsung 460FP-2, 460FPn-2

(For additional "N" version information please see Samsung Specifications)



Display Werks is a Samsung authorized integrator.

**LCD Element:** 46" LCD

**Max. Resolution:** (pixels) 1920 x 1080

**Pixel pitch:** 0.530mm (H) x 0.461 (V)

**Color Space:** 72%

**Display Response Time:** 8 ms

**Viewing Angle:** 178° right/left/up/down

**Contrast Ratio:** 4000:1

**Brightness:** 450 cd/m<sup>2</sup>

**Power Requirements:** AC 100-240V (+/-10%) 50/60 Hz

**Power Consumption:** 260W / Standby 1W

**Operating Temperature:** 10°C to 40°C

**Operating Humidity:** 10% to 80% (no condensation)

**Built in Fan:** Yes

**Dimensions:** inch (mm) Approx. 43.4 x 25.9 x 5.15 (1102.4 x 657.8 x 130.8) with Touch Screen integrated.

**Weight lbs.:** (kg) Approx. 77.8 lbs (35.3) with integrated Touch Screen installed.

**Speakers:** Built in standard (10 W X 2)

Input Terminals		Output Terminals	
DVI	24 pin	RS232C	Mini D-sub 15 pin
VGA	Mini D Sub 15Pin x 1	Audio	Audio line out (RCA L/R)
CVBS	1/8" Jack	Quality and Innovation in LCD Integration.™	
HDMI	HDMI connector		
Component	-		
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)		

Sam 4650 FP-2 Rev 1 SAW



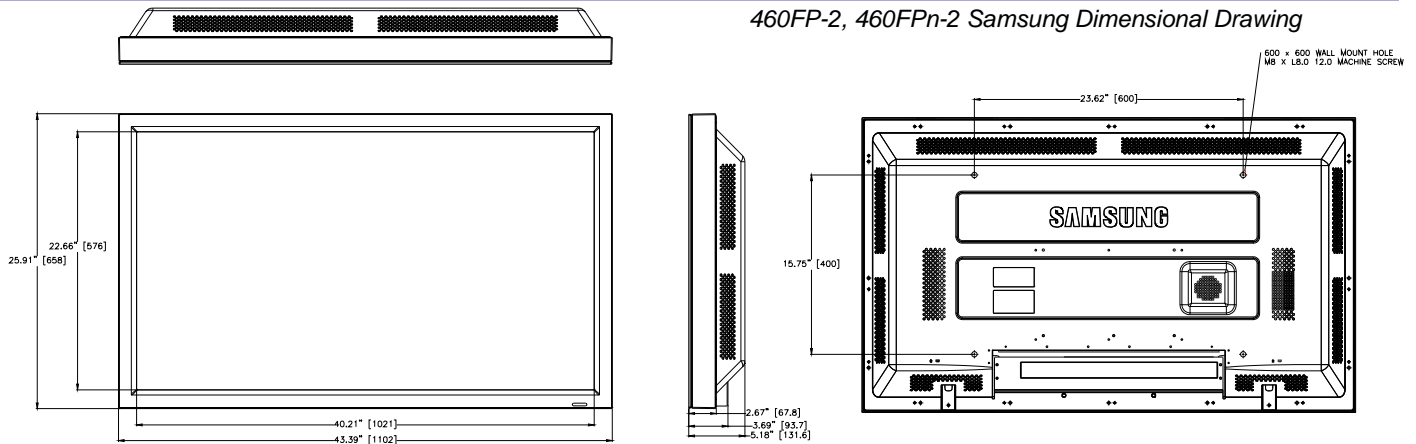
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### Surface Acoustic Touch Screen Specifications:

- **Total additional weight to monitor:** 17.5 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 Samsung 460FP-2, 460FPn-2:** 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 Samsung 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 Samsung 4650 series SAW touch screen monitor.