

# display werks

quality and innovation in LCD integration

## 4650 Series LCD Touch Screen Monitor

Large Format Interactive LCD

Display Werks Part #4650-TU-460FP2-4D, Based on the Samsung 460FP-2 and  
Display Werks Part #4650-TU-460FPN2-4D, Based on the Samsung 460FPn-2

- 46" LCD Touch Screen.
- Authorized Integrator of the 3M™ DST (Dispersive Signal Technology) Touch System.
- 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).



See Samsung for additional monitor specifications:

### Also Available in the following Samsung Monitors:

- 460CX-2 Display Werks Part #4650-TU-460CX2-4D 1080
- 460CXn-2 Display Werks Part #4650-TU-460CXN2-4D 1080
- 460DX-2 Display Werks Part #4650-TU-460DX2-4D 1080
- 460DXn-2 Display Werks Part #4650-TU-460DXN2-4D 1080

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

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

- 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. 67.3 lbs (30.5) with integrated Touch Screen installed.
- Speakers:** Built in standard (10 W x 2)



Display Werks is a Samsung authorized integrator.



Display Werks is an authorized 3M™ DST system integrator.

3M and MicroTouch are trademarks of the 3M Company

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	<p>Quality and Innovation in LCD Integration.™</p>	
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 DST

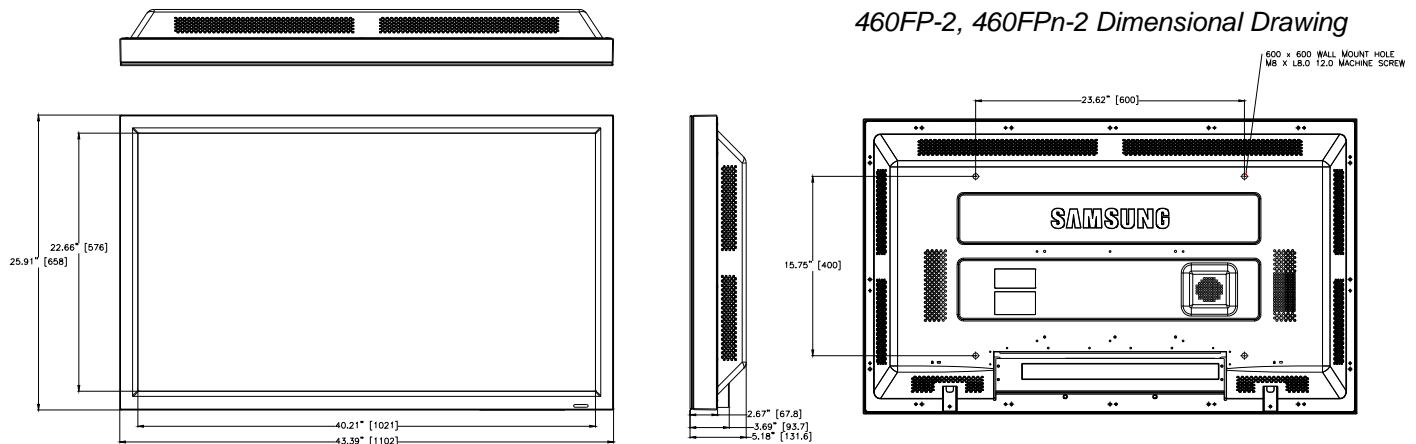
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### 3M™ DST (Dispersive Signal Technology) Touch Screen Specifications:

- **Total additional weight to monitor:** 7.0 lbs.
- **Construction:** Glass chemically-strengthened anti-glare substrate.
- **Input Method:** Finger and stylus input.
- **Positional Accuracy:** Reported coordinates are within 1.0% of true position (based on viewing area dimensions)
- **Light Transmission:** Up to 92%.
- **Operating Temperature:** -15°C to 90°C
- **Minimum Touch Impact:** 50 mN.s (milli-newton seconds), the equivalent of a very light touch.
- **Response Time:** 20 ms for tap input.
- **Expected Life Performance:** No known wear-out mechanism, as there are no layers, coating, or moving parts.
- **Total Additional Depth to Samsung 460FP-2 and 460FPn-2:** 1/4"
- **Surface Obstructions:** Withstands surface contaminants such as dirt, dust and grime.

### Touch screen Controller Specifications:

- **Interface:** USB or RS232 Serial (specify when ordering).
- **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 DST 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 DST touch screen monitor.