3M™ MicroTouch™ System DST2270DX

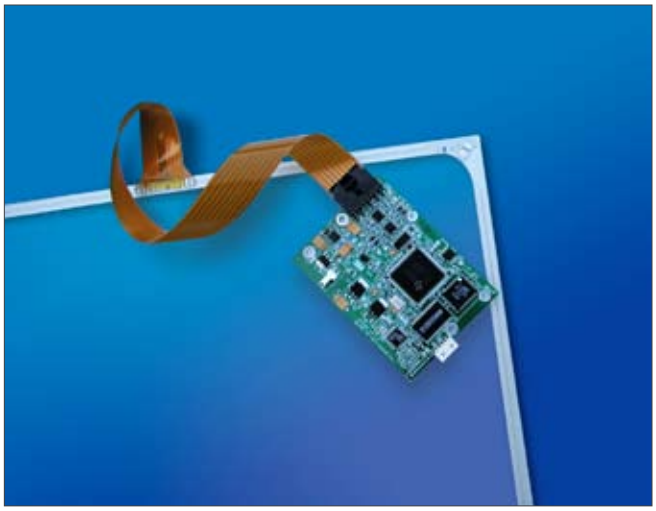
The Reliable Touch Solution for Large Screen Displays

For most large-screen touch technologies “touch position” is calculated when a finger interrupts an optical field, infrared light beams or acoustic waves on or above the surface of the touch screen substrate. Relying on these “active” surface properties makes these technologies susceptible to different types of interference or environmental limitations, whereas 3M's Dispersive Signal Technology (DST) offers a fundamentally different touch solution for large-format display applications.

The 3M MicroTouch System DST2270DX**,** based on 3M Dispersive Signal Technology, consists of a chemically-strengthened glass substrate with piezos mounted on each corner, mated to a sophisticated, dedicated controller. The system determines the touch position by pinpointing the source of “bending waves” created by finger or stylus contact within the glass substrate. This process of interpreting bending waves within the glass substrate helps eliminate traditional performance issues related to on-screen contaminants and surface damage, and provides fast, accurate touch attributes.

3M Innovation

The 3M MicroTouch System DST2270DX is another example of the innovative products expected from 3M Touch Systems. Our world-class support and service organization provides expert technical consulting wherever your products are designed, integrated or delivered. It is this total, global approach that helps ensure exceptional service and support, backed by 3M.



Recommended Applications

- Interactive Digital Signage
- Product Selectors
- Hospitality Wayfinders
- Corporate Directories
- Tabletop Installations

Feature	Benefit
Dispersive Signal Technology	• Superior surface durability is designed to maintain optical and functional performance over the life of the product • Provides reliable operation in the presence of dust, dirt, and other surface contaminants
Durable Glass Surface	• Requires MoHS 7 or higher to induce a cosmetic scratch ensuring reliable performance in high-use environments. • Chemically-strengthened glass meets EN/UL 60950 glass breakage specifications • Anti-glare surfare etch provides excellent optical properties in a wide range of ambient light conditions and minimizes the appearance of fingerprints
Versatile Installation Options	• Outstanding performance in either vertical position (portrait and landscape) and horizontal position (as in a tabletop configuration)

MicroTouch™

3M

3M™ MicroTouch™ System DST2270DX Specifications

System Performance

Input Method	Finger and stylus input
Accuracy	Reported coordinates are within 1.0% of true position (based on viewing area dimensions)
Touch System Resolution	16k x 16k (maximum resolution)
Response Time	20 ms for tap input
Minimum Touch Impact*	50 mN·s (milli-newton seconds), the equivalent of a very light touch

Optics

Light Transmission**	92% light transmission (±2%)
Surface Finish	Anti-glare etch (standard)

Mechanical

Glass Thickness	2.2 mm (± 0.2 mm), glass only
Overall Thickness	4.4 mm (± 0.5 mm) Includes glass thickness, tail, electronics components, and mounting material
Substrate Material	Chemically-strengthened glass substrate
Surface Hardness	Mohs pick with a hardness rating of 7 or higher is required to induce a scratch. Scratches will not result in a functional failure
Cleaning	Recommended 50:50 isoproply alcohol and water solution

Reliability

Surface Obstructions	Touch screen operation withstands surface contaminants such as dirt, dust and grime
Operating Temperature***	-15° C to +70° C for the touch screen RH: Up to 90% non-condensing
Storage Temperature***	-50° C to +85° C RH: Up to 90% non-condensing

Electronics (3M MicroTouch Controller DX)

Communications Protocol	Auto-sensing dual mode (Serial plug and play and/or USB HID)
Nominal Uncased Dimensions	2.66" x 3.75" x 0.45" 67.56 mm x 95.25 mm x 11.43 mm
MTBF	>140k hours per MIL Std. 217F calculation
Regulatory	UL/cUL, FCC-A, CE, VCCI, AS/NZS 3548
Drivers	MicroTouch MT7 for Microsoft® Windows® 2000, XP and VISTA

System Warranty

3-year limited warranty

* Tested at 73 dBA under pink noise, ambient condition

** Test uses BYK Gardner Haze Gard Plus.

*** See 3M MicroTouch SCT2270DX Delivery Specifications for storage and operating temperatures at varying humidity levels.

Standard Part Numbers

Display Size	Part Number
32" wide	DSTK9012-3320
40" wide	DSTK9007-3400
40" wide	DSTK9015-3402 (narrow border)
42" wide	DSTK9013-3420
46" wide	DSTK9010-3460
46" wide	DSTK9014-3461 (narrow border)

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