

3M™ MicroTouch™ System DST2270DX

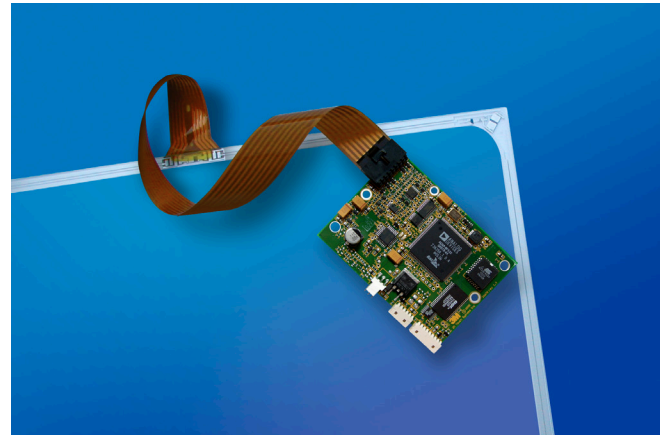
The Dependable Choice for Interactive Digital Signage

The **3M™ MicroTouch™ System DST2270DX** provides digital signage customers with a reliable, durable, and versatile touch solution that transforms the most popular brand name LCD's into high impact, engaging, interactive displays that capture and maintain the attention of targeted audiences.

Designed and engineered for use in high traffic public areas, the DST2270DX system utilizes 3M's patented Dispersive Signal Technology (DST), a bending wave technology that enables a reliable touch performance required by the interactive digital signage market. Renowned for its dependability, the DST2270DX system operates effortlessly in the most demanding of venues and unlike active surface technologies and camera-based systems, its performance is unimpaired by on-screen surface contaminants, surface scratches or direct ambient light. The DST2270DX systems also performs seamlessly with objects resting on the touch screen surface.

The DST2270DX system is a versatile touch solution and comes without the limitations of competitive touch products, highlighted by its ability to be oriented in portrait, landscape, and tabletop positions without recalibration. In addition, the DST2270DX system offers stylus independence and gives users the ability to interact with the touchscreen using virtually any object, including finger, fingernail, prosthetic, car key or other stylus.

Constructed with 2.2mm chemically-strengthened glass, the DST2270DX system provides superior durability and a slim profile that allows for easy integration behind the bezel of most popular narrow border LCD's. This slim profile construction can eliminate the need for an aftermarket custom bezel which not only reduces costs, but also preserves the original industrial design from the display manufacturer. A chemical etch finish gives the DST2270DX system a



Recommended Applications

- Interactive Digital Signage
- Hospitality Wayfinders
- Concierge Desk
- Retail Brand Experience
- Retail Product Selectors
- Corporate Directories
- Interactive Tabletops
- Transportation Scheduling

permanent anti-glare and scratch-resistant touch surface that helps hide fingerprints and creates an inviting touch surface.

The DST2270DX system is offered in sizes ranging from 32 inches to 55 inches, and can accommodate a full spectrum of digital signage projects. Backed by 3M and complemented with a 3-year limited warranty makes the DST2270DX system the dependable choice for all of your interactive digital signage needs.

Feature	Benefit
Dispersive Signal Technology (DST)	<ul style="list-style-type: none">• Provides reliable operation in the presence of surface contaminants, scratches, and direct ambient light typically found in high traffic public areas• Increases touch accuracy by accommodating objects resting on the screen• Enhances the user's ease of operation through stylus independence• Requires no recalibration in either a vertical (portrait and landscape) or horizontal position (tabletop)
Slim 2.2mm Chemically-strengthened and Etched Glass Surface	<ul style="list-style-type: none">• Superior surface durability is designed to maintain optical and functional performance over the life of the product• Requires MoHS 7 or higher to induce a cosmetic scratch ensuring reliable performance in high-use environments• Easily accommodates popular narrow border LCDs without adding additional costs or additional weight• Improves usability by minimizing light reflection and glare• Helps conceal fingerprints

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 isopropyl 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 (average)	>140k hours per MIL Std. 217F calculation
Regulatory	IEC/UL 60950-1, 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)
40" wide	98-0003-3683-8 (oversize)
42" wide	DSTK9013-3420
46" wide	DSTK9010-3460
46" wide	DSTK9014-3461 (narrow border)
47" wide	DSTK9017-3470 (narrow border)
52" wide	98-0003-3795-0 (narrow border)
55" wide	98-0003-3625-9 (narrow border)

How 3M Dispersive Signal Technology Works

Dispersive Signal Technology (DST), a patented 3M technology, determines a touch position by measuring the mechanical energy or bending waves created by the user touching the glass substrate with a finger or other stylus. Unlike other technologies, DST measures the mechanical energy travelling through the glass panel rather on the surface of the glass panel allowing for a dynamic touch performance. Corner-mounted piezos adhered to the backside of the glass panel, collect and translate a touch position through a sophisticated, dedicated controller using proprietary algorithms to ensure fast and accurate touch performance.

3M Touch Systems

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