

# MicroTouch™ TouchPen System



## for ClearTek™ II Touch Screens

### Product Highlights

- Dual input mode (pen stylus or finger touch) with vibrant optics
- Pen-only input mode for handwriting recognition, signature capture, on-screen annotation applications, or to avoid unintended touches.
- Excellent draw precision and touch accuracy
- Based on high-performance EXII ASIC platform

### Extended Touch Solutions

The **MicroTouch™ ClearTek™ II TouchPen System** extends the input flexibility of MicroTouch™ ClearTek™ II capacitive touch screens by supporting both touch and pen input. TouchPen's tethered stylus offers handwriting recognition, signature capture, and on-screen annotation capabilities. It is an excellent solution for applications with dense menus or with detailed images too small to touch with a finger.

### Flexible Input Modes

The TouchPen system can be set up in dual mode (pen or finger touch input) or pen-only mode.

In dual mode, the touch screen accepts touch from both the tethered pen or from a user's finger for ease of use in a multitude of point-of-sale signature capture applications. In dual mode, while accepting input from the pen, all other input is ignored – supporting palm rejection in a very sophisticated manner.

In pen-only mode, only pen inputs are accepted, making it an ideal solution for applications where unintended touches may create problems.

### Making the Difference

The TouchPen System is based on the MicroTouch™ EX II 3700SP, a serial RS232 controller, which takes advantage of the EX II ASIC electronics platform. The EX II 3700SP controller offers a wide operating temperature range, high touch resolution, expanded regulatory approvals, improved ESD and EMI reliability. Adding to its application flexibility, the EX II 3700SP offers the capability to upgrade its firmware, even after installation and deployment.

# MicroTouch™ TouchPen System for ClearTek™ II Touch Screens

## TouchPen System

|  |  |
|--|--|
| <b>System Components</b>                             | Any standard ClearTek II touch screen combined with an add-on kit containing a tethered-pen controller, pen stylus, and cable kit                                    |
| <b>Mean Time Between Failure</b>                     | Controller: >600,000 hours MTBF<br>Pen: 4 million hours MTBF   |
| <b>Operating Temperature Range</b>                   | -15° C to +70° C   |
| <b>Operating Humidity Range</b>                      | <36° C @ 0-90% RH, non-condensing  |
| <b>Storage Temperature Range</b>                     | -30° C to +70° C   |
| <b>Storage Humidity Range</b>                        | <36° C @ 0-90% RH, non-condensing  |
| <b>Power Requirements</b>                            | 12Vdc (sourced from the controller through the J1 connector)   |
| <b>Minimum Touch Duration</b>                        | <14 milliseconds   |
| <b>Touch Resolution*</b>                             | 2048 x 2048  |
| <b>Electro Static Discharge (ESD Susceptibility)</b> | 22Kv Air, 8 Kv Contact   |
| <b>Host Cable</b>                                    | 96" (2.4m) long  |
| <b>Regulatory Compliance</b>                         | UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548<br>ClearTek II TouchPen is compliant with the European Union 2002/95/EC Directive on Restriction of Hazardous Substances (RoHS) |

## TouchPen Controller (EXII-3710SP)

|                                |                                    |
|--------------------------------|------------------------------------|
| <b>Sensor Connection</b>       | 6-pin Molex connector              |
| <b>Communications Protocol</b> | Serial RS 232                      |
| <b>Controller Dimensions</b>   | 4.80" x 1.35" (121.9 mm x 34.3 mm) |
| <b>System Warranty</b>         | 5 years                            |



## TouchPen Stylus (69-502)

|                             |   |
|-----------------------------|---|
| <b>Pen Material</b>         | ABS plastic, lightly textured surface, offered in black                   |
| <b>Pen Dimensions</b>       | 6" (152.4mm) length without stain relief, 0.42" (10.67mm) diameter.       |
| <b>Pen Cabling</b>          | 3.5' (1.07 meters) tether, strain relief to 20 lbs. (7.71 kg) pull force. |
| <b>Pen Tip (Conductive)</b> | Replaceable pen tips (order part number 2604634)                          |
| <b>Pen Connector</b>        | 8-pin Rj 45 phone jack  |
| <b>Resolution</b>           | 2048 x 2048 or greater touch point per axis within the calibrated area    |

## TouchPen System Cable Kit for ClearTek II (69-901)

|                               |  |
|-------------------------------|--|
| <b>Inclusive Part Numbers</b> | 69-502, Stylus<br>7311273, Serial RS-232 cable, 96" (2.4m)<br>7311420, Cable, TouchPen controller to RJ45<br>7319522-03, ClearTek II adapter cable |
|-------------------------------|--|

\* The maximum number of addressable coordinates generated by the controller  
NOTE: TouchPen stylus, pen tips, and controller cables available separately

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**RoHS Directive compliant:** In accordance with European Directive 2002/95/EC, "RoHS Directive compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M. (9/06)

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