ZyFilm® / **Zy**Profilm®

Our flexible touch foils are designed for temporary or semi-permanent mounting to the rear surface of a rigid transparent surface. When installed and connected to an appropriate Zytronic touch controller and a PC, they can provide single, dual or multitouch interactivity on the outside surface.

ZyFilm®

- Our transparent touch foil available in customisable sizes up to 85" diagonal and intended for use in front of an LCD (when mounted to a suitable supporting substrate).

- Available in flat packed or thin rollable format.

ZyProfilm®

- Is our touch foil with an integral laminated rear projection film, available in customisable sizes up to 85" diagonal and intended for use with a rear projection system (when mounted to a suitable supporting substrate).

- Available in flat packed or thin rollable format (rear projection film will be supplied seperatly)

- Both sensor types are available with either "cling film" front surface for easy application and removal, or optically clear adhesive (OCA) for a more permanent one time use.

OPERATION

The screen is divided into an X-Y matrix of sensing cells, using an array of embedded 10µm copper electrodes, which are near invisible to the human eye on a powered display. These electrodes are connected to a remotely mounted controller board.

When a finger or conductive stylus approaches the surface of the sensor, a capacitive change in the tracks around that particular point is registered; the position is then determined by the controller and its firmware. Unlike conventional capacitive systems the active component of the sensor is embedded behind the front substrate, ensuring protection, long life, and stability.

With the unique Z-axis (or depth) sensing characteristics of PCT™ and MPCT™, **Zy**Film® and **Zy**Profilm® sensors can be tuned by the user to eliminate the need for an operating force. The sensors are designed to mounted behind and operated through a supporting substrate such as a shop window.

APPLICATIONS

ZyFilm® and **Zy**Profilm® are intended for use in large format single, dual and multitouch interactive digital signage and information displays in retail, advertising and exhibition environments.

SENSOR

Detection Method	Projected Capacitive Technology mutual (MPCT™) and self capacitive (PCT™) types
Sensor	PET film and/or rear projection medium with embedded micro-fine sensing array
Control electronics	Remotely sited PCB, Serial or USB connectivity
Size range	15" - 85"

CONTROLLER

See data sheet for ZXY100˚ and ZXY110˚ touch controllers for single/dual touch operation

See data sheet for ZXY150˚, ZXY200˚, or ZXY300˚ touch controller for multitouch operation

MECHANICAL

Immunity to damage	Protected by mounting the sensor behind a suitable substrate, no moving parts
Sensor thickness	**Zy**Film® ~ Thin 0.2mm / Standard 0.6mm
	ZyProfilm® ~ Thin 0.3mm / Standard 0.7mm
	Depending on rear projection material selected
Stylus type	Finger, gloved hand and conductive stylus
Operation Force	<0.1g
Hardness	Determined by mounting substrate
Sensor MTBF	Film with no moving parts or coatings. No known wearout mechanisms when mounted behind a suitable substrate

ENVIRONMENT

Operating Temperature	0°C to 50°C
Humidity	RH 0-90% up to 40°C
Storage Temperature	-10°C to 60°C
Storage Humidity	RH 0-90% up to 40°C (max 2 weeks)
Resistance to Contamination	Determined by the mounting substrate (from opperational side)
Water Resistance	Determined by the mounting substrate (from opperational side)

QUALITY

See cosmetic specification	www.zytronic.co.uk

APPROVALS

RoHS compliant

CE, FCC & UL approved	www.zytronic.co.uk/support/quality-assurance