FCL Components Touch Panels

Touch Panels with Clear Film V2

Sharper, Brighter, Smoother: Enhance Your Product Design

Overview

The Clear Film V2 can be used with all FCL Components' resistive touch panels, providing excellent image clarity and smooth finger touch input, which is nearly identical to projected capacitive touch panels.

Flush Surface Touch Panel with clear film v2

Excellent image clarity and visibility

The Clear Film V2 has been developed to display images on an LCD more clearly and without distortion (Fig-1). Clarity has improved by approximately 2% compared to conventional clear film and drastically changed from non-glare film.
It has almost identical capabilities as projected capacitive panels with a glass substrate.

4-wire touch panel with clear film v2

Note: Clarity (JIS K 7374) is set based on the conventional product, which is considered 100% according to our internal research.

- Comparison

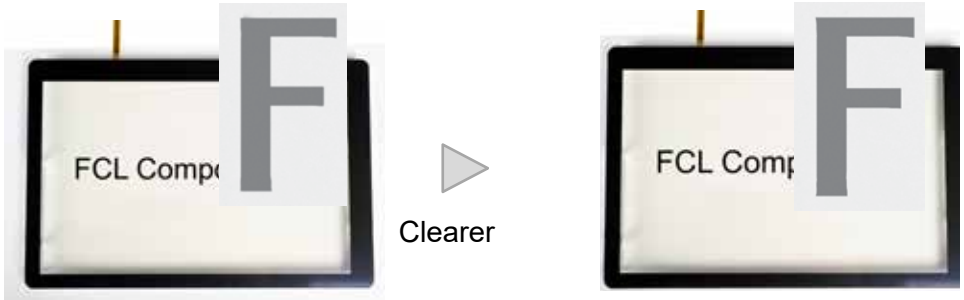

Fig. 1: Clarity comparison between non-glare and Clear Film V2.

Excellent smooth touch experience

To achieve smooth operability similar to that of a smartphone, we have created a smooth film surface that doesn't catch. Users can experience a satisfying operational feel when flicking, swiping, or performing dual touch operations, etc. Evaluation is conducted using the contact angle (JIS R 3257) as a smooth evaluation index (Fig-2).

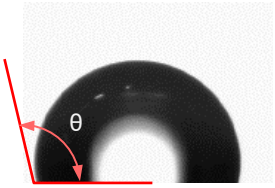

Fig 2: Contact angle (smooth evaluation index)

High versatility

It can be used with all FCL Components' 4-, 5-, and 7-wire resistive touch panels, including general GF touch panels and flush surface touch panels.

Major applications

Medical, measuring equipment, factory automation, tool machines

■ Characteristics

		Resistive Touch Panels ***(Film only)***			Projected capacitive touch panels
		Clear Film V2	Clear Film V1	Non-glare film	
Clarity *1		**102%**	100%	35%	102%
Transmittance		**88%**	88%	88%	91%
Smooth touch input	Water contact angle*2	**107°**	60°	-	106°
	Touch navigation	☆☆☆☆☆	☆☆☆	☆☆☆☆	☆☆☆☆☆

Notes:
Entirely smooth: ☆☆☆☆☆
Somewhat smooth: ☆☆☆☆
Minimally smooth: ☆☆☆

*1: Image clarity (JIS K 7374) is indicated as a ratio when compared to the Clear Film V1, which is considered 100% based on FCL Components' internal research.
*2: In general, a larger water contact angle indicates smoother navigation of the fingers on the surface. (JIS R 3257)

- The data for the Clear Film V1, non-glare film, and capacitance type data in this table are obtained from representative products selected by our company.
- The transmittance of the resistive touch panel in this table is the data for the combination with high transmittance glass.

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