

# FCL Components Touch Panels

## Feather Touch - Flush Surface Light Input Load

### FID-1300/FID-1520 series

Fully Customizable Resistive Touch Panels

#### Overview

A film-glass construction resistive touch panel with light input load and flush surface structure. Decorative patterns are available, including multi-color graphics. Required input force is less than a half of conventional resistive touch panels.

The panel allows improved design of user's products as well as offering light input force nearly identical to projected capacitive touch panels with benefit of secure resistive input method.

#### Features

##### ■ Flush surface design

Maintains clear flat input surface of customer's products and supports waterproof performance. Aperture and other glass finishing features are available. FID-1300 series utilizes 4-wire resistive method, and FID-1520 series utilizes 5-wire resistive method.

##### ■ Light input load

Reliable input and smooth slide/flick operations with less than half the input force of conventional touch panels. Direct print on the top ITO film and eliminating a cover film helps to lower input force.

##### ■ Long life

FID-1300 series (4-wire): min. 1 million touches in a single location  
FID-1520 (5-wire): min. 10 million touches

##### ■ Various input methods

Operable with fingers, gloved fingers, wet fingers, pen, stylus pen.

##### ■ 2-point input, enlarge/shrink gesture available

2-point input, enlarge/shrink, rotation (FID-1300 series only) is available with Dual Touch Control board.

##### ■ Custom design available

Customization is available on anti fingerprint, anti reflection, glass thickness, total light transmittance, haze, FPC placement and length.

##### ■ Option

New optional clear film with enhanced transparency and reduced friction

##### ■ RoHS compliant

#### ■ Major applications

- Mobile terminals
- Operation panel on vehicle navigation system, POS/ECR, multifunction copier, white goods
- Industrial and medical terminals



FID-1300 series



FID-1520 series

## ■ Specifications

Item	Specifications		Notes
Series	FID-1300	FID-1520	
Type	4-wire resistive	5-wire resistive	
Input method	Pen and finger		
Hardness	Pencil hardness min. 2H		JIS K 5400
Construction	Film-Glass		
Operating force	Minimum	0.02N	R120 silicon rubber (hardness 30 degree)
	Typical	0.78N	
Typing life	100,000 words min.	1,000,000 words min.	R0.8 polyacetal resin pen, writing force 1.96N
Input life	1,000,000 times min.	10,000,000 times min.	R120 (hardness 20degree), input force 1.96N, frequency 5Hz
Electrical rated voltage	5.0 VDC±10%		
Insulation resistance	10MΩ		at 25VDC
Environmental conditions*	Operating temperature/humidity	-5° to +60°C (20%RH to 90%RH)	Extended range available
	Storage temperature/humidity	-30° to +70°C (10%RH to 90%RH)	Extended range available

\*: Wet bulb temperature max. 38°C, no condensation.

## ■ Control board and IC

Type	Part Number	Output Interface	Dimensions (mm)
Control board	FID-1850-180 (for FID-1520)	USB (full speed)	95.0 x 30.0 x 8.5
	FID-1850-170 (for FID-1300)	RS232C	75.0 x 30.0 x 8.5
	FID-1850-150 (for FID-1300)	USB (full speed)	75.0 x 30.0 x 8.5
	FID-1850-160 (for FID-1300 / Dual touch)	USB (full speed)	60.0 x 30.0 x 5.2
Control IC	FID-1860-014	USB (full speed)	7.0 x 7.0 x 1.7 (body) 48 pin LQFP
	FID-1860-013	Asynchronous Serial	7.0 x 7.0 x 1.7 (body) 48 pin LQFP

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