

Infrared Touch Screen

BIE Series

Technical Specification

Customer Approved

采购部 PURCHING	品管部 QC	研发部 R&D	签章

Manufacturer

拟制 DRAWING	审核 1 CHECK1	审核 2 CHECK2	批准 RATIFY	签章

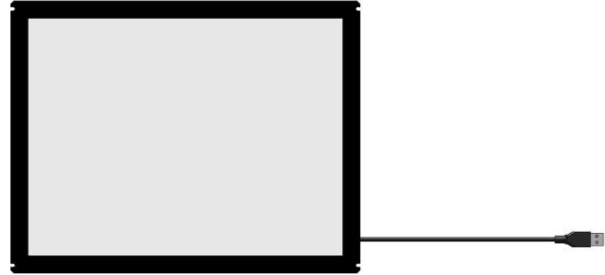
Version	Date	Information Source	Update Details
1.0	2016-9-18	Nick Shi	Compile

1 Characteristics

BIE series infrared touch screen is the low profile touch panel that is designed to easily fit in a LCD monitor.

Features:

- Thin and slim frame
- Including with tempered glass
- Integrated controller
- Fast response and writing smoothly
- Super transparency
- High resolution
- Stable and no drift
- Anti-dust and scratch proof



Typical Applications:

- All-in-one computer
- Video conference system
- Kiosks
- Self-service terminal
- Interactive advertising machine

2 Specifications

Touch Points	1,2	
Normal Size	15"/17"/19"	
Input Method	Finger, or any other opaque stylus	
Position Accuracy	3mm	
Touch Stylus Diameter	>6mm(central area), >7mm(marginal area)	
Response Time	<16ms	
Optical Element Pitch	6.35mm	
Touch Intensity	No pressure required	
Detection Form	Infrared rays interception detection form	
Scanning Form	Auto Start, Always Scanning	
Controller Reported Resolution	4096 × 4096	
Movement Mode	Input Point, Finishing Point, Following, Continuous Detection	
Output Form	Coordinate output	
TOP Shell	Polycarbonate	
Bottom Shell	Galvanized sheet	
Glass	3mm thickness tempered glass	
Outside Dimensions	See Chapter 4	
Touch Area	See Chapter 4	
Interface Type	USB	USB2.0 Low Speed
	RS232C	38400 bps, 8 Data Bits, 1 Stop Bit, No Parity
Connector Type	USB	Plug of type A

	RS232C	DB9 Female
Temperature Range	Operating -25 - 70°C (Temperature slope less than 25°C/Hr)	
	Storage -40 - 85°C (Temperature slope less than 25°C/Hr)	
Humidity	Operating 0%-85%, non-condensing	
	Storage 0%-95%, non-condensing	
ESD Capability	Contact discharge voltage is 8KV, air discharge voltage is 15KV	
Supply Voltage	DC+5V ± 5%	
Power Consumption	max200mA , the following average 160mA	
How to Supply it	USB	From USB PORT of PC or powered HUB
	RS232C	From PS-2 PORT of PC or external power
Supported OS	Windows 2000, 2003, XP-SP3, Vista, Windows 7(32/64 bit), Windows 8(32/64 bit), Linux, Android	
Agency Approval	CE, FCC	

3 Connector

3.1 USB connector, as illustrated below :

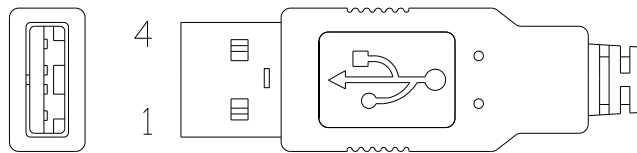


FIGURE 1

Cable length: 400mm (+50, 0)

Cable information: UL2725 28AWG/1P+26AWG/2C+A+B OD:4.0

Number	Signal name	Direction
1	+5V	
2	D-	
3	D+	
4	GND	

3.2 Flat type connector of DB9 female, as illustrated below:

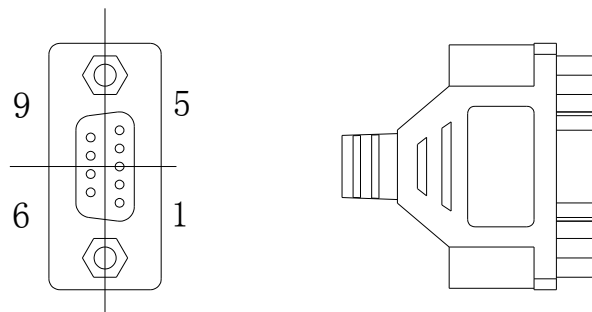


FIGURE 2

Cable length: 300mm (+50, 0)

Cable information: UL2725 28AWG/1P+26AWG/2C+A+B OD:4.0

Number	Signal name	Direction	Number	Signal name	Direction
1	VCC		2	TXD	PC to Panel
3	RXD	Panel to PC	4	Not Connect	
5	GND		6	Not Connect	
7	Not Connect		8	Not Connect	
9	Not Connect				

4 Active Area and Detection coordinate

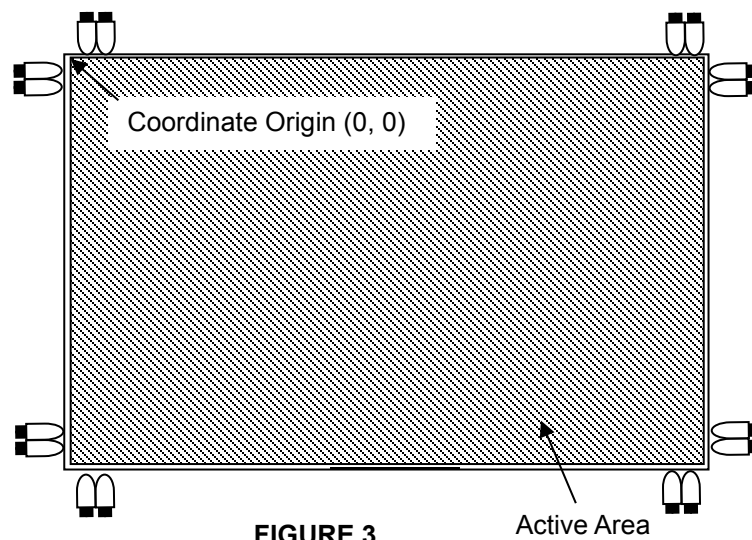


FIGURE 3

5 Mechanical Dimension

Size	Scale	Touch Area Dimensions		Outside Dimensions		
		length (mm)	width (mm)	length (mm)	width (mm)	Thickness (mm)
15 inch	4:3	305.7	229.7	342.2	266.2	6.8
17 inch	5:4	340.3	272.3	376.2	308.2	6.8
19 inch	5:4	378	303	414.2	339.2	6.8

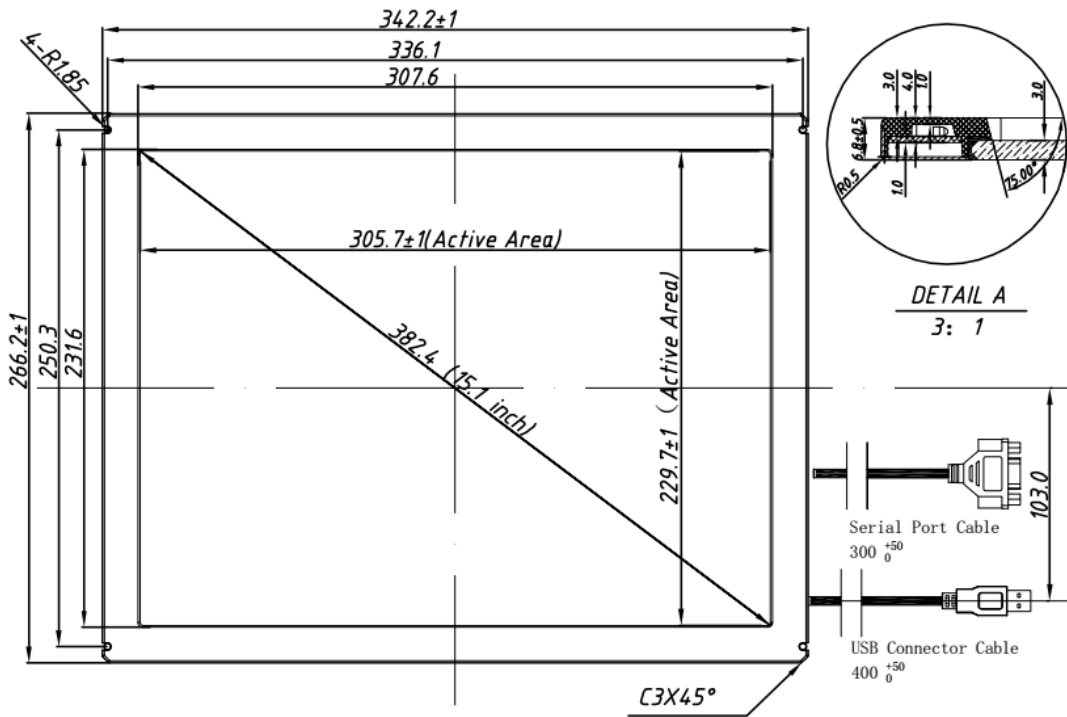


FIGURE 4 15 inch

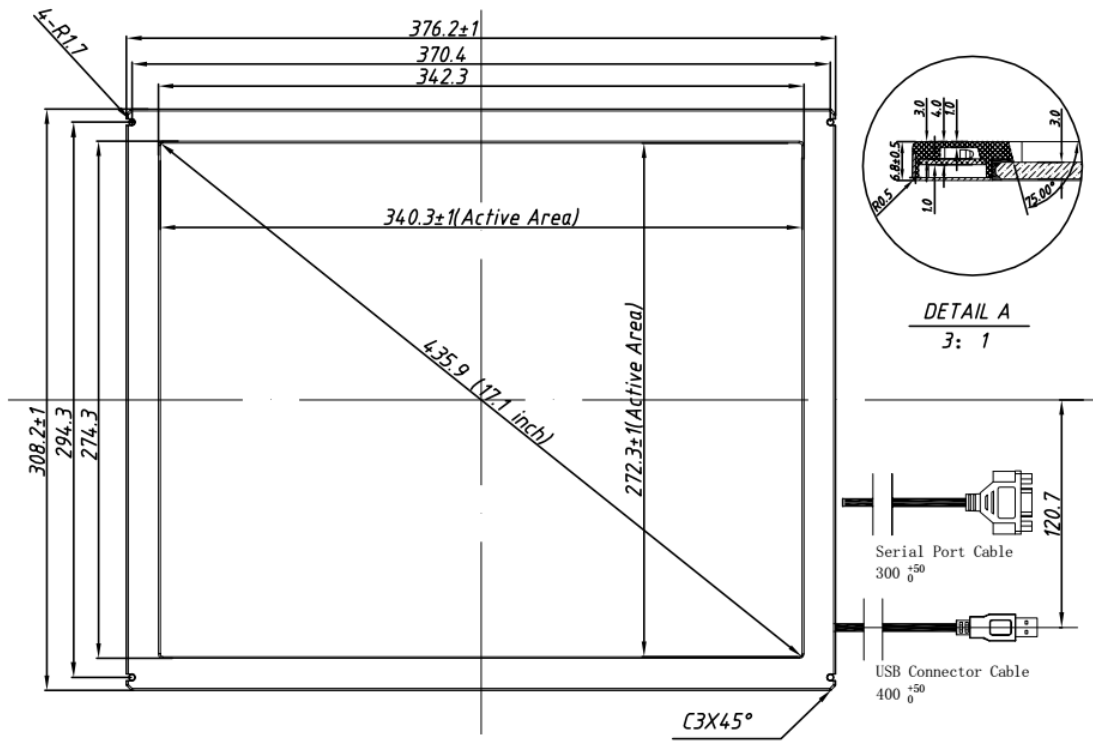


FIGURE 5 17 inch

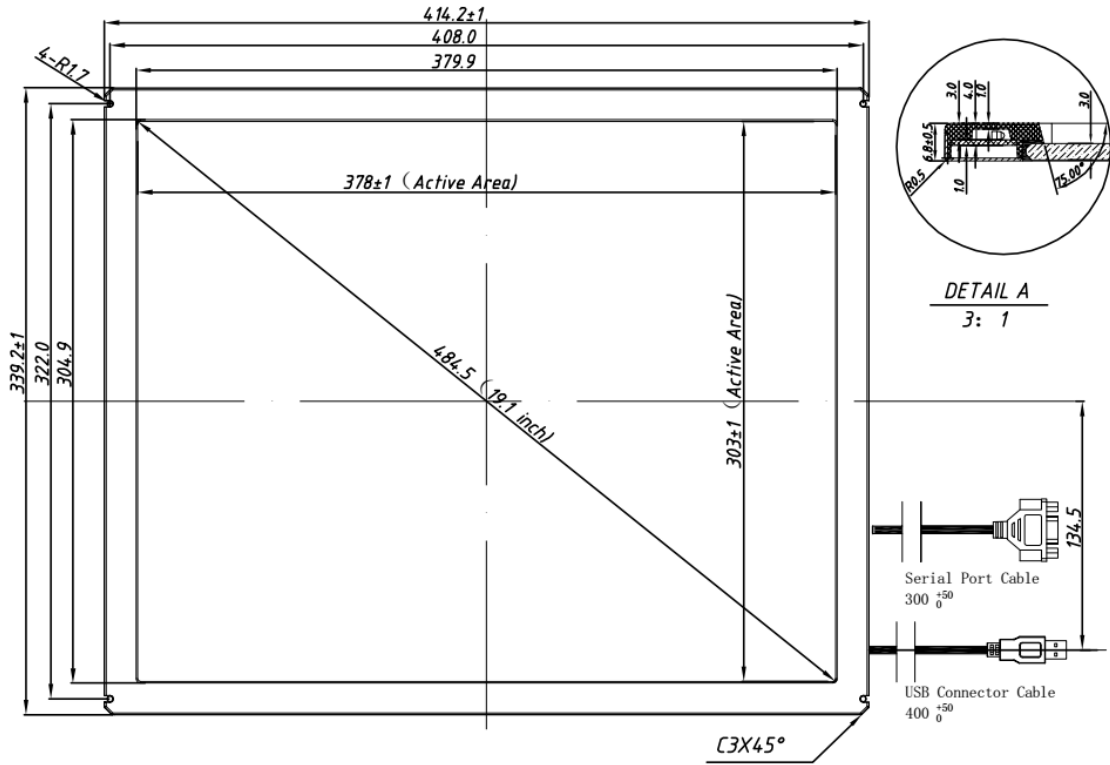
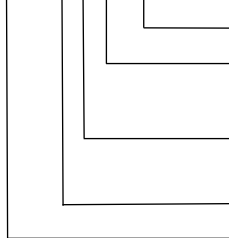


FIGURE 6 19 inch

6 Ordering information

BIE_{xxx}D03X_{xx}-01



- Version 01 – V1.0
- Touch Points blank – 1 point
02 – 2 points
- Interface Type U – USB type
M – RS232C
- Glass thickness 03 – 3mm tempered glass (normally)
- Size 150 – 15", 4:3
170 – 17", 5:4
190 – 19", 5:4
Other – Customer specified size

Part Number	Description	Version
BIE150D03U-01	15", 4:3, 3mm general tempered glass, 1 point USB	V1.0
BIE150D03M-01	15", 4:3, 3mm general tempered glass, 1 point RS232C	V1.0
BIE150D03U02-01	15", 4:3, 3mm general tempered glass, 2 point USB	V1.0
BIE150D03M02-01	15", 4:3, 3mm general tempered glass, 2 point RS232C	V1.0
BIE170D03U-01	17", 5:4, 3mm general tempered glass, 1 point USB	V1.0
BIE170D03M-01	17", 5:4, 3mm general tempered glass, 1 point RS232C	V1.0
BIE170D03U02-01	17", 5:4, 3mm general tempered glass, 2 point USB	V1.0

BIE170D03M02-01	17", 5:4, 3mm general tempered glass,2 point RS232C	V1.0
BIE190D03U-01	19", 5:4, 3mm general tempered glass,1 point USB	V1.0
BIE190D03M-01	19", 5:4, 3mm general tempered glass,1 point RS232C	V1.0
BIE190D03U02-01	19", 5:4, 3mm general tempered glass,2 point USB	V1.0
BIE190D03M02-01	19", 5:4, 3mm general tempered glass,2 point RS232C	V1.0

7 Product Picture



FIGURE 7 Top view

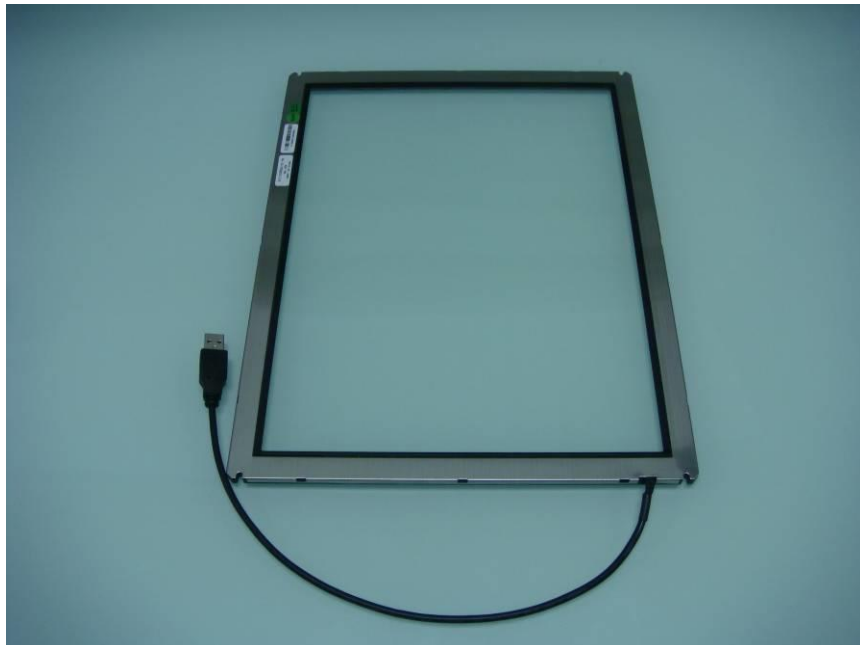


FIGURE 8 Bottom view



FIGURE 9 Top view



FIGURE 10 Bottom view

8 Packaging



FIGURE 11 10 PCS packing

9 RoHS Compliance

BIE series touch screen is RoHS compliant.