

Version	Date	Information Source	Update Details
1.0	28/01/2016	Dongxia Lin	Preliminary version
1.1	25/07/2016	Teddy Xu	Add order information 19.1"16:10
1.2	06/12/2016	Dongxia Lin	Update Appendix I
1.3	16/12/2016	Hai Bi	Update Operating Systems Support
1.4	09/05/2017	Hai Bi	Update Order information
2.1	31/05/2017	Hai Bi	Modify temperature
2.2	08/08/2017	Hai Bi	Modify structural drawings
2.3	18/12/2017	Hai Bi	Parameter modify
2.4	16/01/2018	Hai Bi	Modify structural drawings
2.5	29/03/2018	Hai Bi	Modify 15" barcode
2.6	26/04/2019	Hai Bi	Parameter modify

Infrared Type Touch Panel

IX1002 Series

Technical Specification

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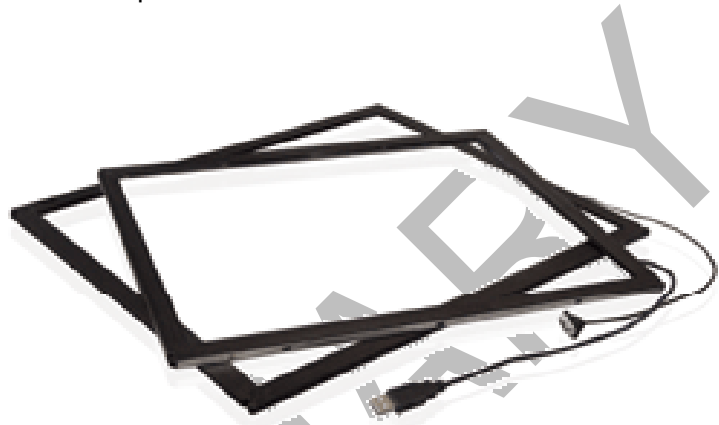
1、 Characters

IRTOUCH SYSTEMS'S IX1002 Series infrared touchscreen is designed for LCD monitor. Features such as vandal proof, water proof, maintenance free as well as long life time make the IX1002-series touchscreen an ideal choice for many interactive applications such as POS, touch monitors, Kiosks, etc.

IX1002 Series infrared touchscreen is a brand-new creative version compatible with existing infrared E series products and add gesture function to support zoom in and zoom out operation.

Benefits

- Vandal proof, scrape-resistant
- Integrated controller
- Support zoom in and zoom out gesture
- Ultra-high precision
- Ultra-Fast response speed
- Maintenance free, long life time
- Fault tolerance design to ensure reliability
- Various touch objects
- 1-2 points touch



Typical Applications

- POS
- Desktop touch monitor
- Indoor/outdoor kiosk
- ATM
- In-vehicles and transportation
- Medical instrument
- Industrial control systems
- Gaming machine
- Ticket machine

2、 Order information

Part Number	Description
IX10020104100001	10.4" (4:3) , 3mm general tempered glass HID
IX10020121100001	12.1" (4:3) , 3mm general tempered glass HID
IX10020151100009	15.1" (4:3) , 3mm general tempered glass HID
IX10020154400001	15.4" (16:10) , 3mm general tempered glass HID
IX10020171200001	17.1" (5:4) , 3mm general tempered glass HID
IX10020191200001	19.1" (5:4) , 3mm general tempered glass HID
IX10020191400001	19.1" (16:10) , 3mm general tempered glass HID
IX10020216300001	21.6" (16:9) , 3mm general tempered glass HID
IX10020241300001	24.1" (16:9) , 3mm general tempered glass HID

3. Specifications

Mechanical Specifications

Input Method	Finger, gloved hand, or any other opaque stylus
Touch Technology	Infrared rays interception detection, no special surface coatings
Available Size	10.4" \12.1" \15.1" \17.1" \19.1" \21.6" \24.1"
Outside Dimensions	see Appendix I
Touch Active Area	see Appendix I
Glass	3mm tempered glass (customizable)
Transmittance	>88% with glass
Shell Material	Top Shell : Polycarbonate (PC) Bottom Shell : SGCC (10.4"-21.6"), Aluminum Extrusion (24.1")
Pressure Required to Trigger Touch Event	No pressure required.

Electrical Specifications

Controller reported resolution		32767×32767
Touch accuracy	[mm]	<1.5mm (central area), < 2.5mm (edge area)
Touch object diameter	[mm]	≥5mm(single point), ≥9mm(two points)
Output		Coordinates
Calibration		Not required or Simple four-point calibration, no drift
Response Time	[ms]	≥11ms
Power requirements		Powered by USB (DC5V±5% @ 500mA)
Power consumption		<1.5W
Electrical life	[Hours]	61000

Interface Specifications

Interface Type	USB	HID
Plug and Play	Plug and play and HID compatible	
Connector Type	USB	Type A

Environmental Specifications

Temperature	Operating : -20 ~ 70°C Storage : -40 ~ 85°C
Relative Humidity	Operating : 10%-90% RH, 40°C non-condensing Storage : 10%-90% RH, 40°C non-condensing
Electrostatic Protection	Per EN61000-4-2 2008: Level 4, Class B. Contact discharge 8kV, air discharge 15kV on USB connector pins
Ambient Light Tolerance	Direct Sunlight illumination ≤32.5K Lux (Non-Direct) Sunlight illumination ≤100K Lux
EMC	CE, FCC Class B Compatible
Seal ability	IP65(Front)

Software Specifications

Firmware Upgradability	Yes
Device Type	Touch (with gesture support per OS) or, Mouse (Click, drag, double click, right-click)
Calibration	Four-point calibration, no drift
Multi-Monitor Support	Manually Binding
Operating Systems Support	Windows(xp\7\8.1\10),Linux(≥ 2.6),Android(≥ 2.6),Vxwork(≥ 6.5)

4、 Panel Opening Area and Touch Active Area

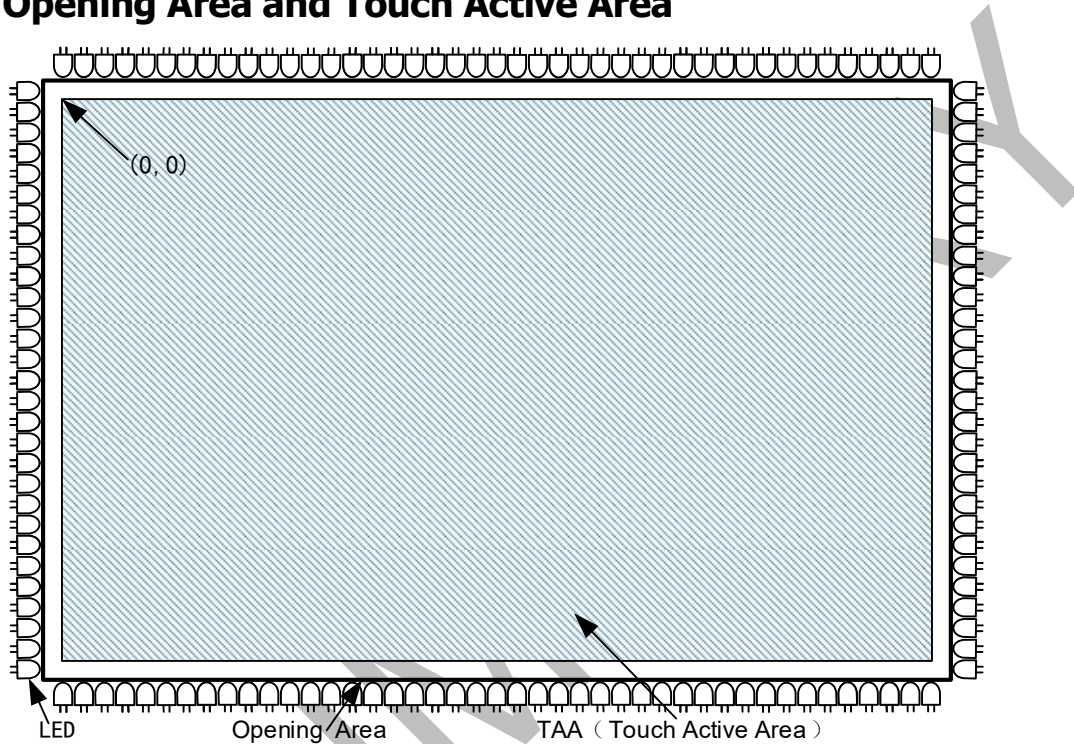


FIGURE 1

5、 Dimensional Drawing

Appendix I: Product Dimension Drawing

Appendix II: USB Connector Drawing

6、 ROHS COMPLIANCE

IX1002 Series touchscreen is RoHS compliant.

Appendix I :

ITEM	LOCT	DESCRIPTION OF CHANGE	APP. BY	DATE	H	G	F	E	D	C	B	A

Size	Touchscreee Thickness (D1)	Outside Dimensions			Touch Active Area				Assemble Hole Dimensions					Connection Position (D12)	Lens Thickness (D13)	Glass Thickness (D14)
		Width(D2)	Height(D3)	Width(D4)	Height(D5)	Diagonal(D6)	Width(D7)	Height(D8)	Diameter(D9)	Width(D10)	Height(D11)					
10.4(4.3)	6.8±0.5	246.2±1	193.4±1	211.2±1	158.4±1	264.0±25	24.0±1	177.8±1	Φ3.6±0.1	213.2±1	160.4±1	65±3	3.8±0.1	3.2±0.1		
12.1(4.3)	6.8±0.5	281.9±1	220.7±1	246.4±1	185.2±1	308.2±0.25	27.5±1	205.1±1	Φ3.6±0.1	248.4±1	187.2±1	75±3	3.8±0.1	3.2±0.1		
15.1(4.3)	6.8±0.5	342±1	266±1	306±1	230±1	382.8±0.25	33.5±1	250.3±1	Φ3.6±0.1	308±1	232±1	100±3	3.8±0.1	3.2±0.1		
15.4(6.10)	6.8±0.5	367.5±1	243±1	331.5±1	207±1	390.8±0.25	36.1±1	229.3±1	Φ3.6±0.1	333.5±1	209±1	74.5±3	3.8±0.1	3.2±0.1		
17.1(5.4)	6.8±0.5	376±1	308±1	34.0±1	272±1	435.4±0.3	37.0±1	294.3±1	Φ3.6±0.1	342±1	274±1	107±3	3.8±0.1	3.2±0.1		
19.1(5.4)	6.8±0.5	414±1	339±1	378±1	303±1	484.5±0.3	4.08±1	322±1	Φ3.6±0.1	380±1	301±1	116.7±3	3.8±0.1	3.2±0.1		
19.1(6.10)	8.0±0.5	451±1	297±1	411±1	257±1	484.7±0.3	4.42±1	285±1	Φ3.5±0.1	413.2±1	259.2±1	103.3±1	4.0±0.1	3.2±0.1		
21.6(6.9)	8.0±0.5	517.5±1	309±1	477.5±1	269±1	548.1±0.3	5.08±1	297±1	Φ3.5±0.1	480.1±1	271.6±1	100±3	4.9±0.1	3.2±0.1		
26.1(6.9)	7.9±0.5	573±1	34.0±1	533±1	300.5±1	611.9±0.3	5.6±1	328.5±1	Φ3.0±0.1	535.1±1	302.6±1	125±3	4.0±0.1	3.2±0.1		

D1

D2

D3

D4

D5

D6 (Ref.)

D7

D8

D9

D10

D11

D12

D13

D14

4±D9

Usb Connector Cable
30 centimetre

DO NOT SCALE DRAWING
ALL DIMENSIONS ARE IN MM
ANGULAR TOL: ±0.5°
LINEW: TOL:

0~50	±0.1	 IRTOUCH SAMSUNG HIGHSCREENS CO., LTD.	MATERIAL:	PART No:	EXPLODE No:	Rev: β	PROJECTION	
50~150	±0.15		 IRTOUCH SAMSUNG HIGHSCREENS CO., LTD.	FINISH:	PART NAME:	IX-series infrared touchscreene	DRAW No:	
150~250	±0.2			 IRTOUCH SAMSUNG HIGHSCREENS CO., LTD.	ACTION:		SCALE: 1:1	
250~400	±0.25				 IRTOUCH SAMSUNG HIGHSCREENS CO., LTD.		DESIGNER: 中野彬	CHECKED: 星海
400~1000	±0.3						DATE: 2018.1.4	DATE: 2018.1.4
1000~	±0.5	 IRTOUCH SAMSUNG HIGHSCREENS CO., LTD.			APPROVED: 陆旭军	SHEET 1 OF 1		
					DATE: 2018.1.4	A4		
					DATE: 2018.1.4			
					DATE: 2018.1.4			

Appendix II:

	H	G	F	E	D	C	B	A
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1	USB 连接线颜色定义	A1254	
1	红色 (VCC)	1	
2	白色 (D-)	2	
3	绿色 (D+)	3	
4	黑色 (GND)	4	
5	黑色 (屏蔽地线)	5	

6	A1254 (MOLEX /51146), A1254-1接线端子 (5个).	1
5	套管: $\Phi 0.8*16\text{mm}$; 屏蔽芯线直径在 0.65mm 内; 不能小于其它芯线直径;	1
4	套管: $\Phi 5.0*25\text{mm}$	1
3	外套: PVC 颜色: 黑色半露	1
2	线材: UI-2725 28AWG*2C+28AWG*1P+AL+BRATID L=985+15/-0mm 黑色 (COM-030)	1
1	PLUG: USB A TYPE MALE-4PIN (SOLDER TYPE)	1

物料简述

IRTOUCH BEIJING IRTOUCH SYSTEMS CO., LTD.

DO NOT SCALE DRAWING ALL DIMENSIONS ARE MM
 TOLERANCE: LINEAR TOL: X= ± 0.25
 Y= ± 0.10 ANGLUAR TOL: $\pm 1.0^\circ$

PART No: 271-040303-06
 PART NAME: 母插头USB引出线

EXPLODE No: Rev: C
 DRAW No:

SCALE: 1:1

DESIGNER: 付精位
 CHECKED: DATE: 2009.06.03

APPROVED: DATE:

SHEET 1 of 1