

Quick Start Guide

感谢您选用光洋EA7E系列工业触摸屏，在您使用此产品之前，请先阅读本随机说明。如您在
使用此产品时有任何的问题，请联系我们！
Thank you for purchasing our EA7E series Touch Panel. Please read this Quick Start Guide carefully
before applying the product. If you need any help when you use the product, please consult us.

光洋电子(无锡)有限公司

KOYO ELECTRONICS (WUXI) CO., LTD.

地址：中国江苏省无锡市滨湖区建筑西路599号1栋21层

Addr: 21st Floor, Building 1, No. 599, Jianzhuxi Road, Binhu District, Wuxi, Jiangsu, P.R.China

邮编(Pc): 214072

电话(Tel): (0510) 85167888

传真(Fax): (0510) 85161393

Homepage: http://www.koyoele.com.cn

KEW-M9213C



安全情报 (Safety Information)

- 请在电源断开的情况下连接电源线，否则有可能损坏触摸屏或导致人身伤害。
- 请不要把触摸屏作为与人的安全或重大伤害有关的开关来使用。（如紧急安全开关等）
- 保护接地端子务必请按第D种方法接地，否则有产生电击的可能。
- 请在规定的环境范围（温度、湿度、振动、冲击等）内存放、使用触摸屏。
- 请不要在有可燃性、爆炸性气体或蒸汽的场所使用触摸屏。
- 请不要自己分解、改造触摸屏，否则有可能引起故障和其它的问题。
- 不要用硬的东西或螺丝刀的尖头等锋利的东西去敲打触摸屏，以免造成触摸屏的损坏或人身的伤害。
- Please connect the power wires when the power is OFF. Otherwise the Touch Panel damage or personal injury may be caused.
- Do not use the Touch Panel to make switches that are related to safety of people or major damages (emergency safety switches, etc).
- Be sure that class D grounding is used for the protective grounding terminal. There is a possibility of electrical shock if the Touch Panel is not grounded.
- Use and store the Touch Panel in the environment described in the specifications (regarding temperature, humidity, vibrations, shock, etc).
- Do not use the Touch Panel where it is subjected to flammable or explosive gases, or stream.
- Do not disassemble or modify the Touch Panel. Doing so can cause malfunctions and lead to other problems.
- Do not press on the Touch Panel with screwdrivers or other sharp objects and do not strike it with hard objects. Doing so can damage the Touch Panel or cause malfunctions.



规格认证 (Agency Approval)

本触摸屏已取得CE认证，请参考产品上的标签。请浏览本公司网站以获得最新的情报。

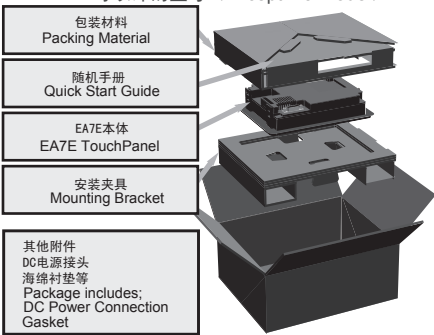
The Touch Panel conforms to CE. Please refer to the product label. Refer to our web site for the latest information.

1 开箱确认 (Unpack and Inspect)

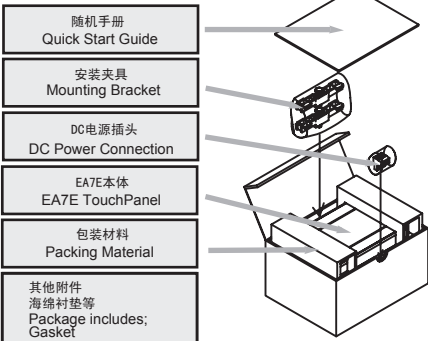
请确认包装纸箱中有下图所示的物品。
如果有任何的缺少或损坏，请与您的供货商联系。

Please make sure that all insertions shown in the picture are included in the carton. If any item is missing or damaged, please contact the store you purchased.

4.3寸以外的型号 (Except 4.3" Model)



4.3寸型号 (4.3" Model)



2 选购件安装 (Install Optional Accessories)

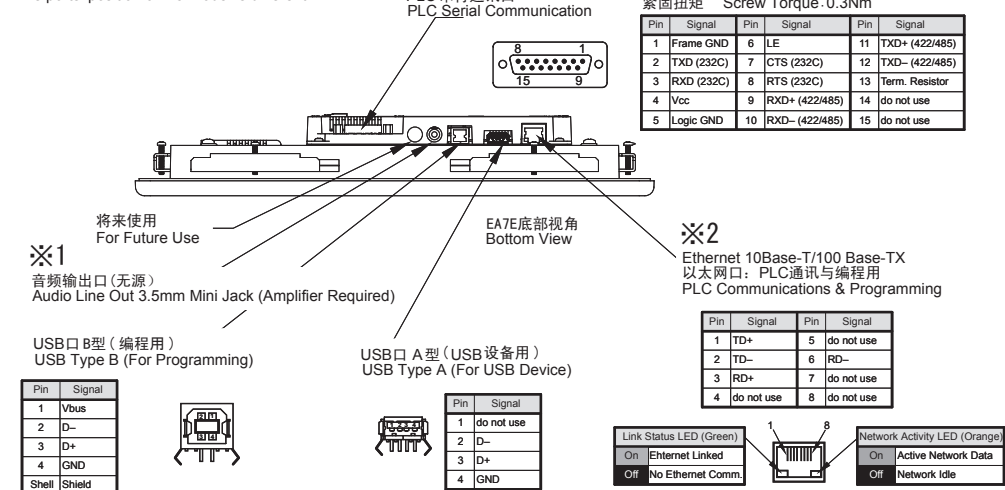
选件的安装。详细内容请参照各自的手册资料。
你可以在选件包中找到手册资料，或者可以去我们的网站上下载手册资料。

Install Optional Accessories. Please refer to each Manual for the details. The Manuals can be downloaded from our Web Site.

注：EA-AC电源模块不适用于4.3寸屏。（EA-AC does not adapt to 4.3" Model.）

3 通讯口确认 (Communication Ports)

注：图例为10.2"及7.0"屏的外观，与4.3"屏有所不同。
The ports' position of 4.3" Model is different.



※1：EA7E-TW10CL-RC/RCW EA7E-TW7CL-RC/RCW 和 EA7E-TW4CL-C/CW 上没有该接口。

※1：Device is not available on EA7E-TW10CL-RC/RCW、EA7E-TW7CL-RC/RCW 和 EA7E-TW4CL-C/CW.

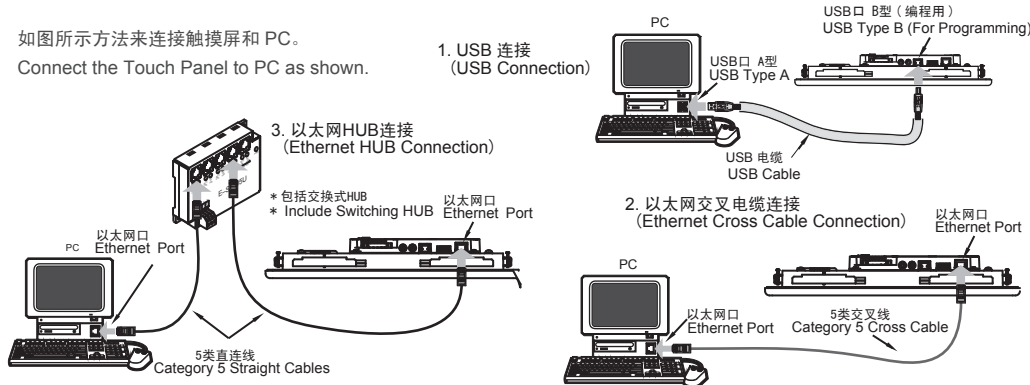
※2：EA7E-TW10CL-RC/RCW EA7E-TW7CL-RC/RCW 上没有该接口。

※2：Device is not available on EA7E-TW10CL-RC/RCW and EA7E-TW7CL-RC/RCW.

4 PC 与 EA7E 的连接 (Connect Touch Panel to PC)

如图所示方法来连接触摸屏和 PC。

Connect the Touch Panel to PC as shown.



5 触摸屏上电 (Provide Power to the Touch Panel)

本触摸屏有 DC24V 和 AC 2 种供电方法。当使用 AC 供电时，需要另外选购电源选件（EA-AC）。

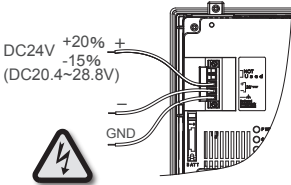
- 按图 1 所示连接 DC24 电源（4.3寸屏可连接DC12~24V电源）。
- 按图 2 所示，通过 EA-AC 选件连接 AC100~240V 电源。（4.3寸屏不支持）

Use DC24V or AC for power source. EA-AC (Option) is required for AC power.

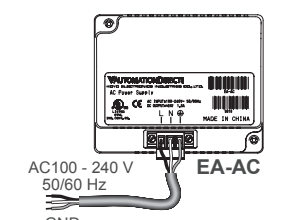
- Connect a DC24V power supply (4.3"Model: DC12~24V) as shown in figure 1). DC wiring.
- Connect EA-AC as shown in figure 2). AC wiring. (Except 4.3"Model)

1). DC接入(DC Wiring)

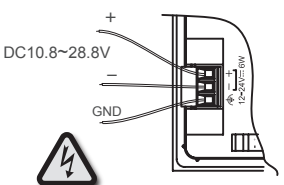
4.3寸以外的型号如下图 (Except 4.3" Model)



2). AC接入(AC Wiring)



4.3寸型号如下图 (4.3" Model)



- 电缆要求：单芯线0.2~2.5mm²，多股线0.2~2.5mm²，AWG24~12
- 接线端子紧固扭矩：0.5~0.6Nm
- 端子台法兰紧固扭矩：0.4~0.5Nm ※1
- ※1 4.3"屏无端子台法兰
- Wire range: Solid: 0.2~2.5mm², Stranded: 0.2~2.5mm, AWG:24~12
- Screw Torque (terminal): Connecting Screw: 0.5~0.6Nm, Screw for flange: 0.4~0.5Nm ※1
- ※1 No flange for 4.3" Model

- 电缆要求：单芯线0.2~2.0mm²，多股线0.2~2.0mm²，AWG24~14
- 端子紧固扭矩：0.5Nm
- 本体安装紧固扭矩：0.35Nm
- Wire range: Solid: 0.2-2.0mm², Stranded: 0.2-2.0mm², AWG24-14
- Screw Torque(terminal): Connecting Screw: 0.5Nm, Screw for flange: 0.5Nm
- Screw Torque(mounting bracket): 0.35Nm

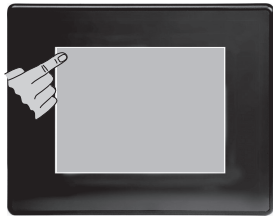
EA7E 状态指示 LED (EA7E Status LED)

CPU Status LED (Green, Orange & Red)	
Off	Power off
Green	Normal-CPU Run State
Red	System not found
Orange	Low Power

Power LED (Green)	
On	Power On
Off	Power Off
Serial Tx/Rx (Green)	
On	Comm. is active
Off	No communication

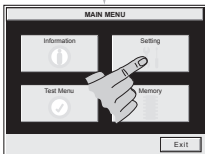
EA7E 背面 (Rear View)

6 如何设定时间 (The time set of a clock)

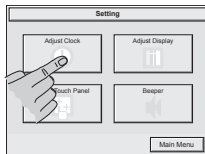


按住触摸屏左上角3秒，进入系统设置画面的主菜单画面。

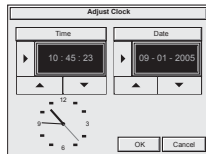
To access the MAIN MENU of the Touch panel setup screens, press the upper left corner of the panel display area for 3 seconds as shown to the left.



按“System Setup”键
Press “System Setup”



按“Clock Setup”键
Press “Clock Setup”

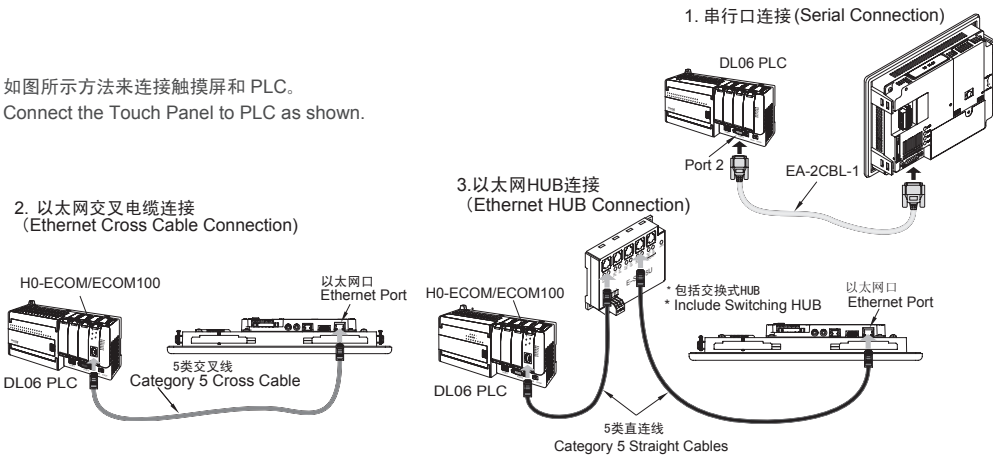


调整触摸屏内部时钟
Adjust the internal clock

7 PLC 与 EA7E 的连接 (Connect Touch Panel to PLC)

如图所示方法来连接触摸屏和 PLC。

Connect the Touch Panel to PLC as shown.



8 作图软件的安装、使用和传送 (Install the Software, Develop and Transfer)

点击或双击下载的安装文件。根据提示信息安装 KEW EA7E 作图软件。

启动安装好的KEW EA7E 作图软件,通过 “开始>模拟>传送” 这简单的三步，您就可以开始制作您的用户画面了。

Clicking or double-clicking the Installer downloaded.

Install KEW EA7E programming software in accordance to the message of an installer.

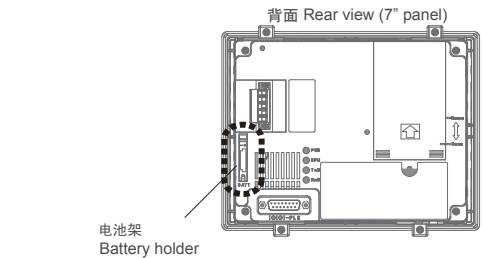
Then start up KEW EA7E programming software.

Your system can be easily started up at three steps, “Start” > “Simulate” > “Send”.

9 交换电池 (Replacing the battery)

1. 请开启触摸屏的电源。
2. 下压并拉出电池架的卡盖（照片①）。
3. 取出旧电池。
4. 安装新电池（照片②）。此时请注意勿卷曲电池卡件（照片③）。

1. Turn on the Touch Panel power .
2. Push down the battery holder's tab and pull out the holder (Picture ①).
3. Remove the old battery.
4. Insert the new battery (Picture ②). Please pay attention not to bend the battery holder's retaining tab (Picture ③).



本制品并未安装大容量电容，因此请务必在触摸屏电源开启时进行电池交换。若于电源关闭时交换电池则SRAM和时钟数据会丢失并产生错误码。

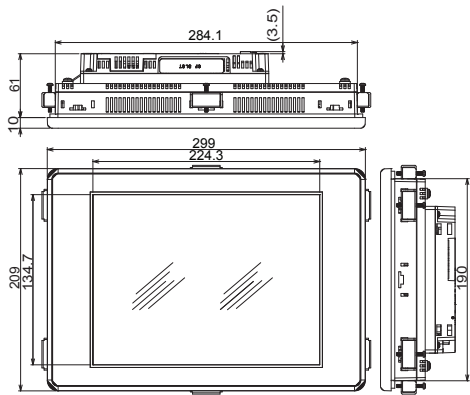
The super capacitor is not put on the Touch Panel. Therefore it is required to replace the battery by keeping the Touch Panel power on. If the battery is replaced when the Touch Panel power is off, SRAM and clock data will be deleted and there will be an error indicated.

10 电池废弃注意事项 (Discarding the battery)

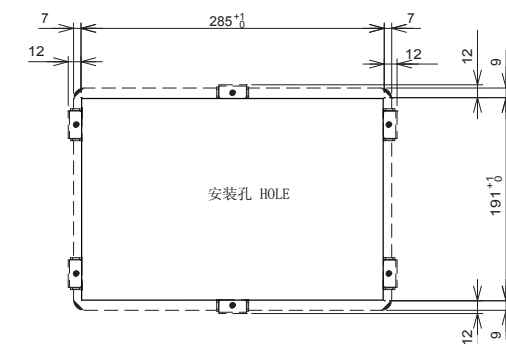
电池丢弃时若和其它金属物接触则可能会产生发热 / 破裂 / 起火情形。请务必将端子（+/-）粘覆胶带后再丢弃。具体请按国家有关法律法规进行处理。

When discarding the battery, if the battery contacts to other metal, it is prone of produce heat, burst or fire. Therefore make sure you cover the terminal (+/-) by sticky tape etc. As for handling the used battery, make sure you follow the regulation.

11 外形尺寸图与开孔尺寸 (Dimensions・Cutout Size)



EA7E-TW10CL-C、EA7E-TW10CL-RC
EA7E-TW10CL-CW、EA7E-TW10CL-RCW



12 规格 (Specifications)

项目 (Item)/型号 (Part Number)			EA7E-TW10CL-C EA7E-TW10CL-CW	EA7E-TW10CL-RC EA7E-TW10CL-RCW	EA7E-TW7CL-C EA7E-TW7CL-CW	EA7E-TW7CL-RC EA7E-TW7CL-RCW	EA7E-TW4CL-C EA7E-TW4CL-CW
显示部分 Display	显示尺寸 Display actual size		10.2"		7.0"		4.3"
	显示类型 Display type		TFT color LCD				
	显示色数 Color scale		65,536 colors				
	显示像素 Screen pixels		800 × 480 (WVGA)		800 × 480 (WVGA)		480 × 272 (WQVGA)
	实际显示区域尺寸 (mm) Display viewing area(mm)		222.0 W × 132.5 H		154.1 W × 85.9 H		95.0 W × 53.8 H
	亮度调节 Brightness adjustment		触摸屏本体系统设置画面调节（可利用作图软件放置调节部品） User configurable by the configuration screen of the Touch panel (Configuration object can be placed by the software)				
背光 Backlight	背光规格 Backlight		LED发光管（平均寿命:连续点灯20,000小时以上，亮度衰减到原始亮度的一半。）※1 LED backlight (Average lifetime: over 20,000 hours continuous use, the brightness decrease to 50% original brightness.) ※1				
	是否允许用户自行更换 User replaceable		不可 No				
	屏保功能 Auto-off function		通过作图软件设定 User configurable by the software				
触摸屏规格 Touch panel			电阻膜方式、分辨率:1024 W × 1024 H Analog Resistive, Resolution : 1024 W × 1024 H				
外部接口 External interface	PLC连接用通讯口 PLC interface	串口 Serial	标准串口: RS-232C, RS-422/485(2/4线式) D-SUB-15P(双排孔型)×1 ※2 Asynchronous RS-232C, RS-422/485(2/4 wires) D-SUB-15P(female)×1 ※2 数据格式: 7/8bit 校验: None/Odd/Even 停止位: 1/2bit Data length: 7/8 bit Parity: None/Odd/Even Stop bit: 1/2 bit 传送速度 (bps): 2400/4800/9600/19200/38400/57600/115200/187500 Transmission speed (bps): 2400/4800/9600/19200/38400/57600/115200/187500				
			Ethernet ※3	有 YES	无 N/A	有 YES	无 N/A
	画面上传/下载用端口 Screen data transfer	USB口 USB	USB(Type-B) 2.0×1				
		Ethernet ※3	有 YES	无 N/A	有 YES	无 N/A	有 YES
	以太网口 Ethernet ※3		有 YES	无 N/A	有 YES	无 N/A	有 YES
	SD卡接口 SD Card-Slot		3.3V 限定 3.3V Only	无 N/A	3.3V 限定 3.3V Only	无 N/A	无 N/A
	音频输出（无源）Audio Line Output		有 YES	无 N/A	有 YES	无 N/A	无 N/A
	USB口 USB		USB(Type-A) 1.1×1 ※4				
一般规格 General Specifications	额定电源电压 Rated power voltage		DC24V (选购件 AC100/200V电源模块型号:EA-AC) 24VDC (Optional 100/200VAC Power Adapter, EA-AC is available)				DC12~24V
	电源电压容许变动范围 Operating power voltage		DC20.4~28.8V				DC10.8~28.8V
	容许瞬间断电时间 Allowable momentary power failure period		5ms以内 Less than 5ms				
	消费功率 Power Consumption		Less than 15W	Less than 13W	Less than 11W	Less than 9 W	Less than 6W
	使用环境温度 Operating temperature		0~50℃				
	保存环境温度 Storage temperature		-20~60℃				
	使用环境湿度 Operating humidity		10~85%RH(无凝露、non-condensing)				
	保存环境湿度 Storage humidity		10~85%RH(无凝露、non-condensing)				
	抗干扰 Noise immunity		干扰电压 AC1000Vp-p 波峰幅宽1μs 持续时间1ns Noise voltage : 1000VACp-p, Pulse width : 1μs, Rise time : 1ns (with noise simulator)				
	耐电压 Withstand voltage		AC1000V 1分钟(DC电源端子~FG端子间) 1000VAC for 1minute (between DC and FG)				
	绝缘电阻 Insulation resistance		DC500V 10MΩ以上(DC电源端子~FG端子间) 500VDC, over 10MΩ (between DC and FG)				
	耐振动 Vibration		IEC61131-2 标准 10-57Hz:0.075mm 57-150Hz:9.8m/s ² (X、Y、Z方向各10次) IEC61131-2 compliant, 10-57Hz: 0.075mm amplitude, 57-150 Hz 9.8m/s ² , 10 sweep cycles per axis on each of 3 mutually perpendicular axes				
	耐冲击 Shock		最大147m/s ² 11ms(X、Y、Z方向各2次) 147m/s ² peak, 11ms duration, 2 shocks per axis, on 3 mutually perpendicular axes				
	耐静电放电 ESD immunity		IEC61000-4-2 标准 接触:4kV 空气:8kV IEC61000-4-2 compliant contact : 4kV air : 8kV				
	腐蚀性气体 Surrounding air		无腐蚀性气体 Non-corrosive gas				
	接地 Grounding		D类接地 Class D				
	防护等级 IP rating		IP65(仅表面部分)相当 IP65(surface) equivalent				
	外形尺寸(mm) Dimensions(mm)		299.0 W × 209.0 H × 71.0 D		204.4 W × 156.0 H × 43.1 D		135.0 W × 95.0 H × 40.0 D
	质量(g) Weight (g)		About 1280	About 1270	About 560	About 550	About 280
	安装开孔尺寸 (mm) Panel cut size(mm)		285.0 W × 191.0 H		179.0 W × 140.0 H		126.0 W × 86.0 H
	冷却方式 Cooling method		自然空冷 Natural air cooling				

※1 25℃、24H 连续点灯时。 ※2 RS-232C/422/485 同时只能使用其中1个。 ※3 10Base-T/100 Base-TX (RJ-45) 自适应。 ※4 仅可连接部分USB移动磁盘、商用键盘、条码读入机。
※1 25℃, 24-hour continuous use. ※2 RS-232C, 422 or 485 only one of them can be used in sametime. ※3 10Base-T/100 Base-TX (RJ-45). ※4 Only some commercial memory cards, keyboard and bar-cord reader are connectable.

13 产品安装注意事项 (Attention at mounting)

1. 当把触摸屏安装到控制柜上时，请务必妥善固定在平整的面板上。若安装在变形弯曲的面板上，则触摸屏会有破损可能。另外，请把触摸屏安装在控制柜方形开孔的中心，否则触摸屏表面板可能会产生翘曲。
2. 允许的控制柜面板厚度请参照下表。可视控制柜板厚实际情况调整安装夹具安装孔位置。
3. 安装夹具推荐安装扭矩请参照下表。安装时请务必以均衡力量固定全部螺丝。如果安装扭矩过大，则可能会造成触摸屏本体/控制柜面板/安装夹具的变形。
4. 触摸屏上部或侧部之空穴为内部排气之专用通道，请勿阻塞。异常发热有可能造成故障。
5. 触摸屏和控制柜边沿或柜中其他制品之间须留出适当空间。

1. When you mount the Touch Panel on the control cabinet, please mount it on the flat surface and fix it correctly. If you mount the Touch Panel on uneven surface you may damage the Touch Panel. Please be advised to mount it on the center of square hole of the control cabinet. If the Touch Panel is mounted away from the center of square hole, then its surface sheet might bend.
2. As for the enclosure thickness please refer to the table as below. Please select the hole position depending on your control cabinet's material thickness.
3. As for the recommended tightening torque of mounting bracket, please refer to the table as below. Make sure all screws of the mounting bracket are screwed and tightened evenly. If tightening torque is too strong then the Touch Panel, control cabinet or mounting bracket might bend.
4. The holes on the top or side of the Touch Panel are necessary for ventilation. Therefore never block the holes. The abnormal heat may cause defects on the Touch Panel.
5. Please make adequate space between the Touch Panel and the edge of the control cabinet or other products.

安装紧固扭矩 (Enclosure Thickness and Screw Torque)			※3 B类夹具安装孔 B type bracket installation position	
型号 Part Number	板厚 Enclosure Thickness (mm)	紧固扭矩 Screw Torque (Nm)	※2 A类夹具上侧安装孔 A type bracket upper position (适用板厚 Suitable enclosure thickness: 1 ~ 6mm)	
EA7E-TW10CL-C/CW、 EA7E-TW10CL-RC/RCW	1.6~4	0.10~0.15	A类夹具下侧安装孔 A type bracket lower position (适用板厚 Suitable enclosure thickness: 5 ~ 16mm)	
EA7E-TW7CL-C/CW、 EA7E-TW7CL-RC/RCW ※1	A类 (A type) 1~16 ※2	0.25~0.35		
EA7E-TW4CL-C/CW	B类 (B type) 1~5 ※3	0.10~0.15		
	1~10	0.25~0.35		

※1 7寸屏有两类安装夹具，A类为金属夹具，B类为塑料夹具。（随机仅配一类夹具。）
※1 For 7.0" product, there are two types of mounting bracket, A type is metallic, B type is plastic. (Only one type in the package.)

