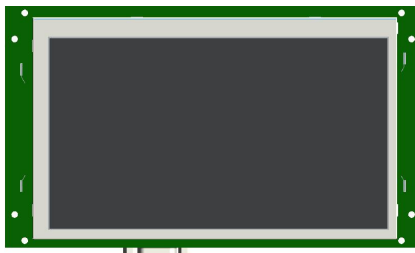


安装说明



深圳市步科电气有限公司



电话: 0755-26585555

传真: 0755-26616372

技术支持热线: 400-700-5281

http: //www.kinco.cn Email: sales@kinco.cn

步科官方微信

地址: 深圳市南山区高新科技园北区朗山一路6号一栋

1. 安装注意事项

1.1 环境要求

工作环境温度: GR070E 人机界面的设计规范可以保证它能够在 32°F~122°F (0~50°C) 的大多数工业环境中稳定工作。

请勿在以下场所使用:

- 阳光直射处
- 周围温度和相对湿度超出规格的场所
- 温度急剧变化易引起结露的场所
- 有腐蚀性气体和可燃性气体的场所
- 尘埃、灰尘、盐分、铁粉较多的场所
- 会被溅到水、油、药品等飞沫的场所
- 给主机带来直接振动和冲击的场所

在以下场所使用时请采取屏蔽措施:

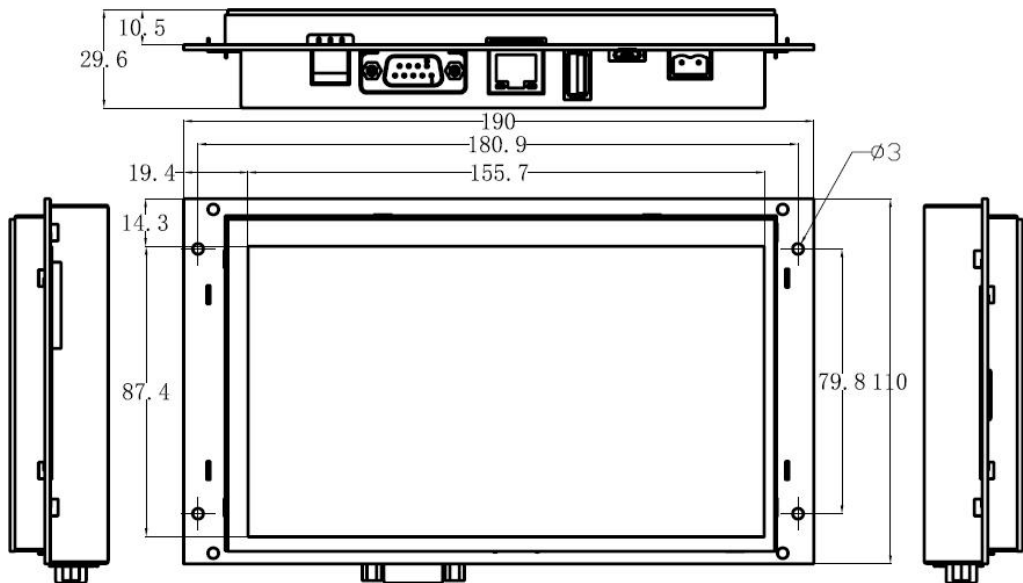
- 有静电或其它形式噪音处
- 有较强电磁场的场所
- 可能暴露于射线的场所
- 靠近于动力电源的场所

1.2 电源要求

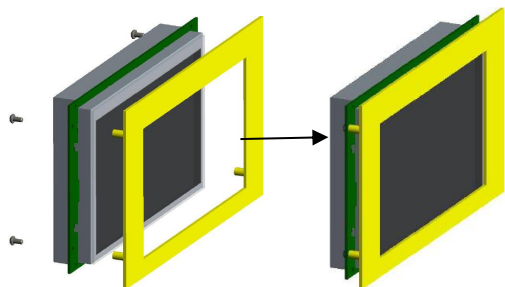
- 输入电压: DC10V~DC28V;
 - 特别需要注意与变频调速器和开关电源供应器保持较远的距离, 这类设备的输入和输出电缆都必须采用屏蔽电缆, 并将屏蔽网接到系统的星形接地点;
 - 直流电源必须与交流主电源正确的隔离开;
 - 不要让 GR070E 人机界面和感性负载或控制器的输入电路共用电源。
- 注意:** 产品内部的快速熔丝在电源电压过高的时候可以起到保护作用, 但并不能够确保内部电子元件不被损坏。

2. 产品安装

2.1 尺寸图



2.2 固定螺钉安装说明



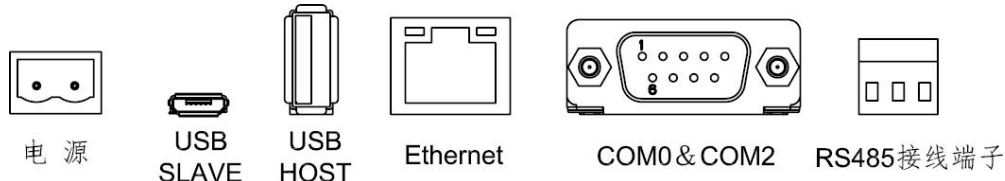
本产品采取后安装形式。产品四周预留了4个 ϕ 3mm的安装孔, 如左图所示, 将孔位与外壳螺纹柱孔对齐, 拧入 M3 规格的螺丝后固定。**注意:** 产品正面触控面板需要进行外部辅助加固, 以防长时间或复杂环境下脱落!

2.3 电源连接

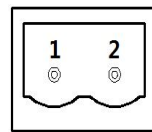
在连接电源前, 请确认符合所有当地和国家的电气标准。电源线缆请选择耐压值和电流值符合安全规定的线缆。

将产品背面接线端子的螺丝按逆时针方向旋松, 插入已经压接了端子的电源电缆, 然后顺时针拧紧接线端子的螺丝。**注意:** 将电源的正极接到 DC24V 的端子上, 直流的地接到 0V 的端子上。

3. 外部接口



3.1 电源



序号	含义
1	DC24V
2	0V

3.2 USB SLAVE 接口

连接	采用 MicroUSB 接口, 兼容手机数据线
端口作用	上/下载用户组态程序和设置 HMI 系统参数

3.3 USB HOST 接口

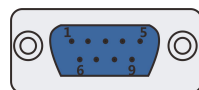
连接	连接 USB 接口设备或 U 盘
端口作用	连接 USB 接口键盘、鼠标、打印机等, 插入 U 盘上传/下载程序以及存储数据

3.4 以太网接口

以太网接口为 10M/100M 自适应以太网端口。

连接	采用标准 RJ45 接口网线与以太网设备连接
端口作用	用于 HMI 组态的上/下载, 系统参数的设置和在线模拟; 构成多 HMI 联机; 与 PLC 等通过以太网通讯; 通过以太网口与 PC 机通讯

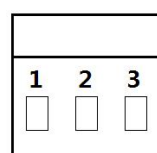
3.5 COM0/COM2



COM0/COM2 通讯端口是 9 针 D 型公座。**注意:** COM0 支持 RS232/485/422 通讯功能, COM2 只支持 RS232 通讯功能。

管脚	信号	PLC (COM0) [RS-422]	PLC (COM0) [RS-485]	PLC (COM0) [RS-232]	PC/PLC (COM2) [RS-232]
1	Rx- (B)	RS422 R-	RS485 B		
2	RxD_PLC			RS232 RxD	
3	TxD_PLC			RS232 TxD	
4	Tx-	RS422 T-			
5	GND	信号地			
6	Rx+ (A)	RS422 R+	RS485 A		
7	RxD_PC				RS232 RxD
8	TxD_PC				RS232 TxD
9	Tx+	RS422 T+			

3.6 COM0



序号	含义
1	GND
2	RS485 A
3	RS485 B

4. 工作模式

4.1 进入模式选择界面操作说明

触摸屏上电前用手指按住液晶屏不放, 给触摸屏上电, 待触摸屏自动进入模式选择界面之后方可松手, 根据模式选择界面提示进入相关操作。如果在进入模式选择界面 20S 内没有有效操作或无操作, 系统将自动进入触控校正界面。

4.2 模式选择界面功能菜单说明

进入模式选择界面会弹出一个启动菜单对话框, 详细功能模式说明如下:

系统设置: 单击此按钮, 系统进入设置界面, 在此画面中可以设置开机启动画面, 屏保时间, 蜂鸣器声音, 以及亮度调节, 设置完成后, 可单击右下角电源按钮重启触摸屏。

固件更新: 单击此按钮, 系统进入固件更新画面, 在此画面中可以进行固件更新工作, 一般用户请不要使用此模式。

触控校正: 单击此按钮, 系统进入触摸屏校正画面, 校正成功后会自动重启。

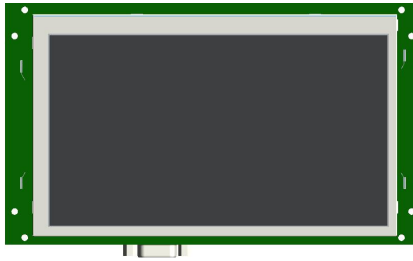
停止倒计时: 单击此按钮, 控制 20S 倒计时启停。

备注: 在模式选择界面的右上角有个多语言切换按钮, 单击此按钮可进行中英文切换。

5. 售后服务

《人机界面售后服务条款》请登录如下网址查看: <http://www.kinco.cn>

Installation Instructions



Kinco Electric (Shenzhen) Ltd.

Tel: 0755-26585555

Web: www.kinco.cn Email: sales@kinco.cn

Add: Building 1, No. 6 Langshan 1st Rd, Hi-tech Park
North, Nanshan, Shenzhen, China.

1. Installation Note

1.1 Environmental Requirement

Operating temperature: GR070E HMI can work stably in most industrial environments that the temperature is between 32°F to 122°F (0~50°C).

Please do not use in the following places:

- Places direct in sunlight
- Surrounding temperature and humidity beyond the specifications
- Places of temperature changes sharply and easily cause condensation
- Places that exist corrosive gas and combustible gas
- Places of much dust, dirt, salt and iron powder
- Places that will be splashed water, oil and drugs
- Places that bring direct vibration and shock to host

Please take shield measures in the following places:

- Places that exist electrostatic or other electro noise
- Places with strong electromagnetic
- Places that may be exposed to rays
- Places near the large power

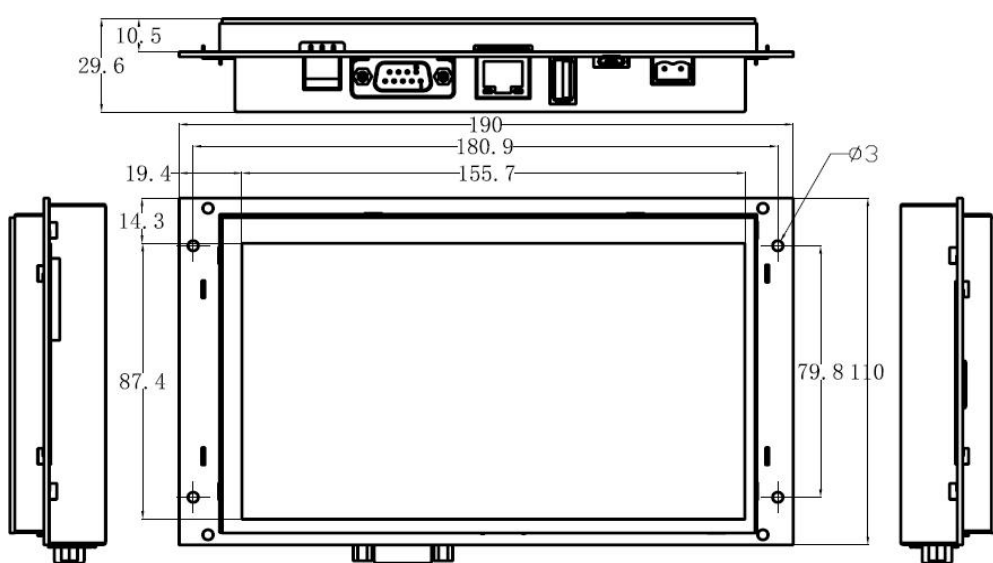
1.2 Power Requirement

- Input voltage: DC12V ~ DC28V
- Particularly note that there must be enough distance between this product and converters or switch mode power supply. Make sure that the input and output cables of that kind equipment are shield cable and the shielding network is connected with the ground.
- Make sure that the DC power and AC power is isolated.
- Do not use common power with inductance load or input circuit of the controller.

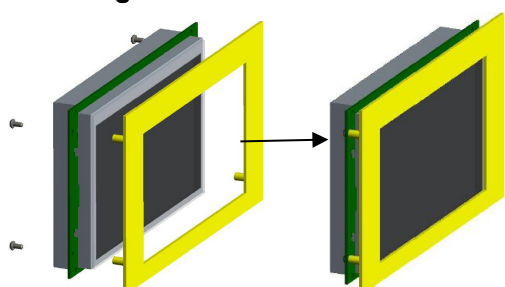
Note: An Internal fuse will prevent damage for over voltage condition, however it isn't guaranteed the internal electronic components are not damaged.

2. Installation Description

2.1 Dimension Drawing



2.2 Fixing Screw Installation Instructions



The product is installed from the back to front. 4*M3 thread holes are reserved all around, and the hole position of the shell (refer to the left) is aligned with the thread hole, and the screw is screwed into the M3 specification. **Note: the front touch panel of the product needs external reinforcement to prevent falling off in long time or complex environment !**

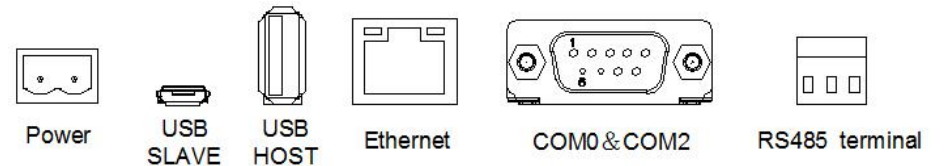
2.3 Power Connection

Before connecting the power, please make sure all local and national electrical standards are met. For power cables, please select cables with their dielectric strength values and current values in compliance with the safety specifications.

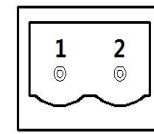
First find the power terminal at the back of the product and loosen the screw according to counter clockwise, then insert the power cables and tighten the screw up.

Connect positive DC(+) line to the 'DC24V' terminal, and the negative DC(-) to the '0' terminal.

3. External Interface



3.1 COM0/COM2



Pin#	Signal
1	DC24V
2	0V

3.2 USB SLAVE

Connection	Micro USB Slave port can be connected with a PC
Port Function	The port is only used to download/upload user configuration program to the HMI and to set HMI system parameters.

3.3 USB HOST

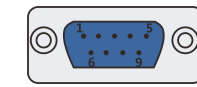
Connection	Connect with USB interface devices or pen drive
Port Function	This interface can be connected with USB keyboard, mouse and printers, and the pen drive can be used for user's configuration uploading/ downloading as well as data storage.

3.4 Ethernet

Ethernet port is 10 M/ 100 M adaptive

Connection	With a standard RJ45 interface cable connected to the Ethernet device.
Port Function	The port can be used for upload/download of HMI configuration, setting of system parameters and online simulations of configurations. It can connect multiple HMIs via the Ethernet to form an HMI network. Furthermore, it can implement communications between HMI and PLC via the Ethernet, as well as communications with a PC via the Ethernet port.

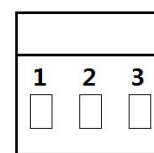
3.5 COM0/COM2



Pin assignment of the 9-pin male, D-SUB, COM0. This port is used to connect the controller with RS-232/485/422 port. **Note:** RS232/485/422 communication functions are supported by COM0. COM2 supports RS232 communication only.

Pin	Signal	PLC (COM0) [RS-422]	PLC (COM0) [RS-485]	PLC (COM0) [RS-232]	PC/PLC (COM2) [RS-232]
1	Rx- (B)	RS422 R-	RS485 B		
2	RxD_PLC			RS232 RxD	
3	TxD_PLC			RS232 TxD	
4	Tx-	RS422T-			
5	GND	Signal ground			
6	Rx+(A)	RS422 R+	RS485 A		
7	RxD_PC				RS232 RxD
8	TxD_PC				RS232 TxD
9	Tx+	RS422 T+			

3.6 COM0



Pin#	Signal
1	GND
2	RS485 A
3	RS485 B

4. Operation Mode

4.1 Instructions for entering Operation Mode selection window

Hold pressing on touch panel when power it on. Release your finger after HMI enter operation mode selection window, then select the operation mode. If no any operation in 20s after entering operation mode selection window, HMI will enter application mode automatically.

4.2 Descriptions of functions in Operation Mode selection window

After entering operation mode selection window, it will pop up a menu. Follows are the descriptions of the functions in the menu:

System Setup: Press this button to enter system setup window. This window is used to set initial window, screen saver time, buzzer and brightness adjustment. After setting, press restart button on the bottom right of the screen to restart HMI.

Firmware Update: Press this button to enter firmware update window. This window is used to update firmware. Normally this mode is not advised to use without guiding by manufacturer.

Touch Calibration: Press this button to enter touch calibration window. It will restart HMI automatically after calibration successful. There is a timer in this button, it will enter application window if there is no operation within 20s.

Stop timer: Press this button to stop the 20s timer.

Note: There is a multi-languages button; it is used to switch English and Chinese for Operation Mode Selection Window.

5. After-sales Service

For < Service Terms and Conditions for HMI >, please check: <http://www.kinco.cn>