

SGD-037

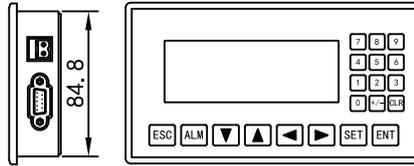
新一代图文显示器 随机手册

欢迎使用GD系列图文显示器。
本随机手册对产品特性、结构、
安装、接口等部分作了介绍，供
用户快速了解该产品。
详细的产品资料及软件操作说明，
请查看产品说明书。

三基电气: www.sanch.net
TEL: (0595) 24678200

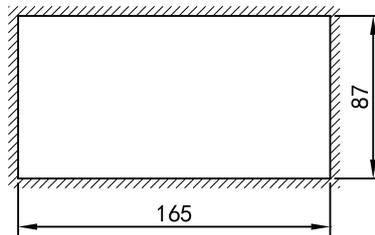
【外观尺寸和安装】

<1>外型尺寸

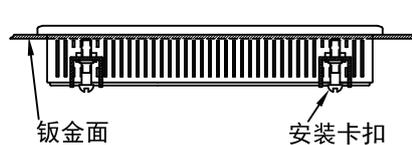


<2>开孔尺寸

用户可以根据实物对开孔尺寸自行调整
此开孔尺寸供参考



<3>产品固定

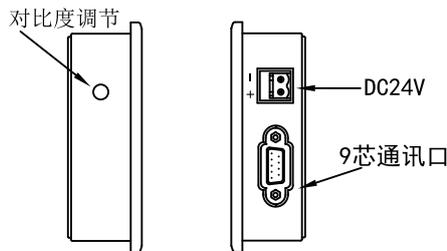


- 1、从钣金正面，将产品后盖推入钣金开孔区域
- 2、把固定支架卡入产品安装孔，拧动螺丝，直至螺栓顶部顶紧安装面板

注意:

- 一拧紧力度适中，以免拉坏产品外壳
- 一固定时螺栓要与安装面板垂直
- 一固定完毕后，请检查密封圈是否到位

【用户接线和对比度调节】



说明:

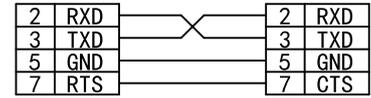
- 1、输入电源为DC12~24V±10%
- 2、DB9母座内含RS232/422/485三种通讯电平，除了专用的下载线外，跟不同的PLC通信，用不同的通信线缆
- 3、用小型梅花螺丝刀，调整液晶对比度

【通讯口管脚功能定义】

1、通信口引脚信号定义

序号	定义	5	GND
1	TD+	6	TD-
2	RXD	7	RTS
3	TXD	8	RD-
4	NC	9	RD+

2、专用下载线的接线图



9PIN 孔

9PIN 孔

【使用方法】

- 1、安装和打开上位机软件，选择好适配的PLC，并编辑工程文件
- 2、先连接下载线缆，再连接电源
- 3、在上位机中选择下载功能，下载工程文件
- 4、下载完毕后，先断电，再拔掉下载线缆
- 5、插上通信线缆后，再上电，然后再操作图文显示器

注意:

- 1、请勿带电插拔下载线或通信线缆
- 2、下载线缆为我司专用
- 3、通信线缆需要从我司获取或按照手册说明自行制作

【使用异常及原因】

- <1>现象: 背光亮、蜂鸣器响，但无显示
估计原因: 工程文件不完整
解决办法: 重新下载
- <2>现象: 蜂鸣器响两声，不能下载
估计原因: 软件版本不正确
解决办法: 根据产品标签提示，使用正确版本的软件下载
- <3>现象: 不能与PLC通讯
估计原因: 选择的PLC型号不对; 通讯电缆有误、松动; 通讯参数设置不对
解决办法: 选择正确的PLC类型; 确认通讯电缆的正确性; 设定正确的通讯参数
- <4>现象: 偶尔出现显示异常、通讯中断，并伴有蜂鸣器响声
估计原因: 附近有强干扰源
解决办法: 使用独立电源，使用屏蔽线通信
- <5>现象: 上电后，背光不亮，蜂鸣器不响
估计原因: 无电源或电源极性错误，或图文显示器硬件故障
解决办法: 检查电源，或更换图文显示器

说明:

- 1、所有产品均支持RS232通信;
- 2、后缀-N的产品，不支持RS422/485通信;
- 3、订购时，请说明连接的PLC类型，并购买相应的通信线缆。

【使用注意事项】

- <1>请不要在下列环境中使用
 - 一环境有凝露的场合
 - 一有腐蚀性气体、粉尘存在
 - 一有油、化学药品等导电液体飞溅到的地方
- <2>配线
 - 一避免接近高压、大电流的电源或电缆
 - 一电源极性正确，电压和纹波在范围内
 - 一使用专用通讯电缆，并良好接地
- <2>清洁
 - 一请定期清理前面板上的油污和后盖粉尘

【电气特性及工作环境】

输入电压: DC12~24V±10%
功耗: ≤1W
耐压: AC1000V-10MA 1分钟

操作温度: -10~50°C
储存温度: -20~60°C
环境湿度: 20~85% (无凝露)
抗干扰: 电压噪声1000Vp-p
保护结构: 表面防护等级IP65
环境湿度: 20~85% (无凝露)
周围环境: 无腐蚀性气体、液体

【产品特点】

- 分辨率: 192×64 (24×4字符; 12×4汉字)
- 显示: STN液晶显示，对比度可调
- 画面编辑: 图形化的编辑工具，设置简单画面形象生动，界面友好
- 按键: 按键功能可自定义
- 通讯: 可以跟三菱、西门子、台达、欧姆龙等多种品牌的PLC通讯
- 通讯方式: 内置RS-232/422/485通讯口
- 特殊功能: 文字灯; 动态文字串显示; 报警列表; 实时时钟
- 防护: 表面防护等级IP65，耐油污

SGD-037

HMI User Manual Of New Generation

Welcome to use the SGD series HMI. This manual contains products feature, structure, installation, interface etc. helps you operate the item smoothly. About the details of hardware and software, please read carefully.

SANCH ELECTRIC: www.sanch.net
TEL: (0595) 24678200

【Operating Precautions】

- <1>Do not operate the item under the following conditions
- exist condensation.
 - exist corrosive gas or dust.
 - exist oil dirty or conducting liquid.

<2>Wiring

- do not close to high voltage and power source with high current or cable.
- please make sure that source pole connecting is correct, voltage and ripple current are within a predetermined range.
- adopt specific communication cable and please ground well.

<3>Clean

- please clean oil dirty on front cover and dust on rear cover at regular intervals.

【Electric characteristics and Working Environment】

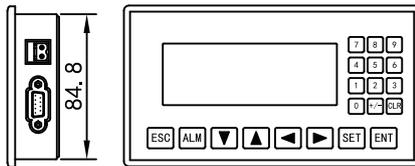
Input Voltage: DC12-24V $\pm 10\%$
Power Consumption: $\leq 1W$
Withstand Voltage: AC1000V-10MA in 1 min
Operating temperature: $-10 \sim 50^{\circ}C$
Storage temperature: $-20 \sim 60^{\circ}C$
Noise Endurance: Voltage Noise 1000Vp-p
Ambient Humidity: $20 \sim 85\%$ (Non-condensation)
Environment: without corrosive gas or liquid

【Characteristics】

Number of pixels: 192×64 ($24 \times 4C$)
Display: STN (Contrast ratio adjustable)
Picture edition: graphical editing tool (friendly, lively and simply interface)
Key: user-defined for key function
Communication: it can be used to communicate with PLC such as Mitsubishi, Siemens, Delta, Omron etc.
Communication Port: built-in RS-232/422/485 interface
Special Function: Text light; dynamic text string display; Alarm list, RTC
Degree of protection: IP65, withstand oil dirty

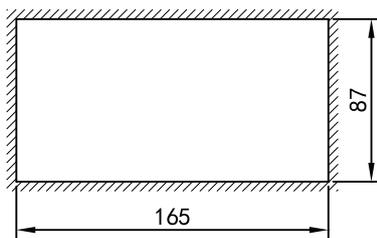
【External Dimension and Installation】

<1>External Dimension

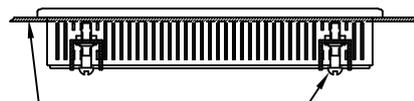


<2>Cut-Out

The following cut-out is for user's reference and the user can judge it according to reality.



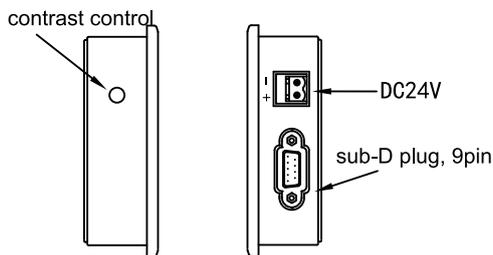
<3>Fixation



sheet metal face installation latch

1. Push rear cover to the cut-out by sheet metal face.
 2. Secure the spring terminal by tightening the recessed head screws to panel.
- Precaution:
- screw gently in case the cover is damaged.
 - spring terminals should vertical with panel when fixed.
 - please check the position of the installation seal after fix.

【User cable and contrast ratio adjustment】



Instruction:

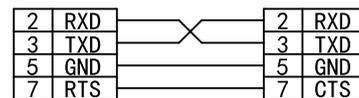
1. Input voltage DC12-24V $\pm 10\%$.
2. DB9 socket with RS232/422/485 level. Except specific downloading cable, adopt different cable when communicate with different PLC.
3. Adjust contrast ratio by screwdriver.

【Pin allocation】

1. The function of communication pin

Pin	Allocation	5	GND
1	TD+	6	TD-
2	RXD	7	RTS
3	TXD	8	RD-
4	NC	9	RD+

2. Specific downloading cable connection instruction



sub-D plug, 9pin sub-D plug, 9pin

【Proceed as follows】

1. Install and activate pc software then select adaptive PLC and edit project on pc.
2. Connect downloading cable between HMI device and PC first and then switch on power supply.
3. Select downloading at pc and then transfer to HMI device.
4. Please switch off the power supply first and then take off downloading cable after download.
5. Connect communication cable first and then switch on the power supply last operate graphic display.

Note:

1. Do not connect or remove the download cable when HMI device is on power.
2. Use only approved cable by us.
3. Please use our communication cable or made by user referring to the manual.

【Exceptional operating situation and corresponding reasons】

- <1>Situation: Back lights, buzzer rings but screen without action
Presumptive Reason: Project document bugs
Solution: Re-download
- <2>Situation: Buzzer rings twice and configuration picture cannot be downloaded
Presumptive Reason: Software version is incorrect.
Solution: Use correct software downloading according to the product label
- <3>Situation: Failure to communicate with PLC
Presumptive Reason: Choose the wrong PLC, Use wrong cable or cable looses
Set communication parameter incorrectly
Solution: Choose the correct PLC Make sure the cable is correct, Set the correct communication parameter
- <4>Situation: Display exception happens timely or communication brakes off with buzzer rings
Presumptive Reason: Exist interference source nearby
Solution: Use independent power source and shield cable
- <5>Situation: Back does not light and buzzer does not ring after power is on
Presumptive Reason: Without power source, power pole connects incorrectly or graphic display hardware faults.
Solution: Check the power source or replace the graphic display

Statement :

1. All modes support RS232 communication
2. Modes with suffix N do not support RS422/485 communication
3. When purchase, please inform PLC type and purchase specific communication cable

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Service Hotline: 400-6161-619
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Sanch wechat service number