



# 三碁 SPN-070S/SPN-101S 使用说明

## 一、型号确认

- 每台 SAVCH HMI 在出厂前均做过功能测试，客户于产品送达拆封后，请执行下列检查步骤：
- 检查内部是否含有 SAVCH HMI 本体，随机手册一本。
  - 产品的机种型号是否符合您所订购之型号。
  - 产品是否因运送不慎造成损坏，若有损坏请勿接入电源。
- 当您发现有上述问题时请立即通知 SAVCH 电气各区业务人员。

## 二、注意事项及安装步骤

- 注意事项：**
- 严格按照端子上的标注的电源极性接线，否则会造成产品故障或者烧毁。
  - 产品与底部其他部件，必须保持足够的空间，以避免散热不良造成的设备损坏。
- 安装步骤：**
- 将 HMI 装入开孔面板内，将侧边的 4 个卡扣与安装面板锁紧。

## 三、型号说明

HMI 型号 → Model: **SPN-070S**

电源规格 → Power: **DC24V 0.45A**

P/N: 1605261053011810012  
SAVCH ELECTRIC CO.,LTD.

**SPN-070S W**

SAVCH

产品名称

W: 支持Wifi  
G: 支持4G  
无: 通用机

显示屏尺寸:  
070: 7英寸  
101: 10.1英寸

## 四、部件与开孔尺寸

**部件说明**

1	液晶和触摸屏
2	指示灯
3	电源插槽
4	COM2
5	Wifi
6	双层 USB
7	COM1
8	LAN

SPN-070S 开孔尺寸: 193mm x 138mm

SPN-101S 开孔尺寸: 260mm x 202mm

## 五、接口定义

COM1 接口定义			
Pin	定义	Pin	定义
1	RS422 TX+/RS485 A+	2	RS232 RXD
3	RS232 TXD	4	CANL
5	GND	6	RS422 TX-/RS485 B-
7	CANH	8	RS422 RX-
9	RS422 RX+		

COM2 接口定义			
Pin	定义	Pin	定义
1	RS232 RXD	2	RS232 TXD
3	GND	4	RS485 B-
5	RS485 A+		

## 六、产品规格

型号		SPN-070S	SPN-101S
电源	输入电源	DC24V±20%	DC24V±20%
	功耗	5W	9W
	电源隔离	内置	内置
	耐电压	AC 500V	AC 500V
	绝缘阻抗	超过 500MΩ@500VDC	超过 500MΩ@500VDC
	耐振动	10~25HZ (X、Y、Z 轴向 2G/30 分钟)	10~25HZ (X、Y、Z 轴向 2G/30 分钟)
冷却方式	冷却方式	自然风冷却	自然风冷却
	防护等级	IP65	IP65
	存储环境温度	-20~70℃	-20~70℃
	操作环境温度	-10~60℃	-10~60℃
	相对湿度	10~90%RH (无冷凝)	10~90%RH (无冷凝)
规格	外壳材质	工程塑料 ABS(阻燃级别)	工程塑料 ABS(阻燃级别)
	外形尺寸	200x146x37mm	270x212x35mm
	开孔尺寸	193x138mm	260x202mm
	重量	0.74kg	1.2kg
证书	CE 认证	符合 CE 认证标准	符合 CE 认证标准

## 七、配套软件

- 三碁 HMI 需要配合 SavchSoft\_HMI 编辑软件使用，请到三碁网站 (<http://www.savch.net>) 的下载中心下载。
- 云服务可以通过访问云网站 (<http://cloud.haiwell.com>) 使用，推荐下载云 APP。
- 云 App (Haiwell Cloud) 下载:
  - (1) 直接扫描右边二维码下载;
  - (2) IOS 终端可到苹果应用商店 (App Store) 搜索“海为云”下载。



## 八、触摸屏校正

HMI 出厂时已经校准，如果需要重新校准，进入参数设置界面，依次选择“硬件设置>显示及声音>触摸校准”，出现如下界面：



依次点中左上角，右上角，右下角，左下角，中心点的“+”，重新启动即可。

## 九、参数设置

按住屏幕的右上角大约 5-10 秒钟，出现如下画面：



选择硬件设置，进入触摸屏的参数设置画面，可以设置网络参数、显示及声音参数、时间参数等设置，修改后，点击保存立即生效。感谢您选用 SAVCH HMI，若您对我们的产品或服务有问题或不足之处，敬请告诉我们！

公司官网: <http://www.savch.net>

## 1. Products receiving

- All products have been performed with strict test and inspection. After receiving the product, the following checks shall be performed.
- To check that SAVCH product, an instruction manual is inside of the package
  - To check whether model number correspond with model your purchase order.
  - To check whether there are damaged parts during transportation and delivering. If there are, do not connect with power supply. If any of the above checkpoints are not satisfactory, contact your SAVCH ELECTRIC representative for a quick resolution.

## 2 The notes and installation steps

- Notes:** ·The wiring should be in strict accordance with the guide of the terminal mark, otherwise it will cause product damage or burn up.  
·There should be sufficient space and distance between the products and other devices to avoid damage to the equipment caused by poor heat dissipation.

**Installation steps:** ·Fit the HMI into the cutout panel and lock the four buckles on the sides with the mount panel.

## 3. Model description

Model → Model# SPN-070S  
Power → Power# DC24V 0.45A  
P/N# 1605261053011810012  
SAVCH ELECTRIC CO.,LTD.

### SPN-070S W

SAVCH

Product name

W:Support Wifi  
G:Support 4G  
None: general

Screen size:  
070: 7 inch  
101: 10.1 inch

## 4. The parts and panel cutout

SPN-070S

193mm x 138mm

SPN-101S

260mm x 202mm

Parts description	
1	Liquid crystal and touch screen
2	Indicator light
3	Power slot
4	COM2
5	Wifi
6	Double-deck USB
7	COM1
8	LAN

## 5. The interface definition

COM1 interface definition			
Pin	Definition	Pin	Definition
1	RS422 TX+/RS485 A+	2	RS232 RXD
3	RS232 TXD	4	CANL
5	GND	6	RS422 TX-/RS485 B-
7	CANH	8	RS422 RX-
9	RS422 RX+		

COM2 interface definition			
Pin	Definition	Pin	Definition
1	RS232 RXD	2	RS232 TXD
3	GND	4	RS485 B-
5	RS485 A+		

## 6. Product specifications

Model		SPN-070S	SPN-101S
Power	Input power	DC24V±20%	DC24V ±20%
	Power consumption	5W	9W
	Power isolation	Built-in	Built-in
	Voltage resistance	500V AC	500V AC
	Isolation resistance	Exceed 500MΩ@500VDC	Exceed 500MΩ@500VDC
	Vibration endurance	10~25HZ (X、Y、Z direction 2G/30 minutes)	
Environment	Cooling type	Ventilation cooling	Ventilation cooling
	Protection structure	IP65	IP65
	Storage temperature	-20~70℃	-20~70℃
	Operating temperature	-10~60℃	-10~60℃
	Relative humidity	10~90%RH (non-condensing)	10~90%RH (non-condensing)
Specification	Enclosure	Engineering Plastic ABS (Flame-retardant level)	
	Dimensions	200x146x37mm	270x212x35mm
	Panel cutout	193x138mm	260x202mm
	Weight	0.74kg	1.2kg
Certification	CE certification	Comply with CE certification standard	Comply with CE certification standard

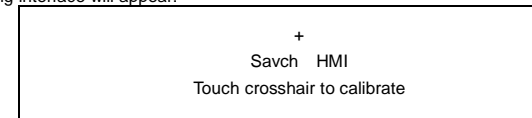
## 7. Savch HMI software

- Savch HMI uses the SavchSoft\_HMI software.You can download from. <http://en.savch.net>.
- Cloud Service can be got by visiting cloud web (<http://cloud.haiwell.com>) We recommend you to use cloud APP.
- Cloud APP download ways:
  - (1) Scan the two-dimension code in the right.
  - (2) Search "Haiwell cloud" in the IOS Iphone APP store.



## 8. HMI calibration

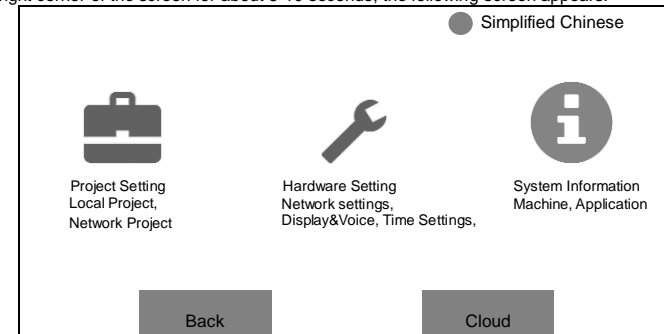
HMI is calibrated at the factory. If you need to recalibrate, enter the parameter setting interface, select "Hardware Setup> Display&Voice> Touch Calibration", the following interface will appear:



Click the upper left corner, the upper right corner, the lower right corner, the lower left corner, the center point of the '+' in turn, you can restart.

## 9. Parameter setting

Hold down the upper right corner of the screen for about 5-10 seconds, the following screen appears:



Select the hardware settings, enter the parameters settings screen of touch-screen, you can set the network parameters, display and sound parameters, time parameters, etc., after the modification, click"Save"to take effect immediately.

Thank you for choosing Savch HMI. Please let us know if you have any questions or shortcomings about our products or services. Savch company website: <http://en.savch.net>