数控电源铝合金金外壳安装说明

外 壳 适 用 数 控 电 源 型 号 ：

DPS3012/DPS5015/DPS5020/DPH3205/DPH5005

一、 安装注意事项：

● 安装前请仔细阅读本文档，如有疑问请与本公司联系。

● 外壳采用铝合金材料，防止尖锐物体划伤，避免阳光直晒和潮湿环境。

● 组装时防止短路，正确连接正负极。

● 不可在电源接通的情况下连接电路。

● 尽量避免震动和跌落。

二、 产品规格

2.1 器件清单：

名称	规格	数量	备注
前端面	49.2*120*130 MM（高*宽*深）	1	36 号铝
后端面		1	
上盖板		1	
下盖板		1	
风扇	4010	1	5V 供电
风扇供电板	36*40（长*宽）	1	
接线端子	M4*36	4	红色 2 个黑色 2 个
冷压端子接头	UT2.5-4	7	U 型插接头

船型开关	KCD3	1	
连接电线	RV2.5 平方单芯软线	2	红：30cm 黑：25cm
外壳配套螺丝	平头 M3*6	8	
风扇固定螺栓	圆头 M3*13	4	螺丝螺帽各 4 个
功率模块固定螺丝	圆头 M3*5	4	
透明自粘脚垫	Φ12*4	4	

2.2 产品零件图：

备注：

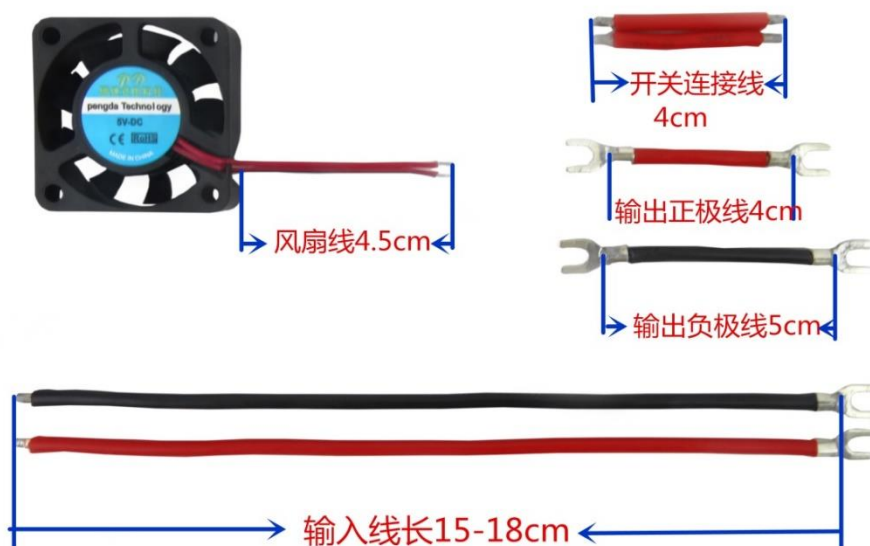| 外壳配套螺丝平头 M3*6 8 个	风扇固定螺栓 圆头 M3*13 螺丝螺帽各 4 个	冷压端子接头 UT1-4 7 个	功率模块固定螺丝 圆头 M3*5 4 个

三、 安装步骤：

四、

3.1 安装准备：

- 数控电源模块一个。

- 工具（电烙铁、焊锡、十字螺丝刀、剥线钳等）。

- 适当的安装环境。

3.2 安装步骤：

a) 使用剥线钳截取适当长度的电线，电线长度参考下图（**因使用**

2.5mm 电线所以焊接冷压端子时需扩孔）：

b) 安装输入接线端子及开关（将接线端子和开关卡在后面板留出的

卡槽上，接线端子采用上正（红）下负（黑）的原则安装，固定螺丝

要拧紧）

c) 安装散热风扇（注意采用配套的螺栓固定，风扇贴有指示标签的一侧朝外，不可装反）

d) 安装风扇供电板：

● 将风扇电源线焊接到风扇 o 供电板正面左下方的 5V 焊盘上（注意正负极不要焊反）。

● 将电源输入线焊接在风扇供电板左上角的两个焊盘背面，（注意正负极不要焊反）。

● 将供电板安装在后面板的接线端子上（注意背面朝上，上正下负），然后使用螺母固定。

● 将电源开关用预先准备好的连接线焊接在供电板 Key 处背面焊盘。

e) 安装好输出接线端子，将准备好的带有冷压端子的输出线连接到输出接线端子上，并用螺帽拧紧（输出端子上正下负安装，输出线不要接错）

f) 本外壳针对的产品分为显示模块和功率模块，安装过程为：

● 安装显示模块将其卡入前面板卡槽上（卡入过程用力要适当，防止造成前面板变形）。

● 安装上显示模块和功率模块连接的排线，注意 PCB 板的丝印

层 LCD 和 KEY 排线插接的位置（排线一定走 PCB 板的下方，否则电感会对其有干扰）。

● 根据下盖板四个孔的位置安装功率模块，使用配套螺丝将其固定住。

● 将输入正负分别接到功率模块的 IN+,IN-；输出正负接到 OUT+，OUT-。

g) 连接好之后可以通电看是否连接成功。（注意通电前再次检查接线是否正确）

h) 安装外壳，注意外壳上有进风口的一端安装前面板，安装顺序可以是先安装上盖板然后固定前后面板。

i) 本产品配套四个透明脚垫，用户可对称粘贴到外壳底部四个角上。

3.3 内部连线图：

Digital Control Power Supply Housing Installation Instructions

This housing is suitable for the following mode of digital control power supply:
DPH5005, DPS5020, DPS5015, DPS3012, DPH3205

1.1 Please read the instructions carefully before installation. If you have any question, please contact us.

1.2 This housing adopts aluminum alloy material, so please avoid being scratched by sharp objects, direct sunlight and humid environment.

1.3 when install this, please avoid short-circuit and connect positive and negative electrode correctly

1.4 Forbid connect the circuit after power on.

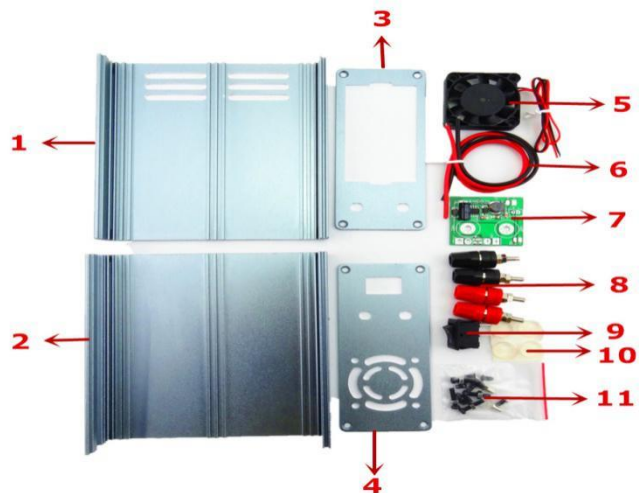1.5 Please avoid vibration and fall.

2. Product Specifications

2.1 Kit parts list

Item	Specification	Qty.	Remark
Front panel		1	
Rear panel	49.2*120*130	1	36 aluminum
Upper cover plate	MM(H*W*D)	1	
Lower cover plate		1	
Fan	4010	1	5V power supply
Fan power supply board	36*40（L*W）	1	
Binding post	M4*36	4	Red 2pcs Black 2pcs
Cold press connecting terminal	UT2.5-4	7	Spade Terminal
Rocker Switch	KCD3	1	
Connecting line	RV 2.5 square single core flexible cord	2	Red 30cm Black 25cm
Screw for housing	Flat head M3*6	8	
Fan fixed screw	Fillister head M3*13	4	Screw 4 pcs Nut 4 pcs
Power module fixing screw	Fillister head M3*5	4	
Transparent sticky mat	Φ12*4	4	

2.2 Kit parts picture

1- Lower cover plate
2- Upper cover plate
3- Front panel
4- Rear panel
5- Fan
6- Connecting line
7- Fan power supply board
8- Binding post
9- Rocker Switch
10- Transparent sticky mat
11- Screw

Note:

Screw for housing Flat head M3*6 8pcs	Fan fixed screw Fillister head M3*13 Screw 4 pcs Nut 4 pcs	Cold press connecting terminal UT2.5-4 7pcs	Power module fixing screw

				Fillister head M3*5 4pcs

3 Installation Procedures

3.1 Installation Preparation

3.1.1 1 pcs digital control power supply

3.1.2 Tools (Soldering iron, solder, Philips screwdriver, Wire stripping pliers)

3.1.3 A proper installation environment
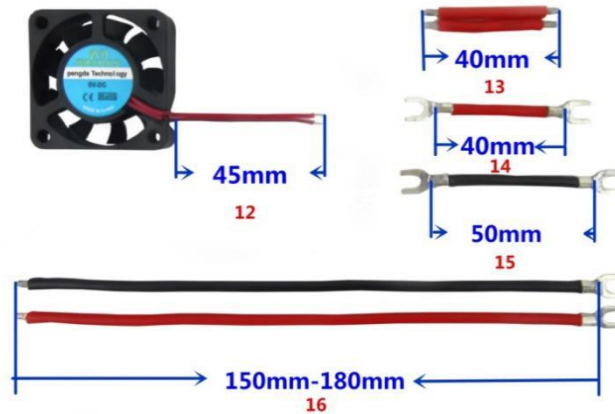
3.2 Installation Procedures

12- Fan line 45mm

13- Switch connecting line 40mm

14- Output positive line 40mm

15- Output negative line50mm

16- Input connecting line

150-180mm

3.2.2 Install the input binding post and switch: put binding post and switch on slot at rear panel. Install binding post according to rule that red is positive above, black is negative below; and screw it tightly.

3.2.3 Install the fan: use the matched screw to fix. The one side attached label is install outward,)

3.2.4 power board:

Install fan supply

3.2.4.1

Weld fan line on 5V place at fan power supply board (Note: can't weld positive and negative reversely).

3.2.4.2 Weld the input power supply line on the bonding pad on the upper left corner of board）.
3.2.4.3 Install fan power supply board on the binding post (red is positive above, black is negative below), then use the screw to fix them.
3.2.4.4 Use the prepared wire to weld the power switch on the kay place at fan power supply board,

3.2.5 Install the output binding post, and use the output line with cold press connecting terminal to connect input (red is positive above, black is negative below)，and screw it tightly
3.2.6The product of this shell is divided into display module and power module, and the installation process is:
3.2.6.1 Install the power supply module. Please put it on slot at front panel (when put it on slot, strength will be proper to avoid the deformation).
3.2.6.2 Use the cable to connect display part with power part. Note the words LCD and KEY on PCB to correspond to the same words on display part (the cable must go through under the PCB, otherwise the capacitor will generate interface to effect it).
3.2.6.3 Install the power module according to the position of the four holes of the lower cover, then use a matching screw to hold it .
3.2.6.4 The input positive and negative are respectively connected the port of the power supply module IN+ and IN -.
3.2.7 After connecting, please power on to check it work or not (before power on, check connection again)
3.2.8 Install the housing, note that the front end of the housing with an air inlet is installed in the order of the front cover and then the front and rear panels.
3.2.9 This product is equipped with four transparent mats, the user can be

symmetrically pasted to the bottom of the four corners of the shell.

3.3 Internal connection diagram: