

数控电源铝合金外壳安装说明

外壳适用数控电源型号：

DPS3003/DPS3005/DPS5005/DP30V3A/DP50V2A/DP50V5A



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
前面端	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	UT1-4	2	U 型插接头
船型开关	KCD3	1	
连接电线	RV1 平方单芯 软线	2	红黑各 30cm
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
透明自粘脚垫	Φ 12*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 2 个
		

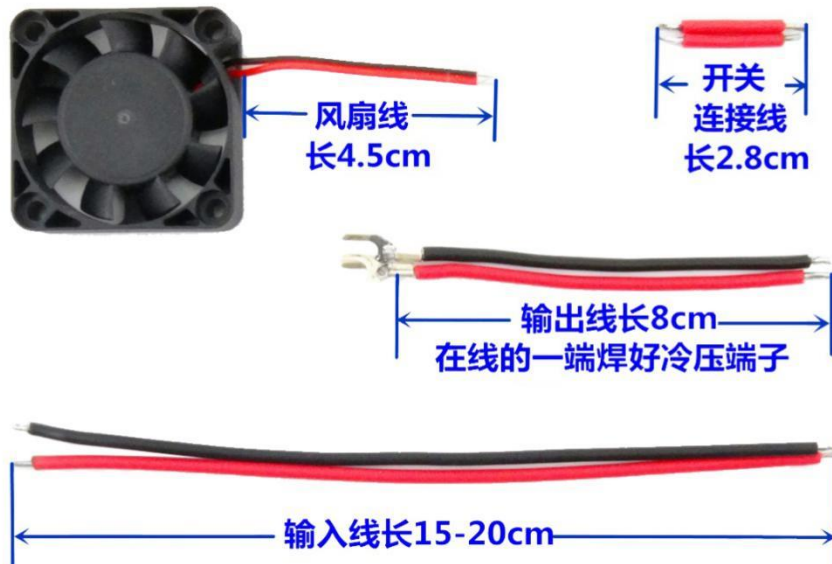
三、 安装步骤

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:

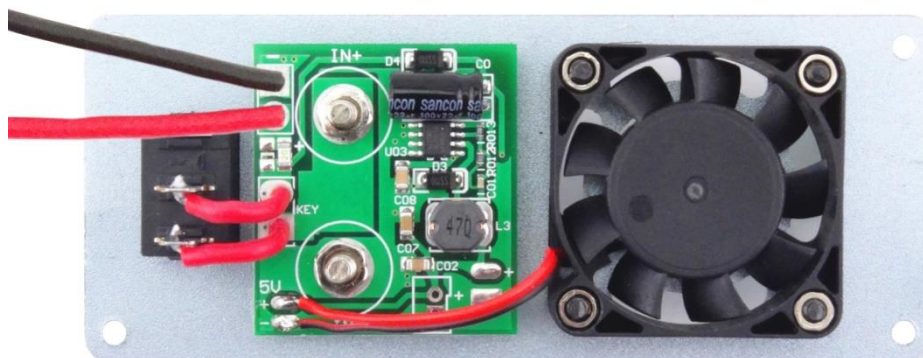
a) 使用剥线钳截取适当长度的电线，电线长度参考下图:



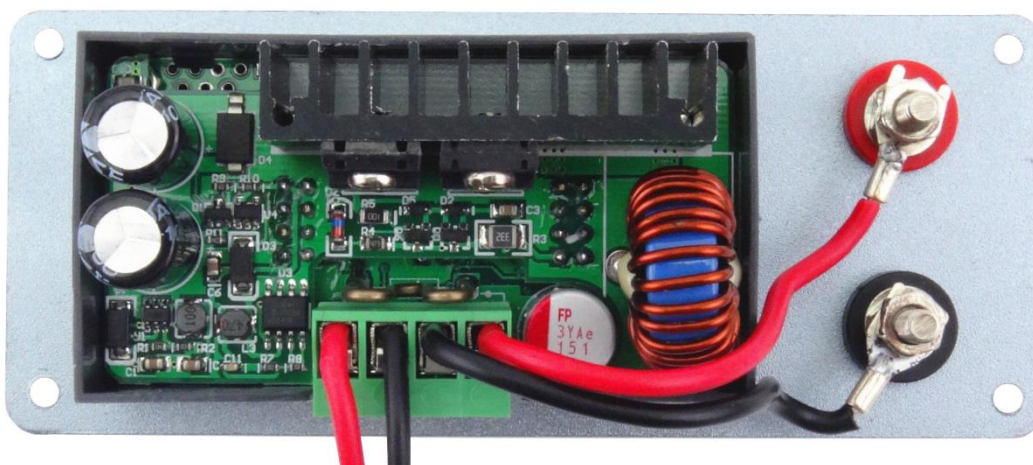
b) 安装输入接线端子及开关（将接线端子和开关卡在后面板留下的卡槽上，接线端子采用上正（红）下负（黑）的原则安装，固定螺丝要拧紧）

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:



- 将供电板安装在后面板的接线端子上(注意上正下负), 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的 \ominus 处焊盘上
- 将风扇电源线焊接在供电板左下方的焊盘处(注意正负极不要焊反)
- 将电源输入线焊接在供电板左上角两个焊盘上, 注意正负极不要焊错

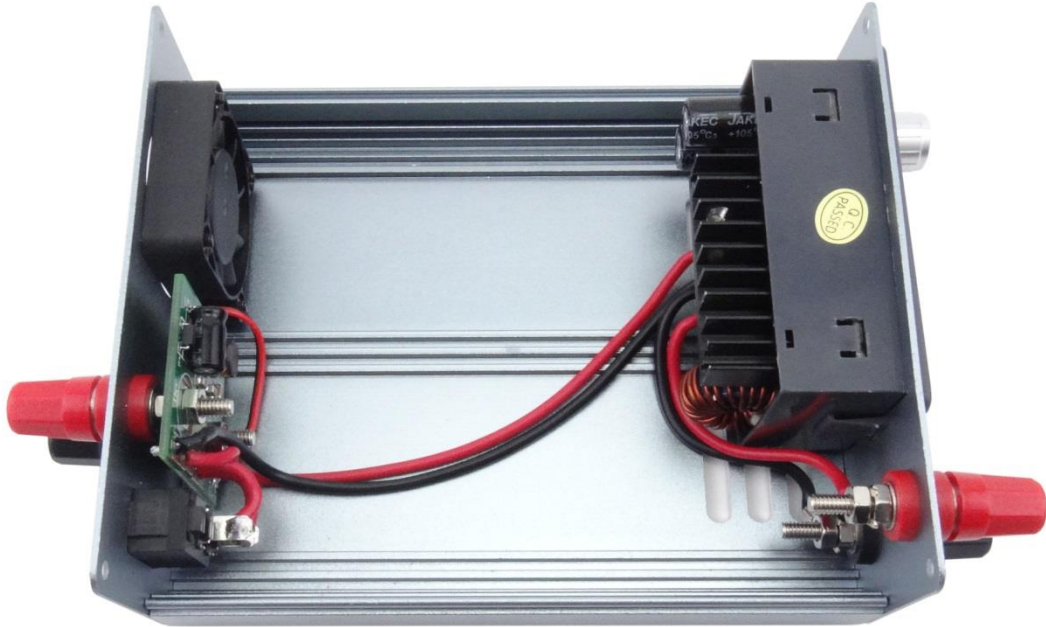


- e) 安装好输出接线端子, 将准备好的带有冷压端子的输出线连接到输出接线端子上, 并用螺帽拧紧(输出端子上正下负安装, 输出线不要出错)
- f) 模块连接采用可插拔式接线端子, 将输入输出的四个线头插入到接线端子正确孔位中, 并拧紧螺丝(此过程千万注意四根线不要接错)
- g) 安装数控模块, 将其卡入前面板卡槽上并连接好接线端子(卡入过程用力要适当, 防止造成前面板变形)
- h) 连接好之后可以通电看是否连接成功。(注意通电前再次检测接线是否正确)
- i) 安装外壳, 注意外壳上有一进风口的一端安装前面板, 安装顺序可以是先安

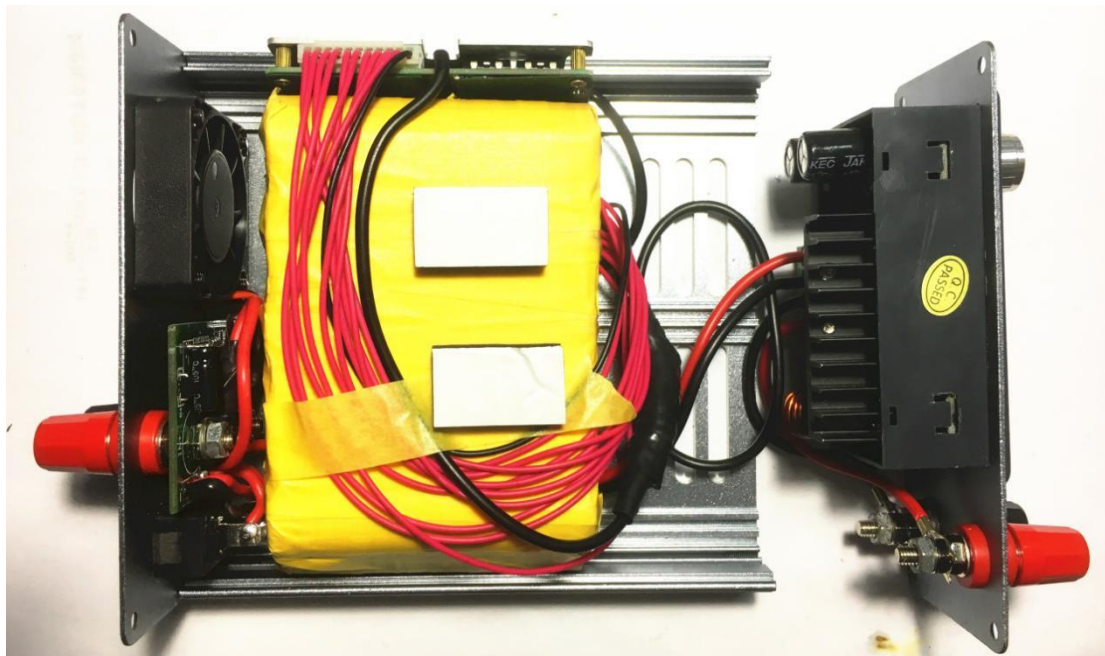
装上盖板然后固定前后面板。

j) 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：



3.4 延伸应用扩展： 客户可在壳子内部中间部分装入 10 接 18650 串联的电池组给电源供电，做成手持移动大功率直流稳压电源。



Digital Control Power Supply Housing Installation Instructions

This housing is suitable for the following mode of digital control power supply:
DPS3003, DPS3005, DPS5005, DP30V3A, DP30V5A, DP50V5A, DP50V2A



1. Installation Note:

- 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.

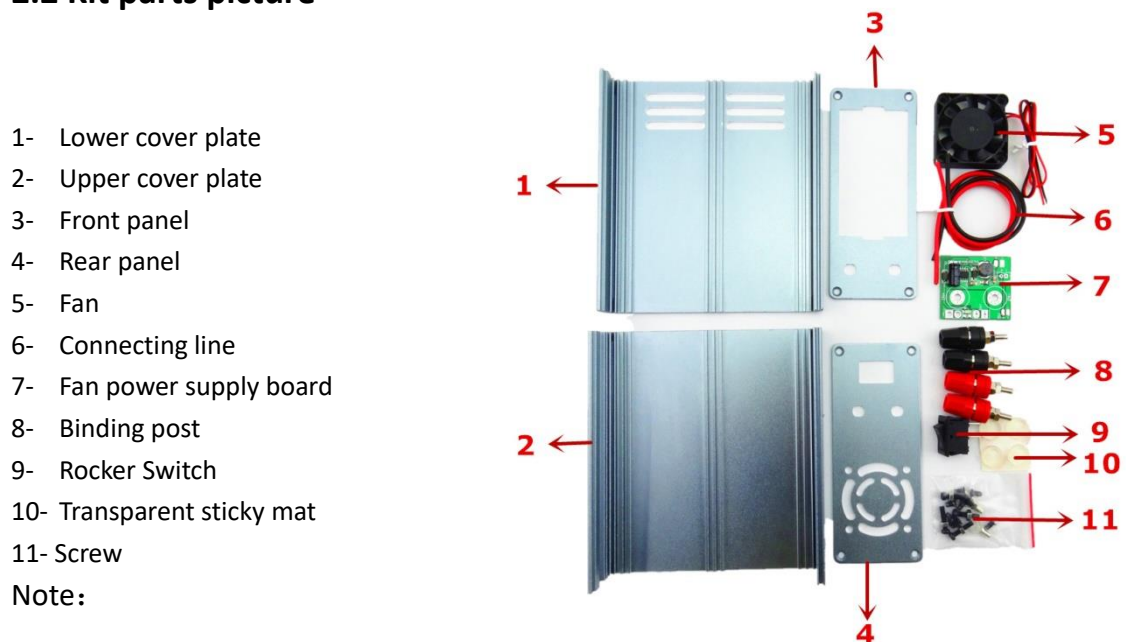
2. Product Specifications



2.1 Kit parts list

Item	Specification	Qty.	Remark
Front panel	49.2*120*130 MM(H*W*D)	1	36 aluminum
Rear panel		1	
Upper cover plate		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	UT1-4	2	Spade Terminal
Rocker Switch	KCD3	1	
Connecting line	RV1 square single core flexible cord	2	Red 30cm Black 30cm
Screw for housing	Flat head M3*6	8	
Fan fixed screw	Fillister head M3*13	4	Screw 4 pcs Nut 4 pcs
Transparent sticky mat	Φ 12*4	4	

2.2 Kit parts picture



Screw for housing 8pcs	Fan fixed screw Fillister head M3*13	Screw 4	Cold press connecting terminal UT1-4 2pcs
	Nut 4 pcs		



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

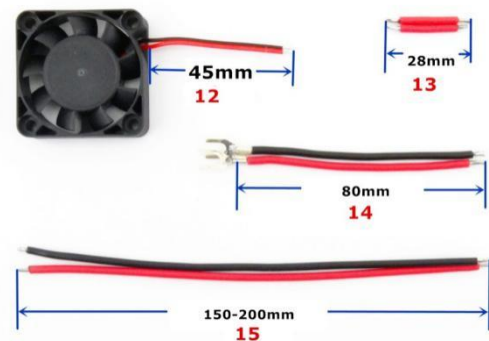
3.2.1 Use wire stripping pliers to cut proper length line, the length as follows:

12- Fan line 45mm

13- Switch connecting line 28mm

14- Output connecting line (Cold press connecting terminal is weld on one side of line) 80mm

15- Input connecting line 150-200mm

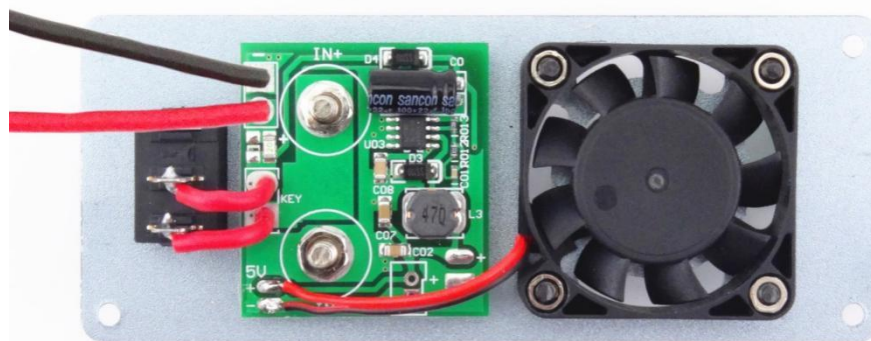


3.2.2 Install the input binding post and switch: put

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 Install fan power supply board:

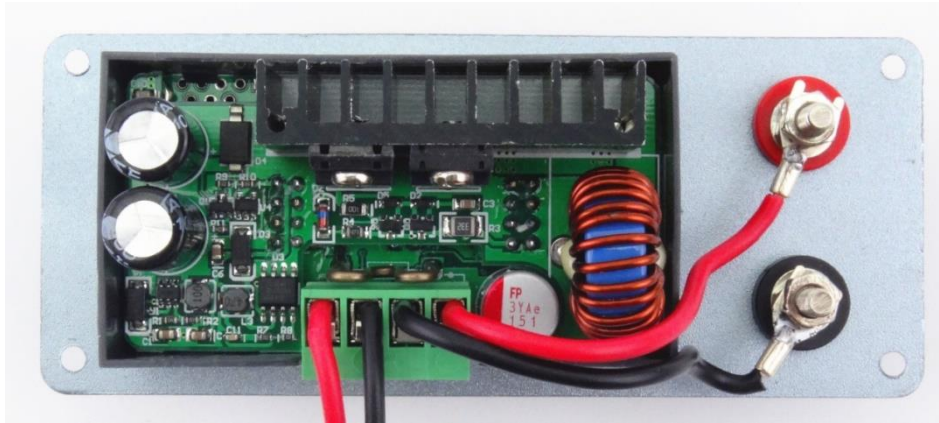


3.2.4.1 Install fan power supply board on the binding post (red is positive above, black is negative below), then use the screw to fix them.

3.2.4.2 Use the prepared wire to weld the power switch on the key place at fan power supply board,

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

3.2.4.4 Weld the input power supply line on the bonding pad on the upper left corner of 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

3.2.6 The module adopts pluggable terminal blocks, you just put input and output 4 wires into the right hole of terminal (Don't connect wrong for 4 wires)

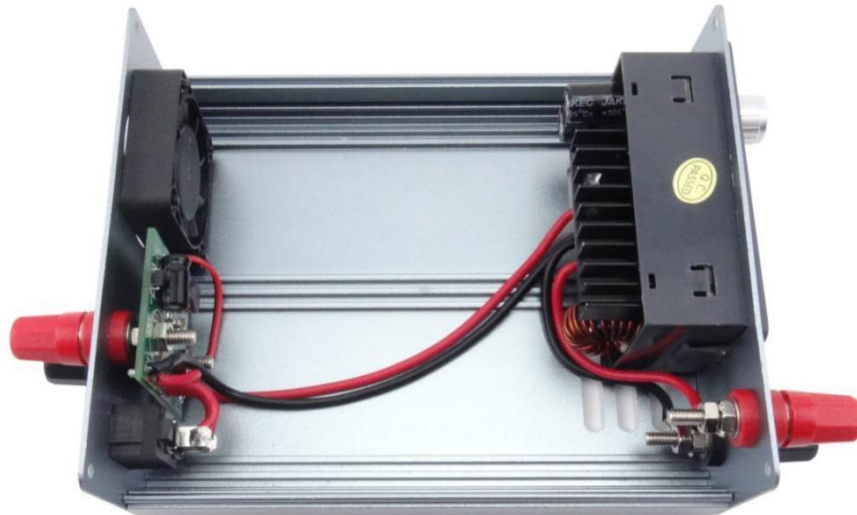
3.2.7 Install the power supply module. Please put it on slot at front panel and connect the connecting terminal (when put it on slot, strength will be proper to avoid the deformation).

3.2.8 After connecting, please power on to check it work or not (before power on, check connection again)

3.2.9 Install the housing. The front panel will be installed on the side of air inlet. The installation sequence can be installed upper cover plate first, and then fixed front panel and rear panel.

3.2.10 There are 4 transparent sticky mat, you can paste symmetrically them on the 4 corners on the bottom.

3.3 Internal connection diagram:



3.4 Extended application extension: you can put 10 pcs 18650 battery in series in the middle on housing to be input power supply. This will be a handheld mobile high-power dc stabilized voltage power supply

