security Guidelines

General introduction

⚠ Avoid machine damage caused by
serious collision or incorrec usage
Do not put static electricity on the
machine
Non professional, please do not open
the machine

Ac input

⚠ AC input voltage:220v/110v
50/60HZ
Connect the protective ground wire to
the ground to avoid electric shock

Main Features

Character   · Low noise: fan speed is controlled by heat
            · temperature and output power
            · Compact and light

Operations · Operation of constant voltage/current
            · Output on/off control
            · Full digital panel operation
            · 5 Sets of panels save/call Settings
            · Coarse and fine voltage/current control
            · Software calibration
            · Buzzer alarm output
            · Key locking function

Protecting · Overcurrent protection and
              overvoltage protection can be set
            · Polarity reverse function

Problem: after opening OCP, press the output switch, the
Answer: ... if the ... protection value is set too low, turn on
the ... first and then turn on the ...

数控直流稳压电源供应器

DIGITAL CONTROL DC POWER SUPPLY

操作手册

OPERATION MANUAL

常见问题

问题1:开机后面板按键不起作用。

回答1:面板被锁定，按下 $\frac{LOCK}{UNLOCK}$ 按钮两秒，即可启动面板操作。

问题2:开机后，按下Off/ON电源没有输出。

回答2:电流设置被设为0。

问题3:打开输出按键后，输出电压缓慢上升。

回答3:电流设置过小。

问题4:打开0CP后，按下输出开关，输出打开后被自动关闭。

回答4:电流保护值设定过小，可以先打开输出开关，再打开ocp过流保护。

Security profile

This section contains important safety
instructions that must be followed to operate
the DC power of use and storage environments,
in order to protect your Life safety,pleasea read
the instructions carefully before operation, to
ensure the DC power in the best working
environment.

Safety symbol

These symbols will appear in the manual or the
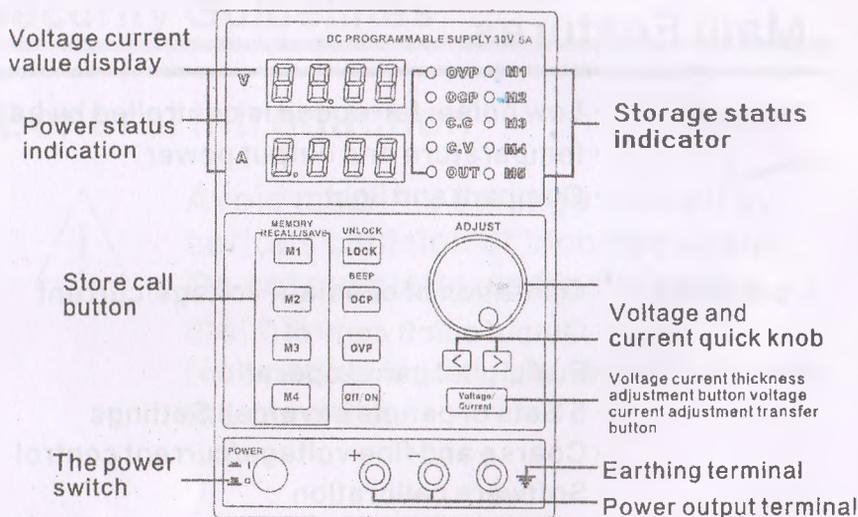machine

 Warning and caution

 Danger high voltage

 Ground terminal

13
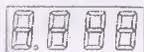
Front panel

Voltage current value display

Power status indication

DC PROGRAMMABLE SUPPLY 30V 6A

V | 8 8.8 8

A | 8.8 8 8

○ OVP ○ M1
○ OCP ○ M2
○ C.C ○ M3
○ C.V ○ M4
○ OUT ○ M5

Storage status indicator

MEMORY
RECALL/SAVE

M1
M2
M3
M4

UNLOCK
LOCK

BEEP
OCP

OVP

Off/ON

ADJUST

Voltage/
Current

Store call button

Voltage and current quick knob

Voltage current thickness adjustment button voltage current adjustment transfer button

The power switch

POWER

+ ○ — ○ ○ ⏚

Earthing terminal

Power output terminal

DISPLAY

Voltmeter head

V | 8 8.8 8

Displays output voltage and voltage Settings

Current meter head

A | 8.8 8 8

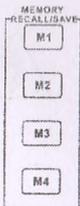Display output current and overcurrent protection Settings

Status Indicator

● OVP When overvoltage protection is on, the OVP indicator lamp will be on. When the output voltage is higher than the setting voltage,the output will be cut off,the power supply will be under protection, and the OVP lamp willflash. Press OVP key again for power reset

- **OCP** OCP is the overcurrent protection setting lamp. When the overcurrent protection function is turned on, OCP indicator light is on.

- **C.C** C.c is the constant current indicator light, which will be on when the power supply enters the constant current mode.

- **C.V** C.V is the output constant voltage indicator light, which is on when the power supply is working in the constant voltage mode.

- **OUT** OUT is the output indicator light. When the indicator light is on, the output port has voltage output.

Storage instructions

- M1
- M2   Store and call internal 5 sets of data indication,
- M3   if one of the indicator light is on,it means that
- M4   the DC power output this parameter
- M5

Introduction to panel operation

Store and call stored data, 1-4 sets can be directly invoked.See page for details on storage/calls
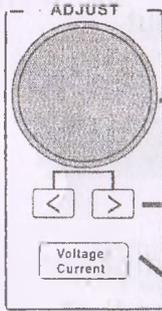
UNLOCK
| LOCK | ——— Lock/release front panel Settings.
see page for "locking for front panel"

BEEP
| OCP | ——— Turn on or off overcurrent protection.
Press this key for more than 2 seconds
to turn on Or turn off the buzzer.

| OVP | ——— Turn on or off overvoltage protection.

| Off/ON | ——— Turn on or off output

ADJUST

Quick adjustment of voltage and
current speed shuttle knob.

| < | > | Voltage and current coarse and fine tuning
shuttle keys, press > to increase shuttle rotation

Voltage
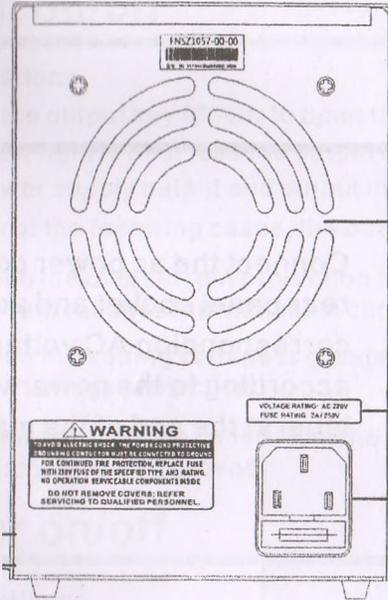Current
Switch key for voltage and current
regulation

POWER
Turn on or off the main switch.

+   −
Output voltage and current.

Ground terminal

18

FNSZ1057-00-00

Fan cooling air outlet

VOLTAGE RATING: AC 220V
FUSE RATING: 2A/250V

Voltage and fuse sticker

⚠ WARNING

TO AVOID ELECTRIC SHOCK. THE POWER CORD PROTECTIVE
GROUNDING CONDUCTOR MUST BE CONNECTED TO GROUND.
FOR CONTINUED FIRE PROTECTION, REPLACE FUSE
WITH 250V FUSE OF THE SPECIFIED TYPE AND RATING.
NO OPERATION SERVICEABLE COMPONENTS INSIDE.
DO NOT REMOVE COVERS: REFER
SERVICING TO QUALIFIED PERSONNEL.
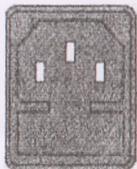
Power socket
(including fuse holder)

Power line socket mainly accepts AC value : 110V/220V. 50/60hz, check the voltage at the end of the machine and fuse label, and replace the specified fuse.

Note: please unplug the power cord before replacing the fuse to avoid electric shock.

19

operation

Access ac voltage

Connect the ac power cord to the rear panel socket and access the corresponding AC voltage according to the power voltage label at the end of the machine.

POWER

Powder

Press the power switch to turn on the power. The display screen is initialized and the machine will display the parameters set on last shutdown.

Power shut down

POWER

Press the power switch to turn off the power.

Output on/off

Panel operation :

press the output key 0ff/ON to open the output. The output
indicator light is on. Press the output key again, then turn off
the power supply output and output indicator.

Note: in any of the following cases, the output will be automatically shut off

1、When the overcurrent protection is started and the output
current reaches the maximum current set.

2、When the setting voltage is greater than the value set by
overvoltage protection.

3、Other settings are called from the store, that is, when storage
parameters are invoked.

Buzzer on/off

Panel operations :

usually turn on the buzzer sound. To turn off the buzzer sound,
press the OCP (BEEP) key for more than 2 seconds. The buzzer
will be off. Set the buzzer to work and press the OCP (BEEP) key
for more than 2 seconds.

Buzzer example :

when the buzzer Settings are turned on, the following action
will cause the buzzer to beep.

- boot
- Panel lock/release
- Voltage/current knob/fine tuning
- Turn the shuttle knob when the power
  or current is adjusted
- coarse switch
- Output on/off
- Setup save call

Front panel locking

Press the LOCK key for more than 2 seconds to LOCK the front
panel button operation. If the LOCK is lifted, press the LOCK key
for more than 2 seconds. Panel operation recovery.

21

Output parameter operation

Panel operation

1、 Connect the load to the front panel terminal。

2、 Set output voltage and current

Press button ░░░░ it can switch between voltage adjustment and current adjustment and use the shuttle knob to adjust the voltage and current.Voltage and current usually work in rough mode.press ◄ ► knob to select coarse tuning and fine tuning.

3、 Open output, press on/off.The OUT lamp lights up and displays CV or CC mode (depending on load).
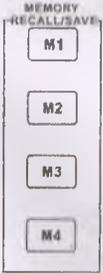
Save Settings

background

The front panel Settings can be saved in 5 groups of internal storage

Panel operation

Press the corresponding storage key m1~m5, set the corresponding voltage and current value, and the power supply will store the data automatically.

22

call setup

Previously, you can directly call any of the five groups of internal storage

MEMORY
RECALL/SAVE

M1

M2

M3

M4

Press any set of 1~4 storage keys, taking storage 1 as an example.The panel setting store in store 1 is called.After calling the fourth group,it will call out the fifth group of parameter values if we roating the shuttle knob.

• M1
• M2
• M3
• M4
• M5

If the indicator light of panel indicating storage is lit up,it means that this group of data is called.

Comment: When a setting is called, the output is automatically turned off to avoid incorrect operation when the output voltage is too high to damage the load

Frequently Asked Question

Problem 1: the panel button doesn't work after power on

Answer 1 :The panel is locked, press $^{LOCK}_{UNLOCK}$ button for two seconds then could start the panel operation.

Problem 2: after starting up, press Off/ON power supply without output

Answer 2: the current setting is set to 0.

Problem 3: after opening the output button, the output voltage rises slowly

Answer 3: the current is set too small

Problem 4: after opening OCP, press the output switch, the output is automatically turned off

Answer 4: the current protection value is set too low. turn on the output switch first and then turn on the ocp overcurrent protection.