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Digital Program-Controlled Switching Power Supply

INSTRUCTION MANUAL

CSI3005D

English



Thank you for purchasing this digital program-controlled switching power supply. This product is specifically designed for all kinds of needs for power output. Please read this manual carefully before using the product. For future reference, please properly retain the manual after reading.

Security Code

To use this product, the following basic measures should be strictly followed to avoid hazards of electric shock, bodily injury, and fire.

1. To ensure personal safety, please turn off the power switch after power work is completed; if it will not be used for a long time, please unplug the power cord!!!
2. You must use approved or recommended original factory parts, otherwise serious consequences will follow.
3. Power failure must be fixed by professionals or by maintenance personnel designated by our company.
4. This product uses a three-wire grounded plug that must be inserted into a three-hole grounded outlet. Do not change the plug or use an ungrounded three-headed adapter as it will cause poor grounding.

Precautions

1. There must be sufficient space around the power source for heat dissipation.
2. Do not use the product in environments where temperatures exceed 40°C.
3. When charging the battery, do not reverse the positive and negative terminals to avoid damage to the battery.
4. This product is of a fan-less design, full power output should be at least 4 hours. For longer continuous operation, please set the usage control rate under 80%, otherwise an artificial early failure may be possible. When ordering the product, please reserve the balance according to the actual operating current.

I. Product Features

1. This digital program-controlled stabilized switching power supply is designed for use in laboratories, schools, production lines, and electronic repair.
2. It has a small size and is lightweight, which is very easy to transport and carry.
3. It has high efficiency, high load capacity, and low noise and is superior to linear power supplies.

4. It has high voltage stability, small ripple factor, excellent short circuit protection, and over-current protection.
5. It digitally adjusts current and voltage, which is more advanced, more stable, and has longer life than traditional potentiometer adjusters.
6. It has an output electronic switch, which can easily break the output load.
7. It has a function set lock that can effectively prevent change of output parameters or change caused by misuse, which makes the product more secure and reliable.
8. It has a cell phone radio-frequency detection function, which is of a 4.2V 2A/19V 5A fixed output function. Parameters can be displayed by pressing the key, which is fast and convenient. It is an essential tool for cell phone and laptop repair.
9. It has three storage memories that can store three sets of frequently used parameters for easy retrieval.
10. It has an output state memory function. When the memory switch is turned on, it can retain the output status before the power switch is turned off. For example, when the power is in the output state, turn off the power switch, and when the power switch is turned on the next time the power supply will directly output the voltage. When the memory switch is turned off, it will not retain the output state when the power switch is turned off. Every time the power switch is turned on, the output key must be pressed to output voltage.

II. Product Specifications

Model	CSI3005D
Output Power	150W
Power Supply Voltage	110V \pm 10% 60Hz or 220V \pm 10% 50Hz
Operation conditions	Temperature 0~40°C Relative humidity<80%
Storage conditions	Temperature -10~70°C Relative humidity<70%
Overall dimensions	L268×W125×H155mm±5mm
Weight	2.3kg

Regulated status parameters	
Export voltage	Continuously adjustable from 0 to 30V (resolution is 0.01V)
Voltage export accuracy	$\pm 0.02V$
Voltage stability	$< 0.01\% + 3mv$
Load stability	$< 0.01\% + 3mv$
Recovery time	100 μ S
Ripple noise voltage	$< 0.1\% V_{rms}$
Temperature coefficient	$< 300PPM/C$

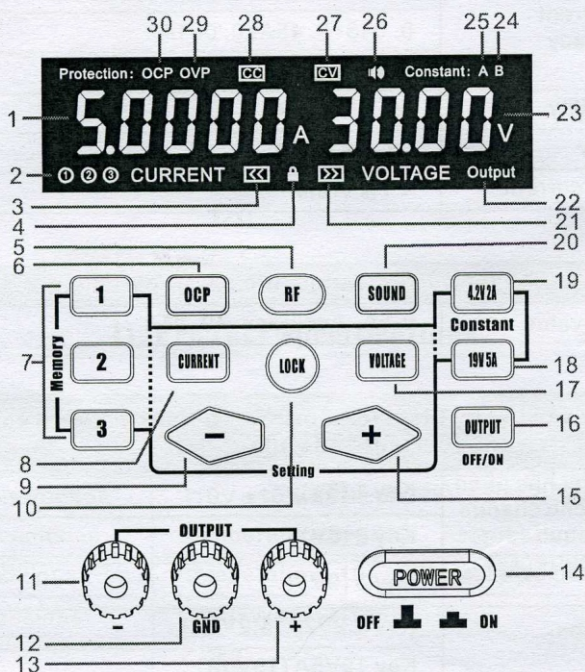
Constant current output state parameters	
Constant current value	0~5A
Constant output current	Continuously adjustable from 0 to 5A (resolution is 0.0001A)
Constant current output accuracy	0.0001~0.0450A $\pm 0.0001A$
	0.045~0.45A $\pm 0.001A$
	0.45~5A $\pm 0.01A$
Current stability	$< 0.1\% + 3mA$
Load stability	$< 0.1\% + 3mA$
Ripple noise current	$< 1\% V_{rms}$

OCP over-current automatic cutoff parameters	
OCP current value	0-5A Accuracy: $\pm 0.01A$

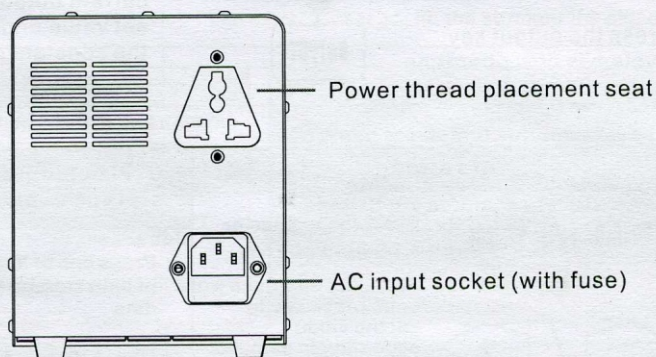
Storage capacity (data for storing and transferring 5 sets of current and voltage data)	
Initial data that has been stored (user can change and set the required voltage and current as needed)	Key 1 (3V)
	Key 2 (5V)
	Key 3 (9V)
Fixed data (non-resettable)	Key 4.2V2A (4.2V2A)
	Key 19V5A (19V5A)

RF radio-frequency signal strength test	
Signal test frequency range	30~1800MHZ including cell phone signal test
Signal strength	>10dBm

III. Panel Diagram



1. Current display
2. Three sets of data storage indicators
3. Current setting indicator
4. Function setting lock indicator
5. RF radio frequency signal detection button
6. Current protection mode key (over-current shutdown or constant current output)
7. Three sets of data storage key
8. Current setting key
9. Data reduce key
10. Function setting lock key
11. Negative output
12. Earth wire
13. Positive output
14. Power switch
15. Data increase key
16. Output switch key
17. Voltage setting key
18. 19V 5A fixed output key
19. 4.2V 2A fixed output key
20. Sound switch key
21. Voltage setting indicator
22. Output indicator
23. Voltage display
24. 19V 5A fixed output indicator
25. 4.2V 2A fixed output indicator
26. Sound indicator
27. Constant voltage output indicator
28. Constant current output indicator
29. Over voltage protection indicator
30. Current protection mode indicator



Backboard diagram

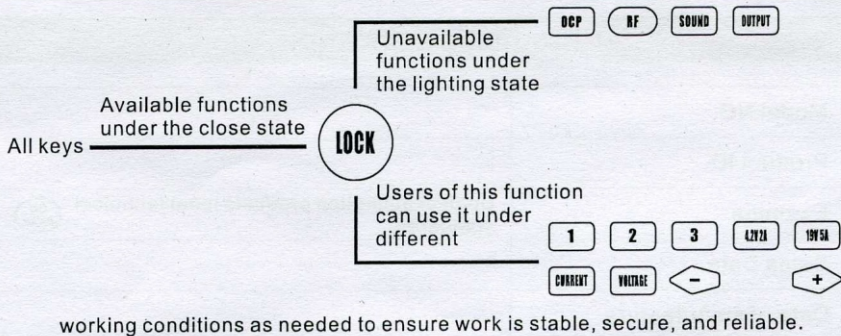
IV. Operation instructions

1. Connect to power
2. Turn on the power switch; current and power value of the previous setting will be displayed each time the power is turned on
3. **Instructions:** First, make sure the function setting key is in the closed state (function setting lock indicator is off).

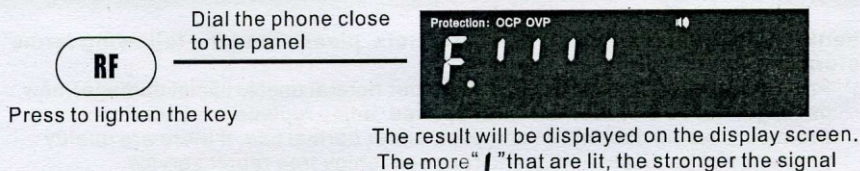
<p>Press the voltage or current setting key</p> <p>Press the decrease or increase key to set the value according to demand, press the voltage/current setting key to confirm.</p> <p>Choose the current protection mode</p> <p>Connect to load</p> <p>Press the output key System is now operating</p>		<p>A. Basic Operations</p> <p>Note: There are two modes of data output. Press the "OCP key;" after the OCP light turns on, the over-current shutdown state will be active; after the current output reaches the set value under this state, the output voltage will turn off. When the OCP light is off, the constant current output state will be active; after the current output reaches the set value under this state, the constant current output will be activated.</p>
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<p>B. Data storage</p> <p>Press the voltage or current setting key</p> <p>Press the decrease or increase key to set the value according to demand, press the voltage/current setting key to confirm.</p> <p>Long press one of the three sets of data storage key until the corresponding number on the bottom left of the screen flashes (or until there is a long sound under the sound state).</p>		<p>C. Fix amount and transfer storage capacity</p> <p>Press one of the following sets of data storage key to transfer data</p> <p> <input type="button" value="427A"/> <input type="button" value="199A"/> <input type="button" value="1"/> <input type="button" value="2"/> <input type="button" value="3"/> </p>
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D. Instruction of function setting lock



E. Cell phone signal test function (can check the cell phone signal strength)



F. Output state memory settings

With the power off, first press and hold the output key, then turn on the power switch. The display screen will show "OFF" or "ON." Press the data increase key to turn on the memory function and the display screen will show "ON." Press the data decrease key to turn off the memory function and the display screen will show "OFF."


G. When the output voltage exceeds 36V, the over voltage indicator "OVP" will flash and there will be an alarm sound (if the sound is not off). Please examine the cause before turning on the power switch.

H. Features of constant current

After the voltage and current values are set, when the power supply has load, the status of the working power is determined by the load resistance, which follows Ohm's Law: $R=V/I$. When the output current reaches the constant value that was previously set, it will automatically enter the constant current state from the constant voltage state; vice versa: when the load current is below the set value, the output current will automatically return to the constant voltage state from the constant voltage state. When the "CC" indicator light is on, the output current is in the constant state; when the "CV" indicator light is on, the output current is in the constant voltage state.

4. When work is completed, please turn off the power switch.

Product certification

Model NO.	
Product ID	
Examine	Upon examination products meet technical standards 
Sales Date	
Date of manufacture	

Warranty Card

Thank you for choosing this type of products, please read the following terms before using:

1. From purchasing date within 7 days, under normal use(Artificial damage), new package, not be disassemble and repaired ,enjoy replacement service.
2. From purchasing date within one year, under normal use, if there are quality problem, not be disassemble and repaired ,enjoy free repair service.
3. For more than warranty, we provide a lifetime warranty service, free of labor costs, charge only spare parts costs.
4. Failure to present warranty card during warranty period, the company will not be a free service.
5. Users need warranty service, please contact your original sales unit.
6. When users need warranty service, please provide warranty card and purchase invoice, or receipt of the certificate of the company seal.
7. Warranty does not include transportation costs and provide on-site service.

Maintenance records

NO.	Date for repair	Cause	Fix date	Repairer

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Simply smart circuitry since 1971

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