Your first choice of inverter brand

Pure sine wave inverter

MANUAL

Dear our customer:

Thank you for using our inverters, in order to use our inverter in the correct way, please read this manual carefully before first using.

Please pay attention to the Cautions which noted in this manual, which may cause damage to the inverter, or bring danger to operator.

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Safety Notice

In order to avoid damage to you and others, here we list below safety notice, please make sure to obey and refer for the following meaning of the marks

Warn、Note　The mark means for prohibited item　The mark means for mandatory item

When connect with the battery will produce spark, connect the former to ensure that no flammable gas.

Battery charging, discharging will produce inflammable gases, should be well-ventilated, do not put in the place may accumulate flammable gases

Output can not be parallel with the mains

Will damage the inverter and the danger of electric shock

Minors can not use it

Output high voltage will cause a danger of electric shock

When using this machine,please do not bundle wires,Use the broken wire can cause electric shock,short circuit of fire

Do not disassemble or remodel the inverter

Do not disassemble or remodel the inverter. Disassemble or modify unauthorized inverter may cause a malfunction or fire, electric shock

Do not wet the airframe

Otherwise may lead to short circuit, even the fire and electric shock

Do not place rod or other metal objects at vent or other openings

This may touch on the internal components to cause electric shock or injury

Put the plug of load of equipment full insert into an electrical outlet

Failure to fully insert the plug socket, could lead to electric shock and overheating, even cause a fire accident.

Do not use a damaged plug or loosed outlet

Forbid wet hand

This may cause electric shock, prohibit wet hands

KEEP AWAY FIRE

Do not let the volatile substances or combustible material floating into the machine, away from the flame

Do not damage output sockets or wires

do not cut, remodel, close to the heat, over-distorted, reversed, wiring and pull wires, or placed outlet weight on wires or sockets

WARN

Use inverter in common ground wire power system

If the output connect with the ground will cause inverter to short circuit and damage, for example: used in the car, the inverter's output terminal has the voltage reflected on the car body.

In power, do not let the load and to type in the loop

Cause the overload protection circuit will invalidate or increase the overload protection power

Do not install inverter worked in hot, humid environment

Inverter leakage may cause electric shock or fire caused by accident

The inverters have not been tested for used in medical equipment

ATTENTION

In connection cable should be used to install the appropriate cable, if the 230V output cable is too long or the wire cross-sectional area is too small, will generate a large number of cable power loss, the load performance will be low power and low voltage.

If battery and inverter connection cable are not standardized, too long cable, too small cross-sectional, parts of contact too short, the inverter may not work but give an alarm, meanwhile cable must have waterproof, insulate strength to meet environment requires.

Operation tips

Rated current and the actual used equipment

The nominal current or power of most of electromotive tools, household appliances and audio-visual equipment, in the range of nominal power or much lower, but when they startup it will occur overload protection phenomenon. Inverter is most likely to drive resistive loads and switching power supply load, because the resistive load is linear load that can be work with full load. Such as electric stove, rice cooker, LCD TVs and other devices.

Some audio-visual equipment and electromotive tools need more power than the resistive load to work normally, an asynchronous motor, CRT TV, compressors, pumps and so on. They need 2 to 6 times of the operating current to start. Whether it can run a specific load depend on the subject test.

⚠ Note: continuous frequently on and off the inverter may cause the damage.

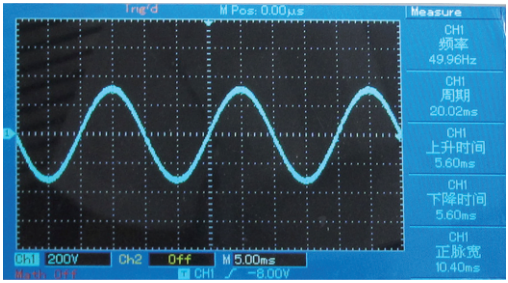
Applied to the following products:

For lamp,electric cooker,desktop computer,notebook computers, computer monitors, fax, printers, LCD TVs,Fan, DVD, mobile phones, digital products, drill machine, electric irons, washing machines and other original equipment usable electricity.

Introduction of performance environment for use

Inverter is a power equipment that can change DC (storage battery, solar cells, wind dynamo, etc.) to AC. The inverter use high-frequency power conversion technology, and use the ferrite transformer instead of the old bulky silicon steel transformer. That is why our power inverter is lighter, smaller than other similar inverter. When the inverter working in invertion mode, the output waveform is sine wave.

Pic 1: Output sine waveform



Environment for use

In order to get the best using results, please put the inverter on the flat surface, such as the ground, car floor, or other solid surface which can easily fixed the inverter's power cord. The working place should meet the following criteria:

Keep dry, should not let the inverter contact the water or other liquids, keep the inverter away from moisture or water.

Cool environment, keep the temperature between 0 Celsius degrees (no condensation) and 40 Celsius degrees.

Do not put the inverter next to heat vents or other heat devices. Try to keep the inverter not be shined directly by the sunshine.

Ventilation. No objects block around, and keep free flow of the air. Do not put anything on the inverter when it was working, because the fan is help to radiating.

Safety. Do not use inverter near the place of flammable materials or accumulate flammable gases.

The battery is not only to provide a 11V to 15V DC voltage also provide sufficient load operating current.

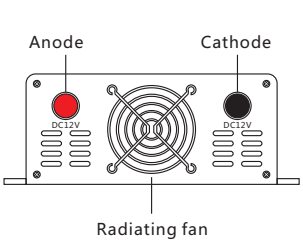
Power should be a full power, good lead-acid batteries Rough estimate the current that a load need, can be estimated by the load power dividing 10.

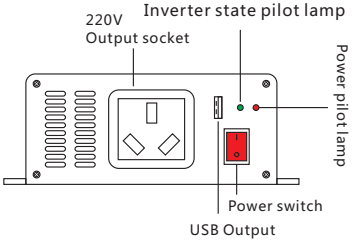
For example: an AC load power is 100W, the power supply must provide a current of 100/10=10A. If you need larger current, you can use a few batteries in parallel. The most important is to ensure that there is sufficient cross-sectional area of the connecting cable. This manual can not list all of the battery combinations. Battery charging and battery configuration are other areas of expertise

Installing and using method

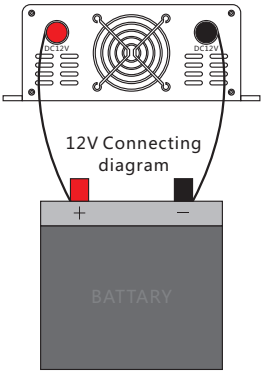
300W-500W

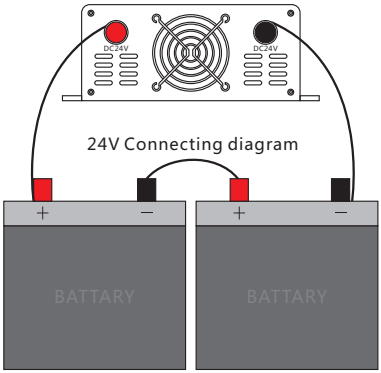
Side panel introduction

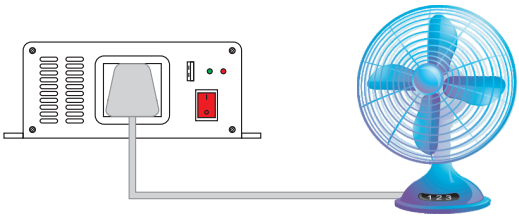




Connecting diagram



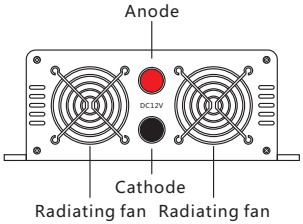


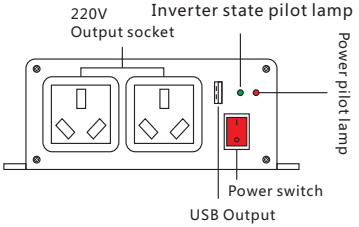


Installing and using method

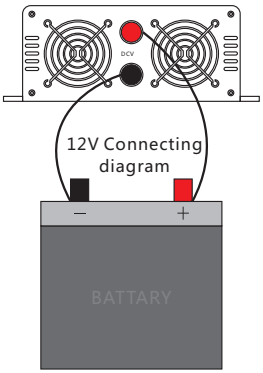
800W-8000W

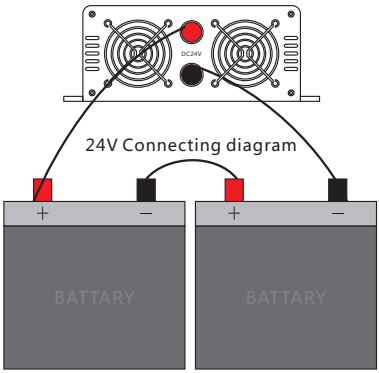
Side panel introduction

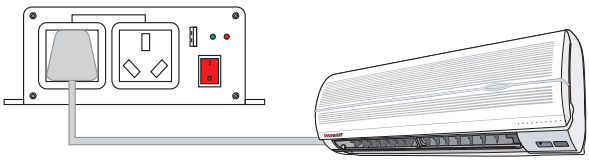




Connecting diagram







Installation connection steps: please refer to the above connection diagram

1.Firs of all, turn off the inverter power.

2.Use the black DC cable to connect the negative terminal of the battery and the black post head of the inverter.

3.Use the red DC cable to connect the anode terminal of the battery and the red post head of the inverter.

4.Plug the power plug of the equipment in the inverter's output socket.

5.Press the inverter's switch then it can be used.

Dismantle steps:

1.First of all, turn off the inverter power.
2.Disconnect the power plug.
3.Dismantle the red DC cable.
4.Dismantle the black DC cable

⚠ **Notes: The connecting diagram is just as basic reference, please contact with the professional technical personnel for the actual installing.**

Inverter can use one or more batteries. Use of 150AH or larger battery is best.

⚠ **Note: Because theses processes may have to connect the battery, before connecting you must ensure that no flammable gas around.**

Use the cable of inverter equipped with (not including high-power mode cable) to connect the inverter and battery, the red cable connect to the red post head of the inverter input terminal and the positive terminal of the battery. The red cable connect to the black post connections solid and reliable. Improper cable connections may result in overheating, post head and lug damage. At the same time will reduce battery time. The inverter mode dial to switch ON, if your battery is fully charged situation. POWER LED glows blue below. If the red light, this is, to protect the inverter. Should find a way to solve before use it (check the battery voltage is too high or too low, the inverter output is overloaded or short circuit).

⚠ **Note: The inverter required to connect the same voltage battery, 12V inverter to 12V battery, 24V inverter to 24V battery.**

⚠ **Note: In the plug all your electrical equipment patch, make sure that all equipment is turned off.**

Open the inverter's inverter mode switch, LED below POWER glows blue. Then your device can be opened one by one, if your device does not overload, it can work normally now. If the LED light is red, it is overloaded. To reduce the load, then it re-start to work.

Characteristic (inverter mode)

- Our inverter are equipped with prefect protection circuits. Provided safe automatic shutdown function, including grounding protection, low voltage alarm to prevent damage to your battery.
- Inverter have advanced anti-jamming technology, fully functional protection circuit and soft start circuit, convenient mode of operation.
- Protection circuit is automatic, Overload protection, input over-voltage protection, input low-voltage protection, high-temperature protection.
- Soft-start circuit has the function of gradually raise the output voltage when startup to eliminate cold start failure. And also has the function of instantaneous output voltage drop and fast recovery to reduce the load boot instantly overloaded

Technical parameter

Model	SGP300A-122	SGP300A-242	SGP300A-482	SGP300A-121	SGP300A-241	SGP300A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	300W	300W	300W	300W	300W	300W
Peak Power	600W	600W	600W	600W	600W	600W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	0.5A	0.3A	0.1A	0.5A	0.3A	0.1A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Model	SGP500A-122	SGP500A-242	SGP500A-482	SGP500A-121	SGP500A-241	SGP500A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	500W	500W	500W	500W	500W	500W
Peak Power	1000W	1000W	1000W	1000W	1000W	1000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	0.5A	0.3A	0.1A	0.5A	0.3A	0.1A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Technical parameter

Model	SGP1000A-122	SGP1000A-242	SGP1000A-482	SGP1000A-121	SGP1000A-241	SGP1000A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	1000W	1000W	1000W	1000W	1000W	1000W
Peak Power	2000W	2000W	2000W	2000W	2000W	2000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	0.6A	0.4A	0.2A	0.6A	0.4A	0.2A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Model	SGP1500A-122	SGP1500A-242	SGP1500A-482	SGP1500A-121	SGP1500A-241	SGP1500A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	1500W	1500W	1500W	1500W	1500W	1500W
Peak Power	3000W	3000W	3000W	3000W	3000W	3000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	1.2A	0.5A	0.2A	1.2A	0.5A	0.2A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Technical parameter

Model	SGP2000A-122	SGP2000A-242	SGP2000A-482	SGP2000A-121	SGP2000A-241	SGP2000A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	2000W	2000W	2000W	2000W	2000W	2000W
Peak Power	4000W	4000W	4000W	4000W	4000W	4000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	1.2A	0.5A	0.2A	1.2A	0.5A	0.2A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Model	SGP2500A-122	SGP2500A-242	SGP2500A-482	SGP2500A-121	SGP2500A-241	SGP2500A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	2500W	2500W	2500W	2500W	2500W	2500W
Peak Power	5000W	5000W	5000W	5000W	5000W	5000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	1.3A	0.6A	0.2A	1.3A	0.6A	0.2A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Technical parameter

Model	SGP3000A-122	SGP3000A-242	SGP3000A-482	SGP3000A-121	SGP3000A-241	SGP3000A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	3000W	3000W	3000W	3000W	3000W	3000W
Peak Power	6000W	6000W	6000W	6000W	6000W	6000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	1.5A	0.8A	0.3A	1.5A	0.8A	0.3A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Model	SGP4000A-122	SGP4000A-242	SGP4000A-482	SGP4000A-121	SGP4000A-241	SGP4000A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	4000W	4000W	4000W	4000W	4000W	4000W
Peak Power	8000W	8000W	8000W	8000W	8000W	8000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	1.8A	0.9A	0.4A	1.8A	0.9A	0.4A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Technical parameter

Model	SGP5000A-122	SGP5000A-242	SGP5000A-482	SGP5000A-121	SGP5000A-241	SGP5000A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	5000W	5000W	5000W	5000W	5000W	5000W
Peak Power	10000W	10000W	10000W	10000W	10000W	10000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	2.2A	1A	0.5A	2.2A	1A	0.5A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

Model	SGP8000A-122	SGP8000A-242	SGP8000A-482	SGP8000A-121	SGP8000A-241	SGP8000A-481
Output voltage	220VAC	220VAC	220VAC	110VAC	110VAC	110VAC
Output Power	8000W	8000W	8000W	8000W	8000W	8000W
Peak Power	16000W	16000W	16000W	16000W	16000W	16000W
USB Output	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC	1A 5VDC
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
No-load current	2.8A	1.4A	0.7A	2.8A	1.4A	0.7A
Working voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V
Voltage range	9.5-15.2V	19.8-30.2V	40.2-60.4V	9.5-15.2V	19.8-30.2V	40.2-60.4V
Alarm voltage	10±0.5V	21±0.5V	42±1V	10±0.5V	21±0.5V	42±1V
Low-voltage protection	9.5±0.5V	20±0.5V	40±1V	9.5±0.5V	20±0.5V	40±1V
Over voltage protection	16±0.5V	31±0.5V	61±1V	16±0.5V	31±0.5V	61±1V
Effciency maximum	94%	94%	94%	94%	94%	94%

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