



使用说明书  
*Owner's Manual*

开关电源  
*Power Supply*

## Preface

Welcome to the world of Hytera and thank you for purchasing this product. To derive optimum performance from the product, please carefully read this manual before use.

This manual is applicable to the following product:

PS22002(L) Power Supply

## Icon Conventions

The following icons are available through this manual:



**Caution:** indicates situations that could cause damage to your product or bodily injury.



**Note:** indicates tips that can help you make better use of your product.

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## Instructions

Do observe the following safety instructions to avoid any property damage or bodily injury.

- Do not disassemble the product without authorization to avoid fire or electric shock.
- Install and use the product in strict accordance with the manufacturer's instructions in this manual.
- Do not expose it to rain and moisture to avoid fire and electric shock. The product is for indoor use only.
- Make sure that the product works within the temperature range of  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and is stored within the temperature range of  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .
- Do not block the ventilation holes of this device.
- Do turn the product off before removing the power cord from the socket. Pull it out by the plug instead of the power cord.
- Keep the product away from intense shock to avoid potential damage.
- Do not use the product if it is damaged.
- Use only the lead-acid battery (12 V, 40 Ah) as a backup battery.

## Packing List

Please unpack carefully and check that all items listed below are received. If any item is missing or damaged, please contact your dealer.

Item	Qty.
Power Supply	1
AC Power Cord	1
Backup Fuse	1
Owner's Manual	1

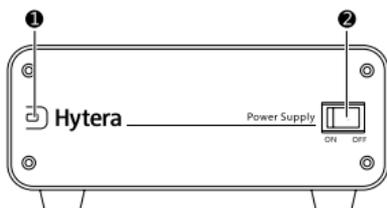
## Product Overview

### Introduction

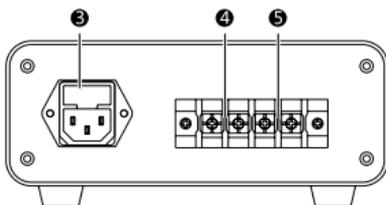
PS22002(L) power supply is designed to supply power to Hytera mobile radios. Working with a backup battery, it can ensure uninterrupted power supply in case of AC utility failure. It charges the backup battery with constant current and voltage, and provides protection against polarity reverse and overdischarge.

### Product Controls

#### Front Panel



## Rear Panel



No.	Part Name	No.	Part Name
1	LED Indicator	4	Battery Connector
2	Power Switch	5	Outlet Connector
3	AC Power Port	/	/

## LED Indicator

LED Indicator	Status
Glows green	The product is using AC utility to supply power.
Glows blue	The product is using backup battery to supply power.
Glows red	The product is using backup battery to supply power, but the battery runs low.

## Specifications

	Item	Specification
AC Input	Input voltage	90–264 V
	Maximum input current	5 A
	Operating frequency	47–63 Hz
Battery	Type	Lead-acid battery (12 V)
	Capacity	≥40 Ah
DC Output	Output voltage	13.8 V±2%
	Maximum output current	16 A
	Output voltage ripple	<150 mV
	Over-current protection	17–23 A
	Over-voltage protection	15.0–18.2 V
	Constant-current charge	1000±100 mA
Fan	Noise level	<45 dB

## Operations

1. Toggle the **Power Switch** to the OFF position to turn the product off.
2. Connect the product to the mobile radio.
  - a. Place the product on a flat surface.
  - b. Connect the red and black power cords of the mobile radio to the positive and negative poles of the product's **Outlet Connector** respectively.
3. Connect the AC power cord.

Insert one end of the AC power cord into the **AC Power Port**, and then insert the plug into the AC socket.
4. (Optional) Connect the product to the backup battery.

Connect the positive and negative poles of the battery to the positive and negative poles of the product's **Battery Connector** respectively.



### Note:

- The product charges the battery with a maximum charge current of 1 A. It takes 2-5 days to fully charge the battery depending on its capacity. It is recommended that you charge the battery with a dedicated charger in order to shorten the charge time.
- If a fully charged battery runs out quickly, it indicates that the battery lifespan has expired. In this case, replace the battery with a new one.

5. Toggle the **Power Switch** to the ON position to turn the product on.

## Troubleshooting

Phenomena	Analysis	Solution
The LED indicator does not glow.	An electricity failure occurs.	Restore the utility power.
	The AC power cord is not connected properly.	Connect the AC power cord properly.
	The fuse in the AC power connector is damaged when the product is using AC utility to supply power.	Replace the fuse with a new one (5 A/250 V; 5 x 20 mm),
	In battery mode, the battery is not connected correctly.	Connect the backup battery correctly.
	In battery mode, the battery does not work normally.	Replace the battery.
The LED indicator glows red.	The product is using backup battery to supply power, but the battery runs low.	Restore the utility power or replace the battery.
	The product is using backup battery to supply power, but the battery voltage is too low ( $\leq 10.8$ V).	Replace the battery.
	The product is using backup battery to supply power, but the battery voltage is too high ( $\geq 15$ V).	Replace the battery.
	In battery mode, large current consumption causes the battery voltage to fall below 10.8V.	Recharge the battery. If the LED indicator still glows red, replace the battery.
	The battery is damaged or its lifespan has expired.	Replace the battery.
	The relay is locked.	<ul style="list-style-type: none"> <li>Restore the utility power.</li> <li>Reconnect or replace the battery.</li> </ul>
Abnormal sound is heard.	The relay is switching constantly.	Make sure that the output is not overloaded and that no short circuit occurs.

If the above solutions cannot solve your problems, or you may have some other queries, please contact us or your local dealer for more technical support.

## Care and Cleaning

To guarantee optimum performance as well as a long service life of the product, please follow the tips below.

### Product Care

- Do not pierce or scrape the product.
- Keep the product away from substances that can corrode the circuitry.
- Keep the product away from excessive heat and dust to extend the service life.
- Do not block the airflow of the apparatus (esp., the fan) with any other foreign objects to avoid potential safety hazard.

### Product Cleaning

**Caution:**

- Turn the product off before cleaning.
  - Make sure the product is completely dry before use.
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- Clean up the dust and fine particles on the product's surface with a clean and dry lint-free cloth or a brush regularly.
  - Use a non-woven cloth with neutral cleanser to clean the device after long-time use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations, so as to avoid potential damage to the surface.

## Optional Accessories

The BRK12 Installation Accessory for Rack-mounted Power Supply (2U) (Black) is available for purchase to secure the product. For more information, please consult your local dealer.



**Caution:** Use the accessories specified by the Company only; otherwise, we shall not be liable for any losses or damages arising out of the use of any unauthorized accessories.





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