

Uninterruptible Power Supply for the Cisco CVA120 Series Cable Voice Adapter

Product Number: GES20W05V0104 December 15, 2000

This document describes the Uninterruptible Power Supply (UPS) for the Cisco CVA120 Series Cable Voice Adapter and how to install the UPS, replace its battery pack, and prepare it for storage.



This UPS must be used to power only a Cisco CVA120 Series Cable Voice Adapter.

Description

The UPS for the Cisco CVA120 Series Cable Voice Adapter provides a backup power supply for the cable voice adapter and the telephones attached to it. The UPS has the following specifications and features:

Input Voltage: 100 to 240 VAC, 47 to 63 Hz, 1A

Output Voltage: 5 VDC @ 2.65A, -30VDC @ 0.130A, -56V @ 0.08A

• Maximum Power: 20 Watts

• Fuse: T2.5A/250V



For protection against risk of fire, replace only with the same type and rating of fuse.



DISCONNECT POWER BEFORE CHANGING THE FUSE.

- The UPS is shipped with a fully charged battery pack. The UPS is not activated until plugged in to an AC power source for the first time, so that it remains at full charge during transit and storage.
- When plugged in to an AC power source, the UPS recharges its battery pack to keep it at full charge. When fully discharged, it requires approximately 24 hours of recharging to return to full charge.
- When the AC power fails, the UPS automatically begins supplying power to the cable voice adapter. The UPS can provide up to 8 hours of power in standby mode (where the cable voice adapter maintains the connection to the network but without making or receiving any telephone calls), or up to 2 hours of "talk time" power when the telephones are in use.

Two LEDs on the face of the UPS chassis provide status information about the unit:

Normal (Green)	Warning (Amber)	Description
OFF	OFF	Power OFF, Battery Pack is Discharged, or Hardware Failure:
		• The UPS has not been connected to AC power since being shipped from the factory.
		The AC power source has failed and the internal battery pack has been discharged.
		A hardware failure has occurred.
		Plug the UPS into an AC power source. If the Normal LED does not light, check the fuse and replace if necessary. If the Normal LED still does not go on, replace the UPS.
ON	OFF	Normal Mode—The UPS is connected to AC power and charging its battery pack.
ON	ON	Battery Backup Mode—AC power to the UPS has failed and the UPS is powering the cable voice adapter with its internal battery pack.
ON	Blinking	Low Battery, Defective or Missing Battery Pack:
		• AC power is not present and the internal battery pack is about to run out of power. Wait until AC power returns, and the UPS should recharge the battery pack within 24 hours.
		• AC power is present but the battery pack is not recharging properly. Unplug the unit and check the battery pack's connections. If the battery pack still does not recharge, replace it. ¹
		• The internal battery pack is missing. Unplug the unit and install a battery pack. ¹
Blinking	Blinking	Severe Fault—The UPS is experiencing a current overload, possibly caused by the AC power source or cable voice adapter. Immediately disconnect the UPS from AC power and the cable voice adapter. Investigate whether the AC power source, cable voice adapter, or UPS is causing the problem. Replace the defective unit.

^{1.} Call the number on the bottom label of the UPS chassis for battery pack disposal and replacement.

Safety Recommendations

Follow these guidelines when working on equipment powered by electricity.

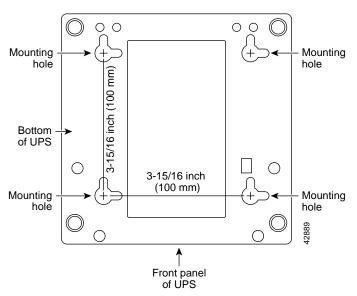
- Never assume that power is disconnected from a circuit. Always check.
- · Look carefully for possible hazards in your work area, such as moist floors and exposed wiring.
- If an electrical accident occurs, proceed as follows:
 - Use caution; do not become a victim yourself.
 - Turn off power to the system.
 - If possible, send another person to get medical aid. Otherwise, determine the condition of the
 victim and then call for help. Then determine if the person needs rescue breathing or external
 cardiac compressions; then take appropriate action.

Wall-Mounting the UPS (optional)

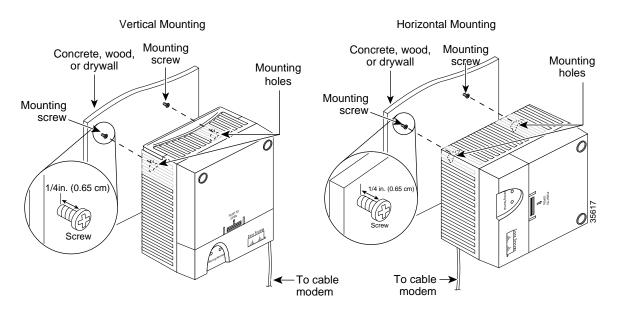
If mounting the UPS on a wall, you will require a drill, 1/8-inch (4 mm) drill-bit, and four 1/8-inch (4 mm) wood screws or wall anchors (depending on wall material), at least 1-inch (25 mm) in length.

To wall-mount the UPS, do the following:

- Step 1 Choose an appropriate mounting place. The wall can be made of cement, wood, or drywall. The mounting location should be free of obstructions on all sides and the power cable should be able to easily reach the cable voice adapter without strain.
- Step 2 Drill four holes that are 3/4-inch (19 mm) deep. The holes should be arranged in a square that is 3-15/16 inch by 3-15/16 inch (100 mm by 100 mm), to match the mounting holes on the UPS chassis:



- Step 3 Install the four screws in the mounting holes, according to the instructions accompanying them. The screw heads should extend approximately 1/4-inch (6.5 mm) from the surface of the wall.
- **Step 4** Position the UPS either vertically or horizontally as shown:

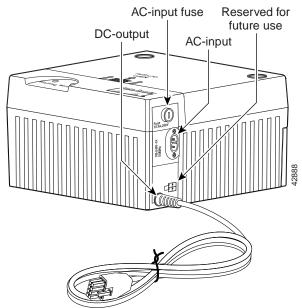


Step 5 Align the mounting holes on the underside of the UPS with the mounting screws and push the UPS against the wall, making sure that the UPS is securely inserted onto each screw. Pull the UPS down to lock it against the screws.

Connecting the UPS to the Cable Voice Adapter

To connect the UPS to the Cisco CVA120 Series Cable Voice Adapter:

- Step 1 If desired, wall-mount the UPS as described in the previous section "Wall-Mounting the UPS (optional)"; otherwise, place the UPS on a stable, flat surface close to the cable voice adapter. The sides and rear of the UPS must remain unobstructed to ensure adequate airflow and to prevent the unit from overheating.
- Step 2 Plug the eight-pin connector (shown as "DC-output" in the following figure) into the eight-pin plug on the rear panel of the cable voice adapter. Push the connector in until it locks.



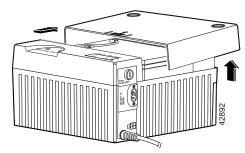
- Step 3 Insert the plug end of the supplied power cable into the power connector on the UPS chassis (shown as "AC-input" in the figure above).
- **Step 4** Plug the other end of the power cable into a suitable AC wall outlet.

When you plug the UPS into an AC power source, the green LED labeled "Normal" lights to indicate that AC power is present. Connecting the UPS to AC power automatically activates the internal battery pack, so that if AC power is then lost, the UPS immediately begins providing power to the cable voice adapter.

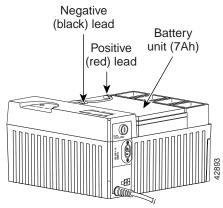
Replacing the Battery Pack

Under normal circumstances, the CVA120 Series UPS does not need any maintenance. However, if you need to replace the battery pack within the UPS, use the following procedure.

- Step 1 Unplug the cable going to the cable voice adapter. Then unplug the power cable from the UPS to the wall outlet.
- Step 2 Remove the UPS from its wall-mount (if applicable) and place it on a firm, flat surface.
- Step 3 Face the front of the UPS chassis and using both hands, push down on the button marked "PUSH TO OPEN." Lift up to remove the cover, as in the following figure:



Step 4 First remove the positive (red) lead from the battery, and then remove the negative (black) lead from the battery pack. See the following figure:



Step 5 Lift the old battery pack out of the UPS chassis, and place it aside for disposal.



The battery pack is a sealed lead battery and must be recycled. For recycling information inside the USA call 800-738-7372. Outside the USA call 1-817-244-7777.



Ultimate disposal of this product should be handled according to all national laws and regulations. (To see translations of this warning, see the appendix, "Translated Safety Warnings," in the CVA User Guide.)



There is a danger of explosion if the battery pack is incorrectly replaced. Replace only with the same or equivalent type, as recommended by the manufacturer.

- Step 6 Insert the replacement battery pack into the chassis, with the battery terminals at the left side of the chassis as you face it. The spacer should be near the back of the chassis.
- Step 7 Attach the negative (black) lead to the terminal closest to the front of the UPS chassis. Make sure that the lead slides all the way on to the terminal and is securely connected.

- Step 8 Attach the positive (red) lead to the terminal furthest from the front of the UPS chassis. Make sure that the lead slides all the way on to the terminal and is securely connected.
- Step 9 Replace the cover by positioning over the chassis, with about a 1/2-inch gap between the cover and chassis, and push down and pull forward until it snaps shut. Be careful not to hit or dislodge the cables going to the battery terminals.
- Step 10 Replace the UPS in its normal position or wall-mount, and reconnect the cables to the cable voice adapter and wall power outlet.

Storing the UPS

The UPS is shipped from the factory in an inactive state, and its battery backup circuitry does not activate until the UPS is plugged into an AC power source for the first time. This prevents the battery pack from discharging while in storage and transit. Before returning the UPS to storage, use the following procedure to return the UPS to the inactive state so that it does not continue to discharge its battery pack:

- Step 1 Ensure that the UPS has been plugged in to AC power for at least 24 hours to fully charge its internal battery pack.
- Step 2 Disconnect the UPS from the AC power. This should turn on the Warning LED, indicating that the UPS has gone into battery backup mode.
- Step 3 Disconnect the UPS from the cable voice adapter.
- Step 4 Face the front of the UPS chassis and, using both hands, push down on the button marked "PUSH TO OPEN." Lift up and remove the cover to expose its internal battery pack.
- Step 5 Remove the positive (red) lead from the battery; the Warning LED should go off. Wait at least ten seconds and then reconnect the lead. The Warning LED should remain off.
- Step 6 Replace the cover on the UPS. The UPS can now be stored for an extended period of time without affecting the battery life or power output.

This document is to be used in conjunction with the Cable Voice Adapter User Guides, available on CCO (http://www.cisco.com).

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