

CyberPower

User's Manual for CyberShield CSN30U12V

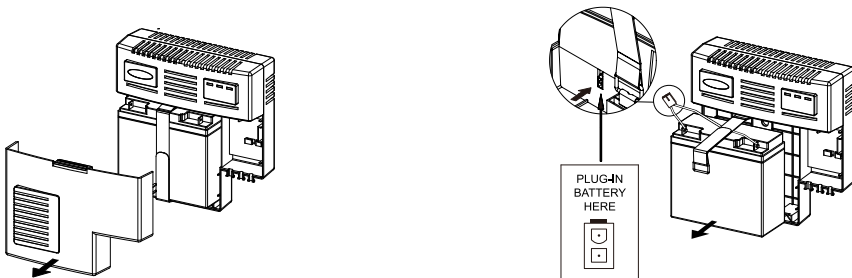
CyberShield UPS are designed to provide a local power solution for cable telephony, wireless local loop (WLL), and fiber to the home (FTTH) broadband equipment. FTTx not only needs backup power to prevent utility power failure, but also supports making emergency calls (e.g., 911) for help.

IMPORTANT SAFETY WARNINGS (SAVE THESE INSTRUCTIONS)

This manual contains important instructions regarding the installation and operation of this device. Read this manual thoroughly before attempting to unpack, install, or operate this device.

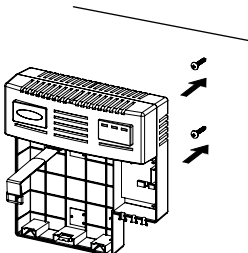
- CAUTION!** The battery can energize hazardous live parts inside even when the AC input power is disconnected.
- CAUTION!** To reduce the risk of fire or electric shock, install in an indoor area that both temperature and humidity could be controlled, and free of conductive contaminants. To find the acceptable ranges of temprature and humidity, please refer to the specification.
- CAUTION!** To avoid electric shock, unplug power cable from the AC power source before servicing the battery or installing a computer component.
- CAUTION!** To reduce the risk of electric shock, keep the cover on. There are no user-serviceable parts inside the unit. Please contact us or our dealer for service.
- CAUTION!** It is recommended to connect the unit to the required equipment and battery before plugging in the utility power.
- CAUTION!** The UPS battery is charging when it's connected to utility power. The battery is charging during its first 24 hours of normal operation. Don't expect full battery capacity during this initial charging period.
- CAUTION!** Runtime is based on testing fully-charged and new batteries at normal operating conditions. Runtime curve is approximate and varies based on battery age, level of charge at test, environment, and other variables.
- CAUTION!** Before replacing the battery, remove conductive jewelry, such as chains, watches, and rings. Use tools with insulated handles to avoid high energy, which could pass through conductive materials and cause severe burns.
- CAUTION!** Before replacing the battery, make sure the replacement has the same rating: Certified Valve Regulated Lead Acid Battery, 12V, 20Ah maximum.
- CAUTION!** The battery must be supplied by CyberPower. Using improper battery which is not evaluated with this model could cause a risk and is at the user's own risk.
- CAUTION!** To store the UPS for an extended period, refer to the typical recharge time in the specification and recharge the battery every three months to ensure battery life.

WALL MOUNT INSTALLATION



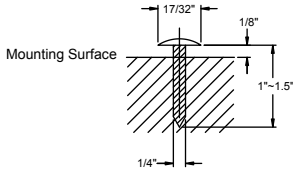
Step 1:
a. Remove the battery cover.

Step 2:
a. Loosen the battery strap.
b. Remove the battery from the shelf.
c. Disconnect the battery cable connector.



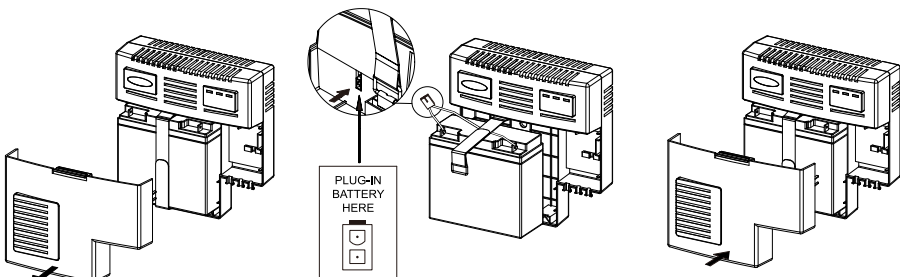
Step 3:
a. Use the enclosed installation template to mark an installation location for the unit.
b. Mount the screws on the wall.
c. Put the keyhole slots of the unit into the two screws.
d. Connect the battery connector and put the battery back.

RECOMMENDED SCREW SIZE



BATTERY REPLACEMENT

As long as utility power is on, you may leave the UPS and the connected equipment while replacing a new battery.



Step 1:
a. Remove the battery cover.

Step 2:
a. Loosen the battery strap.
b. Disconnect the battery cable connector to remove the battery.
c. Replace with new battery and reconnect the battery connector.

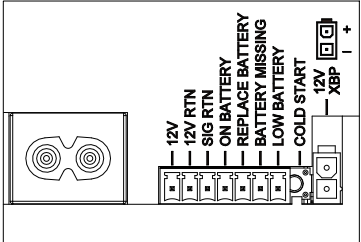
Step 3:
a. Tighten the battery strip and cover it.

LED INSTRUCTION

Indicator	Color	Condition
 AC	Green	The UPS is on utility mode.
	Yellow	The UPS is on battery mode.
 OUTPUT	Green	The UPS is supplying power.
 BATTERY	Red	The battery is not connected or the battery needs to be replaced.

COMMUNICATION SIGNALS

The communication signals of this unit are isolated from the internal circuitry via open collector optocoupler transistors. The connection "SIG RTN" (Signal Return) is a return point for all communication signals. In the typical application, the connected equipment digital ground connects to Signal Return, and pull-up resistors turn the open collector signals into logic levels.



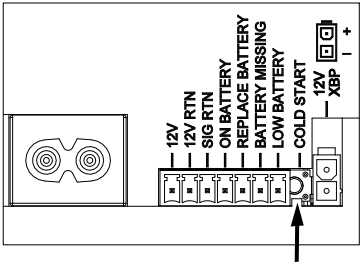
Signal	Message
12 V	+ Voltage output
12 V RTN	- Voltage output
SIG RTN	Signal return
ON BATTERY	Low when the UPS is on utility mode. Open when the UPS is on battery mode.
REPLACE BATTERY	Low when the battery is in a normal state. Open when the battery needs to be replaced.
BATTERY MISSING	Low when the battery is present. Open when the battery is missing.
LOW BATTERY	Low when the battery has sufficient capacity. Open when the battery's capacity is low.

COLD START

The cold start feature is for applying power to the UPS and connected equipment when the UPS is off, and there is no utility power. Before using the cold start feature, please make sure the battery has sufficient capacity. To start the cold start feature, press the recessed COLD START button with a small pointed object.

ALARM ON / OFF BUTTON

The default setting is that the alarm is on. The button position is the same as COLD START. To turn the alarm on, press the recessed COLD START button with a small pointed object.



BUTTON FUNCTIONS

Functions	Instructions
Cold Start	Press the COLD START button for 3 seconds.
Reset Output	Press the COLD START button for 20 seconds to turn off the output power, and it will turn on automatically after 15 seconds.
Temporarily Alarm On/Off	Press the COLD START button for 1 second to turn the alarm off for 24 hours. A short beep will occur to confirm the alarm is off. Press the COLD START button for 1 second again to restore the alarm. Two short beeps will occur to confirm the alarm is on.
Permanent Alarm On/Off	Press the COLD START button for 15 seconds to turn the alarm off for permanently. A short beep will occur to confirm the alarm is off. Press the COLD START button for 15 seconds again to restore the alarm. Two short beeps will occur to confirm the alarm is on.

SPECIFICATION

Model	CSN30U12V
AC Input	
Input Voltage Range	100 – 240 V _{AC}
Input Frequency Range	50 – 60 Hz
DC Output	
On Battery Output Voltage	12 V _{DC}
Continuous Power Capability	30 W
Maximum Output Power	30 W
Efficiency (at Full Load, 25°C)	>83%
Battery	
Battery Type	Sealed, Maintenance Free Lead-Acid Battery
Numbers of Battery	20 Ah/12 V x 1
Typical Recharge Time (25°C)	24 hours
Maximum Full Charge Time (25°C)	72 hours
Replaceable	Yes
Surge Protection and Filtering	
Lightning/Surge Protection	Yes
Warning Diagnostics	
Audible Indicator	Utility Failure, Low Battery
LED Indicators	AC, Output, Battery
Management	
Auto Charge	Yes
Communication Interface	On Battery, Replace Battery, Battery Missing, Low Battery
Physical	
Maximum Dimensions (L*W*D)	30 cm x 28 cm x 10.1 cm
Weight (including battery)	8.2 kg
Environment	
Operating Temperature	32°F – 104°F (0°C – 40°C)
Operating Humidity	0 – 95% noncondensing within enclosure
Maximum Operating Elevation	10,000 ft (3,048 m)
Maximum Storage Elevation	50,000 ft (15,240 m)
Storage Temperature	5°F – 113°F (-15°C – 45°C)

LIMITED WARRANTY

CyberPower warrants to you, the Initial Purchaser, that the Product will be free from defects in material and workmanship for three years from the date of original purchase, subject to the terms of this Limited Warranty. This Limited Warranty gives you specific rights, and you may have other rights, which vary from State to State and Province to Province.

Any Implied Warranty of Merchantability or for Fitness for a Particular Purpose, if applicable to the Product, is limited in duration to three years. This provision shall NOT create any Implied Warranty or Merchantability or of Fitness for a Particular Purpose that would not otherwise apply to the Product. NOTE: **Some States and Provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.**

To be covered, you must be the owner of the Product at the time of the failure that results in the claim made under this Limited Warranty. Your sole and exclusive remedies are those provided by this Limited Warranty. This exclusion of other express warranties applies to written and oral express warranties. CyberPower excludes any liability for personal injury. CyberPower excludes any liability for direct, indirect, special, incidental, or consequential damages, whether for damage to or loss of property, loss of profits, business interruption, information or data. This exclusion applies even though damage or loss is caused by negligence or other faults. NOTE: **Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.**

DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT OR OTHER HIGH RISK ACTIVITIES. CyberPower does not sell the Product for use in high-risk activities. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, including the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, weapons systems, life support or medical applications or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities").CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities. CyberPower does not authorize the use of any Product in any High Risk Activities. ANY SUCH USE IS IMPROPER AND IS A MISUSE OF A CYBERPOWER PRODUCT.

The Limited Warranty is governed by the laws of the United States and the State of Minnesota, without reference to conflict of law principles. The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded.

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (1) Reorient or relocate the receiving antenna. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. (4) Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Shielded signal cables must be used with this device to ensure compliance with Class B FCC limits.
CAUTION: Any changes or modifications which are not expressly approved by CyberPower could void the authority granted by the FCC to operate this equipment.



CAUTION: Batteries are considered HAZARDOUS WASTE , so they must be disposed of properly.
Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by local regulations.

CAUTION: CyberPower Systems encourages environmentally sound methods for disposal and recycle of its UPS products.
Please dispose and/or recycle the UPS in accordance to the local regulations of your state.

 **WARNING:** Cancer and Reproductive Harm-www.P65Warnings.ca.gov.

For more information, please contact:
CyberPower Systems (USA), Inc. 4241 12th Avenue East, Suite 400, Shakopee, MN 55379
CyberPower Systems (EUROPE), Inc. Flight Forum 3545, 5657DW Eindhoven, The Netherlands

Phone: (952)403-9500 Fax: (952)403-0009
E-mail: sales@cyberpower-eu.com

cyberpowersystems.com
eu.cyberpowersystems.com

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