

# **CyberPower<sup>®</sup>**

**User's Manual for  
CyberShield**

**DTC36U12V**

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CyberShield UPSs are designed to provide a local power solution for cable telephony, wireless local loop (WLL), and fiber to the home (FTTH) broadband equipment.

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## **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 prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area, free of conductive contaminants. (Please see specifications for acceptable temperature and humidity range.)

**CAUTION!** To reduce the risk of electric shock, do not remove the cover, except to service the battery. No user serviceable parts inside, except for the battery.

**CAUTION!** When replacing batteries, the replacement should have the same rating as follows, Listed/Certified Valve Regulated Lead Acid Battery, 12V, max. 9Ah.

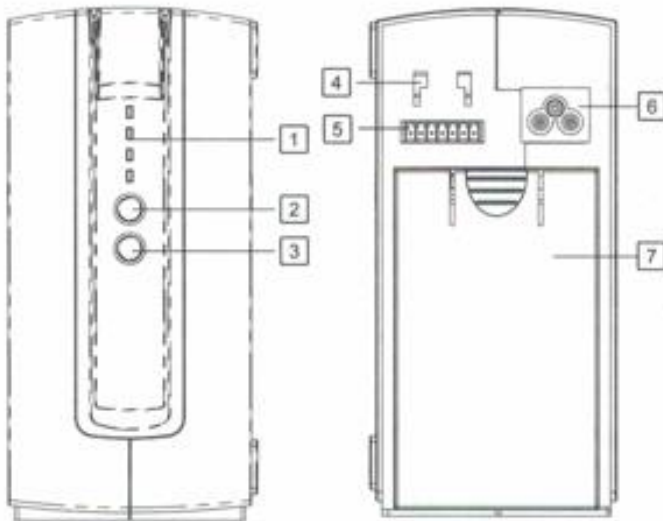
**CAUTION!** Risk of Energy Hazard, 12V, max.9 Ampere-hour battery. Before replacing batteries, remove conductive jewelry such as chains, wrist watches, and rings and use tools with insulated handles. High energy through conductive materials could cause severe burns.

**CAUTION!** Do not dispose of batteries in a fire. The battery may explode if improperly disposed. Recycle batteries in accordance with local regulations.

**CAUTION!** Do not open or mutilate batteries. Released material is harmful to the skin and eyes. It may be toxic.

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## OVERVIEW



Number	Description
1	LED Indicator
2	Alarm Silence Button
3	Cold Start Button
4	Cable Retainer Installation Point
5	Communication Cable Connector
6	AC Power Cable Connector
7	Battery Cover

## INSTALLATION

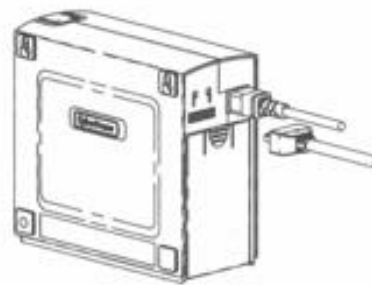
### DESKTOP USE:

- 1.) Open the battery door at the back of the DTC36U12V and connect the battery wires.
- 2.) Plug AC power cable into wall outlet.
- 3.) Connect the communication cable and simply place the DTC36U12V unit on or underneath desk to begin backing up the optical home network.

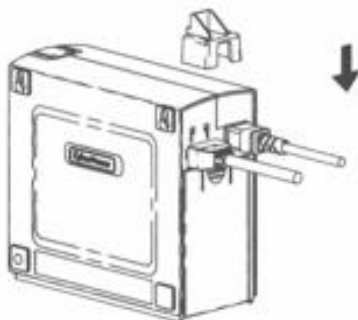
### WALL MOUNT USE:



Step 1:  
Connect the AC cable to the wall outlet.



Step 2:  
Connect the communication cable between the DTC36U12V and the ONT device.



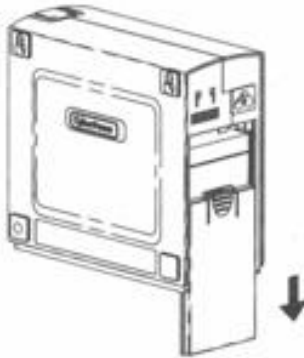
Step 3:  
Install the cable retainer to secure the communication cable.



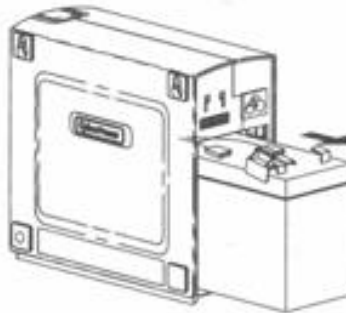
Step 4:  
Use the enclosed wall mount template to locate screws on the wall. Hang the DTC36U12V on the screws which are located on the wall.

## BATTERY REPLACEMENT

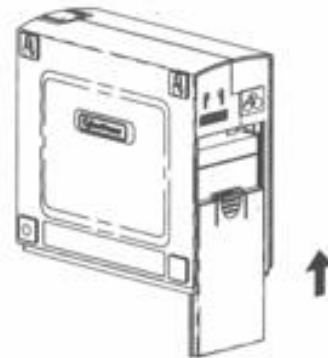
This battery is hot-swappable. As long as utility power is on, you may leave the UPS and connected equipment on while replacing a new battery.



- Step 1:  
a. Slide off the battery cover at the back of the DTC36U12V unit.



- Step 2:  
a. Remove the battery from the enclosure.  
b. Disconnect both battery cable connectors.



- Step 3:  
a. Install the new battery by connecting the red lead to the positive terminal and the black lead to the negative terminal.  
b. Slide the battery back into the compartment.  
c. Replace battery cover to resume normal operation.

## OPERATION

Connect equipment and power:

Step1. Plug the UPS power cord into the utility power cord inlet.

Step2. Plug the UPS power cord into the wall outlet.



The UPS battery charges when it is connected to utility power. The battery charges fully during the first **24 hours** of normal operation. Do not expect full battery run capability during this initial charge period.



Once the battery is disconnected, the connected equipment is not protected from power outages.



Deliver spent batteries to a recycling facility or ship to the manufacturer in the replacement battery packing material.

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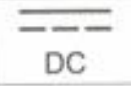


## ALARM SILENCE

The audible alarm will be enabled when the unit is operating from battery or battery power is low. Press the Alarm Silence button for 0.5 seconds, the unit will beep once confirming that audible alarms have been temporary disabled for 24 hours. Press this button one more time for 0.5 seconds to enable audible alarms again. The unit will beep twice confirming that audible alarms have been enable. Or press and hold the Alarm Silence button for 15 seconds the units will beep once confirming that audible alarms have been disabled permanently. To restore the audible alarm, press and hold the Alarm Silence button for 15 seconds and the unit will beep twice confirming that audible alarms have been enabled.

## COLD START

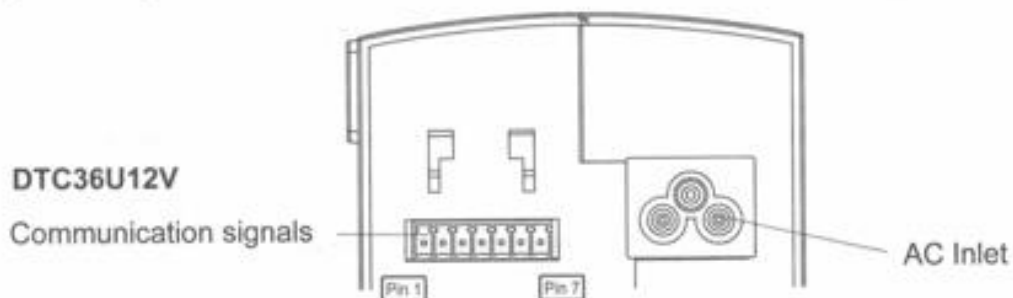
The cold start feature is to supply power to the UPS and connected equipment when the UPS shuts down and no utility power is available. Before using the cold start feature, please make sure that the battery is properly charged. To turn on the cold start feature, please press and hold the cold start button until 4 LED indicators light up.

## LED INDICATOR

Indicator	Color	Condition
 SYSTEM STATUS	Green	Indicates normal mode of operation.
 DC	Green	Indicates the battery is supplying the power. At 45% battery capacity, the LED will flash and then alarm will beep 4 times per minute.
 MUTE	Orange	Press and hold the button "Alarm Silence" for 0.5 second to silence the audible alarm for 24 hours, and the LED will flash.
 BATTERY	Red	Battery replacement required. Alarm will beep once every 15 minutes. The LED also illuminates when battery is absent.

## COMMUNICATION SIGNALS

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



Pin	Signal	Message
1	12V	+ Voltage output
2	12V RTN	- Voltage output
3	SIG RTN	Signal return
4	ON BATTERY	Low when operating from utility line.
5	REPLACE BATTERY	Low when battery is charged. Open when battery fails the self test.
6	BATTERY MISSING	Low when battery is present. Open when battery is missing.
7	LOW BATTERY	Low when battery is near full charge capacity. Open when operating from a battery with < 45% capacity.

## SPECIFICATION

Model	DTC36U12V
<b>Input</b>	
Voltage Range	100Vac - 240Vac
Frequency Range	50-60Hz
<b>Output</b>	
On Battery Output Voltage	12Vdc
Continuous Power Capability	36W
Efficiency (at 75% Max Load)	≥ 80%
<b>Battery</b>	
Battery Type	Sealed, Maintenance Free Lead-Acid Battery
Numbers of Battery	12Vdc / 7.2AH x 1
Typical Recharge Time	14 Hours (90% charged)
Replaceable	Yes
<b>Surge Protection and Filtering</b>	
Lightning / Surge Protection	Yes
<b>Management</b>	
Battery Auto-Charge	Yes
<b>Physical</b>	
Dimensions (LxWxD)	16.8cm x 8.1cm x 18.5cm
Weight (Net)	3.13kg (with 7.2AH battery)
<b>Environment</b>	
Operating Temperature	-4°F - 113°F (-20°C - 45°C) Operation at 50°C (122°F) with de-rating to 30W
Operating Humidity	0 – 95% noncondensing within enclosure
Max Operating Elevation	10,000ft (3,000m)
Max Storage Elevation	50,000ft (15,000m)
Storage Temperature	-4°F - 113°F (-20°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 or 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 still 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 through damage or loss is caused by negligence or other fault. **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 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 to 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 can 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 not expressly approved by Cyber Power could void the authority granted by the FCC to operate this equipment.

For more information, please contact:

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Reliability. Quality. Value.

KO1-361201