

# BATTERY BACK-UP

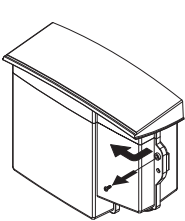


The Federal Communications Commission (FCC) recently ruled that any business entity providing dial tone to a customer must offer for sale or provide for the integration of a third party uninterruptible power supply (UPS) to maintain 911 access for a period of no less than 8 hours to the customer. Morristown Utility Systems (MUS) has a UPS available that the customer may purchase outright. All sales will be final and MUS is not responsible or liable for ongoing maintenance/repair and or operation of the unit once purchased. The customer has the right to purchase outright from a third party distributor a UPS which will integrate and provide 911 access for a predetermined amount of time as described by the FCC.

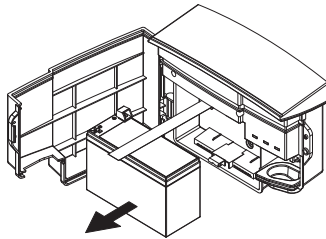
## ENCLOSURE INSTALLATION

Carefully follow these instructions during installation of this device:

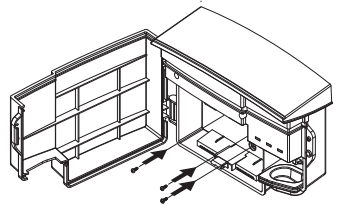
- 1.) Carry out the installation in a safe area that is free of excessive dust and has adequate airflow.
- 2.) Screws must be appropriate for total weight of the Battery Backup Power Supply and the mounting surface material.
- 3.) Do not operate the Battery Backup Power Supply where the temperature and humidity are outside the specified limits. (Refer to specifications in this manual.)



- Step 1:
- a. Remove the case screw.
  - b. Open the battery cover.



- Step 2:
- a. Unstrap strap from battery.
  - b. Slide battery off of the shelf.
  - c. Disconnect battery cable connector at the chassis end.



- Step 3:
- a. Use the enclosed installation template to mark an installation location for the unit.
  - b. Mount the unit on the wall with 3 mounting screws into the keyhole slots.
  - c. Tighten the screws to secure the units.
  - d. Connect the battery connector and replace the battery back.

### Installation Suggestion:

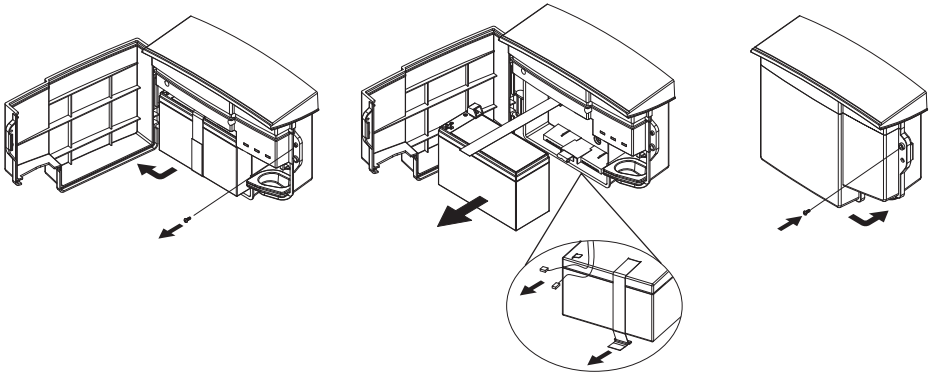
To prevent the unit from intrusion of foreign matter, we suggest that the unit should be mounted on a piece of wood which should then be attached to a wall underneath eaves.

### Power Cable Selection:

A power cable (4.5m max.) being identified as 18AWG, "OUTDOOR" or "WATERPROOF" should be selected while necessary.

# BATTERY REPLACEMENT

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

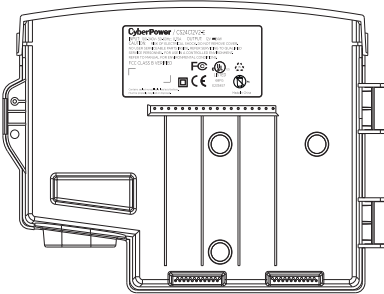


- Step 1:
- a. Remove the case screw.
  - b. Open the battery cover.

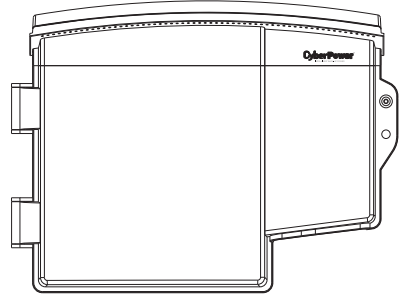
- Step 2:
- a. Loosen the battery strap.
  - b. Disconnect battery cable connector to remove battery.
  - c. Replace with new battery and re-connect the battery connector.

- Step 3:
- a. Tighten the battery strap
  - b. Close the battery cover and lock the case screw.

## • Back Panel



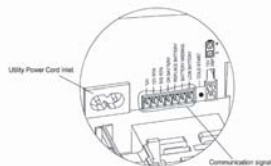
## • Front Panel



CS24C12V2-E

# 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.



CS24C12V2-E

CS24C12V2-E	Message
12V	+ Voltage output
12V RTN	- Voltage output
SIG RTN	Signal return
ON BATTERY	Low when operating from utility line. Open when operating from battery.
REPLACE BATTERY	Low when battery is charged. Open when battery fails the Self Test.
BATTERY MISSING	Low when battery is present. Open when battery is missing.
LOW BATTERY	Low when battery is near full charge capacity. Open when operating from a battery with < 20% capacity.

## OPERATION

Connect: Equipment and Power

Step1. Plug the Battery Backup Power Supply power cord into the utility power cord inlet

Step2. Plug the Battery Backup Power Supply power cord into the wall outlet.



The Battery Backup Power Supply 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.

## COLD START

The cold start feature is for applying power to the Battery Backup Power Supply and connected equipment when the Battery Backup Power Supply is off and there is no utility power. Before using the cold start feature, please make sure the battery is charged. To enable the cold start feature, press the recessed cold start button with a small pointed object.






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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## WARNING INDICATOR

Indicator	Color	Condition
 AC	Green	Battery Backup Power Supply is on utility power.
	Yellow	Battery Backup Power Supply is on battery power.
 OUTPUT	Green	DC output power is provided by the battery or utility power.
 BATTERY	Red	The battery is not connected or the battery needs to be replaced.

# SPECIFICATION

Model	CS24C12V2-E
<b>Input</b>	
Voltage Range	100Vac - 240Vac (Universal Input)
Frequency Range	50 - 60 Hz
<b>Output</b>	
On Battery Output Voltage	12Vdc
Continuous Power Capability	24W
Output Power Max	24W
Efficiency (at 75% Max Load)	> 75 %
<b>Battery</b>	
Battery Type	Sealed, Maintenance Free Lead-Acid Battery
Numbers of Battery	7.2AH / 12V x 1
Typical Recharge Time	18Hours
Replaceable	Yes
<b>Surge Protection and Filtering</b>	
Lightning / Surge Protection	Yes
<b>Warning Diagnostics</b>	
Indicators	AC, Output, Battery
<b>Management</b>	
Auto-Charge	Yes
Communication Interface	On Battery, Replace Battery, Battery Missing, Low Battery
<b>Physical</b>	
Maximum Dimensions (L*W*D)	27.5cm x 20.4cm x 9.9cm
Weight (kg)	3.51
<b>Environment</b>	
Operating Temperature	5°F - 122 °F (-15 °C - 50°C)
Operating Humidity	0 - 95% noncondensing within enclosure
Max Operating Elevation	10,000ft (3,000m)
Max Storage Elevation	50,000ft (15,000m)
Storage Temperature	5°F - 122 °F (-15 °C - 50°C)