

PRECISION POWER

A PRECISION GROUP COMPANY



USER'S MANUAL FOR PRECISION POWER 24 Hour D-Cell BBU Kit

**MODEL NUMBER:
PP36PB-GRST-2-24D**

WARNING

Review the following important safety warnings to avoid bodily injury or damage to equipment during installation or operation of the device. Read ALL instructions before attempting to install or operate this device.

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- This device is intended for indoor use only. To prevent the risk of fire or electrical shock, install in dry location free from damp or wet environment, or potentially damp or wet environment.
- Adhere to all acceptable operating environment limitations as listed to prevent the risk of fire or electrical shock (see user specifications within User's Manual)
- Risk of fire or explosion if improper battery is installed and attempted to operate with this device. Device is rated and approved for use with standard non-rechargeable Alkaline DCell Battery ONLY. Follow User Manual instructions for proper installation and removal of Alkaline batteries.

NOTE: The reference to "DCell BBU Kit" within this User Manual refers to Precision Power Model PP36PB-GRST-2-24D and all package accessories as listed below.

CONTENTS OF "DCell BBU KIT" PACKAGE

NOTE: Please verify all standard contents are accounted for upon receipt of DCell BBU Kit. Device is rated and approved for use with standard non-rechargeable Alkaline DCell Battery ONLY.

STANDARD: (2) DCell BBU [Fig. 1]; (24) D-CELL, non-rechargeable Alkaline Batteries (not pictured); (1) "Y" Cable [Fig. 2]; (2) Wall Mountable Back Plates [Fig. 3 - NOTE: preassembled with DCell BBU]; (1) Modem Power Supply [Fig. 4]; (1) Grandstream Power Cable [Fig. 5]; Wall Mounting Anchors and Screws (not pictured); (1) User's Manual

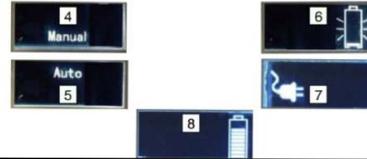
DCELL BBU KIT INTRODUCTION

DCell BBU Kit is designed and intended for use as Desktop or Wall-mount 12Vdc Power Supply and battery back up device for 12Vdc Optical Network Terminals (ONT), Modems, Routers or Gateways.



1 2 3

VISUAL INDICATORS AND CONTROL SWITCHES



CONTROL SWITCHES

1	"ON/OFF"	Primary Function (While in "Manual" Mode): Depress and hold for 3 seconds to activate or deactivate battery backup during loss of commercial power. Secondary Function: Depress and Release to illuminate LED Indicator Window
2	TEST	Primary Function: Depress and Release to illuminate LED Indicator Window Secondary Function: Depress and hold for 15 seconds to toggle between "Manual" and "Auto" Modes

VISUAL INDICATORS

3	LED Indicator Window	When illuminated, displays visual indicator LED's
4	"Manual" Mode	When illuminated, indicates DCell BBU is in Manual Mode
5	"Auto" Mode	When illuminated, indicates DCell BBU is in Auto Mode
6	"On Battery"	When illuminated, indicates DCell BBU is active and using DCell batteries for power output
7	"On AC Power"	When illuminated, indicates DCell BBU is inactive and VAC voltage is present. *Normal Operation
8	"Battery Life"	When illuminated, indicates estimated remaining battery life

AUDIBLE INDICATORS

AUDIBLE INDICATOR	DESCRIPTION
1/2 second "beep" 4 times per minute	Battery has reached equal to or less than 30% remaining battery life

INSTALLATION

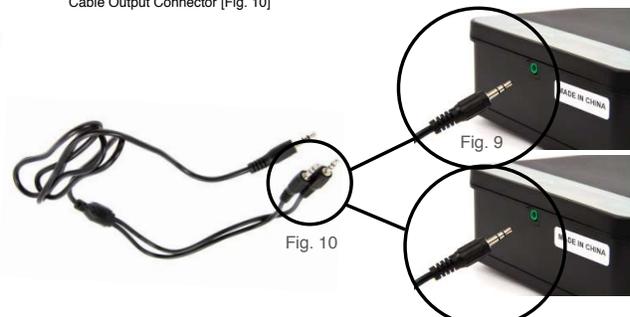
A. Remove all contents from DCell BBU Kit packaging and confirm all Standard Contents are present as stated in "Contents of DCell BBU Kit Package".

B. Confirm Grandstream Power Cable Connection is securely seated into Modem Power Supply [Fig. 6] as well as securely seated on opposing end to CenturyLink Grandstream Modem and Secondary Modem [Fig. 7]. NOTE: OPPOSING ENDS ARE (2) BARREL STYLE CONNECTIONS FOR USE WITH (2) CENTURYLINK PROVIDED MODEMS



C. Connect "Y" Cable [Fig. 2] to the DCell BBU Input Port [Fig. 6] using the "Y" Cable Input Connector [Fig. 8]

D. Connect "Y" Cable [Fig. 2] to each of the DCell BBU's Output Ports [Fig. 9] using the "Y" Cable Output Connector [Fig. 10]



INSTALLATION (CONTINUED)

E. Plug in Modem Power Supply [Fig. 4] to selected Standard 3-Prong Power Outlet located near Service Provider Modem(s) that the DCell BBU Kit will be providing power and battery back up to.

F. IF WALL MOUNTING: Skip Step "G". Locate Modem Power Supply [Fig. 4] and using provided DCell BBU Back Plate [Fig. 3], position a minimum of 3" to the left or right of the Modem Power Supply and Standard 3-Prong Power Outlet. Utilizing screw mounting positions on back plate, mount each back plate securely to the wall (Screws and Drywall Anchors PROVIDED with DCell BBU Kit). NOTE: When unpacking the DCell BBU, the back plate will already be connected to the DCell BBU. Simply slide DCell BBU up and separate DCell BBU from wall mountable back plate.

G. FOR DESKTOP OR FLOOR INSTALLATION (NOT WALL MOUNTING): Skip Step "F". Position DCell BBU free from obstruction from other objects.

H. Utilize [Fig. 9] to begin installation of D-Cell Alkaline Batteries. Make sure that battery orientation follows the example shown in [Fig. 9] below. Negative Terminal of D-Cell Battery should always contact with DCell BBU "Springs". Never install Negative terminal of D-Cell Battery in with orientation to contact opposing Negative terminal of another D-Cell Battery in line. Never install Positive terminal of D-Cell Battery in with orientation to contact opposing Positive terminal of another D-Cell Battery in line. Device is rated and approved for use with standard non-rechargeable Alkaline DCell Battery ONLY. DO NOT INSTALL RECHARGEABLE ALKALINE BATTERIES, NIMH OR LITHIUM BATTERIES.



Fig. 11

I. Close cover of DCell BBU and ensure that cover "snaps" and is securely fastened.

J. Press "Test" Control Button 1x to ensure that "On AC" indicator LED, "Manual" Mode Indicator and "Battery Life" indicator LEDs are present. This confirms DCell BBU is working under normal operation and will indicate remaining battery capacity (i.e. battery life) of the installed D-Cell Alkaline Batteries. If these LED's are not present, please review "Trouble Shooting DCell BBU" section of this User's Manual.

K. IF WALL MOUNTING: Slide the DCell BBU onto already installed wall mountable back plate. To install, align DCell BBU left and right sides with the wall mounted back plate's left and right sides. Next, align DCell BBU "male" slide rails with wall mounted back plate's "female" slide rails and slide DCell BBU down into place securing to wall mounted back plate.

OPERATION

A. DCell BBU will be preset to "Auto" Mode upon completion of installation and activation. In "Auto" Mode, the DCell BBU will automatically switch to "ON BATTERY" when AC Power is lost.

B. When AC Power is restored the DCell BBU will automatically deactivate "ON BATTERY" DC output and return to normal operation

C. To initiate "Manual" Mode, press and hold "Test" Button for 15 seconds. "Manual" LED indicator will illuminate and "Auto" LED indicator will turn off. In Manual Mode, the DCell BBU must be manually turned on when loss of AC Voltage in order to power customer premise device(s) by D-Cell Battery output. To activate DCell BBU, press the "ON/OFF" Button for 3 seconds. The "ON BATTERY" LED Indicator will flash. To then manually deactivate the DCell BBU, press the "ON/OFF" Button for 3 seconds.

BATTERY REPLACEMENT

1. Open the DCell BBU Cover and remove all D-Cell Alkaline Batteries. Following Installation "Step G-1" for installation and testing of new D-Cell Alkaline Batteries.

NOTE: Please follow all State, Federal, and International Regulations when disposing of Alkaline Batteries

TROUBLE SHOOTING DCELL BBU

Following proper installation of the DCell BBU as defined within this User's Manual, use below as recommendations for trouble shooting DCell BBU.

A. Confirm Modem Power Supply [Fig. 4] and DCell BBU are connected securely with provided "Y" Cable

B. Confirm Modem Power Supply [Fig. 4] is securely plugged in to standard, working AC wall outlet or surge protector.

C. On the DCell BBU, Press "Test" Control Button 1x to ensure that "On AC Power" indicator, "Auto" Mode Indicator and "Battery Life" indicator LEDs are present. This confirms DCell BBU is working under normal operation and will indicate remaining battery capacity (i.e. battery life) of the installed D-Cell Alkaline Batteries.

D. If no LED indicators are illuminated:

1. Ensure D-Cell Alkaline Batteries are installed correctly and securely; 2. Ensure provided DCell BBU Cable is installed securely to the DCell BBU and Modem Power Supply

E. If DCell BBU is "beeping" (audible alarm), please change ALL installed D-Cell Alkaline Batteries with new batteries.

Precision Power warrants that the Product sold by Precision Power, or by either a distributor or stocking representative authorized by Precision Power to sell the Product manufactured by Precision Power, are free from Manufacturing Defects (as defined and as determined below) for a period of one (1) year from the date of sale, subject to and on the terms and conditions set forth in 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.

Precision Power will offer full product replacement or product credit on any deemed "Manufacturing Defects", with respect to the Product or the Product's components, during the one (1) year Limited Warranty period, by, at the customer's sole option, either (a) replacing, at Precision Power cost and expense, the Product; or (b) crediting full refund back to the customer the credit card used for purchase of the Product, provided that (in addition to any other requirements or provisions of the Limited Warranty), the customer returns, with all shipping costs pre-paid at Precision Power's sole expense, the Product that the customer claims are subject to any Manufacturing Defects according to Precision Power's returned merchandise authorization procedures.

Precision Power is the only party authorized to remedy and correct any Manufacturing Defects as provide by this Limited Warranty, and this Limited Warranty does not apply to replacements of the Product or Product component(s), or any other corrective or remedial action with respect to the Product or Product component(s), made by any other party.

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The Part Numbers corresponding to the Products covered by this Limited Warranty are as follows:

PP36PB-12BBU-2, PP36PB-12BBU-2-24D, PP36PB-GRST-2-24D

FOR WARRANTY CLAIM PLEASE CONTACT:

E: SALES@PRECISIONPWR.NET, OR

P: +1-615-436-0080

PRECISION POWER
A PRECISION GROUP COMPANY

PRECISION POWER

A PRECISION GROUP COMPANY

P: +1-615-436-0080

E: sales@precisionpwr.net

Website: www.precisionpowersolutions.com