



*PowerTec Solutions International*



## SETTING UP YOUR BATTERY BACKUP

A simple guide

# How to Install: PSI Rechargeable Battery Units for your Gateway

## What you Need:

- (2) PSI Li-75 Power Supplies
- (6) PS36L EX Batteries
- PSI BGW320 Adapter Cable
- Optional Battery Back Plate

## Before you Begin:

Each Battery stack will provide up to 16 hours of backup power. One battery stack will be connected to the Gateway to provide automatic backup and will need to be replaced with the other standby stack as needed during an outage.

Keep standby rechargeable battery stack connected to power source to maintain charge.

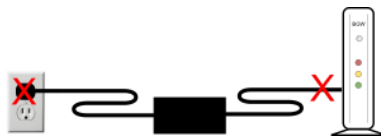
Please see the following page to build a "stack" or mount the batteries and power supply on an optional backplate.



OR



## Connect First Backup Battery:



1

Disconnect existing black power supply from the gateway and wall outlet



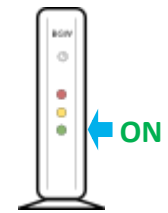
2

Stack three battery units and the power supply on the backplane



3

Connect the rechargeable battery stack to the Gateway using supplied power cord.



4

Make sure the power supply is **ON** and the Gateway is working

## Connect First Backup Battery:

Connect the other three rechargeable batteries and the power supply to the other backplane and plug into an electrical outlet (not controlled by a wall switch). Note: to get the best power available you should plug your battery stack into a wall receptacle.



# How to Install: PSI Rechargeable Battery Units for your Gateway: Build your battery!

## Build a Stack:



1  
Begin by unboxing the PS75. Slide the backplate off the back of the main power supply.

2  
Slide the first battery onto the backplate. Be sure to remove any protective covers from the battery prior. See the instructions provided with the PS75 for instructions of how to slide the devices together.

3  
Slide the second battery onto the first battery, and slide the third battery onto the second battery.

4  
Next slide the power supply onto the third battery.

5  
Disconnect existing black power supply from the gateway and wall outlet. Hook up the power cord, and the BTW cable to the power supply.

## Or Build the Batteries on the Optional Back-



1  
Begin by unboxing the PS75. Find the backplate indicated in the figure above. Slide the logo plate up, remove, and keep it for later.

2  
Slide all three batteries onto the backplate as shown above.

3  
Slide the battery plate cover onto and over two of the batteries.

4  
Next slide the PS75 power supply over the remaining exposed battery

5  
Make sure the power supply is locked into place. Hook up the power cord, and the BTW cable to the power supply.

# How to Check & Replace: PSI Rechargeable Battery Units

## Important Information:

Each Battery stack will provide up to 16 hours of backup power. One battery stack will be connected to the Gateway to provide automatic backup and will need to be replaced with other standby stack as needed during an outage.

Keep standby rechargeable battery stack connected to power source to maintain charge.

**Note:** Battery backup unit will not power a cordless phone. It will only power a corded phone.

## Check your Batteries:

It's important to check your batteries periodically to ensure full charge in case of a power outage. Your batteries will automatically display the charge level when turned on. The power supply will give an audible warning if the battery is low or not charging. Batteries will charge while connected to the Gateway. If batteries are exhausted, replace the batteries with the standby units.

### Replace Your Batteries:



1

Unplug battery from power supply and Gateway.

2

Unplug one of the fully charged standby batteries from its power supply and connect it to the power supply and the Gateway.

### Recharge your Batteries:



Connect the old battery to the power supply from the previous standby battery. Make sure the power supply is still connected to the power outlet and the outlet has power.

## For PSI Rechargeable Battery Units:

If your phone does not have a dial tone during a power outage:

### Check Your Gateway And Rechargeable Batteries

1. Make sure corded phone is plugged into the Gateway
2. If Gateway does not have power, make sure
  - Gateway is plugged into rechargeable battery.
  - Rechargeable battery is turned ON
  - Rechargeable battery still has a charge. If not, replace it with one of the standby rechargeable batteries.
3. Make sure Gateway is connected to AT&T network box.

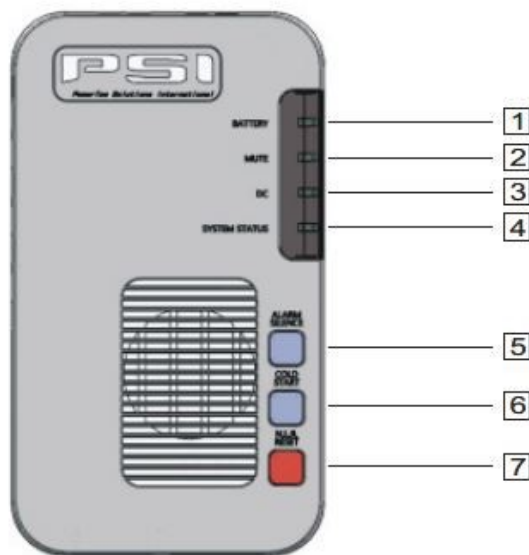
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Need more help & troubleshooting with your:

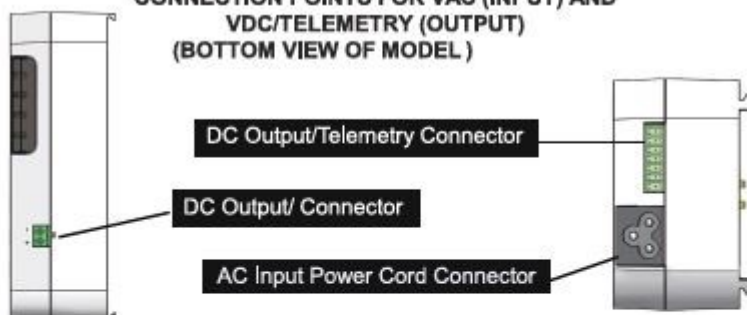
PSI Rechargeable Battery Units: <http://www.powertecsolutions.net>

**APPENDIX**  
**OPERATION MANUAL INFORMATION**

## VISUAL INDICATORS AND CONTROL SWITCHES



CONNECTION POINTS FOR VAC (INPUT) AND VDC/TELEMETRY (OUTPUT) (BOTTOM VIEW OF MODEL)



| MODEL       | AUDIBLE ALARM | VISUAL ALARM | RELAY ALARM TO ONT |
|-------------|---------------|--------------|--------------------|
| PS75L-P7-12 | YES           | YES          | YES                |

\*RELAY ALARM FROM LI75-12 TO ONT (OPTICAL NETWORK TERMINAL) RELAYS BATTERY ALARMS: 1. LOW BATTERY; 2. ON BATTERY; 3. BATTERY MISSING; 4. REPLACE BATTERY

### VISUAL INDICATORS

|   |               |              |   |
|---|---------------|--------------|---|
| 1 | Battery       | Color - Red  | Service or replace battery , or battery is not installed in NXG-Vision.                       |
| 2 | Mute          | Color-Yellow | Flashing -Audible Alarm silenced for 24hrs. Soid-Audible Alarm Silence Until manually enable. |
| 3 | DC            | Color -Green | NXG-Vision is working off Standby Power.  |
| 4 | System Status | Color- Green | NXG-Vision is Receiving AC power load to operate under normal conditions.                     |

### CONTROL SWITCHES

|   |               |  |  |
|---|---------------|--|--|
| 5 | Alarm Silence |  | Disables Audible Alarm function. Press and release to disable Audible Alarm for 24 hours. Press and hold for 15 seconds to disable Audible Alarm indefinitely. Press and hold for another 15 seconds in order to re-enable Audible Alarm function. |
| 6 | Cold Start    |  | Allows NXG-Vision to cold start power off Battery Pack when AC line power is not present and new or replacement pack is connected, press and hold for 3 seconds.   |
| 7 | N.I.R. Reset  |  | Allows for DC line power reset of optical Network terminal.Press and hold for 3 seconds to reset/reboot optical network terminal.  |

### VISUAL AND AUDIBLE STATUS/ALARM SIGNALS





| STATE           | VISUAL INDICATOR            | AUDIBLE INDICATOR                                | DESCRIPTION  |
|-----------------|-----------------------------|--|--|
| Normal          | System Status Indication On |  | Operating under normal AC line power load and conditions, charges battery. Battery is connected and in good condition.   |
| ON Battery      | DC Indicator On             |  | AC line power failure or AC cord disconnection. NXG-Vision is being supplied with battery power.   |
| Replace Battery | Battery Indicator On        | 1/2 second audible indicator every 15 min.       | Replace faulty or end of life battery.   |
| Battery Missing | Battery Indicator On        |  | NXG-Vision is operating on AC line power only without available standby power for outage scenario. When battery is removed from unit, battery indicator will illuminate after 5 sec. |
| Low Battery     | DC Indicator Flashes        | 1/2 second audible indicator 4 times per minute. | Battery has reached equal or less than 30% remaining capacity on battery discharge.  |



| TECHNICAL SPECIFICATION               |   |
|---------------------------------------|---|
| <b>INPUT</b>                          |   |
| Voltage Range                         | 100Vac - 240Vac                             |
| Frequency Range                       | 50 / 60Hz                                   |
| Input Power Cord                      | NEMA 5-15 / 3-Prong Power Cord              |
| Input Ground Reference                | Earth Grounded                              |
| <b>OUTPUT-ON AC</b>                   |   |
| Output Voltage                        | 12Vdc (Nominal)                             |
| Continuous Power Capacity             | 6.25A (75WATT)                              |
| <b>OUTPUT-ON BATTERY</b>              |   |
| Output Voltage                        | 12Vdc (Nominal)                             |
| Continuous Power Capacity             | 6.25A (75WATT)                              |
| <b>BATTERY</b>                        |   |
| Battery Type                          | Lithium Ion Battery Pack                    |
| Design Life                           | 10 Years                                    |
| Battery Capacity                      | 14.8V / 7800mAh                             |
| Typical Recharge Time                 | <20 hrs                                     |
| Replaceable Pack                      | Yes   |
| <b>SURGE PROTECTION AND FILTERING</b> |   |
| Lightning / Surge Protection          | Yes (IEC 61000-4-5 2005 LEVEL D)            |
| <b>MANAGEMENT</b>                     |   |
| Battery Auto-Charge                   | Yes   |
| Remote Battery Alarming               | Optional                                    |
| Local Alarming (Audible / Visual)     | Yes   |
| Alarm Silence                         |   |
| 24 Hour Silence                       | Yes   |
| Disable Indefinitely                  | Yes   |
| ONT Reset                             | Yes   |
| Cold Start                            | Yes   |
| <b>PHYSICAL</b>                       |   |
| Maximum Dimensions (L x W x D)        | 155mm x 89mm x 52.5mm                       |
| Weight (lb.)                          | 1.76lb (with battery pack)                  |
| <b>ENVIRONMENT</b>                    |   |
| Operating Temperature                 | -10°C - 49°C (14°F - 120.2°F) at full power |
| Operating Humidity                    | 0-95% noncondensing within enclosure        |
| Max Operating Elevation               | 10,000ft (3,000m)                           |
| Storage Temperature                   | -30°C - 65°C (-22°F - 149°F)                |





### WARNINGS

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

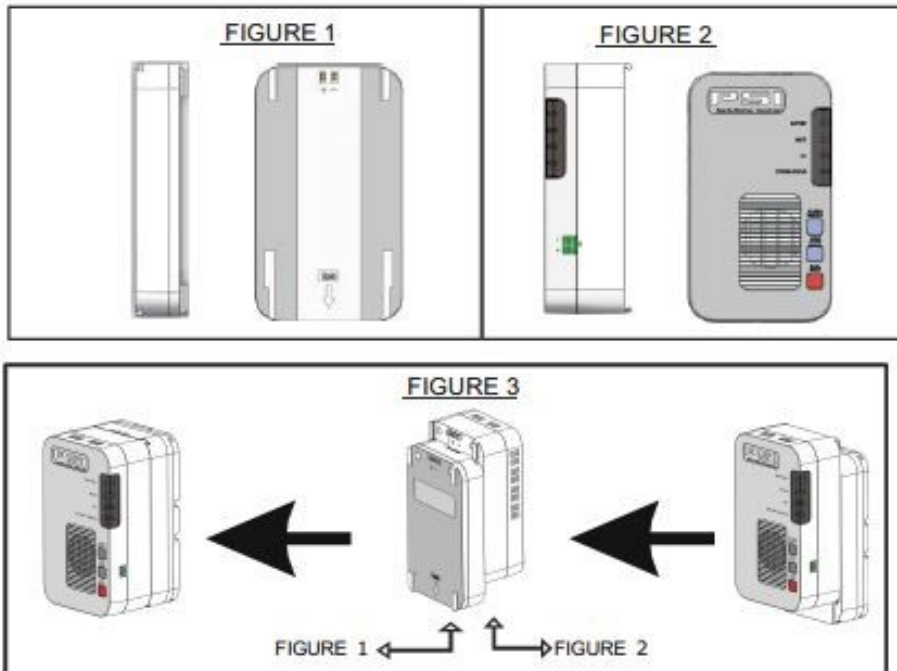
-  This device is intended for indoor use only. To prevent the risk of fire or electrical shock, install in dry location free from damp or wet environment, or potentially damp or wet environment.
-  Adhere to all acceptable operating environment limitations as listed to prevent the risk of fire or electrical shock (see user specifications within User's Manual)
-  Risk of fire or explosion if improper battery pack is installed and attempted to operate with this device. Device is rated and approved for use with PowerTec Solutions International Li Ion Battery Pack ONLY. Follow User Manual instructions for proper installation and removal of battery pack.
-  NO user-replaceable parts within this device. Do not remove cover for any reason.

**NOTE: Please follow all State, Federal, and International Regulations when disposing or recycling Li Ion Battery Pack.**

### WARNINGS - Li Ion Battery Pack

-  DO NOT DISASSEMBLE BATTERY PACK
-  DO NOT DISPOSE OF IN FIRE
-  CHARGE ONLY WITH SPECIFIED CHARGER
-  DO NOT STORE IN TEMPERATURE OVER 65C





## INSTALLATION

A. Slide NXG-Vision Battery Pack (FIGURE 1) onto NXG-Vision Power Supply/Charger (FIGURE 2) until NXG-Vision Battery Pack becomes fully flush with NXG-Vision Power Supply/Charger. You should hear a "click" when NXG-Vision Battery Pack is fully seated.

B. Connect provided AC Power Cord to AC Input Connector on bottom of NXG-Vision Power Supply/Charger.

C. Connect 3 Prong AC Power Cord Plug End into standard 3 Prong AC Receptacle rated for NEMA 5-15 3 Prong AC Plug.

D. Verify "System Status" LED is "On" with Green illumination.

E. Connect NXG-Vision to ONT (Optical Network Terminal).

F. Ensure "System Status" LED is the only illuminated LED on NXG-Vision. If any additional LEDs are illuminated recheck NXG-Vision Battery Pack to make sure it is fully seated and ensure that all wiring from NXG-Vision to ONT is installed correctly as listed by ONT specific instructions.

G. can be overlapped at most two pieces battery

H. Plane use only

## BATTERY REPLACEMENT

As long as AC line power is available, NXG-Vision can resume operation while battery is replaced.

### PROCEDURE:

Remove the NXG-Vision Battery Pack by sliding off in opposite direction of installation (FIGURE 3) and follow "Installation Step A." above for installing new NXG-Vision Battery Pack.