

Pioneer

Backup Power for Residential Landline Telephone Customers Served by Fiber

At Pioneer we appreciate your business and want to provide you with some additional information about your service. Depending on your service location, Pioneer may serve you with either fiber optic cable or copper cable. It is important to understand that if your location is served by fiber optic cable, during a power outage you will not have access to 911 emergency services on your landline telephone. This is the result of fiber needing backup power. If your location is served by copper, you will not lose the ability to contact 911 during a power outage.

If your location is or will be served by a fiber optic cable, without a backup battery or alternate backup source such as a generator, you will not be able to make any calls, including emergency calls to 911 during a power outage. The only way to maintain the ability to use your landline phone is by using some form of backup power.

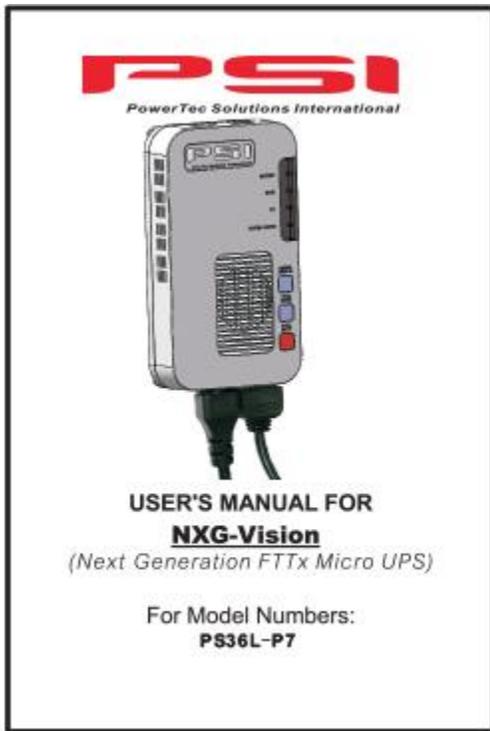
Due to the importance of our customers being able to contact emergency services, Pioneer provides and installs, at **no charge**, an 8-hour battery backup for your landline telephone service at the time of the installation. This battery backup only services landline voice and does not service security systems, medical monitoring devices, Internet, VOIP, or any other equipment.

Backup batteries are expected to last at least 8 hours on standby power. The backup battery should give you 6 hours of talk time. If you feel that is not enough time, you may extend your standby power by purchasing additional 8-hour batteries.

We do not monitor or replace the batteries we install or the batteries you purchase. You should periodically, as described in the instructions included with the battery, remove and test all batteries to verify both the operation of the backup batteries and their condition. Pioneer does not provide free replacement batteries; however, you may purchase them as set out below.

You can purchase an additional 8-hour battery backup from us for \$68.31 when applying for a new landline phone service and we will install at no extra charge at the time of your initial installation. After your service has been installed, if you decide to purchase an additional battery you can go to your local retail office and purchase the battery. If you would like for us to install the battery you purchase, we will charge \$150.00 for the installation, plus a trip charge. This service is not covered by Total Care.

Please refer to the documents attached for Testing, Storage and Warranty Information.



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: The reference to "NXG-Vision" within this User Manual refers to PowerTec Solutions Models PS36L-K7 (Next Generation FTTx Micro UPS) and all package accessories as listed below.

NOTE: Please verify all standard contents are accounted for upon receipt of NXG-Vision. STANDARD: (1) Power Supply/Charger; (1) Li Ion Battery Pack; (1) AC Power Cord; (1) 7-Pin Connector; (1) User's Manual; Optional: (1) Universal Wall Mount Enclosure w/ Cover.

NXG-Vision INTRODUCTION

NXG-Vision is designed and intended for use as Desktop or Wall-mount (when ordered with optional Universal JDC power supply and battery back up device for indoor 12V dc Optical Network Terminals (ONT)). The NXG-Vision not only provides constant supply of DC power during normal operating conditions, but offers battery backup power in case of electrical power outage. NXG-Vision also provides a customer facing Network Interface Reset Intelligence to provide integrated ONT reset technology designed to reduce Provider OPEX.

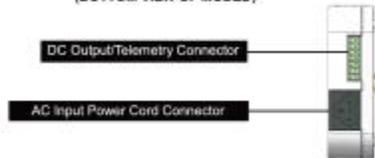
VISUAL INDICATORS AND CONTROL SWITCHES



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. Solid-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.
CONTROLS 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.

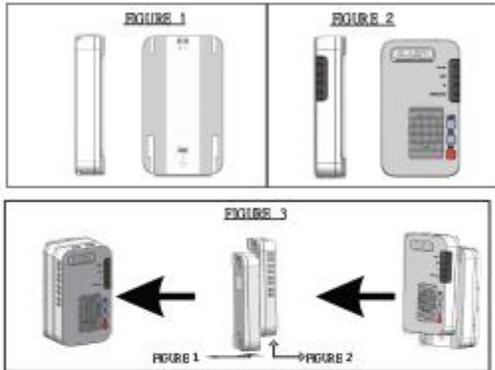
VISUAL AND AUDIBLE STATUS/ALARM SIGNALS			
STATE	VISUAL INDICATOR	AUDIBLE INDICATOR	DESCRIPTION
Normal	System Status Indicator On		Operating under normal AC line power load and conditions, charge battery. Battery is connected and in good condition.
ON Battery	DC Indicator On		AC line power failure or 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 to or less than 30% remaining capacity on battery discharge.

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



MODEL	AUDIBLE ALARM	VISUAL ALARM	RELAY ALARM TO ONT
PS36L-P7	YES	YES	YES

*RELAY ALARM FROM PS36L-P7 TO ONT (OPTICAL NETWORK TERMINAL) RELAYS BATTERY ALARMS: 1. LOW BATTERY; 2. ON BATTERY; 3. BATTERY MISSING; 4. REPLACE BATTERY



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.

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.

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

FCC NOTICE

This equipment has been tested and found to comply with the limit for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide 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: Any changes or modifications could void the authority granted by the FCC to operate this equipment.

NOTE: PowerTec Solutions International reserves the right to change or correct the contents of this document and does not assume any responsibility for omissions or errors.

TECHNICAL SPECIFICATION	
INPUT	
Voltage Range	100Vac-240Vac
Frequency Range	50/60Hz
Input Power Cord	NEMA 5-15 /3-Prong Power Cord
Input Ground Reference	Earth Grounded
OUTPUT-ON AC	
Output Voltage	12Vdc (Nominal)
Continuous Power Capacity	3A(36WATT)
OUTPUT-ON BATTERY	
Output Voltage	12Vdc (Nominal)
Continuous Power Capacity	3A(36WATT)
BATTERY	
Battery Type	Lithium Ion Battery Pack
Design Life	10-15 Years
Battery Capacity	14.8V/5200mAh
Typical Recharge Time	<12 hrs
Replaceable Pack	Yes
SURGE PROTECTION AND FILTERING	
Lightning/Surge Protection	Yes (IEC 61000-4-5 2005 LEVEL D)
MANAGEMENT	
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
PHYSICAL	
Maximum Dimensions (L*W*H)	155mm*69mm*31mm
Weight (lb.)	1.78lb (with battery pack)
ENVIRONMENT	
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)

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LIMITED WARRANTY

PowerTec Solutions International warrants that the Product sold by PowerTec Solutions International, or by either a distributor or stocking representative authorized by PowerTec Solutions International to sell the Product manufactured by PowerTec Solutions International, are free from Manufacturing Defects (as defined and as determined below) for a period of three (3) years from the date of original purchase, 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.

PowerTec Solutions International will remedy and correct any "Manufacturing Defects," with respect to the Product or the Product's Components, during the three (3) year Limited Warranty period, by, at PowerTec Solutions International sole option, either: (a) replacing, at PowerTec Solutions International cost and expense, the Product; or (b) crediting to the customer the credit amount (as subsequently defined) of the Product towards the purchase of new Products with the same or substantially-similar specifications, provided that (in addition to any other requirements or provisions of this Limited Warranty), the customer returns, with all shipping costs pre-paid at the customer's sole expense, the Product that the customer claims are subject to any Manufacturing Defects according to PowerTec Solutions International Returned Merchandise Authorization procedures.

PowerTec Solutions International is the only party authorized to remedy and correct any Manufacturing Defects as provided 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.

Definition of "Credit Amount": "Credit Amount" means a United States Dollar amount that PowerTec Solutions International, in its sole, absolute discretion, determines is reasonable to remedy and correct the Manufacturing Defect(s) applicable to the Product sold to the customer. Furthermore, this definition of "Credit Amount" specifically excludes, without limitation, any sales or use taxes, or any other costs, items, or expenses other than the "Credit Amount" as defined in this Limited Warranty.

Definition of "Manufacturing Defects": "Manufacturing Defects" means verified problems or defects resulting from the manufacture, materials, or workmanship of the Product or the Product Component(s) by PowerTec Solutions International that render(s) the Product or Product Component(s) unable to function in a manner consistent with and according to the specifications provided by and/or defined by PowerTec Solutions International that are applicable to the Product or Product Component(s). Furthermore, PowerTec Solutions International specifically reserves the right to: (a) determine, in its sole, absolute discretion, whether a "Manufacturing Defect(s)" exists; and (b) decline any claim under this Limited Warranty with respect to Product that PowerTec Solutions International can not verify, in its sole, absolute discretion, was sold to the Limited Warranty claimant either directly by PowerTec Solutions International, or through an authorized PowerTec Solutions International distributor or stocking representative. Notwithstanding the foregoing, and without limiting the foregoing, "Manufacturing Defects" are NOT unconfirmed defects or problems caused by modifications to, or work performed on, the Product by any party after the sale of the Product by PowerTec Solutions International. In addition, "Manufacturing Defects" are NOT unconfirmed defects or problems caused by utilization of the Product in a manner inconsistent with the specifications provided and/or defined by PowerTec Solutions International that are applicable to the Product, or in any unreasonable manner. PowerTec Solutions International reserves the right to void this Limited Warranty, and shall not be obligated to make any replacements or credits of the Credit Amount with respect to the Product in event that work is performed on the Product by any party after the sale of the Product by PowerTec Solutions International, or if the Product is used in a manner inconsistent with the specifications provided and/or defined by PowerTec Solutions International that are applicable to the Product, or are used in an unreasonable manner.

EXCEPT AS SET FORTH IN THIS LIMITED WARRANTY, PowerTec Solutions International MAKES NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED. FURTHERMORE, PowerTec Solutions International SHALL NOT BE LIABLE FOR ANY DAMAGES (WHETHER CONSEQUENTIAL, INCIDENTAL OR OTHERWISE) FOR ANY BREACH OF THIS LIMITED WARRANTY, EXCEPT FOR PowerTec Solutions International OBLIGATIONS TO REPLACE, OR PROVIDE CREDITS OF THE CREDIT AMOUNT WITH RESPECT TO, THE PRODUCT, AS ELECTED BY PowerTec Solutions International AT PowerTec Solutions International SOLE OPTION, AND AS MORE PARTICULARLY PROVIDED BY THIS LIMITED WARRANTY, AND SUCH REPLACEMENTS OR CREDITS, AS THE CASE MAY BE, SHALL BE THE SOLE REMEDY FOR ANY SUCH BREACH BY PowerTec Solutions International OF THIS LIMITED WARRANTY.