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**NEXSYS™**

## Line Interactive UPS Expandable Runtime Battery User Manual

100-00071 Rev A





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[legrandav.com](#) | Phone: (866) 977-3901 | Fax: (877) 894-6918 | Email: [av.middleatlantic.techsupport@legrand.com](mailto:av.middleatlantic.techsupport@legrand.com)

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# Important Safety Instructions


Comply with all warnings and operating instructions in this manual and save it for future reference. Do not operate this unit before carefully reading through all safety information and operating instructions.

## Understanding Safety Symbols


	<b>DANGER HAZARDOUS VOLTAGE</b>	The lightning flash with the arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	<b>WARNING</b>	A warning alerts you to a situation that could result in serious personal injury or death.
	<b>CAUTION</b>	A caution alerts you to a situation that may result in minor personal injury or damage to the product and/or property.
	<b>NOTE</b>	A note is used to highlight procedures pertaining to the installation, operation, or maintenance of the product.


## Transportation and Storage


 Transport the UPS system only in the original package to protect against shock and impact.


 The UPS must be stored in a ventilated and dry room.

## Preparation

 Condensation may occur if the UPS system is moved directly from cold to warm environments. The UPS system must be absolutely dry before being installed. Please allow at least two hours for the UPS system to adjust to the environment.


 Do not install the UPS system near water or in damp environments.


 Do not install the UPS system where it would be exposed to direct sunlight or near a heater.


 Do not block ventilation holes on the UPS housing.


## Installation


 Do not connect appliances or devices to the UPS output sockets or terminal that would over load the UPS.


 Place cables in such a way that no one can step on or trip over them.


 Do not connect domestic appliances such as hair dryers to UPS output sockets.


 Connect the UPS system only to a grounded, shockproof outlet, which must be easily accessible and close to the UPS system.


 Use only a VDE-tested, CE-marked (or UL-marked for 100/110/115/120/127 Vac models) mains cable (e.g., the mains cable of your computer) to connect the UPS system to the building wiring outlet (shockproof outlet).

 Use only VDE-tested, CE-marked (or UL-marked for 100/110/115/120/127 Vac models) power cables to connect the loads to the UPS system.


 When installing the equipment, ensure that the sum of the leakage current of the UPS and the connected devices does not exceed 3.5mA.


 Temperature Rating: Units are considered acceptable for use in a maximum ambient environment of 104°F (40°C).


 For Pluggable Equipment: The socket-outlet shall be installed near the equipment and shall be easily accessible.

 The unit is heavy. Lifting the unit requires a minimum of two people.


## Operation

 Do not disconnect the ground conductor cable on the UPS or the building wiring terminals at any time since this would cancel the protective earth of the UPS system and of all connected loads.


 The UPS system features its own, internal current source (batteries), therefore, the UPS output sockets or output terminal blocks may be electrically live even if the UPS system is not connected to the building wiring outlet.


 In order to fully disconnect the UPS system, first press the “OFF” button, and then disconnect the mains.

 Ensure that no liquid or other foreign objects can enter into the UPS system.

 The EPO, RS-232 and USB circuits are an IEC 60950-1 safety extra low voltage (SELV) circuit. This circuit must be separated from any hazardous voltage circuits by reinforced insulation.

## Maintenance, Service and Faults

 The UPS system operates with hazardous voltages. Repairs may be carried out only by qualified maintenance personnel.

 Risk of electric shock. Even after the unit is disconnected from the mains (building wiring outlet); components inside the UPS system are still connected to the battery and are electrically live and dangerous.



Before performing any service and/or maintenance, disconnect the batteries and verify that no current is present and no hazardous voltage exists on the terminals of the high capability capacitor, such as BUS-capacitors.



Only persons are adequately familiar with batteries and with the required precautionary measures may replace batteries and supervise operations. Unauthorized persons must be kept well away from the batteries.



Risk of electric shock. The battery circuit is not isolated from the input voltage. Hazardous voltages may occur between the battery terminals and the ground. Before touching, please verify that no voltage is present.



Do not dispose of batteries in a fire. The batteries may explode.



Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.



Batteries may cause electric shock and have a high short-circuit current. Please take the precautionary measures specified below and any other measures necessary when working with batteries:

- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect charging source and load prior to installing or maintaining the battery.
- Remove battery grounds during installation and maintenance to reduce likelihood of shock. Remove the connection from ground if any part of the battery is determined to be grounded.



When changing batteries, install the same number and same type of batteries or battery packs.



For UPS with internally mounted battery:

- Instructions shall have sufficient information to enable the replacement of the battery with a suitable manufacturer and catalogue number.
- Safety instructions to allow access by Service Personnel shall be stated in the installation/service handbook.
- If batteries are to be installed by Service Personnel, instructions for interconnections, including terminal torque, shall be provided.



Do not attempt to dispose of batteries by burning them. This could cause an explosion.



Do not open or destroy batteries. Escaping electrolyte can cause injury to the skin and eyes. It may be toxic.



Only replace the fuse with the same type and amperage to avoid fire hazards.



Do not disassemble the UPS system.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



This is a product for commercial and industrial applications. In second environment installations, restrictions or additional measures may be needed to prevent disturbances.

## Industry Canada (IC)

ICES-003 Class A Notice. This Class A digital apparatus complies with Canadian ICES-003.

## Waste Electrical and Electronic Equipment (WEEE) Directive



Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office or your household waste collection service.

## Instructions Importantes Sur La Sécurité

Respectez tous les avertissements et consignes d'utilisation de ce manuel et conservez-le pour référence ultérieure. Ne faites pas fonctionner cet appareil avant de lire attentivement toutes les informations de sécurité et les instructions d'utilisation.

### Comprendre Les Symboles De Sécurité



#### **DANGER TENSION DANGEREUSE**

Le symbole de la pointe de flèche, dans un triangle équilatéral, est destiné à alerter l'utilisateur sur la présence de tension dangereuse non isolée dans l'enceinte du produit qui peut être d'une ampleur suffisante pour constituer un risque d'électrocution.



#### **AVERTISSEMENT**

Un avertissement vous avertit d'une situation pouvant entraîner des blessures graves ou la mort.

**ATTENTION**

Une attention vous avertit d'une situation pouvant entraîner des blessures mineures ou des dommages au produit et/ou à la propriété.

**REMARQUE**

Une remarque est utilisée pour mettre en évidence les procédures relatives à l'installation, au fonctionnement ou à l'entretien du produit.

## Transport et stockage



Transportez le système UPS uniquement dans son emballage d'origine pour le protéger contre les chocs.



L'onduleur doit être stocké dans une pièce ventilée et sèche.

## Préparation



De la condensation peut se produire si le système UPS est directement déplacé d'un environnement froid à un environnement chaud. Le système UPS doit être absolument sec avant d'être installé. Veuillez prévoir au moins deux heures pour que le système d'ASI s'adapte à l'environnement.



N'installez pas l'onduleur à proximité d'eau ou dans un environnement humide.



N'installez pas le système UPS à un endroit exposé à la lumière directe du soleil ou à proximité d'un appareil de chauffage.



Ne bloquez pas les trous de ventilation sur le boîtier de l'onduleur.

## Installation



Ne connectez pas de périphériques à la sortie de l'onduleur ou à un terminal susceptible de surcharger l'onduleur.



Placez les câbles de manière à ce que personne ne puisse marcher dessus ou trébucher dessus.



Ne connectez pas d'appareils domestiques tels que des sèche-cheveux aux prises de sortie de l'ASI.



Ne connectez le système ASI qu'à une prise de terre protégée contre les chocs, qui doit être facilement accessible et proche du système ASI.



Utilisez uniquement un câble d'alimentation certifié VDE, marqué CE (par exemple, le câble d'alimentation de votre ordinateur) pour connecter le système UPS au câblage du bâtiment sortie (sortie antichoc).



Utilisez uniquement des câbles d'alimentation VDE, marqués CE pour connecter les charges au système UPS.



Lors de l'installation de l'équipement, assurez-vous que la somme du courant de fuite de l'onduleur et des périphériques connectés ne dépasse pas 3.5 mA.



Température nominale: Les unités sont considérées acceptables pour une utilisation dans un environnement ambiant maximal de 40°C (104°F).





Pour les équipements enfichables: La prise de courant doit être installée près de l'équipement et doit être facilement accessible.



L'unité est lourde. Le levage de l'unité nécessite un minimum de deux personnes.

## Fonctionnement



Ne déconnectez pas le câble du conducteur de mise à la terre de l'onduleur ou des bornes de câblage du bâtiment car cela annulerait la mise à la terre de protection de l'onduleur et de toutes les charges connectées.



Le système ASI dispose de sa propre source de courant interne (batteries). Par conséquent, les prises de sortie ou les borniers de sortie de l'ASI peuvent être sous tension même si le système ASI n'est pas connecté à la sortie du bâtiment.



Pour déconnecter complètement le système UPS, appuyez d'abord sur le bouton "OFF", puis débranchez le secteur.



Assurez-vous qu'aucun liquide ou autre corps étranger ne puisse pénétrer dans le système ASI.



Les circuits EPO, RS-232 et USB sont des circuits de très basse tension de sécurité (TBTS) CEI 60950-1. Ce circuit doit être séparé de tout circuit de tension dangereux par une isolation renforcée.

## Maintenance, Service et Défaux



Le système UPS fonctionne avec des tensions dangereuses. Les réparations ne peuvent être effectuées que par du personnel de maintenance qualifié.



Risque de choc électrique. Même après que l'appareil est déconnecté du secteur (prise de câblage du bâtiment); les composants à l'intérieur du système UPS sont toujours connectés à la batterie et sont sous tension et dangereux.



Avant d'effectuer toute opération de maintenance, déconnectez les batteries et vérifiez qu'il n'y a pas de courant et qu'aucune tension dangereuse n'existe sur les bornes du condensateur haute capacité, telles que les condensateurs BUS.



Seules des personnes connaissent bien les batteries et, avec les mesures de précaution requises, peuvent les remplacer et superviser les opérations. Les personnes non autorisées doivent être tenues à l'écart des batteries.



Risque de choc électrique. Le circuit de la batterie n'est pas isolé de la tension d'entrée. Des tensions dangereuses peuvent se produire entre les bornes de la batterie et le sol. Avant de toucher, vérifiez s'il n'y a pas de tension.



Ne jetez pas les piles dans un feu. Les piles peuvent exploser.



N'ouvrez pas et ne mutilez pas les piles. L'électrolyte libéré est nocif pour la peau et les yeux. Cela peut être toxique.



Les batteries peuvent provoquer un choc électrique et un courant de court-circuit élevé. Veuillez prendre les mesures de précaution suivantes et toutes les autres mesures nécessaires lorsque vous travaillez avec des batteries:

- Retirez les montres, bagues ou autres objets métalliques.
- Utilisez des outils avec des poignées isolées.
- Portez des gants et des bottes en caoutchouc.
- Ne posez pas d'outils ou de pièces métalliques sur les batteries.
- Débranchez la source de charge avant d'installer ou de maintenir la batterie.
- Retirez les masses de la batterie pendant l'installation et la maintenance afin de réduire les risques de choc. Retirez la connexion de la masse si une partie de la batterie est déterminée pour être mise à la terre.



Lorsque vous changez les piles, installez le même numéro et le même type de piles ou de batteries.



Pour onduleur avec batterie interne:

- Les instructions doivent contenir suffisamment d'informations pour permettre le remplacement de la batterie par un fabricant et un numéro de catalogue appropriés.
- Les instructions de sécurité pour permettre l'accès au personnel de service doivent être indiquées dans le manuel d'installation/d'entretien.
- Si des batteries doivent être installées par le personnel de service, des instructions pour les interconnexions, y compris le couple aux bornes, doivent être fournies.



N'essayez pas de vous débarrasser des piles en les brûlant. Cela pourrait provoquer une explosion.



Ne pas ouvrir ou détruire les piles. L'électrolyte qui s'échappe peut causer des blessures à la peau et aux yeux. Cela peut être toxique.



Ne remplacez le fusible que par le même type et le même ampérage pour éviter les risques d'incendie.




Ne démontez pas le système UPS.



Cet équipement a été testé et déclaré conforme aux limites d'un appareil numérique de classe A, conformément à la partie 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément au manuel d'instructions, peut causer des interférences nuisibles aux communications radio. L'utilisation de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles, auquel cas l'utilisateur devra corriger les interférences à ses propres frais.



Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser l'équipement.

 Ceci est un produit pour les applications commerciales et industrielles. Dans les installations du deuxième environnement, des restrictions ou des mesures supplémentaires peuvent être nécessaires pour éviter les perturbations.

## Industrie Canada (IC)

ICES-003 Avis NMB-003, Classe B. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

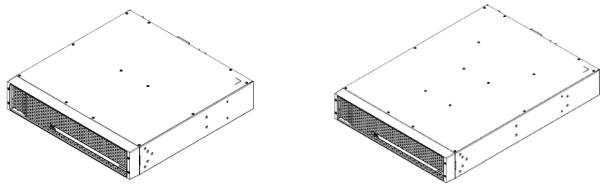
## Directive sur les déchets d'équipements électriques et électroniques (WEEE)



Elimination correcte de ce produit: Ce symbole indique que ce produit ne doit pas être éliminé avec les ordures ménagères, conformément à la directive WEEE (2012/19/EU) et à votre législation nationale. Ce produit doit être déposé dans un centre de collecte agréé pour le recyclage des déchets d'équipements électriques et électroniques (EEE). La mauvaise manipulation de ce type de déchets pourrait avoir un impact négatif possible sur l'environnement et la santé humaine en raison de substances potentiellement dangereuses généralement associées aux EEE. Dans le même temps, votre coopération dans l'élimination correcte de ce produit contribuera à une utilisation efficace des ressources naturelles. Pour plus d'informations sur les lieux de recyclage de vos équipements usagés, veuillez contacter votre mairie ou votre service de collecte des ordures ménagères.

## Supplied Components and Hardware

After carefully opening all product packaging, identify the supplied components and hardware shown. If any pieces are missing or damaged, please report it immediately to Technical Support at [av.middleatlantic.techsupport@legrand.com](mailto:av.middleatlantic.techsupport@legrand.com) or (866) 977-3901. Keep the original box in a safe place for future use.



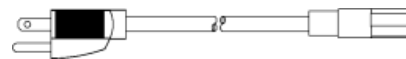
1, 1.5, or 2KVA Expandable Runtime Battery Unit  
**A**



Expandable Battery Main Connector  
**NOTE:** Cord hard wired into back of battery.  
**B**



Expandable Battery Communication Cable  
**C**



Power Cord  
**D**



IEC to IEC Short Cord  
**E**



User Manual




**NOTE**

To order more hardware, contact support at [av.middleatlantic.techsupport@legrand.com](mailto:av.middleatlantic.techsupport@legrand.com) or (866) 977-3901.

## Required Tools

- #2 Phillips Screwdriver
- Electric Drill and #2 Phillips Bit (if Preferred)

	<b>WARNING</b>	Use tools with caution and follow all safety protocols.
	<b>AVERTISSEMENT</b>	Utiliser des outils avec prudence et suivre tous les protocoles de sécurité.

## Introduction

This User Manual provides information about your NEXSYS UPS Expandable Runtime Battery option (A), part of the NEXSYS power devices offered by Middle Atlantic Products. You may have purchased additional items (some sold separately) for your NEXSYS UPS configuration.

For information about additional products that are part of the NEXSYS series, refer to respective documents available on the NEXSYS product page at [www.legrandav.com](http://www.legrandav.com) or contact support at [av.middleatlantic.techsupport@legrand.com](mailto:av.middleatlantic.techsupport@legrand.com) or (866) 977-3901.

## Some General Model and Compatibility Specifications


For more specification details see “Specifications” on page 24.

Model	UPX-EXPANRUN-10-15		UPX-EXPANRUN-20
Compatible with UPS Topology	Line Interactive		
Compatible with UPS sized VA	1000VA	1500VA	2000VA

## Charging Your Expandable Runtime Battery, the First Time

You must first charge your expandable runtime battery (A) for at least eight hours before connecting it to your UPS and providing direct backup power to connected devices.

After configuring your entire UPS system to include an expandable runtime battery, the UPS auto charge feature automatically charges all pre-installed, internal batteries whenever the UPS is plugged directly into an appropriately rated AC power receptacle using the supplied power cord (D), whether the UPS is turned on or off.

	<b>NOTE</b>	First, use the supplied power cord (D) and directly plug your expandable runtime battery into AC power and allow it to charge for eight hours before connecting it to your UPS and providing direct backup power to connected devices.
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# Understanding UPS and Expandable Runtime Battery Installation Requirements



**NOTE**

Before installing your expandable runtime battery (A), carefully review the following considerations to select a proper location. Most considerations apply to your UPS as well.

1. The battery should be placed on a flat, clean surface. Place it in an area away from vibration, dust, humidity, high temperature, flammable liquids, gases, corrosive, and conductive contaminants. Install the battery indoors in a clean environment, where it is away from windows and doors. Maintain a minimum clearance of 3.94" (100mm) on the bottom of the battery to avoid dust and high temperatures.
2. Maintain an ambient temperature range of 32°F (0°C) to 104°F (40°C) for optimal operation.
3. Maintain a maximum altitude of 1093.61yd. (1000m) to keep the connected UPS within normal operation at full load. If used in high altitudes, please reduce the connected load from the UPS. Altitude derating power with connected loads for normal operation is listed as follows:

Altitude (Feet and Meters)		Derating Factor
3280.84	1000	1.0
4921.26	1500	0.95
6561.68	2000	0.91
8202.1	2500	0.86
9842.52	3000	0.82



**NOTE**

Derating factor values are based on density of dry air = 1.225 kg/m<sup>3</sup> at sea level, + 59°F (15°C).

4. Your battery chassis has ventilation openings for thermal management. Place the battery in a well-ventilated area and maintain a minimum clearance of 4" (100mm) in the front of the battery, and 12" (300mm) at the back and two sides of the battery, for heat dissipation and maintenance access.

## Installing the Expandable Battery Inside of Your Enclosure




**WARNING**

This procedure requires at least one additional person.

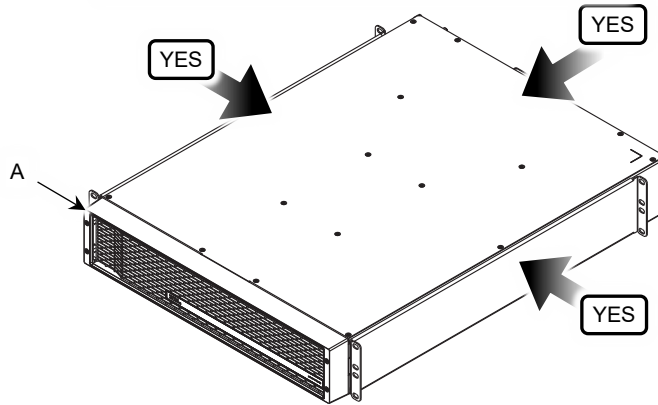
**AVERTISSEMENT**

Cette procédure nécessite au moins une personne supplémentaire.

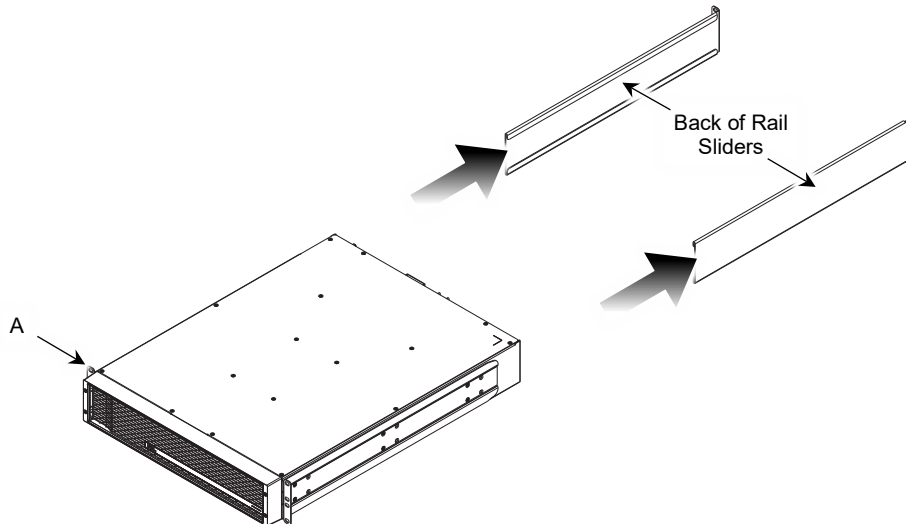
1. Carefully team lift your expandable runtime battery (A), remove it from the packaging, and place it on an appropriate work surface.


	<b>CAUTION</b>	Only lift from the sides and back of the unit and not by the front or rail sliders.
	<b>ATTENTION</b>	Soulevez uniquement par les côtés et l'arrière de l'unité et non par le avant ou les rails.


Acceptable Lifting Points on Your Expandable Battery




2. Slide the back of each rail slider completely off the assembly.



	<b>TIP</b>	Take a moment to consider where you plan to install your expandable battery inside your enclosure and the distance from its corresponding UPS. Installing the expandable battery above or below the UPS (or close to it) will simplify connectivity and cable management.
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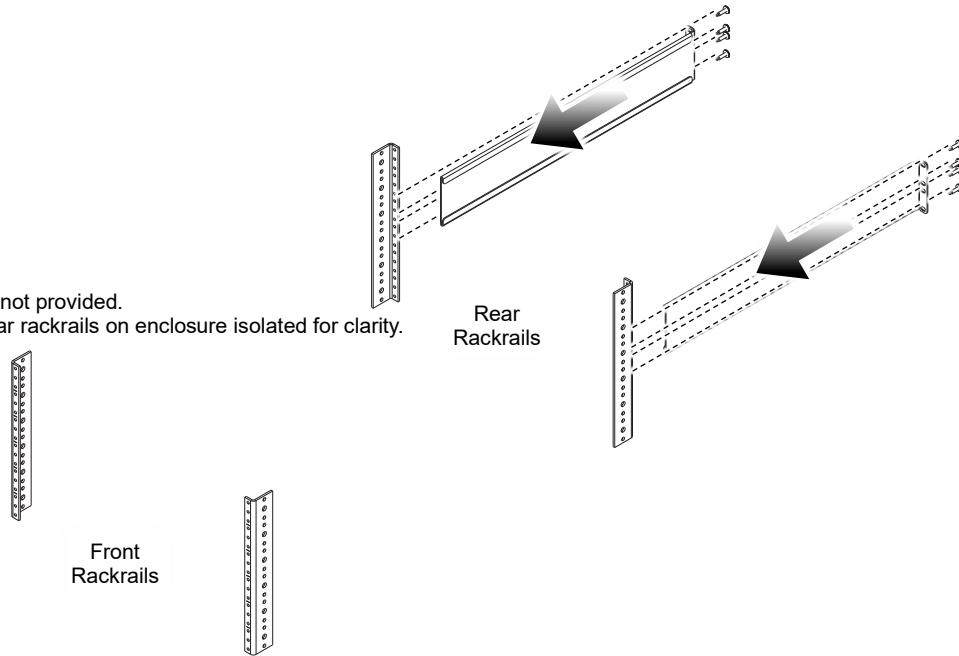
	<b>NOTE</b>	If using power driver, verify the torque is on the lightest setting and only increase as necessary.
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3. Use power driver, #2 Phillips bit, and (8x) rackscrews (not provided) to attach the ears on the back rail sliders to rear rackrails at the desired height inside of your enclosure.

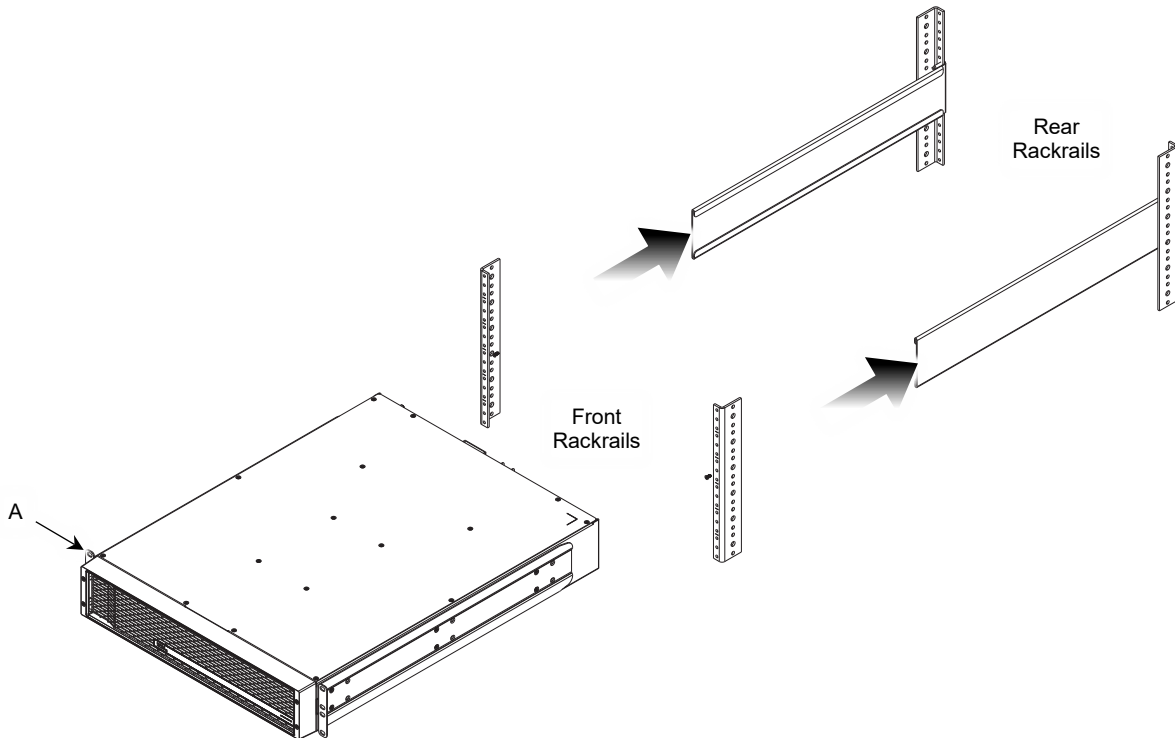
	<b>WARNING</b>	Every hole on each rail slider ear must be secured with a rackscrew (not provided).
	<b>AVERTISSEMENT</b>	Cette procédure nécessite au moins une personne supplémentaire.

**NOTE:**

- Rackscrews not provided.
- Front and rear rackrails on enclosure isolated for clarity.



4. Team lift your expandable runtime battery (A) and carefully slide the front of each rail slider over the back sliders until the ears on the front rail sliders are flush with the front rackrails on your enclosure.

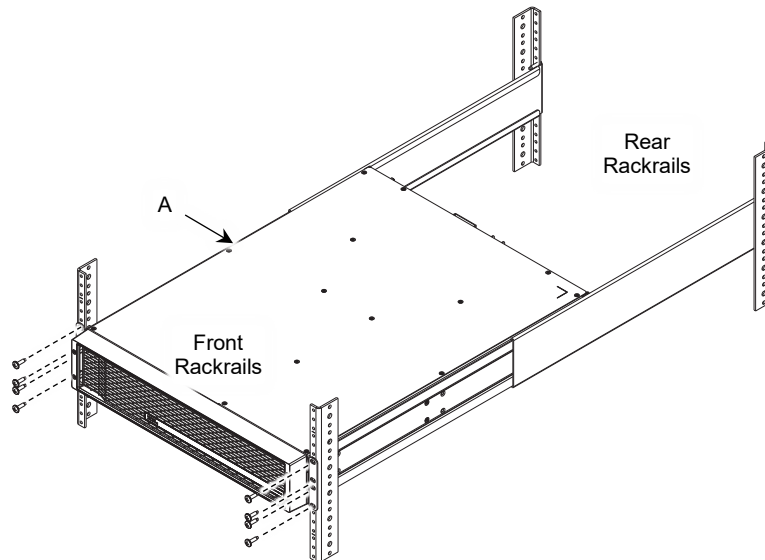


5. Use power driver and (8x) rackscrews (not provided) to attach the ears on the front rail sliders to the front rackrails on your enclosure.



**WARNING**  
**AVERTISSEMENT**

Every hole on the ear of each rail slider must be secured with a rackscrew (not provided).  
Cette procédure nécessite au moins une personne supplémentaire.



- With your expandable battery now secured inside of your enclosure, use the next topic to properly connect it to your UPS.

## Connecting the Expandable Runtime Battery Option to Your UPS

This topic explains how to connect up to four expandable runtime battery options (A) to your UPS system.



**NOTE**

- Up to four expandable runtime batteries (A) may be added to your UPS system.
- Images in this manual typically use UPX-1000R-2 and UPX-EXPANRUN-10-15 models to show the location of connectors, buttons, and LED's. The locations of these items are similar on all available NEXSYS™ Line Interactive UPS models and corresponding options.

For information about battery replacement, see “Replacing the Battery” on page [21](#).

- Use a #2 Phillips screwdriver to remove the screw and plate covering the expandable battery main connector ports on the back of both your UPS and expandable runtime battery (A).

Carefully set aside the screws and plates for future use.




**NOTE**

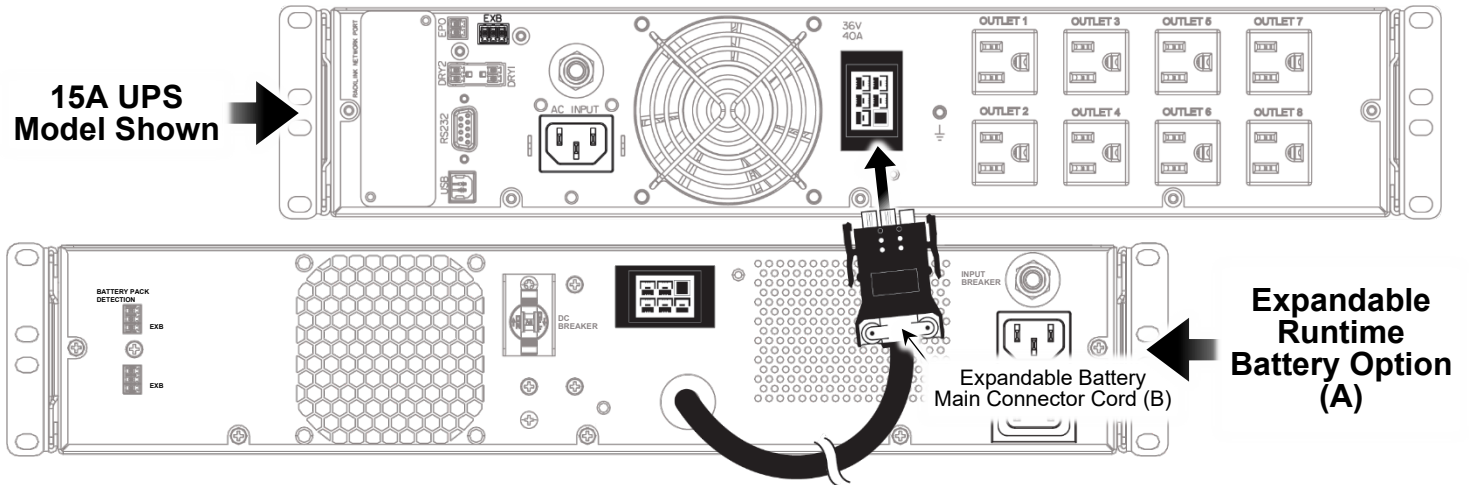
If you are adding exactly one expandable runtime battery to your UPS system, you may decide to leave the main connector port screw and plate intact on your expandable runtime battery, if desired.



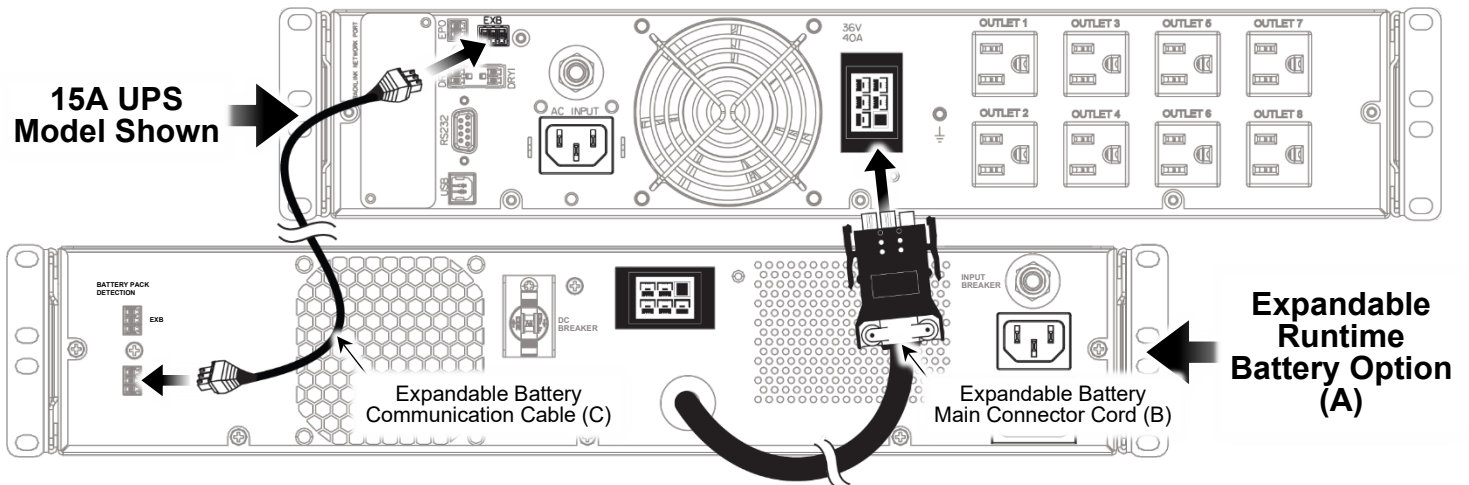
2. Connect the end of the expandable battery main connector cord (B) into the corresponding port on the back of your model UPS as shown.

 **NOTE**


- Applicable cords, cables, and ports shown in black for clarity.
- After connecting the battery or batteries, the entire system must be charged for eight hours before providing direct backup power to connected devices. For more information, see “Charging Your Expandable Runtime Battery, the First Time” on page 12.

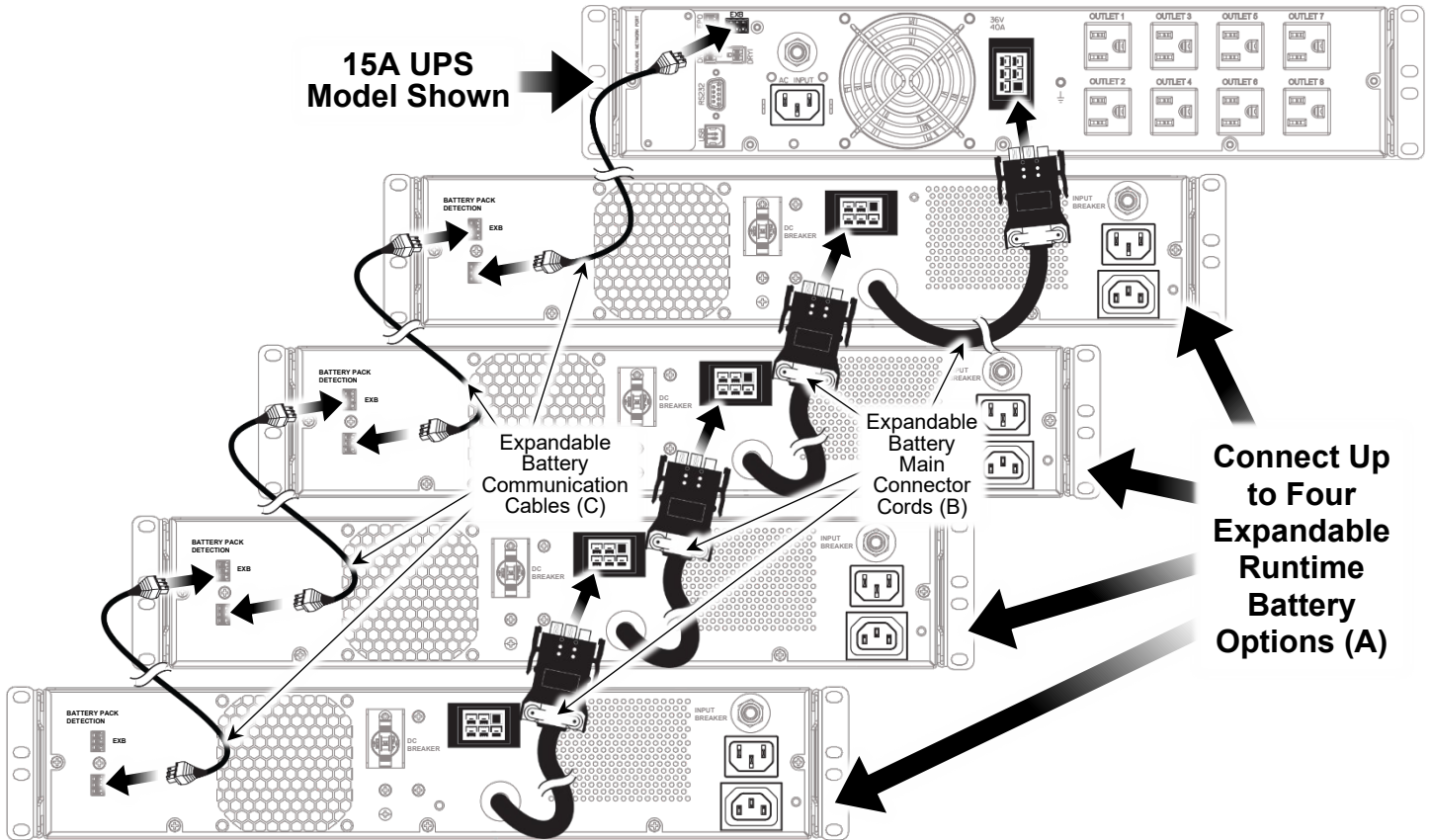


3. Connect one side of the expandable battery communication cable (C) into the lower left port labeled EXB on the back of your expandable runtime battery as shown.

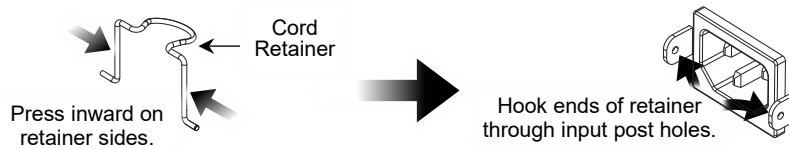


4. Connect the other side of the expandable battery communication cable (C) into the port labeled EXB on the back of your UPS.


 **NOTE** Up to four expandable runtime battery options may be added to your UPS system and should only be connected as shown.




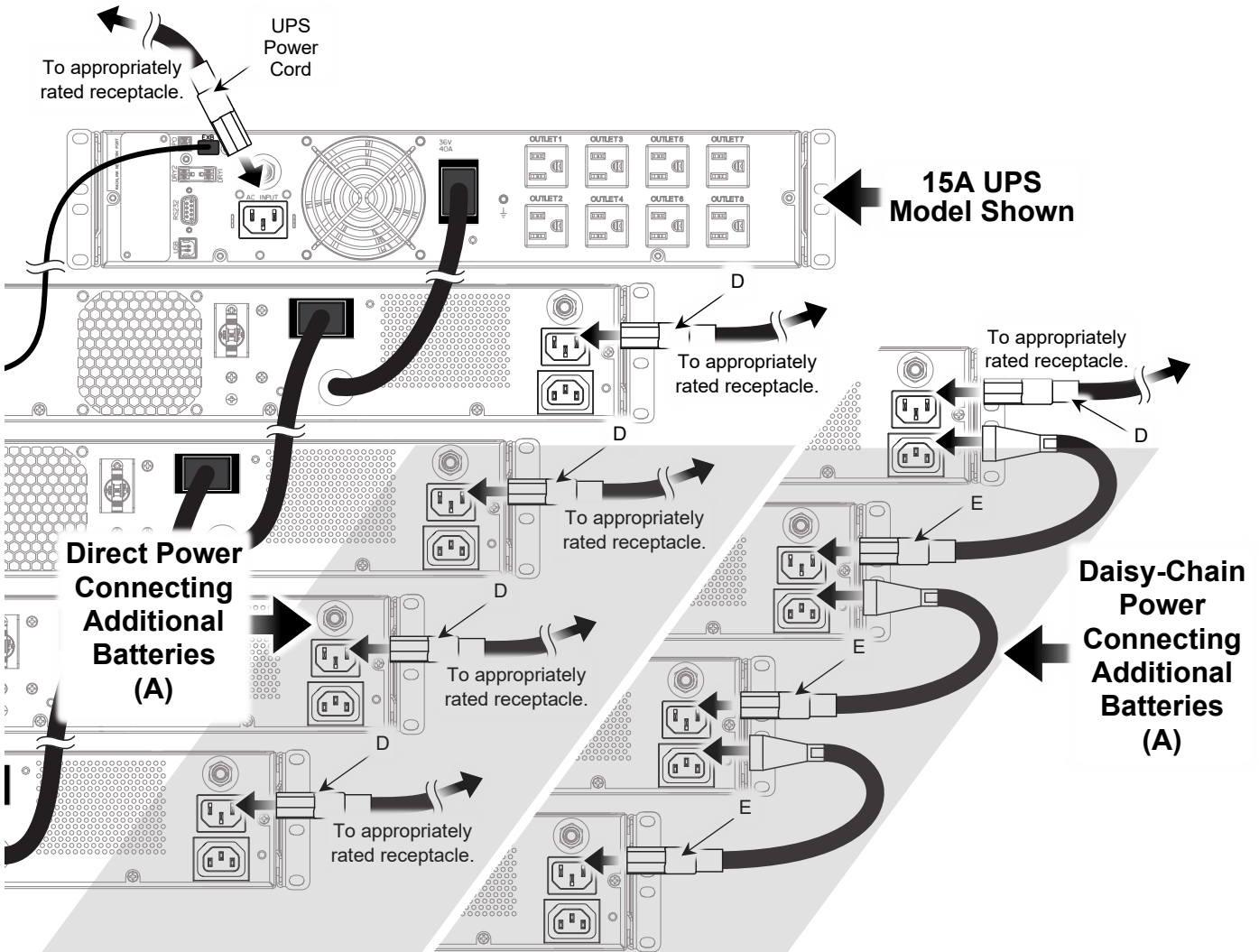
5. Install the power cord provided with your UPS and use the cord retainer clip provided with it by pressing inward on its sides and hooking the ends through the input post holes on the back of your UPS as shown.



- Use the power cord (D) provided with your expandable runtime battery or batteries and either directly connect them to appropriately rated receptacles, or daisy-chain the power to multiple batteries (where applicable) using IEC-to-IEC short cord(s) (E) as shown.

	<b>CAUTION</b>	Plug the devices into a two-pole, three-wire, grounded receptacle only. Avoid using extension cords.
	<b>ATTENTION</b>	Brancher l'appareils dans une prise bipolaire, trois fils et mise à la terre uniquement. Évitez d'utiliser des rallonges.

	<b>CAUTION</b>	The receptacle should be protected by a fuse or circuit breaker. The circuit should not be servicing other equipment with large electrical demands.
	<b>ATTENTION</b>	La prise doit être protégée par un fusible ou un disjoncteur. Le circuit ne doit pas entretenir d'autres équipements avec de grandes exigences électriques.




- After making all expandable battery connections to your UPS, the entire system must first be charged for at least eight hours before it can provide direct backup power to connected devices. For more information, see “Charging Your Expandable Runtime Battery, the First Time” on page 12.
- Press the power button on the UPS to turn on the system. For more information, refer to “Understanding the UPS Power Button” in the Line Interactive UPS User Manual (100-00072) at [www.legrandav.com](http://www.legrandav.com).

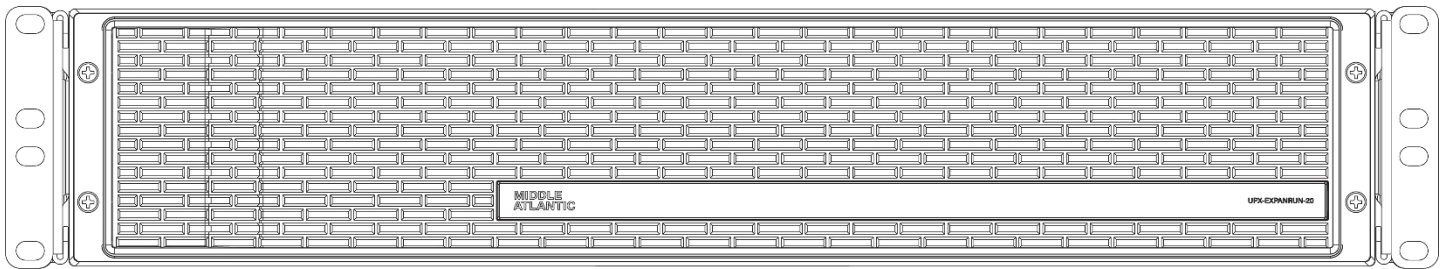
- Use the LCD front panel on your UPS and navigate to **Main Menu > Configuration Functions > External Battery** and verify the system is detecting connections in the manner you prefer. For more information, refer to “Front Panel Buttons” in the Line Interactive UPS User Manual (100-00072) at [www.legrandav.com](http://www.legrandav.com).

The default setting is Auto, but you might prefer specifying the number of external runtime batteries on your system instead.

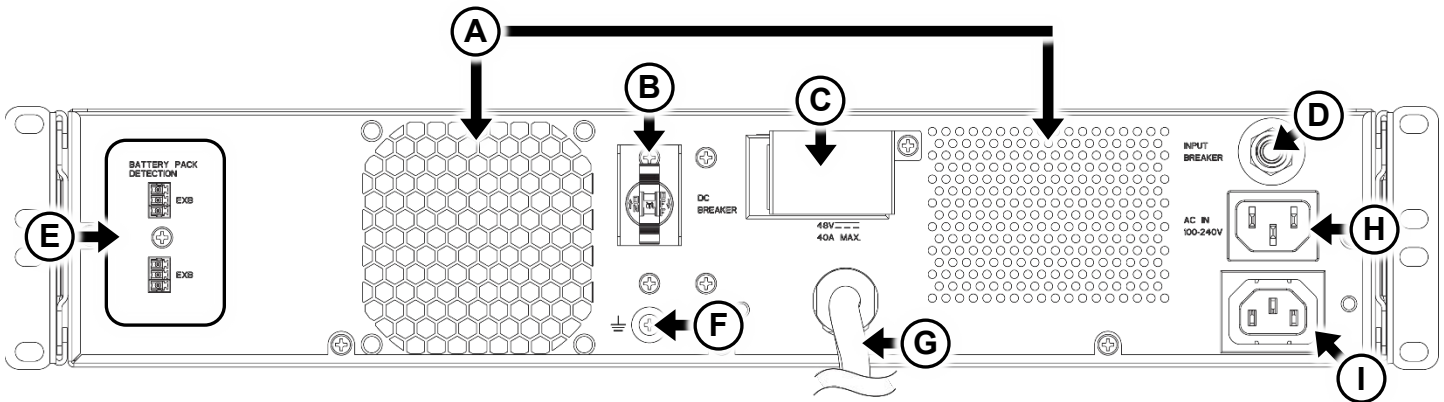
Option	Description
External Battery 0 – 4	Set the number of external battery pack(s) attached to your UPS.
Auto	Automatically detect the number of external battery pack(s) attached to your UPS.

## Basic Operation and Feature Set

 **NOTE** Front and back of a 2K model expandable runtime battery is shown. Called out items are in the same locations on 2K, 1K, and 1.5K units.



Labels on the back of the expandable runtime battery correspond with the following explanations.



- A. **Passive Ventilation Openings**
- B. **DC Breaker**
- C. **External Battery Port:** Port where the main connector from any additional expandable battery is inserted.
- D. **Input Circuit Breaker:** Located next to the AC input, the input circuit breaker trips when the load exceeds power rating of your UPS system.
- E. **External Battery Unit Detection and Signal Ports (EXB):** Connect one end of the expandable runtime battery communication cable (C) in either of these ports and connect the other end into the EXB port on your UPS or another expandable runtime battery option (if purchased) to transmit data between the units.

- F. **External Grounding and Bonding Stud:** For connecting an external ground wire to bond the chassis.
- G. **Expandable Battery Main Connector and Hard-Wired Cord:** Hard wired into the back of the expandable runtime battery, the connector on the other end of this cord is inserted into the External Battery Port on the UPS or another expandable runtime battery (if purchased).
- H. **The AC Input:** IEC14 output socket used with either the power cord (D) to direct power, or with the IEC-to-IEC short cord (E) to daisy chain power to another expandable runtime battery (if purchased).
- I. **The AC Output:** IEC13 input socket used with the IEC-to-IEC short cord (E) to daisy chain power to another expandable runtime battery (if purchased).

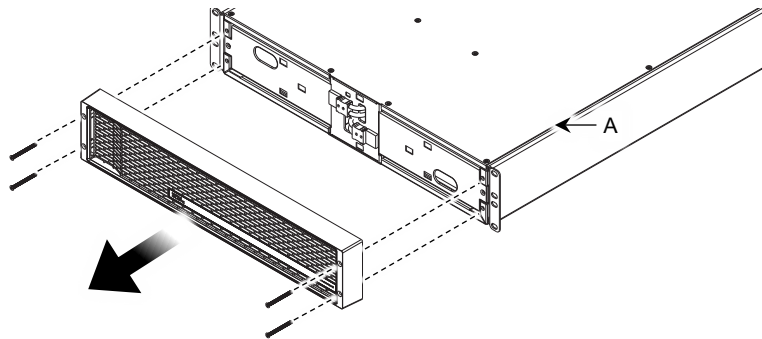
## Replacing the Battery



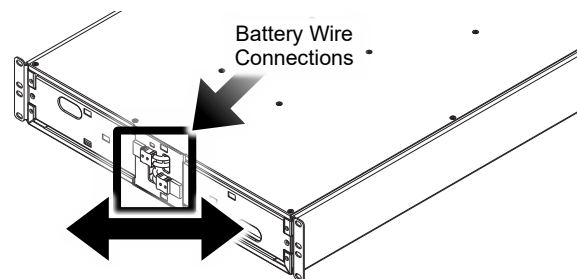
### NOTE

The expandable runtime battery (A) is equipped with a hot-swappable battery design; meaning, the internal batteries may be replaced without shutting down your system or removing any connected loads. Replacement is a safe, isolated procedure from electrical hazards.

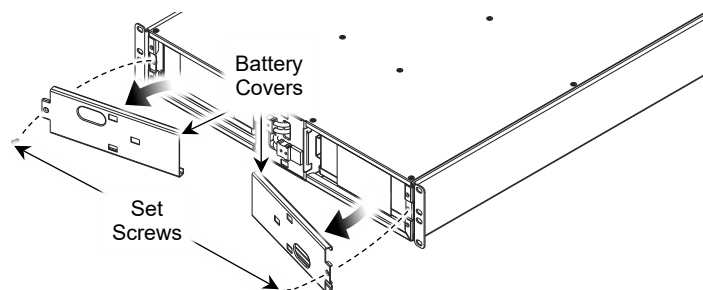
1. Use a #2 Phillips screwdriver and remove the (4x) screws from the front panel of your expandable runtime battery (A) as shown.



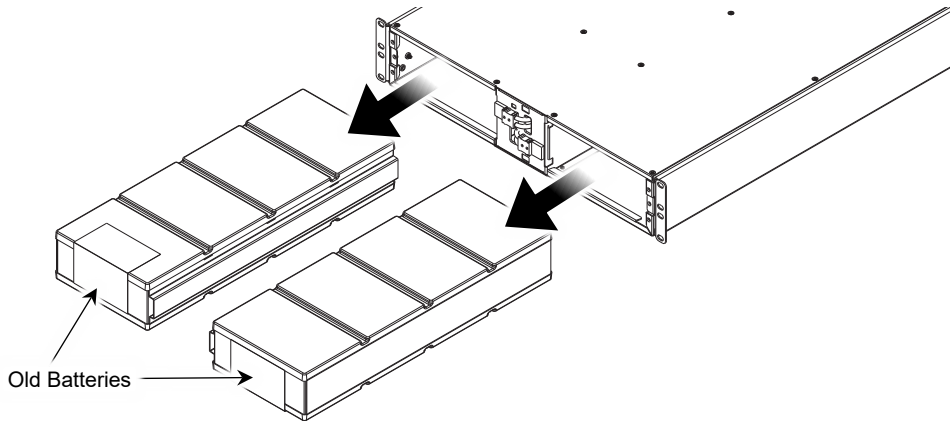
2. Remove the panel from the expandable runtime battery and set it aside along with the screws for re-attachment.
3. Squeeze and pull apart both battery wire connections to separate them as shown.




4. Use screwdriver to remove the set screws from each battery cover as shown.



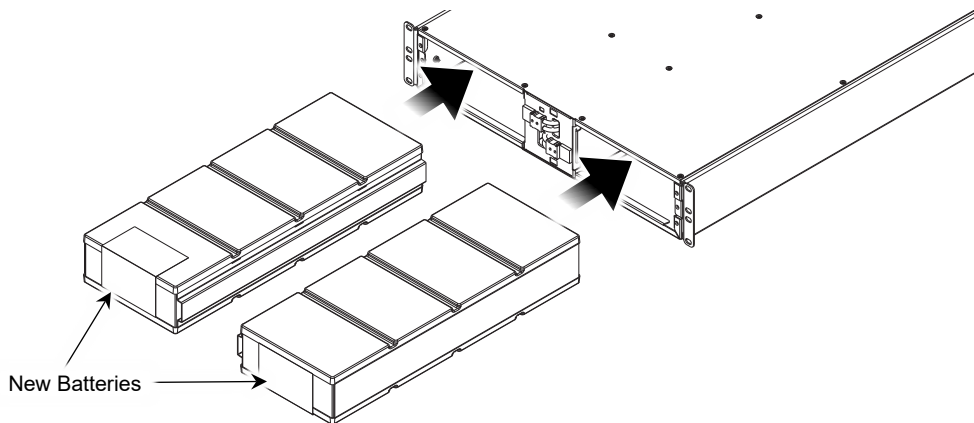
5. Remove the covers from the expandable runtime battery and set them aside with the set screws for re-attachment.
6. Slide both battery boxes out of their front openings.



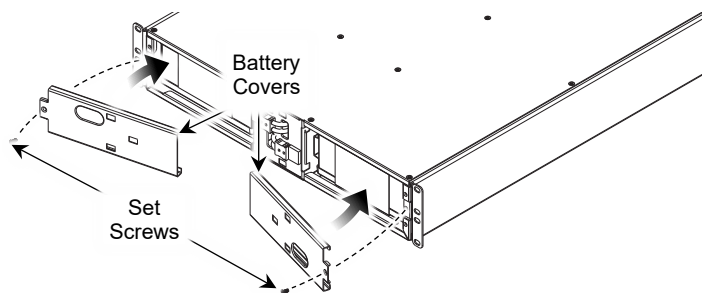
7. Use the box and pre-paid shipping label provided with your replacement battery and carefully pack and send the discharged battery to the recycling center. Otherwise, dispose or recycle your used battery in accordance with local laws and regulations.

	<p><b>CAUTION</b> Discharged batteries are considered hazardous waste. They must be recycled or disposed of in accordance with all local laws and regulations and/or shipped to your dealer using replacement battery packaging, where applicable.</p>
	<p><b>ATTENTION</b> Les batteries déchargées sont considérées comme des déchets dangereux. Ils doivent être recyclés ou éliminés conformément à toutes les lois et réglementations locales et/ou expédiés à votre revendeur en utilisant un emballage de batterie de remplacement, le cas échéant.</p>

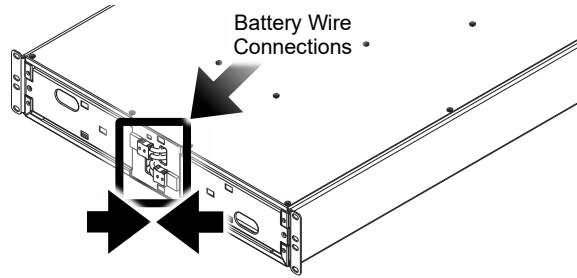
8. Slide your new batteries into the front openings.



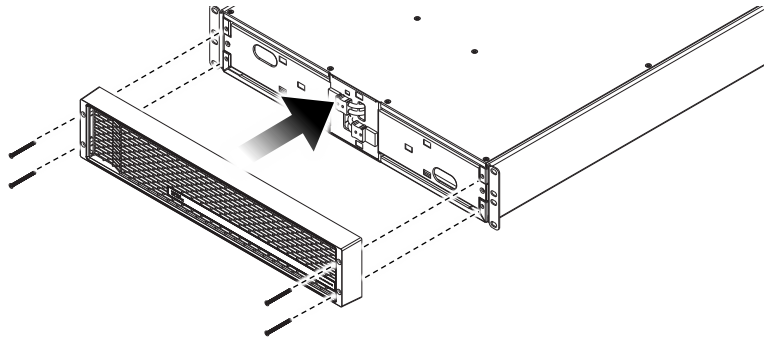
9. Use screwdriver and set screws to re-attach the battery covers.



10. Re-attach the battery wire connections as shown.



11. Use screwdriver and (4x) screws to re-attach the front panel to your expandable runtime battery as shown.



#### NOTE

After replacing the batteries inside your expandable runtime battery, it must be charged for eight hours before providing direct backup power to connected devices. For more information, see “Charging Your Expandable Runtime Battery, the First Time” on page [12](#).

## Replacing the Power Cord (if Necessary)



#### WARNING

Any power cord used with this device must meet the specifications listed in this topic.

#### AVERTISSEMENT

Tout câble d'alimentation utilisé avec cet appareil doit répondre aux spécifications répertoriées dans cette rubrique.

Your battery may require a longer length and/or replacement power cable. When replacing the cable with Legrand or any other supplier, the following specifications are required for 1K/1.5K UPS and 2K UPS products, respectively.

## Understanding Cord Replacement Specifications for the 1K/1.5K/2K Expandable Runtime Battery

Only operate your UPS using a power supply cord meeting the following compliance standards and specifications.

- Detachable, complying with UL 62, 1581.
- NEMA 5-15P plug type complying with UL 817 and CSA 22.2 NO.21-95, 42M.
- Minimum wire size of SJT 3/C, 16AWG, 221° F (105° C), 300V VW-1.
- C13 connector complying with the IEC60320-1 standard.

# Specifications



**NOTE** Specifications are subject to change without notice.

## Expandable Runtime Battery Models and Compatibility

Model	UPX-EXPANRUN-10-15		UPX-EXPANRUN-20
Compatible with UPS Topology	Line Interactive		
Compatible with UPS sized VA	1000VA	1500VA	2000VA

## Input

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
Nominal Voltage	120VAC	
Voltage Range	100VAC min - 240VAC max	
Input Power Cord Type	Detachable C13 to 5-15P, Signal Safe	
Overload Protection	Circuit Breaker	
Power Cord Length	6' (1.83M)	

## Output

Model	UPX-EXPANRUN-10-15		UPX-EXPANRUN-20
Voltage	36VDC		48VDC
Amperage	40A		
DC Switch	Manual DC breaker. Disables DC output to battery main connector.		
BTU (Line Mode)	25	25	42
BTU (Battery Mode)	0.3	0.3	0.3



## Battery

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
Sealed, Maintenance-Free, Lead Acid Battery	Lead Acid	
Recharge Time	6 – 8 hours	
Battery Replacement	Hot Swappable Front Access	
Replacement Battery Model Numbers	UPX-RPLBATT-A (ERB requires two batteries.)	UPX-RPLBATT-D (ERB requires two batteries.)
Battery Pack Voltage	36VDC	48VDC

## UPS Runtime with Expandable Runtime Battery Unit(s)

Model	UPX-EXPANRUN-10	UPX-EXPANRUN-15	UPX-EXPANRUN-20
UPS + 1 ERB Full- and Half-Load Runtimes	23   55 minutes	12   37 minutes	17   42 minutes
UPS + 2 ERB Full- and Half-Load Runtimes	43   105 minutes	28   74 minutes	33   83 minutes
UPS + 3 ERB Full- and Half-Load Runtimes	68   164 minutes	43   111 minutes	50   135 minutes
UPS + 4 ERB Full- and Half-Load Runtimes	93   222 minutes	60   154 minutes	71   178 minutes

## Environment

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
Operating Temperature and Relative Humidity	32° F (0° C) – 104° F (40° C) 0% – 95% Non-Condensing	
Storage Temperature	5° F (-15° C) – 113° F (45° C)	

## Communication

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
EXB Detection and Signal Ports	Runtime calculation to UPS and from additional batteries (if purchased), respectively.  For more information, see “Connecting the Expandable Runtime Battery Option to Your UPS” on page <a href="#">16</a> .	

## Physical

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
Dimensions Width x Height x Depth	17.3" (440mm) x 3.4" (86.5mm) x 17.3" (440mm)	17.3" (440mm) x 3.4" (86.5mm) x 23.6" (600mm)
Product Weight	52.0 lbs. (23.6kg)	70.1 lbs. (31.8kg)
Shipping Weight	58.4 lbs. (26.5kg)	78.5 lbs. (35.6kg)

## Certifications

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
Safety Standards	cTUVus Tested to UL 1778 & CAN CSA-C22.2 standards.	
EMI Standards	FCC Class A	
Environmental	RoHS REACH Compliant	

## Warranty

Model	UPX-EXPANRUN-10-15	UPX-EXPANRUN-20
Standard	Three Years Limited (2 Years Battery)  For warranty information, refer to <a href="http://legrandav.com/policies/warranty_information">legrandav.com/policies/warranty_information</a> .	

# Warranty

For warranty information, refer to [www.legrandav.com/policies/warranty\\_information](http://www.legrandav.com/policies/warranty_information).

## Contacting Corporate Headquarters

P: (866) 977-3901 | F: (877) 894-6918 | [www.legrandav.com](http://www.legrandav.com) | [av.middleatlantic.techsupport@legrand.com](mailto:av.middleatlantic.techsupport@legrand.com)

## Contacting Middle Atlantic Canada

P: (888) 766-9770 | F: (888) 599-5009 | [ca.middleatlantic.com](http://ca.middleatlantic.com) | [av.canada.customerservice@legrand.com](mailto:av.canada.customerservice@legrand.com)

### United States (US)

Legrand | AV Headquarters  
6436 City West Parkway  
Eden Prairie, MN, 55344, USA

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