



Electrical Service Guide

March 3-5, 2020 Pennsylvania Convention Center Philadelphia, PA USA

1 Electrical FAQs

From under carpet wiring to overhead lighting, PACK EXPO Services has the power to simplify your electrical needs and installation. We've answered your most common questions below to help you place your order or prepare for a detailed discussion. Whether you require basic household/office power or a more technical installation for equipment, audio-visual presentations or truss lights, our electrical specialists and qualified electricians are always available to assist you.

How do I know how much power I need?

First, review a layout of your exhibit, noting all of the items in it that require power. Consider lighting, computer equipment, and your own product. Are you bringing or renting any a/v equipment or ordering catering services that might need power? Will you be using a lead retrieval machine? If it's an item that plugs into a standard wall outlet found in a home or office (in North America), it will require 110/120 volt power. 208 or 480 volt power is generally used for machinery or industrial cooking devices and is ordered by single or 3 phase.

Next, mark the voltage and wattage or amperage (referred to as "load") (100 watts = 1 amp) of each piece of equipment at its location in the booth. This information should be provided on a name plate or stamp usually located on the back or bottom of the equipment. If not indicated, check our accompanying electrical usage guide for estimated wattages for common items used at trade shows or call your rental company/caterer for specifics. For lighting, loads are dictated by the wattage of the bulbs. Arm lights included with exhibit packages use 200 watt bulbs. Keep in mind that you need to order power for any lighting within your booth unless the lights are ordered directly from the Electrical Department (those listed on the electrical order form).

Finally, total the wattage for the 120 volt devices in each area and select an outlet that meets or exceeds that total. Separate outlets should be ordered for each piece of equipment and/or each power location to help minimize tripping/power outages. It is always safer to slightly overestimate your power requirements. Wattage or amperages cannot be combined for 208 or 480 volt apparatus. Please order separate outlets for each.

Do I need to order labor?

Labor orders will automatically be input and scheduled upon receipt of an electrical layout for any under carpet installation (floor work). You do not need to order labor for floor work unless you wish to be present to supervise the install.

208 volt or higher services machine hook up labor will need to be scheduled or will revert to a "will call" system at showsite. Please schedule a date and time for these hookups to ensure we have enough labor scheduled to accommodate the request. Hookup Labor will be dispatched at the time specified. If you are not present at the time requested, a half hour "no-show" charge will be assessed and your hookup request will then be added to the gueue with other exhibitors that are in need of labor.

If you wish to have electricians install personally owned stem lights for your booth properties, it is recommended to also schedule labor for this service to avoid delays at showsite.

Dismantle labor for electrical services is calculated at 50% of the installation time since much of the work is performed on a mass basis after booths are removed from the exhibit hall. Please see the electrical labor order form for further details, rules and regulations.

There is a one hour minimum on install labor, and a half hour minimum on dismantle labor.

Please schedule the approximate date and time your machinery will be ready for hook up on form 19e or under electrical labor if ordering online.





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1 Electrical FAQs (cont.)

What is an electrical layout and why do I need one?

Like your own home, electrical boxes and wiring should not be visible once the exhibit is completed. At show site, they are the first things to be installed so that they can be hidden by drape, walls or counters and under flooring or carpet. Electricians, therefore, work on a blank slate. A good electrical layout or floor plan provides them with a simple overhead view of your booth indicating the locations and load of each electrical outlet and the orientation of your booth within the show itself. The layout should be to scale and provide specific measurements to each outlet along with surrounding aisle or booth numbers to ensure accuracy. For island booths, a main power location must also be indicated as it is the location from which other outlets are fed. Please see the sample layouts and electrical grid for further information.

When a layout and credit card are provided in advance, PACK EXPO Services makes every effort to ensure that the floor work is completed before you arrive so that there is no delay in assembling your booth. Once carpet is laid, installing or changing electrical services becomes much more difficult and potentially costly.

Is the price for power per day?

Outlet or connection prices are typically for an entire show.

What is 24 hour power?

Many facilities these days are energy conscious and therefore turn off power overnight during show days. Power is turned off 1/2 hour after the show closes at the earliest and restored no later than 1/2 hour before the show opens the following day. 24 hour power is, as it sounds, power that is continuously on 24 hours per day.

If your booth includes, for example, refrigeration equipment, an aquarium or programmable apparatus that depends on uninterrupted power, you should consider ordering 24 hour service. Power is usually not turned off during move-in or move-out.

Where does the power come from?

Depending on the facility, the power can come from overhead catwalks, floor ports, columns, wall outlets or a combination of these sources. Check with your Customer Account Manager for more information.

Where will my power be located?

In-line and peninsula booths will find their main power source on the floor somewhere along the rear drape line of their booth. Island booths need to submit an electrical layout. Please see the sample layouts and electrical grid for further information.

What if I need power at another location besides the rear of my booth? What if I have multiple power locations?

Exhibitors requiring power at any location other than a back wall must submit an electrical layout. Please see the sample layouts and electrical grid for further information.

How many places will I have to plug in? How many things can I plug in?

For planning purposes, you should always assume that there is only one connection point per outlet ordered. Power strips can provide additional sockets but do not confuse having more places to plug in with additional power. For example – An order is placed for a 500 watt outlet. A track light with 4 – 100 watt bulbs is plugged in to a power strip connected to the outlet, using 400 of the 500 watts. Any lighting or equipment now plugged in to a second socket may not exceed 100 watts.

Also keep in mind that power strips are designed, for safety purposes, to trip at 1500 watts or 15 amps. Using a power strip with a 2000 watt (20 amp) outlet will reduce it to a 1500 watt outlet.

All orders exceeding 120 volt/20 amps provide one connection point only, cannot accommodate power strips and require labor for installation.





Electrical Service Guide

1 Electrical FAQs (cont.)

Can I bring my own extension cords and power strips? (Also known as plug strips, multi strips, etc.)

Exhibitors may use their own extension cords and power strips under the following conditions:

- The equipment must be 3 wire, 14 gauge minimum with a ground.
- The extension cords must be flat if they are to be laid under carpet. (Labor is required to lay the cords.)
- All power strips must have circuit protection.

Can I run my extension cords under the carpet myself?

For safety reasons, exhibitors are not allowed to run any electrical wiring under any type of floor covering or where they may be concealed in the booth structure. The show's electrical contractor is liable for electrical installations and therefore must perform all floor or booth work.

Will my floor work be completed before I arrive?

Every attempt is made to have floor work completed prior to carpet installation if you have submitted the following:

- A completed electrical order form.
- A valid and authorized credit card to be kept on file for the company.
- An electrical layout indicating the main power location, dimensions to each power location, the power required at each location, and surrounding aisle or booth numbers to determine orientation of the booth.

Labor and material charges apply.

When will my power be turned on?

Power is only guaranteed to be installed before the show opens. If PACK EXPO Services is allowed early access to the facility, power is normally ready the first day of move-in for exhibitors but any special requests such as temporary chain motor power, programming machinery or testing equipment should be noted on your order.

Do I need lighting?

Lighting can dramatically change the impact of an exhibit, no matter the size. Used effectively, lighting can emphasize specific areas of a booth or highlight products. Also, an exhibit will appear dark and uninviting if the surrounding booths are lit and yours is not.

Can I hang my own lights?

Full time employees of the exhibiting company are allowed to hang lights in their booth. If a decorating company has been contracted to install a display, electrical labor is required to install the lights. Due to union contracts, no other union is allowed to install electrical equipment.

Do I need to order power for my lighting?

Exhibitors ordering Electrical Services lighting (those listed on the electrical order form) do not need to order power. It is included in the rental. Exhibitors supplying their own lighting or renting lights need to order power. Labor may be required to hang the lights.

Do I need to order labor to plug in my lights or equipment?

Most 120 volt connections do not require labor. Exhibitors are welcome to plug in their own standard office devices. Labor is required for all 208 or 480 volt connections and if lights or equipment need wiring or if electrical cords are to be run under the carpet or in concealed areas to ensure that all electrical codes and building rules are met.





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1 Electrical FAQs (cont.)

How can I save money and frustration when ordering electrical services?

Most importantly, be sure to submit your order before the discount price deadline date. If an electrical layout is needed, it also must be received, complete with mandatory information, before the deadline date to be eligible for discount pricing. Late orders can be subject up to a 50% increase in cost because of the behind-the-scenes planning required to distribute power.

Don't underestimate your power requirements and work within the local rules, regulations and union jurisdictions. They have been implemented to avoid problems. While it may seem simple to plug in lights and equipment, it is not uncommon for exhibit or non electrical staff to overload circuits. Trouble calls can become expensive when it takes time to find the source of a problem.

If you require carryover electrical labor, you must confirm at the electrical desk that you wish to use labor again the following day. Carryover requests should be confirmed by 2:00 pm each day.

If unsure about labor, call us for direction and if necessary, place a "will call" order before the discount price deadline date. You will only incur a charge if labor is dispatched to your booth but you'll have secured the advance pricing. And, check in with the electrical or service desk as soon as you know you need labor, not at the time you want the electricians in your booth. It will help to avoid delays as we can schedule accordingly.

Lastly, try to resolve any disputes at show site. It is much easier to discuss electrical issues when both parties can physically review the installation.



Electrical Rental Information

Step-by-Step Guidelines to Completing Your Electrical Order Forms

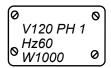
Guidelines

STEP 1

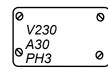
Total the single phase or three phase power requirements on all nameplates on your equipment. Complete Form 19k-19l, Electrical Service.

How much power do I need?

Calculate your lighting needs by adding wattage in each location. For other equipment, read the ratings from the metal plates attached to each unit.



120 Volt Single Phase 60 Cycle 1000 Watts



230 Volts 30 Amps Three Phase

STEP 2

If you require any under carpet distribution, machinery hooked up, or the combination of all outlets and booth power is greater than 20 amperes and/or with a voltage greater than 120 volts, then you will require electrical labor and we require a copy of the floor plan of your booth.

STEP 3

To receive the advance rate, the booth layout Form 19f or a scaled plan for electrical distribution must be attached to this form or e-mailed to your Customer Account Manager on or before January 27, 2020. PDF, CAD, or JPG files are preferred. Complete Forms 19b-19f, Electrical Service Order Form.

*Remember these important facts when ordering labor:

- 1. Labor is only guaranteed at 8:00 am.
- 2. There is a minimum 1 hour in, 1/2 hour out for all labor ordered.
- 3. Monday through Friday, 8:00 am to 4:30 pm is straight time. Holidays and weekends are billed at overtime and double time rates.
- 4. Labor dismantle is charged at up to 50% of total labor in. Overtime rates may apply.
- 5. Labor on Friday-Saturday must be ordered prior to the first day of show move-in. If labor is ordered on Friday-Saturday, work will not be guaranteed on Straight Time.

(For more details regarding Electrical Contractor's responsibilities see mid-section of Electrical Regulations.)

*A late floor plan fee of \$500.00 goes into effect February 17, 2020. This fee will be assessed if a final, scaled floor plan is not submitted for electrical services. Resubmitting changes to existing floor plans after this date will be treated as a new floor plan.

NOTE: Additional information concerning electrical services will be sent to each exhibitor prior to move-in. If you have any questions concerning your electrical services (number of connections, labor estimates, etc.), please contact your Customer Account Manager (CAM).

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Electrical requirements for an exhibit at all convention facilities are for the safety of all exhibitor and are based on national electric codes and local ordinances.

3 Electrical Code and Safety Guidelines

Too frequently, fires have been traceable to faulty wiring, sometimes because of the carelessness and sometimes because of lack of understanding of the risks involved.

In the interest of public safety, exhibits at all convention facilities may be inspected to determine if any violations exist. If they are found, qualified electricians are available to correct the problems. This work will be performed on a time and materials basis. If the exhibitor does not wish to have the fault corrected, electrical service to the offending booth will not be connected.

If an exhibitor is not informed or does not understand basic safety standards for electrical wiring, an electrician should be consulted before shipment can be made to convention facilities.

Serious risks are involved which can be eliminated by understanding the basic requirements of safe wiring inside your booth. For the safety of you and the public, remember these points:

- All wiring must have a 3-wire grounded cord with a minimum of #14 guage.
- Spot or flood lighting is a hazard when lamps are too close to fabrics or other material which can be affected by heat.
- The use of clip-on sign sockets, romex, or lamp cord wire in displays, or the use of 2-wire clamp on fixtures, is prohibited by order of fire prevention bureaus at trade shows and conventions.
- Cube taps and cobra heads are prohibited.
- Zip cords or two-wire cords are ungrounded and could result in safety hazards. Their use is forbidden in all convention facilities.
- It is your responsibility to refer to your specific facilities rules and regulations.

Please leave all 2-wire cords at home!

Timesaving
Wiring
Methods and
a Distribution
System

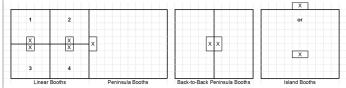
Whenever possible, in compliance with the electrical code, use multiconductor interconnecting cables with approved quick-connect plugs or fittings. For a list of the plugs that match our equipment receptacles, please see form 19j.

Exhibitors who require many standard outlets may wish to incorporate a power distribution system into their booth. Please contact your Customer Account Manager if you need more information at 972.751.9400.

5 Commonly Asked Questions

Where will my outlet be located?

There are four different types of trade show booths: Linear Booths, Peninsula Booths, Back-to-Back Peninsula Booths, and Island Booths. Each type of booth has its own standard method of installation. In the following diagrams, the symbol X represents the approximate location of the power outlets:



One drop within booth when power source is in ceiling or one location when power is in the floor.

Linear Booths, Peninsula Booths, or Back-to-Back Peninsula Booths: Your pre-ordered electrical outlet will be installed at the rear of your booth, at the drape line.

Island Booths: You need to designate one location for each outlet you order. Multiple outlet locations will be charged on a labor and material basis. For facilities with power originating in the floor, your electrical outlet will be placed at one location at our discretion. All other distribution will be done on a time and materials basis. If you fail to provide us with a floor plan, we will bring power to one location at our discretion.

Electricity will be turned on thirty minutes prior to show opening and will be turned off within thirty minutes after show close.



Electrical Regulations

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6 Electrical Regulations and General Information

- 1. PACK Expo Services is not responsible for any voltage fluctuation or power failure due to temporary conditions. For your protection you should install a surge protector on any sensitive electronic equipment. All electrical installations and connections to all electrical service should be made by a PACK EXPO Services electrician. PACK EXPO Services will not be responsible for any damage or loss of equipment, component, computer hardware or software and/or any damage or injury to any person caused by the installation, connection or plugging into any electrical outlet by persons other than a PACK EXPO Services electrician. PES is not responsible for exhibitor supplied distribution equipment and materials.
- 2. Electricity will be turned on within 30 minutes of show opening and turned off 30 minutes after show closing.
- 3. 24-hour service to any outlet increases the cost of the outlet.
- 4. All electrical outlets will be installed on the floor at the draped backwall of in-line booths and peninsula spaces. Exhibitors with hardwall displays must arrange for power to be dropped inside the booth if necessary; this will be done on a time and materials basis. Overhead power to island booths will be dropped to one main location per the exhibitor's floor plan. If no plan is provided, the connection(s) to equipment is chargeable on a time and materials basis.
- Local ordinances prohibit more than 2000 watts per lighting circuit and only one connection for power and motor outlets.
- 6. All wiring, motors, electrical installation, etc. must be approved. To prevent overloading circuits, exhibitors cannot add wattage except as ordered.
- 7. All electrical permits required by the Local Building and Safety Code will be obtained by the electrical contractor.
- 8. All flood light, column and wall outlets are not part of booth space. A separate outlet must be ordered at regular price for each piece of equipment to be connected.
- Special hanging, hookups, repairs or installation of electrical will be done on a time and materials basis
- 10. All equipment should be properly tagged and wired with full information as to current, voltage, phase, cycle, horsepower, etc. and "Ready for Connection."
- 11. All outlets over 20 amps and with a voltage of over 120 volts requires electrical labor. This includes a 1-hour minimum to inspect any exhibits that are pre-wired to plug into our system.
- 12. Any labor rates indicated on forms are based upon the current IBEW union contract at the time of printing forms. These rates are subject to change without notice based on prevailing union contract at the time of show.
- 13. Exhibitors are allowed to hang arm lights. Additionally, they may repair their own equipment that requires their technicians as long as the technician is a company employee.

7 Electrical Contractor's Responsibilities As the Official Electrical Contractor, we will be responsible for:

- All under-carpet distribution of electrical wiring.
- All facility overhead distribution of electrical and the distribution of same from product to booth and from booth to booth.
- All motor and equipment hook-ups requiring hard wire connections.
- Installation and/or repair of electrical fixtures, track lights, arm lights and/or low voltage if requested.
- Installation of electrical motors to be energized and electrical apparatus.

The above items require electrical labor, which may be ordered in the Electrical Labor section.





Electrical Regulations

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Electrical Code

Electrical requirements for an exhibit at all convention facilities are for the safety of all exhibitor and are based on national Electric Codes and local ordinances. Too frequently, fires have been traceable to faulty wiring, sometimes because of the carelessness and sometimes because of lack of understanding of the risks involved.

In the interest of public safety, exhibits at all convention facilities may be inspected to determine if any violations exist. If they are found, qualified electricians are available to correct the problems. This work will be performed on a time and materials basis. If the exhibitor does not wish to have the fault corrected, electrical service to the offending booth will not be connected.

If an exhibitor is not informed or does not understand basic safety standards for electrical wiring, an electrician should be consulted before shipment can be made to convention facilities.

Serious risks are involved which can be eliminated by understanding the basic requirements of safe wiring inside your booth. For the safety of you and the public, remember these points:

- All wiring must have a 3-wire grounded cord with a minimum of #14 guage.
- Spot or flood lighting is a hazard when lamps are too close to fabrics or other material which can be affected by heat.
- The use of clip-on sign sockets, romex, or lamp cord wire in displays, or the use of 2-wire clamp on fixtures, is prohibited by order of fire prevention bureaus at trade shows and conventions.
- Zip cords or two-wire cords are ungrounded and could result in safety hazards. Their use is forbidden in all convention facilities.

Please leave all 2-wire cords at home!

Please note that there is a late fee of \$500.00 for any floorplans received after February 17, 2020.





Electrical Information

Discount Deadline: January 27, 2020 (excludes labor)

Special Notes and Important Ordering Information **24-hour Power** - When ordered, 24-hour power begins the evening before the first show day and is turned off on the last day at the close of the show. 24-hour power is available before or after these times for an additional charge. Contact your Customer Account Manager at PACK EXPO Services.

Labor Request - If you need to work past 5:00 pm during set-up, you must notify your PACK EXPO Services Customer Account Manager no later than 1:30 pm that same day. If you need to schedule man-power prior to 8:00 am for the following day, you must notify your Customer Account Manager by 1:30 pm the day before.

Send detailed floor plans showing locations for the services ordered.

We have 1000 wat Par Can Fixtures (see form 19m) that mount on the building steel at a height of 40 feet. They are used to highlight a machine or panel. They throw an 8-10 foot elliptical circle and a medium amount of light (see form 19m).

PES will conduct an audit of service usage. Exhibitors will be required to pay for any additional or unauthorized use. Exhibitors are not permitted to use a neighboring booth's service. Exhibitors will be charged on-site prices for use.

10 Terms and Conditions

- . Straight Time and Overtime rates apply. Please contact PACK EXPO Services at 972-751-9400 for details.
- Labor wages are based on current wage scales and are subject to change in the event of a wage increase after rates have been published.
- 3. A minimum charge of 1 hour is applicable to all labor requests. Additional time on the same day (and the same labor ticket) is billed in 1/2 hour increments. Continuations to another day are a minimum of 1 hour. Labor charges for dismantle will be one-half of the installation charge and will be automatically applied to your invoice.
- 4. Charges for labor commence at the time of dispatch to service the labor call. A one half hour minimum will apply if an exhibitor representative is not present at the time of call or reschedules the call, unless 24 hour advance notice is received in writing.
- 5. Labor charges will include the time for electricians to gather necessary tools and material for the job, have their work checked by the client and return the tools and material to the supply area.
- 6. Every effort will be made to dispatch electricians as requested but start times cannot be guaranteed. 8:00 am calls will be filled on a first-come-first-served basis as orders are received.
- 7. Electrical services provided to Island booths require labor and material charges for distribution. Exhibitors may supply their own 14 gauge, 3 wire extension cords, and/or power strips, both of which must be grounded and UL approved.
- 8. Lift equipment required for installation and dismantle purposes can be rented on a one half hour basis, with a one hour minimum. At least one crew will be required to operate the equipment.
- Claims will not be considered, or adjustments made, unless filed in writing, by Exhibitor, prior to the close of the event.
- 10. PACK EXPO Services is not responsible for any damage or loss caused by the loss of power beyond its control and Exhibitor agrees to hold PACK EXPO Services, its officers, directors, employees and agents harmless from such power loss. IN NO EVENT SHALL PACK EXPO SERVICES BE LIABLE FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS) EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER UNDER THEORY OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCTS LIABILITY OR OTHERWISE. Exhibitor shall indemnify and hold PACK EXPO Services, its officers, directors, employees, and agents from and against any and all claims, liabilities, damages, fines, penalties or costs of whatsoever nature (including reasonable attorney's fees) arising out of or in any way connected with Exhibitor's actions or omissions under this agreement.





Electrical Information

Discount Deadline: January 27, 2020 (excludes labor)

11 Important Electrical Exhibiting Information

Exhibitors requiring electrical services should thoroughly read and understand the rules and regulations posted in the Exhibitor Service Manual.

All questions or concerns can be directed to your Customer Account Manager for clarification at 972-751-9400.

All exhibitor provided equipment for connection to PACK EXPO Services electrical or for distribution of power within the exhibit may require an inspection to ensure compliance with all Federal, State and Local Codes as listed on the Electrical Order Form.

Exhibitor provided equipment for distribution or equipment connection shall require PACK EXPO Services to make the final connection from PACK EXPO Services' power distribution equipment to the exhibit. This is required only to ensure proper voltage and connection prior to energizing any exhibits.

As an exhibitor, should you choose to provide equipment with electrical connectors to plug directly into PACK EXPO Services electrical equipment, the following list provided will ensure the proper connection:

500 Watts to 2000 Watts - Standard U-Ground 20 Amp Cord Cap

20/30 Amp 120 / 208 L2120P / L2130P

60 Amp 208v & 480v Mini-Cam - Male Leviton 15SDM

100 / 200 / 400 Amp 208v & 480v Large-Cam - Male Hubbel HBL 400PT EKE

If you have a 100, 200 or 400 Amp outlet, and you are using a distribution panel, a female connector will also be needed. All of the above listed items may be found at your local electrical wholesale houses. Should you require additional information, please contact your Customer Account Manager.

Hopefully you find this information useful in planning your event. If we can provide further assistance, please don't hesitate to contact us at 972-751-9400.