

Vagabond Portable Power System User Instructions

The VAGABOND system is designed to provide portable battery power for photographic flash units manufactured by Paul C. Buff, Inc., including all models that are branded White Lightning, White Lightning Ultra, White Lightning ZAP, White Lightning UltraZap, White Lightning X-Series and all AlienBees flash models.



2725 Bransford Ave. Nashville, TN 37204 Toll Free Customer Line 1-800-443-5542 Local (615) 383-3982 Fax (615) 383-0676 The Vagabond is a LightGear USA product, a division of Paul C. Buff, Incorporated

Thank You for purchasing the VAGABOND! Please call us if you need any assistance.



SAFETY PRECAUTIONS

Please read and follow these warnings for safety.

WARNING: The Vagabond is not designed to power other brands of flash equipment. Paul C. Buff, Inc. cannot be responsible for any damage or liability that might result from unauthorized usage.

WARNING: The Vagabond system should always be grounded using the supplied grounding lead and clamp. Failure to properly ground the system may result in a life threatening shock hazard. Grounding may be accomplished by attaching the grounding clamp to the supplied grounding stake or to a water line. Gas lines should not be used for grounding. To assure proper grounding, always use three prong power cords and extension cords when connecting the flash units. Two wire cords should not be used, as this would result in an improperly grounded system. Proper grounding is especially important when operating the system on damp ground. Never operate your Vagabond system in the rain or in close proximity to bodies of water. Remember, a lighting system powered by Vagabond functions similarly to a system powered by house wiring and presents the same potential for electric shock.

DANGER! Do Not Connect One Battery To Another! When using an external battery, be aware that connecting a charged battery to a discharged battery can result in dangerously high current flow and can result in sparking, blown fuses and/or possible damage to one of the batteries.

The Vagabond Product Description

The **Vagabond** Portable Power System (available in two models: the V150 and the V300) is designed to provide a portable, battery power source for Paul C. Buff, Inc. flash units. The heart of the Vagabond system is the CU-150 power converting unit(s), which convert current from the 12 volt internal battery to a 120 Vac, 60 Hz, current-controlled true sine wave power source.

The Vagabond V150 includes:

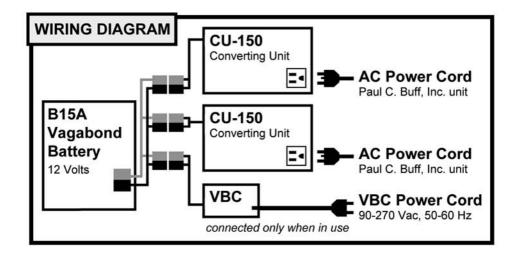
- 1 CU-150 Power Converting Unit
- 1 B15A 15AH Battery
- 1 VBC Global Battery Charger
- 1 Grounding Rod with Wires
- 1 Car Lighter Adaptor

The Vagabond V300 includes:

- 2 CU-150 Power Converting Units
- 1 B15A 15AH Battery
- 1 VBC Global Battery Charger
- 1 Grounding Rod with Wires
- 1 Car Lighter Adaptor

Both complete systems will come with all necessary wires, assembled and ready to charge inside the padded Vagabond Carrying Bag.

As supplied, the Vagabond System is ready for use, and connected as shown in the **Vagabond Wiring Diagram** (the second CU-150 Power Converting Unit shown in the diagram is only present in the Vagabond V300 model).



Getting Started With The Vagabond

First, take a quick inventory of the items included to familiarize yourself with the different components and their locations. Please contact us if any of these items are missing, or if any appear to have been damaged during shipment.





VBC and power cord



cigarette lighter adaptor

1. The Grounding Wire

The green grounding wire will be wrapped and tied, found in the top compartment of the shipping box. The grounding wire has a clamp on one end, and a ring connector on the other.

2. The Grounding Rod

The grounding rod will be bubble wrapped, found inside the top compartment of the shipping box.

3. The VBC Battery Charger and AC Power Cord
The VBC is a black, rectangular piece (with the words
"LAN POWER" embossed on one side), found inside
the front pouch of the Vagabond Bag. There is a wire
attached to the VBC with a red and black connector pair
on one end. The power cord will be wrapped and tied,
found in the front pouch with the VBC. The power cord
has a two-prong AC plug on one end, and a two-pin
appliance connector on the other.

4. The Cigarette Lighter Adaptor

The cigarette lighter adaptor cord will have a red and black connector pair on one end, and the car cigarette lighter adaptor (20 amp auxiliary port adaptor) on the other. The adaptor cord will be wrapped and tied in a clear plastic bag, found in the front pouch of the bag.

Getting Started With The Vagabond continued

5. The CU-150 Power Converting Unit(s)

The CU-150 Power Converting Unit is the heart of the system, converting the power from the Vagabond Battery into a suitable AC power source for your Paul C. Buff, Inc. Flash Units. There will be one CU-150 unit present in the Vagabond V150 System, and two CU-150 units present in the Vagabond V300 System.

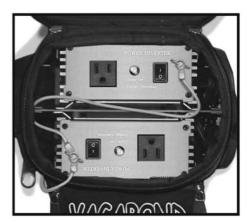
The Vagabond V150

The CU-150 will be seated on top of the B15A Battery, with a separation panel dividing the space in half (you can add an additional CU-150 unit to the system in the future, if needed).

The Vagabond V300

The two CU-150 units will be seated on top of the B15A Battery, with a separation panel between them. A green grounding wire will be in place, connecting the two units together.





6. The B15A Vagabond Battery

The Vagabond Battery is installed in the bottom of your VBAG Vagabond Bag, below the CU-150 Power Converting Unit(s).

7. The VBAG Vagabond Bag

The padded Vagabond carrying bag holds the B15A Vagabond Battery and the CU-150 Power Converting Unit(s), divided with a separation panel. The bag has a wide shoulder strap for travel, and two straps across the back to attach the unit to a light stand.

Once you have located and familiarized yourself with the components, you are ready to charge your Vagabond Battery. For optimal performance, please charge your battery for 12 HOURS before your first use. This will ensure the best performance and longest lifespan for your battery. To charge your battery, you will use the VBC Vagabond Battery Charger and its AC power cord.

Charging the Vagabond Battery

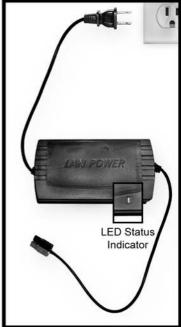
- First, plug the VBC Vagabond Battery Charger's AC Power Cord into the twopin appliance receptacle at the end of the VBC housing.
- 2. Next, plug the two-prong AC power cord into an AC outlet. When power is applied, the internal circuitry of the VBC Charger resets (this process takes from three to five seconds). At the end of this time, the status indicator LED will glow green (the indicator LED is found on the side of the VBC that is marked "LAN POWER"). When the LED glows green, the VBC is ready to use.
- 3. Locate the battery harness charging port inside the Vagabond Bag's front left pouch. The harness is already connected to the Vagabond Battery inside. The exposed end has a neon yellow fuse attached (in line 20 amp fuse), with a red and black connector pair (this is a DC connector pair) on the end.
- 4. Plug the red and black DC connector pair from the VBC into the red and black DC connector pair on the charging port. Connect red to red, and black to black. The connector pairs should snap together easily.
- 5. The VBC will automatically check the status of the battery (this may take a few seconds). Depending on the charge condition, the VBC will display one of these status indications:

Red: the VBC is charging the battery using current-regulated output

Flashing Green and/or Red: the battery is almost fully charged and the VBC is periodically checking the voltage

Green: the battery is fully charged and the VBC is maintaining the battery using the trickle charge mode









With your battery charged, you are ready to use the Vagabond System. When using the Vagabond, it must always be grounded for safety.

Grounding the Vagabond

Unzip the top cover of the bag to expose the CU-150 power converting unit(s). Turn **off** the power switch(es) of the CU-150 unit(s).

If you have the Vagabond V150 System:

- **1.** Remove the wing nut from the grounding screw. When the wing nut is unscrewed, a star washer is revealed. Remove the washer (be careful, these pieces are small and can be tricky to get out if they drop inside the bag).
- 2. Install the green grounding wire by positioning the ring connector around the ground screw. Once the ring connector is seated around the screw, replace the star washer and the wing nut.

If you have the Vagabond V300 System:

- 1. Remove the wing nut from the grounding screw on either of the CU-150 units. When the wing nut is unscrewed, a star washer is revealed. Remove the star washer as well (be careful, these pieces are small and can be tricky to get out if they drop inside the bag). The green wire attaching the two CU-150 units will remain in place.
- 2. Install the green grounding wire by positioning the ring connector around the ground screw, on top of the ring connector from the green wire that connects the two CU-150 units. Once the ring connector from the wire is seated around the screw, replace the star washer and the wing nut.

Both Systems:

- **3.** Next, locate and remove the grounding rod from its bubble wrap bag. As the grounding rod has a sharp end, there is a black plastic sleeve covering this end. Remove the plastic sleeve.
- **4.** Clamp the green grounding wire to the grounding rod, and drive the rod into the ground next to the Vagabond Bag.



1. remove wing nut



2. attach the wire (then replace wing nut)

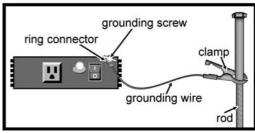


3. clamp to rod

Ways To Properly Ground Your Vagabond System:

It is very important to ensure proper grounding for your safety, and the safety of others working with you, whether you are shooting outdoors or indoors.

The grounding wire (with clamp and ring connector) and grounding rod are supplied with each Vagabond Portable Power System, allowing you to ground the system whenever it is used.





If you are shooting outside:

If you are in an open space out of doors, you can use the supplied grounding wire with clamp and the supplied grounding rod. Simply clamp the grounding wire to the grounding rod, and push or pound the rod into the ground. Moist soil is a more effective ground surface than dry soil, but both will work. Sand is also acceptable, but the quality of the ground connection will be better in moist sand than in dry sand.

If you are shooting outdoors, in an urban environment:

Any conductive object that is embedded in the ground, in a concrete/pavement slab, or sticking out of the sidewalk is likely to be an acceptable ground. For example, a sign post or a lamp post base, a fire hydrant, a wire link or a chain link fence, a manhole cover, a storm drain grate or a steam vent grate are all things commonly found in an urban environment, and these are all likely to be quite acceptable as a grounding point for attaching the grounding wire clamp.

If you are shooting indoors:

You can attach the grounding wire clamp to any nearby metal fixture that is driven into or in contact with the ground, such as a water pipe. If you are shooting architectural work indoors, for example, you can clamp on to a nearby water fountain.

Notes on grounding the Vagabond:

The Vagabond Portable Power System *should always be properly grounded*, using the supplied grounding lead and clamp. Failure to properly ground the Vagabond system may result in a life threatening shock hazard. However, using the Vagabond Portable Power System indoors, without grounding, while not advised for complete safety, can be relatively safe if the following precautions are followed.

The scenario wherein a safety hazard is present would consist of one where:

A. There is a faulty or damaged light unit or other three-wire appliance attached – one where a short circuit exists between the power terminals and the ground

Notes on Grounding the Vagabond continued

- terminal, or metal housing. Such a piece of equipment can be equally dangerous if used on ordinary house wiring if not properly grounded via the three prong power plug, through faulty house wiring or if connected to lamp cord type 2-prong extension cords.
- B. One were to simultaneously touch another piece of equipment that was connected to grounding via a three wire cord set, or by touching a grounded metal object such as a water pipe or gas line. A shock hazard would always exist if the equipment is operated ungrounded on a wet or damp floor, or outdoors on damp ground. Therefore, grounding must always be present when operating in wet locations...with any equipment...whether Vagabond powered or power line connected.

Paul C. Buff, Inc. light units are designed and protected in such a manner that there is no shock hazard present on the camera body or on the remote controls when these are connected to a light unit, as the control and sync connections are isolated. It is possible though for sync difficulties and control anomalies to occur if the light units are not grounded, particularly if operated via two wire extension cords or in buildings with faulty or ungrounded wiring. Therefore, it is relatively safe to operate a Vagabond-powered system ungrounded, in dry indoor situations, as long as the power equipment is not damaged or faulty, and precautions are taken not to touch the lights or stands while touching water pipes or other grounded equipment. If such objects are located within reach of the Vagabond unit, the proper procedure would be to simply clip the Vagabond grounding wire to any such grounded metal objects. The primary thing to remember is that a serious shock hazard only exists when two conditions are present: faulty or damaged equipment operated with improper grounding. Therefore, one should always ascertain the equipment being used is in good condition and has not been dropped or damaged without being inspected. This applies whether or not Vagabond power or house wiring is being used, and also applies to all other electrical equipment designed to be operated via a three prong grounded plug (i.e. many power tools and appliances, audio equipment, etc.).

These suggestions should not be taken as any form of disclaimer regarding our published safety precautions...they should all be followed for absolute safety and we cannot be held responsible for any unexpected consequences which might arise if they are not followed.

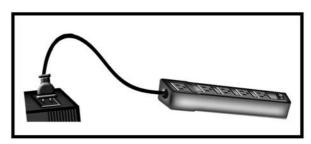
Connecting Flash Units

With the system charged and grounded, you are ready to connect your flash units.

- 1. First, turn your flash unit(s) OFF.
- 2. Using the three-prong AC Power Cord provided with your flash unit, plug the flash unit into the AC Power Outlet located on the top panel of the CU-150

Power Converting Unit. If you are only powering one flash unit, you can plug the unit's power cord directly into the CU-150 (either CU-150 unit in the V300 system). If you are powering multiple flash units, you can connect an ordinary multi-outlet power strip to the CU-150(s), making sure to use only three prong grounding connections, then plug your flash units into the power strip. When attaching multiple flash units to a Vagabond 300 system, optimal recycle rates will result when the amount of wattseconds connected to each of the two CU-150 units is more or less equal.





- 3. Set the modeling lamp(s) on your flash unit(s) to the OFF position. Each CU-150 unit can provide up to 300 watts of total modeling illumination for occasional previewing, but cannot provide modeling and recycling at the same time. Be aware that use of the modeling lamp(s) will drastically shorten the battery life.
- **4.** You are now ready to turn your Vagabond Portable Power System ON. If your Vagabond has been properly charged, the **Ready** Indicator Light on the top of each CU-150 unit will glow green. An orange glow indicates a low battery condition.
- **5.** When the light glows **green**, you can turn your flash unit(s) ON, and begin shooting.

Testing the System

- 1. Set one of the flash units to a low power setting with the modeling lamp OFF, then switch this flash unit ON. You should hear a quick vibrating type noise coming from the Vagabond CU-150 as the flash unit charges up, then the ready light on the flash unit should light indicating the flash is ready to fire.
- **2.** Press the TEST FLASH button on this flash unit. It should flash, then recycle quickly. You will hear the quick vibrating sound as it recycles.
- 3. Increase the flashpower on the flash unit and test fire it again. You will hear the vibrating sound for a longer period of time now because of the increased recycle time. If the flash unit has a fan, you should hear the fan slow down during recycle, then speed up as the unit approaches the ready state.

Testing the System continued

Now, turn on all of the flash units connected to the Vagabond and set them all for Full Power. Test fire the system. You should now hear the vibrating sound for a longer time as all the flash units cycle. The length of the recycle time corresponds to the total wattseconds being recycled.

Because of the controlled recycling current, the voltage output of the CU-150 units will lower or "brown out" during each recycle period. This is why the fans slow down; this is normal. Flash units manufactured by Paul C. Buff, Inc. are designed to tolerate such fluctuations in supply voltage, while other brands may not be. Paul C. Buff, Inc. cannot be held liable for any damage resulting from use of the Vagabond system with flash units other than those made by Paul C. Buff, Inc. (AlienBees and White Lightning units).

Using the Vagabond Portable Power System:

Once you have checked out the system and become familiar with it, you can use it pretty much as you would in your studio with AC power, except for the modeling lamps. Keep in mind that a modest amount of power is being drawn from the battery whenever the CU-150 units are switched on, even if the flash units are idle. For this reason, you should develop the habit of switching the CU-150 unit(s) OFF during breaks in your shooting. If you are using the Vagabond V300 system, remember to distribute your flash units more or less equally by wattsecond rating between the two CU-150 units. For example: a 640 Ws unit connected to one CU-150, and two 320 Ws units connected to the other would yield optimum recycle times of about four seconds.

After each shot, you will hear the vibrating sound as the flash units recycle. When about 3/4 of the battery capacity has been used, the CU-150 unit(s) will begin to sound an audible alarm during recycle. At first just a short tone, then a longer tone as you use more of the battery's capacity. When the battery is completely exhausted the CU-150 unit(s) will shut down and sound a continuous low battery sound. It may be possible to get a few more shots by letting the system rest for a few minutes after it has shut down. It is also possible for the CU-150 unit(s) to shut down from overheating, but this is very unlikely because the battery will usually become exhausted before any overheating. In testing, we have fired 200 shots at 1200 Ws each in less than one hour without overheating the unit.

Always Recharge the Battery Promptly. It is extremely important that the battery be recharged as soon as possible after is has been depleted. If the battery is left in a discharged state for long periods of time (days), its ability to hold a charge will be reduced. This is the number one cause of battery failure for all types of rechargeable batteries. The VBC Battery Charger included with your Vagabond system is a "smart" charger designed to give you maximum battery life and ease of charging. The VBC operates from any voltage, from 90 to 270 Vac at 50 or 60 Hz, therefore, it may be operated from power lines anywhere in the world (given the proper plug adapter).

Recharging Your Battery With the VBC Battery Charger:

You will recharge the Vagabond battery following the same steps used when you charged the battery for the first time. You will first locate the VBC and its AC power cord in the Vagabond Bag front left pocket. Next, you will plug the VBC charger's AC power cord into the two-pin appliance receptacle at the end of the VBC housing, and plug the AC Power Cord into an AC outlet. As before, the status indicator LED in the small rectangular window on the VBC housing top should glow green. You will next locate the red and black DC connector pair inside the left hand compartment of the Vagabond's front flap pocket, and connect the VBC to the Vagabond battery charger port. Once connected, the VBC will again glow red, green, or flashing green and/or red. When the LED glows green, the battery is fully charged. Once charged, the Vagabond is ready to be used immediately or stored.

Using a Car Battery or Other External Battery:

The CU-150 converter unit(s) may be operated from any 12 Volt lead acid battery having at least a 5 AH rating. If you plan to use an external battery, you will first need to disconnect the CU-150 unit(s) from the Vagabond battery.

- Gently lift the CU-150 unit out of the Vagabond bag. You will notice that there is a wire running from the CU-150, connected to the internal Vagabond wiring harness. Disconnect the red and black connector pair on the CU-150 from the red and black connector pair inside the bag.
- 2. Plug the CU-150 unit(s) into the cigarette lighter adaptor via the red and black connector pair (the pair will only connect red to red and black to black).
- 3. Plug the cigarette lighter adaptor into your car's cigarette lighter port. Some cars have multiple auxiliary power ports, and you will need to ensure that you are using the actual cigarette lighter port. The auxiliary port that you use must be a 20 amp outlet, as the outlets with smaller amps (for example, a 6 amp cell phone outlet) will not be sufficient.

Because of the car's fusing, you will only be able to connect one CU-150 unit via the cigarette lighter. If you need to connect more than one CU-150 to a car battery you will need to obtain a cord set that connects to the battery with large "jumper cable" type clamps. By running the car's engine periodically, you will be able to shoot as many shots as you like from one, two or even three CU-150 units thus connected.





Storing the Vagabond:

When you are not actively using the Vagabond, it is best to keep the VBC connected to the Vagabond battery charger port and plugged into a source of AC power. This allows the battery to constantly charge while not in use. This keeps the battery fresh using the VBC voltage-regulated trickle charge function. It is important that the battery be maintained using the trickle charger if the Vagabond is idle for long periods of time. Failure to do so will severely shorten the life of the battery. Allowing the battery to charge while not in use will maintain the battery and keep the Vagabond ready for your next shoot. If you intend to store the Vagabond for longer periods of time, first ensure that the battery is completely charged. Once the battery has charged, disconnect the VBC from the Vagabond battery charger port. Unplug the VBC from the AC outlet, and store the VBC and cord set in the front flap pocket. It is important that the VBC is disconnected from the Vagabond battery charger port when the battery is not being charged or maintained by the VBC. Failure to disconnect the VBC when it is not active will deplete the charge in the Vagabond battery. Storing a depleted lead-acid battery without first charging it fully will ruin the battery. If you have purchased an extra battery, please follow these same storing guidelines.

Operating Auxiliary Equipment:

The Vagabond system may also be used as a source of power for small electrical appliances such as fans, televisions, computers, or radios. Each CU-150 unit can supply 150 watts of power continuously, or up to 300 watts for periods of up to about 20 minutes. The CU-150 units are fully protected from overheating, overloading and discharged battery and will automatically shut down if any of these conditions are present. Auxiliary uses, however, should not be attempted simultaneously while recycling flash units from the same CU-150 unit. In the case of a V300 system, though, it is permissible to dedicate one CU-150 unit to auxiliary uses while recycling flash units with the other CU-150. For example, you might choose to continuously operate a wind producing fan and/or a radio from one CU-150 while recycling your flash units from the second CU-150.

Power Consumption of Load in Watts	Minutes of Operation Before Shutdown
50 W	130 minutes +/-
60 W	110 minutes +/-
75 W	85 minutes +/-
100 W	60 minutes +/-
150 W	35 minutes +/-
200 W (V300 only)	22 minutes +/-
300 W (V300 only)	15 minutes +/-

These values represent the typical performance of a fully charged Vagabond powering a constant load. Performance will vary with the type of load, and depends upon power factor, as well as peak current demand.

If you plan to power auxiliary equipment with the Vagabond, you should consult the product's manual and/or check with the product manufacturer to determine the power consumption. For example, a laptop computer (varying loads depending on the mode, screen usage, etc.) may have anywhere from 15 W to 45 W of power consumption. Please note that as the power consumption of the load increases, the efficiency of the Vagabond inverter decreases. Please also note that, as in any Lead Acid battery system, the amount of power available from the battery depends upon operating temperature. Temperatures substantially higher or lower than room temperature will result in less power being delivered from the battery, and shorter operating times than those stated above.

Frequently Asked Questions

We get lots of great questions here, and we do our best to answer them fully and easily. Here are the answers to some FAQ's that can often be easy and fast solutions to your problems or questions about features and use.

If you still have further questions, please contact us. You can call our Toll Free Customer Service Line at *1-800-443-5542*. We are open Monday through Friday, 9:00am to 5:00pm, Central Standard Time. *Thanks for ordering the Vagabond!*

Q: What kind of battery does the Vagabond use?

A: The battery supplied with the Vagabond is a Sealed Lead Acid Battery.

Q: Can I take my Vagabond when I travel by air?

A: Yes. The battery is spill-proof, and has all the necessary approvals to be shipped by UPS, US Mail, and to be transported by airline as checked baggage (Unregulated per DOT 49 CFR 173.159 (d), IATA/ICAO Special Provision A67). When checked in for transport, it must be labeled: "Non-Spillable Battery" for all modes of public transportation, and the label must be visible, so tag the bag, or box it for air travel. Please understand that some airlines may simply refuse to transport any device that contains a lead acid battery, even one conforming to the current regulations, so check with the airline first for any special shipping or packaging requirements.

Q: Does the battery in the Vagabond have a memory? Should I discharge it completely before I charge it up? When should I charge the battery?

A: The lead acid battery does not have a "memory." You do not have to discharge the battery completely before you recharge it. The battery should, however, be recharged after every use. Recharging the battery after every use will extend the life of the battery, and leaving the battery in a discharged condition for longer than 24 hours will begin a process known as "sulfation," which will rob the battery of its useful life.

Q: Is it really important to ground my Vagabond unit?

A: Yes. The grounding rod is provided for your safety, and the Vagabond unit must be properly grounded whenever it is used.

Q: Is there a "right" way to charge my battery? Are there things I must avoid doing?

A: Yes, there is a correct way to charge the battery. You should always charge the battery as soon after each use as is practical. When you first connect the VBC to the red and black Charger Port connections, and plug in the AC power cord, the Status Indicator LED in the corner of the VBC top cover will glow red. This indicates that the battery is charging at its maximum rate. As the battery charging cycle nears completion, the VBC Status Indicator LED will begin to flash. This is normal, and shows that the battery is about 95% charged. You should charge the battery fully, until the VBC Status Indicator LED glows solid green. If the indicator does not change to solid green after more than 12 hours of charging time, it may indicate a problem in the battery/charger system. The most common problem is light sulfation of the battery, which may be alleviated by repeated charge/discharge cycles. If the problem persists, contact our Customer Service Department. Always turn the CU-150 units off when charging the battery. Allowing the CU-150 units to operate while the battery is being fully recharged will cause the VBC to overcharge the battery, and the battery will be destroyed. We do not recommend using the Vagabond to power your lights while simultaneously charging the battery.

Q: Do I need to ground the Vagabond using the ground connection when I charge the battery?

A: No. The ground terminal is only necessary when operating your lights using the Vagabond.

Q: Can I recharge my battery directly from my car battery?

A: Yes! We are pleased to offer a new Vagabond accessory, the VCA Vagabond Battery Charger Car Adaptor that will allow you to charge your Vagabond Battery directly from your car! This item is now available for purchase by phone and online! Please note that the cigarette lighter adaptor supplied with your Vagabond System is different from the VCA Car Adaptor. The supplied cigarette lighter adaptor (that comes with each Vagabond System) is designed to bypass the Vagabond Battery. With this cord, you are using your car's battery power, converted by the CU-150 Power Converting Unit into useable power for your flash units. As this cord connects your car's battery directly to the CU-150, it eliminates the use of the Vagabond Battery, and cannot be used to recharge the Vagabond battery.

Q: How long will my battery last?

A: In normal use, the battery should last for several hundred charge/discharge cycles. Things that will shorten the battery life are high temperatures, overcharging the battery using an external battery charger such as an automotive battery charger, repeated excessive deep discharges, storing the battery in a discharged condition, and extreme physical abuse, such as dropping the battery.

Q: What happens when the battery runs down?

A: As the battery nears depletion, you will hear the CU-150 "beep" when the lights recycle. Near the end of the charge, the LED on the CU-150 will start to change to orange, and the unit will actually shut off, then come back on when the lights are recycling, and, of course, the CU-150 will beep more and longer. When this happens, you must recharge the battery. If you turn the unit off for a few minutes, you may be able to get another half-dozen or more shots out of it, depending on how many lights you are using, and how big the lights are. This is not recommended unless it is a have-to situation, because repeatedly discharging the battery too much will shorten the useful life of the battery.

Q: How long does it take to recharge my battery?

A: Using the VBC Vagabond Battery Charger, it will take about five hours to fully recharge an exhausted battery. This is typical of all lead-acid battery systems when charged at the recommended rate. If the battery is not completely exhausted, the recharge cycle will take less time.

Q: Is it OK if I don't use my Vagabond frequently, and let it sit for a long time?

A: If you are going to let your Vagabond sit idle for a couple of weeks at a time, make sure that the battery is fully charged, and the VBC battery charger is disconnected from the red and black connector pair before you store it. When bringing your Vagabond out of short-term storage, it is a good idea to charge the battery fully before using it; while you don't have to do this, it will help extend the useful life of the battery. If you anticipate storing the Vagabond for longer periods of time, you should keep your battery charger plugged in and operating. The battery charger has a maintenance charge function that will keep your battery fully charged. Storing the battery for extended periods (months) without having the charger plugged in and operating will shorten the useful life of the battery.

Q: Is there a "right" way to use and store an extra battery?

A: Yes. If you purchased a spare Vagabond battery (B15A and "Y" cable) you must charge and maintain it the same as the internal battery. Use the Vagabond VBC, and connect it directly to the red and black DC connectors on the "Y" cable. Charge the extra battery fully, just as you would the Vagabond's internal battery. Recharge it after every use, and be sure that it is fully charged before storing it. For long-term storage, you may decide to purchase an additional VBC to maintain your extra battery. As an alternative, you may periodically use the Vagabond's VBC to fully charge the extra battery during long periods of storage. For example, fully charging the extra battery once a month during long periods of storage, then returning the VBC to its normal use as a maintenance charger for the Vagabond's internal battery will keep both batteries in ready-to-use condition, and extend the useful life of the extra battery.

Troubleshooting

Problem: The CU-150 is completely dead. No indicator light or output. **Possible causes:** The battery was left in a discharged state for a long time and has no charge, or has been damaged and cannot be charged. Try to charge the battery. The red light on the charger should initially come on. Once the battery is fully charged, the green light should come on. Check all the connections to make sure everything is plugged in (see wiring diagram). Check the fuse between the VBC charger and the battery. Check the fuse in the connection from battery to CU-150. If the battery is charged and all connections and fuses are ok, disconnect the CU-150 unit and remove the bottom plate. There is another fuse inside that could have blown. All fuses are 20 amp automotive type readily available at Home Depot, Lowes, K-Mart and other stores.

Problem: The Vagabond battery won't stay charged as long as it did at first. **Possible causes:** The battery was left in a discharged state for a long time and cannot hold a full charge. Replace the battery. Always recharge the battery soon after every use. It is normal for the battery to lose capacity after several hundred cycles.

Problem: In my V300 system, one CU-150 unit recycles faster than the other. **Possible causes:** Check to see if the wattsecond ratings and power settings of the lights connected to one CU-150 are much greater than the lights connected to the other CU-150. They will only recycle at the same rate if they are both cycling the same amount of wattseconds.

Please contact our Technical Services Department if you have any questions or comments regarding the use of, or grounding of, the Vagabond Portable Power System. Our **Toll Free Customer Service Line** is **1-800-443-5542**, and we are here Monday through Friday, from 9:00am until 5:00pm, Central Standard Time. The Vagabond Portable Power System is made by Paul C. Buff, Inc., to provide portable power for both the AlienBees and White Lightning Flash Units.

Satisfaction Guarantee and Warranty

Paul C. Buff, Inc. offers a **60 Day Absolute Satisfaction Guarantee** on the Vagabond Portable Power System. If you are for any reason not satisfied with your purchase, you may return your Vagabond within that 60 days for a complete refund, minus shipping charges. The Vagabond carries a **1 Year Factory Warranty**, limited to repair or replacement only. This warranty does not include the replacement of a battery which has become exhausted. Take care to follow all of the instructions within this manual to insure proper use, and to get the most life out of your battery. The warranty applies to units which have become defective under normal use, as outlined in this manual. Should you experience any problems, call us at **1-800-443-5542**, Monday through Friday, from 9:00am to 5:00pm, Central Standard Time. Thanks!