

## **How many AMPs/Watts can the CIC Powerbox™ provide?**

Each CIC Powerbox™ can supply a continuous amp/watt load of 17 amps of 115-volt AC power (2,000 watts), and can supply an initial amp/watt surge of over 25 amps (up to 4,000 watts max) for AC motor start-up or welder arc start.

Each CIC Powerbox™ is designed to shutdown automatically in the event of a power overload. Testing appliances and equipment with start-up load ratings comparable to the CIC Powerbox™ wattage rating will not damage it. Before use, please verify the power requirements of all tools and appliances to be operated by the CIC Powerbox™. If the power requirements are not known, you can test tools and appliances by individually plugging them in to the CIC Powerbox™ and attempting to operate them.

Where maximum power is required, you can potentially enable the CIC Powerbox™ to provide its maximum power output by operating your vehicle's motor during the work to be performed. This additional vehicle power can only be supplied if the CIC Powerbox™ is correctly installed in the vehicle. This same function can be replicated with the GOBOX by properly connecting the GOBOX's jump start booster cables to the battery terminals of a running vehicle. Please make certain that you abide all local, state, and federal "no idle laws" if attempting this process.

For further information on the CIC Powerbox™ AC power system and applicable concepts like "peak loads" and "continuous loads," please review pages 11-13 of the Owner's Manual.

## **How many hours of power can the CIC Powerbox™ supply on a full charge?**

The actual length of work-time of the CIC Powerbox™ is a function of several variables, including the age and condition of the battery and the power demand being placed on the battery by the equipment being operated.

A new and fully charged battery will provide the following work times:\*

GOBOX: 2 hour run time

Crossover and Chest models:

Standard Battery: 4 hour run time

Contractor Battery: 6 hour run time

When nearing the maximum work run time of any CIC Powerbox™ battery system, simply start the vehicle in which the unit is installed to continue working while simultaneously recharging the battery system.

For further information on the CIC Powerbox™ internal battery system, please review pages 10 & 21 of the Owner's Manual.

\*Work Run Times are based on an estimation of the average power usage of most job sites. Depending on variations in the actual work being performed, CIC Powerbox™ batteries may provide a longer or shorter run time than specified by the above listed work times. Anytime a properly installed CIC Powerbox™ fails to provide power, simply start the vehicle and restart the CIC Powerbox™ system to continue working. If for any reason your systems fail to work, contact CIC POWERBOX LLC immediately by phone or through our website.

### **How long will the CIC Powerbox™ battery last in the field?**

Manufacturer ratings estimate a 15-year lifespan for each CIC Powerbox™ battery system under optimal controlled conditions and use.

Because of environmental extremes, power use cycling, and re-charging variables in the field, CIC Powerbox™ customers should expect 5 to 10 years of life from each CIC Powerbox™ battery system.

Proper maintenance and care of the CIC Powerbox™ will support a longer battery life.

For further information on the battery system, including care and maintenance, please review pages 9-10 & 18-19 of the Owner's Manual.

### **How many batteries are in each CIC Powerbox™?**

Each CIC Powerbox™ uses only one deep-cycle gel cell 12 volt battery system.

For further information on the internal battery systems used in CIC Powerbox™ products, please review page 21 of the Owner's Manual.

Note: Future high voltage CIC Powerbox™ systems designed to jump start aircraft and heavy equipment will use more than one battery system.

### **How does the CIC Powerbox™ recharge and how long does it take?**

Each CIC Powerbox™ product can be recharged using either DC or AC electrical power.

Both the Crossover and Chest models are normally wired to a 12-volt vehicle electrical system and when properly installed will automatically connect to and be recharged by the vehicle's electrical system while the vehicle is operating. Direct vehicle battery connection: 1 hour of power = approximately 20-40 minutes of charging depending on the vehicle's alternator system and the amperage being provided (driving vs. idling).

The Crossover and Chest models can also be recharged using a smart charging system supplied by CIC POWERBOX™ LLC. When the smart charging system is plugged into any properly grounded 110v wall outlet and set to recharge the battery system, the CIC Powerbox™ will normally be fully charged overnight (approximately 10 hours).

The GOBOX Powerbox can be recharged 4 different ways: (all recharge times shown are based on a low battery)

1. Plugging in the AC power cord from the on board smart charger to any standard AC wall power outlet. The GOBOX will normally be charged overnight and ready to provide power as needed.
2. Plugging in the 12 volt DC male to male cigarette lighter plug into the GOBOX cigarette lighter socket and then plugging the other end into a 12 volt DC cigarette lighter socket on a

car, truck, ATV or other vehicle or device that offers continuous 12 volt DC power. When connected to a normal construction truck style vehicle, the GOBOX will typically recharge fully within 5 – 6 hours of vehicle run time. Please be aware that the vehicle's engine needs to be operated so as not to deplete the vehicle's battery during the recharging process.

3. The GOBOX Jump Start Booster Cables can also be used to recharge the GOBOX battery system by properly connecting them from the GOBOX to the battery terminals of a vehicle's battery. Please make sure that the vehicle's engine is operating properly and continue to operate the engine until the GOBOX is properly recharged. In this configuration, the GOBOX will continue to provide power to the user and will recharge from any excess energy produced by the alternator system of the engine. Time to recharge will vary depending on the amount of power being used while in this configuration.
4. An optional 'pig tail' cable with a quick disconnect connector system can be supplied by CIC POWERBOX LLC that can be directly connected to the vehicle's battery system and the cabling installed in the vehicle to a GOBOX attachment point inside or outside of the vehicle. Typically run to the rear or trunk area of a vehicle, the pig tail cable can be connected to the GOBOX, which would enable continual charging of the GOBOX from the vehicle's battery. The GOBOX would provide continual power while the vehicle was operating in this configuration. Recharge time will vary depending on the amount of power being supplied to the user.

For further information on charging CIC Powerbox™ products, please review page 17 of the Owner's Manual.

### **Can the CIC Powerbox™ recharge itself?**

Although CIC Powerbox™ products can power both built-in and external charging systems, it is not possible to recharge a CIC Powerbox™ using its own AC or DC power.

For further information on charging CIC Powerbox™ products, please review page 17 of the Owner's Manual.

### **Is the CIC Powerbox™ compatible with solar panels?**

All CIC Powerbox™ products can be recharged using a solar panel if the appropriate connectors are used.

A blocking diode may be required with solar panel systems for proper solar panel connections. Please contact CIC POWERBOX LLC before attempting to connect a solar panel to a CIC Powerbox™ product.

Note: CIC POWERBOX LLC does not currently offer any solar panel charging options as upgrades for CIC Powerbox™ products.

### **How long can the CIC Powerbox™ battery retain a charge?**

At a full charge, each CIC Powerbox™ battery has a storage shelf life of up to 24 months without additional charging and without risk of degradation to the battery system. Storage must be climate controlled at optimum temperatures for maximum storage life.

Never store a CIC Powerbox™ battery system at a low voltage.

CIC POWERBOX LLC strongly encourages CIC Powerbox™ customers to charge their product(s) to a full state-of-charge at least every 12 months, if the unit is not in use.

For further information on the charging specifications for CIC Powerbox™ products, please review pages 10, 17 & 18 of the Owner's Manual.

### **How much air pressure does the CIC Powerbox™ supply?**

Crossover Powerbox: 125 psi @ 4 cfm with a built-in 3-gallon reserve tank.

Chest Powerbox: 125 psi @ 4 cfm with a built-in 2-gallon reserve tank.

GoBox: The GoBox is supplied with a removable on-demand air compressor system that provides 150 psi @ 2.11 cfm. The optional heavy duty air system provides 150 psi @ 2.15 cfm and incorporates a quick connect coupler for easy hose attachment.

Both the Crossover and Chest model Powerboxes feature a second auxiliary air coupler that provides a connection to add a spare air tank for additional air power and to expel any water condensation from the built-in reserve tank. CIC POWERBOX, LLC recommends spare air tank sizes of 3 to 5 gallons of additional air capacity. Never use a spare air tank that exceeds 10 gallons in capacity and allow ample cooling time for the air pump system during high duty cycle operations.

For further information on the CIC Powerbox™ air power system, please review pages 14 & 22 of the Owner's Manual.

### **Will the CIC Powerbox™ air tank rust out?**

The CIC Powerbox™ Crossover and Chest models both utilize a non-rusting internal air reserve.

For further information on the internal air system and condensation dispersion, please review pages 14 & 26 of the Owner's Manual.

### **How is the CIC Powerbox™ installed in a vehicle?**

CIC Powerbox™ products are only compatible with 12 volt vehicle electrical systems.

Mounting:

- The Crossover unit is typically mounted on top of the bed rails of a pickup truck affixed by using the supplied j-bolts or drill screws.

- The Chest unit can be directly bolted to a vehicle, such as a flatbed truck, service truck, or inside of a van or SUV, using the two supplied L bracket lugs on both rear corners of the chest chassis.
- The GOBOX, while completely portable, can also be mounted to a vehicle using bolts or straps.\*

#### Wiring:

Once properly mounted to the vehicle, the Crossover and Chest units connect to the vehicle's electrical system through 3 wires:

1. Positive 2 AWG wire that runs from the CIC Powerbox™ to the positive terminal of the vehicle's battery. This connection is protected by a fusible link which provides a fail-safe to separate both the vehicle and CIC Powerbox™ electrical systems from one another in the event of system failure.
2. Negative 2 AWG wire that runs from the CIC Powerbox™ to either the chassis of the vehicle or to the negative terminal of the vehicle's battery.
3. Control sensor 18 AWG wire which runs from the CIC Powerbox™ to an appropriate fuse in the fuse box of the vehicle. This sensor wire notifies the CIC Powerbox™ of an operating engine.
  - Note: Some CIC Powerbox™ models may feature our voltage-reading technology, which eliminates the need for the auxiliary wire and only requires a positive connection to the positive vehicle battery terminal and negative ground connection to the vehicle chassis or to the negative battery terminal.

Quick disconnect options are available for installation, which provides a reconnectable link using 2 Anderson Connectors that connect at the base and rear of the CIC Powerbox™. The quick disconnect option is necessary for direct links from a vehicle to the GOBOX model.

For further information on how to install a CIC Powerbox™, please review the Installation Manual.

\*Mounting brackets for the GOBOX model are only available with a special order.

Note: The improper installation of a CIC Powerbox™ product with any system can be dangerous, result in injury, death, property damage, and/or the void of the manufacturer's warranty and should be handled with extreme caution.

#### **Do CIC Powerbox™ products automatically disconnect from the vehicle when the vehicle is turned off?**

Both the Crossover and Chest models have a built-in sensor/solenoid system, which when installed correctly, allows the units to automatically connect and disconnect from the vehicle's electronic system when the vehicle is running and when it is turned off, respectively.

The GOBOX can also be connected to any 12-volt vehicle system, but some models do not feature a sensor/solenoid system and must be manually connected and disconnected using the quick disconnect cable option.

For further information on how CIC Powerbox™ products connect to a vehicle's system, please review pages 22-23 of the Owner's Manual as well as the Installation Manual.

### **Is an alternator upgrade required to accommodate a CIC Powerbox™/Will CIC Powerbox™ products damage a vehicle's alternator?**

The CIC Powerbox™ battery system does not require an alternator upgrade nor does it damage the vehicle's alternator.

The vehicle's alternator system only supplies a charge to the CIC Powerbox™ when it senses that the vehicle battery is below normal regulated voltage. If the CIC Powerbox™ battery is low and needs to be recharged when the CIC Powerbox™ connects, either automatically or directly, to the electrical system of the vehicle, the vehicle's battery will begin charging the CIC Powerbox™ battery, thus lowering the vehicle battery's voltage. This lower voltage is sensed by the alternator, causing the alternator system to begin charging the whole battery system, now comprised of both the vehicle battery and the CIC Powerbox™ battery. Both batteries will continue to attempt to balance and charge until both battery systems reach a full state of charge. Once a normal regulated voltage is reached, the alternator will cease supplying power to the battery system.

CIC Powerbox™ products have been working in the field for over ten years with the same battery systems still in operation. To date, there are no reported issues of a CIC Powerbox™ product causing damage to a vehicle's alternator.

For further information on how CIC Powerbox™ products connect to a vehicle, please review the Installation Manual.

### **How much space is left in each CIC Powerbox™ for storage?**

Crossover without RockBox stereo system: ~ 7 cubic ft (ROCKBOX STEREO SYSTEM takes up ~ 1 cubic foot)

Chest: ~ 4 cubic feet

GOBOX: ~ 1 cubic foot

For further information on CIC Powerbox™ dimensions, please review CIC Powerbox™ Compatibility on our website [www.cicpowerbox.com](http://www.cicpowerbox.com)

Note: These figures are based on approximations of practical storage space inside of each product when empty.

### **What type of security is provided to protect the CIC Powerbox™?**

Each CIC Powerbox™ product has a locking mechanism(s) that is accessible through the set of keys provided with each unit.

Each Crossover unit features a 1,500 lb. security lid with lock bar.

For an additional cost, high security options can be specially ordered, such as electronic burglar alarms and electronic tracking systems.

For further information on the security features of CIC Powerbox™ products, please review pages 20, 22 & 23 of the Owner's Manual or contact us at [www.cicpowerbox.com](http://www.cicpowerbox.com)

### **How much does each CIC Powerbox™ weigh?**

Standard Crossover:	270 lbs
Contractor Crossover:	320 lbs
Standard Chest:	240 lbs
Contractor Chest:	290 lbs
GoBox:	92 lbs

Note: These are approximate estimations that do not include the weight of additional accessories.

### **What are the operating temperatures for a CIC Powerbox™?**

For peak AC and air power efficiency, the ambient air temperature should be between 50° F and 80° F. Each CIC Powerbox™ has built-in fan systems to aid with cooling the internal systems as well as thermal cut-off features that automatically shut down the CIC Powerbox™ if the internal temperature exceeds safe design parameters.

Jumpstart capability is operational from -40° F up to 140° F.

For further information on temperature conditions, please review page 19 of the Owner's Manual.

### **Are CIC Powerbox™ products water-proof?**

Although each CIC Powerbox™ product is water resistant when securely closed, none of the products produced by CIC POWERBOX LLC are waterproof and a CIC Powerbox™ should never be submerged in any liquid or the internal structure exposed to any precipitation or liquid chemicals.

For further information on liquid resistance, please review page 19 of the Owner's Manual.

### **What are the differences between the three styles of CIC Powerbox™?**

All CIC Powerbox™ products provide 115v of AC power peak at 4,000 watts; 2,000 watts continuous; and 2,100 cold cranking amps.

Listed below are the unique characteristics of each style:

Crossover:

- Saddle mounts for bed-rails.
- Built-in 15 amp smart charger.
- 1,500 lbs security lid with lock bar.
- 3-gallon air reserve.
- 2 external AC outlets.
- External Anderson Connector for Jump Start
- Dual independent locking mechanisms.
- RockBox stereo system compatibility.
- ~ 7 cubic feet of storage

#### Chest:

- “No-Show” below bed-rail design, for in-the-bed mounting of a pickup truck.
- Flatbed truck and service truck mountable.
- 2-gallon air reserve.
- Internal Anderson Connector for Jump Start
- Internal 6 outlet bus-bar.
- Smart charger supplied separately as an option.
- One latch locking mechanism.
- ~ 4 cubic feet of storage

#### GOBOX:

- Completely portable design.
- Built-in 5 amp / float smart charger.
- On-demand, removable air compressor.
- 12 volt DC cigarette lighter socket.
- USB power-only function with two USB ports.
- ~ 1 cubic foot of storage

For further information on the differences associated with each CIC Powerbox™ product, please review the “POWERBOXES” section of [www.cicpowerbox.com](http://www.cicpowerbox.com) or visit [store.cicpowerbox.com](http://store.cicpowerbox.com).

#### **Are CIC Powerbox™ products available with built-in fuel tanks?**

At this time, CIC POWERBOX LLC does not manufacture any products with built-in or mounted fuel tanks.

Some fuel tank designs may be able to accommodate a CIC Powerbox™ with little or no modifications to either the fuel tank, vehicle, or CIC Powerbox™ product.

For further information on fuel tank compatibility, please review the “COMPATIBILITY” section of [www.cicpowerbox.com](http://www.cicpowerbox.com).

#### **Are custom boxes available through CIC POWERBOX™ LLC?**

CIC POWERBOX LLC currently offers three variations of portable power solutions: the Crossover, Chest, and GOBOX.



Upgrades include: larger-capacity batteries (Crossover & Chest only), a Rockbox Stereo System (Crossover only), a black powder-coat finish, a quick disconnect option, and additional tools & accessories that can be purchased with each style.

Other than these options, no custom boxes are currently offered by CIC POWERBOX™ LLC.

For further information on the upgrades associated with each CIC Powerbox™, please visit [store.cicpowerbox.com](http://store.cicpowerbox.com).

Note: Fleet/Multi-unit orders of more than 25 units may be eligible for customization. Please call 802-468-7697 or email [info@cicpowerbox.com](mailto:info@cicpowerbox.com).

### **How do I replace defective items in my CIC Powerbox™?**

Modifying and/or dismantling a CIC Powerbox™ product is potentially dangerous, strictly prohibited, and results in the immediately void of the manufacturer's warranty.

If any part of the CIC Powerbox™ becomes defective, please contact your CIC Powerbox™ distributor or CIC POWERBOX LLC by calling 802-468-7697 or sending an email to [info@cicpowerbox.com](mailto:info@cicpowerbox.com).

For further information on the CIC Powerbox™ maintenance and warranty, please review pages 11-13 & 29 of the Owner's Manual.

### **What type of warranty is provided by CIC POWERBOX™ LLC?**

Each CIC Powerbox™ comes with a limited 90-day warranty, which covers the CIC Powerbox™ and all of its internal components, as well as a 1 year warranty on the internal battery system.

Additional warranty options are available for purchase.

For more information on the CIC Powerbox™ warranty, please review page 29 of the Owner's Manual.