



# AXTRA



# USER MANUAL

Model: AX-BC36

**READ AND UNDERSTAND ALL SAFETY INFORMATION BEFORE USING THIS PRODUCT. Failure to follow these safety instructions may result in ELECTRICAL SHOCK, EXPLOSION, FIRE, which may result in a SERIOUS INJURY, DEATH, or PROPERTY DAMAGE.**

**Electrical Shock.** Product is an electrical device that can shock and cause serious injury. Do not cut power cords. Do not submerge in water or get wet.

**Explosion.** Unmonitored, incompatible, or damaged batteries can explode if used with product. Do not leave product unattended while in use. Do not attempt to jump start a damaged or frozen battery. Use product only with batteries of recommended voltage. Operate product in well ventilated areas.

**Fire.** Product is an electrical device that emits heat and is capable of causing burns. Do not cover product. Do not smoke or use any source of electrical spark or fire when operating product. Keep product away from combustible materials.

**Eye Injury.** Wear eye protection when operating product. Batteries can explode and cause flying debris. Battery acid can cause eye and skin irritation. In the case of contamination of eyes or skin, flush affected area with running clean water and contact poison control immediately.

**Explosive Gases.** Working in the vicinity of a lead-acid is dangerous. Batteries generate explosive gases during normal battery operation. To reduce risk of battery explosion, follow all safety information instructions and those published by the battery manufacturer and manufacturer of any equipment intended to be used in the vicinity of battery. Review cautionary markings on these products and on engine.

## Important Safety Warnings

AXTRA car battery charger represents some of the most innovative and advanced technology on the market, making each charge simple and easy. It is quite possibly the safest and most efficient charger you will ever use. Smart battery charger is designed for charging all types of 6V & 12V lead-acid batteries, including Wet (Flooded), Gel, MF (Maintenance-Free), CA (Calcium), EFB (Enhanced Flooded Battery), and AGM (Absorption Glass Mat) batteries. It is suitable for charging battery capacities up to 120 Amp-Hours and maintaining all battery sizes.

**Proposition 65.** Battery posts, terminals, and related accessories contain chemicals, including lead. These materials are known to the State of California to cause cancer and birth defects and other reproductive harm

**Personal Precaution.** Only use product as intended. Someone should be within range of your voice or close enough to come to your aid in case of emergency. Have a supply of clean water and soap nearby in the case of battery acid contamination. Wear complete eye protection and protective clothing while working near a battery. Always wash hands after handling batteries and related materials. Do not handle or wear any metal objects when working with batteries including; tools, watches or jewelry. If metal is dropped onto battery, it may spark or create a short circuit resulting in electrical shock, fire, explosion which may result in injury, death or property damage.

**Choking Hazard.** Accessories may present a choking hazard to children. Do not leave children unattended with product or any accessory. The product is not a toy.

**Handling.** Handle product with care. The product can become damaged if impacted. Do not use a damaged product, including, but not limited to, cracks to the casing or damaged cables. Do not use product with a damaged power cord. Humidity and liquids may damage product. Do not handle product or any electrical components near any liquid. Store and operate product in dry locations. Do not operate product if it becomes wet. If product is already operating and becomes wet, disconnect it from the battery and discontinue use immediately. Do not disconnect the product by pulling on the cables.

**Modifications.** Do not attempt to alter, modify or repair any part of the product. Disassembling product may cause injury, death or damage to property. If product becomes damaged, malfunctions or comes in contact with any liquid, discontinue use, and contact AXTRA customer support. Any modifications to the product will void your warranty.

**Location.** Prevent battery acid from coming in contact with the product. Do not operate the product in a closed-in area or an area with restricted ventilation. Do not set a battery on top of product. Position cable leads to avoid accidental damage by moving vehicle parts (including hoods and doors), moving engine parts (including fan blades, belts, and pulleys), or what could become a hazard that may cause injury or death.

**Operating Temperature.** This product is designed to work in ambient temperatures between -4° F and 104° F (-20° C and 40° C). Do not operate outside of temperature ranges. Do not charge a frozen battery. Discontinue use of product immediately if the battery becomes excessively warm. Storage. Do not use or store your product in areas with high concentrations of dust or airborne materials. Store your product on flat; secure surfaces so it's not prone to falling. Store your product in a dry location. The storage temperature is -20°C - 25°C (average temperature). Never exceed 80°C under any condition.

**Compatibility.** The product is only compatible with 6V & 12-volt Lead-Acid, AGM batteries. Do not attempt to use product with any other type of battery. Charging other Important Safety Warnings and battery chemistries may result in injury, death or property damage. Contact the battery manufacturer prior to attempting to charge the battery. Do not charge a battery if you are unsure of the battery's specific chemistry or voltage.



## How To Use

### To change and select mode:

There is a 3 to 5 seconds interval to change the mode after you connect the battery clamps to the battery only when the battery is fully charged. Due to safety feature, we designed to lock the mode button once the battery is fully charged to keep the battery in maintenance mode. Please press the "Mode" button under 5 seconds when it is connected to the battery. You can always change the mode during charging process for battery that is partially charge.

### LED power indicator light:

The Charger will continuously monitor the battery voltage to determine if a maintenance charge should be initiated. If the terminal voltage falls below 6.4V (6V) and 12.8V (12V), the charger will start the maintenance cycle until voltage reaches 7.2V (6V) and 14.4V (12V) and then it discontinues to the charge cycle. The cycle between trickle and maintenance is repeated indefinitely to keep the battery at full charge, without overcharging. The battery charger can be left connected indefinitely. All 4 LEDs lights (25%, 50%, 75%, 100%) will be illuminated constantly to maintain the battery for all-seasons.

**Standby:** In Standby mode, the charger is not charging or providing any power to the battery. Once the battery clamps is removed from the battery, standby mode will be activated to avoid electrical shock. Energy Save is activated during this mode, drawing microscopic power from the electrical outlet. When in Standby, the green Standby LED will illuminate.

**Error** : light will illuminate when an error condition or reverse polarity is present.

Mode	Charging Application
12V NORM	For charging 12V Flooded, GEL, Maintenance-free batteries.
	<b>14.4V/3.6A   14Ah - 120Ah</b>
12V NORM COLD/AGM	For charging 12V AGM batteries or batteries in cold temperatures below 32°F (0°C).
	<b>14.7V/3.6A   14Ah - 120Ah</b>
12V NORM [SMALL]	For charging 12V Flooded, GEL, Maintenance-free batteries.
	<b>14.4V/0.9A   1.2Ah - 14Ah</b>
12V NORM COLD/AGM [SMALL]	For charging 12V AGM batteries or batteries in cold temperatures below 32°F (0°C).
	<b>14.7V/0.9A   1.2Ah - 14Ah</b>
6V NORM	For charging 6V Flooded, GEL, Maintenance-free batteries.
	<b>7.2V/3.6A   14Ah - 120Ah</b>
6V NORM COLD/AGM	For charging 6V AGM batteries or batteries in cold temperatures below 32°F (0°C).
	<b>7.4V/3.6A   14Ah - 120Ah</b>
6V NORM [SMALL]	For charging 6V Flooded, GEL, Maintenance-free batteries.
	<b>7.2V/0.9A   1.2Ah - 14Ah</b>
6V NORM COLD/AGM [SMALL]	For charging 6V AGM batteries or batteries in cold temperatures below 32°F (0°C).
	<b>7.4V/0.9A   1.2Ah - 14Ah</b>

## For 6V/12V and 3.6A

### Use for (14-120AH) Batteries

**6V NORM (3.6A):** For charging 6-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 6V LED will illuminate.

### Use for (14-120AH) Batteries – Recommend to use in Cold Weather

**6V COLD/AGM (3.6A):** For charging 6-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 6V LED will illuminate. For charging batteries in cold temperatures below 32°F (0°C).

### Use for (14-120AH) Batteries

**12V NORM (3.6A):** For charging 12-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 12V LED will illuminate.

## **Use for (14-120AH) Batteries – Recommend to use in Cold Weather**

**12V COLD/AGM (3.6A):** For charging 12-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 12V LED will illuminate. For charging batteries in cold temperatures below 32°F (0°C).

## **For 6V/12V and 0.9A**

### **Use for (1.2-14AH) Batteries**

**6V NORM (0.9A):** For charging 6-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 6V LED will illuminate.

### **Use for (1.2-14AH) Batteries – Recommend to use in Cold Weather**

**6V COLD/AGM (0.9A):** For charging 6-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 6V LED will illuminate. For charging batteries in cold temperatures below 32°F (0°C).

### **Use for (1.2-14AH) Batteries**

**12V NORM (0.9A):** For charging 12-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 12V LED will illuminate.

### **Use for (1.2-14AH) Batteries – Recommend to use in Cold Weather**

**12V COLD/AGM (0.9A):** For charging 12-volt Wet Cell, Gel Cell, Enhanced Flooded, Maintenance-Free and Calcium batteries. When selected, the 12V LED will illuminate. For charging batteries in cold temperatures below 32°F (0°C).

## Connecting to the Battery with Battery Clamps

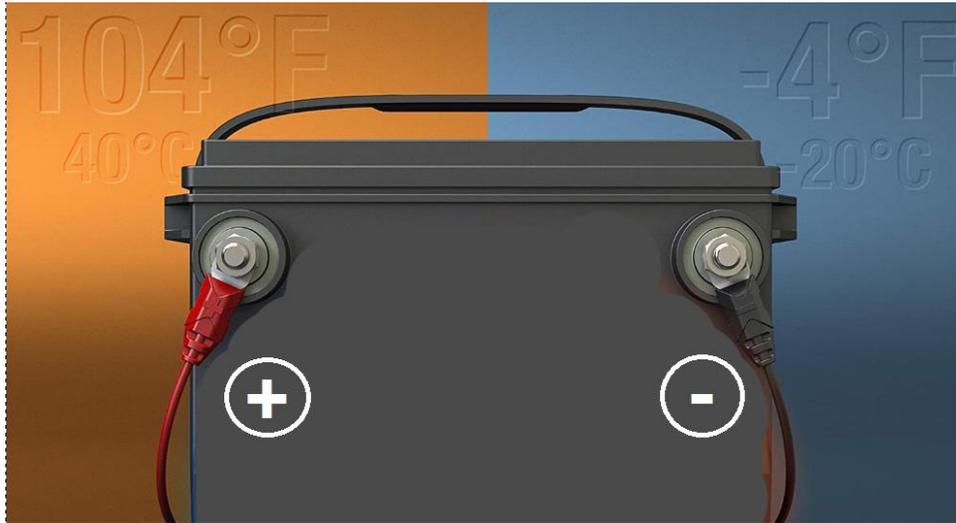
Do not connect the AC power plug until all other connections are made. Identify the correct polarity of the battery terminals on the battery. The positive battery terminal is typically marked by these letters or symbol (POS,P,+). The negative battery terminal is typically marked by these letters or symbol (NEG,N,-). Do not make any connections to the carburetor, fuel lines, or thin, sheet metal parts. The below instructions are for a negative ground system (most common). If your vehicle is a positive ground system (very uncommon), follow the below instructions in reverse order.



1. Connect the positive (red) battery clamp or eyelet terminal connector to the positive (POS,P,+) battery terminal.
2. Connect the negative (black) battery clamp or eyelet terminal connector to the negative (NEG,N,-) battery terminal or vehicle chassis.
3. Connect the battery charger into a suitable electrical outlet. Do not face the battery when making this connection.
4. When disconnecting the battery charger, disconnect in the reverse sequence, removing the negative first (or positive first for positive ground systems).

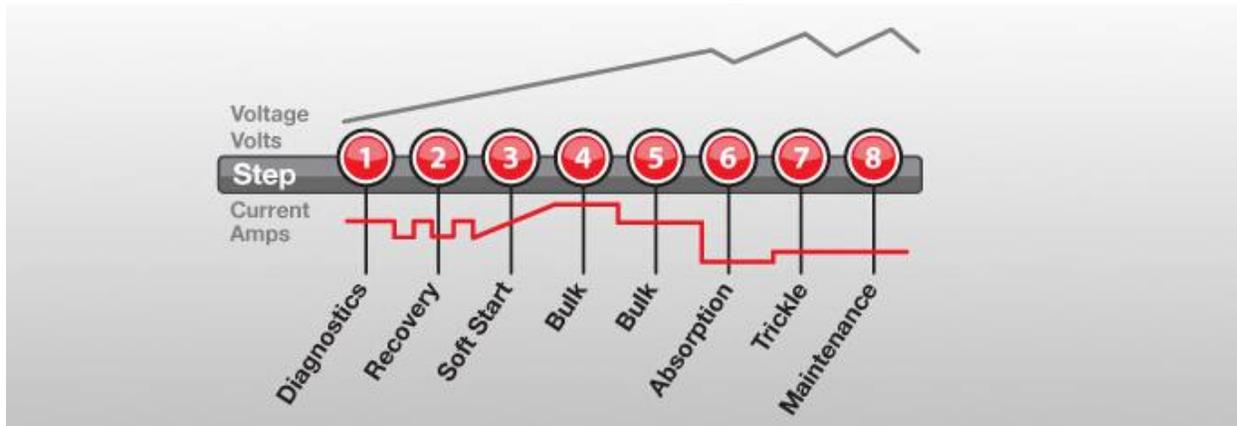
## Quick-Connect O-Ring Terminal

The O-ring connectors permanently attach to the battery, providing easy access to quickly connect the charger to your battery. This application is appropriate for motorcycles, lawn tractors, ATVs and snowmobiles.



1. To permanently attach to a battery, loosen and remove each nut from the bolt at the battery terminal.
2. Connect the red (+) POSITIVE connector ring to the (+) POSITIVE battery terminal.
3. Connect the black (-) NEGATIVE connector ring to the (-) NEGATIVE battery terminal.
4. Replace and tighten the nuts to secure.
5. Connect the cable to the end of the charger output cord. Take care to keep the wires and plug away from metal and moving parts.
6. Plug the charger power cord into a grounded electrical wall outlet.

## 8-Stage Charging Steps:



### Step 1: Diagnostics

Checks the battery voltage to make sure battery connections are good and the battery is in a stable condition before beginning the charge process.

### Step 2: Recovery

Initializes the Recovery process, if needed, the charger will perform deeply discharged or sulfated (desolations) batteries by pulsing small amounts of current.

### Step 3: Soft Start

Begins bulk charging process with a gentle (soft) charge.

### Step 4-5: Bulk

The bulk charging process continues using both a High Rate or Medium Rate charge so that the battery will return 80% capacity, and it will indicate by 25%, 50%, 75% charging level.

### Step 6: Absorption

It brings the charging level to 90%, the battery charger will deliver small amounts of current to provide a safe, efficient charge and limit battery gassing.

### Step 7: Trickle

Battery is fully charged and ready to use, indicated by the 100% Charge LED illuminate solid Green. In this step, the battery charger will only deliver enough current to keep the battery in full charge. If the battery sends signal to the charger that requires more current, then the battery charger will switch to maintenance stage.

### Step 8: Maintenance

The Charger will continuously monitor the battery voltage to determine if a maintenance charge should be initiated. If the terminal voltage falls below 6.4V (6V) and 12.8V (12V), the charger will start the maintenance cycle until voltage reaches 7.2V (6V) and 14.4V

(12V) and then it discontinues to the charge cycle. The cycle between trickle and maintenance is repeated indefinitely to keep the battery at full charge, without overcharging. The battery charger can be left connected indefinitely.

## Technical Specifications

**Input Voltage AC:** 100-240V, 50/60Hz

**Working Voltage AC:** 100-240V, 50/60Hz

**Output Power:** 60W Max

**Charging Voltage:** Various

**Charging Current:** 6V/12V (3.6A), 6V/12V (0.9A)

**Low-Voltage Detection:** 2V

**Ambient Temperature:** -20°C to +40°C

**Type of Batteries:** 6V & 12V

**Battery Chemistries:** Wet, Gel, MF, CA, AGM

### FAQ:

**How to know if the battery charger is working?**

After the battery clamps / O-ring is hooked up to the battery, the LED power indicator light will start blinking or solid, and it depends on the juice of the battery.

**what are some scenarios that might cause it to malfunction?**

Your car battery may be too old and the acid in the battery that are never fully recharged can also suffer from acid stratification.

**Can you hook up the battery clamps directly to battery terminal without removing the battery?**

Yes, you may simply hook up the battery clamps or O-ring directly to the battery. Friendly reminder: some newer vehicles have start/stop engine feature, they have two batteries, (main battery and auxiliary battery), we suggest removing the battery terminals before placing the battery charger to the battery.

**Is it safe to leave the battery charger maintainer for 24/7?**

Yes. Please refer to Step 7 Trickle charge and Step 8 Maintenance.

**Can this battery charger use to charge generator battery?**

Yes, Battery Compatibilities Works with all types of 6-volt and 12-volt lead-acid batteries.

### **Can you charge a dead battery or the voltage is too low?**

No, if your battery is low in voltage, and your car wouldn't start at all, you may need to jump start the battery first then use this battery charger to recharge the battery. You would need a 400 amp jump start to jump the battery first in order to recharge the battery. 3.6-amp battery charger is not enough amp to charge up the battery.

### **The battery charger keeps changing from error light, standby and 25% charging light. Do I have a bad battery?**

Yes, your battery voltage is too low to detect by the charger, please use a jumper cables or portable jump starter to jump start the battery, then you can use this battery charger to keep the battery charged.

### **Here are some bad battery symptoms:**

- During an engine crank, you won't hear the engine turning over
- You don't see the instrument panel or dashboard lights turn on
- It's hard to start your car on a cold morning
- Flickering or non-functioning headlights
- The dome light won't turn on
- Your car displays the battery symbol hinting at your battery troubles

### **1-year warranty for quality-related issues**

If your product is having a manufacturer defect, we want to improve your experience by giving you a replacement or refund. For a minimum of 1 after the date of purchase, we promise to cover any manufacturer defects your product may have. For specific warranty terms, please refer to your product listing page or product operation manual.

### **Our business standard:**

Your satisfaction is our priority. Our commitment to clients is to provide exceptional, reliable service at competitive prices. Please do not hesitate to contact us if you have any questions or concerns.

## **Customer Support**

**Support Email: [info@axtraus.com](mailto:info@axtraus.com)**