



15A Battery Charger and Maintainer



WP ITM. AC532713 User Manual

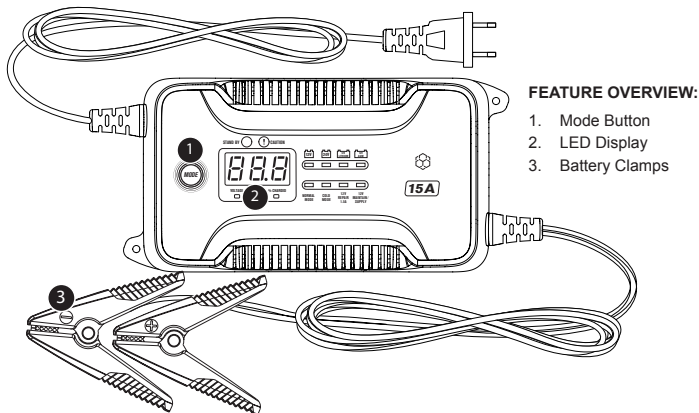
IMPORTANT!

READ THE ENTIRE INSTRUCTION MANUAL CAREFULLY AND MAKE SURE THAT YOU FULLY UNDERSTAND IT BEFORE YOU USE THE EQUIPMENT.

KEEP THE MANUAL FOR FUTURE REFERENCE.



TECHNICAL SPECIFICATIONS:

Input:	100-120VAC, 50-60Hz, 300W
Output :	12.9VDC 15.0A, 25.6V DC 7.5A
Charging Voltage:	12VDC, 24VDC
Charging Current:	15A (12VDC), 7.5A (24VDC)
Reverse Current:	<5mA
Low Voltage Detection:	3.75V (12VDC), 15.5V (24VDC)*
Low Voltage Detection (Push Mode):	0.5V (12VDC)
Operating Temperature:	32°F - 104°F / 0°C - 40°C
Storage Temperature:	-4°F - 140°F / -20°C - 60°C
Battery Types:	Standard (Wet Cell / Flooded, SLA & Maintenance Free) AGM, GEL, Lithium-ion (incl. LiFePO ₄)
Battery Capacity:	Up to 250Ah 12V batteries, maintains all battery sizes. Up to 120Ah 24V Lead Acid Battery, maintains all battery sizes.
IP Rating:	IP68 Water-resistant
Product Dimensions:	8 x 4.5 x 2.4 inch (203 x 114 x 60 mm) (charger only)
Product Weight:	3.6 lb (1657 g)



FEATURE OVERVIEW:

1. Mode Button
2. LED Display
3. Battery Clamps

* If battery voltage detected at below 3.75V on a 12V battery, the STAND BY LED  & Error Indicator LED  CAUTION light up and charger enters Standby Mode. Please refer to page 12, Push Mode section for more information.

WARNING:

Please read the entire instruction manual before using the product and then save it for future reference. We reserve the right for any errors in text or images and any necessary changes made to technical data. In the event of technical problems or other queries, please contact our Customer Services (see address details on the back).

- The product may be used by children of 8 years and above and by persons with reduced physical, sensory or mental capability or lack of experience and knowledge provided they have been given supervision or instruction concerning use of the product in a safe way and understand the hazards involved.
- Never let children play with the product.
- Cleaning and user maintenance shall not be made by children without supervision.
- **Warning:** Charging produces explosive gases, make sure that the place where the product is used is free from sparks and naked flames. Make sure that the place where the product is used is well ventilated.
- The product is intended for indoor use only.
- **Warning:** Never try to charge non-rechargeable batteries.
- **Warning:** Keep the product, its mains lead and plug away from water and moisture to avoid the risk of electric shock.
- **If the mains lead is damaged it should only be replaced by a qualified electrician.**
- Ensure that the mains lead is unplugged before connecting a battery to the product.
- The charger is only intended for charging rechargeable Li-ion, Gel and AGM type lead-acid batteries. Charging other types of batteries than these can damage the charger, battery or other property.
- Never try to charge dry-cell batteries, they can explode and cause damage.
- Do not use the charger if the mains lead is damaged. If the mains lead is damaged it should only be replaced by a qualified electrician.
- The charger should not be used if it is in any way damaged or malfunctioning.
- Do not place the charger close to the battery being charged, the battery will emit fumes which can corrode the charger. Place the charger as far as possible from the battery as the connection cables allow.
- Never try to dismantle, repair or modify the charger in any way.
- Make sure that the Battery Clamps of the charger leads don't touch each other once the charger has been connected to a wall socket.
- Always unplug the charger from the wall socket before disconnecting the charger leads from the battery.
- See that the place where charging takes place is well-ventilated.
- During charging the battery can emit explosive gases. Be careful to ensure that the charger leads don't touch each other when they are being disconnected from the battery after charging.
- Do not smoke in the vicinity of the battery whilst charging is in progress.
- Do not cover the charger.
- The charger should not be used by persons who have not read and understood the contents of this manual.
- A frozen battery must never be charged, always defrost it first.

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This manual contains important safety and operating instructions for battery charger Model AC532713.

1. Do not expose charger to rain or snow.
2. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
3. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
4. An extension cord should not be used. Use of improper extension cord could result in a risk of fire and electric shock.
5. Do not operate charger with damaged cord or plug – replace the cord or plug immediately.
6. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
7. Do not disassemble charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
8. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

WARNING – RISK OF EXPLOSIVE GASES.

- a) WORKING IN VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF UTMOST IMPORTANCE THAT YOU FOLLOW THE INSTRUCTIONS EACH TIME YOU USE THE CHARGER.
- b) To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of battery. Review cautionary marking on these products and on engine.

PERSONAL PRECAUTIONS

- a) Consider having someone close enough by to come to your aid when you work near a lead-acid battery.
- b) Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- c) Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
- d) If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at

- least 10 minutes and get medical attention immediately.
- e) NEVER smoke or allow a spark or flame in vicinity of battery or engine.
 - f) Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or short-circuit battery or other electrical part that may cause explosion.
 - g) Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, causing a severe burn.
 - h) Use charger for charging a LEAD-ACID battery only. It is not intended to supply power to a low voltage electrical system other than in a starter-motor application. Do not use battery charger for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.
 - i) NEVER charge a frozen battery.

PREPARING TO CHARGE

- a) If necessary to remove battery from vehicle to charge, always remove grounded terminal from battery first. Make sure all accessories in the vehicle are off, so as not to cause an arc.
- b) Be sure area around battery is well ventilated while battery is being charged.
- c) Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.
- d) Add distilled water in each Standard wet cell until battery acid reaches level specified by battery manufacturer. Do not overfill. For a battery without removable cell caps, such as valve regulated lead acid batteries, carefully follow manufacturer's recharging instructions.
- e) Study all battery manufacturer's specific precautions while charging and recommended rates of charge.
- f) Determine voltage of battery by referring to car owner's manual and make sure that output voltage selector switch is set at correct voltage. If charger has adjustable charge rate, charge battery initially at lowest rate.

CHARGER LOCATION

- a) Locate charger as far away from battery as dc cables permit.
- b) Never place charger directly above battery being charged; gases from battery will corrode and damage charger.
- c) Never allow battery acid to drip on charger when reading electrolyte specific gravity or filling battery.
- d) Do not operate charger in a closed-in area or restrict ventilation in any way.
- e) Do not set a battery on top of charger.

DC CONNECTION PRECAUTIONS

- a) Connect and disconnect dc output Battery Clamps only after setting any charger switches to “off” position and removing ac cord from electric outlet. Never allow Battery Clamps to touch each other.
- b) Attach Battery Clamps to battery and chassis as indicated.

FOLLOW THESE STEPS WHEN BATTERY IS INSTALLED IN VEHICLE. A SPARK NEAR BATTERY MAY CAUSE BATTERY EXPLOSION. TO REDUCE RISK OF A SPARK NEAR BATTERY:

- a) Position ac and dc cords to reduce risk of damage by hood, door, or moving engine part.
- b) Stay clear of fan blades, belts, pulleys, and other parts that can cause injury to persons.
- c) Check polarity of battery posts. POSITIVE (POS, P, +) battery post usually has larger diameter than NEGATIVE (NEG, N, -) post.
- d) Determine which post of battery is grounded (connected) to the chassis. If negative post is grounded to chassis (as in most vehicles), see (e). If positive post is grounded to the chassis, see (f).
- e) For negative-grounded vehicle, connect POSITIVE (RED) Battery Clamp from battery charger to POSITIVE (POS, P, +) ungrounded post of battery. Connect NEGATIVE (BLACK) Battery Clamp to vehicle chassis or engine block away from battery. Do not connect Battery Clamp to carburetor, fuel lines, or sheet-metal body parts. Connect to a heavy gage metal part of the frame or engine block.
- f) For positive-grounded vehicle, connect NEGATIVE (BLACK) Battery Clamp from battery charger to NEGATIVE (NEG, N, -) ungrounded post of battery. Connect POSITIVE (RED) Battery Clamp to vehicle chassis or engine block away from battery. Do not connect Battery Clamp to carburetor, fuel lines, or sheet-metal body parts. Connect to a heavy gage metal part of the frame or engine block.
- g) When disconnecting charger, turn switches to off, disconnect AC cord, remove Battery Clamp from vehicle chassis, and then remove Battery Clamp from battery terminal.
- h) See operating instructions for length of charge information.

FOLLOW THESE STEPS WHEN BATTERY IS OUTSIDE VEHICLE. A SPARK NEAR THE BATTERY MAY CAUSE BATTERY EXPLOSION. TO REDUCE RISK OF A SPARK NEAR BATTERY:

- a) Check polarity of battery posts. POSITIVE (POS, P, +) battery post usually has a larger diameter than NEGATIVE (NEG, N, -) post

- b) Attach at least a 24-inch-long 6-gauge (AWG) insulated battery cable to NEGATIVE (NEG, N, -) battery post.
- c) Connect POSITIVE (RED) charger Battery Clamp to POSITIVE (POS, P, +) post of battery.
- d) Position yourself and free end of cable as far away from battery as possible – then connect NEGATIVE (BLACK) charger Battery Clamp to free end of cable.
- e) Do not face battery when making final connection.
- f) When disconnecting charger, always do so in reverse sequence of connecting procedure and break first connection while as far away from battery as practical.
- g) A marine (boat) battery must be removed and charged on shore. To charge it on board requires equipment specially designed for marine use.

CARE AND MAINTENANCE:

Cleaning

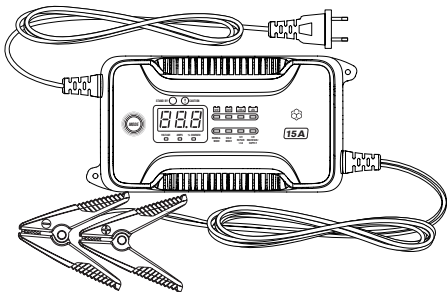
Unplug the charger before cleaning it with a damp cloth. Use only mild cleaning agents, no solvents or corrosive chemicals.

Storage

If the charger is not to be used for an extended period, it should be unplugged and stored in a dry and dust-free location and out of reach of children.

PACKAGE CONTENTS:

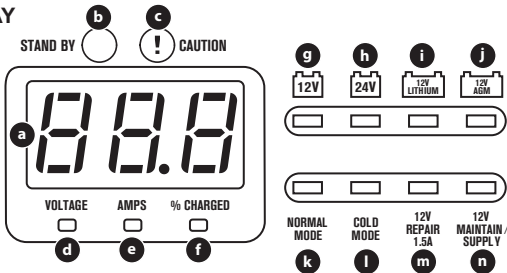
15A Battery Charger and Maintainer x 1



OPERATING INSTRUCTIONS:

Note: Please read the vehicle's Owner's Manual before charging its battery or removing any of its battery leads. Check if there are any recommendations for charging the battery of your vehicle.







LED DISPLAY GUIDE



- **a** LED Screen
- **f** Percentage Charged
- **k** Normal Mode
- **b** Standby Mode
- **g** 12V Lead-Acid Battery
- **l** Cold Mode
- **c** Error Indicator
- **h** 24V Lead-Acid Battery
- **m** 12V Repair Mode
- **d** Battery Voltage
- **i** 12V Lithium Battery
- **n** 12V Maintain or Supply Mode
- **e** Charging Current
- **j** 12V AGM Battery

LED Screen a + d + e + f	- Battery Voltage - Charging Current - Percentage Charged
Standby Mode b	No charging or power delivered to the battery. Press MODE button to start charging.
Error Indicator c	Error indicator will be ON for reverse polarity, poor connection, low voltage battery, over-voltage battery and temperature protection.
12V Lead-Acid Battery (Normal Mode) g + k	12V Lead-Acid Battery Normal Mode is designed for 12V Lead-Acid batteries with capacities higher than 50Ah being charged under normal weather conditions.
24V Lead-Acid Battery (Normal Mode) h + k	24V Lead-Acid Battery Normal Mode is designed for 24V Lead-Acid batteries with capacities higher than 25Ah being charged under normal weather conditions.
12V Lithium Battery (Normal Mode) i	12V Lithium Battery Normal Mode is designed for 12V Lithium batteries including Lithium Iron Phosphate (LiFePO ₄) batteries being charged under normal weather conditions. PLEASE ENSURE THIS MODE IS SELECTED FOR 12V LITHIUM BATTERIES ONLY.






OPERATING INSTRUCTIONS CONT.:

12V AGM Battery (Normal Mode) 	12V AGM Battery Normal Mode is designed for AGM / GEL batteries or batteries with capacities higher than 50Ah being charged under normal weather conditions.
12V Lead-Acid Battery (Cold Mode) 	12V Lead-Acid Battery Cold Mode is designed for 12V Lead-Acid and AGM batteries with capacities higher than 50Ah being charged at cold temperatures (below 10°C).
24V Lead-Acid Battery (Cold Mode) 	24V Lead-Acid Battery Cold Mode is designed for 24V Lead-Acid and AGM batteries with capacities higher than 25Ah being charged at cold temperatures (below 10°C).
12V Maintain Mode 	12V Maintain Mode is designed for 12V Lead-Acid, AGM, GEL and Lithium batteries being charged and maintained at 5A max.
12V Supply Mode 	12V Supply Mode works as a 12V DC power supply for powering 12V devices or as a memory retainer when replacing a battery.
12V Repair Mode 	12V Repair Mode is designed for 12V LEAD-ACID BATTERIES ONLY . It is a battery recovery mode for repairing & restoring damaged, stratified and sulphated batteries.








CHARGING STATUS

While battery clamps are connected to the vehicle battery properly, STAND BY LED is ON, press the **MODE** button to start, the LED Screen will show the charging status. Please see example below for 12V & 24V battery:

Battery voltage, charging current and battery percentage charged will alternate every 5 seconds.

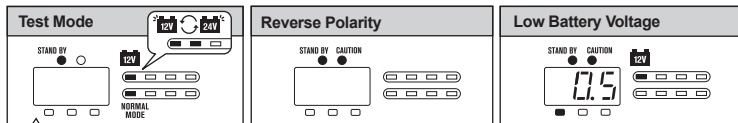
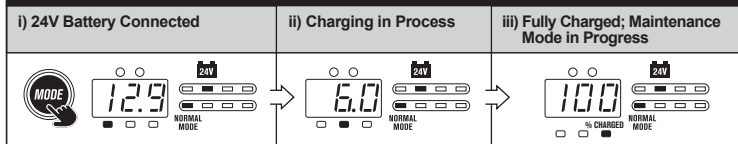
Battery Voltage  VOLTAGE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Charging Current  AMPS <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		Battery Percentage Charged  % CHARGED <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
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12V Lead-Acid Battery

i) 12V Battery Connected	ii) Charging in Process	iii) Fully Charged; Maintenance Mode in Progress
   NORMAL MODE	  NORMAL MODE	  NORMAL MODE

OPERATING INSTRUCTIONS CONT.:

24V Lead-Acid Battery



Test Mode: If 12V or 24V flashes alternatively it means that the connected battery is either a discharged 24V battery (down to roughly 15.5-21V) or a fully charged 12V battery. The charger is trying to determine which kind of battery has been connected. After 1-2 minutes the charger will determine whether the battery is a 12V or 24V battery and it will either perform a maintenance charge for a 12V battery or start charging for a 24V battery.

NOTE: If 24V battery is connected and charging does not started after 1-2 minutes scan time, please press **MODE** button once to resume charging.

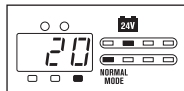
AUTOMATIC CHARGING

1. Clean the battery terminals if necessary, always wear safety glasses to protect your eyes.
2. Verify the voltage and type of battery.
3. Connect the **RED** Clamp / ring terminal to the **POSITIVE (+)** post of the battery terminal. The **POSITIVE** battery post will be marked with a **PLUS (+)** sign. There may also be a **RED** plastic protective cover over the positive battery post. Connect the **BLACK** Clamp / ring terminal to the **NEGATIVE (-)** post of the battery terminal. The **NEGATIVE** battery post will be marked with a **MINUS (-)** sign. There may be a **BLACK** plastic protective cover over the negative battery post.

NOTE: When charging a battery that is mounted on a vehicle, the cables should be attached in the following order:

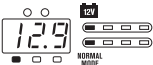
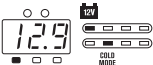


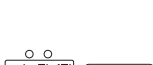


- Connect the **RED** lead to the **POSITIVE (+)** terminal of the battery.
- Connect the **BLACK** lead to a metal part of the vehicle chassis. Choose a spot on the chassis that is some distance away from the battery itself and any fuel lines.

4. Connect the AC power plug of battery charger into a wall socket. Battery voltage is auto-detected and charging will be started automatically. To manually select voltage or other charging mode, press **MODE** button for selection.



OPERATING INSTRUCTIONS CONT.:

5. While you are in 12V Charging Mode, press **MODE** once to cycle through the following charge modes.

	<p>i) 12V Lead-Acid Battery Normal Mode is designed for 12V Lead-Acid batteries with capacities higher than 50Ah being charged under normal weather conditions.</p>
	<p>ii) 12V Lead-Acid Battery Cold Mode is designed for 12V Lead-Acid and AGM batteries with capacities higher than 50Ah being charged at cold temperatures (below 10°C).</p>
	<p>iii) 12V Lithium Battery Normal Mode is designed for 12V Lithium batteries including Lithium Iron Phosphate (LiFePO₄) batteries being charged under normal weather conditions. PLEASE ENSURE THIS MODE IS SELECTED FOR 12V LITHIUM BATTERIES ONLY.</p>
	<p>iv) 12V AGM Battery Normal Mode is designed for AGM / GEL batteries or batteries with capacities higher than 50Ah being charged under normal weather conditions.</p>
	<p>v) 12V Repair Mode is designed for 12V LEAD-ACID BATTERIES ONLY. It is a battery recovery mode for repairing & restoring damaged, stratified and sulphated batteries. At Standby Mode, press and hold the MODE button for 3 seconds to start battery repairing. The 12V REPAIR 1.5A LED flashes and charging starts. The recovery process will take one to four hours and the battery will be charged in 12V Lead-Acid Battery Normal Mode if recovery is successful or STAND BY LED will be lighted for failure.</p>
	<p>vi) 12V Maintain Mode is designed for 12V Lead-Acid, AGM, GEL and Lithium batteries being charged and maintained at 5A max. At Standby mode, press and hold MODE button for 3 seconds, the 12V REPAIR 1.5A LED will be lighted and then press MODE button one more time to enter 12V Maintain Mode.</p>
	<p>vii) 12V Supply Mode works as a 12V DC power supply for powering 12V devices or as memory retainer when replacing a battery. THIS FEATURE WILL OVERRIDE SHORT-CIRCUIT AND REVERSE-POLARITY PROTECTION. Disable these protection can cause sparks, fire or damage your charger and/or device connected if used improperly. DO NOT USE THIS FEATURE FOR BATTERY CHARGING.</p> <p>At Standby mode before connecting battery clamps to 12V device, press and hold MODE button for 3 seconds, to enter the 12V Supply Mode. DO NOT USE THIS FEATURE FOR BATTERY CHARGING.</p>

OPERATING INSTRUCTIONS CONT.:

STAND BY CAUTION



viii) **Push Mode** (for 12V Lead-Acid battery only) is designed for charging batteries with voltage 0.5V to 3.75V. At Standby mode with battery clamps are connected to 12V Lead-Acid battery, if the battery voltage is measured at 0.5V to 3.75V, both LEDs light on. Press and hold **MODE** button for 3 seconds to enter Push Mode. Connect battery clamps to vehicle battery and the battery will be charged with maximum current of 0.5A until the voltage is up to 3.75V and it will enter the 12V Lead-Acid Battery Mode for charging onwards or it will return to Standby mode and stop charging after 5 minutes if 3.75V can not be reached.

FCC Compliance Statement:

15A Battery Charger and Maintainer

Model: AC532713 / Responsible Party: YADA

2975 Red Hill Ave., Ste. 100, Costa Mesa, CA 92626 / Tel: 866-294-9244

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or change to this equipment. Such modifications or change could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



2975 Red Hill Ave., Ste. 100, Costa Mesa, CA 92626

Mon - Fri, 8AM - 5PM (Pacific Time)

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www.letsyada.com

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CAN ICES-3 (B)/NMB-3(B)