Technical Specifications:

AC Input:	100 to 120 VAC, 60 Hz, 3.5 Amps
DC Output:	Up to 14.9 VDC Digitally & Temperature Controlled
Charge Mode:	Up to 12 Amps (Clamps), Up to 4 Amps (Aux.)
Maintain Mode:	Up to 4 Amp (Clamps & Aux.)
DC USB Output:	5.0 VDC, Up to 1 Amp
Battery Types:	AGM and Flooded (Lead Acid) Batteries - 12V Auto / Marine - 12V Motorcycle / Power Sports 12V OPTIMA and High Performance AGM Batteries - Starting AGMs include OPTIMA RedTop & BlueTop - Dual Purpose AGMs include OPTIMA YellowTop & BlueTop
Cables:	6' AC and DC Cable, 6' Maintainer Cable
Size:	10" x 7.5" x 6.5"
Weight:	4.8 lbs.

OPTIMA CHARGERS
THE ULTIMATE POWER SOURCE™

User Guide

Digital 1200

12V Performance Charger and Battery Maintainer

For use with 110 Volt 60 Hz AC power consistent with U.S. and Canadian standards

IMPORTANT SAFETY INSTRUCTIONS PLEASE READ & SAVE THESE INSTRUCTIONS

The Digital 1200 user guide contains important safety and operating instructions. In addition, important safety warnings are often found on batteries and in vehicle owner's manuals. Please read and follow all of the warnings, the battery and vehicle manufacturer's instructions and cautionary markings for the battery you are charging before applying AC power and operating the Digital 1200 Charger.

⚠**WARNING -** Failure to follow instructions may cause explosion, blindness or other serious injury. Always shield eyes. Safety glasses should be worn when working with or near a battery.

Introduction

Thank you for your recent purchase of OPTIMA's Digital 1200 12 Volt Performance Charger and Battery Maintainer. OPTIMA® has taken 12 Volt performance automotive charging to new levels of design and performance. Designed with advanced digital charging technology, the Digital 1200 delivers multi-stage charging, conditioning, automatic battery maintaining and reconditioning modes in addition to quick set controls and an industry leading LCD information display center. The Digital 1200 is The Ultimate Power Source™ for all your battery charging and maintaining needs. The ultra-premium Digital 1200 will fully charge and maintain all types of 12 Volt batteries while significantly extending their lives.

Versatile Use:

For 12 Volt automotive, motorcycle, marine, tractor, power sports, RVs and more.

Benefits of OPTIMA's Digital 1200 Charging Technology:

- Microprocessor and software controlled charging.
- Fully automatic, multi-stage performance charging, conditioning, maintaining and storage reconditioning modes.
- Enhances the performance of OPTIMA® and other AGM batteries.
- Recovers deeply discharged batteries.
- Extends battery life.
- Auxiliary side port compatible with supplied cable for maintaining common pre-wired battery maintainer installations.
- Quick set, single touch operation for charging by battery type or storage maintain modes by connection type.
- LCD display for charging, maintaining and fault mode indication.
- USB port for convenient charging and powering of USB supported devices and accessories.

Digital 1200

Important Safety Instructions

SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions for the OPTIMA® Digital 1200 12V Performance Charger and Battery Maintainer.

⚠ WARNING

To reduce the risk of injury to user or property; the user must read and understand the instruction manual and all warnings on the charger and batteries before use.

⚠ WARNING

RISK OF EXPLOSIVE GAS MIXTURE. Read instructions in manual before using charger.

1. Connect and disconnect battery leads only when supply cord is disconnected.
2. For a battery installed in a vehicle, first connect charger output lead to ungrounded battery post - not connected to automobile chassis - in accordance with polarity identification and then opposite polarity lead to chassis away from battery; do not connect to carburetor or fuel lines. Disconnect chassis lead first. For battery not installed in vehicle, refer to Instruction Manual.
3. Do not overcharge battery - See Instruction Manual.
4. Do not smoke, strike a match, or cause a spark in vicinity of battery.
5. Use in well-ventilated area.
6. Refer to Instruction Manual for further details.

⚠ WARNING

This equipment employs parts, such as switches and relays, that tend to produce arcs or sparks and therefore, if used in a garage, locate in a room or enclosure provided for the purpose or not less than 18 inches above the floor.

⚠ CAUTION

Risk of Electric Shock. Connect only to properly grounded outlets.

Do not expose to rain or snow.

If cords or wires/cables become damaged return complete unit to OPTIMA for service/repair immediately.

⚠ CAUTION

1. WARNING - RISK OF EXPLOSIVE GASES.
   a. WORKING IN THE 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 marked on the battery. Review cautionary marking on these products and on engine.
2. Use charger for charging a LEAD-ACID battery only. It is not intended to supply power to an extra-low-voltage eletrical system or to charge dry-cell batteries. Charging dry-cell batteries may burst and cause injury to persons and property.
3. NEVER smoke, strike a match or cause a spark or flame in vicinity of battery or engine.
4. NEVER charge a frozen, damaged or leaking battery.
5. If it is necessary to remove battery from vehicle to charge it, always remove grounded terminal from battery first. Make sure all accessories in the vehicle are off in order to prevent an arc.

Important Safety Instructions

6. Study all battery manufacturer's specific precautions such as removing or not removing cell caps while charging and recommended rates of charge.
7. For a charger having an output voltage selector switch, refer to the car owner's manual in order to determine the voltage of the battery and to make sure the output voltage is set at the correct voltage. If an output voltage selector switch is not provided, do not use the battery charger unless the battery voltage matches the output voltage rating of the charger.
8. Use of an attachment not recommended or sold by OPTIMA® may result in a risk of fire, electric shock, or injury to persons.
9. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
10. Extension cords should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used make sure:
    a. Pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
    b. Use only a properly wired extension cord in good electrical condition.
    c. Use an industrial grade / heavy duty UL or CSA approved and grounded extension cord. Check extension cord before use for damage, bent prongs, and cuts. Replace if damaged. Always make your extension cord connection on the charger side first. After connecting the extension cord to the charger proceed to plug the extension cord into a nearby 120 VAC GFCI protected (Ground Fault Circuit Interrupt) outlet. Below are manufacturer recommendations for the right size UL or CSA Approved grounded extension cord.
        i. Up to 50 feet in length use a 3 conductor 18 AWG extension cord.
        ii. 50 to 100 feet in length use a 3 conductor 16 AWG extension cord.
        iii. 100 to 150 feet in length use a 3 conductor 14 AWG extension cord.
11. Do not operate charger if any protective AC and DC cable insulation, charging clamps, DC fuse holders and/or maintainer ring terminals have been damaged or compromised. Return the charger for service and repair to OPTIMA® immediately.
12. Do not operate the charger if it has received a sharp blow, direct hit of force, been dropped or otherwise damaged in any way. Return the charger for service and repair to OPTIMA® immediately.
13. Do not disassemble charger. Incorrect reassembly may result in a risk of electric shock or fire. If service or repair is required please call OPTIMA® customer service at 1-888-867-8462 (888-8OPTIMA) between 9am-5pm (CST) Monday through Friday, or via email at info@optimabatteries.com. Unauthorized attempts to service, repair or modify may result in a risk of electrical shock, fire or explosion and will void warranty.
14. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce risk.
15. Do not expose charger to rain or snow

Digital 1200

Important Safety Instructions

16. **GROUNDING AND AC POWER CORD CONNECTION INSTRUCTIONS**
    a. Charger should be grounded to reduce risk of electric shock. Charger is equipped with an electric cord having in equipment-grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

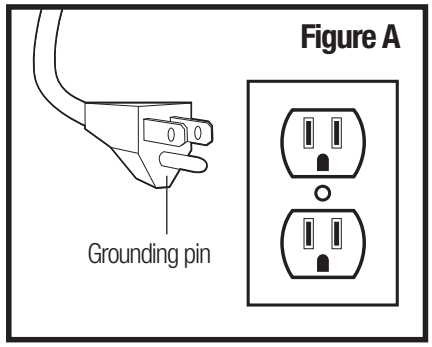
⚠ DANGER

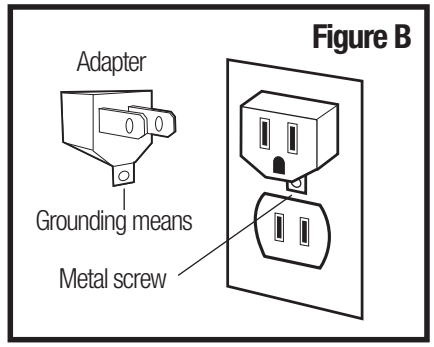
Never alter AC cord or plug provided - If it will not fit outlet, have proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.

b. This battery charger is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in figure A. A temporary adapter, which looks like the adapter illustrated in figure B may be used to connect this plug to a two-pole receptacle as shown in figure B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician.

⚠ DANGER

Before using adapter as illustrated, be certain that center screw of outlet plate is grounded. The green-colored rigid ear or leg extending from adapter must be connected to a properly grounded outlet - make certain it is grounded. If necessary, replace original outlet cover plate screw with a longer screw that will secure adapter ear or lug to outlet cover plate and make ground connection to grounded outlet.





Use of an adapter is not allowed in Canada. If a grounding type receptacle is not available, do not use this appliance until the proper outlet is installed by a qualified electrician.

Important Safety Instructions

17. **PERSONAL PRECAUTIONS**

⚠ CAUTION

a. Consider having someone close enough or within the range of your voice to come to your aid when you work near a lead-acid battery.

b. Have plenty of soap, water and baking soda nearby in case battery acid comes in contact with skin, clothes or eyes.

c. Wear complete eye protection, hand and clothing protection. Avoid touching eyes while working near a 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 15 minutes and get medical attention immediately.

e. NEVER smoke, strike a match or cause a spark or flame in vicinity of battery or engine.

f. Be extra cautious to reduce risk of dropping a metal tool onto the battery. It might spark or short-circuit a battery or other electrical hardware which may cause an explosion or fire.

g. Remove all personal metal items such as rings, bracelets, necklaces, watches, and jewelry when working near a battery. A battery can produce a short circuit current high enough to weld a ring or any other metal, causing serious burns.

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 start-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, damaged or leaking battery.

j. Keep other persons, children and pets away from batteries and your charger during operation to avoid serious injury, death, fire or explosion.

k. Do not place the charger in the engine compartment or near moving parts. Place away from the battery using the length of the DC cables.

l. Consult vehicle owner's manual.

m. Do not use the charger's auxiliary side port maintainer / cable assembly and the charger's DC charging clamps at the same time.

Digital 1200

Important Safety Instructions

18. **PREPARING TO CHARGE A BATTERY**

⚠ CAUTION

a. When it is necessary to remove a battery from a vehicle to charge, make sure the engine is off and all accessories in vehicle are off, as to not cause an arc. Always remove the grounded negative terminal from the battery first.

b. Study all battery manufacturers' specific precautions; warnings and instructions while charging and recommended rates of charge. Never charge a battery with missing safety vent caps.

c. Be sure the area around the charger and batteries is well ventilated while the battery is being charged.

If the electrolyte is splashed into an eye, immediately force the eye open and flood it with clean, cool water for at least 15 minutes. Get prompt medical attention.

If electrolyte is taken internally, drink large quantities of water or milk. DO NOT induce vomiting. Get prompt medical attention.

Neutralize with baking soda any electrolyte that spills on a vehicle or in the work area. After neutralizing, rinse contaminated area clean with water.

d. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.

e. For flooded batteries with removable caps, ONLY ADD DISTILLED WATER in each cell until electrolyte reaches levels specified by the battery manufacturer. Do not over fill. For a maintenance free battery without removable caps, such as valve regulated lead acid batteries, carefully follow manufacturer's recharging instructions.

f. Determine voltage of battery by referring to the car owner's manual and make sure the charger is set for the correct 12V battery type. See "Charging Battery Types and Approximate Charge Times".

g. Do not overcharge batteries by selecting the wrong battery type or by trying to charge a non-12 Volt as defined by the 12 Volt battery types specified in this manual.

h. Do not use the charger's auxiliary side port maintainer / cable assembly and the charger's DC charging clamps at the same time.

Charger Location & DC Connection

19. **CHARGER LOCATION**

⚠ CAUTION

a. Locate charger as far away from battery as DC cables permit.

b. Never place a charger directly above a battery being charged; gases or fluids from battery will corrode and damage charger.

c. Do not operate charger in an enclosed area or in an area with restricted ventilation in any way.

d. Never allow battery acid to drip on charger when reading electrolyte specific gravity or filling a battery.

e. Do not set a battery on top of charger.

f. Do not install on or over combustible surfaces.

20. **DC CONNECTION PRECAUTIONS**

⚠ CAUTION

a. Connect and disconnect DC output clips only after setting any charger switches to "off" position and removing AC cord from electric outlet. Never allow clips to touch each other.

b. Attach charging clamps to battery and chassis as indicated in 21 (E), 21 (F) and 22 (b) through 22 (d).

Digital 1200

In Vehicle Battery Charging Safety Precautions

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

⚠ CAUTION

a. Position AC and DC cords to reduce risk of damage by hood, door or moving engine parts.

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 a larger diameter than the NEGATIVE (NEG, N, -) post.

d. Identify if you have a negative or positive grounded vehicle. This can be done by identifying which battery post NEGATIVE (NEG, N, -) OR POSITIVE (POS, P, +) is connected to the chassis.

e. For a negative grounded vehicle: connect the RED POSITIVE (POS, P, +) cable clamp or ring terminal first to the positive post of the battery, then connect the BLACK NEGATIVE (NEG, N, -) cable clamp or ring terminal to the vehicle's chassis. Do not connect the black negative (NEG, N, -) cable clamp to metal fuel lines or anywhere in proximity of the carburetor or the battery itself. Connect to a heavy gauge metal part of the frame or engine block

f. For a positive grounded vehicle: connect the BLACK NEGATIVE (NEG, N, -) cable clamp or ring terminal first to the negative post of the battery, then connect the RED POSITIVE (POS, P, +) cable clamp or ring terminal to the vehicle's chassis. Do not connect the red positive (POS, P, +) cable clamp to metal fuel lines or anywhere in proximity of the carburetor or the battery itself. Connect to a heavy gauge metal part of the frame or engine block

g. Connect charger ac supply cord to electric outlet.

h. When charging is completed always disconnect AC power, remove clip from vehicle chassis, and then remove clip from battery terminal.

i. Plug charger into a properly grounded GFCI protected outlet.

j. See operating instructions for length of charge information.

k. Do not use an AC plug adapter of any kind.

Out of Vehicle Battery Charging Safety Precautions

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

⚠ CAUTION

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

b. Attach at least a 60 cm 6-gauge (awg) insulated battery cable to a negative(NEG, N, –) battery post.

c. Connect the RED POSITIVE (POS, P, +) cable clamp or ring terminal to the POSITIVE (POS, P, +) post of battery.

d. Position yourself and free end of cable as far away from the battery as possible - then connect the BLACK NEGATIVE (NEG, N, -) charger cable clamp or ring terminal to the free end of cable

e. Do not face battery directly when making final connection.

f. Connect charger AC supply cord to electric outlet

g. When disconnecting charger, always do so in reverse sequence of connecting procedure and break first connection while standing as far away from the battery as practical.

h. Plug charger into a properly grounded GFCI protected outlet.

i. Do not use an AC plug adapter of any kind.

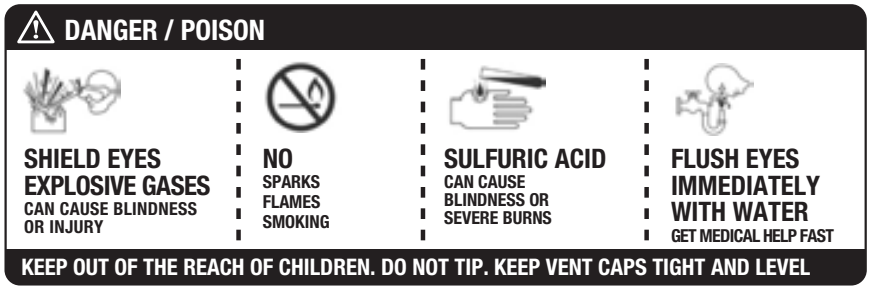
j. A marine (boat) battery must be removed and charged on shore. To charge it on board requires equipment specially designed for marine use.

Digital 1200

Handling Batteries

WHEN HANDLING BATTERIES ALWAYS READ AND FOLLOW THE BATTERY MANUFACTURER WARNINGS, INSTRUCTIONS AND CAUTIONARY MARKINGS

DANGER OF EXPLODING BATTERIES



Batteries contain sulfuric acid and produce explosive mixtures of hydrogen and oxygen gas. Because self-discharge action generates hydrogen gas even when the battery is not in operation, make sure batteries are stored and are used in a well-ventilated area. ALWAYS wear ANSI Z87.1 (U.S. standard) approved safety glasses and face shield or splash proof goggles when working on or near batteries:

Always wear proper eye, face and hand protection.

Never try to charge a visibly damaged battery.

Do not attempt to charge a frozen battery.

Have plenty of soap, water and baking soda nearby in case battery acid comes in contact with skin, clothes or eyes.

Keep all sparks, flames and cigarettes away from the battery.

Keep removable vents tight and level except when servicing electrolyte.

Never try to open a battery with non-removable vents.

Make sure work area is very well ventilated.

Never lean over battery while boosting, testing or charging.

Exercise caution when working with metallic tools or conductors to prevent short circuits and sparks.

Make sure that the charger leads to the battery are not broken, frayed or loose.

If the battery becomes hot, or if violent gassing or spewing of electrolyte occurs, immediately turn off the charger and have your local dealer test your battery.

HANDLING BATTERY ACID

Battery acid, or electrolyte, is a solution of poisonous sulfuric acid and water that can destroy clothing and burn the skin. Use extreme caution when handling electrolyte and keep an acid neutralizing solution- such as baking soda or household ammonia mixed with water- readily available. When handling batteries:

Always wear proper eye, face and hand protection.

If the electrolyte is splashed into an eye, immediately force the eye open and flood it with clean, cool water for at least 15 minutes. Get prompt medical attention.

If electrolyte is taken internally, drink large quantities of water or milk. DO NOT induce vomiting. Get prompt medical attention.

Neutralize with baking soda any electrolyte that spills on a vehicle or in the work area. After neutralizing, rinse contaminated area clean with water.

Product Overview

Digital 1200 Performance Features

The OPTIMA® Digital 1200 12 Volt charger boasts ultra-premium features and technology making battery care, charging and maintaining batteries easier than ever before. Convenient features include an in-clamp LED work light for connections in dark conditions and a 5 Watt USB charging port compatible with iPad®, iPhone®, Android™ phones, cameras, digital video recorders and other USB powered devices and accessories. The OPTIMA® Digital 1200 also features integrated ergonomically designed non-slip DC charging clamps housed in a rear compartment for easy access and storage.

Featuring an LCD battery charging gauge, the OPTIMA® Digital 1200 is the only performance charger with empty to full status of the battery being charged. The LCD display includes full length messages for charge mode, status and fault conditions with real time indication of DC voltage and charging amps during charge modes.

The OPTIMA® Digital 1200 has an innovative pre-charge battery status feature providing charge level and status of your battery before charging. Designed for the professional, enthusiast and collector, the Digital 1200 also includes quick set charge modes. In addition, quick set auto maintainer modes can be facilitated with the charging clamps or the auxiliary maintainer side port for a hardwired maintainer connection in your vehicle during short or long term storage.

Your OPTIMA® Digital 1200 is for use with all OPTIMA® 12 Volt batteries, in addition to other high performance 12V AGM (Absorbed Glass Matt), 12V standard Flooded lead-acid and standard 12V AGM batteries. Experience easy operation with our quick set charge selector by battery type or auto maintainer by connection type. For quick and easy charging of your battery, simply choose the battery type shown and the OPTIMA® Digital 1200 will do the rest.

Digital 1200

Product Overview

Digital 1200 Performance Multi-Stage Charging

Recover deeply discharged batteries, enhance the performance of your battery and extend battery life. The OPTIMA® Digital 1200 Performance Charger employs the latest in digital, multi-stage charging. With up to 6 fully automatic modes your Digital 1200 Performance Charger will sequence through stages 1 through 6 below:

- Stage 1: Analyze your battery for the state of charge and quality of connections before charging.
- Stage 2: Soft ramp charging-controlled amperage for deeply discharged batteries - when necessary.
- Stage 3: Fast charge bulk mode for batteries moderately discharged - also known as normal battery usage.
- Stage 4: Conditioning mode for conditioning your battery with a finish/complete charge.
- Stage 5: Auto maintain, float mode for keeping your battery fully charged.
- Stage 6: A 30-day storage recondition mode - while your vehicle or battery is in storage and is being maintained.

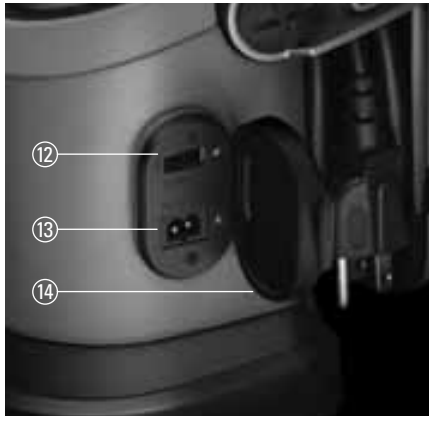
  Performance tip: A battery in any one state (charged or not charged) can begin to sulfate and impact battery performance. The OPTIMA® Digital 1200 is designed to recondition your batteries every 30 days for up to 3 hours in the battery storage recondition mode. When completed, the auto-maintain mode will resume, while your battery is fully charged.

Additional peace of mind safety and operation features:

- Spark-free connection technology.
- Reverse polarity and over temperature protection.
- Ambient air temperature compensation during charging - Digitally controls the charger output in high heat or extreme low temperature conditions.
- At-a-glance battery connected and battery fault icons.
- Audible fault alarm to bring attention to fault or improper connection conditions.

Getting to Know your Charger

This section of the manual is designed to give you a complete understanding of the features, functions and operation of your OPTIMA® Digital 1200 12 Volt Performance Charger and Maintainer.



Digital 1200

Getting to Know your Charger

Feature	Function
1. LCD Battery Charging Gauge	LCD display for charging, maintaining, and fault mode indication. Gauge displays battery charging (fill) rate with charger mode and fault messages. See pages 21-25.
2. Quick Set Charging Selector	Quick and easy selection of charge profiles by battery type. (Engine starting, deep cycle, auto/marine and motorcycle). See pages 17 and 22.
3. Quick Set Maintainer and Pre-Charge Battery Status Selector	Set maintainer modes by connection type (DC clamps or ring terminal cable assembly for stored or seasonal use vehicles). See page 23.
4. Non-Slip Carrying Handle	Fold away handle ratchets in the up and down positions.
5. AC Power Cord Storage Clip	Holds the AC power cord in place free from obstructing the handle.
6. AC Power Cord Wrap	Stores AC power cord when not in use.
7. 3 Prong AC Power Plug	UL rated 3 prong AC power plug that is properly grounded. Do not alter.
8. Latching Rear Storage Compartment	Stores DC charging cable and clamps when not in use.
9. DC Cable Exits (Left and Right Side)	Conveniently close the rear door during charger operation with cables exiting either the left or right hand side.
10. Push Button LED Work Light	Integrated LED in red (+) charging clamp. When the charger is plugged into AC power you can use this work light in dark conditions or as a general source of light.
11. Non-Slip DC Charging Clamps	Red (+) and gray (-) heavy duty battery clamps.
12. USB Power and Charging Port	When the charger is plugged into AC power this USB port is on and available as indicated by the illuminated green LED. 5 Watt USB port is compatible with iPad®, iPhone® and can be used with Android™ phones, other cell phones, digital cameras, and other USB powered devices.
13. Auxiliary Maintainer Port	Use with supplied ring terminal cable assembly for hardwired in vehicle auto-maintaining of your battery. Green LED will turn on when this feature is selected.
14. Side Port Protective Cover	Protects both the USB port and auxiliary maintainer port.

Getting to Know your Charger

Feature	Function
15. Quick Set Charging Prompt	Illuminates green prompting user to make a selection.
16. AC Power	Illuminates blue when AC power is applied and unit is on.
17. Temperature Compensation On	Illuminates green after making a quick set selection as it monitors the ambient air temperature and digitally controls the charging process by ambient air temperature.
18. Quick Set Maintainer Prompt	Illuminates green prompting user to make a selection.
19. Battery Connected	Illuminates green after making a quick set selection. Check mark LED is on confirming battery is connected
20. Check Battery	Fault warning LED will illuminate red only if there is a connection or battery problem requiring attention in addition to LCD fault messaging. Charger will “chirp” with an audible tone letting you know to read the fault message and attend to the battery or charger.
21. Fill Gauge	Empty to full pre-charge status, charge and auto-maintain mode gauge.
22. Mode/Fault Message Center	Displays charging, conditioning and auto maintain mode status and fault condition.
23. Volts DC Display	Displays pre-charge status, charging and auto maintain charger voltage.
24. Amps DC Display	Displays charging and auto maintain charger amperage

Digital 1200

Getting to Know your Charger

Feature	Function
25. OPTIMA® Starting Charge Profile	For quick set automatic selection of OPTIMA® RedTop and BlueTop AGM STARTING batteries or other High Performance starting AGM's.
26. OPTIMA® Deep Cycle Charge Profile	For quick set automatic selection of OPTIMA® YellowTop and BlueTop AGM DEEP CYCLE batteries and/or other High Performance deep cycle AGM's.
27. (Small) Standard Flooded Charge Profile	For quick set selection of standard 12V motorcycle, power sports, tractor (small) AGM and Flooded batteries. Up to 40 Amp hour rated batteries.
28. (Large) Standard Flooded Charge Profile	For quick set selection of standard 12V auto, marine, truck, RV (large) AGM and Flooded batteries. 40 - 130 Amp hour rated batteries.
29. Maintain Battery by Charging Clamps	If your battery is fully charged and you want to automatically maintain your battery in or out of a vehicle keeping it fully charged.
30. Maintain Battery by Auxiliary Port	If your battery is fully charged and you want to automatically maintain your battery in or out of a vehicle keeping it fully charged. Ideal method for most existing and all new vehicle “ring terminal” maintainer cable installations (cable assembly included).
31. LCD Backlight	The LCD display will turn off when a battery is fully charged and is being automatically maintained. To turn off/on the LCD back light simply touch this button.
32. Pre-Charge Battery Status	Prior to charging your battery you may select this function. **ENGINE MUST BE OFF** to have the charger identify the state of charge of your battery before charging.

Charging Battery Types & Approximate Charge Times

The OPTIMA® Digital 1200 12 Volt Performance Charger and Maintainer is designed specifically for 12 Volt batteries.

Please use the table below to understand your battery type before making a quick set "battery type charging profile" selection.

Quick Set Icon	Battery Type	Description of Battery Type	Approximate Amp Hour Rating	Approximate Charge Times
Profile 1 Engine Starting 	High Performance AGM (Absorbed Glass Mat) starting batteries	OPTIMA® 12 Volt AGM starting batteries ■ OPTIMA® RedTop and BlueTop batteries with a dark gray body Other high performance AGM starting batteries	40-100 Ah	3 to 5 hours at 20 to 40% discharge 6 to 10 hours at 50% or greater discharge
Profile 2 Deep Cycle 	High Performance AGM (Absorbed Glass Mat) deep cycle batteries	OPTIMA® 12 Volt AGM deep cycle batteries ■ OPTIMA® YellowTop and BlueTop batteries with a light gray body Other high performance AGM deep cycle batteries	35-100 Ah	3 to 5 hours at 20 to 40% discharge 6 to 12 hours at 50% or greater discharge
Profile 3 Auto/Marine 	Standard Flooded lead-acid and AGM (Absorbed Glass Mat) batteries (large)	Standard 12 Volt Flooded lead-acid and standard AGM batteries ■ Flooded (large) auto, marine, truck, RV batteries with and without caps AGM (large) auto, marine, truck, RV batteries	40 to 130 Ah	3 to 6 hours at 20 to 40% discharge 6 to 12 hours at 50% or greater discharge
Profile 4 Motorcycle 	Standard Flooded and AGM (Absorbed Glass Mat) batteries (small)	Standard 12 Volt Flooded lead acid and standard AGM batteries ■ Flooded (small) motorcycle, tractor, power sport batteries with and without caps AGM (small) motorcycle, tractor, power sport batteries	up to 40 Ah	1 to 3 hours at 20 to 40% discharge 5 to 10 hours at 50% or greater discharge

CAUTION - IMPORTANT NOTICE: Don't know your battery type? Look online or call your local dealer with your battery manufacturer's name and part number to identify your battery type before charging. Do not charge 4D, 8D or other high capacity 6, 8 or 12 Volt batteries typically seen in golf carts as they are typically wired for 24 Volt, 36 Volt or 48 Volt configurations and have a dedicated / specific charger to be used.

Do not connect or use your OPTIMA® Digital 1200 battery charger to charge dry cell and/or Lithium Ion batteries that are commonly used with home appliances or power tools. These batteries may burst and cause injury to persons and property. Do not use with Gel batteries. **NEVER charge a frozen battery.**

Read all important safety and cautionary markings on your battery by the manufacturer and in this manual before using your OPTIMA® Digital 1200 Charger.

Digital 1200

Operating Instructions
Easy Set up - Charging w/ DC Clamps out of a Vehicle

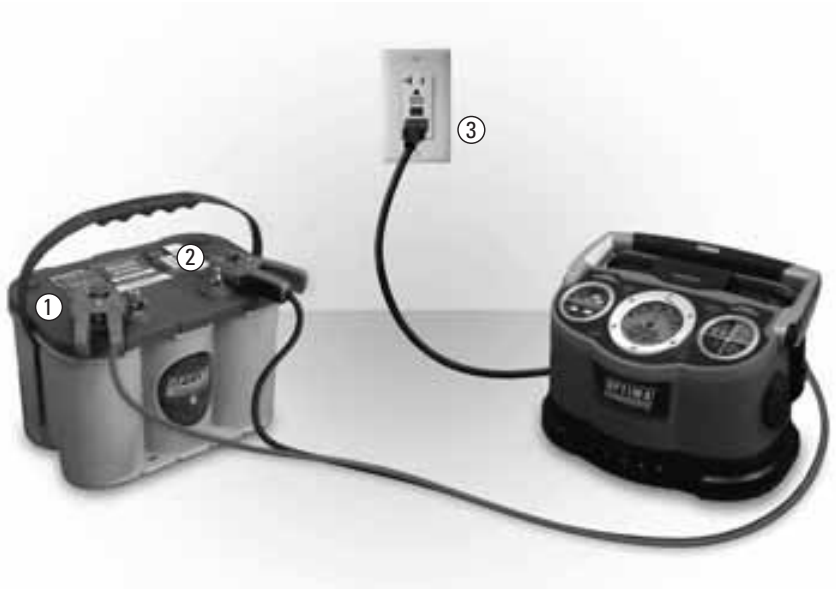
⚠ WARNING - FAILURE TO FOLLOW INSTRUCTIONS MAY CAUSE SERIOUS INJURY, DAMAGE OR EXPLOSION, ALWAYS SHIELD EYES WITH SAFETY GLASSES.

Follow all General and Personal Safety Precautions in this manual and those by the battery manufacturer.

Follow all the preparing-to-charge steps for out of vehicle battery charging / maintaining.

For **out of vehicle** charging or auto maintaining a fully charged battery, please find below a general illustration of the steps for connecting your charger for operation. General illustration is for an out of vehicle set up.

1. Connect the red POSITIVE (POS, P, +) cable clamp to the POSITIVE (POS, P, +) post.
2. Connect the black NEGATIVE (NEG, N, -) cable clamp to the NEGATIVE (NEG, N, -) post.
3. Plug the charger into a properly grounded GFCI protected outlet.



Pictured:Typical DC charging clamp connections for a precharge status, charging or just maintaining a fully charged battery with the DC charging clamps out of vehicle.

Easy Set up - Charging w/ DC Clamps in a Vehicle

⚠ WARNING - FAILURE TO FOLLOW INSTRUCTIONS MAY CAUSE SERIOUS INJURY, DAMAGE OR EXPLOSION, ALWAYS SHIELD EYES WITH SAFETY GLASSES.

Follow all General and Personal Safety Precautions in this manual and those by the battery manufacturer.

Follow all the preparing-to-charge steps for in a vehicle battery charging / maintaining.

For **in a vehicle** charging or auto maintaining a fully charged battery, please find below the sequence of steps for **in a vehicle** charging (negative chassis ground vehicles).

1. Connect the red POSITIVE (POS, P, +) cable clamp to the POSITIVE (POS, P, +) post.
2. Connect the BLACK NEGATIVE (NEG, N, -) cable clamp to the vehicle's chassis. Do not connect the black negative (NEG, N, -) cable clamp to metal fuel lines or anywhere in proximity of the carburetor or the battery itself.
3. Plug the charger into a properly grounded GFCI protected outlet.

Pictured: Typical DC charging clamp connections for a precharge status (with engine off), charging or just maintaining a fully charged battery with the DC charging clamps in a vehicle.

Note: In the event your vehicle is a POSITIVE (POS, P, +) ground set up then follow the safety instructions on page 8 for charging a battery in a positive grounded vehicle.

Digital 1200

Easy Set up - Auxiliary Side Port Maintainer Setup

⚠ WARNING - FAILURE TO FOLLOW INSTRUCTIONS MAY CAUSE SERIOUS INJURY, DAMAGE OR EXPLOSION, ALWAYS SHIELD EYES WITH SAFETY GLASSES.

Follow all General and Personal Safety Precautions in this manual and those by the battery manufacturer.

Follow all the preparing-to-charge steps for in a vehicle and out of vehicle battery charging / maintaining.

Pictured: Typical side port hardwired maintainer cable assembly connections for auto-maintaining a fully charged battery in or out of a vehicle with a hardwired cable connection. Cable supplied.

For **in a vehicle** auto maintaining (not shown) a fully charged battery please find below the steps for setting up your charger for the side port hardwired auto-maintainer operation. The sequence of steps below is for an in a vehicle installation set up for the most common vehicles (negative chassis ground vehicles).

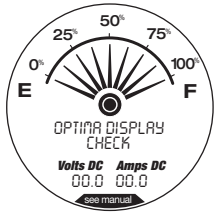
1. Plug the provided "Direct Connect Maintainer Cable Assembly" into the side port maintainer.
2. Connect the red POSITIVE (POS, P, +) ring terminal to the POSITIVE (POS, P, +) post.
3. Connect the BLACK NEGATIVE (NEG, N, -) ring terminal to the vehicle's chassis. Do not connect the black negative (NEG, N, -) cable to metal fuel lines or anywhere in proximity of the carburator or the battery itself.
4. Plug the charger into a properly grounded GFCI protected outlet.

Note: In the event your vehicle is a POSITIVE (POS, P, +) ground set up then follow the safety instructions on page 8 for charging a battery in a positive grounded vehicle.

Quick Set Operations

After connecting to a battery:

With your OPTIMA® Digital 1200 12 Volt Performance Charger set up as outlined in pages 17-19, you can now make quick and easy selections. With the charger plugged into a GFCI protected 110 VAC outlet, and properly connected to a battery, the OPTIMA® Digital 1200 will automatically perform a quick self-test of the display and all LEDs. Following the self-test you will be prompted by the display and the directional arrows to make a quick set selection. From left to right are the LCD screens you will see:



Display Check

Make a Quick Set Selection Prompt

Note: Self test takes less than 2 minutes. If after 10 minutes no selection is made, the OPTIMA® Digital 1200 will automatically default to a safe maintainer mode.

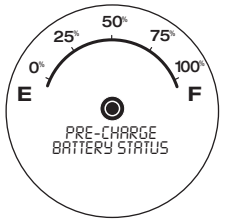
Note: It is recommended to make a selection and allow the charger to finish that selection before making a different selection.

Below is an overview of each function that can be selected.

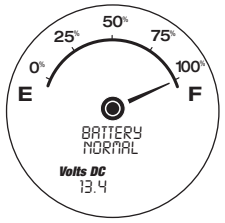
1. Pre-Charge Battery Status.

Note: Vehicle engine and all charging systems must be off.

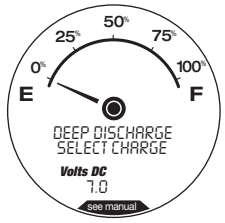
This quick and easy feature allows you to understand your battery's state of charge before charging it. To use this feature, use the RIGHT SIDE "Maintainer Quick Set Selector" to choose the battery pre-charge status function. The LCD display will provide the current state of battery in % of charge and DC volts in the numeric display. Below is a typical sequence of the display during this selection.



Processing



Normal Charge Status



Deeply Discharged Status; From here you can make a Quick Set Charge Selection for your battery type.

Note: If the charger identifies a fault during this process or any quick set process it will illuminate the "Check Battery" icon on the top of the charger and it will "chirp" with an audible tone letting you know to read the fault message and attend to the battery or charger. See pages 24 and 25 for Fault Screens and Troubleshooting steps.

Digital 1200

Quick Set Operations

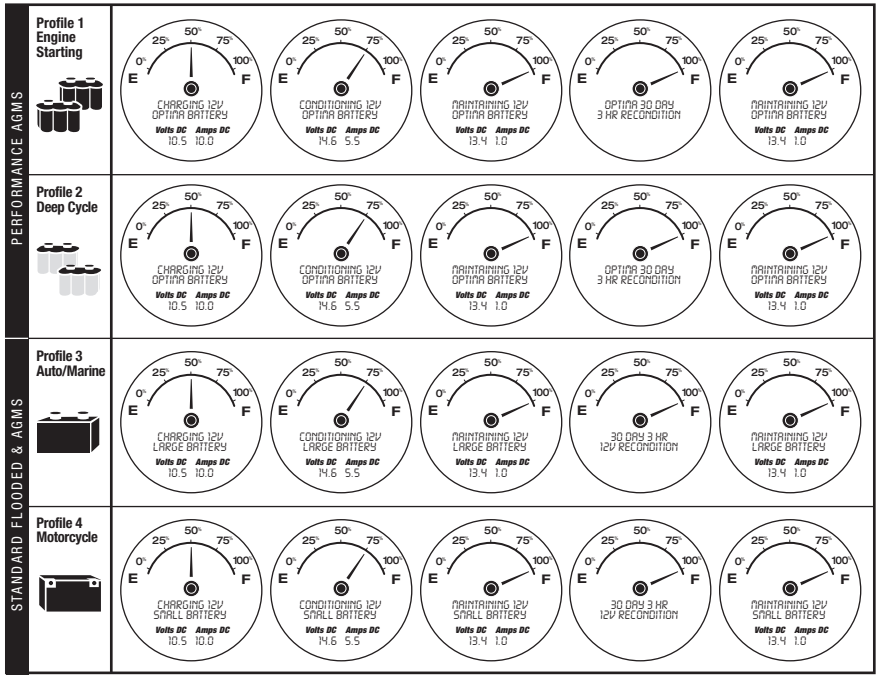
2. Quick Set Charging by Battery Type.

From the LEFT SIDE "Charging Quick Set Selector," choose the BATTERY TYPE that matches the battery type descriptions as outlined on page 17 titled: "Charging Battery Types & Approximate Charge Times."

After selecting 1 of the 4 battery types the charger will begin its stage 1 "Analyzing Battery" mode. This mode can take up to 2 minutes to complete while it determines the state of your battery and check that all connections made are correct.

Upon completing the Stage 1 "Analyzing Battery" mode, the charger will start its multi-stage charging process checks and will sequence through the illustrated LCD screens highlighted below:

- Analyzing Battery Mode (screen not shown)
- Charging Battery Mode
- Conditioning Battery Mode
- Maintaining Battery
- 30 Day Recondition Mode



Note: If the charger identifies a fault during this process or any quick set process it will illuminate the "Check Battery" icon on the top of the charger and it will "chirp" with an audible tone letting you know to read the fault message and attend to the battery or charger. See pages 24 and 25 for Fault Screens and Troubleshooting steps.

Quick Set Operations

3. Quick Set Battery Auto-Maintainer by Connection Type.

From the RIGHT SIDE "Maintainer Quick Set Selector" choose a maintainer connection type that matches your set up as outlined on pages:

Page 18: Easy Set Up - "Charging with DC Clamps out of a Vehicle"

or

Page 19: Easy Set Up - "Charging with DC Clamps in a Vehicle"

or

Page 20: Easy Set Up - "Auxiliary Side Port Maintainer Setup" for in or out of vehicle auto-maintaining.

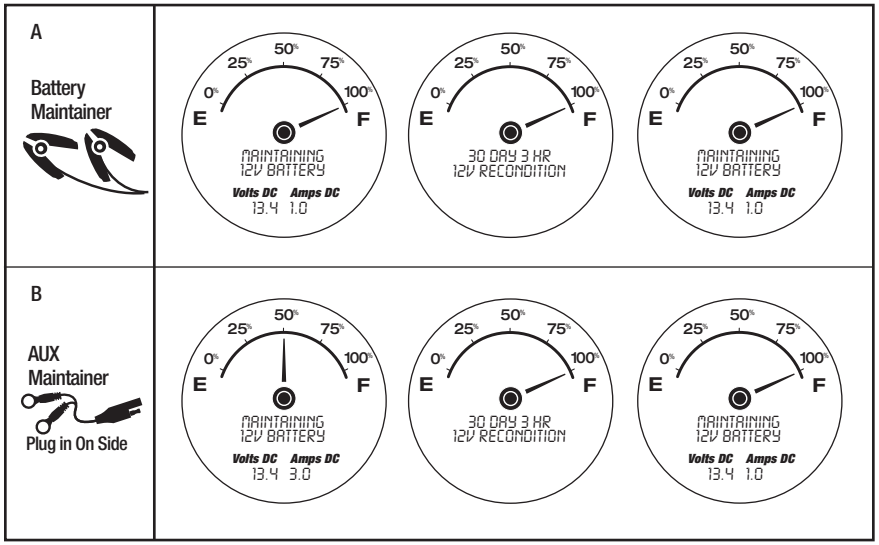
Select the battery maintainer by using the touch button quick sets:

A. "DC Charging Clamps"

B. The "Auxiliary (AUX)" side port maintainer (for hardwired in or out of vehicle connections).

After making a selection the charger will begin its auto-maintain process and will sequence through the following LCD screens as shown below for the connection type selected:

Note: For short and long term storage the OPTIMA® Digital 1200 will automatically recondition batteries every 30 days for 3 hours.



Note: If the charger identifies a fault during this process or any quick set process it will illuminate the "Check Battery" icon on the top of the charger and it will "chirp" with an audible tone letting you know to read the fault message and attend to the battery or charger. See pages 24 and 25 for Fault Screens and Troubleshooting steps.

Fault Screens and Trouble Shooting

If at any time a fault is identified by the charger the following will appear:

- "Check Battery" icon red LED will illuminate.
- The charger will have an audible "chirp" identifying attention is needed.
- A fault message will be displayed in the LCD center display

Below are the OPTIMA® Digital 1200 LCD fault screens in addition to basic trouble shooting steps.

Reverse Polarity - Wiring Fault

Check connection red postive cable clamp or ring terminal to positive post.

Check Connection or Battery < 1.25V

Verify both leads from the charger are connected to the battery.

Verify connection type (clamps or ring terminal) is correct.

Battery voltage may be too low to accept a charge. Return battery to dealer for testing. If battery is under 1.25VDC another battery may be used in parallel to start the charging process, then be removed.

Verify aux. ring terminal connector is securely plugged into charger.

Charger Hi-Temp - Fault Condition

Ambient temperature and/or unit temperature are too high to charge at this time.

Charger will automatically resume charging when appropriate.

If recharging a deeply discharged battery it is not uncommon for the charger to enter the Hi-Temp fault condition in order to protect the charger and battery. Charger will automatically resume charging in 3 to 15 minutes depending on the ambient temperature and condition of the battery. Do not block cooling vents on bottom of charger and locations in the AC coil wrap area and place only on a hard surface.

Fault Screens and Trouble Shooting

Unable to Charge - Check Battery

Check battery voltage with Pre-Charge Status. If greater than 12.0 volts, restart charger once. Do not repeat more than once. If fails again, return battery to dealer for testing. If less than 12.0 volts, return battery to dealer for testing.

Re-verify battery is a 12 Volt battery versus a 6 Volt battery or other unsupported voltage.

Out of Range - Battery > 17V

Battery voltage is high. Check to see if there is another battery connected (remove additional battery). Verify there is not another charger or maintainer source that is connected or on. Remove if either is present.

Ensure engine is off. Have a dealer check your battery and/or charging system.

Other General Trouble Shooting Steps:

Note 1: To clear the charger at any time, unplug the charger and wait until the BLUE AC power indicator is completely off. For typical negative chassis ground applications, disconnect the battery by removing the BLACK NEGATIVE (NEG, N, -) cable clamp followed by the RED POSITIVE (POS, P, +) cable clamp. Re-connect your battery, apply AC power per the guidelines of this manual and make a quick set selection to re-start the function of your choice.

Note 2: For instances where the charger is properly connected and the AC power cord is plugged into a properly protected 110 VAC GFCI outlet, there are NO LEDs on and the main center LCD display is not on, follow these steps:

1. Confirm the GFCI protected outlet has not tripped due to a ground fault.
2. Confirm there is 110 VAC present by plugging in a table lamp or meter.
3. Reset and apply power to resume using the OPTIMA® Digital 1200 Charger.
4. If power is present and there are still no LEDs on and the center display is not working then follow the customer service return steps on page 27 for warranty or out of warranty service.

Note 3: For instances where LCD backlight is not Illuminated - to save energy, LCD backlight will turn off after 30 minutes. To toggle backlight off/on, press "LCD Backlight" button.

⚠ WARNING - AVOID SERIOUS INJURY OR DEATH FROM FIRE, EXPLOSION OR ELECTRICAL SHOCK.
There are no serviceable or replaceable items inside the charger. DO NOT ATTEMPT SERVICE OR REPAIR AS THIS IS DANGERIOUS AND CAN CAUSE RISK OF EXPLOSION, ELECTRICAL SHOCK OR LOSS OF LIFE. THIS WILL ALSO VOID ALL WARRANTY COVERAGE.

Digital 1200

Storage, Care and Technical Specifications

Store your OPTIMA® Digital 1200 12 Volt Performance Charger and Battery Maintainer in a dry safe location, and inspect all cables before use. Should the AC power cord, plug or the DC cables be damaged in any way do not attempt to service and follow the return instructions in the customer service and warranty section of this manual.

Technical Specifications:

AC Input:	100 to 120 VAC, 60 Hz, 3.5 Amps
DC Output:	Up to 14.9 VDC (Clamps & Aux.) Digitally & Temperature Controlled
Charge Mode:	Up to 12 Amps (Clamps), up to 4 Amps (Aux.)
Maintain Mode:	Up to 4 Amps (Clamps & Aux.)
DC USB Output:	5.0 VDC, up to 1 Amp
Battery Types:	AGM and Flooded (Lead Acid) Batteries - 12V Auto / Marine - 12V Motorcycle / Power Sports 12V OPTIMA and High Performance AGM Batteries - Starting AGMs include OPTIMA RedTop & BlueTop - Dual Purpose AGMs include OPTIMA YellowTop & BlueTop
Cables:	6’ AC and DC Cable, 6’ Maintainer Cable
Size:	10” x 7.5” x 6.5”
Weight:	4.8 lbs

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.