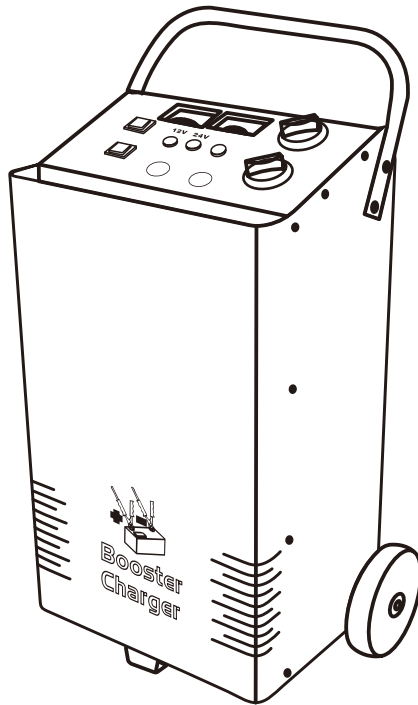


G.I.KRAFT



User Manual

Battery Charger

GI35111

CE

Preface

Please read this instruction manual carefully before using the equipment and refer to it as needed to ensure the continued safe operation of the equipment.

- ◆ This instruction manual should be read completely before attempting to use or service the equipment. Failure to follow the instructions in this manual could result in property damage, severe personal injury, or death.
- ◆ The following warnings and important notices are used in the instruction manual:



DANGER

Improper use of this equipment can cause serious or fatal injury



WARNING

Improper use of this equipment can cause personal injury or property damage



Do not use this device until all precautions and operating instructions have been carefully read and fully understood.



Possible sources of ignition, such as flames, sparks and flame lamps, must be kept away from batteries.



Do not allow corrosive battery electrolyte to contact eyes, skin and clothing



Ensure sufficient fresh air is supplied during charging. Keep the charger at least 50 cm away from other objects



◆ Magnetic fields can affect pacemakers. Pacemaker wearers keep away from the equipment. Wearers should consult their doctor before going near equipment operations.



- ◆ Do not touch any live electrical parts. Wear dry, hole-free insulating gloves and body protection. The input power circuit and machine internal circuit are live with high voltage when power is on. Touching live electrical parts can cause fatal shocks or severe burns. High voltage exists in the power supply socket. Never touch the conductor terminals with bare hand.
- ◆ Input power installation must meet national standard. All electrical connections must be made by a qualified electrician. Insulated gloves and shoes must be worn when connecting input power or maintaining equipment.



◆ Never disassemble, repair, alter or rebuild the equipment without approval from the manufacturer. There is a risk of electrical shock and fire.



◆ Electric shock can kill. Properly ground this equipment according to its user manual and national standard.



◆ In the event of abnormal operation must be immediately stopped. If smoke, smell or abnormal noise is produced by the unit, disconnect the power cord immediately and contact your local dealer. Do not use it until the problem is fixed.



◆ Make sure the supply cable is up to national standard or local code. Use only the right gauge of electrical wire/cable. There is a risk of fire or electrical shock if overload building wiring-be sure power supply system is properly sized, rated and protected to handle this unit.



- ◆ Do not operate or place the device near water or in wet locations. Risk for electrical shock or damage to the device.
- ◆ Do not operate the equipment in potential hazardous areas: chemicals, oil, gas and mining, or the worksites where power supply system is in poor condition.



WARNING! Risk of explosion! Batteries produce explosive gases during normal battery charging



Use this device indoors or in vehicles. Do not expose charger to rain, snow or other damp



Do not dispose battery charger in the same way as household waste. Handle according to safety and environmental protection rules



- ◆ Replace power cord/wire/cable immediately-bare wiring can kill.
- ◆ Do not step on, twist or pull the power cord..
- ◆ Frequently inspect input power cord and regularly clean the unit to remove dust and dirt.
- ◆ Any worn or damaged power cord or internal components in heavy dust may cause electrical shock, short circuit or fire.
- ◆ Use only well-maintained device. Inspect and maintain the device for safety every 12 months, including cleaning and removing dust.
- ◆ Repair or replace damaged parts/ cables at once.
- ◆ There are precautions printed on the top of the machine. Strictly check whether the environment where the machine is placed meets the requirements when using it. Otherwise, the charger or the device connected to the charger may be damaged, or even personal safety may be endangered
- ◆ Flames are strictly prohibited at the operation site, since combustible gas is produced during charging
- ◆ Consult the distributor/manufacturer before replacing any spare parts. Use only the spare parts provided by the manufacturer.
- ◆ Before use, make sure the machine is complete in appearance without obvious dents and dings to avoid internal short circuit problems caused by collision. Please contact the distributor/manufacturer for parts replacement to meet the usage requirements.
- ◆ This machine can only charge rechargeable batteries that conform to the battery specifications. It is strictly forbidden to charge disposable batteries. Otherwise, the battery and charger may be damaged, and even serious explosion happens. If the acid in the battery accidentally touches the skin, clothes, eyes, etc., clean it with clean water and soap in time. If doesn't work, go to the hospital for professional treatment in time
- ◆ Do not let water or any other liquid or (flammable) detergent enter the product to avoid electric shock or fire



WARNING

Improper use of this equipment can cause personal injury or property damage

WARNING!

- ◆ Overheating of the battery may risk injury and damage. Do not charge at ambient temperatures above 36° C. Starting repair mode may cause the battery temperature to rise to 45°C. If the battery temperature exceeds 45°C, disconnect the charger immediately.
- ◆ Also make sure that: the battery is charged at room temperature / the capacity of the battery is set correctly / the vehicle electrical system and the battery are disconnected - the battery is removed from the vehicle and placed in the open (not exposed to direct sunlight) or in a well-ventilated area for repair charging.
- ◆ Improper use of the equipment may result in serious injury and damage.
- ◆ Do not use this equipment until you have thoroughly read and understood the instructions. In particular, the safety guidelines and operating instructions in the manual.
- ◆ Power supply, voltage and wire size should be strictly in accordance with the requirements of the nameplate on the charger. Connect the charging clamp correctly and avoid reverse polarity connection. Keep the charger clean. Make sure all cables are undamaged and neatly placed. Turn off the power and disconnect the socket after use. Do not open the cover of the machine at will. If necessary, contact our staff for maintenance and service.
- ◆ Keep the charger away from children during use. The charger must be grounded to avoid electric shock. The charger should not be left unattended during the whole process of use. Keep the charger in a dry and ventilated place to prevent moisture.
- ◆ Before connecting to the power supply, make sure that the facility's supply voltage is the same as that shown on the charger nameplate. Leakage circuit breaker is required on the power supply.
- ◆ If the power cord is damaged, to avoid danger, it must be replaced by the manufacturer or qualified personnel.
- ◆ Do not use this product again if the plug, power cord or the product itself is damaged.
- ◆ Poor contact at the power outlet may cause the plug to become too hot. Make sure that the machine and the power outlet are in good contact.
- ◆ Always place and use the product on a dry, stable, flat and level surface.

CAUTION!

- ◆ There is a risk of damage to the vehicle when attempting to charge a defective battery. Before charging, make sure the battery being charged is fully functional.

NOTE!

- ◆ Risk of injury. Wear protective eyewear and appropriate protective clothing when handling battery acid. If splashed by acid, rinse thoroughly with clean water and seek medical care in time if necessary.
- ◆ Do not breathe any released gases or fumes.



Follow the installation and operation instruction to ensure user safety and proper equipment performance. It is the responsibility of the owner to ensure that the equipment has been installed and operated as specified in the instructions provided. The manufacturer takes no responsibility for any loss or damage suffered as a result of using the equipment incorrectly or improperly.



NOTE

- ◆ The equipment must be used by qualified personnel familiar with electronic equipment.
- ◆ Do not place the equipment on unstable or uneven ground. The equipment might fall causing injuries and damage to the equipment.
- ◆ During operation process, the equipment should keep a distance about 10cm from the wall to keep air way clear.
- ◆ Avoid using the equipment in the environments with high humidity (above 90%), high temperature (above 40℃), low temperature (below 5℃), high frequency source nearby, chemical and drug, water vapor for condensation, dust or vibration.
- ◆ Make sure the facility supply voltage and frequency are the same as shown on name plate. The supply cable must be properly sized and rated.
- ◆ The connection between the main power supply and the equipment should be as short as possible.
- ◆ Use a dry cloth to clean the dirt on the equipment.
- ◆ Do not forget to take back all repair tools/objects inside the equipment after repair/ maintenance, such as screws, bolts or nuts. The left out metallic objects inside the equipment can cause damage to the equipment.
- ◆ Follow the instructions on the user manual to operate the equipment.
- ◆ We have made installation and operation quick and easy. Please operate the buttons and switches gently with your hands, only one button each time. The sensitive control circuit will be damaged if pressing the buttons with a hard and sharp thing such as screw driver and, pen.
- ◆ Equipment must be disconnected from the power supply after use.
- ◆ When charging, the charging clamps must be connected directly to the positive and negative terminals of the battery and not through other conductors.
- ◆ Ensure that the battery type and vehicle must be compatible with the charger's range of application.
- ◆ Programming mode is not allowed to be used for battery charging
- ◆ Make sure the charger meets the charging requirements of battery before charging



Follow the installation and operation instruction to ensure user safety and proper equipment performance. It is the responsibility of the owner to ensure that the equipment has been installed and operated as specified in the instructions provided. The manufacturer takes no responsibility for any loss or damage suffered as a result of using the equipment incorrectly or improperly.

INSTRUCTION

Battery Charger & Engine Starter

Please read this instruction manual carefully before using the device.

Precaution

- ◆ Shut off power before disconnecting the charging clamps from the battery posts.
- ◆ Batteries generate explosive gases during their normal operation. Never smoke or allow an open spark or flame in the vicinity of the battery.
- ◆ Do not place the charger where rain, snow, or other moisture could drip on it.
- ◆ Make sure the black clamp to the (-) terminal and red clamp to the (+) terminal of the battery.
- ◆ Do not operate charger with damage cord or plug. Replace the damaged cord or plug immediately.
- ◆ Avoid vibration and collision when using the charger.
- ◆ Never attempt to charge a frozen battery

Important!

- ◆ Use only qualified breaker or fuse(s).
- ◆ Replace or repair damaged parts at once.
- ◆ Connect the negative terminal first and then connect the positive terminal.
- ◆ Clean the battery before charging and test its primary voltage.

Battery Charging Principle

- ◆ When charging by current, the value of charge depends on the type of battery being charged, and is generally about 10% of its maximum current.

Charging Time

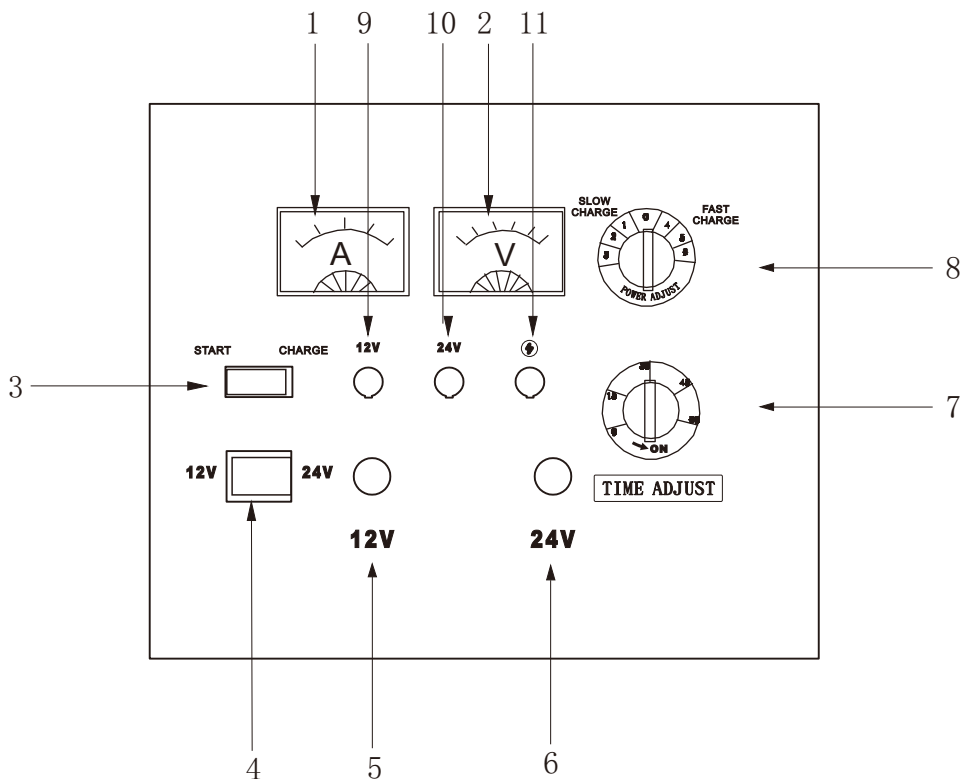
1. Depending on the type of battery, it is generally calculated by the following formula:

Charging time = Battery capacity (Ah)/Charging current(A)

As the charge current will decrease with time during charging process, the actual charging time will be about 1/4 longer than the value of the formula.

2. It is possible to charge one or more than one battery simultaneously, but the charging time will be extended.
3. When charging the vehicle battery, the original battery clip should be removed.

Controls



- | | |
|--|---|
| <ul style="list-style-type: none"> 1、Ammeter 2、Voltmeter 3、Charge/Start 4、12V/24V Voltage selector 5、12V output terminal 6、24V output terminal | <ul style="list-style-type: none"> 7、Timer 8、Power adjust 9、12V indicator 10、24V indicator 11、Power indicator <p>Circuit breaker must be installed</p> |
|--|---|

Technical Specification

Model	GI35111
Input Voltage	220V/1-ph/50/60Hz
Power	8.2KVA
Charging Voltage	12/24V
Charging Current	6、 9、 13、 20、 30、 37A
Starting current	350A
Nominal capacity	Min 35 Ah / Max 300Ah
Dimensions	34x26x62cm
Gross Weight	17.5Kg
Power cord length	3M
Charging cable length	3M+3M

Operation

Charging Battery

1. Disconnect the charger from the mains.
2. Select 12V or 24V.
3. Set the timer to '0' (OFF) position
4. Connect red clamp to the (+) terminal and black clamp to the (-) terminal of the battery. (The cable with black clamp has been mounted on the back of the front pane). Turn clamps slightly to ensure a good connection.
5. Set to 'Charge' mode.
6. Select the Current .The Positions 1,2 and 3 are for slow charge and Positions 4,5 and 6 are for fast charge.
7. Connect the charger to the mains.
8. Set the timer to the desired charging time. The charger stops charging automatically when the preset time is reached.

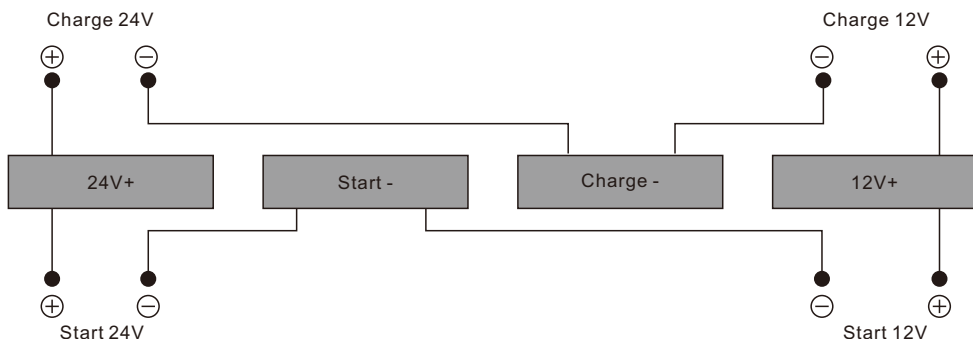
Starting Engine

1. Disconnect the charger from the mains.
2. Select 12V or 24V.
3. Set the timer to '0' (OFF) position
4. Connect red clamp to the (+) terminal and black clamp to the (-) terminal of the battery. (The cable with black clamp has been mounted on the back of the front pane). Turn clamps slightly to ensure a good connection.
5. Set to 'Start' mode.
6. Select the Current to the max position '6'
7. Connect the charger to the mains.
8. Set the timer to the position 'ON'.
9. Start the engine in the normal manner. DO NOT EXCEED 10 SECONDS. Check car's owners manual for recommended cranking time limit.
10. If the engine cannot be started, give the battery a fast charge for 15 minutes or longer.

Important!

1. Disconnect the charger from the mains before connecting it to the battery.
2. Make sure the timer has been set to '0' (OFF) before connecting the charger to power supply.
3. The supply voltage and connections should be made strictly in accordance with the operating Instructions.
4. Always check the voltage of the battery before attempting to charge the battery.
5. Positive and negative terminal connections cannot be reversed to avoid short circuiting on the device.
6. For high power engine, fast charge the battery for 15mins or longer before jump starting. For diesel engines, preheat spark plug before starting .

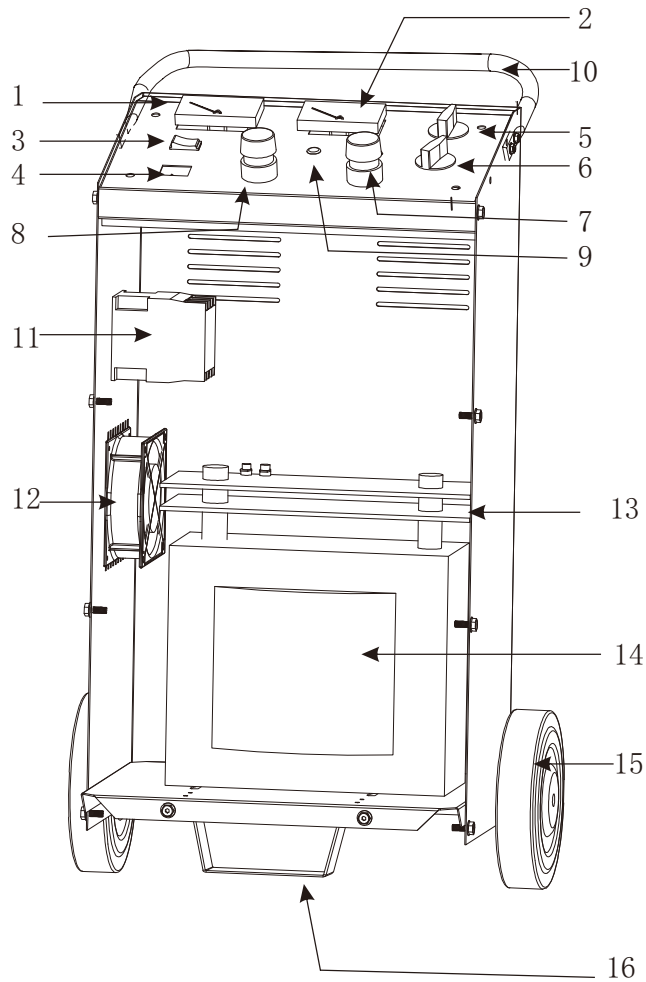
Connection Diagram



Note!

1. Connect the the black clamp (-) to the negative terminal and red clamp (+) to the positive terminal.
2. Do not use the charging connection to start engine as this may cause the fuse and ammeter to blow. (The connection between the charger and the battery should be the same as the above diagram. Any Damage to the battery and charger caused by failure to comply with the above connection diagram is not covered by the warranty).
3. If the engine fails to start, please check that
 - A. The power cord meets the specified standards.
 - B. Charging clamps are properly connected to the battery terminals
 - C. Charging clamps and cables comply with the specified standards

Repair and Maintenance



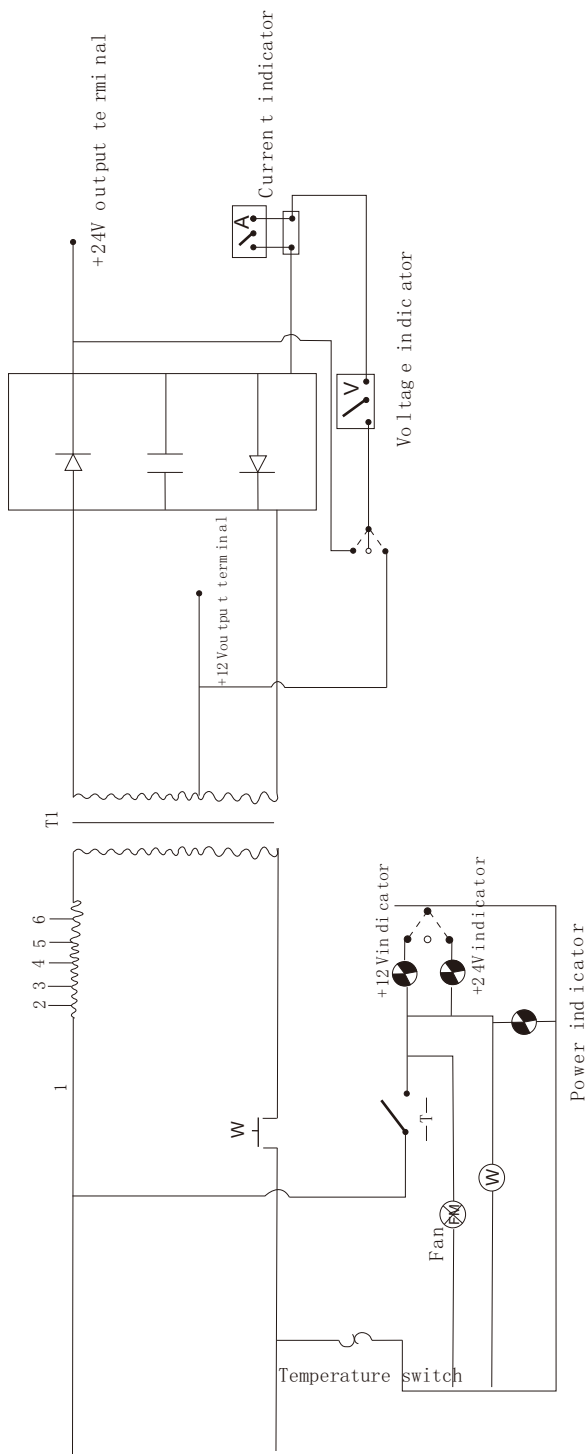
- 1、Ammeter
- 2、Voltmeter
- 3、Charge/Start
- 4、12V/24V Voltage selector
- 5、Power adjust
- 6、Time adjust
- 7、24V output terminal
- 8、12V output terminal

- 9、Indicator
- 10、Handle
- 11、Contactor
- 12、Fan
- 13、Rectifier
- 14、Main transformer
- 15、Wheel
- 16、Front stand

Troubleshooting

Trouble	Probable cause	Remedy
No input power	(1)incorrect input power connection (2)Power switch in "off" position	(1)Check input power connection (2)Turn power switch to "ON" position
Timer does not work	(1)Charging time has not adjusted (2)Timer damaged	(1)Adjust charging time (2)Replace timer
Not enough electricity power of charged battery	(1)Improperly connect work cables or clamps (2) Not enough charging current (3) Not enough charging time (4) Ex cess charge rate of battery capacity	(1)Check cables connections and tighten clamps (2)increase charging current (3)increase charging time (4)Check correct charge rate for the battery being charged
Charger stops working while operating	(1)Timer reaches preset time (2)Charger over heat	(1)Adjust timer (2)Wait for charger temperature to cool down
Voltmeter does not work	(1)Switches in "OFF" position (2)12V/24Vswitch in neutral	(1)Turn on power,adjust timer and current (2)Select 12V or 24V
Ammeter does not work	(1)No out put current	(1)Ammeter works while under loading only
Cannot charging battery	(1)Incorrect cables connections (2)Switches in "OFF" position (3)Battery had been damaged	(1)Check cables connections (2)Adjust switches to correct position (3)Check battery

Electrical Diagram



Accessories and spareparts list



Contactor NO. S001



Front stand NO. S002



Amperage switch NO. S003



Rectifier NO. S004



Power switch NO. S005



Timer NO. S006



Voltmeter NO. S007



Wheel NO. S008



Ground clamp NO. S009



Ammeter NO. S010



Output cord NO. S011

Remarks:

- 1)Optional orders for above accessories and spareparts are available.
- 2)Model and parts number required when ordering parts from your local distributor or service agency.