

Owner's Manual



FY-201735A



The equipment is approved by following car manufacturers(China)



This manual contains safety and operating instructions. Read it carefully before using or servicing the device. Do not neglect to do this as improper handling may result in personal injury and damage to the device.

Note!

1. The safety precaution is also printed on the top panel of the device. Make sure the device is to be used under right circumstances and conditions. Otherwise, it may damage the charger or devices connected to the charger, and injury to persons.
2. During the charge, the battery must be placed in a well ventilated area. Avoid flames and sparks
3. To maintain the factory original performance of your device, use only manufacturer suggested replacement parts. Model and serial number required when ordering parts from your local distributor. Do not use the charge if it has been dropped or damaged. Make sure the exterior appearance is in good condition without any obvious damages, to avoid short circuit and other problems caused by damage to the internal components.
4. The charger is designed for charging rechargeable batteries only. Do not use to charge small batteries or non rechargeable batteries, otherwise it may cause the battery and charger damage or even explosion. In case of the battery acid contact with the eyes or skin, rinse well with water and see a doctor as soon as possible.

Caution!

1. Risk for electrical shock! All electrical connections must be made by a qualified electrician. Make sure that the facility supply voltage and frequency are the same as shown on the charger name plate. Make sure the supply cable also meets the specifications of the charger unit.
2. Make sure the red clamp to the (+) and black clamp to the (-) of the battery. Keep the charger clean.
3. Frequently inspect all power cables for damage or bare wiring. Replace cable immediately if damaged.
4. Turn off the charger and disconnect the charger from the mains when not in use.
5. Disconnect input power supply before installing, checking, cleaning or changing parts.
6. Only qualified persons should install, operate, maintain and repair this charger. Consult

the manufacturer or supplier before servicing.

7. Keep charger as far away from children as practical. Properly install and ground this equipment. Electric shock can kill.

To prevent dangers and accidents, a person to keep an eye on the device and battery during the whole charging process is strictly required. Do not place or operate the charger near water, in wet locations or outdoors.

Important!

1. Fully use the length of charging cables to keep the charger away from the battery when connecting the charger to the battery.
2. Never place the charger on top of a battery.
3. Keep well-ventilated and dry condition.
4. Make sure the power supply and charging clamps is properly connected
5. Press Start/Stop button and disconnect the clamps to stop the charger during charging process. Do not disconnect the power by simply unplugging the charger. After charging, disconnect the charger from the mains, then disconnect the clamps from the car body and then disconnect the clamp from the battery, in the indicated order.
6. It will take a longer time for the battery to be fully charged as there will be a relatively longer time for floating charge.
7. Never attempt to charge a damaged or short-circuited battery.

Operation

Before starting the charger, it is very important to ensure that:

1. The facility supply voltage is the same as shown on the charger name plate.
2. The charger is correctly connected both to the mains and battery.
3. The battery type, battery voltage and operating mode are correctly selected. Otherwise it may cause damage to the vehicle or charger.

This charger has 4 work modes, including 1 hidden mode.

Charging Mode: This mode charges the selected battery type under normal conditions. The charger will automatically change its charging cycle depending on the open-circuit voltage of the battery. The charger will stop charging the battery automatically once the battery is fully charged. It is very important that the correct battery type is selected to protect both the battery and the charger.

Programming Mode: This mode provides a stable voltage source for the vehicle's electrical system allowing the electronics to be diagnosed and programmed in a safe environment. Before selecting the programming mode, please ensure that the vehicle's battery has been fully charged to prevent instabilities in current due to charging. The charger's output voltage can be changed from 12 to 14.8V manually, please select the appropriate voltage according to the service manual of the vehicle. Please note that this charger has a maximum output of 35A, make sure that the load does not exceed this value or damage may occur to the electrical system of the vehicle.

Showroom Mode: This mode provides power to a vehicle that is used for exhibition or demonstration purposes to prevent deeply discharging or damaging the vehicle's battery. When this mode is selected, the vehicle's battery will be maintained and kept fully charged.

Repair Mode (Hidden Mode): Once the charging mode is selected, this mode functions automatically when the open-circuit voltage of battery is in a certain range. Batteries that have not been used for long periods of time will be recovered by this mode.

Replacement mode: This mode should be used when the battery of a vehicle needs to be replaced and the supply of power to the vehicle cannot be interrupted. In this mode, the charger will supply power to the vehicle in the place of the battery. When replacing the battery, ensure that all ancillary features are turned off to reduce the load on the system to a minimum.

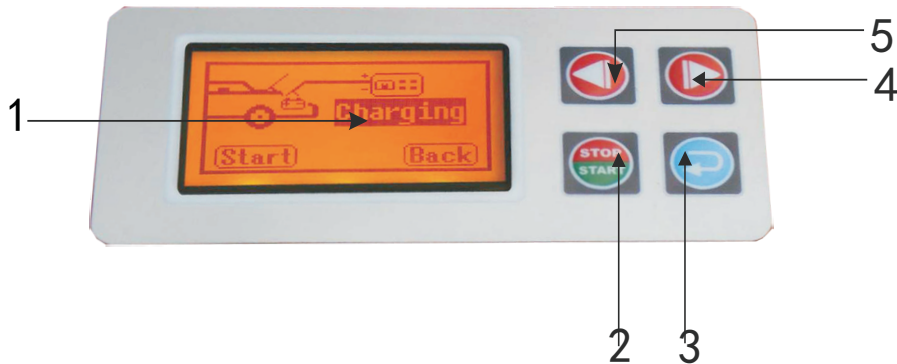
Alarm

Poor connection alarm: Indicates that the clamps and connections are not properly secure. If this alarm still indicates poor connections once the connections have been properly secured and the battery voltage is above 5V, remove the clamps and clean the electrodes, and reconnect the clamps with the electrodes. If the alarm is still indicating poor connections, please contact your distributor for further information.

High temperature alarm: Indicates that the temperature is too high for safe operation. In this case remove the connecting clamps. DO NOT turn off the charger. It needs the built-in cooling fan to cool the charger faster. The alarm will be canceled once the temperature has returned to normal. If the alarm is indicated when first connecting the charger or the

temperature is not high, please do not attempt to use the charger and contact your distributor for further information.

Controls



Display screen

1. Start/Stop
2. Return
3. Navigation button-Right
4. Navigation button-Left

Languages: Press the two buttons **Start/Stop** + **Navigation Right** at the same time for switching between English and Chinese.

- 1. Overcharge Protection:** During the charging process, the charger will automatically identify the status of battery to determine whether it is full or not to prevent damage to the battery caused by overcharging.
- 2. Overheat Protection:** The system will automatically shut off the charger when a pre-programmed temperature is reached. Do not turn off the charger while the cooling fan is activated.
- 3. Under Voltage Protection:** The system will automatically shut off the charger when the input voltage is lower than required.
- 4. Short-circuit Protection:** The system will automatically shut off the charger when damage or short-circuit is detected.
- 5. Reverse Polarity Protection:** The charger's display screen will indicate if the clamps are incorrectly connected.

Operation:

During the charging process, the charger will automatically adjust the charging voltage and current to carry out the proper charging curve to the battery.

Below is an operation procedure for setting the mode by hand:

Charging Mode:



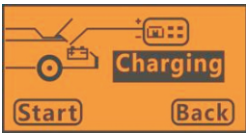
1. Battery voltage automatically set to either 12V
Set by hand is also available.



2. Set battery type to GEL, AGM or WET.



3. Set battery type to either WET or EFB



4. Select Work mode to Charging Mode

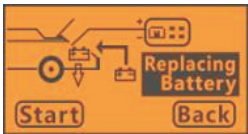
Select other Work Modes:



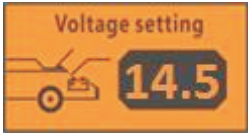
Programming Mode



Showroom Mode



Replacement Mode



Using Up and Down buttons to adjust voltage for programming from 12- 14.8V



Interface

Technical Specification

Characteristic	Units	FY- 201735 A
Input Voltage	V	220-240V
Frequency	Hz	50/60
Input Power	W	900 W
Max Current	RMS	35A
Charging Voltage	v	12
Programing	PG VA	12~16V/2~35A
MAH	Ah	10~1000
Dimension	cm	28×26.5×10
Weight	Kg	2.5

Key Tips 1: Power connections must be equipped with circuit breaker!

Key Tips 2: User must follow the user manual and charger's guidance to operate!

Key Tips 3: Charger must be serviced and maintained by professionals!

Key Tips 4: Must choose the proper battery type among Wet, AGM and GEL, in case of potential loss such as battery damage and vehicle damage.

Key Tips 5: EFB battery and vehicle must be apart during charge process, in case of vehicle damage!

Key Tips 6: Battery must be separated from vehicle during recovery process, in case of vehicle damage!

Key Tips 7: Important! This charger cannot replace battery completely. Backup battery must be connected during battery replacement!

Guard against danger

To prevent dangers and accidents, a person to keep an eye on the device and battery during charging process is strictly required.

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