



POWER CHARGER

Model: NS-1220C

User Manual

Specifications and Features:

- 20 Amp Total Max.

Power output 15A Max.

Charger output 5A Max.

- Net weight, only 4.63 lbs/2.1kg
- Dimensions 252*54*190 m/m (W*H*D)
- Over Voltage protection
- Over Current protection
- Quiet Internal Cooling Fan
- Input Voltage: Selectable AC input voltage
 - 110 Vac at 50/60Hz
 - 220 Vac at 50/60Hz
- Super Regulation:
 - Works with AC input from 90 to 132 Vac or from 178 to 264 Vac.
- Back-up Power Supply System

INSTALLATION:

Before plugging in the NS-1220C to an AC outlet, please make sure that the proper input voltage is selected on the rear of the unit. Select 115 for 100/110/120 AC operation or 230 for 200/220/240 AC operation. NS-1220C is factory set for 230V.

OPERATION:

The NS-1220C offers a fixed 13.8 VDC output at “POWER” connector for radio devices and a charging current output on “CHARGER” connector for charging a lead acid battery. The maximum load of NS-1220C is 20A, which means 15A on “POWER” and 5A on “CHARGER” at the same time. If no battery is connected on “CHARGER”, then “POWER” may gather all “POWER” output up to a maximum of 20A. All you have to do is connect your device to the correct output terminal and turn the “PWR” switch to the “ON” position. Select WET for wet battery, GEL for gel battery.

The NS-1220C may work as an Uninterruptible Power Supply (UPS) or as a backup power supply system if a battery is connected at the “CHARGER” terminal block. When AC power is applied normally, the charger terminal block provides current to charge the battery. Once AC fails, the battery will replace the AC to power the model immediately. The “POWER” connector may remain at 13.8VDC output for a while, the duration time is dependant upon the volume of the battery.

All LED indicators will turn off when AC fails except REV and battery type indicator (WET or GEL).

The cooling fan on the NS-1220C will operate when the unit is turned on. The speed of the fan varies depending on the temperature control circuit.

PROTECTION:

Over Current Protection: the NS-1220C will automatically shut down if the total load is over 20 Amps. To reset the PS, turn the unit OFF and wait 20 seconds, then turn the unit ON - the PS will recover.

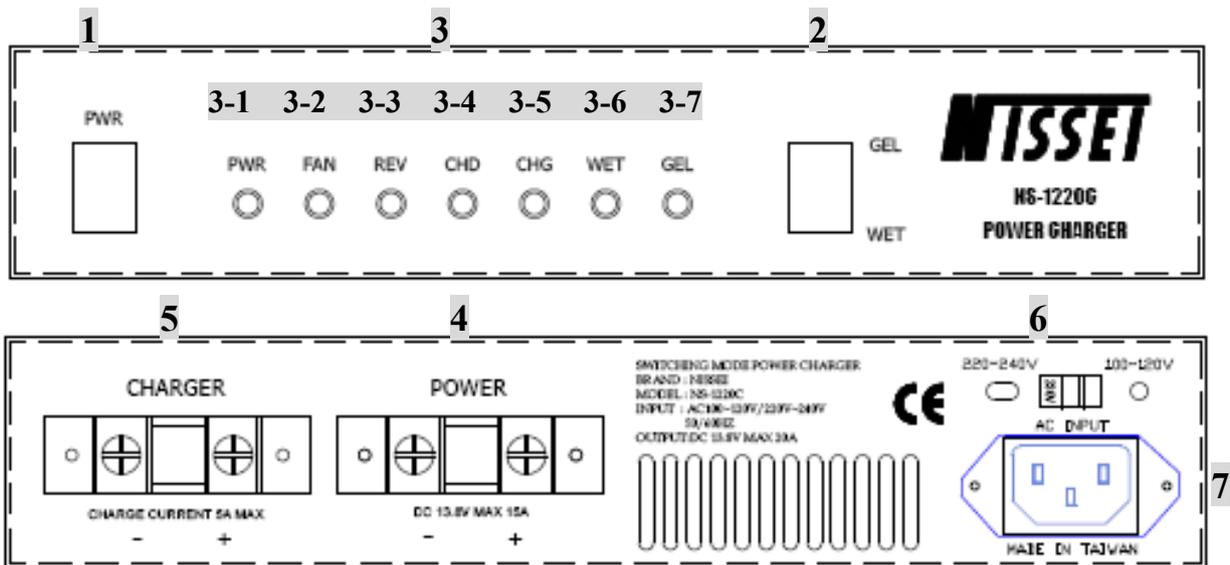
Polarity Reverse Protection: when the battery polarity is reversed, the “CHARGER” will stop output immediately. If the total load is over 20A in the meantime, the PS will shut down.

Low Voltage protection: when a battery is connected to “CHARGER” for charging, the “CHARGER” will automatically detect its voltage. If the battery voltage is higher than 4V, then it will start charging. If the voltage is lower than 4V, normally the battery is considered to be damaged and it is not necessary to charge it. “CHARGER” will stop the output charging current.

Short Circuit Protection: output terminal short circuit will not damage the PS, it will be simply turn off. When short circuit is removed, the “POWER” will recover immediately. The “CHARGER” should be reconnected with a battery to reactive it (the battery voltage should over 4V).

Over Voltage Protection: when the charger output is over 16V, it will turn off. If the output is lower than 10V, it will also turn off.

The NS-1220C has a 6 amp AC input fuse inside of the unit. To replace the fuse you should remove the old fuse by opening the case and replace it with a new 6 amp fuse.



PANEL DESCRIPTION		
Item	Name	Descriptions
1	Power Switch	Control - main power On or Off,
2	Battery Type Selector	<input type="checkbox"/> WET Flooded battery <input type="checkbox"/> GEL Gel battery
3	LED Indicators	
3-1	<input type="checkbox"/> PWR Power Indicator	Light on when the model is on
3-2	<input type="checkbox"/> FAN FAN Indicator	Light on when the FAN is working
3-3	<input type="checkbox"/> REV Battery Reverse Indicator	Light GREEN when BATTERY polarity connection is correct, light RED when connection is incorrect
3-4	<input type="checkbox"/> CHD Floating Indicator	Light on when battery is in floating mode.
3-5	<input type="checkbox"/> CHG Charging Indicator	Light on when battery is charging
3-6	<input type="checkbox"/> WET Battery Indicator	Green LED light on when battery type selector is set on <input type="checkbox"/> WET position
3-7	<input type="checkbox"/> GEL Battery Indicator	Yellow LED light on when battery type selector is set on <input type="checkbox"/> GEL position
4	<input type="checkbox"/> Power Output Terminal Block	For Power supply output connection
5	<input type="checkbox"/> Charger Output Terminal Block	For Charger output connection
6	AC Voltage Selector	Select AC input voltage to be <input type="checkbox"/> 115V (100V~120VAC) or <input type="checkbox"/> 230V (220~240VAC) Factory Default 230V
7	AC Socket	For separable AC power cord connection