



1 Scope:

This specification is applicable to Pairdeer Battery Charger, PAC001 distributed by ZHONGYIN (NINGBO) BATTERY CO., LTD.

2 Product Features

2.1 Battery Type

Suitable for 1-4pcs AA/AAA/C/D or 1-2pcs 9v Ni-MH/Ni-Cd batteries.

2.2 Reverse Polarity Protection

The electrical circuit protects the charger and batteries from being damaged by incorrectly installed batteries.

2.3 Zero Voltage Jump Start

Restore the battery if the battery voltage is 0V

2.4 Low Battery Leakage Current

If the battery charger is not connected to input power and left in the charger, the charger will discharge the batteries using a pre-determined current.

3. Electrical Performance and Tests

3.1 Input voltage

100-240VAC, 50/60Hz

3.2 Charging voltage

1.4VDC x 4 channels

9VDC x 2 channels

3.3 Charging current

D/C/AA/AAA: 360mA \pm 30mA

9V: 25mA \pm 5mA

3.4 Trickle charge current

D/C/AA/AAA: 50mA \pm 10mA

3.5 Timer Control Feature.

Shuts off main charging current and starts trickle charge at selected times. Only for D/C/AA/AAA : 3 hours, 6 hours, 9 hours, 24 hours, \pm 10%,

3.5.1 Battery Capacity Tester

To test the capacity of AA/AAA/C/D batteries, a bright indicator shows sufficient battery capacity, a weak indicator indicates insufficient battery capacity. This tester is only an approximate gauge of battery capacity and only tests batteries placed in the first (left) channel.

3.5.1 Discharge Function

Discharges AA/AAA/C/D batteries which are placed in any of the 4 channels. The indicator will not light when discharging. To test if discharge is complete, place the discharged battery in the battery tester. No light indicates the discharge is complete.



3.6 Input standby current

Maximum 30mA

3.7 Input loading current

Maximum 50mA

3.8 Charging Indicators

Red on: Normal charging

Red off: Trickle charge in progress OR no battery in channels

3.9 Hi-pot test

Apply 3750VAC between input plug and charging channel for 1 minute, current leakage must be less than 5mA. After the test, the unit should still work as normal.

3.9.1 Insulation Resistance

Minimum 100M ohms @ DC500V

4. Mechanical Tests and Requirements

4.1 Drop test

Drop from a height of 3 feet onto a concrete floor covered with 1/8 inch vinyl tile. Drop 3 times total, each time on a different product surface.

Expected result: The unit should still meet the section 3.9 requirements

4.2 Surface

Damage and rusting are not permitted.

5 Operating and Storage Conditions

5.1 Operating temperature range

0°C to 40°C, best at 25°C

5.2 Storage temperature range

-20°C to 65°C, best at 25°C

6 Safety and Environment Regulations

CE/ROHS compliant

7. Product Inspections

7.1 Inspections of all products

- Charging voltages (3.2)
- Charging current (3.3)
- LED indicators (3.8)
- Hi-pot (3.9)
- Surface (4.2)
- Foreign mass & sound by shock
- Polarity of charging channel



7.2 Inspections of selected products

- Battery charging test
- Drop test (4.1)

8. Cautions

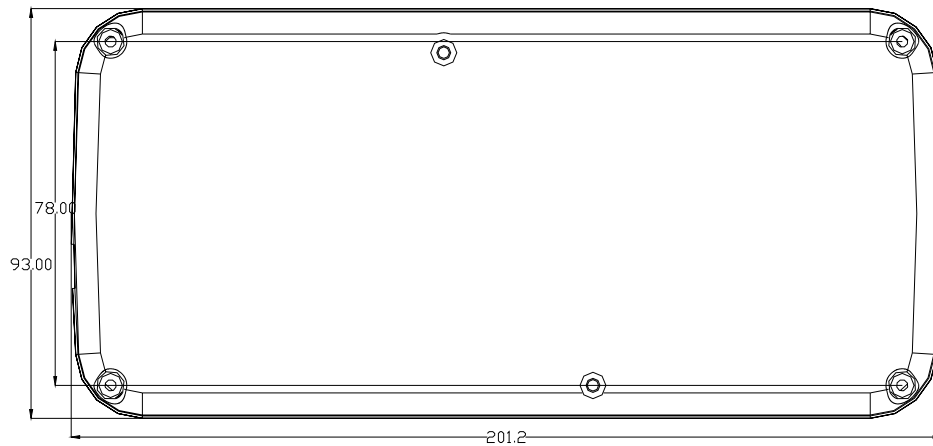
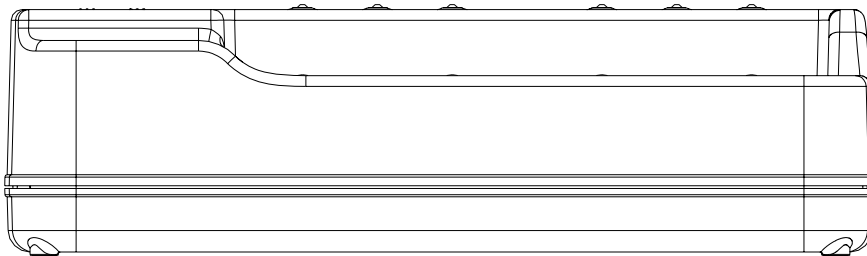
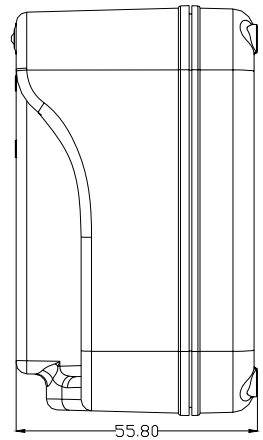
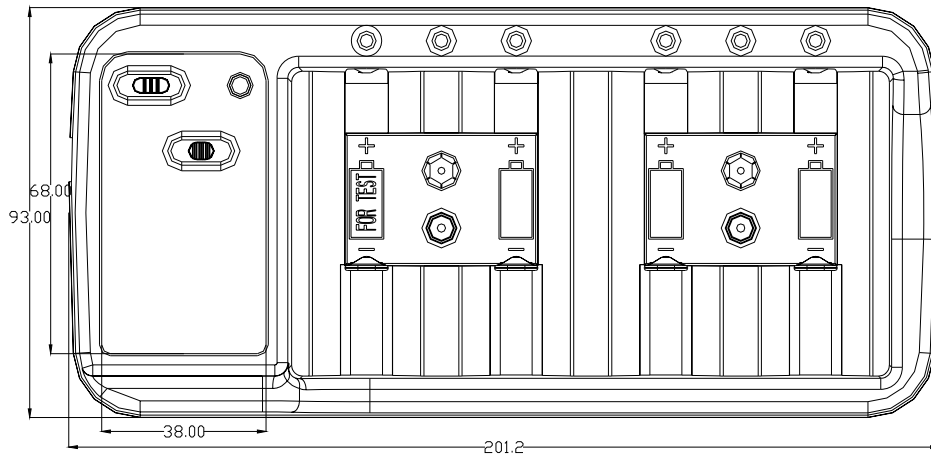
- Children should use product only under adult supervision.
- Mixing batteries of different capacities and sizes in the charger may influence the charging times or damage the batteries.
- Correctly insert the batteries and avoid reversing the +/- polarities.
- Cut off power after the batteries are fully charged.
- The charger is intended for use with C/D/AA/AAA/9V Ni-MH/Ni-Cd batteries only. Charging other battery types may cause explosions, breakage, personal injury or property damage.
- Incorrect use may result in electric shock
- For indoor use only. Keep away from humid and hot places.
- Do not disassemble or reassemble the charger.

9. Charging Times

Battery Type	Battery Capacity	Charging Times (Approximate)
AA Ni-MH	2000mAh	6.6h
AA Ni-MH	1500mAh	5h
AAA Ni-MH	600mAh	2h
AA Ni-Cd	1000mAh	3.3h
AA Ni-Cd	850mAh	2.8h
AAA Ni-Cd	300mAh	1h
C Ni-MH	1800mAh	6h
D Ni-MH	2500mAh	8.3h
C Ni-Cd	1200mAh	4h
D Ni-Cd	1600mAh	5.3h
9V Ni-MH	200 mAh	9.6h

10. Mechanical Drawing

Unit: mm



11 Figure of Unit Product Sales Packaging





History and Deviation of Revision

Revision History

Revision	Date	By	Description of Change
A0	2008-8-15		New release