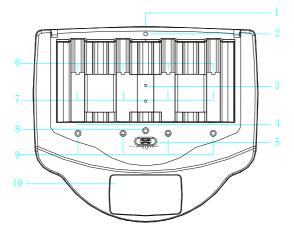
# **R-BC-01** User manual



- 1 DC SOCKET
- 2 LED LIGHT (9V BATTERY)
- 3 CHARGING (9V BATTERY)
- 4 +POLE
- 5 BATTERY SELECTION SWITCH

- 6 -POLE
- 7 BATTERY CHARGER BAY
- 8 POWER LIGHT
- 9 LED INDICATORS
- 10 LCD DISPLAY

## LCD & LED Display

| Battery<br>TYPE | Function      | LED Indication | LCD display word | LCD capacity<br>Indication |
|-----------------|---------------|----------------|------------------|----------------------------|
| Ni-Cd           | Discharge     | Yellow         | DIS              | Blinking<br>downward       |
|                 | Charging      | Red            | CHA              | Flashing upward            |
|                 | Fully charged | Green          | ОК               | Fully charged              |
| Ni-MH           | Charging      | Red            | СНА              | Flashing upward            |
|                 | Fully charged | Green          | ОК               | Fully charged              |
| Alkaline        | Charging      | Red            | СНА              | Flashing upward            |
|                 | Fully charged | Green          | ОК               | Fully charged              |

| Ni-Cd    | Battery voltage        |     |     |  |
|----------|------------------------|-----|-----|--|
| Ni-MH    | is very low short      | Off | BAD |  |
| Alkaline | Battery can't recharge |     |     |  |

#### Dear Customer,

Thank you for purchasing the ROSEWILL universal battery charger. This product is an excellent environmentally friendly choice providing a comprehensive and versatile solution to keeping your batteries charged when you need them and minimizing battery waste.

The device you have purchased is equipped with the best available technology.

The product meets the requirements of current European and National guidelines. Conformity has been established and the relevant statements and documents have been deposited at the manufacturer.

This battery charger has the following features:

- Easy to use
- Intelligent microprocessor controlled
- With negative delta V cut-off function
- Rechargeable batteries in all capacities 1-4 pcs size AAA ,AA ,N,C ,D& 1PCS 9V
- Recharges batteries in SINGLE or GROUP as the ROSEWILL Charger microprocessor monitors each charging bay individually
- With short-circuit protection

- With both LED and LCD display ,the status of each batteries charge cycle can be seen easily
- With individual maximum timer control for overcharge protection.
- Charges Ni-Cd (Nickel Cadium), Ni-Mh(Nickel Metal Hydride), Alkaline \*, RAM(Rechargeable Alkaline Manganese)

## • Note on standard alkaline batteries:

The ROSEWILL Charger can charge most types of alkaline batteries. Please use the setting "ALK" on the sliding front panel of your charger. Because of the chemistry of standard alkaline batteries they cannot be recharged nearly as many times as standard rechargeable type batteries like Ni-Cd or Ni-MH batteries. However, the ROSEWILL Charger uses a recharge current of 130 mA and the entire charging process is controlled intelligently by microprocessor which can recharge most standard alkaline batteries to 75-90% of their original capacity upwards of 30+ times depending on the quality of the battery. Please note standard alkaline batteries should be completely drained before recharging with your ROSEWILL Charger.

On an environmental note, the cost/performance comparison between standard alkaline batteries and rechargeable batteries such as Ni-Cd (Nickel Cadmium) and Ni-MH (Nickel Metal Hydride) is overwhelmingly in favour of rechargeable batteries, we think them the obvious environmental choice.

We kindly request the user to follow the operating instructions to preserve this condition and to ensure safe operation.

The device is intended for charging rechargeable Ni-Cd, Ni-MH and RAM batteries of type of

Mono (C), Baby (D), Mignon (AA) and Micro (AAA) as well as 9v block batteries. The charger is also effective at recharging standard alkaline batteries of the same types but at a more limited capacity as outline earlier. (See "note on standard alkaline batteries")

#### Warranty Disclaimer

- No part of the product may be modified or rebuilt and the housing must not be opened.
- Always observe the safety instruction.
- Incase of any damages which are caused due to failure to observe these operating instructions, improper operation or the failure to observe the safety instructions, the guarantee will be voided. We neither assume liability for consequential damages nor for damages to property nor personal injury arising from improper use of the device.
- For safety and approval reasons the unauthorized conversion or opening of the device is prohibited.
- Never short-circuit the charging contacts or batteries. It is normal that batteries get warm during the charging procedure. Please handle re-charged batteries with care.
- The ROSEWILL universal battery charger must not come into contact with moisture or wetness.
- Neither the device nor batteries are toys for children. Please keep them out of reach of children.

#### Important safety instruction

Before you use your new universal fast charger, please pay attention to the user's manual and the safety instructions listed below.

- Never use the unit outdoors; it is designed only for use indoor use
- This charger is only suitable for the Ni-Cd(Nickel Cadmium) accumulators and the Ni-MH(Nickel Metal Hydride) accumulators and Alkaline
- Don't use extension cord for connection of the unit.
- Pay attention to the correct polarity during inserting the accumulators.
- Use the unit only at ambient temperatures of 0-40°C.
- Always draw the main plug out of the socket after each use and before cleaning.
- Protect the charger against humidity and heat.
- Never open the unit by yourself; otherwise the warranty will become invalid! Repair can be carried out only by our service branch or an authorized distributor. Faults on montage can cause fires or electric shocks.
- Do not use damaged or corroded accumulators.

- AAA accumulators with a capacity of 300 mAh can never be charged for more than 0.5 hours.
- Never connect other electric units or devices with a damaged main together.
- If the connection cord of this unit is damaged, it must be replaced by the manufacturer, its service person or a similar qualified person, in order to avoid danger.

## PRODUCT DESCRIPTION

- $1\,{\scriptstyle \smallsetminus}\,$  This charger can charge 4 kinds of batteries Ni-Cd  ${\scriptstyle \smallsetminus}\,$  Ni-MH, RAM &Alkaline.
  - The Four separate battery charging bays function independently
  - This enables charging of up to 4 batteries simultaneously, Note : Batteries must of the same type is Ni-Cd、Ni-MH or alkaline.
  - Accommodates both AA、AAA、C、D size and 9V batteries. Battery type is preselected therefore only one type (Ni-Cd, Ni-MH, RAM or alkaline (Ram Setting)) battery can be charged at one time
  - This charger uses the latest battery charging technology. It uses "-delta V" deletion when charging Ni-Cd &Ni-MH battery first, followed by a quick charge. Once the battery is fully charged, a constant current trickle charge will keep the battery at optimum capacity.

## 2 Discharging Ni-Cd only:

Discharge times will very dependant on capacity and charge state, typically the process could take up to one hour, before the charge cycle commences.

During the discharge process

The indicator LED will glow amber

#### 3. Operation

Please read the following instructions carefully before first use of the ROSEWILL Charger.

- Connect the DC plug from the AC adaptor to the DC socket on the rear of the charger.
- Insert the AC adaptor into the household supply ensuring the wall socket is switched ON. This will cause the LED power indicator light to turn on.
- Select the required battery type by moving the batter selector switch between Ni-Cd ,Ni-MH or Ram for alkaline batteries (Switch must not be moved after batteries are loaded)
- Insert the required number of batteries into the charger, making sure the correct polarity is observed (+ is uppermost)
- After approximately 2 seconds the ROSEWILL Charger will automatically detect the status of the battery.
- Once battery detection is complete one of the following charging programs will commence.
- Ni-Cd batteries: A characteristic of a Ni-Cd battery is that it suffers from a memory condition
  which means after repeated topping up of the battery the capacity is significantly reduced to
  counteract this effect the ROSEWILL Charger will discharge the battery first (LCD linking
  "DIS"& energy LCD indicator flashing downward ) whilst LED indicator is illuminated
  yellow

Once the discharge cycle is completed, ROSEWILL Charger will begin the quick charge program (LCD blinking "CHA"& energy level indicator flashing upward) whilst the LED indicator illuminates red.

When the battery is fully charged , (The LCD will show "OK" & energy level indicator showing full) whilst the LED indicator illuminates green.

• Ni-MH & Alkaline batteries: Since neither Ni-MH nor Alkaline batteries have memory characteristics; ROSEWILL Charger will automatically start the quick charge program. Both

LCD & LED will have the same display as for charging Ni-Cd battery.

• Providing the fully charged batteries are not removed form the battery charging bays, The ROSEWILL Charger will automatically trickle charge the battery keeping it at its optimum capacity.

#### CHARGING TIME

In order to determine the approximate charge times the formula as below can be applied.

<u>capacity of the battery</u> x 1.4 = charge time of the battery

current of the charger

| Battery Type | Battery size | Battery capacity | Charge time    |
|--------------|--------------|------------------|----------------|
|              | AAA          | 400mAh           | 0.7Hours       |
| Ni-Cd        | AA           | 800mAh           | 1.4Hours       |
| Ni-Cu        | С            | 2200mAh          | 3.9Hours       |
|              | D            | 4400mAh          | 7.7Hours       |
|              | AAA          | 800mAh           | 1.4Hours       |
| Ni-MH        | AA           | 2300mAh          | 4Hours         |
| INI-IVITI    | С            | 3300mAh          | 5-8Hours       |
|              | D            | 5000mAh          | 8Hours         |
| Alkaline     | AAA          | 1.5V             | <1.4V 2.5Hours |
| Aikailite    | AA           | 1.5V             | <1.4V 5Hours   |

|          | С | 1.5V   | <1.4V 6Hours  |
|----------|---|--------|---------------|
|          | D | 1.5V   | <1.4V 10Hours |
| 9V block |   | 200mAh | 7 Hours       |

## Warranty Information

This product is fully guaranteed to the original purchaser against defects and workmanship for a period of one (1) year from the date of purchase, providing the equipment has been operated according to the accompanying instructions. This warranty is not valid if the product has been misused or damaged in way that is beyond our control. This warranty applies only to the product and ROSEWILL Technologies, LLC is not responsible in any way for losses, damage or inconveniences caused by equipment failure. Proof of purchase is necessary to redeem warranty.

