ARE-X2 Dual Channel Smart Charger

Main Features
◎ Compatible with battery types as follows:
   1) Li-ion batteries: 10440, 14500, 18650, 26650
   2) Ni-MH or Ni-Cd batteries: AA, AAA
◎ Micro USB charging and USB discharging
◎ LED charging and discharging indicators
◎ LED battery power indicator
◎ Micro-computer chip controlled digitally regulated charging to extend battery lifetime
◎ Short circuit protection, over-current protection, over-voltage protection and reverse-polarity protection.

Specification Parameters
Input: Max DC 5V/1.5A, is the external power supply offers to the charger, as to charge/discharge the rechargeable batteries, the details are as follows:

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>To charge the batteries</th>
<th>To charge other devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>4.2V</td>
<td>4.2V</td>
</tr>
<tr>
<td>Current</td>
<td>1.0A</td>
<td>0.8A</td>
</tr>
<tr>
<td>Battery Type</td>
<td>1<em>18650, 1</em>26650</td>
<td>2<em>18650, 2</em>26650</td>
</tr>
<tr>
<td></td>
<td>16340</td>
<td>14500</td>
</tr>
<tr>
<td></td>
<td>10440</td>
<td>AAA</td>
</tr>
<tr>
<td></td>
<td>AA</td>
<td>18650</td>
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<td></td>
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<td>26650</td>
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<tr>
<td></td>
<td></td>
<td>AAA</td>
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<tr>
<td></td>
<td></td>
<td>14500</td>
</tr>
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<td></td>
<td></td>
<td>10440</td>
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</tbody>
</table>

Size: 115mm Length x 63mm Width x 30mm Height
Weight: 96 grams (excluding charging cable)
Operating temperature: -20℃ to 50℃
Operating Humidity: 5%(0℃) to 90%(40℃)
Storage conditions: Temperature: -20℃ to 85℃

Safety Specification
Compliant Standards: CE, FCC, RoHS, WEEE, PSE (round), and China Quality Inspection Report Standard.

How to use

LED Indicator   Charging Slot

Micro USB Input ———

USB Output ———
1. Insert the Batteries
   Keep the battery polarity markings in conformity with the charger markings.
   * Only to charge the allowed batteries, and never to charge non-rechargeable batteries.

2. Charge the Batteries
   ◎ Micro USB charging port
   ◎ When in charging process, the three LED indicators will perform to show the charging state:
     One flashes, two off: less than 30%
     One constant-on, one flashes, one off: 30%-70%
     Two constant-on, one flashes: 71%-95%
     Three constant on: fully charged
   ◎ The two channels work independently. Due to the independent working circuit of the two channels, so if two fully-charged batteries exchange the place, the charging goes in a short time is normal. (5V, 1.5A adapters or above are recommended)
   ◎ Take out the batteries and cut off the power completely after charging is done.

3. Discharging
   ◎ USB port for other devices
   ◎ The preferred discharging channel will be the left one, but if it is not Li-ion battery, then the right channel will be detected, if it is Li-ion battery, then the right channel will be chosen to discharge.
   ◎ The discharging will be ceased when the discharging voltage is 3.0V
   ◎ When the discharging starts, the LED indicator will flash blue and then go out when discharging is completely done.
   ◎ The discharging will not be fulfilled if Ni-MH and Ni-CD batteries are inserted.

4. Battery Power Indicator
   ◎ When battery is inserted, the LED indicator will be on for three seconds. And the battery state can be displayed through the number of the constant-on LED:
Three constant-on: more than 80%
Two constant-on: 41%-80%
One constant-on: 10%-40%
None is on: critical power level

◎ Please insert the two batteries within 3 minutes for battery power indication. If you have to take out the batteries, please take the two at the same time, and reload the batteries, thus the battery level can be displayed again.

Notice
1. It is normal if the temperature of the battery is under 55℃ during charging process. Due to the high working power in charging process, the battery will heat, please be careful in case of scalding.
2. Because of the limited capacity of 10440, 14500 and 16340 rechargeable Li-ion batteries, the capability of charging other devices in heavy load will be doomed soon.
3. The totally discharged battery will be detected with one LED indicator constant-on, but without discharging function any more for critical battery power.

Attention
1. Only intended for rechargeable Li-ion batteries, Ni-MH and Ni-Cd batteries. Other types of batteries may cause battery breach, leakage or explosion, or even cause damage to people and property.
2. Use the battery charger in normal working condition and cut off the power completely after usage.
3. Load the battery properly.
4. Do not dismantle, modify the charger or use it for other purpose.
5. Keep the charger out of reach of children. Children should use the battery charger only under the guidance of adults.