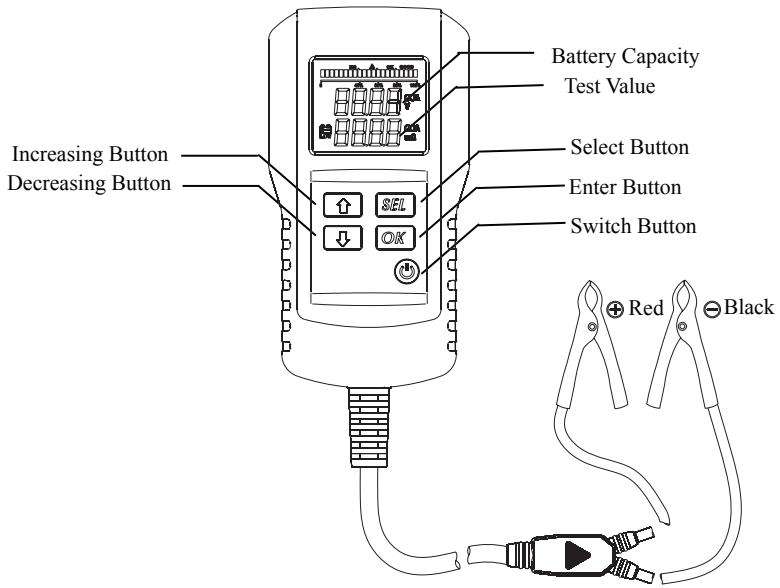
Digital Battery Analyzer (AE300)



Operation Procedure

(1) Power of the analyzer is supplied by the vehicle battery.For testing, the clinchers of the analyzer should be clinched correctly on the battery during is testing. (Red clincher means ⊕(positive) terminal and black clincher means ⊖(negative) terminal which should be clinched correspondingly on the terminals of the battery.)

(2) Turn on and input:

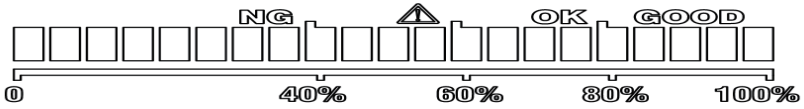
a. Press the button "⏻" for 1 second.
b. The screen gets lightening and Bee alarm will emit a "B" sound.
The screen shows moving digits, all test indexes and low battery caution index.
c. Press "OK" it gets into the step of CCA (Cold Cranking Ampere) value input.
d. The third digit on the right of the four-digits number index blinks, it means the indication digit is changeable by "⬆" (increasing) or "⬇" (decreasing) function button. Press the "⬆" (increasing) or "⬇" (decreasing) function button until the correct digit shows and move to next digit place for value-input by pressing "SEL".
e. The units digit on the right if the four-digits number carries each time 5 units in adding, the other digits carry once an unit in adding.
f. After input steps are completed, press"OK", the analyzer will start testing mode for 10 seconds. The Bee alarm keeps emitting "Be" sounds when the testing mode is closed. Press any button to stop the "Be" sounds.

* If the voltage of battery is too low,the "LOW"sign at the below left position on the screen will blink, please recharge the battery and test it again.

(3) Checking results display

a. Values display:
First column: the voltage of the battery
Second column: the mΩ → resistance of the battery
Press "SEL", the screen shows next values display
First column: the input CCA value for the battery
Second column: the test CCA value of the battery

b. The index below the bar graph on the display screen shows the capacity of the battery which has indication range from 0~100%.



The left indication below the bar graph shows lower than 40%, it defined that the battery plate is broken or too old, the battery should be replaced.
Indication shows between 40 % to 60 %, the battery is old, replacement could be under consideration.
Indication shows between 60 % to 80 %, the battery is workable.
Indication shows between 80% to 100 %, the battery is in good condition.

(4) Press the "⏻" button for 1 second, the analyzer will be turned off.

What does the CCA value of the battery mean? What's its significance?

CCA (Cold Cranking Ampere) values are indicates on the battery housing of all vehicles which signifies the capacity of the battery. It defines that under the circumstance of 0℉ (17.8℃ minus zero), the current released in continues 30 seconds from the 12V battery before its voltage drops to 7.2 V. For example when the indication of CCA value marks 600 on one 12V battery, it defined that the battery supplies 600 Ampere in 30 continues seconds at 0℉ before its voltage drops to 7.2V. The higher the measured CCA value by the analyzer is the better will be the battery performance.

How's the influence of temperature in battery?

During cold weather the fluidity of electrolyte reduces.
Its interacting with the battery plates shows down which causes worse charging and discharging performance of the battery.