

# AE1801 Instruction Guide

## Product Features:

Application range: 12V starter batteries;  
Analyze battery by 4 accurate indexes: Voltage, Resistance, CCA Value, Battery Condition;  
Cranking test displays the decision on the starter system, cranking voltage, and cranking time in milliseconds;  
Charging system test;  
Default language: English & Chinese.

## Working scope:

Working temperature: 0 °C to 50 °C  
Measurement standard:  
CCA: 100-1700  
CA:100-1700  
BCI: 100-1700  
MCA:100-1700  
SAE: 100-1700  
GB:30-200Ah  
JIS: 26A17-245H52  
IEC 100-1000  
EN: 100-1700  
DIN: 100-1000  
Measuring voltage range: 6V-18V

## Functional Indication:

### Clamp connection:

To ensure the secure connection, get the red clip clamped on the anode(+) pole and get the black clip on the cathode(-) pole of 12V battery. Then the device automatically enters into starting-up screen which shows item name "AE1801", description "12V Bat Tester" & current voltage. If the connection is not good, the screen shows "Check clamps".

## Test Function selection:

In status of excellent connection with clamps, press the "ENT" button in starting-up screen to enter TEST FUNC SELECT index, which shows "BAT TEST", "CRANKING TEST", "CHARGING TEST" and "LANGUAGE" setting. Switching to different function screen by pressing button "↑" and "↓", the page shows at the lower right corner during the process. Press button "←" to exit to starting-up screen.

**Note: If the connection is not good , pressing "ENT" button in starting-up screen would not enter TEST FUNC SELECT screen.**

## Battery test function:

Switch to "BAT TEST" Function in TEST FUNC SELECT screen; Press "ENT" button to enter "BAT TEST" input screen. By pressing button "←" & "→" to move the cursor position, and by pressing button "↑" & "↓" to set input value. For battery input value, please refer to measurement standard range to get accurate results. After confirming input value, press "ENT" button to start the test and enter battery test output screen.

In battery test output screen, you can repeat the test measurements by pressing "ENT" button to get results quickly. Press button "←" would back to TEST FUNC SELECT screen. Battery test result would show "GOOD" "WARNING" or "REPLACE" for reference. If battery voltage is too high or too low which would extremely affect the test result, in that case,"VOLT TOO HIGH" or "VOLT TOO LOW" would be displayed on the screen.

**Note 1: The device can not exit to the TEST FUNC SELECT screen, by pressing button"←" on "BAT TEST" input screen.**

**Note 2: When JIS Standard Input is needed, please refer to JIS-CCA Comparison Index to set CCA value.**

**Note 3: The device would keep last "BAT TEST "input value as default.**

## Cranking test Function:

Switch to the CRANKING TEST function in TEST FUNC SELECT screen and press "ENT" button to enter CRANKING

TEST screen. START ENGINE shows on the screen to suggest user to start engine to move forward. After started engine, it will automatically enter CRANKING TEST output screen, displays starting voltage and starting time in milliseconds, and shows "GOOD" or"WARNING" for reference. Press button "←" to back to TEST FUNC SELECT screen.

## Charging test function:

Switch to CHARGING TEST function in TEST FUNC SELECT screen and press "ENT" button to enter charging idle voltage screen, the screen shows"Increase RPM to 2500. Close all loads. Then press ENTER." It indicates to increase engine speed up to 2500RPM, turn off all loads, and then press "ENT" button to enter into charging idle voltage output screen.

Charging idle voltage output screen shows current charging voltage , and respectively shows "HIGH", "NORMAL" or "LOW" voltage for reference. In this screen, press "ENT" button to enter charging load voltage screen. The screen shows "Increase RPM to 2500. Start all loads. Then press ENTER". It indicates to increase engine speed up to 2500RPM, turn on all loads, and then press "ENT" button to enter charging load voltage output screen.

The Charging Load Voltage Output screen shows current charging voltage, and "NORMAL" or "LOW"voltage for reference.

**Note: Pressing button "←" in above-mentioned screen to exit to TEST FUNC SELECT .**

## Language setting functions:

Switch to LANGUAGE setting function in TEST FUNC SELECT screen, press "ENT" button to enter language setting. Switch English or Chinese languages by pressing button "↑" or "↓". Pressing button "ENT" or "←" to select the desired language and back to TEST FUNC SELECT screen.

# JIS translation table

Battery Model (JIS#)		CCA			Battery Model (JIS#)		CCA		
NEW	OLD	WET	MF	CMF SMF	NEW	OLD	WET	MF	CMF SMF
26A17R		200			36B20R	NS40Z	275	300	360
26A17L		200			36B20L	NS40ZL	275	300	360
26A19R	12N24-4	200	220	264	36B20RS	NS40ZS	275	300	360
26A19L	12N24-3	200	220	264	36B20LS	NS40ZLS	275	300	360
28A19R	NT50-N24	250			38B20R	NX60-N24	330	340	410
28A19L	NT50-N24L	250			38B20RS	NT60-N24S	330	340	410
32A19R	NX60-N24	270	295		38B20L	NX60-24L	330	340	410
32A19L	NX60-N24L	270	295		38B20LS	NX60-24LS	330	340	410
26A17R		200			40B20L		330		
26B17L		200			40B20R		330		
28B17R		245			42B20R		330		
28B17L		245			42B20L		330		
28B19R	NS40S	245			42B20RS		330		
28B19L	NS40LS	245			42B20LS		330		
32B20R	NS40	270			46B24R	NS60	325	360	420
32B20L	NS40L	270			46B24L	NS60L	325	360	420
32C24R	N40	240	325	400	46B24RS	NS60S	325	360	420
32C24L	N40L	240	325	400	46B24LS	NS60LS	325	360	420
34B17R		280			46B26R		360		
34B17L		280			46B26L		360		
34B19R	NS40ZA	270	325	400	46B26RS		360		
34B19L	NS40ZAL	270	325	400	46B26LS		360		
34B19RS	NS40ZAS	270	325	400	48D26R	N50	280	360	420
34B19LS	NS40ZALS	270	325	400	48D26L	N50L	280	360	420
50D20R		310	380	480	80D26L	NX110-5L	580	580	630
50D20L		310	380	480	85B60K				500
50D23R	85BR60K	500			85BR60K				500
50D23L	85B60K	500			95D31R	NX120-7	620	660	850
50D24R	NT80-S6	390			95D31L	NX120-7L	620	660	850
50B24L	NT80-S6L	390			95E41R	N100	515	640	770
50D26R	50D20R		370		95E41L	N100L	515	640	770
50D26L	50D20L		370		105E41R	N100Z	580	720	880
55D23R		355	480	500	105E41L	N100ZL	580	720	880
55D23L		355	480	500	105F51R	N100Z	580		
55B24R	NX100-S6	435	420	500	105F51L	N100ZL	580		
55B24L	NX100-S6L	435	420	500	115E41R	NS120	650	800	960
55B24RS	NT80-S6S	430	420	500	115E41L	NS120L	650	800	960
55B24LS	NT80-S6LS	430	420	500	115F51R	N120	650	800	960
55D26R	N50Z	350	440	525	115F51L	N120L	650	800	960
55D26L	N50ZL	350	440	525	130E41R	NX200-10	800		
60D23R		520			130E41L	NX200-10L	800		
60D23L		520			130F51R		800		
65D23R		420	540	580	130F51L		800		
65D26R	NS70	415	520	625	145F51L	NS150L	780	920	
65D26L	NS70L	415	520	625	145G51R	N150	780	900	1100
65D31R	N70	390	520	630	150F51R	NT200-12	640		
65D31L	N70L	390	520	630	150F51L	NT200-12L	640		
70D23R	35-60	490	540	580	165G51R	NS200	935	980	
70D23L	25-60	490	540	580	165G51L	NS200L	935	980	
70D23R		500	520	580	170F51R	NX250-12	1045		
75D23R		500	520	580	170F51L	NX250-12L	1045		
75D23L		500	520	580	180G51R	NT250-15	1090		
75D26R	F100-5	490			180G51L	NT250-15L	1090		
75D26L	F100-5L	490			195G51R	NX300-51	1145		
75D31R	N70Z	450	540	735	195G51L	NX300-51L	1145		
75D31L	N70ZL	450	540	725	190H52R	N200	925	1100	1300
80D23R		580			190H52L	N200L	925	1100	1300
80D23L		580			245H52R	NX400-20	1530	1250	
80D26R	NX110-5	580	580	630	245H52L	NX400-20L	1530	1250	

# Comparison table of DIN/EN

Battery Model No.	Standards		Battery Model No.	Standards	
	DIN	EN		DIN	EN
52805	180	240	55057	320	540
52815	180	240	55068	220	390
53517	175	300	55069	220	390
53520	150	240	55218	255	420
53521	150	240	55414	265	450
53522	150	240	55415	265	450
53621	175	300	55421	265	450
53624	175	300	55422	265	450
53625	175	300	55423	300	510
53638	175	300	55427	300	510
53646	175	300	55428	300	510
53653	175	300	55457	265	450
53836	175	300	55529	220	360
53890	175	300	55530	255	420
54038	175	300	55531	255	420
54039	175	300	55545	255	420
54232	175	300	55548	255	420
54312	210	360	55552	255	420
54313	220	330	55559	255	420
54317	210	360	55559L	255	420
54324	220	330	55563	255	420
54434	210	360	55564	255	420
54437	210	360	55565	255	420
54449	210	360	55565L	255	420
54459	210	360	55566	265	450
54459L	210	360	55567	255	420
54464	220	330	55811	360	540
54465	210	360	56012	230	420
54466	210	360	56048	250	390
54469	210	360	56049	250	390
54519	210	360	56068	250	390
54523	220	300	56069	250	390
54524	220	300	56073	250	390
54533	210	360	56077	300	510
54537	190	300	56091	360	540
54545	190	300	56092	300	510
54551	220	300	56111	300	540
54577	220	300	56216	300	510
54578	220	300	56218	300	510
54579	220	300	56219	300	510
54580	220	300	56220	280	510
54584	220	300	56225	300	510
54590	210	330	56311	300	510
54612	210	360	56312	300	510
54801	190	300	56318	300	510
54827	240	360	56322	300	510
55040	265	450	56323	300	510
55041	220	360	56420	300	510
55042	220	360	56530	300	510
55044	265	450	56618	300	510
55046	300	510	56619	300	510
55048	300	540	56620	300	510
55056	320	540	56633	300	510
56638	300	510	60026	440	720
56641	300	510	60038	500	760
55647	300	510	60044	500	760
56821	315	540	60527	410	680
56820	315	540	60528	410	680
56828	315	540	61017	400	680
57024	315	540	61018	400	680
57029	315	540	61023	450	760
57113	400	680	61047	450	760

57114	400	680	61048	450	760
57217	420	720	62034	420	680
57218	420	720	62038	420	680
57219	420	720	62045	420	680
57220	420	720	62529	450	760
57230	380	640	63013	470	680
57412	400	680	63545	420	680
57412L	400	680	63549	420	680
57413	400	680	64020	325	550
57512	350	570	64028	520	760
57513	350	570	64035	520	760
57531	350	570	64036	460	760
58424	450	760	64317	540	900
58513	320	540	64318	540	900
58514	320	540	64323	540	900
58515	450	760	65513	540	900
58521	320	540	65514	570	900
58522	320	540	65515	570	900
58527	395	640	67043	600	1000
58811	440	720	67045	600	1000
58815	395	640	68021	570	950
58820	395	640	68032	600	1000
58821	395	640	68034	600	1000
58827	400	640	68040	570	950
58833	400	680	70027	630	1050
58838	400	680	70029	630	1050
59017	360	600	70036	570	950
59018	360	600	70038	630	1050
59040	360	600	71014	700	1150
59215	450	760	71015	700	1150
59218	290	480	72512	680	1150
59219	290	480	73011	740	1200
59226	450	760	88038	175	300
59514	320	540	88046	210	360
59518	395	640	88056	265	450
59519	395	640	88066	300	510
59615	360	600	88156	320	540
59616	360	600	88074	400	680
60018	250	410	88092	400	680
60019	250	410			
58521	320	540	65514	570	900
58522	320	540	65515	570	900
58527	395	640	67043	600	1000
58811	440	720	67045	600	1000
58815	395	640	68021	570	950
58820	395	640	68032	600	1000
58821	395	640	68034	600	1000
58827	400	640	68040	570	950
58833	400	680	70027	630	1050
58838	400	680	70029	630	1050
59017	360	600	70036	570	950
59018	360	600	70038	630	1050
59040	360	600	71014	700	1150
59215	450	760	71015	700	1150
59218	290	480	72512	680	1150
59219	290	480	73011	740	1200
59226	450	760	88038	175	300
59514	320	540	88046	210	360
59518	395	640	88056	265	450