

Advance Heavy Duty Battery Capacity Tester

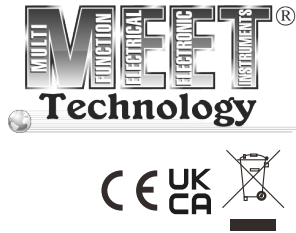
Check performance of 2V / 6V / 12V or 2V / 6V group battery

Model No.: MS-886(10)A

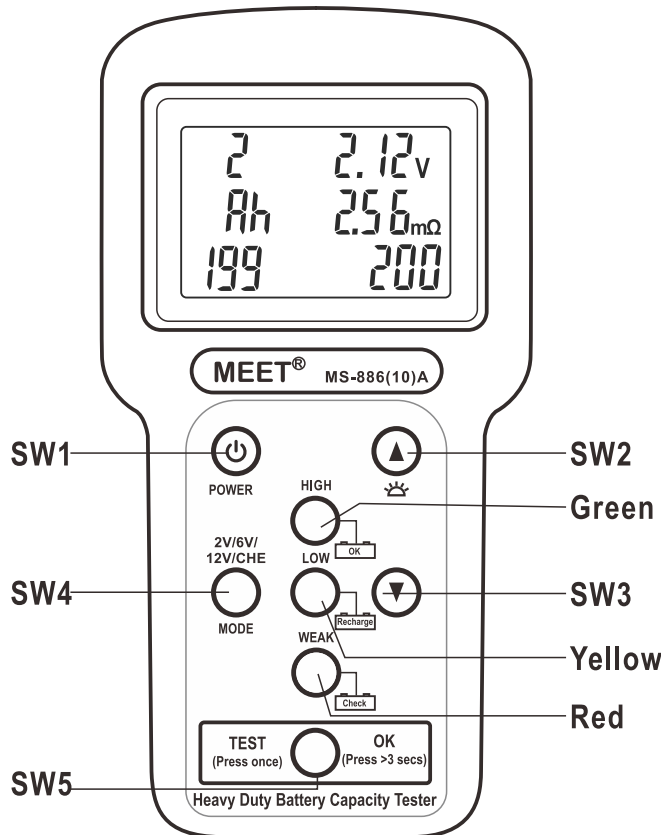
Introduction:

Thank you for selecting MEET battery tester MS-886(10)A. The tester is specially designed for 2V / 6V / 12V heavy duty battery tests, include voltage; internal resistance; 'Ah' current and additional feature 'CHE' mode is used to measure or monitor real time status of the battery voltage during charging or supplying upto 50VDC.

It is well designed, easy to operate; accurate results are achieved using a 4 terminal measurement method that eliminates test leads and contact resistance; selectable applied ON LOAD test current with less than 1 sec. measurement which produce less harm to the battery.



Tests type of Battery :



Definition of the press button:



Press > 3 secs. to ON/OFF.



- 1) When at 'TEST' mode, press once to ON / OFF backlight.
- 2) When at 'Apply current setting', press once or press and hold to increase the current value between 1 to 200 (Ah) or 200 to 1900 (Ah) with a bi (short) or bi...bi...bi (rapid and continuous) sound. Release to stop.



When at 'Apply current setting', press once or press and hold to decrease the current value between 200 to 1 (Ah) or 1900 to 200 (Ah) with a bi (short) or bi...bi...bi (rapid and continuous) sound. Release to stop.



- 1) At 'TEST' mode, press once to enter 'SEt' setting mode.
- 2) After, press once to select by looping through '2.00' → '6.00' → '12.00' → 'HE' → .



- 1) After select the desired test mode, press and hold for 3 secs. to conform and then enter 'Apply current' setting.
- 2) After set the proper current value, press and hold for 3 secs. to conform and then ready to TEST.
- 3) During 'TEST' mode, press once to test again (except 'CHE' mode).

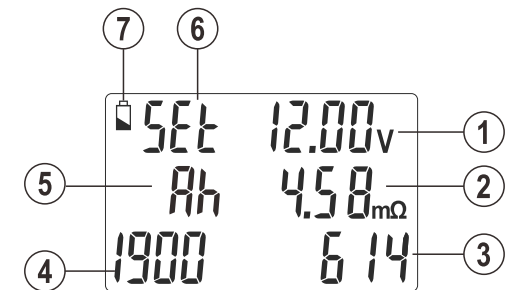
Definition of LED indication:

- 1) Green / Yellow / Red, either LED lights up which indicates quick results of battery, i.e. OK / Recharge / Check.
- 2) Green / Yellow / Red, all blinks which indicates error result

For more information, please refer to the LED indication explanation in page 5

Definition of LCD display:

- 1) a) 2V / 6V / 12V / CHE battery test mode
b) Display test results of the battery voltage
- 2) Display test results of internal resistance of the battery
- 3) Battery capacity 'Ah' left
- 4) Current setting applied to test the battery from 1 to 200 (Ah) or 200 to 1900 (Ah)
- 5) Display 'Ah' mode
- 6) a) 'SEt' Setting mode, when pressed once the 'SW4' button
b) Display 2 / 6 / 12 / HE when at Test mode
- 7) Low battery indication (when <7.00 ±0.2V)

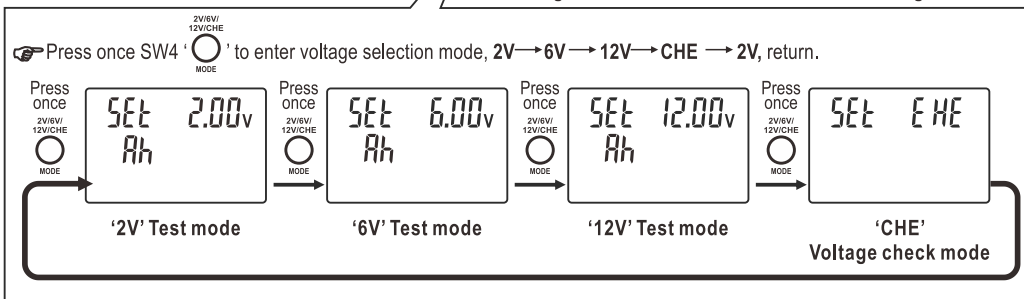
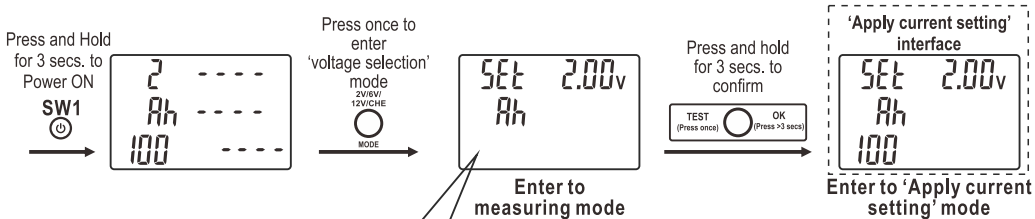


OPERATION

Mode setting:

1) Select battery voltage to be measure

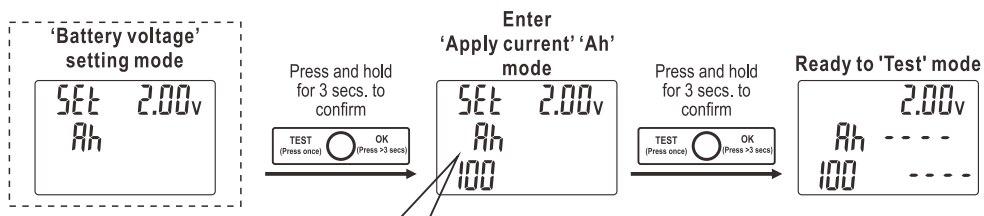
Press and hold the SW1 (Power ON) for 3 secs. to power ON the meter, then press once the SW4 (MODE) to enter 'battery selection'.



Note: Once selected at CHE (Voltage check) mode, press and hold for 3 secs. SW5 (TEST) to confirm and exit directly from 'Mode setting' interface. Now, you are ready to measure the voltage of the battery.

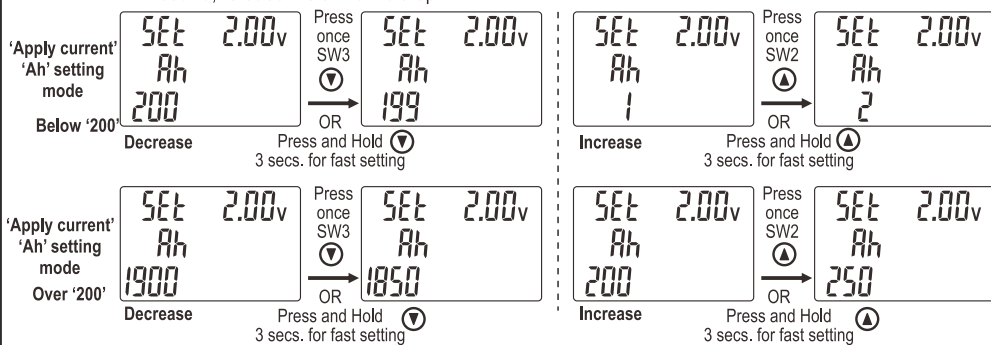
2) 'Apply current' 'Ah' setting (disabled for 'CHE' mode)

After setting battery voltage, press and hold SW5 (TEST) for 3 secs. to enter 'Apply Current' 'Ah' setting mode.



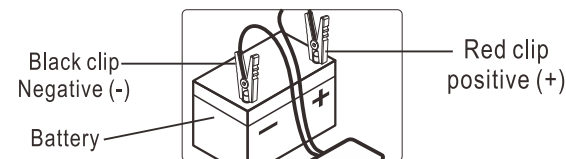
According to the rating marked on the battery (Ah), you can adjust the 'Apply current' 'Ah' value via the press switch SW2 (▲) as increasing or SW3 (▼) as decreasing into two steps.

Increasing or decreasing from '1~200' by steps '1' or from '200~1900' by steps '50', press once the switches SW2 (▲) or SW3 (▼) with a short 'Bi' sound or by press and hold for more than three secs. to rapidly increase or decrease with Bi...Bi...Bi sound, release the switch to stop.



Make Connection with the battery

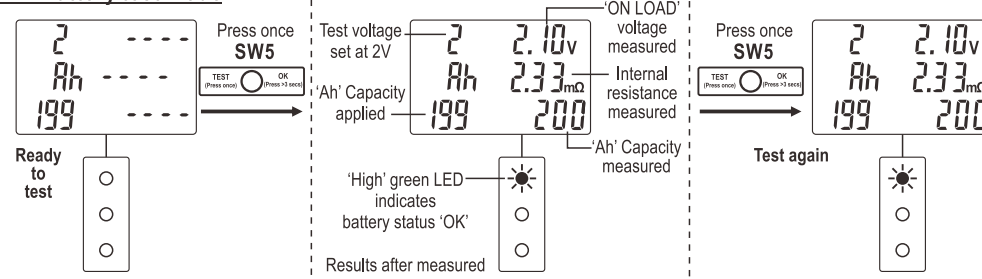
After all setting, connect the red clip to the positive terminal; the black clip to the negative terminal. Make sure clips are connected securely hence not to avoid affecting the results measured.



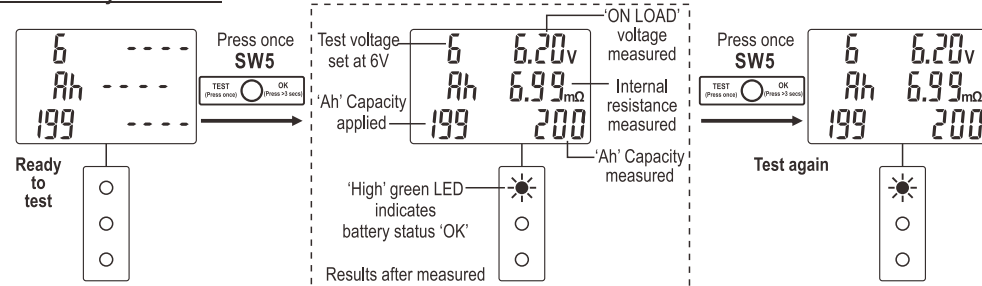
Start to TEST:

After connected with the battery properly and securely, press the SW5 (TEST) to start testing, press another to test again if necessary.

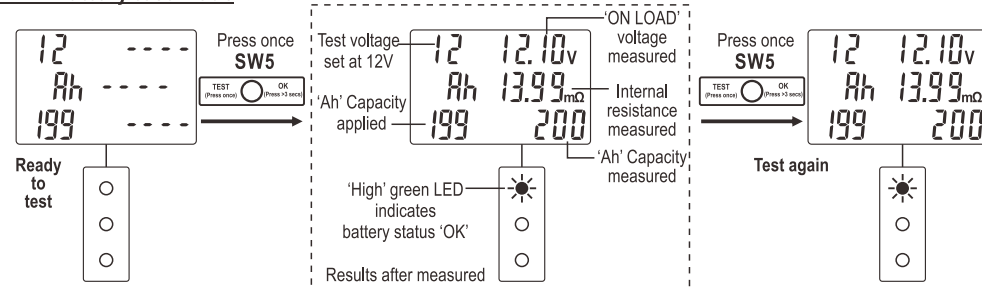
- '2V' Battery test mode



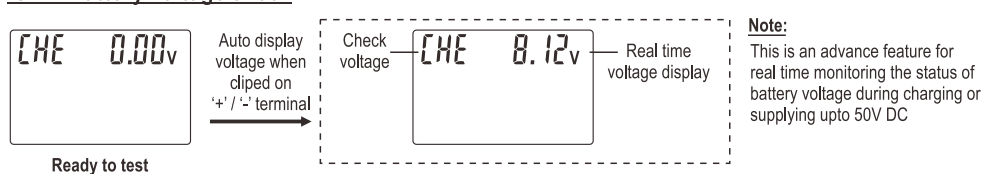
- '6V' Battery test mode



- '12V' Battery test mode



- 'CHE' Battery voltage check






Note: This is an advance feature for real time monitoring the status of battery voltage during charging or supplying upto 50V DC

Explanation:

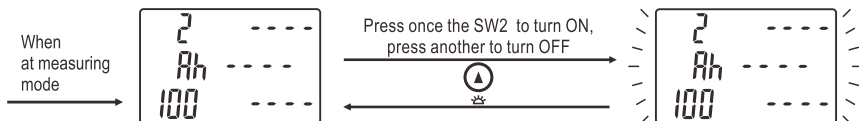
- 'Ah' (Ampere per hour) value : Higher the 'Ah' value of the battery generated, lower the internal resistance measured, So better performance of the battery.
- **Internal resistance of the battery** : The internal resistance test standard varies with the battery made of different materials by different manufacturers, so there is no certain standard. If the battery of the same model is made by the same manufacturer, the internal resistance value will not differ too much when it leaves the factory
- **Battery Capacity**: show the status of the battery, when the battery capacity is lower than 45%, recommend to replace the battery

LED indication explanation


Green / Yellow / Red, either LED is steady on which indicates the result of battery, ie. OK / Recharge / Check.

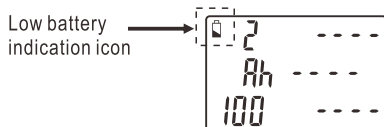
Status	LEDs status	'2V' mode	'6V' mode	'12V' mode	Battery performance	Suggestions
HIGH 	Steady ON	$\geq 1.85V$	$\geq 5.50V$	$\geq 11.00V$	GOOD	No need to replace
LOW 	Steady ON	1.41 ~ 1.84V	4.51 ~ 5.49V	10.01 ~ 10.99V	WEAK	Need to charge
WEAK 	Steady ON	$\leq 1.40V$	$\leq 4.50V$	$\leq 10.00V$	BAD	Pay attention/ Replace

Backlight



Battery replacement

- Using a low voltage battery will lead to the result measured inaccurate, when battery voltage lower than 7V ($\pm 0.2V$), the warn icon  appears on the LCD, you need to replace a fresh battery immediately.
- Loosen the screw on the reverse of the meter and remove the battery cover. Install a fresh 9V battery (6F22 / 6LR61 / 1604) at correct polarity, then replace the battery cover and tighten the screw.
- Dispose of used battery in accordance with local regulations- Never incinerate the battery !
- To avoid chemical leakage from the battery, remove the battery if you are not intended to use the meter in short time.



DON'T OPERATE IN CASE OF OPENING THE BATTERY COVER

APO (Auto Power OFF)

- To preserve battery life, when not in use, MS-886(10)A will automatically power down after 15 minutes of inactivity.
- To resume use after pressing and holding the SW1  for 3 seconds.

Power