YUASA BATTERY

YUA200BLTT

Wireless Battery & Electronics System Analyzer

Owner's Manual

Read entire manual before using this product

IMPORTANT

1. For testing 12 volt batteries, and for testing 12 and 24 volt charging systems.
2. Suggested operation range 0℃ (32℉) to 74℃ (165.2℉) in ambient temperature.

WARNING: This product can expose you to chemicals including arsenic, which is known to the State of California to cause cancer.

For more information, go to www.P65Warnings.ca.gov.

1. Working in the vicinity of a lead acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost importance, if you have any doubt, that each time before using your tester, you read these instructions very carefully.
2. To reduce risk of battery explosion, follow these instructions and those

published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Observe cautionary markings on these items.

3. Do not expose the tester to rain or snow.

PERSONAL SAFETY PRECAUTIONS:

1. Someone should be within range of your voice or close enough to come to your aid when you work near a lead acid battery.
2. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.

3. Wear safety glasses and protective clothing.
4. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least ten minutes and get medical attention immediately.
5. NEVER smoke or allow a spark or flame in vicinity of battery or engine.
6. Be extra cautious to reduce risk of dropping a metal tool onto the battery. It could spark or short-circuit the battery or other electrical parts and could cause an explosion.
7. Remove personal metal items such as rings, bracelets, necklaces and

watches when working with a lead acid battery. It can produce a short circuit current high enough to weld a ring or the like to metal causing a severe burn.

PREPARING TO TEST:

1. Be sure area around battery is well ventilated while battery is being tested.
2. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.

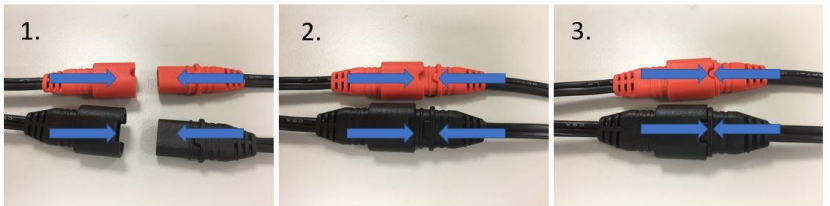
3. Inspect the battery for cracked or broken case or cover. If battery is damaged, do not use tester.
4. If the battery is not sealed maintenance free, add distilled water in each cell until battery acid reaches level specified by the manufacturer. This helps purge excessive gas from cells. Do not overfill.
5. If necessary to remove battery from vehicle to test, always remove ground terminal from battery first. Make sure all accessories in the vehicle are off to ensure you do not cause any arcing.

OPERATION & USE:

Each time you connect the tester to a battery, the tester will run a quick cable verification to ensure a proper connection through the output cables to sensors in the clamp jaws. If the connection checks out OK, the tester will proceed to the Home Screen. If the connection is poor, the display will show “CHECK CABLE”. In this case, check cable connections for visible signs of damage, as you may need to re-connect the clamps to the battery or replace the cable end.

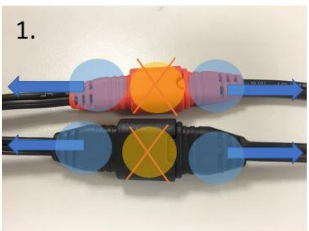
SECURE YUA200BLTT ONTO THE BATTERY INSTALLED IN A VEHICLE:

1. Choose ring terminal cable set to replace the clamp sets on the YUA200BLTT (The detachable cable design allows the user to switch between the clamp set and ring terminal cable set based on their needed.)



2. Loosen the battery posts and hook up the YUA200BLTT ring terminals on to the battery posts. Then tighten the battery posts back.
3. Use zip ties to tie up or double side tape velcro to secure the YUA200BLTT on the battery. (Make sure the double side tape doesn't cover on the S/N label of the YUA200BLTT tester and prevent from tearing off the S/N label)

Note: To loosen the connector, pull from the blue marked areas below to opposite directions. DO NOT hold the yellow marked area marked below which will make the connector's protective cover of the tester side to clamp the other connector of ring terminal / clamp side even tighter.



DOWNLOAD THE APPLICATION:

Download YUA200BLTT application on Google play or APP store by searching " **YUA200BLTT**" or go to:

Android:

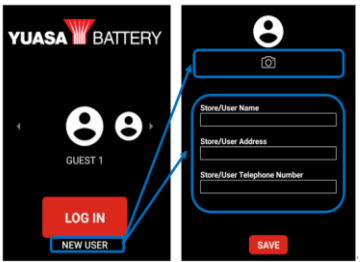
https://play.google.com/store/apps/details?id=us.yuasa.yua200bltt

iOS:

https://apps.apple.com/us/app/yua200bltt/id6744312238

START AS A NEW USER:

Start using YUA200BLTT by clicking "**New User**" and proceed to your profile settings. (User Info)



PROFILE:

1. Photo:

   You may take a picture which helps you identify which tester it is easily.

2. Store / User Name:

   Edit your store or user name.

3. Store / User Address:Edit your address.

4. Store / User Phone Number:

   Edit your phone unmber.

5. Save:

   Once you complete above items, click SAVE to proceed to the main dashboard.

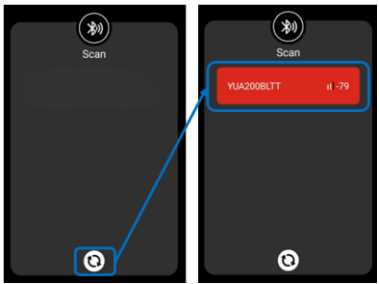
LOG IN AND SCAN YUA200BLTT:

1. Log In:

   Click “LOG IN” and proceed to Bluetooth scan.

2. Scan:

   Click the refresh icon to search the YUA200BLTT. (Make sure you are close to YUA200BLTT since the maximum connection distance for Bluetooth is 10 meters without any



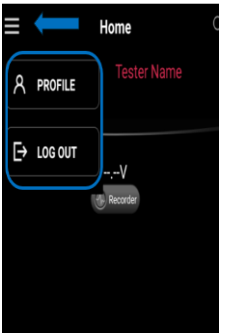
obstacles.)

Once the YUA200BLTT is found. Click on the appeared tester and enter the main dashboard.

3. Top Menu:

3.1 Home:

Click the top menu icon on the top left corner to enter.

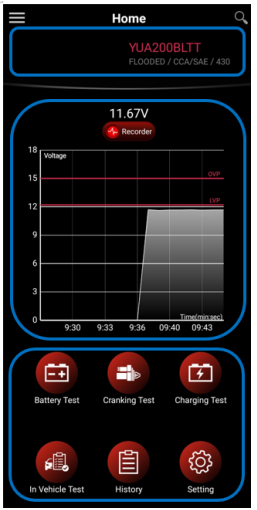


3.2 Profile:

Click “PROFILE” to edit the user info & change the photo.

3.3 Log Out:

Click LOG OUT, the app will return to the login page.



MAIN DASHBORAD:

Main dashboard contents your ***device info*** on the

top section, ***real-time voltage monitor*** in the middle section, and ***options of 6 different functionailities*** at the lower section as listed below

Battery Test / Cranking test / Charging Test

In Vehicle Test / History / Setting

BATTERY TEST:

1. Info:

   You may input the memo for this test.

2. VIN:

   Tap the scan icon to enable VIN scan or you could manually input the VIN.

3. Battery Serial Number:

   Tap the scan icon to scan the serial number of the battery or you could manually input.

4. “Battery Test” or “Start Stop Test”:

   Select “Battery Test” for testing standard / regular batteries or select “Start Stop Test” for testing start stop batteries.

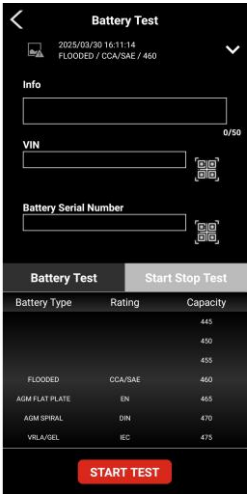
5. Battery Type:

Select FLOODED, AGM FLAT, AGM SPIRAL, or VRLA/GEL for testing standard / regular batteries.

Select EFB or AGM FLAT for testing start stop batteries.

6. Rating:

Select the rating between CCA/SAE, EN, DIN, IEC, CA/MCA, and JIS according to the specification of the battery.



- CCA/SAE: 40~2000
- EN: 40~1885
- DIN: 25~1120
- IEC: 30~1320
- JIS: By Battery Type No.
- CA/MCA: 50~2400

7. Capacity:

   Select the capacity according to the specification of the battery.

8. Start Test:

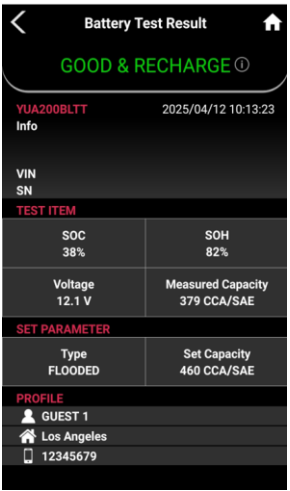
Click “START TEST” icon to start the battery test.

*Note:

“*In Vehicle Test?*” and “*Has the vehicle been started, driven, or jump started in the past 24 hours?*” questions may pop up based on the battery’s condition.

Please select Yes/No based on the actual scenario to prevent possible misjudgment.

*If surface charge is detected, the application will pop up a notification to ask the user to "*Turn on headlights for 15 seconds*" to eliminate the surface charge.



9. Test Result:

The test result includes the judgement, VIN, battery info, battery type, SOH%, SOC%, Measured voltage, set / measured capacity,

and your profile. Click on SHARE to send out the test result by text or image via email or other communication apps.

- Click on the exclamation mark to see the description.

GOOD & PASS:

The battery is good and capable of holding a charge.

GOOD & RECHARGE:

The battery is good but needs to be recharged.

CAUTION:

The battery may be serviced but decrease the capability of starting the engine gradually. The battery may fail under extreme climate conditions. There may be a poor connection between the vehicle and the battery affect the charging function. Please pay attention to the battery for replacement consideration and charging system checking.

RECHARGE & RETEST:

Battery is discharged, the battery condition cannot be determined until it is fully charged. Recharge & retest the battery

BAD & REPLACE:

The battery will not hold a charge. It should be replaced immediately.

BAD CELL REPLACE:

The battery has at least one cell short circuit. It should be replaced immediately.

LOAD ERROR:

The tested battery is bigger than 2000CCA/SAE or 200AH. Or the clamps are not connected properly. Please fully charge the battery

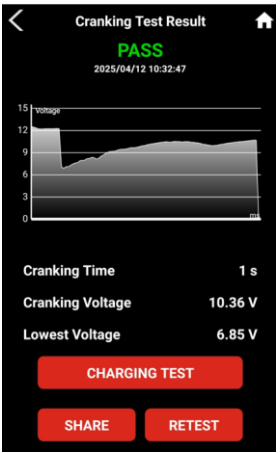
and retest after excluding both previous reasons. If reading is the same, the battery should be replaced immediately.

10. Share the test result:

    Click “SHARE” to share the test result via email or other communication applications by image or text.

11. Retest:

    Click “RETEST” to return to the setting



page of the battery test.

CRANKING TEST:

1. Turn off headlights, A/C, & audio system, and start the vehicle.
2. Test Result:

   The test result shows PASS or FAIL of the cranking test including the detail info of crank time, cranking voltage, and the lowest voltage.
3. Share test result:

   Click SHARE to share the cranking test result via email or other communication applications by image or text.

4. Retest:

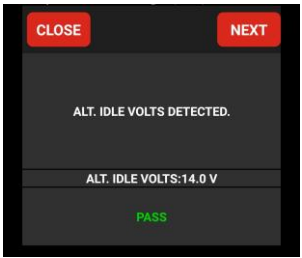
   Click “RETEST” to redo the cranking test.

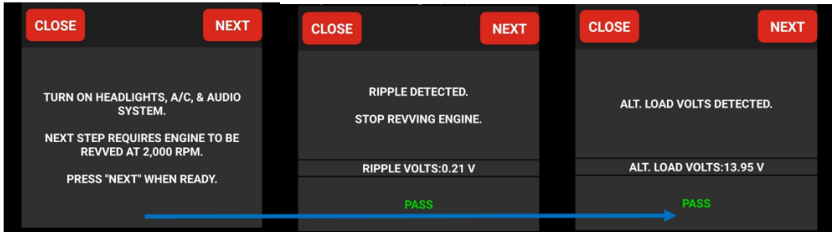
5. Proceed to charging test:

   Click “Charging Test” to proceed to charging test.

CHARGING TEST:

1. Turn off headlights, A/C, & audio system and begin the idle test.
2. Turn on headlights, A/C, & audio system and begin the ripple & load test. (Rev the engine and hold for 15 seconds for ripple & load test.)





3. Test result:

   The result shows PASS / FAIL results including idle, load, and ripple test with detected voltages and ripple voltage monitor. Scroll the page to see all test results in detail.

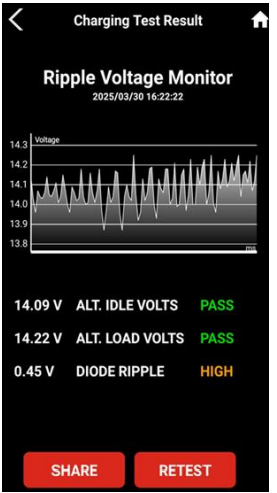
5. Share test result:

   Click SHARE to share the test result via email by image or text.

6. Retest:

   Click “RETEST” to redo the charging test.

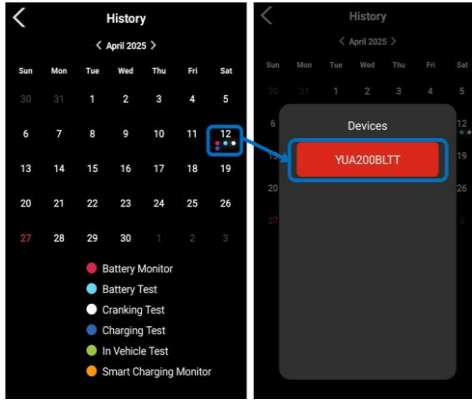
IN VEHICLE TEST:



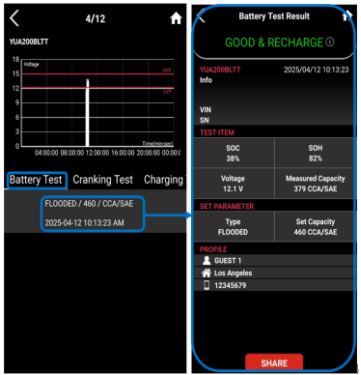
The combination test of BATTERY TEST, CRANKING TEST, and CHARGING TEST. Please refer to above instrutions of battery, cranking, and charging test.

HISTORY:

1. Click “HISTORY” to get an overview test records from a calendar.



2. Click on the date you would like to check and confirm the device.
3. Check history records of the battery test:



4. Check history records of cranking test:

5. Check history records of charging test:

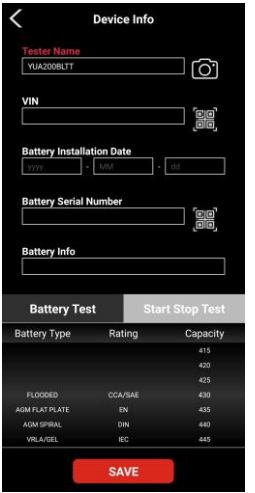
6. Check history records of in-vehicle test:

Same precedures as decripted above. The in-vehicle test is a combination test of battery, cranking, and charging test.

SETTING:

Device Info: You may edit the following items in this page and click SAVE after editing.

1. Tester Name
2. VIN
3. Battery Installation Date
4. Battery Serial Number
5. Battery Info
6. Battery Type & Capacity



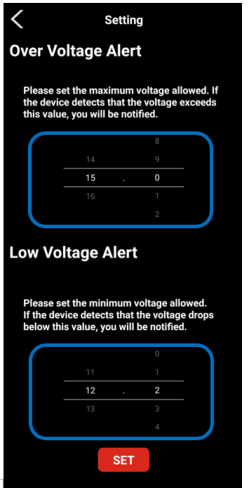
Notification:

It allows you to switch on/off the notification by clicking ON/OFF icon.

Voltage Alert:

Set voltage points for over & low voltage alert by sliding the scroll and click SAVE.

Once the battery voltage is above or under the safe range, you will get notification once you are close to the battery.

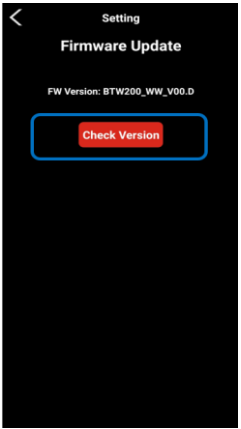


Firmware Version:

Check the current firmware version.

Firmware Update:

Click “Check firmware version” to see if your firmware is up to date or a new firmware is available. (Make sure your smartphone is close to YUA200BLTT durgin the firmware upgrade.)



About:

Check the app version and additional info of the applications here.