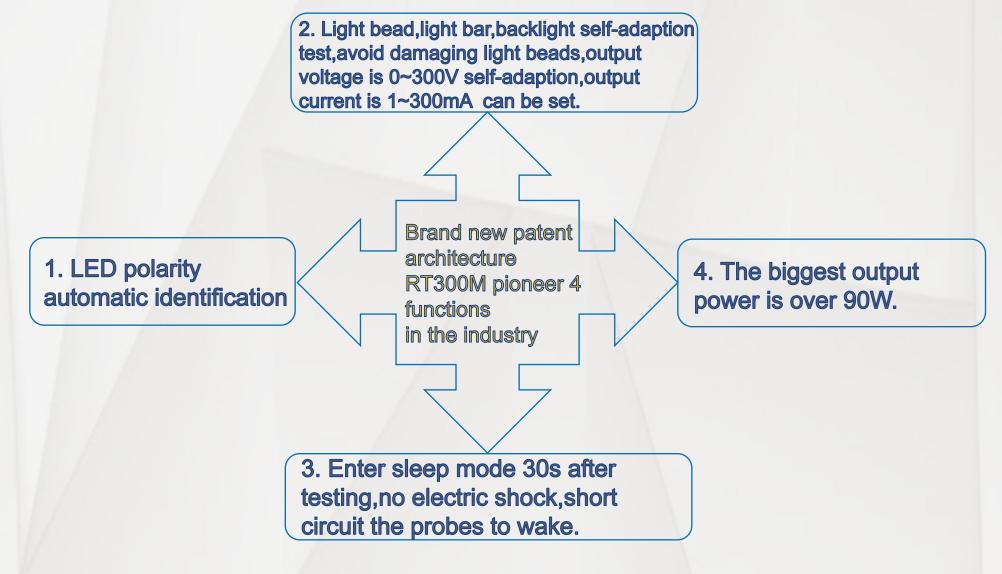


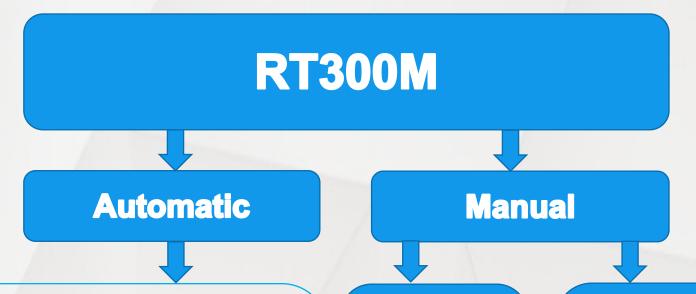
**RT300M** 

**LED Smart Tester Specification** 







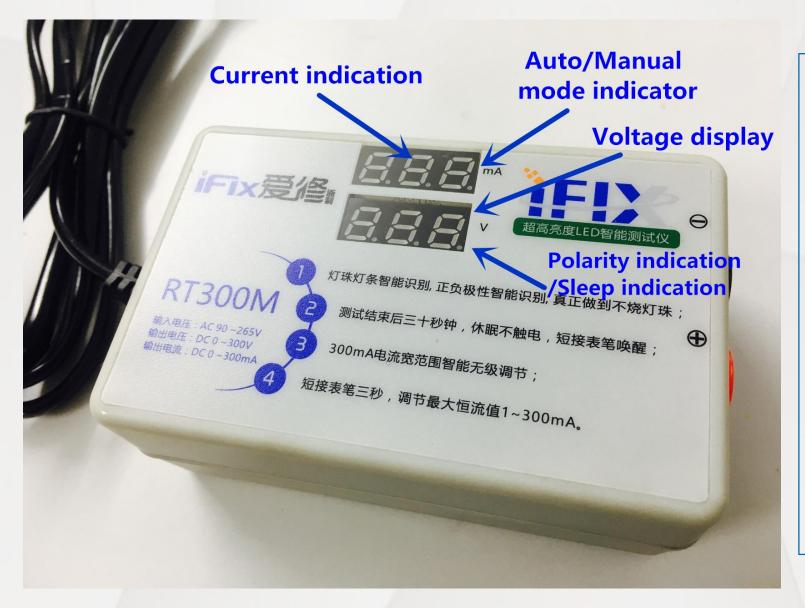


After the RT300M is energized, measure LED directly, can be used to identify most of the light beads, light bars and backlight in the market.

Automatic polarity conversion, no need to worry about connecting inversely by mistake to burn light beads. Short circuit the probes for 3s, enter the setting state, setting value is 1mA, 20mA, 20-300mA free setting.

Can be used to test the positive and negative withstand pressure of capacitor, stabilivolt, diode, triode, MOS tube, LED and other components.



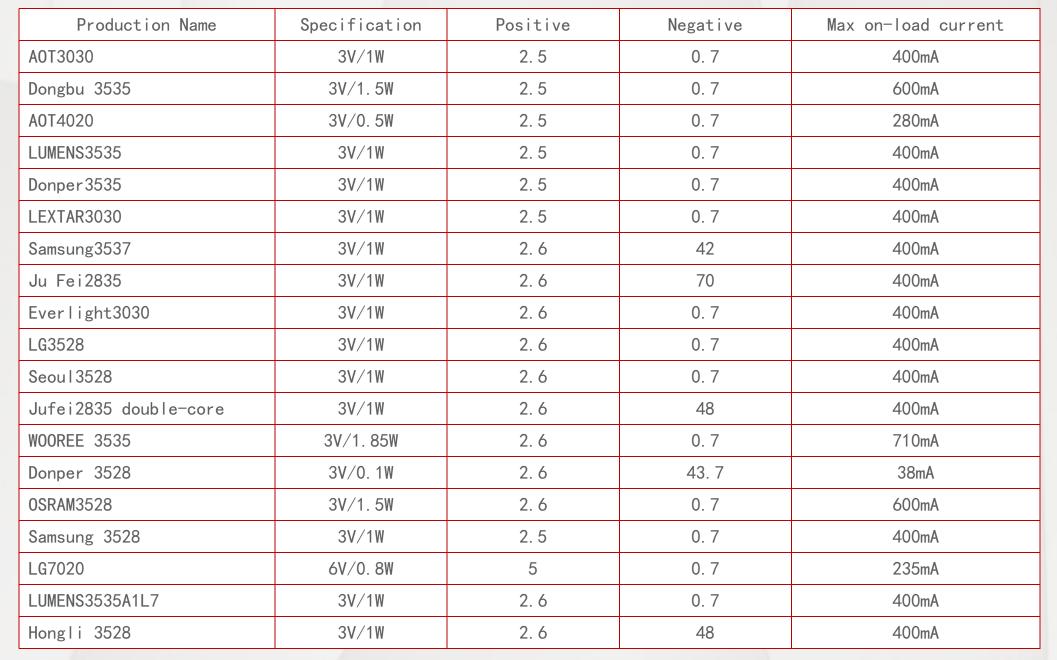


When automatically test, the frame in front of "mA" is the current indication, the one in front of "V" is voltage display.

The red probe is "+", the black probe is "-". When measuring, red probe connect to LED +,black probe connect to LED-, polarity/dormancy indicator light is not light.

Red probe connect to LED-,black probe connect to LED+,
Leds will be lighted up normally,
polarity/sleep indicator light is light.

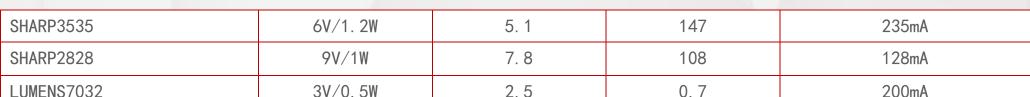
In automatic mode, the automatic/manual mode indicator light behind the mA box is not light. In manual mode, the automatic/manual mode indicator light behind the mA frame is light.







SHARP2828	3V/0.5W	2. 5	38	200mA
Dongbu 3528	3V/1W	2. 5	0. 7	400mA
Xinruida3535	3V/1W	2. 6	38	400mA
Seoul8520	3V/0.7W	2. 5	0. 7	280mA
Samsung 2828	3V/1.5W	2. 6	0. 7	600mA
Jufei7020	6V/0.8W	5	112	160mA
4020	6V/1W	5	64	200mA
AVAGO	6V/1W	5. 1	59. 5	200mA
Jufei 2835	6V/1W	5	157	200mA
LG6030	6V/1W	5. 1	0. 7	200mA
LG7020	6V/1W	5. 1	0.8	200mA
SHARP7030	6V/1W	5	78	200mA
Dongbu 7020	6V/1W	5	0.8	200mA
LEXTAR3030	6V/1W	5	0. 7	200mA
A0T7020	6V/1W	5	0.8	200mA
Puguang 3030	6V/2W	5	0. 7	400mA
LG3535	6V/2W	5	0. 7	400mA
Hongli 3528	6V/1W	5	78	200mA
Seoul 3535	6V/2W	5	0. 7	400mA
A0T3030	6V/1W	5	0. 7	200mA





SHARP3535	6V/1.2W	5. 1	147	235mA
SHARP2828	9V/1W	7. 8	108	128mA
LUMENS7032	3V/0.5W	2. 5	0. 7	200mA
LEXTAR4014	3V/0.2W	2. 5	0. 7	80mA
Puguang 7030	6V/1W	5	0. 7	200mA
LEXTAR5630	3V/0.5W	2. 5	0. 7	200mA
Hongli 3528	3V/1W	2. 5	52	400mA
SHARP2828	6V/0.8W	5. 1	77	160mA
A0T6030	3V/0.5W	2. 6	30	200mA
Samsung 5630	6V/0.6W	5. 1	0. 7	117mA
OSRAM3528	3V/1.5W	2. 5	0. 7	600mA
OSRAM5630	3V/0.5W	2. 6	0. 7	200mA
LUMENS5252	3V/0.3W	2. 5	0. 7	120mA
LG5630	3V/0.5W	2. 5	0. 7	200mA
OSRAM4014	3V/0.5W	2. 5	0. 7	200mA
1206	3V/0.2W	2. 5	61	80mA
Lite-0n 5630	3V/0.5W	2. 5	0. 7	200mA
Donper 215	3V/0.2W	2. 5	42	80mA
OSRAM4520	3V/0.5W	2. 5	0. 7	200mA



These are the measured parameter of iFix team's collection of about 60 different kinds of light beads. From the above form, the minimum on-load current is 38mA, which in turn is 80mA-117mA-120mA-160mA-200mA-200mA-235mA-280mA-400mA-600mA-710mA.

There are less light beads of 38mA, the light beads of 200mA-400mA are used more widely, also can't see the parameter when we haven't opening the inside of screen, most of the Front-line maintenance personnels are used to measure directly, with certain risk.

Since RT300M power has sufficient power, can be used for long time light bar aging and measuring with maximum current of 300mA, but this is only a maintenance method to be used to judge the soft failure of light bars, can't be mastered by all maintenance personnel.

Considering the unified opinions of many maintenance engineers, the security consideration and the measuring effect of actual combat.

Automatic mode and manual mode both open the Anti-jitter safety measurement model, also is to prevent accidental damage caused by poor contact, it will not enter the measurement condition when keep shaking, the amperemeter always show 0, lights are dim.



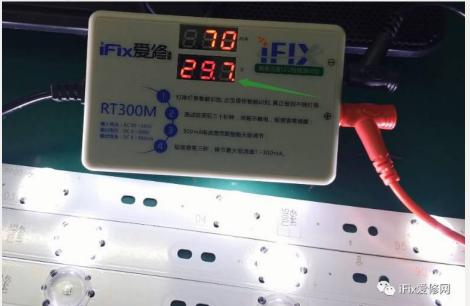
Automatic mode:Measure optionally with anode and cathode probes, automatically identify the polarity, measurement starts,1-20mA, after pause for 5s, 20-70mA, permanently stop (the same measuring method to light beads).

Note: RT300M automatically identifies light beads, light bars, entire backlight, over 60V, switch to backlight measurement mode, no pause at 20mA, pause for about 5s at 30mA, then continue to rise to 70mA.

Light bar test example: Connect the red probe and black probe positively, the polarity indicator light is not light.

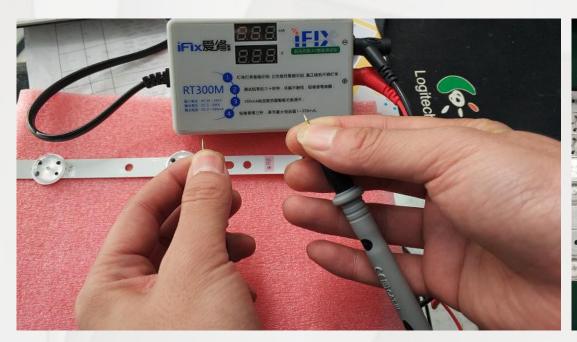
Light bar test example:Connect the red probe and black probe reversely, the polarity indicator light is light.







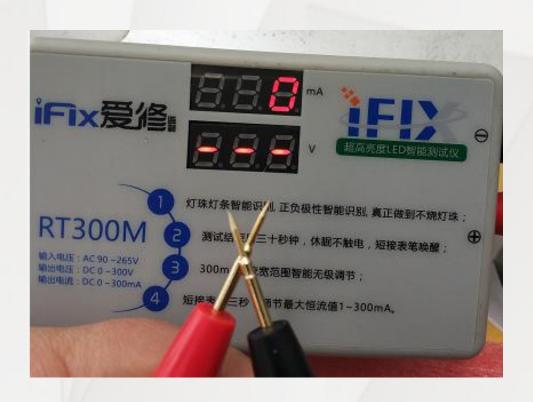
Stop measuring for 30s, enter sleep mode, the polarity indicator/sleep indicator light is lit, no electric shock, short circuit the red probe and black probe to wake.







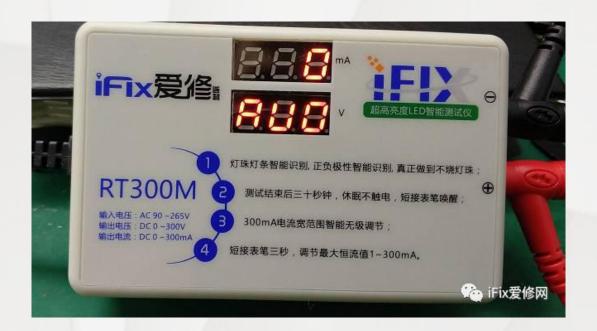
Manual Mode:Short circuit the probe, voltage frame display "---", enter manual setting mode. Can set optional value freely around 1mA,20mA,20-300mA.

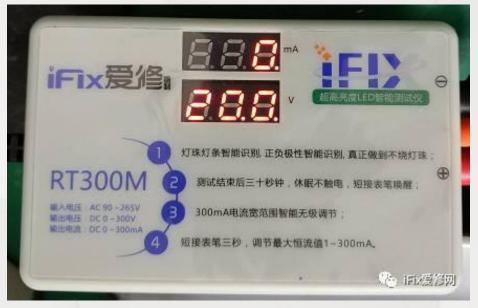


"---" flash 3 seconds later then show "1.0", loosen the probe, indicating to set 1mA, can test the positive and negative withstand pressure of capacitor, stabilivolt, diode, triode, MOS tube, LED and other components.









After "1.0" if you don't loosen the probes it will jump to the next value "AUTO", and now loosen the probes, switch to Auto mode.

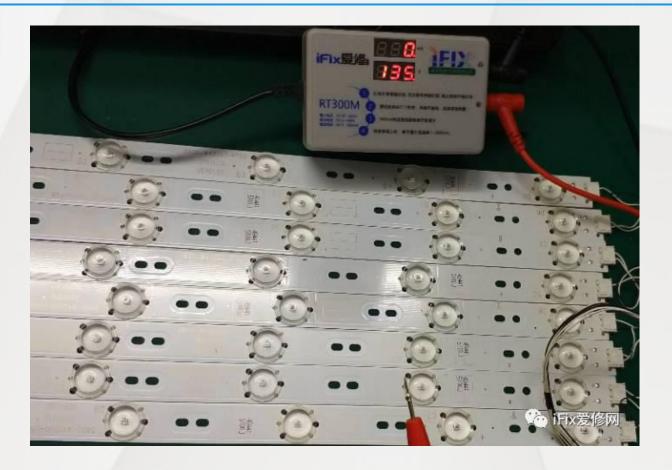
Pull out the AC plug and recharge, it will also swtich back to Auto mode.

After "AUO" if you don't loosen your probes it will jump to the next value "20.0", and now loosen the probes, which shows that the setting value now is 20mA, the measurement under 30V would permanently stop at 20mA, and measurement more than 30V permanent would stop at 30mA.

Attention: After the manual setting, the positive and negative polarity automatic recognition is shielded. When measuring, the red probe must measure the anode of the LED and the black probe measure the cathode.



Continue not to loosen the probes, starte up from 20 and end at 300, you can set the current value optionally between 20-300mA.If you set 135mA, please loosen the probe at about 130, if it does not reach 135, continue to short circuit the probe, adjust the value slightly, and loosen when it reach the standard value.





Now we can see that the manual mode indicator light was lit, and when measuring under the manual mode, pay attention to positive and negative polarity and avoid connecting reversely.





Taking Xiaomi2 TV measurement as an example, the manufacturer's power supply board parameters are as follows: 8 path of LED, rated current 120mA, voltage range 92.8~105.6V.







First set the current to about 120mA.

The measured result is consistent with the manufacturer's nominal value, which indicates that the backlight is ok. If the measured value differs with the manufacturer's nominal value greatly, the light bar is faulty.



RT300M can identify most of the light beads, light bars, entire backlight, but there are too many heterogeneous light beads on market, iFix team try their best to collect different types of light beads as far as possible, but cannot guarantee that all the LED can be identified.

When it cannot be identified automatically, please switch to manual mode for measurement.

When it switches from manual mode back to auto mode, please enter the setting state to AUO or pull out the AC plug of tester for outage, and then plug in after the internal capacitor discharge.

Due to the large power output,RT300M is equipped with a 256-level dimmer inside. As the current increases, the LED brightness gradually increases. Please protect your eyes when measuring, and do not look directly into LED.

When RT300M is baking machine at 300mA, it would drop to 150mA in 90 seconds, supporting the long time baking machine. iFix test roasting machine with 200V backlight, last for 10 hours without pressure, but after all it is still a testing tool, please don't bake for too long.

Non-professional, do not use!!

iFix, produce only quality goods!



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