

劲芯微 15W 测试治具使用说明书

Chipvision 15W Test Fixture User Manual

修 订 记 录

No	版本	修订摘要	修订人	日期
1	A0	新版发行/Initial release	张春林	2020/05/25

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1. 产品功能/ Product Features::

劲芯微 15W 测试治具为内置 15W 自主知识产权的无线接收芯片，主要功能为无线充电设备功能检测及老化测试。

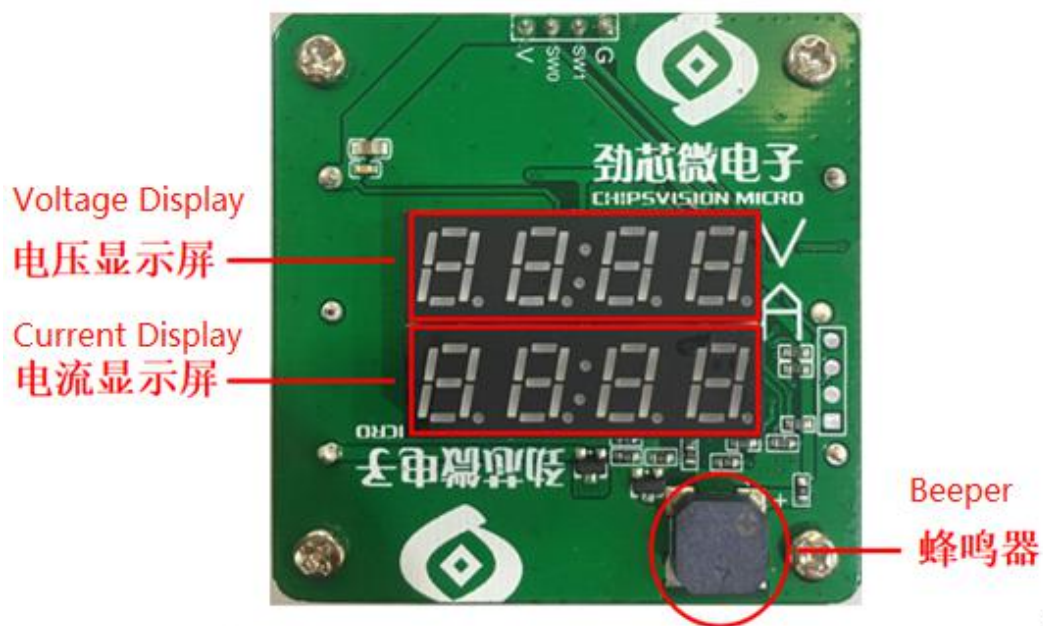
Chipvision 15W Test Fixture is a built-in 15W wireless receiver chip with independent property rights. Its main function is wireless charging device function detection and aging test.

2. 适用范围/ Scope of application:

适用于 5W、7.5W、10W 和 15W 的无线充电设备。

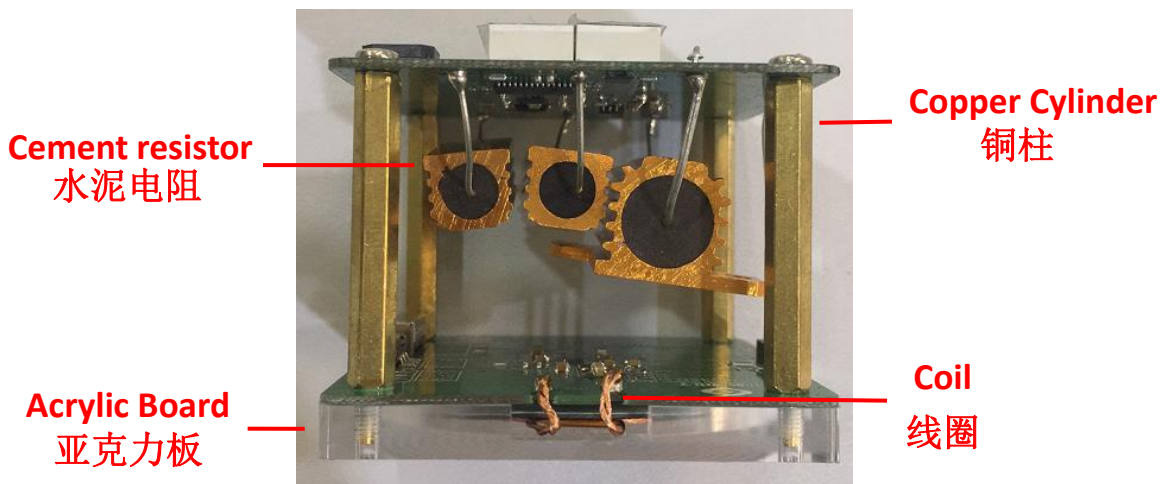
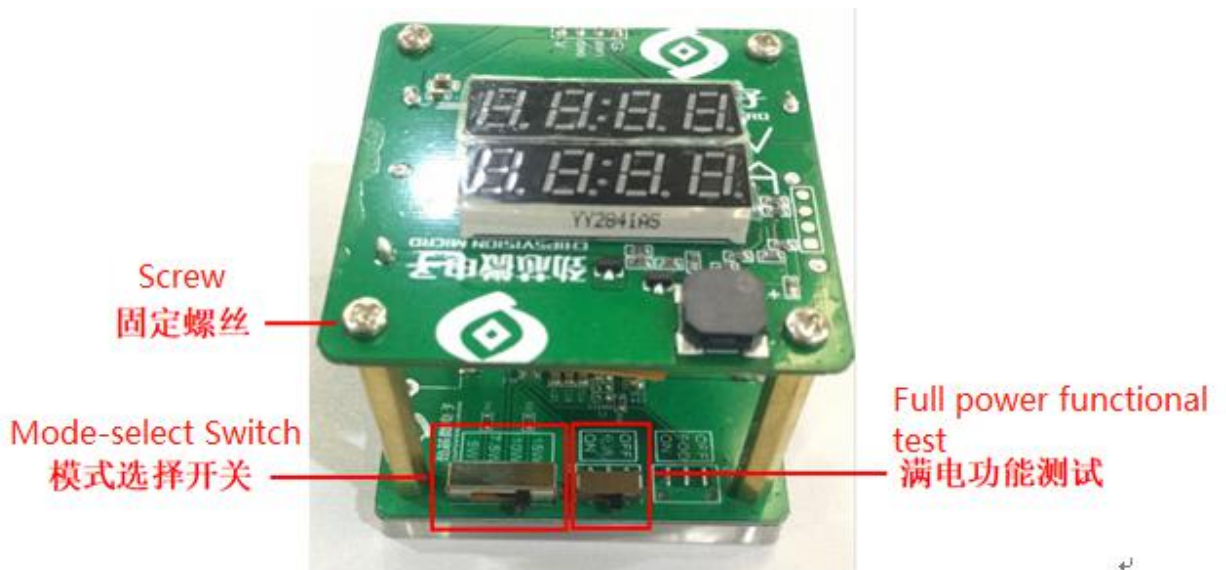
Suitable for 5W, 7.5W, 10W and 15W wireless charging equipment.

3. 产品结构/product structure::



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4, 测试方法及判断标准/ Test methods and judgment standards:

4.1 模式选择/ Mode selection:

拨动模式选择开关，可以有 4 种功率进行切换，分别为 5W、7.5W、10W 和 15W。

模式一（5W）： 检测 Qi 通讯协议，测试 5W 功率；

模式二（7.5W）： 检测 Qi 通讯协议，检测苹果协议，测试 7.5W 功率；

模式三（10W）： 检测 Qi 通讯协议，测试 10W 功率；

模式四（15W）： 检测 Qi 通讯协议，测试 15W 功率。

Toggle the mode selection switch, there are 4 kinds mode, respectively 5W, 7.5W, 10W and 15W.

Mode 1 (5W): Detect Qi communication protocol and test 5W power;

Mode two (7.5W): detect Qi communication protocol, detect Apple protocol, test 7.5W power;

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Mode three (10W): Detect Qi communication protocol and test 10W power;

Mode 4 (15W): Detect Qi communication protocol and test 15W power.

4.2 满电功能测试/ Full power function test:

模拟当一个 100%电量的手机放在无线充电设备时，检测无线充电设备的应对措施。

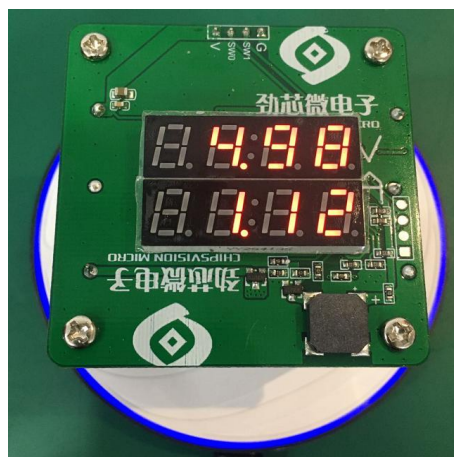
Simulate when a mobile phone with 100% power is placed in the wireless charging device, detect the response of the wireless charging device.

4.3 检测标准/Testing standards:

模式选择 Mode selection	蜂鸣器 Beeper	电压 Voltage	电流 Current
5W	响一声 Rang once	4.5V~5.5V	0.80A~1.5A
7.5W	响一声 Rang once	7V~8V	0.80A~1.5A
10W	响一声 Rang once	8.5V~9.5V	0.80A~1.5A
15W	响一声 Rang once	11.5V~12.5V	0.80A~1.5A

4.4 模式一（5W）测试/ Mode 1 (5W) test:

1. 无线充电设备需用 $\geq 5V2A$ 的适配器供电;
2. 满电功能测试按钮需拨到 OFF 此端。
1. The wireless charging equipment needs to be powered by an adapter $\geq 5V2A$;
2. The full power function test button needs to be dialed to OFF.



电压显示屏显示为 4.98V，电流显示屏显示为 1.12A，无线充电设备输出正常。

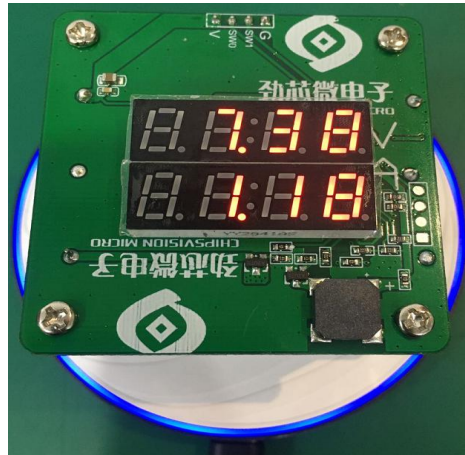
The voltage display shows 4.98V, the current display shows 1.12A, and the output of the wireless charging device is normal.

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4.5 模式二（7.5W）测试/ Mode 2 (7.5W) test:

- 1, 无线充电设备需用 $\geq 9V1.5A$ 的适配器供电;
 - 2, 满电功能测试按钮需拨到 OFF 此端。
1. The wireless charging equipment needs to be powered by an adapter $\geq 9V1.5A$;
 2. The full power function test button needs to be dialed to OFF.



电压显示屏显示为 7.38V，电流显示屏显示为 1.18A，无线充电设备输出正常。

The voltage display shows 7.38V, the current display shows 1.18A, and the output of the wireless charging device is normal.

4.5 模式三（10W）测试/ Mode three (10W) test:

- 1, 无线充电设备需用 $\geq 9V1.5A$ 的适配器供电;
 - 2, 满电功能测试按钮需拨到 OFF 此端。
1. The wireless charging equipment needs to be powered by an adapter $\geq 9V1.5A$;
 2. The full power function test button needs to be dialed to OFF.



电压显示屏显示为 8.95V，电流显示屏显示为 1.26A，无线充电设备输出正常。

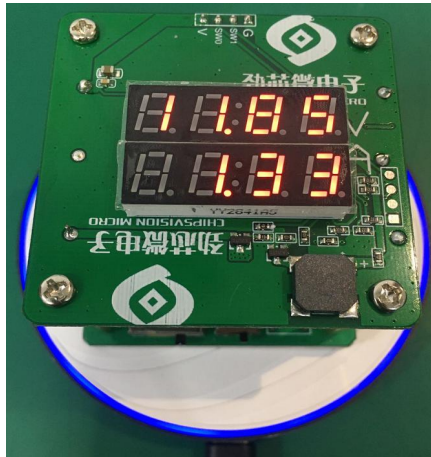
The voltage display shows 8.95V, the current display shows 1.26A, the output of the wireless charging device is normal

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4.6 模式四（15W）测试/ Mode 4 (15W) test::

- 1, 无线充电设备需用 $\geq 12V1.5A$ 的适配器供电;
- 2, 满电功能测试按钮需拨到 OFF 此端。
 1. Wireless charging equipment needs to be powered by an adapter $\geq 12V1.5A$;
 2. The full power function test button needs to be dialed to OFF.



电压显示屏显示为 11.85V，电流显示屏显示为 1.33A，无线充电设备输出正常。

The voltage display shows 11.85V, the current display shows 1.33A, and the output of the wireless charging device is normal.

4.7 满电功能测试/ Full power function test:

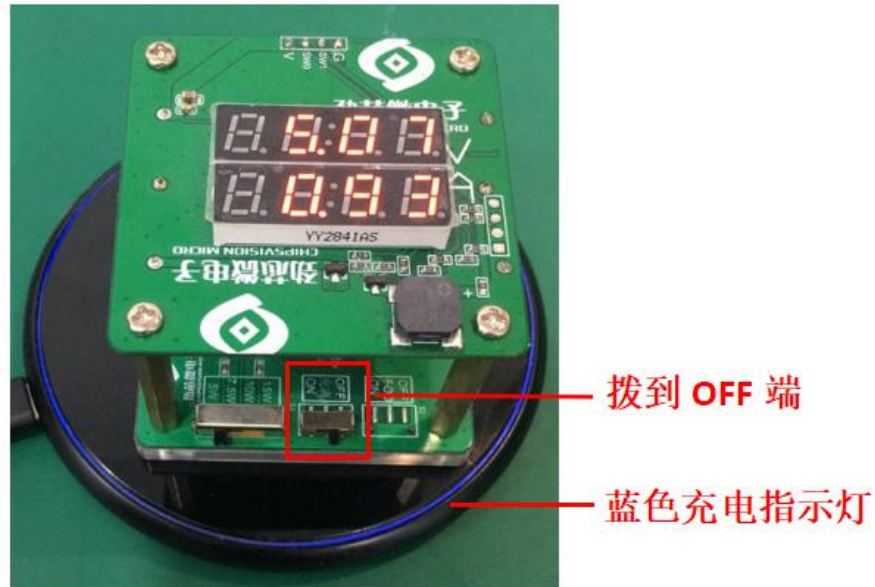
- 1, 满电功能测试按钮拨到 OFF 此端时，无线充电设备处于持续充电状态;
- 2, 满电功能测试按钮拨到 ON 此端时，无线充电设备会处于待机充电状态。
 1. When the full power function test button is dialed to OFF, the wireless charging device is in a continuous charging state;
 2. When the fully charged function test button is dialed to ON, the wireless charging device will be in standby charging state.

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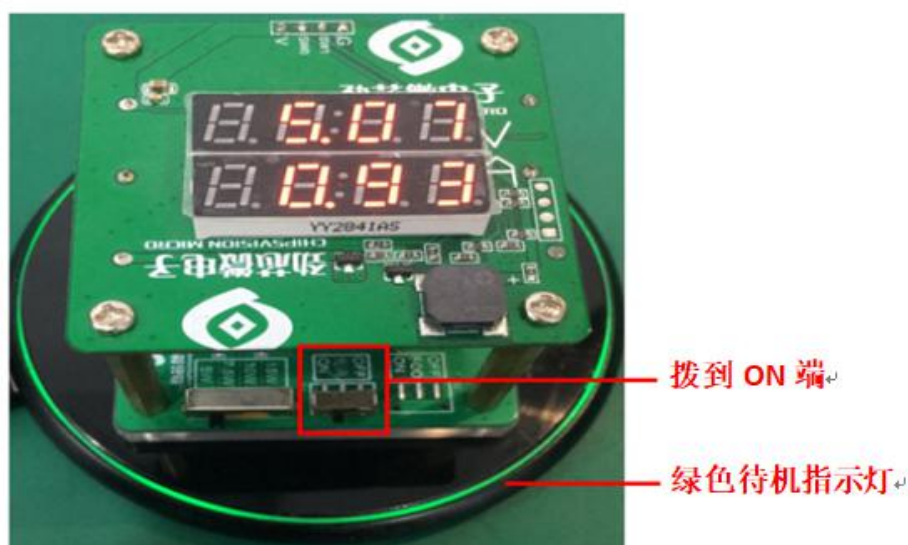
当满电功能测试按钮拨到 OFF 此端无线充电设备亮蓝灯，说明处于充电状态，如下图显示

When the fully charged function test button is set to OFF, the wireless charging device lights up blue, indicating that it is in the charging state. Shown as below:



当满电功能测试按钮拨到 ON 此端，无线充电设备亮绿灯，说明处于待机状态，证明无线充电设备功能正常，如下图显示：

When the fully charged function test button is turned to ON, the wireless charging device lights green, indicating that it is in standby state, which proves that the wireless charging device is functioning normally, as shown in the following figure:



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5, 注意事项:

- 5.1 测试 7.5W/10W/15W 时, 显示屏出现断断续续亮屏, 需检查适配器是否符合以上所述要求或者与无线充电设备不兼容;
- 5.2 显示屏显示电压电流偏低, 则需测试底部贴 2mm~3mm 厚度的脚垫/间隔板测试, 因不同的无线充电设备的最佳高度不同导致, 多出现于未增加外壳厚度的产品;
- 5.3 显示屏不显示, 但无线充电设备处于工作状态, 为水泥电阻开路或者显示屏损坏;
- 5.4 显示屏不显示, 无线充电设备也处于不工作状态, 为无线充电设备连接不良或者治具已经损坏;
- 5.5 勿拆卸或修改测试治具来做其他功能使用, 否则可能损坏治具;
- 5.6 测试治具处于工作状态时, 请勿用手触摸水泥电阻或者芯片, 存在高温烫手和损坏治具;
- 5.7 勿随意拉扯水泥电阻, 否则可能损坏治具或者与上下板的导通铁线接触形成短路;
- 5.8 测试架显示屏易碎, 不可跌落。

5. Notes

- 5.1 When testing 7.5W / 10W / 15W, the display shows an intermittent bright screen, you need to check whether the adapter meets the above requirements or is not compatible with wireless charging equipment
- 5.2 If the display shows that the voltage and current are low, you need to test the pad / spacer with a thickness of 2mm to 3mm at the bottom. Due to the different optimal heights of different wireless charging devices, most of them appear in products without increasing the thickness of the case;
- 5.3 If the display screen is not displayed, but the wireless charging device is in working state, most because the cement resistance is open or the display screen is damaged;
- 5.4 If the display screen does not show, and the wireless charging device is also in an inoperative state, which means that the wireless charging device is poorly connected or the fixture is damaged;
- 5.5 Do not disassemble or modify the test fixture for other functions, otherwise the fixture may be damaged;

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5.6 When the test fixture is in working state, please do not touch the cement resistance or chip with your hand, the high temperature may scald your hand or fixture may be damaged.

5.7 Do not pull the cement resistance at will, otherwise it may damage the fixture or contact with the conductive iron wires of the upper and lower plates to form a short circuit;

5.8 The display of the test stand is fragile and cannot be dropped.

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