

心电导联切换自动化测试方法

心电导联切换测量：用标准 1mV 正弦波代替心电波，检测时只需波形幅度大小即可，为确保检测的可靠性，特测量两组数值（由软件生成 1V、10Hz 的标准正弦波经 1000 倍衰减后的信号分别接入 RA、LA）。

① 接入 RA 时，其他 4 个导联均接地，这时分别切换导联模式，测量在各导联模式下的波形幅值，其波形峰值应满足相应地规格值：

- 13.1 ECG1 Lead "I\RA" (0.92_1.08)
- 13.2 ECG2 Lead "I\RA" (0.92_1.08)
- 15.1 ECG1 Lead "II\RA" (0.92_1.08)
- 15.2 ECG2 Lead "II\RA" (0.92_1.08)
- 17.1 ECG1 Lead "III\RA" (0.00_0.08)
- 17.2 ECG2 Lead "III\RA" (0.00_0.08)
- 19.1 ECG1 Lead "aVR\RA" (0.92_1.08)
- 19.2 ECG2 Lead "aVR\RA" (0.92_1.08)
- 21.1 ECG1 Lead "aVL\RA" (0.45_0.57)
- 21.2 ECG2 Lead "aVL\RA" (0.45_0.57)
- 23.1 ECG1 Lead "aVF\RA" (0.45_0.57)
- 23.2 ECG2 Lead "aVF\RA" (0.45_0.57)
- 25.1 ECG1 Lead "V\RA" (0.29_0.39)
- 25.2 ECG2 Lead "V\RA" (0.29_0.39)

② 接入 LA 时，其他 4 个导联均接地，这时分别切换导联，测量在各导联模式下的波形幅值，其波形峰值应满足相应的规格值：

- 27.1 ECG1 Lead "I\LA" (0.92_1.08)
- 27.2 ECG2 Lead "I\LA" (0.92_1.08)
- 29.1 ECG1 Lead "II\LA" (0.00_0.08)
- 29.2 ECG2 Lead "II\LA" (0.00_0.08)
- 31.1 ECG1 Lead "III\LA" (0.92_1.08)
- 31.2 ECG2 Lead "III\LA" (0.92_1.08)
- 33.1 ECG1 Lead "aVR\LA" (0.45_0.57)
- 33.2 ECG2 Lead "aVR\LA" (0.45_0.57)
- 35.1 ECG1 Lead "aVL\LA" (0.92_1.08)
- 35.2 ECG2 Lead "aVL\LA" (0.92_1.08)
- 37.1 ECG1 Lead "aVF\LA" (0.45_0.57)
- 37.2 ECG2 Lead "aVF\LA" (0.45_0.57)
- 38.1 ECG1 Lead "V\LA" (0.29_0.39)
- 38.2 ECG2 Lead "V\LA" (0.29_0.39)

每块 PCBA 板只有都通过以上两项测试，心电导联切换项才算通过。