SureTest™ 164/165 Calibration Procedure

Hot/Neutral Voltage Verification

On a dual receptacle use a true RMS Digital multi meter with at least a measurement accuracy of 0.5% to measure the line voltage at one of the outlets. Plug in the 61-164/165 into the other outlet. The voltage reading of the 61-164/165 should read within the tolerances specified in user manual.

Neutral/Ground Voltage Verification

To verify accuracy of the neutral/ground voltage requires a true RMS Digital multi meter with at least a measurement accuracy of 0.5% and a means to generate a nominal neutral/ground voltage of 7.5 Volts RMS. On a dual receptacle generate a nominal neutral/ground voltage of 7.5 Volts RMS. Use a true RMS Digital multi meter with at least a measurement accuracy of 0.5% to measure the neutral/ground voltage. While still applying the nominal 7.5 Volts RMS voltage Plug in the 61-164/165 into the other outlet. The neutral/ground voltage reading of the 61-164/165 should read within the tolerances specified in the user manual.

Calibration

1. Power on SureTest™ calibration test fixture and verify DMM connection.
2. Set voltage to 120VAC and turn on output.
3. With a DMM verify the ground neutral voltage to the Unit Under Test (UUT) reads in range of 7.1VAC to 7.5VAC.
4. Verify connections from tester cable back to text fixture are secure.
5. Press the right arrow key on the UUT and plug tester cable in. UUT should power up and display calibration screen (Figure 1).

Figure 1

6. Verify firmware revision displayed on UUT matches number embedded in programmed HEX file name.
7. Press down arrow on UUT to advance to next screen (Figure 2).
8. Adjust the ACT: readings on UUT by using the down arrow and right arrow keys until the value matches the 120 Volt RMS supply. The CAL and MES values displayed on UUT can be ignored.

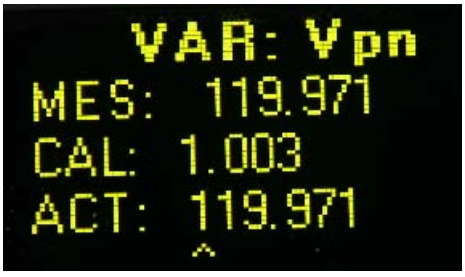

Figure 2

9. Press GFCI button on UUT to advance to next screen (Figure 3).
10. Use right and down arrows to adjust ACT reading displayed on UUT to match ground neutral DMM reading to two significant digits.
11. Press GFCI button on UUT to advance to next screen.
12. Press down arrow and verify reading is matching the hot neutral (120V) provided by the test fixture.
13. Unplug UUT from calibration test fixture.

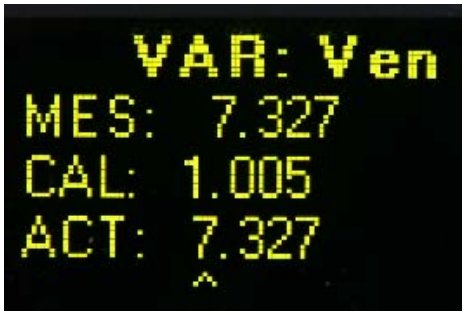

Figure 3