

2831B Calibration Procedure

Note: Warm up 30 minutes before proceeding calibration procedure

DCV :

1. Set function at Voltage
2. Set RANGE at 200mV , connect to V/Ohm input with 190mVDC , Adjust VR2to get reading 190.0 °
3. Set RANGE at 2V , connect V/Ohm input with 1.9VDC , adjust VR3 to get DISPLAY reading 1.900 °
4. Set RANGE at 20V , input 19VDC , adjust VR4 to get reading 19.00 °
5. Set RANGE at 200V , input 190VDC , adjust VR5 to get reading 190.0 °
6. Set RANGE to 1200V , input 1000VDC , adjust VR6 to get reading 1000 °

ACV :

1. Set function at current and press DC/AC switch ° Set at 2000mA range, adjust VR19 to get reading 000.0 °
2. Set range at AC200mV, input 190mV/50Hz, adjust VR20 to get reading 189.9~189.8mV
3. Set RANGE at AC1200V , connect V/Ohm input with 1KHz/1000VAC adjust VC1 to get DISPLAY1000 °
4. Set RANGE at AC200V , input 1.9KHz/190VAC , adjust VC4 to get 190.0 °
5. Set RANGE at AC20V , input 2.5KHz/19VAC , adjust VC3 to get 19.00 °
6. Set RANGE at AC2V , input 2.5KHz/1.9VAC , adjust VC2to get reading 1.900 °

DCA :

1. Set function at DCA and RANGE at 20A , input 10A to 20A terminal. Adjust R55to get DISPLAY10.00 °
2. Set RANGE to 2000mA , connect 1.9A to 2A terminal , adjust VR7 to get reading 1900 °
3. Set range to 200mA , connect 190mA to 2A input , adjust VR8 to get reading 190.0 °
4. Set RANGE at 20mA , connect 19mA to 2Ainput , adjust VR9 to get 19.00 °
5. Set RANGE to 2mA , connect 1.9mA to 2Ainput , adjust VR17 to get 1.900 °
6. Set RANGE to 200μA , connect 190uA to 2A terminal , adjust VR18 to get reading 190.0 °

Resistance :

1. Set the function at Ω function , set RANGE to 200 Ω , connect V/Ohm to GND terminal and adjust VR16 to get 000.0 °
2. Set RANGE to 2M Ω , connect 1.9M Ω between V/Ohm and GND , adjust VR15 to get DISPLAY 1900 °
3. Set RANGE to 20M Ω , connect 19M Ω , adjust VR10 to get reading 19.00 °
4. Set RANGE to 200K Ω , connect 190K Ω , adjust VR11 to get reading 190.0 °
5. Set RANGE to 20K Ω , connect 19K Ω , adjust VR12 to display 19.00 °
7. Set RANGE to 2K Ω , connect 1.9K Ω , adjust VR13 to get reading 1.900 °
8. Set RANGE to 200 Ω , connect 190 Ω , adjust VR14 to get reading 190.0 °