



Transmille 8081 Precision 8.5 Digit Multimeter
ADJUSTMENT POINTS

| TITLE | TEST VALUE | CONNECTIONS / NOTES |
|---------------------------|-------------------|--|
| DC Voltage Ranges | | |
| 100mV Zero ADJ | 0uV | Connect 8000 multimeter V terminals to V terminals of Voltage Source |
| 100mV +FS ADJ | 100mV | CONNECT TO CALIBRATOR VOLTAGE TERMINALS |
| 1V Zero ADJ | 0V | |
| 1V +FS ADJ | 1V | |
| 10V Zero ADJ | 0V | |
| 10V +FS ADJ | 10V | |
| 100V Zero ADJ | 0V | |
| 100V +FS ADJ | 100V | |
| 1kV Zero ADJ | 0uV | |
| 1kV +FS ADJ | 1000V | |
| DC Volts Linearity | | |
| AC Voltage Ranges | | |
| AC Volts 1kHz ADJ | 100mV | Connect 8000 multimeter V terminals to V terminals of Voltage Source |
| AC Volts 1KHz ADJ | 20mV | |
| AC Volts 10Hz # ADJ | 100mV | |
| AC Volts 23Hz # ADJ | 100mV | |
| AC Volts 40Hz ADJ | 100mV | |
| AC Volts 56Hz ADJ | 100mV | |
| AC Volts 106Hz ADJ | 100mV | |
| AC Volts 206Hz ADJ | 100mV | |
| AC Volts 2kHz ADJ | 100mV | |
| AC Volts 10kHz ADJ | 100mV | |
| AC Volts 20kHz ADJ | 100mV | |
| AC Volts 35kHz # ADJ | 100mV | |
| AC Volts 50kHz # ADJ | 100mV | |
| AC Volts 75kHz # ADJ | 100mV | |
| AC Volts 100kHz# ADJ | 100mV | |



| <i>TITLE</i> | <i>TEST VALUE</i> | <i>CONNECTIONS / NOTES</i> |
|----------------------|-------------------|----------------------------|
| 1V Range 1KHz ADJ | 1V | |
| 1V Range 1KHz ADJ | 0.2V | |
| 1V Range 10Hz# ADJ | 1V | |
| 1V Range 23Hz # ADJ | 1V | |
| 1V Range 40Hz ADJ | 1V | |
| 1V Range 56Hz ADJ | 1V | |
| 1V Range 106Hz ADJ | 1V | |
| 1V Range 206Hz ADJ | 1V | |
| 1V Range 2kHz ADJ | 1V | |
| 1V Range 10kHz ADJ | 1V | |
| 1V Range 20kHz ADJ | 1V | |
| 1V Range 35kHz ADJ | 1V | |
| 1V Range 50kHz ADJ | 1V | |
| 1V Range 75kHz # ADJ | 1V | |
| 1V Range 100kHz# ADJ | 1V | |
| 1V Range 200kHz# ADJ | 1V | |
| 1V Range 400kHz# ADJ | 1V | |
| 1V Range 700kHz# ADJ | 1V | |
| 1V Range 1MHz # ADJ | 1V | |
| 10V Range 1KHz ADJ | 10V | |
| 10V Range 1KHz ADJ | 2V | |
| 10V Range 10Hz # ADJ | 10V | |
| 10V Range 23Hz # ADJ | 10V | |
| 10V Range 40Hz ADJ | 10V | |
| 10V Range 56Hz ADJ | 10V | |
| 10V Range 106Hz ADJ | 10V | |
| 10V Range 206Hz ADJ | 10V | |
| 10V Range 2kHz ADJ | 10V | |
| 10V Range 10kHz ADJ | 10V | |



| TITLE | TEST VALUE | CONNECTIONS / NOTES |
|----------------------|------------|---------------------|
| 10V Range 20kHz ADJ | 10V | |
| 10V Range 35kHz ADJ | 10V | |
| 10V Range 50kHz ADJ | 10V | |
| 10V Range 75kHz# ADJ | 10V | |
| 100V Range 1KHz ADJ | 100V | |
| 100V Range 1KHz ADJ | 20V | |
| 100V Rng 10Hz # ADJ | 100V | |
| 100V Rng 23Hz # ADJ | 100V | |
| 100V Range 40Hz ADJ | 100V | |
| 100V Range 56Hz ADJ | 100V | |
| 100V Range 106Hz ADJ | 100V | |
| 100V Range 206Hz ADJ | 100V | |
| 100V Range 2kHz ADJ | 100V | |
| 100V Range 10kHz ADJ | 100V | |
| 100V Range 20kHz ADJ | 100V | |
| 100V Range 35kHz ADJ | 100V | |
| 100V Range 50kHz ADJ | 100V | |
| 1000V Range 1KHz ADJ | 700V | |
| 1000V Range 1KHz ADJ | 200V | |
| 1000V Range 40Hz ADJ | 700V | |
| 1000V Range 56Hz ADJ | 700V | |
| 1000V Rng 106Hz ADJ | 700V | |
| 1000V Rng 206Hz ADJ | 700V | |
| 1000V Range 2kHz ADJ | 700V | |
| 1000V Rng 10kHz ADJ | 700V | |

DC Current

| | | |
|----------------------|-------|--|
| 100uA Zero ADJ | 0uA | Perform zero with leads open circuit (not connected to current source) |
| 100uA DC Rng +FS ADJ | 100uA | Connect 8000 Low Current terminals to Current source |



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|----------------------|------------|--|
| 1mA Zero ADJ | 0mA | Perform zero with leads open circuit (not connected to current source) |
| 1mA DC Rng +FS ADJ | 1mA | Connect 8000 Low Current terminals to Current source |
| 10mA Zero ADJ | 0mA | Perform zero with leads open circuit (not connected to current source) |
| 10mA DC Rng ADJ +FS | 10mA | Connect 8000 Low Current terminals to Current source |
| 100mA Zero ADJ | 0mA | Perform zero with leads open circuit (not connected to current source) |
| 100mA DC Rng +FS ADJ | 100mA | Connect 8000 Low Current terminals to Current source |
| 1A Zero ADJ | 0A | Perform zero with leads open circuit (not connected to current source) |
| 1A DC Rng +FS ADJ | 1A | Connect 8000 Low Current terminals to Current source |
| 10A Zero ADJ | 0A | Switch 8081 to high current terminals, zero with no leads connected |
| 10A DC Rng +FS ADJ | 10A | Connect 8000 High Current terminals to Current source |
| 30A Zero ADJ | 0A | Perform zero with leads open circuit (not connected to current source) |
| 30A DC Rng +FS ADJ | 30A | Connect 8000 High Current terminals to Current source |
| AC Current | | |
| 100uA AC 1kHz ADJ | 100uA | Connect 8000 Low Current terminals to Current source |
| 100uA AC 1kHz ADJ | 20uA | |
| 100uA AC 10Hz # ADJ | 100uA | |
| 100uA AC 23Hz # ADJ | 100uA | |
| 100uA AC 40Hz ADJ | 100uA | |
| 100uA AC 56Hz ADJ | 100uA | |
| 100uA AC 106Hz ADJ | 100uA | |
| 100uA AC 206Hz ADJ | 100uA | |
| 100uA AC 2kHz # ADJ | 100uA | |
| 100uA AC 10kHz # ADJ | 100uA | |
| 1mA AC 1kHz ADJ | 1mA | |
| 1mA AC 1kHz ADJ | 0.2mA | |
| 1mA AC 10Hz # ADJ | 1mA | |
| 1mA AC 23Hz # ADJ | 1mA | |
| 1mA AC 40Hz ADJ | 1mA | |



| TITLE | TEST VALUE | CONNECTIONS / NOTES |
|----------------------|------------|---------------------|
| 1mA AC 56Hz ADJ | 1mA | |
| 1mA AC 106Hz ADJ | 1mA | |
| 1mA AC 206Hz ADJ | 1mA | |
| 1mA AC 2kHz # ADJ | 1mA | |
| 1mA AC 10kHz # ADJ | 1mA | |
| 10mA AC 1kHz ADJ | 10mA | |
| 10mA AC 1kHz ADJ | 2mA | |
| 10mA AC 10Hz # ADJ | 10mA | |
| 10mA AC 23Hz # ADJ | 10mA | |
| 10mA AC 40Hz ADJ | 10mA | |
| 10mA AC 56Hz ADJ | 10mA | |
| 10mA AC 106Hz ADJ | 10mA | |
| 10mA AC 206Hz ADJ | 10mA | |
| 10mA AC 2kHz # ADJ | 10mA | |
| 10mA AC 10kHz # ADJ | 10mA | |
| 100mA AC 1kHz ADJ | 100mA | |
| 100mA AC 1kHz ADJ | 20mA | |
| 100mA AC 10Hz # ADJ | 100mA | |
| 100mA AC 23Hz # ADJ | 100mA | |
| 100mA AC 40Hz ADJ | 100mA | |
| 100mA AC 56Hz ADJ | 100mA | |
| 100mA AC 106Hz ADJ | 100mA | |
| 100mA AC 206Hz ADJ | 100mA | |
| 100mA AC 2kHz # ADJ | 100mA | |
| 100mA AC 10kHz # ADJ | 100mA | |
| 1A AC 1kHz ADJ | 1A | |
| 1A AC 1kHz ADJ | 0.2A | |
| 1A AC 10Hz # ADJ | 1A | |
| 1A AC 23Hz # ADJ | 1A | |



| TITLE | TEST VALUE | CONNECTIONS / NOTES |
|-------------------|------------|---|
| 1A AC 40Hz ADJ | 1A | |
| 1A AC 56Hz ADJ | 1A | |
| 1A AC 106Hz ADJ | 1A | |
| 1A AC 206Hz ADJ | 1A | |
| 1A AC 2kHz # ADJ | 1A | |
| 1A AC 10kHz # ADJ | 1A | |
| 10A AC 1kHz ADJ | 10A | Connect 8000 High Current terminals to Current source |
| 10A AC 1kHz ADJ | 2A | |
| 10A AC 10Hz # ADJ | 10A | |
| 10A AC 23Hz # ADJ | 10A | |
| 10A AC 40Hz ADJ | 10A | |
| 10A AC 56Hz ADJ | 10A | |
| 10A AC 106Hz ADJ | 10A | |
| 10A AC 206Hz ADJ | 10A | |
| 30A AC 1kHz ADJ | 30A | |
| 30A AC 1kHz ADJ | 2A | |
| 30A AC 10Hz # ADJ | 30A | |
| 30A AC 23Hz # ADJ | 30A | |
| 30A AC 40Hz ADJ | 30A | |
| 30A AC 56Hz ADJ | 30A | |
| 30A AC 106Hz ADJ | 30A | |
| 30A AC 206Hz ADJ | 30A | |

Resistance Adjust

| | | |
|---------------------|------|---|
| Zero 1Ohm 4Wire ADJ | 0R4 | Connect 8081 to standard resistor and open circuit current terminals for zero |
| 1Ohm ADJ | 1R4 | Connect to resistance standard as 4 wire connection |
| Z 10 Ohm 4Wire ADJ | 0R4 | |
| 10 Ohm ADJ | 10R4 | |
| Z 100 Ohm 4Wire ADJ | 0R4 | |



| TITLE | TEST VALUE | CONNECTIONS / NOTES |
|----------------------|-------------------|----------------------------|
| 100 Ohm ADJ | 100R4 | |
| Z100 Ohm 4W Lo ADJ | 0R4 | |
| 100 Ohm Lo ADJ | 100R4 | |
| Z 1kOhm 4Wire ADJ | 0R4 | |
| 1kOhm ADJ | 1kR4 | |
| Z 1kOhm 4Wire Lo ADJ | 0R4 | |
| 1kOhm Lo ADJ | 1kR4 | |
| Z 10kOhm 4Wire ADJ | 0R4 | |
| 10kOhm ADJ | 10kR4 | |
| Z 10kOhm 4WireLo ADJ | 0R4 | |
| 10kOhm Lo ADJ | 10kR4 | |
| Z 100kOhm 4Wire ADJ | 0R4 | |
| 100kOhm ADJ | 100kR4 | |
| 1M Ohm 2Wire ADJ | 1MR | |
| 10M Ohm 2Wire ADJ | 10MR | |

4 Wire Resistance

2 Wire Resistance

Electrometer - Voltage Output

| | | |
|---------------|------|--|
| Main Gain ADJ | 300V | Connect 8000 Vout connector to measuring multimeter in dc voltage mode |
| 10V ADJ | 10V | |
| 50V ADJ | 50V | |
| 100V ADJ | 100V | |
| 150V ADJ | 150V | |
| 200V ADJ | 200V | |
| 250V ADJ | 250V | |
| 300V ADJ | 300V | |

Electrometer - Current Measurement



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|----------------|-------------------|--|
| 10nA Zero ADJ | 0nA | Open circuit I meas lead |
| 10nA +FS ADJ | 10nA | Use 10GR resistor @ 100V to generate accurate 10nA |
| 100nA Zero ADJ | 0nA | Open circuit I meas lead |
| 100nA +FS ADJ | 100nA | Use 1GR resistor @ 100V to generate accurate 100nA |
| 1uA Zero ADJ | 0uA | Open circuit I meas lead |
| 1uA +FS ADJ | 1uA | Use 100MR resistor @ 100V to generate accurate 1uA |
| 10uA Zero ADJ | 0uA | Open circuit I meas lead |
| 10uA +FS ADJ | 10uA | Use 10MR resistor @ 100V to generate accurate 10uA |

| |
|--|
| Electrometer - Resistance Measurement |
| Frequency |
| Thermocouple |
| PRT Measurement (PT100) |
| Phase Angle |
| Rear Terminals |
| Interface |