

Manual Supplement

Manual Title: 80 Series V Users
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This supplement contains information necessary to ensure the accuracy of the above manual. This manual is distributed as an electronic manual on the following CD-ROM:


CD Title: 80 Series V
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Change #1

On page 9, Table 4, add the following entry to the  section:

| | |
|----------------|------------------------|
| Hz, Duty Cycle | Toggles \pm trigger. |
|----------------|------------------------|

On page 12, add the following table: Error Messages

| | |
|---------------------|---|
| bAtt | Replace the battery immediately. |
| diSC | In the capacitance function, too much electrical charge is present on the capacitor being tested. |
| EEPr Err | Invalid EEPROM data. Have Meter serviced. |
| CAL Err | Invalid calibration data. Calibrate Meter. |
| LEAd |  Test lead alert. Displayed when the rotary switch is moved <u>to</u> or <u>from</u> the mA or A position. |

On page 15, under *Zero Input Behavior of True RMS Meter (87)*, replace the first paragraph and two bullets with following:

True Rms Meters accurately measure distorted waveforms, but when the input leads are shorted together in the AC functions, the meter displays a residual reading between 1 and 30 counts. When the test leads are open, the display readings may fluctuate due to interference. These offset readings are normal. They do not affect the Meter's AC measurement accuracy over the specified measurement ranges.

Unspecified input levels are:

- AC voltage: below 3 % of 600 mV AC, or 18 mV AC
- AC current: below 3 % of 60 mA AC, or 1.8 mA AC
- AC current: below 3 % of 600 μ A AC, or 18 μ A AC

On page 21, under Measuring Capacitance, add the following note:

Note

If too much electrical charge is present on the capacitor being tested, the display shows "diSC".

On page 43, under *Specifications*, replace the Electromagnetic Compatibility with the following:

Electromagnetic Compatibility: In an RF field of 3 V/m total accuracy = specified accuracy + 50 counts.

On page 44, Table 10, replace footnote 1, with the following:

1. Below 10% of range, add 12 counts.

On page 46, replace Table 12 with the following:

Table 12. DC Voltage, Resistance, and Conductance Function Specifications

| Function | Range | Resolution | Accuracy | |
|---|-----------------------|------------------|-----------------------|-----------------------|
| | | | Model 83 | Model 87 |
| \bar{V} | 6.000 V | 0.001 V | $\pm (0.1 \% + 1)$ | $\pm (0.05 \% + 1)$ |
| | 60.00 V | 0.01 V | $\pm (0.1 \% + 1)$ | $\pm (0.05 \% + 1)$ |
| | 600.0 V | 0.1 V | $\pm (0.1 \% + 1)$ | $\pm (0.05 \% + 1)$ |
| | 1000 V | 1 V | $\pm (0.1 \% + 1)$ | $\pm (0.05 \% + 1)$ |
| \bar{mV} | 600.0 mV | 0.1 mV | $\pm (0.3 \% + 1)$ | $\pm (0.1 \% + 1)$ |
| Ω | 600.0 Ω | 0.1 Ω | $\pm (0.4 \% + 2)^1$ | $\pm (0.2 \% + 2)^1$ |
| | 6.000 k Ω | 0.001 k Ω | $\pm (0.4 \% + 1)$ | $\pm (0.2 \% + 1)$ |
| | 60.00 k Ω | 0.01 k Ω | $\pm (0.4 \% + 1)$ | $\pm (0.2 \% + 1)$ |
| | 600.0 k Ω | 0.1 k Ω | $\pm (0.7 \% + 1)$ | $\pm (0.6 \% + 1)$ |
| | 6.000 M Ω | 0.001 M Ω | $\pm (0.7 \% + 1)$ | $\pm (0.6 \% + 1)$ |
| nS | 50.00 M Ω^2 | 0.01 M Ω | $\pm (1.0 \% + 3)^2$ | $\pm (1.0 \% + 3)^2$ |
| | 60.00 nS ¹ | 0.01 nS | $\pm (1.0 \% + 10)^1$ | $\pm (1.0 \% + 10)^1$ |
| <ol style="list-style-type: none"> 1. When using the REL Δ function to compensate for offsets. 2. Add 0.5 % of reading when measuring above 30 MΩ in the 50 MΩ range. | | | | |

On page 48, Table 14, replace footnote 2 with the following:

2. AC conversions for Model 87 are ac coupled, true rms responding, and valid from 3 % to 100 % of range, except 400 mA range (5 % to 100 % of range) and 10 A range (15 % to 100 % of range).

On page 50, Table 17, under Duty Cycle Range, replace the Accuracy with the following:

Within $\pm (0.2 \% \text{ per kHz} + 0.1 \%)$ for risetimes $< 1 \mu\text{s}$.