Manual Supplement

Manual Title: 1735 Users Supplement Issue: 4 Part Number: 2560330 Issue Date: 3/08 March 2006 Page Count: 5 Print Date: Revision/Date: 1, 4/06

> This supplement contains information necessary to ensure the accuracy of the above manual.

Change #1

On page 10, prior to *Basic Operation*, add the following:

Charging the Internal Battery

Before you use the 1735 Logger, charge the internal battery as follows:

- 1. Switch the 1735 Battery Charger to either 115V or 230V as appropriate.
- 2. With the Logger power off, attach the BC1735 battery charger to a power outlet and then to the 1735.
- 3. Charge the 1735 for 5 hours before using it for the first time.
- 4. On subesquent use, turn the Logger power on before you connect the BC1735 Battery Charger.

This helps insure that the fast charge mode is activated. If the Logger does not turn on due to a discharged battery, recharge the battery for 5 hours with the Logger power off as described in steps 2 and 3 above.

Change #2

On page 52, under *EMC* replace the Emission, with the following:

Emission: IEC/EN 61326-1:1997+A1:1998+A2:2000 class B

Change #3

On page 2, add the following symbol to Table 1:



Do not apply around or remove from the Hazardous Live conductors

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On page 4, replace Table 3 with the following:

Table 3. Optional Accessories

Description	Accessory
I1A/10A CLAMP PQ3, 3-PHASE 1A/10A MINI CURRENT CLAMP SET FOR PQ	I1A/10A CLAMP PQ3
I1A/10A CLAMP PQ4, 4-PHASE 1A/10A MINI CURRENT CLAMP SET FOR PQ	I1A/10A CLAMP PQ4
I5A/50A CLAMP PQ3, 3-PHASE 5A/50A MINI CURRENT CLAMP SET FOR PQ	I5A/50A CLAMP PQ3
I5A/50A CLAMP PQ4, 4-PHASE 5A/50A MINI CURRENT CLAMP SET FOR PQ	I5A/50A CLAMP PQ4
I20/200A CLAMP PQ3, 3-PHASE 20A/200A MINI CURRENT CLAMP SET FOR PQ	I20/200A CLAMP PQ3
I20/200A CLAMP PQ4, 4-PHASE 20A/200A MINI CURRENT CLAMP SET FOR PQ	I20/200A CLAMP PQ4
3000/6000A FLEX 4,3000A/6000A 36-INCH FLEXI PROBE 4 PHASE	3000/6000A FLEX 4
C435 HARDCASE	TRANSIT CASE

On page 21, add the following Note under the Warning:

Note

When using either flexi-probes or current clamp sets, make sure the arrow on the current probe points towards the load.

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Change #4

On page 21, under *Connecting the Power Logger to the network* add the following text and Figure:

 To avoid shock or personal injury, keep fingers behind the tactile barrier, see the figure.



Using the Optional Microclamps

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Change #5

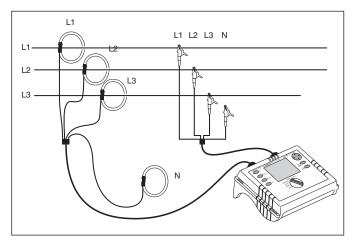
On page 22, replace the table with the following:

Network	Test Leads
L1	A (L1)
Not connected	B (L2)
Not connected	C (L3)
N	N

On page 26, change the figure title to:

Figure 8. Three-Phase Delta Δ Connections-Blondel (Aron, Two-Element Delta)

And add the following figure and title:



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Figure 9. Three-Phase Delta Δ Connections-Blondel (Aron, Three-Element Delta)

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On page 49, under *Power Measurements*, delete the total active power Blondel (Aron) formula and add:

$$P_{tot} = P_1 + P_3$$
 Total Active Power-Blondel (Aron)
 $Q_{tot} = \sqrt{S_{tot}^2 - P_{tot}^2}$ Total Reactive Power-Blondel (Aron)

$$S_{tot} = \frac{\sqrt{V_{12}^2 + V_{23}^2 + V_{31}^2} \cdot \sqrt{I_1^2 + I_2^2 + I_3^2}}{\sqrt{3}}$$
 Total Apparent Power $I_2 = -(I_1 + I_3)$ Blondel (Aron) circuit

On page 50, under *Total Harmonic Distortion*, delete the Total Harmonic Distortion formula and add:

$$THD = \frac{\sqrt{\sum_{h=2}^{50} (V_h)^2}}{V1} \times 100\% \quad \text{Total Harmonic Distortion}$$

V1 to RMS of the fundamental Vh to RMS of the h-th harmonic

$$k - factor = \sum_{h=1}^{50} \left(\frac{I_h}{I_{RMS}}\right)^2 \cdot h^2$$
 k-factor

 $I_h \dots$ h-th harmonic (amps) $I_{RMS} \dots$ RMS amps h ... harmonic order