CELLCORDER®
CRT-300 Cell Resistance Tester

Quick Start Instructions
Operating Instructions

Albércorp
990 South Rogers Circle, Suite 11
Boca Raton, Florida 33487

POWERING ON THE CELLCORDER

1. Press and release the green POWER KEY.

POWER

2. The firmware version number appears.

Alber
TRUST YOUR BATTERIES

System Initializing
• • • • •
Flash Vers.##.#####
Boot Vers.##.#####

3. If readings are in temporary storage, messages appear.

4. To save readings, insert the memory card and press YES. Whether you select YES or NO, readings stay in the memory.

Readings are in temporary storage. Save readings to the memory card?
YES NO HELP

5. To clear readings from the memory, press YES. Do this if you are starting a new set of readings.

Do you want to erase the readings from temporary storage?
YES NO

6. To keep readings in memory, press NO. Do this if you are not finished taking readings or want to examine the readings.

7. The MAIN MENU appears.

CELLCORDER
CRT-300
TEST MODE VIEW RESULTS LOAD DATA CRT SETUP

POWERING OFF THE CELLCORDER

1. Press and hold the green POWER KEY.

POWER

System is now shutting down 3

System is now shutting down 2

System is now shutting down 1

Release Power Button

2. Powering off doesn't automatically delete voltage or resistance readings from the memory.

3. If readings are in memory, you will be asked to save them.

Readings are in temporary storage. Save readings to the memory card?
YES NO HELP

Do you want to erase the readings from temporary storage?
YES NO

TAKING VOLTAGE READINGS

1. Connect the voltage probes to the Cellcorder and select F1-TEST MODE.

CELLCORDER
CRT-300
TEST MODE VIEW RESULTS LOAD DATA CRT SETUP

2. From the Test Mode menu, select F1-VOLTAGE.

Test Mode
F1-Voltage
F2-Resistance
F3-S.G./Temp.
VOLT RES SG/TEMP BACK

3. If "Resume Test" appears, put the probes on the cell.

CELL 001
13.50 Volts
(RESUME TESTING)
DVM DONE

WARNING

Don't measure voltages greater than 20V DC.

4. If "Stored in Memory" appears, retest the cell or change the cell number by typing a number and pressing ENTER.

CELL 001
13.50 Volts
(STORED IN MEMORY)
DVM RETEST DONE

5. When the unit beeps, remove the probes. The cell number advances automatically to the next cell.

THE CELLCORDER IS ALSO A DIGITAL VOLTMETER (DVM)

1. In the voltage mode, press the F1-DVM button.

CELL 001
13.50 Volts
(RESUME TESTING)
DVM DONE

2. The screen displays the measured voltages.

3. Readings are not saved in DVM mode.

13.50 Volts
WARNING! 20VDC maximum input
CANCEL

TAKING RESISTANCE READINGS

1. Connect the resistance test leads to the Cellcorder and select F1-TEST MODE.

CELLCORDER
CRT-300
TEST MODE VIEW RESULTS LOAD DATA CRT SETUP

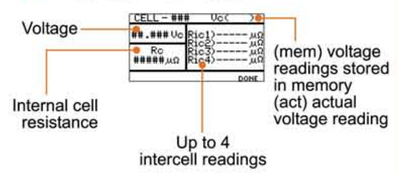
2. From the Test Menu, select F2-RESISTANCE.

Test Mode
F1-Voltage
F2-Resistance
F3-S.G./Temp.
VOLT RES SG/TEMP BACK

3. Select the Amp hour rate (F2) of the cell being tested. Specify the number of intercell connections (F3) per cell.

Amp Hours: 1
Intercell Type: 1
MENU
TEST AMP HOUR INTER CELL BACK

4. Press the F1 TEST button.



5. Connect the leads to the cell. See lower left for some examples; refer to manual for more details. Press the orange Test button. The display shows test progress.

TEST PROGRESS
0% 100%
STOP

6. When the unit beeps, remove the probes. When leads are moved, the cell number advances automatically to the next cell.

7. When finished testing, press the DONE button.

CELL - ### Uc( )
##.### Uc
Rc
#####µΩ
Ric1)----- µΩ
Ric2)----- µΩ
Ric3)----- µΩ
Ric4)----- µΩ
DONE

No VFloat Readings Exist. Now What?

If "No VFloat readings exist. Do you want to take VFloat readings now?" appears, choose YES, read voltage, then resume resistance testing. Reading voltage before resistance results in more accurate voltage readings because skewing is not a factor. If you choose NO, voltage and resistance are read concurrently. Concurrent readings are subject to the skewing effect.

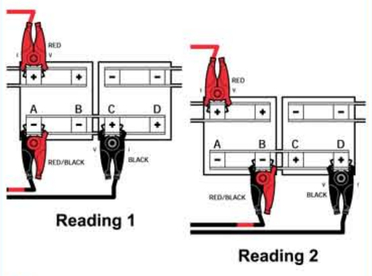
CONNECTING THE RESISTANCE LEADS

These figures show connections for dual post cells.

- Take two readings.

  Read with the intercell leads connected from terminal posts A to C.

  Then read with the intercell leads connected from terminal posts B to D.



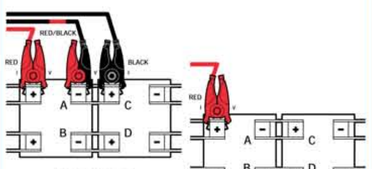
Reading 1

Reading 2

- Take two readings.

  Read with the intercell leads connected from terminal posts A to C.

  Then read with the intercell leads connected from terminal posts B to D.



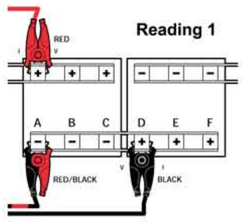
Reading 1

Reading 2

These figures show connections for triple post cells.

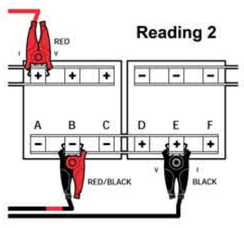
- Take three readings.

  Read with the intercell leads connected from terminal posts A to D.



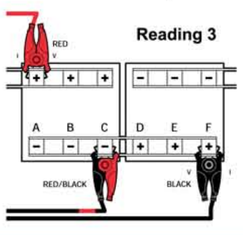
Reading 1

- Then read with the intercell leads connnected from terminal posts B to E.



Reading 2

- Then read with the intercell leads connnected from terminal posts C to F.



Reading 3

TRANSFERRING SPECIFIC GRAVITY AND TEMPERATURE READINGS

1. On the CRT-300, select a cell data file to transfer SG and Temp readings into. This can be readings that already exist in memory or you can open a previously saved set of readings from the memory card.

2. From the Main Menu, select F1-TEST MODE.

CELLCORDER
CRT-300
TEST MODE VIEW RESULTS LOAD DATA CRT SETUP

3. From the Test Mode menu, select F3-SG/TEMP.

Test Mode
F1-Voltage
F2-Resistance
F3-S.G./Temp.
VOLT RES SG/TEMP BACK

4. From the SG/TEMP screen, select the F2-IMPORT.

CELL - 001
S.G. Temp.
#.### ##.#
IMPORT CANCEL

5. On the Data Module, select a channel (A-H) of data to transfer.

On hydrometer memory module, select string (A-H) and align IR ports.
CONTINUE BACK

6. Align the Data Module and CRT-300 IR port.

7. On the CRT-300 press Continue.

Receiving data
CANCEL

8. When transfer is done, the SG/Temp value from Cell 1 appears.

CELL - 001
S.G. Temp.
#.### ##.#
IMPORT CANCEL

9. Save the file to the CRT-300 memory card.

SAVING AND LOADING THE READINGS

Saving readings to the memory card.

1. Insert a memory card into the Cellcorder, press Shift then SAVE.

2. At Enter File Name, type a name (8 characters max, no spaces) or press F3-SELECT NAMES to choose an existing name.

Enter File Name
DELETE CHAR SAVE SELECT NAMES CANCEL

3. To save to the memory card, press F2-SAVE.

4. After saving, if you copy the file from memory card to computer, you may delete the file from the card if space is needed. Do not rely on the memory card for permanent data storage.

5. Note: Saving readings to the memory card does not delete them from Cellcorder temporary storage. To delete readings from the Cellcorder, enter F4-CRT-SETUP from the Main Menu and then F3-CLEAR MEMORY.

WARNING

Readings cleared from Cellcorder temporary storage cannot be retrieved unless they've been saved to the memory card or PC.

Loading readings from the memory card.

1. Insert a memory card with readings into the Cellcorder. From the Main Menu, select F3-LOAD DATA.

CELLCORDER
CRT-300
TEST MODE VIEW RESULTS LOAD DATA CRT SETUP

2. In the next screen, select F2-CELL DATA.

F1-Load site template
F2-Load previously saved readings.
SITE SETUP CELL DATA HELP CANCEL

3. Select the file from the list provided.

Cell Data File
SELECT CANCEL

WARNING

The Smart Media card is preformatted. Some Microsoft operating systems may automatically attempt to reformat to a different file structure the Cellcorder will not recognize. If this happens or if you must reformat, always use the format utility under the Setup Menu on the Cellcorder.