



Cadex Electronics Inc.

22000 Fraserwood Way, Richmond, BC Canada V6W 1J6

Tel: 604 231-7777 Fax: 604 231-7755

Toll-Free: 1 800 565-5228 (USA & Canada)

E-mail: service@cadex.com Web: www.cadex.com

Cadex C7200-C, C7400-C and C7400ER-C Firmware History

Jan 22, 2008

By: Gary Kwok - Cadex Applications Engineering

Notes:

- a. The Cadex C7200-C, C7400-C and C7400ER-C analyzers use the same firmware.
- b. The non-C series analyzers (C7200, C7400 and C7400ER) use different firmware. The last release for the non-C series is version 6.12.

Version: Release Date

Major Improvements/Changes

Ver 1.00: May 18, 2006

- Initial release
- QuickSort program introduced – this program uses a standard matrix to estimate the State of Health of most cell phone batteries (Li-Ion, 3.6V, 500-1500mAh) within 30 seconds. QuickSort is on the list of basic programs.
- QuickTest has been moved to the Advanced Program list.
- Charge Optimization is now available for NiCd and NiMH batteries. Previously it was only available for Li-Ion and SLA batteries. When charge optimization is set to "Time" the battery terminates charge at the first opportunity. If set for "Capacity" additional charging is done to ensure maximum battery capacity. The default setting is "Time."
- Adapter calibration now provides resistance values. If the difference between the old and new value is more than 50 milliohms, the user is given a choice to accept or reject the new value. The C7000 C-Series Users Manual (P/N 89-307-1016) provides a range of acceptable values.
- The default negative slope for NiCd and NiMH batteries is 8mV/cell. However, for 1.2V or 2.4V batteries, the default negative slope is automatically set to 16mV/cell.
- dT/dt (terminating charge based on temperature) is now user programmable. The analyzer allows the user to select between 2°C per 2 minutes, 3 minutes, or 4 minutes for terminating charge based on temperature. The default setting is 2°C per 3 minutes.

V1.01: Mar 13, 2007

- Firmware updated to prevent accidental downloading of older firmware or non C-series firmware into the analyzer.
- Corrected Reboot: if a unit was not calibrated after a cold hard reboot (using Alt-0), there is a remote possibility that the current could overshoot because of an incorrect register value. This has been fixed to prevent the overshoot. To do a reboot, hold down the Menu key while powering up. Do not use Alt-0 to reboot the analyzer.
- Corrected an error message: FAIL 179 error message was partially overwritten by the text "SOH=N/R. It now correctly shows Fail179 only.
- Corrected label output: removed text for blank results on the labels. For example, if running OhmTest, it used to show "Cap: _% mOhm 123". In this version, it would only display "mOhm: xxx."
- Fn-9 was made more intuitive: it now shows "Analyzer Mode": and the options are 'BatteryShop' or 'Standalone'
- The analyzer would request adapter calibration although it has been previously done. This has been fixed.

V1.10: Sep 18, 2008

- Li-Phosphate Chemistry Support.
- Firmware updated to prevent incorrect message from being displayed during USB power failure.
- Corrected a N/A display on Ohm Test results when added to a custom program.
- Provided a "Remove calibration adapters" when Voltage Calibration was complete.
- Charge optimization provided for Nickel based batteries and SLA/Li batteries.
- Corrected a problem where the capacity will not display when serviced with a custom program.
- Stabilized the temperature reading.

- END -