



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, C7400 and C7400ER Firmware History

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By: Gary Kwok - Cadex Applications Engineering

Note: The Cadex C7200, C7400 and C7400ER battery analyzers use the same firmware

Version: Release Date	Major Improvements/Changes
Ver 1.00: Aug 15, 2000	<ul style="list-style-type: none">- Initial release; only the 7200 platform was available
Ver 2.00: Jan 4, 2001	<ul style="list-style-type: none">- Added Quicktest & Learn: an adaptive battery test program- Added Boost (Power Boost) to revive batteries with very low voltage- Analyzers can be upgraded by downloading firmware from a PC rather than changing IC's.
Ver 2.02: May 9, 2001	<ul style="list-style-type: none">- Added support for Batteryshop 4.0.- Marked all C-Codes with QuickTest matrices with a "T"- Run-time program duty cycles changed from percentages to milliseconds- Quicktest label printing
Ver 3.00: Mar 21, 2002	<ul style="list-style-type: none">- Added QuickLearn- Improved Learn to prevent overvoltage errors- Provided Support for BatteryShop 4.1- Upload and Download matrices to Batteryshop
Ver 3.01: Jun 30, 2002	<ul style="list-style-type: none">- Lowered the allowable charge current for both SLA and Li batteries to 3500mA to prevent Code 16x errors.- The single cell 2500mA charge/discharge current limit has been removed for Li batteries. This limit does still apply to NiXX and SLA.- QuickLearn now assumes a battery that is more than 90% to create the matrix – previous version used the target capacity.
Ver. 3.02: Sept 4, 2002	<ul style="list-style-type: none">- Improved resolution of a single Quicklearn/Learn cycle for Nickel Metal Hydride.- C-Code copy function does not erase Quicktest matrix at the destination if no matrix exists for the origin code.- Improved error code management between C7 and Batteryshop.
Ver 3.03: Nov 7, 2002	<ul style="list-style-type: none">- Fixed the following bugs:- Corrected a problem in the LEARN process where a corrupted matrix was being produced - occasionally, a 100% battery would subsequently be reported as being at 83% by QUICKTEST.- A compiler bug caused the station temperature reading to be displayed incorrectly if the temperature was below 0°C.- Removing a battery from a station when a charge or trickle charge was being applied may produce a 122 "Shorted" or a 128 "Soft" error message.- A fully charged SLA or Li battery may produce a 160 error or a 128 error, if the first cycle of a program is a charge cycle.
Ver 3.04: Jun 6, 2003	<ul style="list-style-type: none">- The default C-Code for NiCd batteries has been changed. Negative Slope is now 16mV/cell for NiCd batteries with 3 or more cells, and 24mV/cell for 1 and 2 NiCd cell packs.

Ver 5.00: Nov 17, 2003

- In addition to the C7200 and C7400, this firmware release supports the C7400ER with higher voltages and 6A charge current. The 6A charge current is only supported on adapters that are ordered on special request. Please contact your sales rep for more information.

Ver 6.00: Apr 8, 2005

- The OhmTest was improved to make it closer to the IEC 60285 standards.
- QuickTest now gives battery results as Excellent, Good and Poor.
- The Learn program allows batteries to be run through the Learn program in any order.
- The adapter resistance is given after calibration. This value indicates if an adapter can be adequately used for QuickTest. Resistance limits are provided in the Users Manual.
- Press the Alt-Station key while the battery is in service to restart a program. This feature is used to remove a battery while it is in service to prevent arcing.
- Several messages have been simplified. For example, Code 123, Code 124, Code 127 refer to Low Voltage Timeout Zone 1, Zone 2 and Zone 3 depending on where the problem occurred. This has been combined into one message 'Low Voltage'.
- Support for BatteryShop version 6.00.
- Corrected: A full NiCd or NiMH battery sometimes triggers an erroneous soft battery error. This was corrected.

Important Note:

Firmware Version 6.00 drops support for matrix formats that are pre-firmware 6.00. Old format matrices will not be imported from a previous version in the case of an upgrade.

Ver 6.11: Nov 24, 2005

- An option to accept adapter calibration has been added. If the new calibration value is different from the old calibration value by more than 50 mΩ, a message prompts to accept or reject the new value.
- End of Charge dT/dt detection can be configured for NiCd/NiMH batteries.
- NiCd/NiMH batteries charging method can be selected for Time (for quick charging) or for Capacity (for a further quick charge to ensure that the battery is full).

Important Note:

Firmware Version 6.11 drops support for matrix formats that are pre-firmware 6.00. Old format matrices will not be imported from a previous version in the case of an upgrade.

V6.12: Mar 13, 2007

- Fixed: when Ohmtest was added to a custom program, the print out would always be N/A mOhms. This has been corrected.
- During Voltage Calibration, an erroneous message "Calibration in Progress" would be displayed. Added "Remove calibration adapters" when Voltage Calibration was complete.
- Corrected a Battery Label layout issue.
- Corrected a "Over-Temp" cycle timer issue.
- Modified the "F9" shortcut screen.

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