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

Information Sheet for BatteryShopä
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Analyzer Requirements
- BatteryShop™ works with the C7000, C7200, C7400 and 7400ER analyzers or a combination of all three.
- C7000 requires version V3.53; use upgrade kit p/n: 92-770-0110
- C7200, C7400 and C7400ER requires version 5.0; use upgrade kit p/n 92-770-0150 or download from a PC using the 'Firmware Update Utility' included with BatteryShop.

Recommended Peripherals
- Label Printing: the **Dymo label printer** via the PC serial port (Cadex p/n: 00-004-3037) or via the PC parallel port with the parallel-to-serial converter (Cadex p/n: 00-004-3032) is recommended for use with BatteryShop™. NOTE: The **Dymo SE300 label printer** via the serial port (Cadex p/n: 00-004-3013) can be configured for BatteryShop™ 5.0 as well.
- Report Printing: Any printer with Windows printer drivers. For laser printers, at least 300 x 300 dpi resolution. For ink-jet printers, at least 360 x 360 dpi resolution for ink-jet printers.
- Optional PCI Bar-code Scanner Kit available (p/n: 92-770-0260)

Minimum PC Requirements
- Internet Explorer 5.5 or higher required--update available on BatteryShop™ CD
- BatteryShop Version 5 Software operates on Windows 95/98/ME/NT4/2000/XP
- For Windows NT 4.0 Users, Service Pack 4 or 5 is required
- For Windows 2000 Users, Service Pack 1 is required
     IMPORTANT: If you are using Windows NT/2000, your user profile **must** have Administrator or Power User access or else you will have printing and/or installation problems.
- Pentium II 233 MHz
- Hard Drive: 160Mb (2Gb if real-time data storage enabled)
- Memory: 64Mb on Windows 95/98, 128Mb for Windows ME/NT4/2000
- Monitor: SVGA Color, 800x600 resolution, 256 colors
- CD ROM: 4X or better
- BatteryShop 5 automatically upgrades all older versions of BatteryShop and its data.

Main Features of BatteryShopä Version 5 Release

Options for the Analyze Battery Screen:
- Tabs on the "Analyze Battery Screen" can be removed when not needed through System Setup.
- Batteryshop 5.0 is backward compatible with C7000 and C7000ER firmware version 3.53.
- Batteryshop 5.0 is compatible with Cadex 7200 and Cadex 7400 firmware version 5.0x.

Compatibility
- The C7400ER is supported on BatteryShop 5.0; Battery Models can be programmed for 6A charge and discharge rates to use on the C7400ER (note: special adapters must be used for this).

Printing
- There is now an option to print on both service labels with the same information rather than on just one label.

BatteryShop Battery Database
- Batteryshop 5.0 comes with a Firmware Upgrade Utility that includes downloadable analyzer firmware v5.0x for customers with older Cadex 7200 and Cadex 7400 analyzers.
- Cadex Batteryshop version 5.0 can download C-Codes from the Internet through the Battery Models window when requested by the user – a direct Internet connection is required.
- BatteryShop database access can now be controlled by a password.

Manuals
- The complete BatteryShop manual is now available on the CD-Rom as a Adobe Acrobat file.

BatteryShop™ Features	Ver. 5	Ver. 4.2	Ver. 4.0	Ver. 3.0	Ver. 2.0
Windows XP compatibility	✓	✓			
Quicklearn program	✓	✓			
Manual C-Code/Matrix transfer	✓	✓			
Minimum required firmware checking	✓	✓			
Analyzer Icon Size option	✓	✓			
Support for standard DYMO LabelWriter Windows' drivers	✓	✓			
Re-position all fields in label "Print Area" at once	✓	✓			
Windows 9.x/NT4/ME compatibility	✓	✓	✓	✓	✓
Windows 2000	✓	✓	✓		
Native data engine	✓	✓	✓	✓	
Concurrently service batteries on the Cadex 7000, 7200, and 7400	✓	✓	✓		
Option to store real-time chart data that is accessible from Service records at a later date	✓	✓	✓		
MS Outlook style user interface	✓	✓	✓		
Quicktest/Learn	✓	✓	✓		
Improved report/label designer; supports any label printers with Windows printer drivers.	✓	✓	✓		
Additional label and report fields for state of health and confidence grade	✓	✓	✓		
Firmware download utility for updating firmware on the Cadex 7200 and 7400 via the PC. *The utility does NOT work with the Cadex 7000*	✓	✓	✓		
Multi-language captions (English, French, Spanish, and German)	✓	✓	✓		
Cycle charts for capacity and impedance	✓	✓	✓		
Can easily support a fleet of 200,000 batteries when using the battery ID feature.	✓	✓	✓		
Daily log is overwritten each day at midnight				✓	✓
Daily log is over-written once a week	✓	✓	✓		
Customizable reports that allow the user to print required columns only.	✓	✓	✓		

Frequently Asked Questions on BatteryShopä

(Q) When I try to connect BatteryShop to the Analyzers, no analyzer icon appears on the screen.

(A) Check the following:
- The serial port device in the analyzer should be set to "BatteryShop".
- The COM port that the analyzer is connected to must listed as one of the "Ports to Search For" list under "System Setup" => "Ports Map" in BatteryShop.
- In the Windows COM port settings, the baud rate = 9600, data bits = 8, stop bits = 1, parity = none, and flow control should be "Hardware". In the advanced settings for the serial port, the FIFO Buffer option should be selected
- Use the gray cable provided with the BatteryShop software. A standard printer or serial cable does not work.
- Make sure that the 9-pin end of the cable is connected to the back of the analyzer. Connect the 25 pin or 9pin port to your COM port (NOT the Printer Parallel Port) of your PC.
- Check the COM port settings on your PC. Make sure that you have only 2 COM ports COM1 or COM2, if there is COM3 and COM4, there will be conflict with COM1 and COM2 since the ports use the same interrupts.
- Check for any modems that may use the COM ports and disconnect them – this can cause interference and conflict with the data.
- Setup the software to search for all the COM ports.

(Q) I cannot connect to more than 3 analyzers
(A) This BatteryShop is licensed for a maximum of three licenses. To connect to more analyzers, contact Cadex or your representative for a license upgrade to 4, 8, 16 or 32 analyzers. To check how many licenses you have, go to 'System Setup' -> 'Ports Map'. The number of licenses is on the bottom left.

(Q) With BatteryShopä connected to the Cadex 7x00 Analyzers, I cannot start services on the analyzer.

(A) Try the following in the order stated:

- Make sure the proper firmware is installed on C7x00 analyzer. See <u>Analyzer Requirements</u> above.
- In the Windows COM port settings, the baud rate = 9600, data bits = 8, stop bits = 1, parity = none, and flow control should be "Hardware". In the advanced settings for the serial port, the FIFO Buffer option should be selected and default

(Q) The Dymo EL60 printer cannot print ID or service labels from BatteryShopä.
(A) If you are using the parallel-to-serial converter with the Dymo EL60, the parallel port mode must be set to "SPP" in the BIOS of your computer. If you are using the Dymo EL60 with the serial port on your PC, make sure the serial port settings in Windows are as follows:

- Baud Rate: 19200
- Data Bits: 8
- Parity: None
- Stop Bits: 1
- Flow Control: Hardware

(Q) How do I save real-time battery service data to the disk?
(A) Under "System Setup", "Options", make the check box beside "Save Real Time Data" is enabled. To see the data after battery service has completed, go to "Database" then "Reports".
- Set the query type as "View Services"
- Select either to query by battery ID, battery model, or all batteries
- Select the dates when the service(s) ran
- Click "Run"
- Right-click the battery service you want to see and select "Battery Characteristics Graph"

If the service is already in progress or already finished…
- Right-click the appropriate station on the analyzer icon and select "Real Time Chart".
- Select the "Chart" tab

(Q) How do I service many batteries of the same model without having to double-click the battery model repeatedly?
(A) When you first double-click the appropriate battery model, set the Analyze Mode to "Batch". Insert the battery until the service starts on the analyzer then repeat again for the other batteries. Do not insert batteries at the same time because this will confuse BatteryShopä.

(Q) How do I download and upload matrices?
(A) Insert an adapter into a Cadex C7x00 Series analyzer. Right-click on the analyzer station icon where the adapter was inserted. Select C-Code/Matrix Transfer menu option from the context menu to display the C-Code/Matrix Transfer dialog. A C-Code/Matrix Transfer menu option will not appear for C7000 units.