

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: <u>service@cadex.com</u> Web: <u>www.cadex.com</u>

#### Information Sheet for BatteryShopä

15 April 2005

IMPORTANT: QuickTest matrices that pre-date BatteryShop 6.0 will NOT be imported into the new BatteryShop database because the new Advanced Learn Program uses a new matrix format.

Analyzers with firmware prior to version 6.0 should not use adapters with new format matrices to Learn/QuickTest batteries as that will result in faulty test results.

Please ensure that Internet Explorer 5.5 or higher is installed on your system prior to installing Cadex BatteryShop.

#### Main Features of BatteryShopä Version 5 Release

- QuickTest results are displayed as verbal messages: Excellent, Good and Poor.
- The Learn program allows batteries to be Learned in any order.
- The OhmTest was improved to make it closer to the IEC 60285 standards.
- Several messages have been simplified. For example, Code 123, Code 124, Code 127 referred to Low Voltage Timeout Zone 1, Zone 2 and Zone3 depending on where the problem occurred. This has been combined into one message 'Low Voltage'.
- Battery Service Reports can be customized.

Batteryshop <sup>™</sup> Features	6.0	5.1	5.0	4.1	4.0	3.0	2.0
Firmware 6.0 Compatibility	~						
Additional Custom Report	~						
Advanced Learn	~						
Matrix Protection	~						
Firmware 5.0 Compatibility		$\checkmark$	~				
Interface Customization	~	$\checkmark$					
Models Update via Web	~	$\checkmark$					
Windows XP Compatibility	~	~	~	~			
Learn program	~	~	~	~			
Manual C-Code/Matrix transfer	~	$\checkmark$	~	~			
Minimum required firmware checking	~	$\checkmark$	~	$\checkmark$			
Analyzer Icon Size option	~	~	~	~			
Support for standard DYMO LabelWriter	~	$\checkmark$	~	~			
Windows' drivers							
Re-position all fields in label "Print Area" at	~	$\checkmark$	~	$\checkmark$			
once							
Windows 95B/98/NT4/ME compatibility	$\checkmark$	~	$\checkmark$	~	~	$\checkmark$	$\checkmark$
Windows 2000	$\checkmark$	~	$\checkmark$	$\checkmark$	~		
Native data engine	$\checkmark$	~	$\checkmark$	~	~	$\checkmark$	
Concurrently service batteries on the Cadex	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
7000, 7200, and 7400							
Option to store real-time chart data that is	~	$\checkmark$	~	$\checkmark$	$\checkmark$		
accessible from Service records at a later							
date							
MS Outlook style user interface	✓	✓	✓	✓	✓		
Quicktest/Learn	✓	✓	✓	✓	✓		
Improved report/label designer; supports	~	$\checkmark$	~	$\checkmark$	$\checkmark$		
any label printers with Windows printer							
drivers.							

Batteryshop <sup>™</sup> Features	6.0	5.1	5.0	4.1	4.0	3.0	2.0
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	~	~	~	~	✓		
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.	~	~	~	~	~		

Analyzer Requirements

- BatteryShop<sup>™</sup> 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 6.0; follow instructions for "Downloading Firmware" in Cadex Firmware Utility Help (Start > Programs > BatteryShop > Cadex Firmware Utility Help).

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<sup>™</sup>. NOTE: The **Dymo SE300 label printer** via the serial port (Cadex p/n: 00-004-3013) can be configured for BatteryShop<sup>™</sup> 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

BatteryShop supports English, French, Spanish, and German captions only on the European language versions of Windows. For all other language versions of Windows, BatteryShop supports English captions only.

- 1. Dedicated computer with Windows 95B, 98, Me, NT4 SP6a, 2000 SP4, or XP (Home or Professional Edition). XP or 2000 Professional is recommended.
- Pentium II 233 MHz or higher, 160 MB free hard-drive space; 64 MB RAM for Windows 98 & 95B, 128 MB RAM for Windows XP (Home), Me, NT4, or 256 MB RAM for Windows XP (Professional) or Windows 2000 Professional\*.
- 3. Internet Explorer 5.5 (IE5.5). A copy of IE5.5 is included on the Cadex BatteryShop CD.
- 4. COM (serial) port for each battery analyzer, or USB or COM port multiport adapter.
- 5. Web update requires working Internet connection.
- 6. SVGA color monitor, 800 x 600 resolution, 256 colors; mouse; keyboard.
- 7. UPS (uninterruptible power supply) and 2 GB free hard-drive space if you want to collect Real-time data.
- 8. Cadex 7200/7400/7400ER (firmware 6.00 or better), or C7000 (firmware 3.51 or better) battery analyzer. If your C7000 firmware version is less than 3.51, contact Cadex for a C7000 firmware upgrade kit.

### 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</u> <u>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 label 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) I do not see any voltage, current or temperature graphs. How do I save this data?

(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.