

### New Battery Maintenance Solutions for Biomedical Engineer Technicians

## Battery Maintenance is one of the Top 10 problems faced by today's Biomedical Engineer Technicians according to the AAMI association.

- March / April 2011 issue of the Biomedical Instrumentation & Technology journal





### **Battery Maintenance**

Over time, rechargeable batteries lose capacity (the ability to hold a charge) and their fuel gauges can lose accuracy.

More than simple chargers, Cadex Battery Analyzers measure the capacity and health of batteries to identify when they should be removed from service.

- Ensure your critical equipment is **ready to go** when you need it
- Save money on batteries by replacing only those that are no longer useful
- Label and track batteries to minimize error and optimize service
- Ensure the battery fuel gauge is properly calibrated.
- Use your medical devices for patient care not charging and maintaining their batteries

### **New Analyzer Packages for Hospitals**

Each package delivers the full capabilities of the latest C-Series analyzers, universal battery adapters to service a wide range of batteries, and our PC BatteryShop™ maintenance software to manage your entire fleet of batteries.

The batteries in portable medical equipment play a vital role in delivering patient care. Cadex Battery Analyzers assure that all batteries meet specified equipment requirements and ensure reliable patient care.





"Cadex Battery Analyzers are the only product on the market that truly maintains our wide variety of batteries. Their versatility, reliability, programmability, and ease of use are second to none. Our hospital depends on the information from the analyzer and could not function without them." - Stan Z. Spacek - Biomedical Engineering, Ottawa Civic Hospital



**C7400ER-C**: At 170 watts of charge power, 6A per station and a battery voltage of up to 36V, this four-station battery analyzer is best suited for medical batteries



**C7400-C**: This is the most economical battery analyzer in terms of cost per station. It offers 80 watts of charge power at 4A per station and 16V.



**Custom Adapters**: Available for all popular medical batteries including Philips, Zoll, Medtronic Physio Control, Alaris, and Mindray.



**SmartCable**: Universal adapter for larger batteries that cannot be placed into a custom adapter



FlexArm™: The FlexArm adjusts to handle a large variety of battery types and accommodates batteries when no custom adapter is on hand.

Our analyzers support all popular equipment brands such as:

### Medtronic



ZOLL



ALARIS"



**SANYO** mindray



Contact us today and we can schedule a product demonstration and understand your needs.

Also inquire about our Cadex C8000 for higher power requirements.

#### Package 1

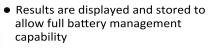
- C7400ER C-Series Analyzer (07-740-1100)
- 4 x Battery Adapters (any type)
- BatteryShop PC Software (07-770-2001)

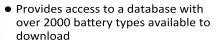
#### Package 2

- C7400ER C-Series Analyzer (07-740-0100)
- 4 x Battery Adapters (any type)
- BatteryShop PC Software (07-770-2001)
- Dymo 450 Label Printer (00-004-3037)
- USB Barcode Scanner (92-770-0261)
- 2-Year Extended Warranty (Total=4 Years)

#### **Features:**

#### **BatteryShop PC Software:**





Operates up to 32 analyzers from a single computer

## Indication 450

#### **Dymo 450 Label Printer:**

- Printing service labels allows instant identification for users
- Labels display the service date, battery capacity test result, and next required service date



Cadex Electronics Inc.
Phone: 1-800 565-5228
Email: sales@cadex.com
Web: www.cadex.com

Web: www.batteryuniversity.com





# Five Tips for Servicing Hospital Batteries

TIP

Check incoming batteries before placing them in service; return marginally performing batteries to the vendor (even new batteries may not meet the specified capacity level).

TIP 2

Prime new lead acid batteries to maximize capacity, condition nickel-based to reverse capacity fade, or verify lithium-ion for conductivity and capacity levels.



Treat a battery like any other medical device. Keep track of the vendor, price, purchase date, start date, performance history and retirement.



Do not replace a battery based on the date-stamp; rely on the performance instead. A pack may fail before the expiry date. However, most will last twice as long, saving money and reducing waste.



Examine the runtime criteria of each operation and establish the minimal acceptable capacity for the application. Follow these requirements when replacing the battery.



## Medical Battery Adapter Listing C7XXX Series Adapters - Partial Listing

Manufacturer	Used In	Battery Model	Chemistry	Volts	mAh
Biomet	GL-80103450P	GL-80103450P	Li	7.2	1950
Boehringer	Engenex	60065	NiMH	12	2500
Corventis	Gateway	UBBP01	Li	3.6	1800
Datascope	Accutorr Plus	0146-00-0069	 Li	10.8	4400
DePuy	ProVision	5430-35-000	NiMH	6	2800
Flir	\$60	194 067	NiMH	13.2	2000
Hewlett Packard	4100 Series Defibrillator	GL43100	SLA	12	2500
Hewlett Packard	M1722A/B CodeMaster Defib.	B10782	SLA	12	4500
Impact Instruments	731 Series Eagle II	990477-006926	Li	14.4	6600
ксі	ActiVAC	340078	Li	10.8	2400
KCI	INFOVAC	340426	Li	14.4	6600
Kinetic Concept	VAC Unit	PB-0604	NiMH	12	2700
Marquette .	Mac 5000	MMS#900770-001	NiMH	18	3500
Medtronic-Physio	Fastpak 5, 10 (Snap-In)	09-10424-04	NiCd	12	1200
Medtronic-Physio	First Medic 510	BP-20P	SLA	12	2000
Medtronic-Physio	First Medic 510	BP-212	SLA	12	2300
Medtronic-Physio	First Medic 510	LC-7A122R3U	SLA	12	2300
Medtronic-Physio	First Medic 510	LCS-2012AV	SLA	12	2300
Medtronic-Physio	First Medic 510	LCS-2012P	SLA	12	2000
Medtronic-Physio	First Medic 510	LCS2312AVBNC	SLA	12	2300
Medtronic-Physio	First Medic 510	PVB-88	NiCd	12	2300
Medtronic-Physio	First Medic 510	VW-VBM10E	SLA	12	2300
Medtronic-Physio	First Medic 510	VW-VBM2	SLA	12	2000
Medtronic-Physio	First Medic 710	AGBP20P	SLA	12	2000
Medtronic-Physio	First Medic 710	LCS2012DVBNC	SLA	12	2000
Medtronic-Physio	First Medic 710	PV-BP50	SLA	12	2000
Medtronic-Physio	Lifepak 300	804901-05	SLA	12	3400
Medtronic-Physio	Lifepak 500	3005379-000	SLA	8	2500
Medtronic-Physio	Lifepak 6, 7 Monitor	800285-01	NiCd	14.4	1500
Medtronic-Physio	Lifepak 6,7 Defibrillator	800566-04	NiCd	12	1200
Medtronic-Physio	Lifepak 8 Defibrillator	3006370-00	NiCd	6	1200
Medtronic-Physio	Lifepak 8 Monitor	802850-01	NiCd	9.6	2200
Medtronic-Physio	Lifepak 9	803704-03	SLA	16	1200
Medtronic-Physio	LP20	10HR-SCU	NiMH	12	3000
Philips	HeartStart MRx	M3538A	Li	14.4	6000
Philips	HeartStart MRx/HeartStart MRx	COPY OF 3098	Li	14.4	6000
Philips	IntelliVue MP2/MMS X2	M4607A	Li	10.8	1000
Philips	PageWriter Touch	NI2040PH	Li	10.8	6600
Sanyo	HR-4/5FAUP	HR-4/5FAUP	NiMH	9.6	1950
SKC	AirChek 2000	P20136	NiCd	4.8	2300
SKC	Leland Legacy Pump	P75692NUL	Li	7.2	12000
SKC	PCXR	P21661	NiCd	6	2400
Smith & Nephew	Dyonics Pac II	Dyonics Pac II	NiCd	6	1200
Stryker	2102 Drill	4112	NiCd	9.6	500
SynCardia	Freedom	100-10260-01	Li	14.4	3300
Teledyne Demo	AMC	77090-1	SLA	12	2500
Terumo	DuraHeart	817537	Li	14.4	2500
Thoratec	TLC-II	20010-2815-000	Li	18	3200
Tocad	ProTIME Monitor	TAI-M1009	NiCd	7.2	800
Unipower	Zell PD-1200 Pacemaker	B10544	SLA	12	2500
Zoll	M-Series Defibrillator	PD4410	SLA	10	2500
Zoll	M-Series Defibrillator	PD4410SMT	SLA	10	2500
Zoll	M-Series Defibrillator	PD4410XL	SLA	10	4500