Cadex Load Capture Unit (LCU)
## User's Guide

Introduction

The C8000 Load Capture Unit (LCU) (PN 89-207-3036) has been designed to store and capture load signatures of any device up to 100A in real-time. The load signatures can be incorporated in a BatteryLab™ custom program which can aid in determining battery performance characteristics, battery life, time of use, and device performance, thus allowing you to design the right battery for your device. The LCU has digital I/O, analog I/O.

Note: The C8000 Load Capture Unit (LCU) has been designed specifically for use with the C8000 Battery Testing System and BatteryLab software. The LCU should not be used with any other devices. Refer to the C8000 User Manual for information on how to use the LCU with BatteryLab software.

The C8000 User Manual can be found on Cadex's website: (http://www.cadex.com/support/)
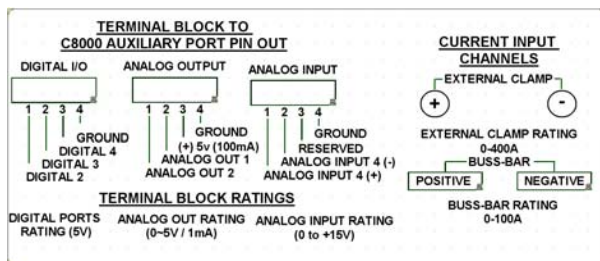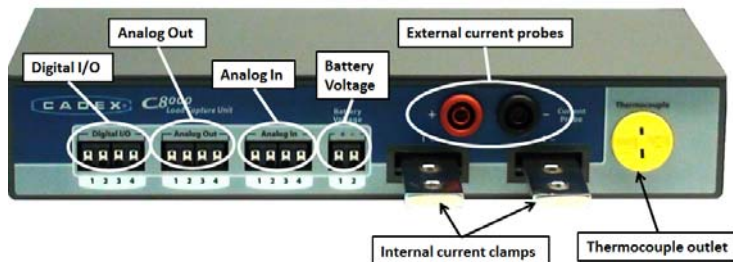
| Buss-bar Current	0-10A (2% of full scale, ripple: 20mA)
	0-100A (2% of full scale, ripple: 50mA)
External Current Clamp	0-400A (1% of full scale, ripple: 500mA)
Voltage Input Terminals	500mV-48V (2% of scale, ripple: 20mV)
Capture Frequency	DC to 250 Hz
Thermal Couple	Supports K-type
	± 2°C plus Thermal couple accuracy

Using the Load Capture Unit (LCU)

1. **Hardware connection:** Connect the LCU I/O cable to the C8000 Channel 1 I/O port (see figure below).
   Note: Channels 2-4 on the C8000 are not compatible with the LCU.

2. **Software Connection:** Ensure that your C8000 Battery Testing System is connected with your "host PC" with BatteryLab software. Refer to the C8000 User Manual (http://www.cadex.com/support/) for more detail.

3. **Device Simulation with the LCU:** There are several ways to hook up a device to the LCU. The digital I/O, analog I/O, battery voltage ±, and current clamps provide a multitude of configurations to evaluate your device simulation. The following diagram is a device simulation of a power tool that includes wiring to the LCU battery voltage terminal. Refer to the Section 3.11 in the C8000 User Manual (http://www.cadex.com/support/) to learn how to use the LCU with BatteryLab.

Wiring Diagram Example
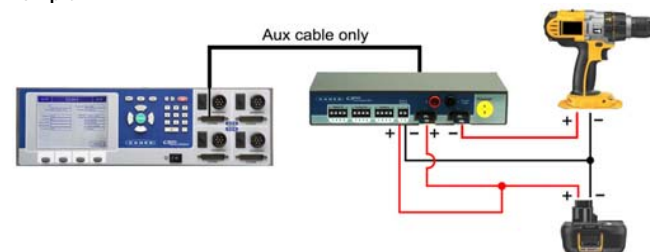
Calibration
The LCU does not require any calibration.

Maintenance
Cadex C8000 Load Capture Unit (LCU) carries a 1 year limited warranty covering materials and workmanship under normal service conditions.

Disclaimer

While every effort is made to ensure that the information contained in this guide is accurate and up-to-date, the manufacturer does not warrant or guarantee its accuracy. Further, the manufacturer makes no warranties, either expressed or implied, as to the merchantability or fitness for a particular purpose of the Cadex C8000 Load Capture Unit. In no event will the manufacturer or its officers or employees be responsible for any consequential, incidental, or indirect damages (including damages for loss of business profits, business interruption, and the like) arising out of the use or inability to use the Cadex C8000 Load Capture Unit and/or its documentation..

RoHS Compliance
The Cadex C8000 Load Capture Unit complies with the European Union's Directive 2002/95/EC, Restriction of Hazardous Substances (RoHS) and Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

	Disposal of Waste Electrical and Electronic (WEEE) in the European Union: This symbol on the product and package indicates that this product must not be disposed of with unsorted municipal waste. Instead, it is your responsibility to dispose of WEEE by handing it over to a designated collection point for the disposal. The separate collection and recycling of waste equipment will help conserve natural resources and ensure that it is disposed of in a manner that protects human health and the environment. For more information about where to drop off waste equipment for disposal, please contact your local municipal office, waste disposal service, or wherever you purchased the product.
	Caution: Information that, if ignored, can result in damage to the Load Capture Unit (LCU), C8000 Battery Testing System, simulated device, or the battery.

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