

To PC Parallel Port

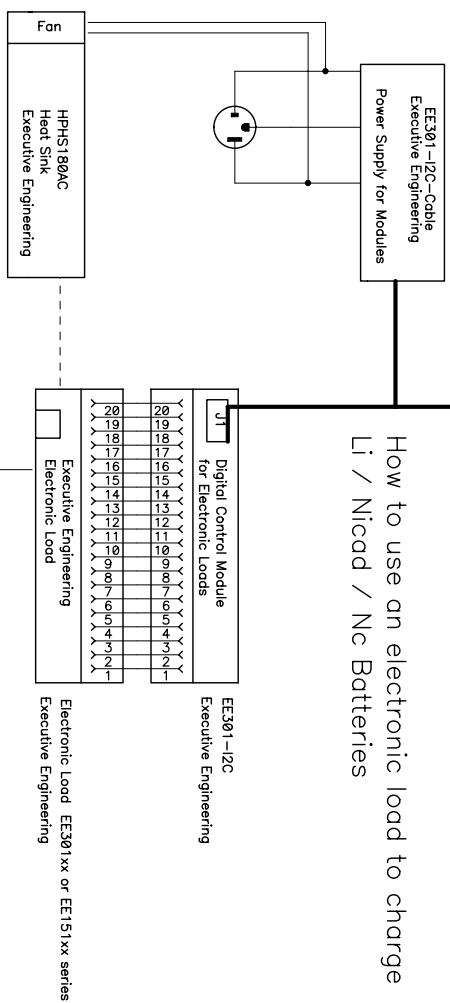
Customer PC

EES-100 Software

EE301-12C Cable  
Executive Engineering

Power Supply for Modules

How to use an electronic load to charge  
Li / Nicad / Nc Batteries



EE301-12C  
Executive Engineering

EE301-12C  
Digital Control Module  
for Electronic Loads  
Executive Engineering

EE301-12C  
Electronic Load  
Executive Engineering

UUT  
3.2 Volts  
Li / Ni / Nc / La  
Battery 3.3 V @ 1 A

Battery/ Charging  
Battery Under Test

Power Supply 5 Volts

Note:  
Power Supply should be 1 to 2 volts  
above battery voltage.

Charge Battery

Discharge Battery

Power Switch S1

The EES-100 software can be used for both charging and discharging a battery source.

### Theory of operation.

As the battery charges the voltage across the battery will start to increase and the voltage across the electronic load will decrease. When the load get to a low enough voltage the EES-100 software will shut off the electronic load.

Rx (Resistor ) is for controlling the discharge or leakage current of the battery. Rx can also be used to control the tricky charge of a battery.

### Whats Required!

- EES-100 (Software) Windows only 98 / 2000 / XP
- EE301-12C (Digital Module)
- EE301-12C-CABLE (power & data cable)
- EE301xx or EE151xx (Electronic Load )

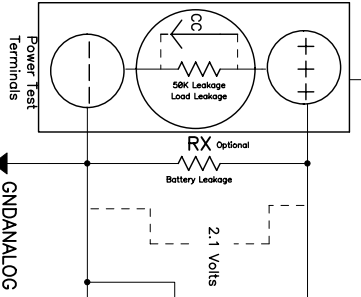
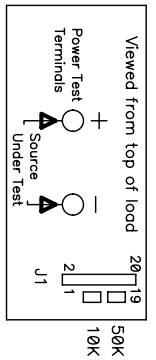
Optional Heat Sink ( If Required ) Any power dissipation above 20 watts we suggest using a high power heat sink!

### Customer Supplied Equipment!

- DC Power Supply
  - Batteries to be tested
- Power Supply must be able to supply full charging current to batteries.

Connector shown from top view.  
Pins shown as seen on electronic load.

Note J1 - Pin 2 and the (-) source under test are connected, never have current flowing through this path. All control signals should be connected to J1 -pin 2. Only the source under test should be connected to the power test terminal (+) and (-).



Use this ground for all measurements

Http://www.EXEC-ENG.com

Title Digital Dis-Charger System			
Size B	Number X011-00002-0003	Rev 1	dw
Date	Filename digital-dis-charger.SCH	Sheet 1	of 1