



MVD Constant Current Charger



BDX Smart Digital Load Bank

## **MVD/BDX Smart Digital Battery Cycler User Guide**

**Version Software:**

**MVD V2F1C.XX**

**BDX V.10U**

**For Service Call:**

**Spectre Industries**

**440-665-2600**

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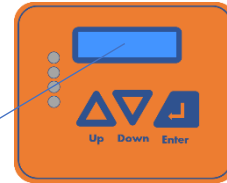
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# Rejuvenate Battery

1. Ensure Charger is plugged into the side of the BDX Smart Digital Load Bank
2. Plug BDX connector into Battery.
3. The BDX automatically detects the battery voltage. If the voltage on the display matches the voltage of the battery skip to step 5. If the voltage on the display does not match the voltage of the battery Press the ENTER button and proceed to step 4.

## Set BDX Smart Digital Load Bank:

4. Set "DISCHARGE END VOLT"
  - a. Press ENTER until block flashes
  - b. Adjust with UP and DOWN arrows
  - c. Press ENTER until block stops flashing



DISCHARGE END VOLT  
37.8V -> 30.6V

If:  
24V set to 20.4V  
36V set to 30.6V  
48V set to 40.8V  
80V set to 68.0V

5. Press UP arrow
6. Set "DISCHRG. AH MAX"
  - a. Press ENTER until block flashes
  - b. Adjust with UP and DOWN arrows
  - c. Press ENTER until block stops flashing

DISCHRG. AH MAX  
1000 Ah

Battery Capacity = Discharge AH MAX

7. Press UP arrow
8. Start Cyclor "READY TO START"
  - a. Press UP and DOWN as the same time for 1 second.

READY TO START  
Press UP+DW

# Check for Bad Cells

1. **Disconnect** the MVD from the BDX.
2. Plug BDX connector into Battery.
3. The BDX automatically detects the battery voltage. If the voltage on the display matches the voltage of the battery skip to step 5. If the voltage on the display does not match the voltage of the battery Press the ENTER button and proceed to step 4.

## Set BDX Smart Digital Load Bank:

4. Set "DISCHARGE END VOLT"
  - a. Press ENTER until block flashes
  - b. Adjust with UP and DOWN arrows
  - c. Press ENTER until block stops flashing



DISCHARGE END VOLT  
37.8V -> 30.6V

If:  
24V set to 20.4V  
36V set to 30.6V  
48V set to 40.8V  
80V set to 68.0V

5. Press UP arrow
6. Set "DISCHRG. AH MAX"
  - a. Press ENTER until block flashes
  - b. Adjust with UP and DOWN arrows
  - c. Press ENTER until block stops flashing

DISCHRG. AH MAX  
1000 Ah

Battery Capacity = Discharge AH MAX

7. Press UP arrow
8. Start Cyclor "READY TO START"
  - a. Press UP and DOWN as the same time for 1 second.

READY TO START  
Press UP+DW

9. Once the Discharge is complete the display will read "ERROR PARAMETER"
  - a. Switch the BDX off then on again.
10. The BDX automatically detects the battery voltage.
  - a. Press the ENTER button and proceed to step 4.

## Set BDX Smart Digital Load Bank:

11. Set "DISCHARGE END VOLT" to 15.0V
  - a. Press ENTER until block flashes
  - b. Adjust with UP and DOWN arrows
  - c. Press ENTER until block stops flashing



DISCHARGE END VOLT  
37.8V -> 15.0V

12. Press UP arrow
13. Press UP arrow
14. Start Cyclor "READY TO START"
  - a. Press UP and DOWN as the same time for 1 second.

READY TO START  
Press UP+DW

15. After 20 Minutes on Discharge check each cells voltage with a voltmeter while Discharge is continuing. Any Bad Cells will show a REVERSE voltage on your voltmeter and will need to be replaced.