Operating Manual

e-STATION BC8

Microprocessor controlled high-performance rapid charger/discharger/ balancer for NiCd/NiMH/Lithium/Pb batteries with cell voltage balancer. USB PC link, temperature sensor and built-in Lithium battery balancer

Charge current up to 7A, discharge current up to 5A, 1 to 8 series of LiIo/LiPo/LiFe, 1 to 27 cells of NiCd/NiMH, 2 to 36V of Lead-acid (Pb)

BANTAM
Broadcasting & Hobby design

Thank you for purchasing the e-STATION BC8. You get a rapid charger/discharger with built-in balancer, which is computerised with a high performance microprocessor and specialised operating software. It can maintain your battery at its best condition and also control them safely. Please read this entire operating manual completely and attentively as it contains a wide variety of specific programming and safety information.

You need to keep this manual in a safe place, and be sure to pass it on to the new owner if you ever dispose of BC8

Special features

- Optimised operating software

When charging or discharging, BC8 has an 'AUTO' function that sets the feeding current automatically. Especially for Lithium batteries, it can prevent the over-charging can lead to an explosion by users fault. Every program in the unit is controlled with mutual links and communication for every possible error so it introduces a maximum safety. These can be set at users option.

- High-power and high-performance circuit

BC8 employs the circuit that has maximum output power of 150W. As a result it can charge or discharge up to 27 cells of NiCd/NiMH and 8 series of Lithium batteries with maximum current of 7.0A. Furthermore the cooling system is so efficient that can hold such a power without any trouble of running the circuit or the operating program.

- Individual voltage balancer for Lithium batteries inside

BC8 has an individual-cell-voltage balancer inside. So it does not need any balancer separately when charging Lithium batteries (LiIo/LiPo/LiFe) for cell voltage balancing.

- Balance individual cells on discharge

BC8 also can monitor and balance individual cells of the Lithium battery pack during the discharge process. If the voltage of any one cell varies abnormally, the process will be stopped with the error message.

- Accept various types of Lithium battery

BC8 can accept three types of Lithium batteries - LiIo, LiPo and LiFe. They have different characteristics by their chemistry. You can select any one of them that you are going to process before the job. For their specifications, refer 'Warnings and safety notes' section.

- Lithium battery 'Fast' and 'Storage' mode

You can charge Lithium battery for special purposes. 'Fast' charge reduces the charging time of Lithium battery and 'Storage' mode controls the final voltage of the battery to be suit for long time storage.

- Maximum safety

Delta-peak sensitivity : The automatic charge termination program works on the principle of the Delta-peak voltage detection. (NiCd/NiMH)

Auto-charge current limit : When charging NiCd or NiMH at 'AUTO' current mode, you can set the upper limit of charge current to avoid from high current charging. This is very useful when charging the low impedance and small capacity NiMH battery in 'AUTO' mode.

Capacity limit : The charging capacity always calculated by multiple of the charging current and time. If the charging capacity exceeds the limit the process will be terminated automatically when you set the maximum value.

ture of the unit is raised.

- Data store/load

For users convenience it can store maximum 10 data of different batteries. You can establish the data contains program setting of the battery to charge or discharge continually. These data can be called out at any time you need and the process can be executed without program setting.

- Cyclic charging/discharging

Perform 1 to 5 cycles of charge>discharge or discharge>charge continually for battery refreshing and balancing.

- PC based analysis using USB communication(**)

For technical expert, BC8 offers PC based program can analysis the characteristic of the battery by USB port. It shows a graph of voltage, current, capacity and temperature curves. It also shows the individual voltage of each cell in the Lithium battery pack.

* When using the thermal probe
** BC8 comes with the program kit (CD plus PC link cable)

— USB port