Battery box and charger

This issue's parts are used to set up R2-D2's power supply. He is powered by six rechargeable batteries which must be charged separately. You can power the battery charger and USB lead provided. In order to ensure the maximum performance, the batteries must be charged correctly, and be installed as a matched set in the battery box – which you will do when the build is complete at Stage 99. This information is provided in order to give you ample time to purchase your batteries.

BUYING R2-D2'S BATTERIES: ESSENTIAL INFORMATION

This section covers many of the batteries that include internal protection circuitry. Source the batteries from a vendor you trust as they can be considered as standard R2-D2 has its own protection circuitry. The battery chosen should be approved for high output voltage capability. Your battery should have a nominal voltage of 3.7V or less. Be sure that don't exceed. This can easily burn the battery to death. The safest and easiest way to charge your batteries is to charge from 12V to 230VAC, or more. You can also charge your batteries in a range of voltages between 5V and 230VAC, but we recommend charging between 12V and 15V. The voltage range is needed to ensure the battery is a good match for your R2-D2. One of the main dangers that can occur is overcharging a battery. You must ensure the battery is correctly matched for high output power devices. A fully charged battery will maintain power longer than a half-charged battery, which will ensure that the battery is fully charged and will not be damaged.

CHECKOUT: DO YOUR BATTERIES MEET ALL THESE SPECIFICATIONS?

1. Voltage: 3.7V
2. Terminal: 2 x 2.3mm
3. Protection: Internal protection circuitry
4. Capacity: 2800mAh

Be sure to choose a battery that is matched to your R2-D2's battery requirement. The battery chosen should be approved for high output voltage capability. The voltage range is needed to ensure the battery is a good match for your R2-D2.

Preparing the batteries

The battery box is fitted inside R2-D2 at Stage 97 – but he won't be ready for the batteries until Stage 99. At that point, it will be vital to follow this procedure before installing the batteries.

1. Carefully follow the instructions on the previous page. Briefly charge the battery pack. Make sure that the internal charger is not plugged in, so it will work in a voltage range of 12V to 230VAC. Install the battery box into the battery charger and plug the box into a suitable USB socket.

2. Take the first battery and briefly charge it. Make sure that the internal charger is not plugged in, so it will work in a voltage range of 12V to 230VAC. Install the battery box into the battery charger and plug the box into a suitable USB socket.

When the lead is plugged in the display will flash, indicating that charging has started.