

Spektrum SPMXBC100

Spektrum XBC100 Smart Battery Checker & Servo Driver User Manual

Model: SPMXBC100

INTRODUCTION

The Spektrum XBC100 Smart Battery Checker is an essential tool for any pilot or driver. This device functions as more than just a battery checker; it features a built-in cell balancer, an integrated servo tester and driver, and Spektrum Smart battery connectivity.

When used with a Spektrum Smart battery, the XBC100 allows you to view and adjust many settings typically only available with a Spektrum Smart charger. This includes a single connection for balance and battery level checking, and provides records such as the number of cycles, internal battery temperature, and exception reports. Smart battery settings can be adjusted directly from the XBC100.

The XBC100 also includes a Qualcomm 3.0 USB charge port, offering a convenient way to charge mobile devices and Spektrum Smart Transmitters when other USB power sources are limited. Furthermore, the XBC100 enhances model setup and testing capabilities with its integrated servo tester, allowing for easy centering and testing of servo endpoints via the PWM output port.

All functions are displayed on a full-color IPS LCD screen, designed for clear readability in direct sunlight, and accessed through a user-friendly touch interface.



Figure 1: Front view of the Spektrum XBC100 Smart Battery Checker displaying battery percentage, voltage, and individual cell voltages.

SAFETY INFORMATION

WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property, and cause serious injury. This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. The product manual contains instructions for safety, operation, and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup, or use, in order to operate correctly and avoid damage or serious injury.

FEATURES

- Battery checker with built-in cell balancing, integrated servo tester and driver, and Spektrum Smart battery connectivity.
- Qualcomm 3.0 compatible USB charge port with Quick Charge for compatible Android and iOS devices (up to 12V and 2 Amps).
- Easy-to-read full-color IPS LCD screen with user-friendly touch interface.
- Center and test servo endpoints easily with the integrated PWM output port.

SETUP

Initial Power On

The XBC100 can be powered by connecting a compatible RC battery to its input port or via the USB-C port. The device will automatically power on and display the main screen.



Figure 2: Side view of the XBC100, highlighting the battery input ports for power and checking.

Connecting a Smart Battery

To check a Spektrum Smart battery, connect its balance lead to the appropriate balance port on the XBC100. The device will automatically detect the battery type and display its status.



Figure 3: The XBC100 connected to a Smart battery, showing detailed battery parameters like capacity, C-rating, and cycle count.

Connecting for USB Charging

To use the USB charge port, connect your mobile device or Spektrum Smart Transmitter to the USB-A port on the side of the XBC100. Ensure the XBC100 is powered by a suitable source.



Figure 4: Side view of the XBC100, illustrating the USB-A and USB-C ports for charging and power input.

OPERATING INSTRUCTIONS

Battery Checking and Balancing

Once a battery is connected, the XBC100 will display the overall voltage, individual cell voltages, and battery health information. Use the touch screen to navigate through different display modes to view detailed information such as internal resistance, temperature, and cycle count.

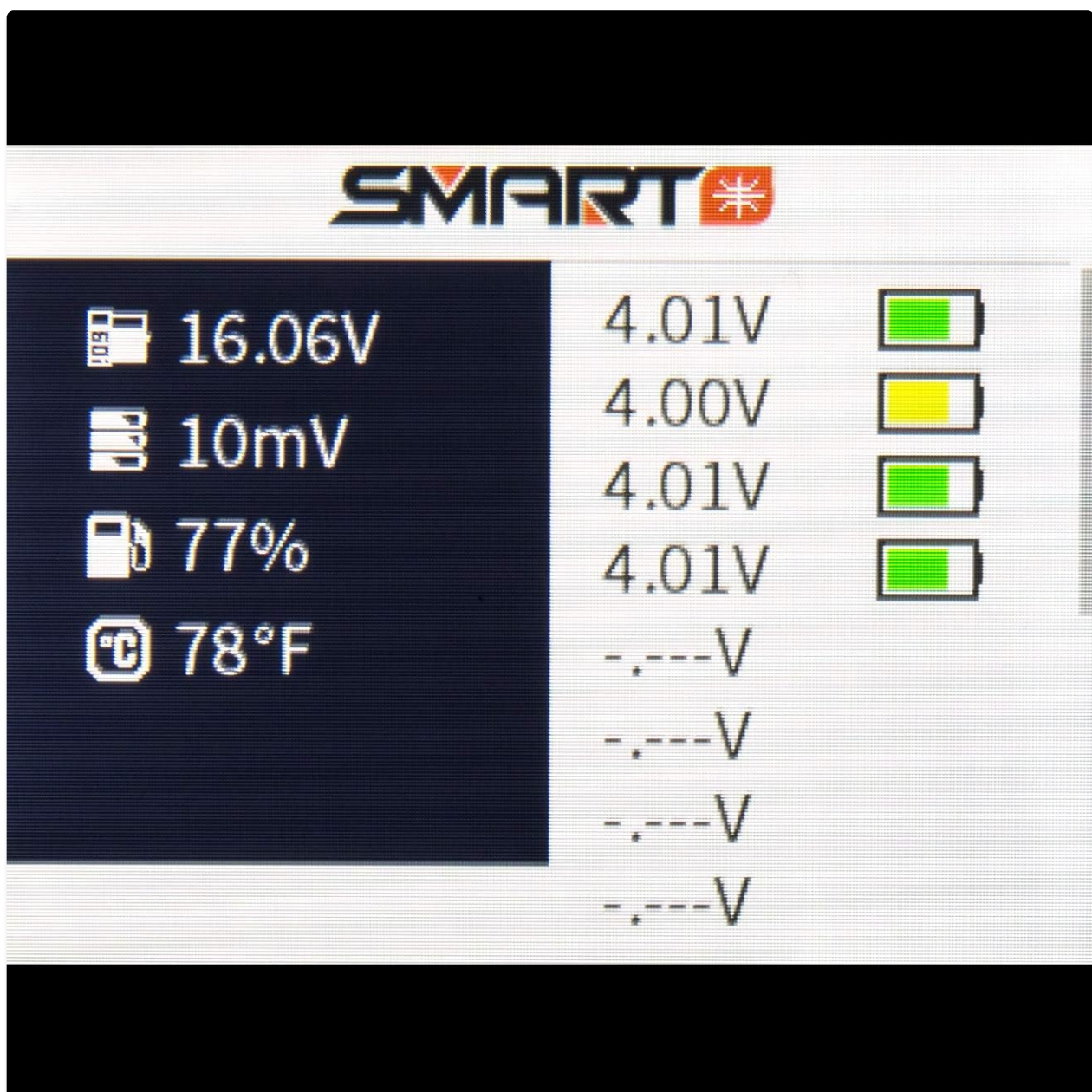


Figure 5: Screen display showing detailed individual cell voltages and overall battery health metrics.

Adjusting Smart Battery Settings

For Spektrum Smart batteries, the XBC100 allows adjustment of settings like auto storage time, storage voltage, charge current, and charge voltage. Access these options through the touch interface when a Smart battery is connected.

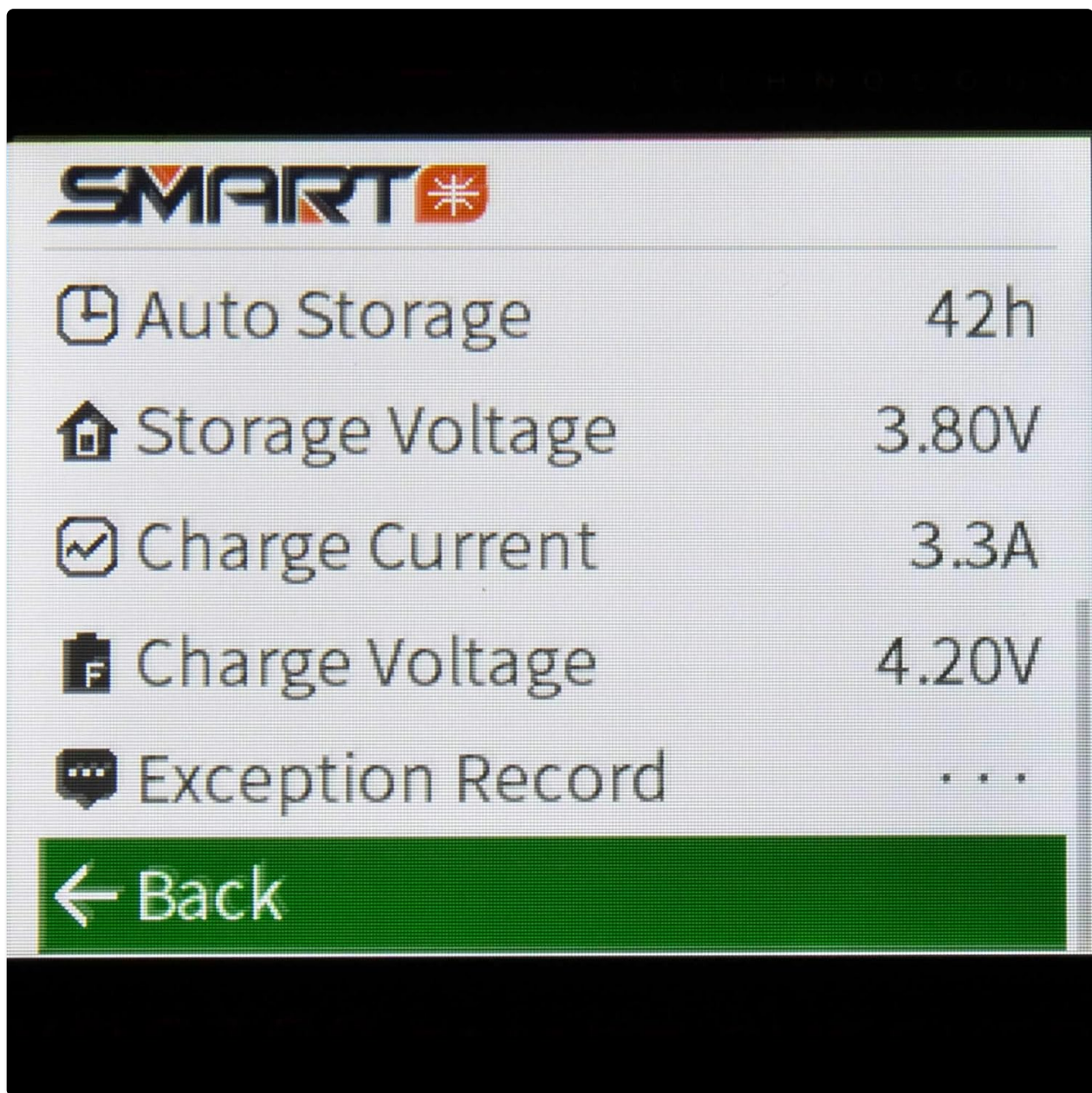


Figure 6: Interface for adjusting Smart battery parameters, including auto storage and charge settings.

Servo Testing

Connect a servo to the PWM output port. The XBC100 can be used to test servo functionality, including centering, endpoint adjustment, and cycling. This feature is useful for pre-flight or pre-drive checks and model setup.

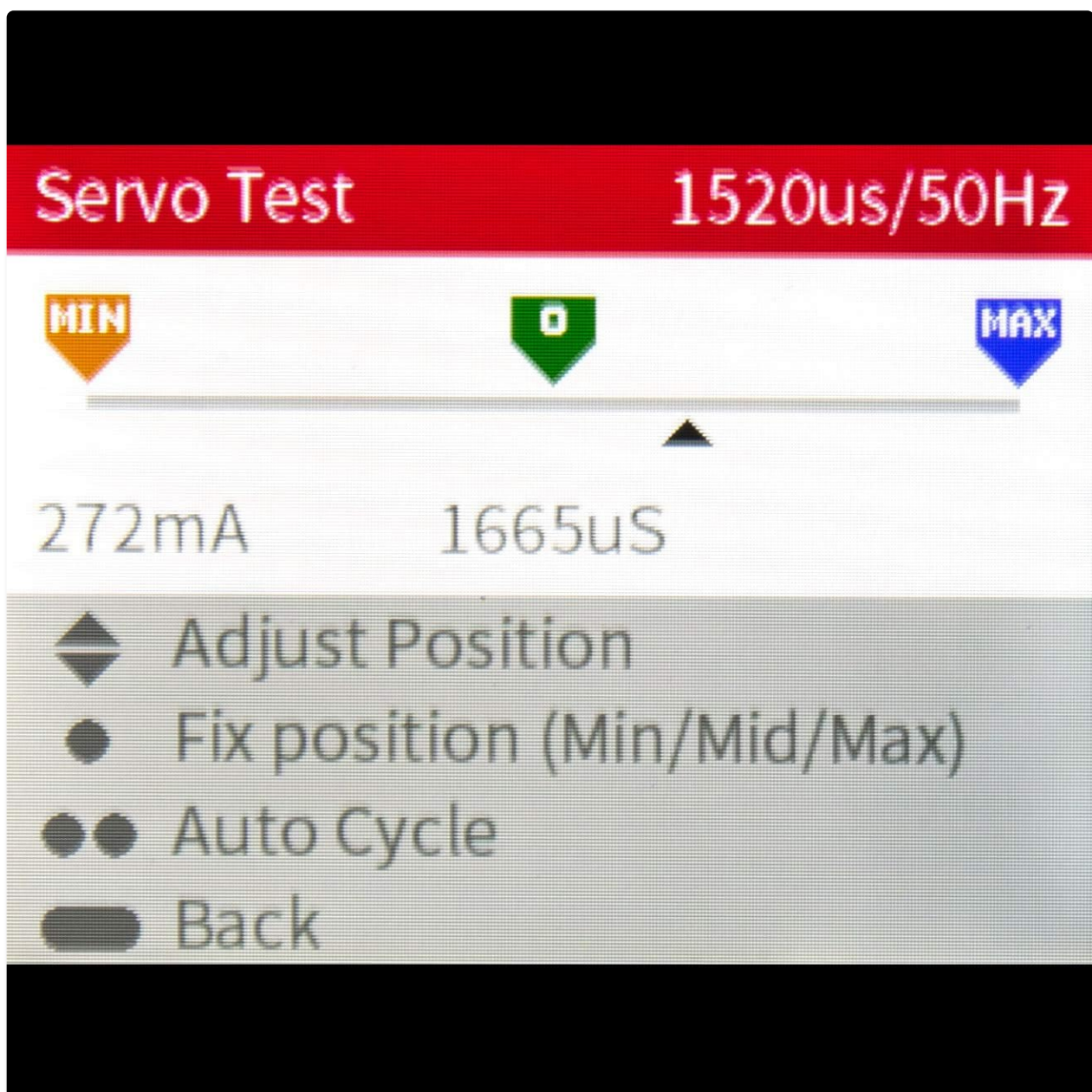


Figure 7: The Servo Test screen, providing controls for adjusting servo position and cycling.

Product Overview Video

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Video 1: An overview of the Spektrum XBC100 Smart Battery Checker, demonstrating its features and ease of use for RC battery and servo management.

MAINTENANCE

To ensure the longevity and optimal performance of your XBC100, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid using solvents or abrasive cleaners, which can damage the screen or casing.
- **Storage:** Store the XBC100 in a cool, dry place away from direct sunlight and extreme temperatures.
- **Cable Care:** Inspect all cables and connectors regularly for signs of wear or damage. Replace any damaged cables immediately.
- **Firmware Updates:** Periodically check the Spektrum website for available firmware updates to ensure your device has the latest features and improvements.

TROUBLESHOOTING

If you encounter issues with your Spektrum XBC100, refer to the following common troubleshooting steps:

- **Device Not Powering On:** Ensure the power source (RC battery or USB-C) is properly connected and providing sufficient voltage. Check the battery's charge level if using an RC battery.
- **Inaccurate Battery Readings:** Verify that the balance lead is securely connected to the correct port. Ensure the battery type selected (if applicable) matches the connected battery.
- **Servo Test Malfunction:** Confirm the servo is correctly plugged into the PWM output port. Check the servo's power supply if it requires external power.
- **Touch Screen Unresponsive:** Try restarting the device by disconnecting and reconnecting power. If the issue persists, contact customer support.
- **USB Charging Issues:** Ensure the XBC100 is adequately powered. Check the USB cable and the device being charged for proper connection and compatibility.

For further assistance, please refer to the official Spektrum support resources.

SPECIFICATIONS

Specification	Detail
Brand	Spektrum
Model Number	SPMXBC100
Power Source	Battery Powered
Style	Digital
Color	Black
Item Weight	1.6 ounces
Item Dimensions (L x W x H)	3.5 x 2.6 x 1 inches
Min. Operating Voltage	5 Volts
Upper Temperature Rating	40 Degrees Celsius
UPC	605482296721
Manufacturer	Horizon Hobby
Recommended Age	14 years and up
Release Date	December 10, 2019

WHAT'S IN THE BOX

- XBC100 Smart Battery Checker & Servo Driver

WARRANTY AND SUPPORT

This Spektrum product is backed by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms, registration, and technical support, please visit the official Horizon Hobby website or contact their customer service department. Keep your proof of purchase for warranty claims.

Online Support: www.horizonhobby.com