Voktta B0BCDVDWCN

Voktta 3CH Digital Multi Servo Tester and ESC Consistency Master User Manual

Model: B0BCDVDWCN

1. Introduction

The Voktta 3CH Digital Multi Servo Tester is a versatile device designed for testing RC servos and Electronic Speed Controllers (ESCs). It can function as a signal generator for ESCs, allowing motor system testing without a separate transmitter or receiver. This device can connect and test 1 to 3 servos simultaneously, evaluating their consistency and reaction time. It is also suitable for connecting 1 to 3 ESCs for comparative reaction time analysis. Additionally, it supports connecting up to three servos for CCPM helicopters and can be used for adjusting airplane servos, such as setting the neutral mode.

Image 1.1: Three Voktta 3CH Digital Multi Servo Testers. Each unit is blue with a yellow and black rotary knob, featuring multiple pin connectors for input and output.

2. Features

- **Input Voltage:** DC 4.2-6.0 V
- **Output Signal:** 1.5 ms ± 0.5 ms
- **Multiple Servo Testing:** Connects 1 to 3 servos simultaneously to test consistency and reaction time.
- **ESC Signal Emitter:** Can be used as a signal emitter for Electronic Speed Controllers (ESCs).
- **Three Operating Modes:** Manual Mode, Neutral Mode, and Automatic "Window Wiper" Mode.

3. Specifications

Parameter	Value
Dimensions (L x W x H)	4.5 x 3 x 2.5 cm
Weight	10 grams
Input Voltage	DC 4.2-6.0 V

Parameter	Value
Output Signal	1.5 ms ± 0.5 ms
Batteries Required	No
Batteries Included	No

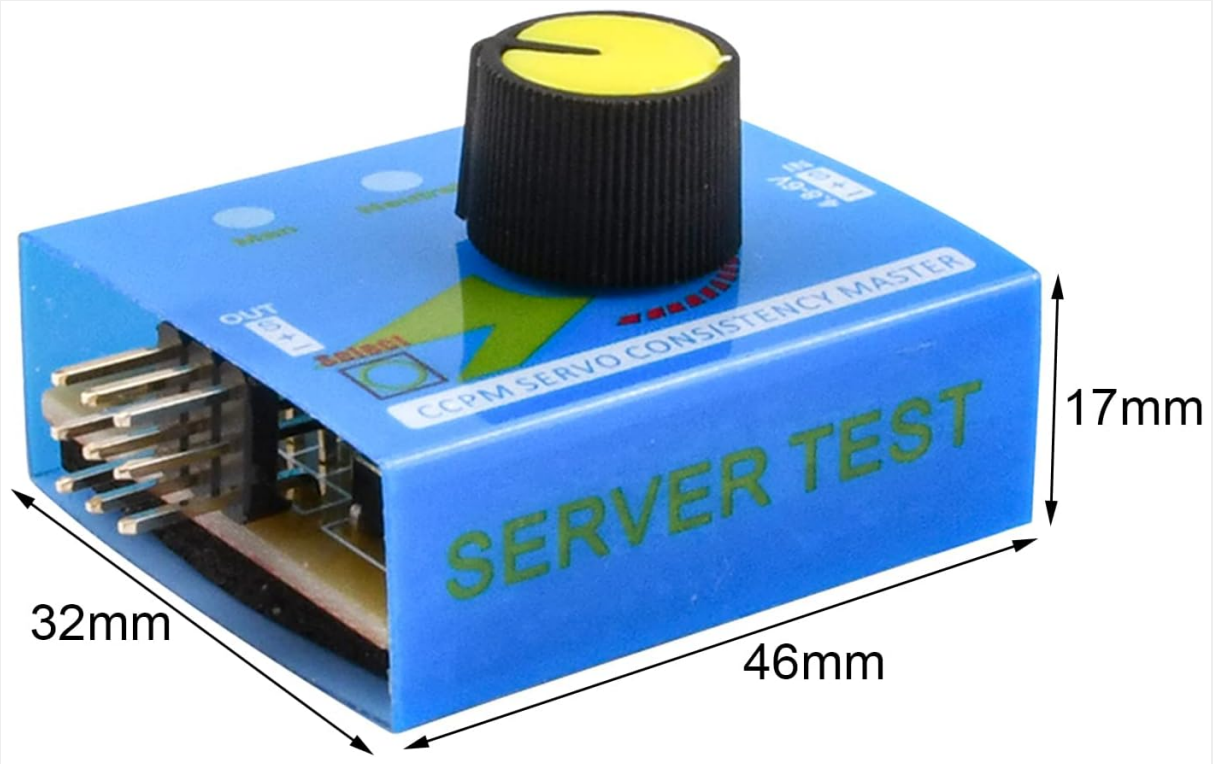

Image 3.1: Physical dimensions of the Voktta 3CH Digital Multi Servo Tester, showing approximate measurements of 46mm length, 32mm width, and 17mm height.

4. Setup and Connections

Before operation, ensure proper connections for power and the components you intend to test (servos or ESCs).

4.1 Power Connection

1. Locate the "IN" port on the side of the tester, labeled "4.8-6V".
2. Connect a DC power source (4.2-6.0 V) to this port. Ensure correct polarity: "+" for positive, "-" for negative, and "S" for signal (though typically only + and - are used for power input).

4.2 Servo/ESC Connection

1. Locate the "OUT" ports on the opposite side of the tester. There are three sets of pins, each labeled "S", "+", and "-".
2. Connect your servo(s) or ESC(s) to these "OUT" ports. Ensure correct polarity: "S" for signal, "+" for positive, and "-" for negative.
3. You can connect up to three servos or ESCs simultaneously for testing.

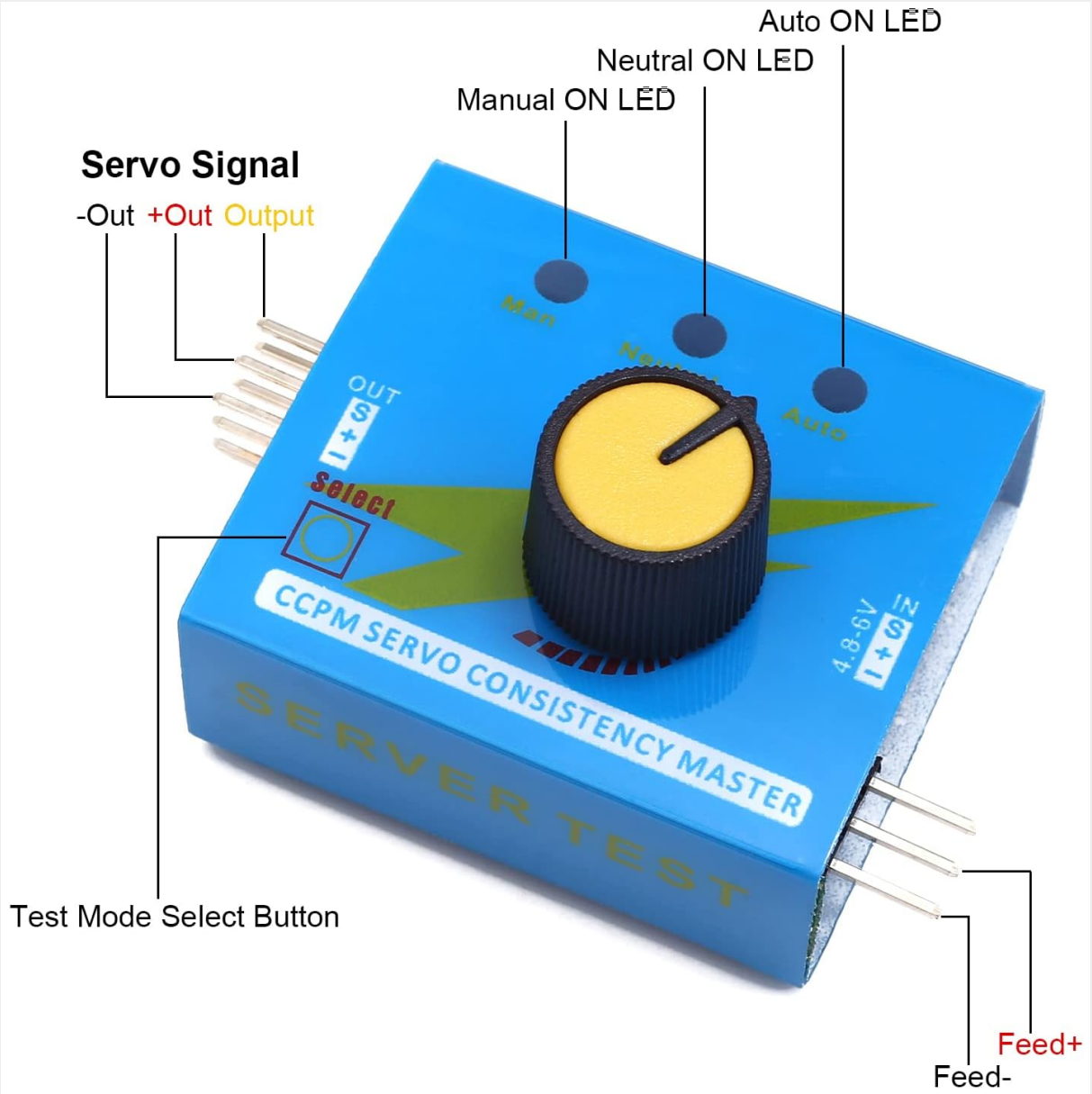

Image 4.1: Detailed view of the Voktta 3CH Digital Multi Servo Tester, highlighting the "IN" power input (4.8-6V), "OUT" servo signal outputs, the rotary knob, and the "Select" button for mode selection.

5. Operating Instructions

The Voktta 3CH Digital Multi Servo Tester features three distinct operating modes, selectable via the "Select" button. LEDs indicate the currently active mode.

5.1 Mode Selection

Press the "Select" button to cycle through the three modes: Manual, Neutral, and Automatic. The corresponding LED (Man, Neutral, Auto) will illuminate to indicate the active mode.

Image 5.1: Visual representation of the three modes: Manual Mode, Neutral Mode, and Automatic "Window Wiper" Mode, as indicated by the LEDs on the tester.

5.2 Manual Mode

- In Manual Mode, the "Man" LED will be lit.
- Turn the rotary knob to manually adjust the servo's position or the ESC's speed.
- This mode is useful for checking the full range of motion of a servo or the response of an ESC at various input levels.

5.3 Neutral Mode

- In Neutral Mode, the "Neutral" LED will be lit.
- The tester will send a signal that commands the connected servo(s) to move to their neutral (center) position.
- This mode is ideal for setting up servo linkages and ensuring correct centering.

5.4 Automatic "Window Wiper" Mode

- In Automatic Mode, the "Auto" LED will be lit.
- The tester will automatically sweep the servo(s) through their full range of motion, similar to a car's windshield wiper.
- This mode is useful for checking for smooth operation, binding, or inconsistencies across the servo's entire travel.

Image 5.2: Close-up of the Voktta 3CH Digital Multi Servo Tester showing the text descriptions of the three modes: Manual, Neutral, and Automatic "Window Wiper" mode.

6. Maintenance

- Keep the device clean and free from dust and moisture. Use a soft, dry cloth for cleaning.
- Avoid exposing the tester to extreme temperatures or direct sunlight.
- Store the device in a safe place when not in use to prevent physical damage to the connectors or knob.
- Do not attempt to open the casing, as this may void any potential warranty and could damage internal components.

7. Troubleshooting

- **No Power/LEDs Off:**
  - Ensure the power source is connected correctly to the "IN" port and provides 4.2-6.0 V DC.
  - Check the polarity of the power connection.
  - Verify that the power source itself is functioning.
- **Servo/ESC Not Responding:**
  - Confirm that the servo or ESC is correctly connected to the "OUT" port with proper polarity.
  - Ensure the servo or ESC is functional by testing it with another known working device if

possible.
    - Check the selected operating mode. Some modes may require knob adjustment (Manual Mode).
- **Inconsistent Servo Movement:**
    - Verify the power supply is stable and within the specified voltage range.
    - Inspect the servo for mechanical issues or damage.
    - Ensure connections are secure and free from interference.
- **Device Overheating or Malfunction:**
    - Immediately disconnect power if the device shows signs of overheating or unusual behavior.
    - Ensure the input voltage does not exceed 6.0 V.
    - Avoid short circuits during connection.

8. Warranty and Support

For warranty information or technical support, please refer to the retailer or manufacturer's official channels. Keep your proof of purchase for any warranty claims.