



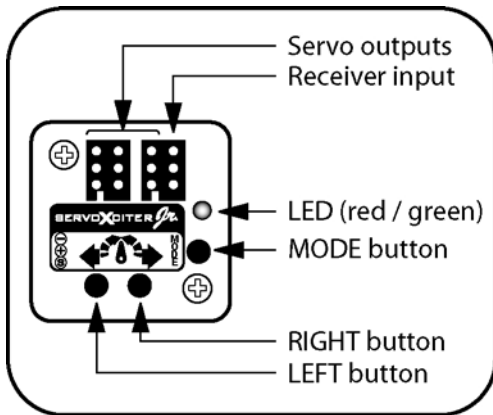
# SERVOXCITER Jr.

A precision servo driver / tester

## DETAILS

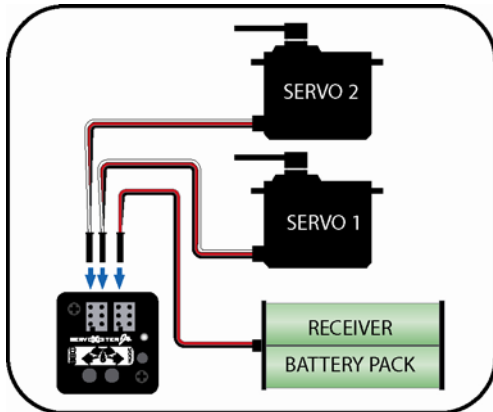
The **ServoXciter Jr** is a precision servo driver/tester capable of big features in a tiny package. The **ServoXciter Jr** has most of the same servo test features as the **ServoXciter EF**:

- precision drive accuracy with one micro second resolution
- easy servo centering
- auto-sweep mode with 10 speeds
- center and end point memory
- drive multiple servos simultaneously



## OPERATION

The **ServoXciter Jr** is powered with a standard 4 or 5 cell receiver battery pack. Plug the battery pack into any of the servo outputs. The receiver input may also be used to power the **ServoXciter Jr**, but you will have to make an adapter harness to plug into the female socket.



\*You may also use a Y-harness to drive two servos from one servo output port.

The **ServoXciter Jr** has two modes of operation: Manual Drive and Automatic Sweep. Press the **MODE** button to switch between the two modes.

### Manual Drive mode

This is the default mode when the **ServoXciter Jr** is initially powered.

- ▶ Move the servo      Press the **LEFT** or **RIGHT** drive button.
- ▶ Center the servo      Press the **LEFT** and **RIGHT** drive buttons simultaneously.

The LED color indicates the position of the servo.

- Steady RED      The signal pulse is less than center.
- Steady GREEN      The signal pulse is greater than center.
- Flashing RED/GREEN      The signal pulse is at center.
- Flashing RED      The signal pulse is in overdrive range (between endpoint and 0.850mS)
- Flashing GREEN      The signal pulse is in overdrive range (between endpoint and 2.150mS)

### Servo movement speed:

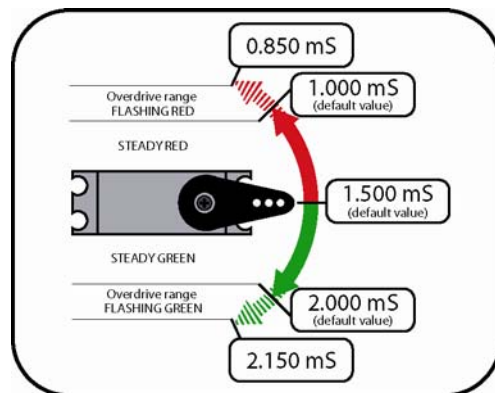
The manual drive servo movement speed can be changed to suit your preference. See the *Automatic Sweep mode* section for instructions on how to save your desired servo speed. The manual drive servo movement speed is saved in memory and will not be lost when the **ServoXciter Jr** is powered OFF.

### Overdrive range:

The **ServoXciter Jr** will stop the servo when it has reached a configured endpoint. The default endpoints are 1.000 milliseconds to 2.000 milliseconds.

Release and then re-press the drive button to drive past the configured endpoint and into the overdrive range. The servo will be controlled at a very slow rate while in the overdrive range and the LED will be flashing.

- **Maximum overdrive pulse:** 2.150 milliseconds
- **Minimum overdrive pulse:** 0.850 milliseconds.



Shown with default center and endpoint positions.

Rotation is based on servo brand and may not match that shown.



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## Automatic Sweep mode

In automatic sweep mode the **ServoXciter Jr** continually cycles the servo from one configured endpoint to the opposite configured endpoint (pausing for a half second during direction changes). *The default endpoints are 1.000 milliseconds to 2.000 milliseconds.*

The **ServoXciter Jr** can drive the servo in any of 10 speeds from very slow to fast.

- ▶ Increase speed    Press the **RIGHT** button.
- ▶ Decrease speed    Press the **LEFT** button.

### Saving the Manual Drive mode's servo movement speed:

Press the **LEFT** and **RIGHT** buttons simultaneously to save the current sweep speed for use as the drive speed in the manual drive mode. The servo will stop and the LED will flash GREEN quickly 10 times to indicate that the manual drive speed has been saved. The manual drive speed is saved in memory and will not be lost when the **ServoXciter Jr** is powered OFF.

## CUSTOM SET-UP

The **ServoXciter Jr** is capable of saving custom endpoints and center positions. There are two methods for saving the endpoints: receiver method and manual method.

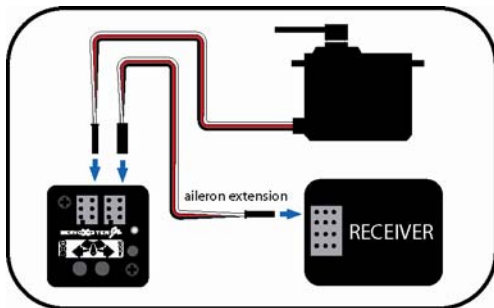
The receiver method allows you to save the EXACT center and endpoints that are used by your radio system. The **ServoXciter Jr** will then mimic perfectly your radio system's servo drive characteristics.

The manual method allows you to save desired custom endpoints anywhere in the **ServoXciter Jr's** valid range (0.850 milliseconds to 2.150 milliseconds).

Either method saves the custom points into memory and will retain the settings even when battery power is disconnected.

## Saving center and endpoints – receiver method

Plug a standard aileron extension between the **ServoXciter Junior's** receiver input and the receiver channel.



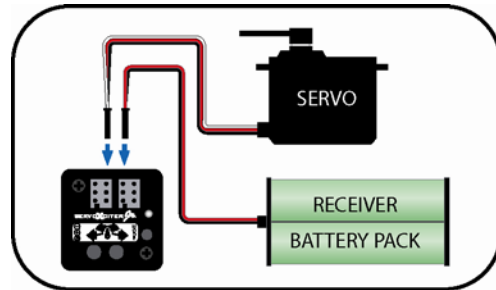
1. Press and hold the **MODE** button while powering your radio system.  
The **ServoXciter Jr's** LED alternately flashes RED and GREEN.
2. Center your radio stick and trims and then press the **MODE** button.  
The **ServoXciter Jr's** LED flashes RED.  
*If you only want to save the center point – disconnect battery power now.*

3. Deflect your radio stick to one side and then press the **MODE** button.  
The **ServoXciter Jr's** LED flashes GREEN.
4. Deflect your radio stick to the other side and then press the **MODE** button.  
The **ServoXciter Jr's** LED slowly flashes GREEN.

The center and endpoints have been saved. Disconnect your radio system and then re-power. Your **ServoXciter Jr** is ready for operation with your custom set points.

## Saving endpoints – manual method

Plug a servo into one of the servo outputs.



1. Press and hold the **LEFT** and **RIGHT** buttons simultaneously while plugging a receiver battery pack into one of the servo outputs.  
The **ServoXciter Jr's** LED lights steady RED.
2. Use the drive buttons (**LEFT**, **RIGHT**) to position the servo at one of your desired endpoints and then press the **MODE** button.  
The **ServoXciter Jr's** LED lights steady GREEN.
3. Use the drive buttons (**LEFT**, **RIGHT**) to position the servo at your other desired endpoint and then press the **MODE** button.  
The **ServoXciter Jr's** LED flashes GREEN quickly 10 times and then alternates between RED and GREEN.

Your **ServoXciter Jr** has saved your custom endpoints and is ready for operation.

## Resetting the factory defaults

Press and hold the **MODE**, **LEFT**, and **RIGHT** buttons simultaneously while powering the **ServoXciter Jr**. The LED will flash GREEN quickly 10 times to indicate that the defaults have been reloaded.

- **Center:** 1.500 milliseconds
- **Endpoints:** 1.000 milliseconds and 2.000 milliseconds
- **Manual drive speed:** 5 (mid speed)

## TECHNICAL

Voltage range	+3.5VDC...+6.5VDC
Power consumption @4.8VDC	38mA
Operational temperature range	-40°C...+125°C
Environmental range	IP 10 (dry only)
Dimensions (W x L x H) in inches	1.378 x 1.378 x 0.591

## WARRANTY

For a period of 1 year from the date of purchase we will repair or replace the **ServoXciter Jr** free of charge if defective in material or workmanship (excluding reverse power polarity, excessive voltage, or physical abuse). Please contact us for return instructions.

