

LSS - Electrical

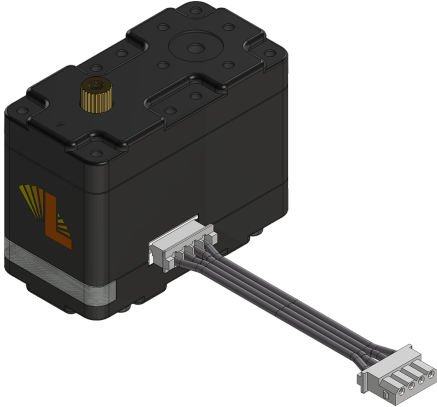
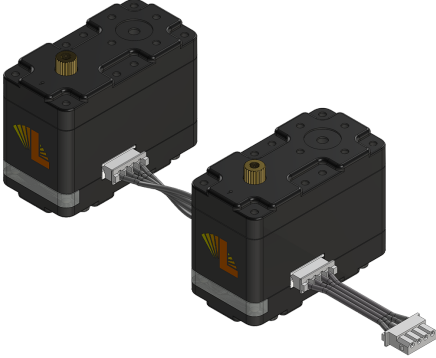
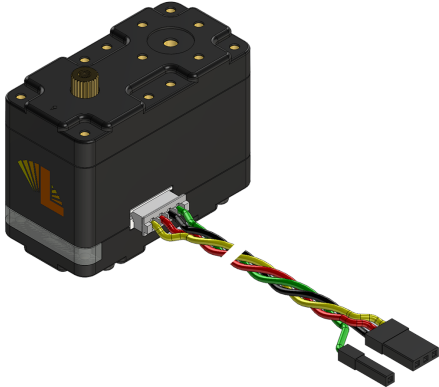
Last modified by Coleman Benson (/info/bin/view/XWiki/CBenson) on 2019/04/01 13:57

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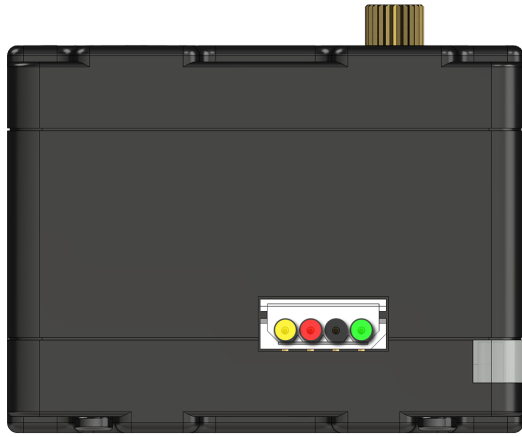
Typical Connections

In order to daisy chain one servo to the next (serial mode only), rollover serial cables are used. Although the wires are straight, one connector must be rotated 180 degrees with respect to the other.

Serial Single	Serial Multiples	Radio Control (RC)
		
(/info/wiki/lynxmotion/download/lynxmotion-smart-servo/lss-electrical/WebHome/LSS-WIRING-Single.PNG)	(/info/wiki/lynxmotion/download/lynxmotion-smart-servo/lss-electrical/WebHome/LSS-WIRING-Multiple.PNG)	(/info/wiki/lynxmotion/download/lynxmotion-smart-servo/lss-electrical/WebHome/LSS-WIRING-RC.PNG)

Wiring Pinout

Serial Mode	RC Mode
<div><div>■</div><div>Servo Rx: In serial mode, this pin should be connected to a 5V TTL serial pin. In RC mode, the pin should be connected to an 5V RC PWM pin</div></div>	<div><div>Servo RC Signal:Please refer to the LSS - RC PWM (/info/wiki/lynxmotion/view/lynxmotion-smart-servo/lss-radio-control-pwm/) for more information regarding the RC mode and signals</div></div>
<div><div>■</div><div>Servo Vcc: Refer to the Voltage section of the LSS - Specifications (/info/wiki/lynxmotion/view/lynxmotion-smart-servo/lss-specifications/) page to understand which voltages are meant to be connected to this pin.</div></div>	<div><div>Same as Serial Mode</div><div>▲</div></div>



Ground (GND): This pin should be connected to both the communication sources' ground, as well as that of the power source (principle of "common ground").

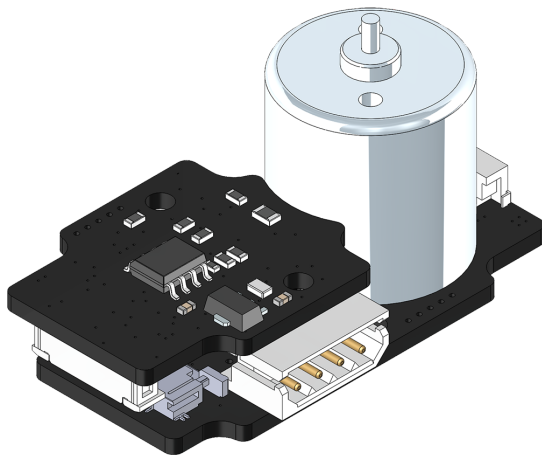
Same as Serial Mode

Servo Tx: In serial mode, this pin sends the output from query commands. In RC mode, the cable does not need to be connected as there is no output.

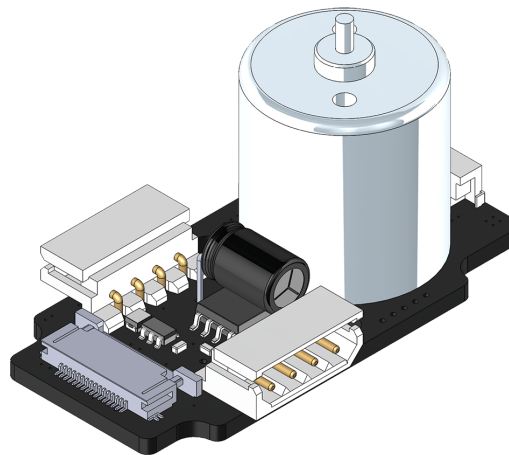
N/A: Futur Implementation

(/info/wiki/lynxmotion/download/lynxmotion-smart-servo/lss-electrical/WebHome/LSS-SIDE-PinOut.png)

Electronics



(/info/wiki/lynxmotion/download/lynxmotion-smart-servo/lss-electrical/WebHome/LSS-Electronics-01.png)



(/info/wiki/lynxmotion/download/lynxmotion-smart-servo/lss-electrical/WebHome/LSS-Electronics-02.png)

The electronics inside the servo include the following:

- H-bridge motor controller
- Microcontroller (Cortex M0)
- Magnetic position sensor
- Voltage sensor
- Temperature sensor
- Current sensor

Tags:

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