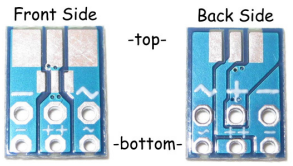
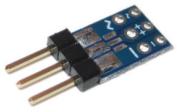
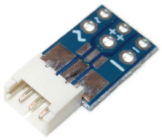
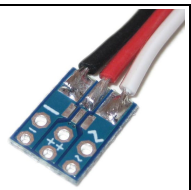
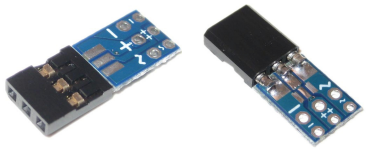
Hansen Hobbies Universal Servo Connector Adapter



We designed this circuit board to help with making servo connections, especially with some of the newer, smaller servo connectors that can be difficult to work with. The board has been designed to accommodate a number of different connectors in different configurations, and should allow you to convert one type of connector to almost any other connector. To make referencing easier we declared the front & back sides, and top & bottom ends in the image to the right. This pcb is rated for **10A** of current, the only exception being the **1.50mm** center pad on the back side which is rated for **4A** (the trace leading to this pad is much thinner). The top end of the board has surface mount pads for **1.00mm**, **1.25mm**, **1.50mm**, and **0.1"** headers. Servo wires can also be soldered directly to the pads.

Universal Servo Connector Adapter Top End Connector Options:

 0.1" header strip - surface mounted on front side	 1.50mm straight header (Spektrum AR6300 receiver connector) - surface mounted on back side	 1.25mm straight header (Futaba R616FFM receiver connector) - surface mounted on front side	 1.00mm right angle header (Spektrum AR6400 receiver connector) - surface mounted on front side	 Servo wires - surface mounted on front or back side	 Modified servo connector - surface mounted on front side

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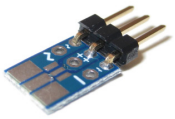
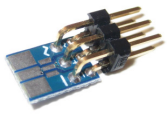
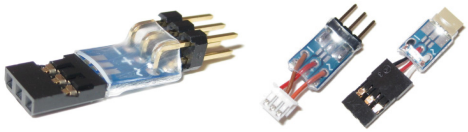
The bottom end of the board has two sets of holes for wires or **0.1"** header pins. The upper set of holes are **0.040"** and the lower set are **0.032"**. When twisted very tightly, the upper set will accommodate **20AWG** wire, and the lower set **22AWG** wire. Smaller wire will fit more easily. One set of holes can also be used for strain relief for very thin wire. On the back side of the board take special note that the markings are for the holes only - the surface mount pads at the top end do not follow the +/-/~ markings (the Spektrum **1.50mm** servo connectors do not use center-positive orientation).

Universal Servo Connector Adapter Bottom End Connector Options:

 0.1" single row right angle header strip - through-hole on top or bottom side	 0.1" double row right angle header strip - through-hole on top or bottom side	 0.1" double row straight header strip - through-hole on top or bottom side	 22AWG servo wires - through hole on top or bottom side	 28AWG or smaller servo wires - strain relief + through-hole on top or bottom side	 Modified servo connector - surface mounted on front side

Examples: To the right are a few examples of finished adapters. The first simply plugs into a single set of male pins and doubles it to two sets - now two servos can be plugged into the channel. The second image shows a **1.50mm** to **0.1"** converter. This could be used to plug a device with a standard **0.1"** servo connector (like an ESC) into a Spektrum AR6300 receiver. The last example is the opposite of the previous, and could be used to plug a Spektrum DSP60J servo into a standard **0.1"** receiver header. We recommend securing all wires and headers prone to flexing with heat shrink tubing to insulate and protect the solder joints.



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