SKU:3113-0004-0001

Element-4 Radio Control System (Pistol Grip)

User Manual

What's in the Box

- 1 x Element-4 Transmitter
- 1 x Element Receiver

First Time Use

This transmitter requires 4 x AA batteries (not included). The included Element Receiver must be bound to your transmitter before operation. See the **Binding a Receiver** section for step-by-step directions. The receiver requires a 6V nominal (3.5-7.4V) power source (such as SKU: 3100-0006-0001). To power the transmitter on or off, hold the power button for about 1 second.

Receiver Compatibility

This transmitter is compatible with the goBILDA® Element Receiver (SKU: 3112-0006-0001). One is included with this radio control system, but additional receivers can be purchased separately at goBILDA.com.

Binding a Receiver

1) Ensure the transmitter is powered off.
2) Connect power to the receiver by plugging in a 6V battery (such as SKU: 3100-0006-0001) or 6V power supply. The orange LED on the receiver will blink slowly to indicate that it is not communicating with a transmitter.
3) Press and release the Bind button on the receiver. A pen, pencil, or small hex key allows you to easily reach the small button. The orange light will blink quickly to indicate it is ready for you to turn on the transmitter.
4) Power on the transmitter. The receiver's orange LED will illuminate solid to indicate that it is bound to, and communicating, with the transmitter.

Multiple Receivers

Binding a new receiver does not unbind another previously bound receiver. This allows you to have a different receiver in each of your projects and re-use this transmitter to control each of them without physically removing a receiver and transferring it from project to project. Generally, in this setup, you are only controlling one project at a time. However, if multiple receivers are bound, powered on, and in range, this transmitter will control them all simultaneously.

Steering Wheel

Output (mixing disabled): Ch1
Output (mixing enabled): Ch1 & Ch2
Behavior: Rotating the wheel proportionally affects the output signal. The wheel will spring-return to the center of its rotation when released.
PWM Range: 1000-2000µsec (1500µsec center)

Trigger

Output (mixing disabled): Ch2
Output (mixing enabled): Ch1 & Ch2
Behavior: Pulling the trigger proportionally affects the output signal. The trigger will spring-return to the center of its throw when released.
PWM Range: 1000-2000µsec (1500µsec center)

CH3 Button
Output: Ch3
Behavior: When the button is not pressed, this channel outputs a signal of 1000µsec. So long as the momentary button is being pressed, this channel outputs a signal of 2000µsec.
PWM Range: 1000µsec, 2000µsec

CH4 Button
Output: Ch4
Behavior: This momentary button will cycle this channel through three output signals in a “ping pong” style sequence. At first this channel outputs 1000µsec. When the button is clicked (pressed and released) the output changes to 1500µsec. A second click changes it to 2000µsec. The next click will take it back to 1500µsec, and another will take it back to the original signal of 1000µsec. This channel will remember the signal it was at even if you power-cycle the transmitter.
PWM Range: 1000µsec, 1500µsec, 2000µsec

Trim Buttons
Ch1 and Ch2 each have trim buttons that allow you to adjust the signal sent when the control input is centered. To achieve this, the entire signal range is shifted up or down a few microseconds for each beep of the switch. A long beep means that the signal is either completely centered or has reached the max that it can be shifted in a particular direction.

Mixing
Mixing is enabled by default. Mixing allows you to drive a skid-steer (differential) style chassis.

When mixing is *disabled*, the steering wheel’s position is output to channel 1 and the trigger’s position is output to channel 2.

When mixing is *enabled*, it will combine the input of the steering wheel and the trigger. The output of channels 1 and 2 represent the speed and direction of each side of your chassis.

To enable/disable mixing: hold the Ch 3 and Ch 4 buttons while powering on the transmitter. Your mixing state will remain even if you power-cycle the transmitter.

Reversing Channels
All four channels can be reversed. *To reverse a channel*, simply hold the REV button while interacting with a channel (via the wheel, trigger, or buttons). As soon as you begin to interact with the channel, the transmitter will beep to acknowledge that it observed the interaction. Now you can release the REV button.