

## **Control Link Description**

A JR 9303 2.4 GHz radio transmitter will be used by the pilot to transmit commands to the Bergen RC helicopter. This transmitter provides direct pilot control of the aircraft throttle, collective pitch (main rotor pitch), roll cyclic (aileron), pitch cyclic (elevator), and yaw (tail rotor). During some flight operations, the onboard autopilot will be sent GPS waypoints from a ground station transmitting at 900 MHz. Using a three-way switch on the 2.4 GHz transmitter, the pilot can switch between manual mode, autonomous hover autopilot mode, and waypoint autopilot mode. A detailed description and technical specifications for the JR 9303 2.4 GHz transmitter are attached.

## **JR 9303 2.4 GHz Transmitter Features**

### **X9303 2.4 A/S Tx w/DSM 9 Ch Rx 4-821 Mode 2**

#### **Overview**

At last, the 2.4GHz radio the world's been waiting for.

As the foundation for an advanced, full range, spread spectrum radio, it's hard to imagine a more ideal candidate than JR's XP9303.

A breakthrough in versatility and flexibility when it was introduced, the 9-channel, 30-model memory, 3-model type 9303 is an enormously popular radio upgrade for fliers whose skills have outgrown sport-class equipment. With software shaped by the input of top airplane, sailplane and heli pilots, plus its exclusive rolling ease and speed of programming, the 9303 remains the standard by which all 9-channel radios are judged.

And now, with the added convenience and security of Spektrum DSM2 2.4GHz technology, the newly-designated X9303 2.4 is destined to be a breakthrough once more.

#### **2.4GHz RC technology with a flawless track record.**

Unlike ordinary spread spectrum ICs, the unique chip that's the basis for Spektrum's 2.4GHz technology was specifically developed by an avid RCer to yield a robust, ultra-reliable, glitch- and interference-immune RF link for RC modeling.

Add Spektrum's patented DSM/DSM2 protocols—plus the brand's DualLink® feature—and the result has been revolutionary. It's proven 2.4GHz technology that JR is proud to adopt—technology that's been used with unprecedented success by thousands of RCers since 2005.

#### **A completely integrated radio system.**

Instead of settling for a 2.4GHz module adaptation to accomplish spread spectrum capability, JR has incorporated DSM2 as an integral feature of the X9303 2.4. Consequently, there's no added processing time. And in addition, other exclusive features of DSM2—like patent pending ModelMatch™ technology that prevents “wrong model” losses—are also preserved.

What's more, Spektrum engineers have incorporated technology that permits owners of conventional XP9303 radios to transfer all of their model programming data from their transmitters directly to their new X9303 2.4 transmitters!

#### **The bottom line.**

JR quality, unmatched Horizon Hobby product support, programming sophistication you'll probably never outgrow, along with the all-important advantages of Spektrum 2.4GHz convenience and security—that's the X9303 2.4. It's the most unique advanced radio control system ever offered—the system the world's been waiting for.

Not only can data for 30 models of all types be programmed into your X9303 2.4, but owners of conventional XP9303s will be able to transfer their models' programming data directly to their new X9303 2.4 transmitters.

The bulletproof R921 2.4 DSM2 DualLink receiver. In addition, all existing Spektrum brand receivers are also compatible with the X9303 2.4 transmitter.

JR X9303 2.4 transmitters are available with 9-channel R921 receivers and no servos, or complete systems including four, 72 oz/in DS821 digital servos.

### Key Features

- DSM/DSM2 compatible
- Compatible with all JR/DSM and Spektrum-brand aircraft receivers
- R921 DSM2 receiver included
- Flight modes (3 air, 5 sailplane, 6 heli)
- 6 programmable mixers (2 multi-point style)
- 3-axis dual rate and expo
- 3-position flap
- Gyro system (in-flight selection of 3 gains for up to 2 gyros)
- Trim system offers presets for ail/ele/rud/flaps/flaperon for each mode (sailplane)
- Launch/Land flight mode override system (sailplane)

### JR 9303 2.4 GHz Transmitter Technical Specifications

**X9303 2.4 A/S Tx w/DSM 9 Ch Rx 4-821 Mode 2 Specs**

**# of Channels:** 9

**Band:** 2.4GHz

**Servos:** DS821 (JRPS821)

**Receiver:** R921 (JRPR921)

**Programming Features:** Aircraft, Heli, & Sailplane

**Model Memory:** 30

**Transmitter (Tx) Battery Type:** 1500mAh Ni-MH