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Welcome - Bienvenue



Choosing your RC Radio **Emmanuel Brière**



Choosing your RC Radio



*With so many RC radio systems on the market, and so many features
How do you know what radio system is right for you?
Choosing your best RC radio requires information and some research.*

- Here are some of the many choices you will be faced with:
Brand (Futaba, Spektrum, JR, Hitec, etc.)
- How Many Channels (2 up to 18 and may be more)
- What Type of Modulation (AM, FM, PCM, 2.4GHz Spread Spectrum Modulation)
- Other Features (LCD Displays, Digital Trims, Exponential Rates, Dual Rates, Model Memory, Servo Reversing, Servo Travel Adjustment)
- Mode 1 or Mode 2 Transmitter

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- Get a **Name brand** computerized radio system that uses **2.4 GHz** spread spectrum modulation.
- Superior warranties and customer support in almost all cases.
- 100% system compatibility, long term growth and enjoyment, resale value, and build quality.
- Getting a decent name brand system to start with should be seen as a time & money saving investment
- Your radio will become your best flying partner for many years.

Brands vs. Off Brands

You may get a great radio but the level of service and support may not be up to the standards of the brands. So if you go outside the brands, consider where you will get help if you need it and how often will you get updates for your radio.

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Futaba



Futaba's really hits the mark on their intermediate to higher end products. Their entry level 7EX & 6J six channel computerized radios are missing a few important features.

However, their new 2.4 GHz performance FASST series and very affordable FHSS series are honestly some of the **best intermediate & advanced radios on the market right now.**

As with most of the big name radio brands these days - **the intermediate to higher end** Futaba radio models support aircraft telemetry.

Futaba has two distinct 2.4GHz spread spectrum protocols - FASST & FHSS which are not compatible with each other Futaba S-Bus communication network is well supported by most high end flybarless systems on the market

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HiTec Radios



Get a **HiTec** was left behind for a couple years when 2.4GHz Spread Spectrum Modulation was introduced; but HiTec has caught up to this new technology and has three very good 2.4 GHz radios on the market right now.

Their Optic 6 Sport 2.4GHz is a nice entry level 6 channel computerized radio and their Aurora 9 2.4GHz 9 channel radio offers amazing value with its telemetry capability and touch screen display.

The Aurora 9X takes it one step further with lighting fast 4096 resolution. HiTec is known for having some of the best RC radio bang for the buck out there.

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JR Radios



Like Futaba radios, JR has been in the RC game for a long time.

JR has traditionally built very high end products that have been used by many professional RC pilots is perhaps still the number one choice.

JR originally licensed up with Spektrum to take advantage of Spektrum's patented DSM2/X 2.4 GHz spread spectrum technology

So many receiver options (either JR DSM2/X or Spektrum DSM2/X) that are also well supported by most flybarless systems allowing for easy satellite RX hookup.

JR now has it's own unique spread spectrum protocol called DMSS (Dual Modulation Spectrum System). This new system is not compatible at all with the Spektrum shared DSM2/X.

The nice thing is the menu layouts and access have remained the same; so if you are already a JR user, it is very easy and intuitive to migrate over to the newer DMSS models (XG6, XG8, XG11, & XG14).

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Spektrum



Spektrum continues to improve their products with features such as quad bearing gimbals even on their low cost DX6, and come out with neat features before many other brands do such as SD card support and voice alert first seen on the DX9.

Spektrum is not quite up to the overall quality of the pro/higher end JR & Futaba radios; but you also don't have to remorgage your house to purchase one.

Their flag ship DX18 for example is under \$ 1,050
If you want a radio with telemetry, voice alerts, and a backlit display for under \$290 bucks - the six channel DX6 offers perhaps the best value of any decent quality RC radio out there right now.

Spektrum has some of the best diversity radio systems out there and I like the fact that most good flybarless systems are fully compatible with Spektrum's satellite receivers.

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How Many Channels?

Even if you are flying a rudder elevator glider or electric airplane today, next year you may be adding ailerons and flaps and landing gear. So get a radio that can handle at least that, and that would be 6 channels.

Typical channel breakdown, regardless of whether you are flying electric, glow, gas or gliders, giant scale or highly detailed scale models. Jets, advanced Hells, first person view may have other needs, but it still comes down to channels.

Rudder – 1 or 2
Elevator - 1 or 2
Ailerons - 1 to 4
Spoilers - 1 or 2
Flaps - 1 to 2
Tow hook - 1
Landing gear - 1
Motor – 1 to 2
Smoke, lights, Other – 1 to ?

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Basic Features

Most currently available new computer radios offer the following features.

- Model Memories (at least 10)
- Low Battery Warning
- Trims on the channels controlled by the stick(s).
- Timer – highly recommended but not required
- End Point Adjustment/Adjustable Travel Volume
- Sub-trim
- Dual Rates and/or Exponential on ailerons and elevator.
- Elevon/delta wing and V-tail mixes

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Budget

- How much are you willing to spend?
- Look at some radios package which included a free receiver (Excellent saving if available).
- Once you get over \$400 for one of the brand name radios, they all pretty much can do as long as they have enough channels.
- If you don't have \$400 for a radio, then you have to be more selective. But you can still get a very capable radio for \$200. You just have to be a little more specific as we start finding limitations.
- Does your budget include a receiver? Servos? State a number and then define it.
- There are lots of used radios. Buying used radio is like buying a used car, it may be great or it may be a dog.
- Forget about the "best" radio or the one that will last you the rest of your flying career.

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Mode 1 or Mode 2 Transmitter



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The Best and the Last

People ask which is the best radio. There is no best. The best is the one that you can't afford or that will be released 6 months after you buy the one you bought.

So don't worry about the best, concern yourself with what will work for you, your budget and your flying style. All of the major brands are good.

Some people want to buy the radio that will last them a lifetime. Well, even an entry level computer radio can fulfill that, if your requirements never exceed the capability of the radio.

Ten years ago we did not have 2.4 GHz radios or radios that could be upgraded over the internet. So forget the forever radio. In the world of computers and electronics, 5 years is forever.



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Good Night – Bonne nuit