# HITEC



Maxima series is designed for Hitec High-Response Radio such as Aurora 9X, please check the compatibility. (Aurora 9 cannot be used with Maxima series receiver) And, please USE ONLY Digital SERVO for your purpose. Analog servo cannot be used with Maxima series

# Introduction

Thank you for your purchase of the Hitec Adaptive Frequency Hopping Spread Spectrum (AFHSS) 2.4GHz module and receiver system. This manual contains the complete directions on how to use the Maxima series of receiver. We encourage you to review the entire manual before using these products.

# Service & Support

#### Hitec Customer Service

Help is available from the Hitec office through phone support and e-mail inquiries. Our US office is generally open Monday thru Friday, 8:00AM to 4:30PM PST. These hours and days may vary by season. Every attempt is made to answer every incoming service call. Should you reach our voicemail, leave your name and number and a staff member will return your call.

# **Hitec Web Site**

Make plans to visit the Hitec website, **www.hitecrcd.com**, on a regular basis. Not only is it full of specs and other information about the entire Hitec product line, our website's FAQ pages will eventually hold valuable information and program updates about the Spectra 2.4 module and Optima series of receivers.

# The On-Line Community

One of the benefits of the extensive R/C online community is the vast wealth of archived knowledge available. Hitec sponsors forums on most of the popular R/C websites where a Hitec staff member or representative tries to answer all manner of product related questions. Bringing together strangers with common interests is proving to be one of the greatest gifts of the internet. If past history is any guide to the future, we are certain forums will be started about the Hitec 2.4 system and several are certain to stand out as valuable archives of information.

# Warranty and Non-Warranty Service

All Hitec products carry a two year from date-of-purchase warranty against manufacturer's defects. Our trained and professional service representatives will determine if the item will be repaired or replaced. To provide all the necessary information we need to administrate your repair, visit our website at **www.hitecrcd.com** and download the repair form, fill it out and send in your item for repair.

# Hitec Service 12115 Paine St. Poway CA 92064 1-858-748-6948 E-mail: service@hitecrcd.com



# **Warning!**

 For maximum performance, it is recommended to position the antenna at a 90 degree angle as shown in the picture below.



2. The receiver antenna should not be placed near the engine, metal parts, or high current batteries.

3. It is strongly recommended to use Hitec's genuine Heavy Duty High Channel Switch Harness with Receiver Charger Cord (Stock#. 54407S) for all Maxima series receivers.

# Maxima Series Receiver Specifications & Features

# Full Range AFHSS 2.4GHz Receivers

Receiver Model	Size	Weight	Stock Number
MAXIMA 6	1.29 x 0.81 x 0.42in (33 x 20.8 x 10.7mm)	0.22oz (6.4g)	27524
MAXIMA 9	1.45 x 0.96 x 0.57in (37 x 24.4 x 14.6mm)	0.28oz (8.1g)	27525

**Operating Voltage for Maxima series :** 3.7~9.0V From receiver battery power or speed control (ESC) power. **Max Current Consumption :** 30mA



**MAXIMA 6** 



#### 1. Function Button

 Used for binding the receiver to a module or Hitec 2.4 built-in transmitters, entering the FAIL-SAFE or Hold feature.

# 2. Dual LED Status Indicator

- Indicates the set-up process codes and current status of the receiver.

#### 3. Channel Output and Battery Input Ports

- The ports for battery power input and servos, gyros and other accessories output port are located at the side end of the Maxima receivers.

#### 4. Low Battery Warning

- If once receiver's battery levels reach below 3.6V, RED LED will be flashing.

#### 5. FAIL-SAFE/Hold Mode Selectable

- Servos and other accessories position can be set with a FAIL-SAFE point, if power to the receiver is lost. See page 2 for details.

#### Antenna installation

The Maxima Series antenna system is made for high directivity consisting of two antennas. In order to secure the clear range, please install Maxima Series antenna as shown below.



**Receiver Connection Diagrams** 

#### Electric powered aircraft with Electronic Speed Control

Use this method on electric planes using ESC's providing power to the receiver and servo functions.



#### Glow, gas or electric powered aircraft using a separate receiver battery supply.

Follow this connection diagram when using a regulated Li-Po, or 4.8 to 6V receiver battery.





# FAIL-SAFE and Hold Mode Setup

If you use the FAIL-SAFE function, and set it up properly, should the receiver signal somehow be interrupted or interference were to occur, the servos will move to your pre-set FAIL-SAFE point you previously stored in the receiver during the FAIL-SAFE set-up.

If FAIL-SAFE has not been activated, the signal is switched off after the HOLD period of 1 sec. This means that the servos become "soft" and remain in their last commanded position under no load (this may equate to full-throttle!), until a valid signal is picked up again.

In the interests of safety, we recommend that FAIL-SAFE should always be activated, and the FAIL-SAFE settings should be selected so as to bring the model to a non-critical situation. (e.g. motor idle / electric motor OFF, control surfaces neutral, airbrakes extended, aero-tow release open, etc.)



#### Testing the FAIL-SAFE Setting

a. Move the sticks to positions other than the FAIL-SAFE settings, and then switch off the transmitter. The servos should now move to the FAIL-SAFE positions previously stored, after the I sec HOLD period

#### How to turn FAIL-SAFE Off and reactivate the Hold Mode

- a. Switch on the transmitter, then the receiver. Wait for the system to boot and you have control over the model. b. Press and hold the receiver function button for 6 seconds and release it. After 2 seconds the red and
- blue LEDs will blink rapidly.
- c. Immediately press the button once.
- d. FAIL-SAFE Mode is now deactivated and HOLD mode is activated.
- e. Turn the transmitter off, then the receiver off.
- f. Turn the system back on to use it.

Note



- The FAIL-SAFE settings should be checked every time before you run the engine/motor.