

OPTIMA D

2.4GHz Aircraft Receiver

Instruction

ENG_Version 3.0



• Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to the instructions.

European CE notice to users and product statements

- Frequency Range : 2409.2 MHz ~ 2474.0 MHz
- Maximum RF Output power : 100mW
- Hereby, HITEC RCD INC, declares that our (RE type : OPTIMA D) is in compliance with RED 2014/53/EU.
- The full text of the EU DoC is available at the following internet address: www.multiplex-rc.de

FCC notice to users and product statements

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

Operation is subject to the following two conditions; (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

• FRANCE Frequency Range : 2.4056GHz~ 2.4482GHz

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 Website

Make plans to visit the Hitec website, www.hitecrd.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 module and Optima D receiver.

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

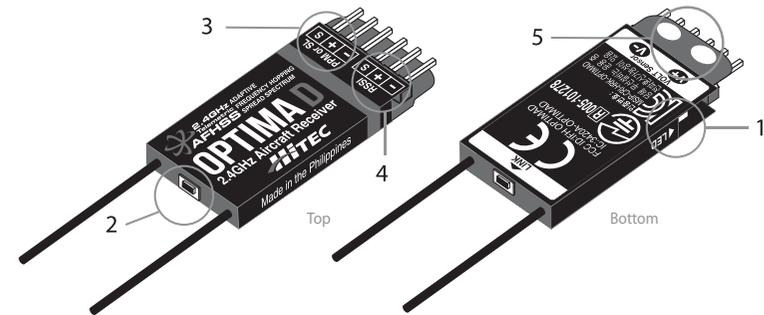
All Hitec products carry a two year from date-of-purchase warranty against manufacturer's defects. Our trained and professional service representatives will determine if the item will be repaired or replaced. To provide all the necessary information we need to administrate your repair, visit our website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

Warning

1. The receiver antenna should not be placed near the engine, metal parts, or high current batteries.
2. The receiver Antenna should not get damaged. To prevent antenna damage, do not install the antenna near the sharp edge or bend it more than 90 degree in angle.
3. Use a Velcro or think double sided tape to install to absolve the shock during the operation.
4. When LED indicator irregularly blinks, indicates unstable frequency environment, stop operating and look for the possible cause of problems.

OPTIMA D Receiver Specifications & Features

Receiver Model	Size	Weight	Stock Number
OPTIMA D	1.38 x 0.66 x 0.19in (35 x 16.8 x 5mm)	0.14oz (4.1g)	29493



1. LED :

- Shows current status or set up status (See page 2 more details)

2. LINK Button:

- For Link(ID-Set) and set functions (See page 2 more details)

3. BUS signal output:

- Optima D provides PPM, S-Bus signal. User have to select PPM or S-Bus system according to Flight Control system. (See Page 2 'Signal Mode Change' for more details)

4. RSSI signal output:

- Via RSSI, communication sensitivity can be seen through OSD.

5. Voltage Sensor input:

- Main power can be checked by this tap

- User need to have soldering direct to here to check battery voltage (0.5V to 35V)



Warning

After soldering job, please cover soldering spot to prevent explosion or catch the fire by circuit short.

Operation Voltage

- 4.8V~8.4V (BEC from ESC can be used)

Compatibility

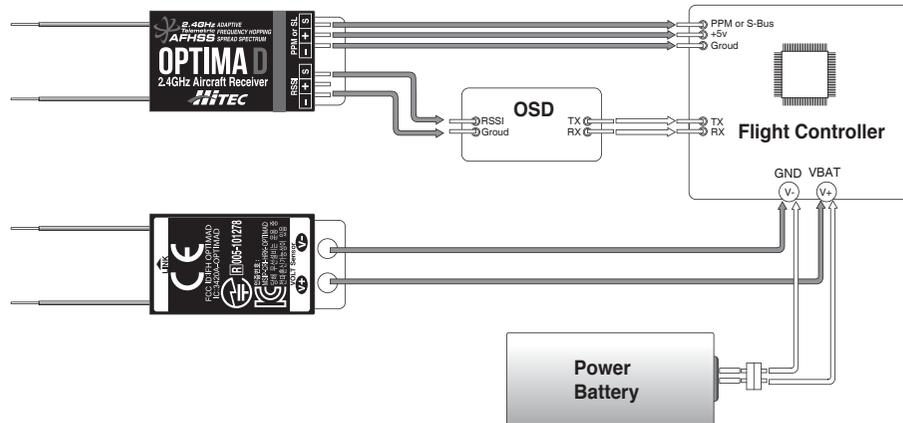
- Optima D is using Hitec AFHSS 2.4GHz system, all Hitec radios can control Optima D Receiver.



Note

Servo manufacturer will specify maximum voltage of their servo model. please refer each servo's specification.

Optima D Drone Connection Diagram



How to Link (ID-Set)

When you purchase a radio set that Transmitter and receiver include together in the box, each device are linked already from the factory. If you purchase extra receivers or transmitter, you need to have Link with current your device together.

Before 'Link' process, please check correct installation refer to above Drone Connection Diagram.

AURORA 9

1. Press and hold the button on the module, and turn on the transmitter*
For Aurora 9, once connect to module, press Link button in the module and turn on the transmitter.
Press Transmit "Yes" in the Aurora 9 screen and then release Link button.
2. Press Link button in the Receiver and turn on the Receiver. Once Receiver power is on, release Link button.
After release Link button, LED will turn Blue and entered Scan mode.
3. Once connection is completed, Red LED will be on in the module. After that BLUE LED will be blinking.
At the same time BLUE LED in the Receiver also will be blinking. Now Connection is completed
4. Turn off and On both transmitter and receiver together, Beep sounds will be spoken 4 times.
This sound also shows that connection is completed.

AURORA 9X, FLASH Series

1. Turn On the Transmitter.
2. Select 'Spectra' in the System menu of Transmitter.
3. Select RX type as "Opti&Mini". Select 'Binding' and press 'YES'.
4. Press Link button in the Receiver and turn on the Receiver. LED will turn Blue and entered Scan mode
5. Once Link is completed, Transmitter screen will be changed to the next step.
6. Turn Off/On the Receiver power and check the operation. Press 'Finish' on the radio to complete the Link.



Note

Please place transmitter and receiver together less than 1 meter distance to prevent signal interrupt

Signal Mode Change (PPM, S-Bus)

Optima D provides PPM and S-BUS signal. User can choice one of PPM or S-BUS according to their FC (Flight Control).

1. Turn off the transmitter during this process
2. Press "Link" button of Optima D and turn on the Power.
3. Once BLUE LED blink 5 times, release Link Button. Once release Link Button, current bus type will be shown.
4. If BLUE LED is blinking 2 times- this is PPM Mode
If BLUE LED is blinking 3 times – this is S-BUS Mode
Once press Link, Mode will be changed.
5. Once signal mode is selected, press and hold Link Button about 3 seconds and release.
LED will be blinking rapidly. This is confirmation sign.
6. Turn Off/ On the receiver to check suitable signal Mode.



Warning

In order to prevent accident by incorrect operation, please check all functions without props.

FAIL-SAFE and Hold Mode Setup

FAIL-SAFE point you previously stored in the FAIL-SAFE set-up. Make sure you set the FAIL-SAFE function properly. If FAIL-SAFE has not been activated, the signal will switch off after the HOLD period of one second. 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 interest of safety, we recommend that the FAIL-SAFE function 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.).

1. Turn On the transmitter and receiver
2. Check the correct operation and place control stick or control toggle of transmitter to fail-safe position.
3. Press and Hold Link button in the receiver in 6 seconds.
BLUE LED will be blinking start slowly and then blinking rapidly.
4. Once BLUE LED change to solid BLUE, Fail Safe is successfully completed.
5. Please turn off the transmitter to check the operation

Deactivate Fail Safe

During the set Fail-Safe (please refer to above Fail Safe set up phase No.3), once LED start blinking, please press Link Button 'one time' to set Deactivate Fail Safe function.



Note

- The FAIL-SAFE settings should be checked every time before you run the engine/motor.
- This product is designed to be used as a R/C hobby product and should be operated under local regulation.

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