

2.4GHz 4 Channel Surface Telemetry Receiver



PROTON 4e

Instruction Manual

Version 2.0



• 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 : PROTON 4e) 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 get voice mail, 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 FAQ pages will eventually hold valuable information and program update about the PROTON 4e 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 web sites 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

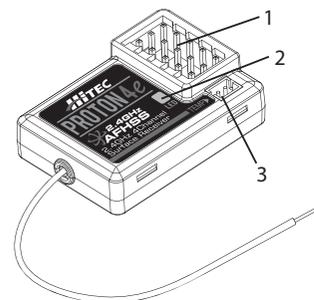
All Hitec products carry a two year from date of purchase warranty against manufactures defects. Our trained and professional service representative will determine if the item will be repaired or replaced. To provide all the necessary information we need to administrate your repair, visit our website 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.

PROTON 4e Receiver Specifications & Features

Receiver Model	Size	Weight	Stock Number
PROTON 4e	1.70 x 1.08 x 0.64in (32.8 x 22.3 x 8.3mm)	0.67oz (6.5g)	27625



1. LED Status Indicator

Indicates the set-up process codes and current status See 2 page for more detail

2. Channel Output and Battery Input Ports

The ports for battery, servos and other accessories.

3. Temp Prot

Temperature can be checked via Temp sensor and Temp Alarm also can be set

Operating Voltage :

Rechargeable four to six cell NiMH, NiCd, or LiPo batteries (4.8~7.4V). From the receiver battery power or speed control (ESC) power. Select the suitable voltage depends on the servos capability.



HTS-TEMP [Temperature Sensor]

Temp Sensor can be used by just plug it into the PROTON4 receiver without sensor station. Attach the sensor on target surface such as Motor, ESC and Body of Glow/Gas engine. Gauge Range: 0~250°C, 32~ 482°F



Note

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

Fail safe / Hold

The positions of the servos and other accessories can be set with a FAIL-SAFE point, if power to the receiver is Lost within 1 sec. See page 2 more detail

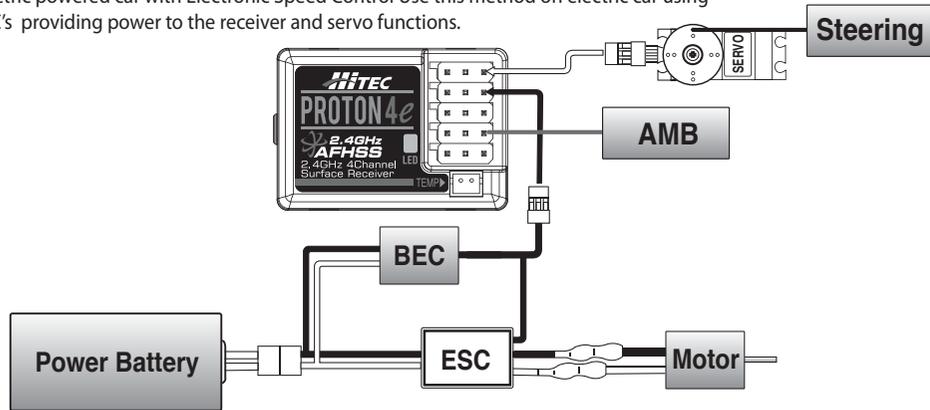
How to Link (ID-Set)

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.

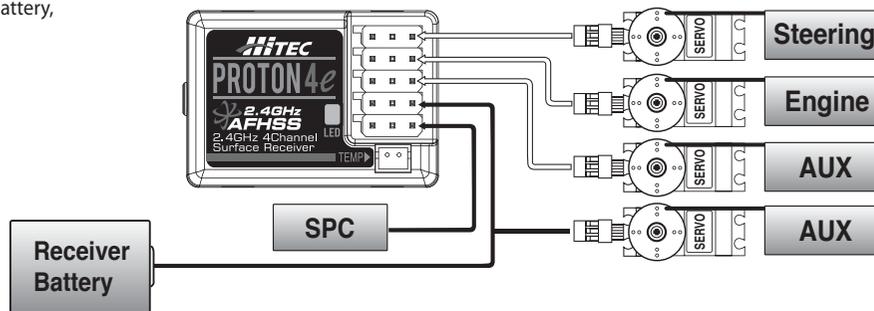
Receiver Connection Diagrams

Electric powered car with Electronic Speed Control Use this method on electric car using ESC's providing power to the receiver and servo functions.



Receiver Connection Diagrams

Glow, gas or electric powered car using a separate receiver battery supply. Follow this connection diagram when using a regulated 2cell Li-Po/Li-Fe, or 4.8~7.2V (4~6cell) NiMH/NiCd. Receiver battery,



Note

When you try to have Link, please located TX & RX less than a 3 feet distance.

How to Link LYNX 4S with PROTON 4e receivers

How to Link LYNX 4S with PROTON 4e receiver

- (1) Select [RX-BIND] from LYNX 4S system menu
- (2) Select receiver type from menu
- (3) Run Bind Mode
- (4) Be sure to place Proton 4e with Lynx 4S within 30cm distance
- (5) Turn of Proton 4e
- (6) Blue/Red LED on receiver will be blinked rapidly. (This means waiting signal from Lynx 4S)
- (7) Once Bind is done, LED will turn to Blue.
- (8) Please turn Off and On once again to use Proton 4e

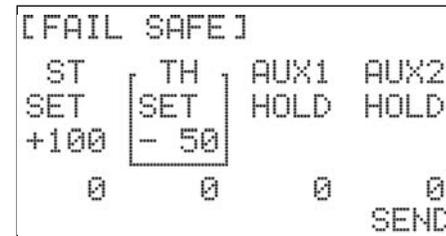
Fail-safe or Hold Mode Switch

If you use the FAIL-SAFE function, and set it up properly, should the receiver signal somehow be interrupted or interference were to occurred, the servos will move to your pre-set FAIL-SAFE position 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, or full brake, etc.)

Fail Safe- / Hold Set up (PROTON 4e)



- 1 Fail safe and Hold function of PROTON 4e Receivers can be set by Lynx 4S transmitter
- 2 Turn on Transmitter and receivers. Select [FAIL SAFE] from transmitter menu, and then you can select Fail safe or Hold. After you set, please press 'SEND' button
- 3 When you press 'SEND' on transmitter, LED on receivers will be blink in 'BLUE' rapidly. If LED turn on solid Blue, set up is completed.
- 4 Set up the fail safe position of trigger/ steering wheel/ switch before you set up (ie. Full brake, engine idle),
- 5 Make sure to check Fail Safe set properly, turn off the transmitter and check the position. After 1sec, if there is no signal, Fail Safe function will be activated.



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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