

 2.4GHz 4 Channel
Surface Telemetry Receiver

HITEC

PROTON4

Instruction

Version 1.0

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.hitecrcd.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 AXION Series 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.hitecrcd.com and download the repair form, fill it out and send in your item for repair.

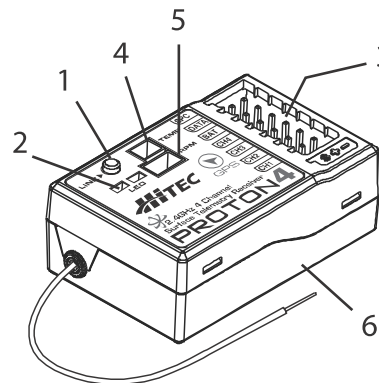


Warning

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.

PROTON4 Receiver Specifications & Features

Receiver Model	Size	Weight	Stock Number
PROTON4	1.70 x 1.08 x 0.64in (43.3 x 27.6 x 16.5mm)	0.67oz (19g)	27624



1. Function Button

Used for linking the receiver to a Transmitter, To select response.

2. LED Status Indicator

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

3. Channel Output and Battery Input Ports

The ports for battery, servos and other accessories.

4. Temp Prot

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

5. RPM Port

RPM and Speed can be checked via RPM sensor

6. GPS Sensor (installed)

GPS sensor is installed already in Proton 4 receiver to gauge your car speed

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 Proton 4 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



HTS-MRPM (RPM Sensor)

RPM Sensor can be used by just plug it into the Proton 4 receiver without sensor station. Attach the sensor on target surface such as Spur gear, Fly wheel or Etc. Gauge Range: 0~99999 RPM

GPS Sensor (Built-in RX Type)

GPS Speed sensor is installed in the Proton 4 receiver already. You can gauge your car speed via Lynx 4S screen just using Proton 4 receiver without any attachment. Range : 0~250km/H * Since GPS is not working on inside of building or indoor place, please use this function on outdoor environment.



Note

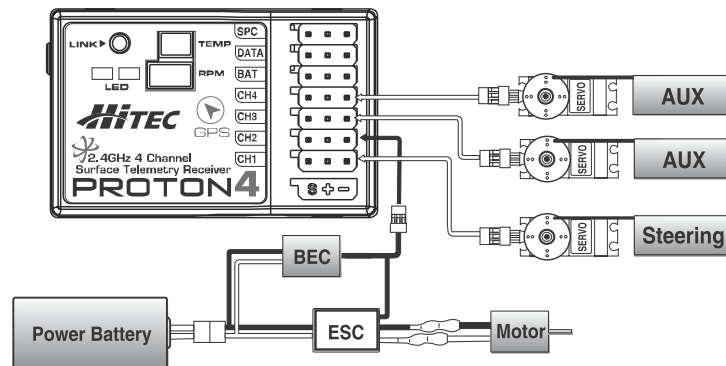
Servo manufacturer will specify maximum voltage of their servo model. Please refer each servo's specification.

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

Receiver Connection Diagrams (AXION2)

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

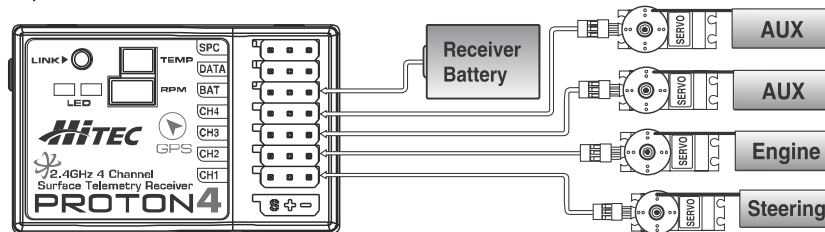


Receiver Connection Diagrams (AXION4)

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,



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.



Note

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

How to Link LYNX 4S with AXION receivers

1. Surface AFHSS 2.4GHz Transmitter (LYNX 4S)
- (1) Select [RX-BIND] from LYNX 4S system menu
- (2) Select receiver type from menu
- (3) Run Bind Mode
- (4) When Blue LED on receiver is solid on, Link is complete.
- (5) Turn off the Bind Mode pressing ESC button twice
- (6) Turn off the receiver and Turn on again.

2. AXION Series Receiver

- (1) Run Bind Mode in Transmitter.
- (2) Press and hold the LINK button and turn on the receiver.
- (3) release button, and then LED will be blink Blue and Red rapidly..
- (4) When LED turn on Solid Blue, Link set up is complete

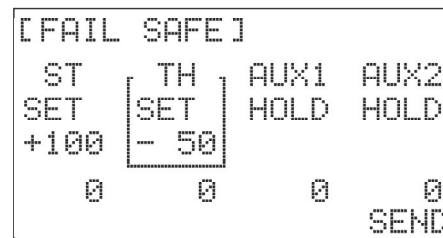
Fail-safe or Hold Mode Switch

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 (AXION 2&4)



- 1 Fail safe and Hold function of AXION 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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WARNING & SAFETY INFORMATION

Safety Symbols



Warning

- When encountering this symbol in the manual, you must follow these recommendations to avoid irreparable damage to your car, system or connected devices or to avoid accidents with injuries or death.

IC Information

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The antenna(s) used for this device must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Information

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.

FCC notification to users

This equipment has been tested and found to comply with the limits for a CLASS B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference, the user is encouraged to try to correct the interference by consulting with a KIA dealer or an experienced technician for technical assistance.

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