

MOD-3

2.4GHz Radio Control System

Specifications

Transmitter

Model: G82187
Frequencies: 2.4GHz
Weight: 375 gm
Power supply: 4AA alkaline dry cells DC 6V
or 4 cell Ni-MH pack

Receiver:

Model: G82188
Frequency: 2.4GHz
Power supply: DC 4.8~6.0V
Weight: 6 grams
Dimensions: 1.35"(L) x 0.72"(W) x 0.53"(H)



Skyion

INSTRUCTION MANUAL

H0140025 20120801

Printed in Taiwan

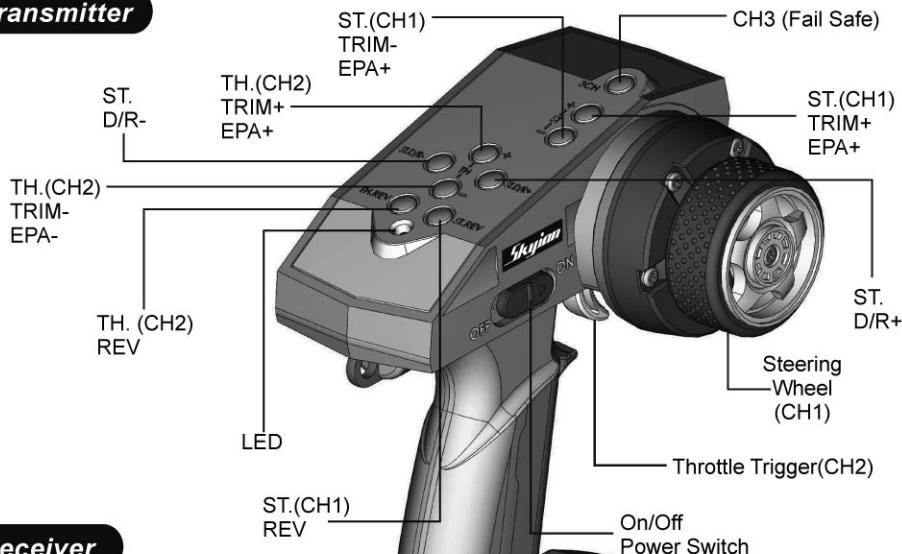
Features

- Dual Rate Steering (D/R Steering)
Steering angle can be changed using digital trim.
- Digital Trim
Steering Trim, Throttle Trim, Adjustable D/R steering can all be adjusted using digital trim switches.

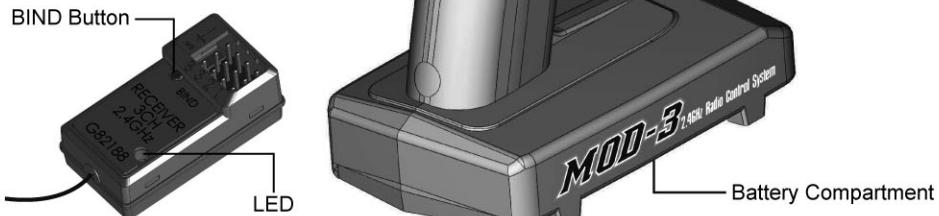
Safety Precautions

- YOUR MODEL CAN CAUSE SERIOUS DAMAGE OR INJURY SO PLEASE USE CAUTION AND COURTESY ALL THE TIME
- DO NOT EXPOSE THE RADIO SYSTEM TO WATER OR EXCESSIVE MOISTURE
- PLEASE WATER PROOF THE RECEIVER AND SERVOS BY PLACING THEM IN A WATER TIGHT RADIO BOX WHEN OPERATING R/C MODULES.
- IF YOU HAVE LITTLE OR NO EXPERIENCE OPERATING R/C MODULES, WE STRONGLY RECOMMEND YOU TO SEEK THE ASSISTANCE OF EXPERIENCED MODELERS OR YOUR LOCAL HOBBY SHOP FOR GUIDANCE

Transmitter

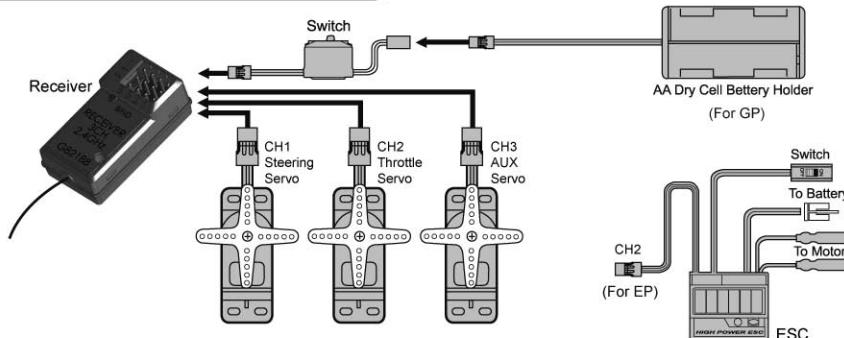


Receiver



BEFORE OPERATING

Receiver and Servo Connections



Binding the Transmitter and the Receiver

Binding the Transmitter and the Receiver

- Each transmitter is assigned with a random unique ID number. In order to begin using the transmitter system you will have to bind the receiver to the transmitter. Follow the instructions below.

Binding Instructions:

1. Bring the transmitter close to the receiver.
2. Press and hold the “binding button” on the receiver and while turning on the power to the receiver. The LED of the receiver will blink indicating that it is searching for a transmitter to bind with.
3. Turn on the transmitter. The transmitter will auto-search and bind to the receiver. This may take up to 10 seconds.
4. Once the transmitter and the receiver are bound together, the receiver’s LED will turn solid green; otherwise, repeat step 1 to 4.

Digital Trimming

Steering Trimming:

- * Press the “ST+” or “ST-“button to adjust the neutral position of the steering. A short “beep” will sound.
- * Once the value reaches the limit, a long steady “BEEP” will sound.

Throttle Trimming:

- * Press the “TH+” or “TH-“button to adjust the neutral position of the throttle. A short “beep” will sound.
- * Once the value reaches the limit, a long steady “BEEP” will sound.

Servo Reverse (REV)

- This function reverses the direction of the operation of the servos related to transmitter steering and throttle.
- Caution: For your safety, before you adjust the throttle reverse, have a friend hold the model, or clamp it down or place it where the wheels cannot come in contact with the ground or any object.
- Steering reverse
 - * Turn the steering wheel fully to the left (or right) and press the “ST. REV” buttons together for at least 2 seconds to reverse the ST channel.
 - * The transmitter will beep twice for confirmation.
- Throttle reverse
 - * Pull the throttle trigger fully to the high-side and press the “TH. REV” buttons together for at least 2 seconds to reverse the TH channel.
 - * The transmitter will beep twice for confirmation.

Steering Dual-Rate (ST D/R)

- Steering dual-rate allows on-the-fly travel adjustment to both sides (left and right) of the steering servo.
- The default value is 100% of the maximum travel. The dual-rate can be set from 20% to 100%.
- To increase the dual-rate, press the “DR+“button. To decrease the dual-rate, press the “DR-“button.

BEFORE OPERATING

End Point Adjustment (EPA)

Steering EPA

- Use this when performing left and right steering angle adjustment.
Caution: Be careful to not over extend the steering throw as it can cause your servo to over-work and over heat.
- ST –Left-side adjustment:
turn the steering wheel fully to the left and use the (ST+) or (ST-) buttons to adjust the steering angle to the desired angle.
- ST –Right-side adjustment:
turn the steering wheel fully to the right and use the (ST+) or (ST-) buttons to adjust the steering angle.

Throttle and Brake EPA

- Use this when performing throttle throw and brake throw.
Caution: Be sure that your engine is not running during throttle EPA adjustments
- Throttle Open Adjustment:
* Pull the throttle trigger fully to the high-side and use the “TH+” or “TH-” buttons to adjust the throttle to the desired throw.
It is recommended to remove the air filter of your nitro engine and view how much your carburetor opens while pulling the trigger and adjust accordingly.
- Throttle brake adjustment:
* Push the throttle trigger fully to the brake-side and use the “TH+” or “TH-” buttons to adjust the brakes accordingly.

Fail-safe adjustment

Failsafe Setting

- The failsafe function is to drive the servos (or ESC) to a pre-programmed position once the receiver cannot receive the signals from the transmitter. This can be due to low voltage from the battery or radio interference.

Testing the Fail-Safe Settings:

1. Push the “FailSafe(3CH)” button for 5 seconds to enter the failsafe programming mode.
2. Adjust the throttle trigger and steering wheel to adjust the positions and press the “FailSafe” button to program. Once the positions are programmed, the Status LED will turn solid green.
3. You can turn-off the power of the transmitter to check if the servo will turn to the programmed positions.

Very Important, Please note: If you are utilizing a nitro vehicle, make sure that your engine is not running during this application.

Power Alarm

Low Battery Voltage Alarm

- If the transmitter battery voltage drops to 4.2V or less, a quick beeping alarm sounds and the power LED light will blink.

Battery Replacement

For dry cell batter system

Load the four batteries in accordance with the polarity marking on the battery holder.(4AA Size Batteries)

Battery Replacement

1. Remove the battery cover from the transmitter.
2. Remove the old batteries.
3. Insert the four new AA batteries according to the polarity markings.
4. Replace the battery cover.
5. Slide the power switch to the ON position and check the LCD for the battery voltage. If voltage is low, check that the batteries are properly inserted and are making sufficient contact.

Caution

- ! Always check the voltage of the transmitter before use.
- ! Always be sure to insert the batteries correctly according to the marking, or the transmitter may be damaged.
- ! When the transmitter will not be used for a long time, remove the batteries to prevent leaks and corrosion. If a contacts thoroughly, making sure all contacts are corrosion free.

Low Battery Alarm:

An alarm will sound if the transmitter voltage drops below 4.2V. This alarm is meant as a safety feature only. The transmitter should not be operated below 4.2V. If the low battery alarm sounds, replace batteries immediately with fresh AA batteries to prevent loss of control

BEFORE OPERATING

CE Statement

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

EN 60950-1: 2006

Safety of Information Technology Equipment

EN 62311: 2008

Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz - 300 GHz)

EN 300 328 V1.7.1 (2006)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 489-17 V1.3.2 (2008-04) and EN 301 489-1 V1.8.1 (2008-04)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.



警 訊

低功率電波輻射性電機管理辦法

第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、大功率或變更原設計之特性及功能。

第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Česky [Czech]	SKYION tímto prohlašuje, že tento MOD-3 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede SKYION erklærer herved, at følgende udstyr MOD-3 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EU.
Deutsch [German]	Hiermit erklärt SKYION, dass sich das Gerät MOD-3 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab SKYION seadme MOD-3 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, SKYION, declares that this MOD-3 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente SKYION declara que el MOD-3 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ SKYION ΔΗΛΩΝΕΙ ΟΤΙ MOD-3 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/EK.
Français [French]	Par la présente SKYION déclare que l'appareil MOD-3 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente SKYION dichiara che questo MOD-3 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo SKYION deklarē, ka SID-3 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo SKYION deklaruoja, kad šis MOD-3 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart SKYION dat het toestel MOD-3 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malta [Maltese]	Hawnhekk, SKYION, jiddikjara li dan MOD-3 jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, SKYION nyilatkozom, hogy a MOD-3 megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym SKYION oświadcza, że MOD-3 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	SKYION declara que este MOD-3 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	SKYION izjavlja, da je ta MOD-3 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	SKYION týmto vyhlasuje, že MOD-3 splňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	SKYION vakuuttaa täten että MOD-3 tyypinä laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar SKYION att denna MOD-3 står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Warning

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 in a residential installation. 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 to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

15.21 "Changes or modifications are not expressly approved by the manufacturer could void the user's authority to operate the equipment."

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