

Graupner

www.openhobby.com

No. 33502

Graupner



OPERATING INSTRUCTION

Prior to use, please read this manual thoroughly.
Keep this manual in a convenient place for quick and easy reference.

GR-4 HoTT 2.4GHz Receiver Manual

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BEFORE USE

Thank you for purchasing Graupner GR-4 HoTT 2.4GHz Receiver. This system is extremely versatile and may be used by beginners and pros alike. In order for you to make the best use of your system, please read this manual carefully. If you have any difficulties while using your system, please consult the manual, our online Frequently Asked Questions (on the web pages referenced below), your hobby dealer, or the Graupner Service Center. Due to unforeseen changes in production procedures, the information contained in this manual is subject to change without notice.

SUPPORT AND SERVICE

• Customer support

Please feel free to ask any question by e-mail or phone. We've been trying to deal with your question. We are open from nine to six, Monday to Friday in Korea. We may respond to your question by e-mail as soon as possible when we are close.

• Internet sales site

Please feel free to contact "www.openhobby.com" to get all information on product features, specifications, running events and the newest product line up.

• A/S regulation

Only when the product is faulty after normal operation within the warranty period, we will repair the product for free based on our regulations. The repair will be paid for by the consumer when the damage is due to use in improper ways or beyond the warranty period.

• Warranty regulation

Refer the WARRANTY CARD in a Package

OPENHOBBY A/S CENTER

202 Dong- 201, Chunui Techno-Park II, 18, 198 street, Bucheon-ro, Wonmi-Gu, Bucheon-Shi, Gyungki-Do KOREA 420-857

Phone: 82-70-7863-3674 Fax: 82-70-7863-3670

Customer Service E-mail: service@openhobby.com

BOX CONTENTS

GR-4 HoTT Receiver
Manual
Warranty Card
Temperature/Voltage Sensor (S8362)

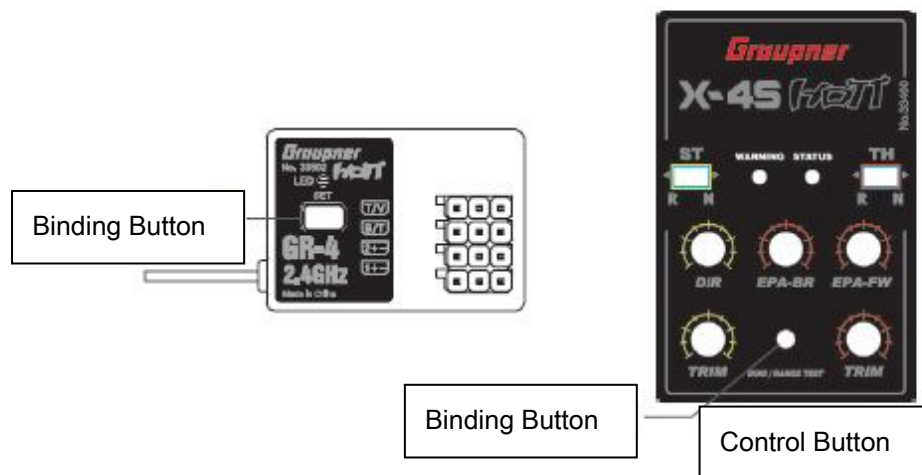
WARNING NOTES

- Never operate your car or truck in a crowded street with traffic. Especially, do not drive in a place near railway, chemical substance, gas to prevent any damage.
- This product is not intended for use by inexperienced or disabled person without direct supervision of a responsible, knowledgeable adult. This is not suitable for children under 18 years.
- The radio system is affected by signal environment and the electronic jamming signals can cause disorientation and loss of control of your aircraft.
- Please read the manual to make the best use of the product
- Make sure to check all operations of channels before use.
- For the safe use, please operate the Range Check Mode before use.
- Be careful not to turn your transmitter off while in use.
- Do not touch or grab antenna during the use.
- Do not operate your model in the rain or run through standing water
- Fail Safe should be set before use to prevent uncontrollable situation occurred by any interruption. It is recommended to set throttle channel to Neutral condition or brake condition.
- Always operate your program setup mode after stopping motor's power or engine and disconnecting drive battery.
- Make sure whenever you start operating your transmitter, turn your transmitter on and then turn your receiver on. Whenever you stop your transmitter, turn your receiver off first and your transmitter.
- Always disconnect the battery pack from the speed control when not in use to avoid short circuits and possible fire hazard.
- Always insulate exposed wiring with heat shrink tubing or electrical tape to prevent short circuits, which can damage ESC.
- Don't make any changes on the structure and design of your controller unless they are described in the manual.
- Only those components and accessory parts which have been recommended by us may be used. Use only genuine and matching Graupner/SJ connectors and accessory parts.
- Make sure whenever you start connecting and operating the controller, that your transmitter is switched on, and has the throttle set to position "STOP".

Binding & RF Range Test

BIND

Press and hold Bind button for 3 sec while your receiver is powered on and then LED indicator is off. Now press Bind button of your transmitter and then receiver's LED indicator is off.



RF RANGE TEST

When BIND button is touched after the connection between transmitter and receiver, RF RANGE TEST is now activated. RF TEST is continued during 90 seconds and it is automatically deactivated. RF RANGE TEST is deactivated by touching BIND button during RF RANGE TEST mode. Please note that your model is not controllable if your model is far away from you during Test mode due to the short transmit distance.

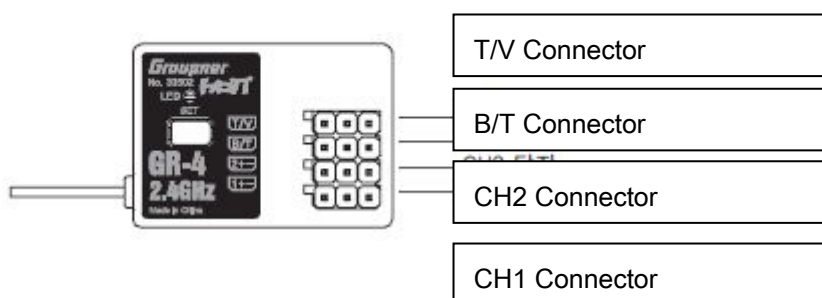
Receiver Specification and Port Description

1. GR-4 Receiver Specification

Channel	2CH
Frequencies	2400 – 2483.5Mhz
Modulation	FHSS
Input Voltage	3.6 ~ 8.4V
Output Power	60mW
Operating Current	35mA
Display Indicator	One LED(red)
Extra Function	Yes(Port3)
Fail Safe	free/Fail safe
External Temp Sensor	Port4(10 ~ 200`C)
External Voltage Sensor	Port4(1.0 ~ 25.5V)
Telemetry Sensor	Port3
Size	30x21x14.3 mm (1.18x0.82x0.56 in)
Weight	5.5 g (0.19 oz)

2. Receiver Port Description

	Function	
Port1	Ch1 Signal output	
Port2	Ch2 Signal output	
Port3	Telemetry Sensor / Batt	(HoTT-v1 Sensor only)
Port4	Temp Sensor/ Voltage Sensor	



1) Port 1, 2 should be connected to servo or ESC.

2) Port 3 supports low voltage warning alarm with beep and LED indicator.

In addition, it is available to use with telemetry sensor.

When using receiver battery (Nixx 4~5 cell, LiPo 2 cell), it needs to be connected to Port3.

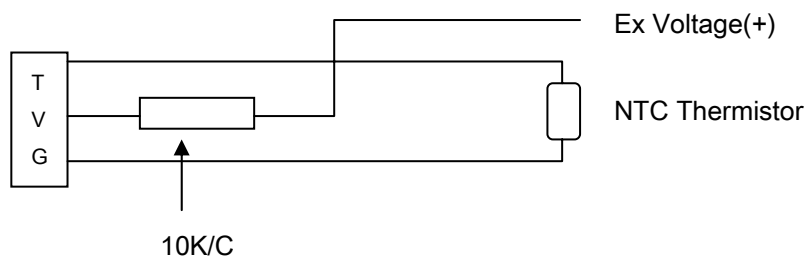
As for low voltage warning alarm, the default value is 3.7V.

Caution: When using LiPo 2 cell for receiver battery, you may protect your battery from any damage by using optional smart box, which ensures voltage adjustment and warning alarm function.

3) Port 4 is designed that it will activate the beep and LED indicator when your engine gets hot.

Caution: Regardless of receiver battery type, warning alarm is activated if battery capacity is lower than 70%. Therefore, you need to use your model after fully charging battery.

<Voltage/Temperature Sensor Configuration>



Ex Voltage (+): Connect with ESC Power Connector(+)

NTC Thermistor: Connect with Engine Head

Connect sensor to Port 4 as above. Temp sensor should be installed on engine head and Volt sensor should be installed on ESC power connector (+).

Caution: Warning alarm may not be activated, depending on weather condition or mounting location. If it is not activated, change mounting location or adjust temperature value with optional smart box (Telemetry box). (Default value: 100°C)

4) Receiver Indicator LED's

LED OFF: Very good signal condition

LED blinks: Not good signal condition

LED ON: No signal

LED and Buzzer indication

	Bind Switch	RED	GREEN	Buzzer
RX BIND ON	Push		ON	-
RX BIND OFF	-		Slow flash	-
Rang TEST	Push (Bind on status)	ON	Slow flash	Low 2Time(90sec)
Fail Safe Setup/Cancel	Push 3sec (Bind on status)	ON	3 blink	Low 3Time
Free		ON	2 blink	Low 2Time
Warning Status				
Tx Receive Rate Low	-	1cycle	-	1cycle
Sensor Warning	-	2cycle	-	2cycle
Rx Ex Temp High	-	3cycle	-	3cycle
Rx Ex Volt Low	-	4cycle	-	4cycle
Rx Voltage Low	-	5cycle	-	5cycle
Tx Low Battery	-	6cycle	-	6cycle

COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

(2) Conformance Européenne



- Product(s): Graupner GR-4 Receiver
Item Number(s): No 33502

CE 0678

- EN 62479:2010
- EN 60950-1:2006/A11:2009/A1:2010/A12:2011
- EN 301 489-1 V1.9.2
- EN 301-489-17 V2.2.1
- EN 300 328 V1.7.1

(3) FCC Information

- Graupner GR-4 Receiver
FCC ID: SNL-16005600

• FCC Statement

1. 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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

• NOTE

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.

• FCC radiation exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

• ENVIRONMENTAL PROTECTION NOTES

This product must not be disposed of with other waste. Instead, it is the user's responsibility to their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the produce.

