

REELY

Ⓒ Operating Instructions

2.4 GHz “GT6 EVO” remote control

Item No. 1780646

CE

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1. Introduction

Dear customer,

Thank you for purchasing this product.

This product complies with statutory, national and European regulations.

To ensure that the product remains in this state and to guarantee safe operation, always follow the instructions in this manual.



These operating instructions are part of this product. They contain important information on setting up and using the product. Do not give this product to a third party without the operating instructions.

Also retain these operating instructions for reference!

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If there are any technical questions, please contact:

International: www.conrad.com/contact

United Kingdom: www.conrad-electronic.co.uk/contact

2. Explanation of symbols



The symbol with an exclamation mark in a triangle is used to highlight important information in these operating instructions. Always read this information carefully.



The arrow symbol indicates special information and advice on how to use the product.

3. Intended use

The "GT6 EVO" 6-channel remote control is intended exclusively for private use by model makers with the associated operation times. This system is not suitable for industrial use, such as controlling machines or equipment.

Any use other than the one described above damages the product. Moreover, this involves dangers such as short-circuiting, fire, electric shock, etc. Do not alter or modify the product.



Always follow the safety information in these operating instructions. They contain important information on how to handle the product safely.

You are solely responsible for the safe operation of the model and the remote control!

4. Product description

The "GT6 EVO" 6-channel remote control is a wireless remote control system that is ideal for model vehicles or model ships. The remote control has two proportional control channels intended for the driving and steering functions (control handle and steering wheel); and another four control channels (two of which are proportional) intended for special functions. An integrated LC display allows all settings to be made conveniently.

The ergonomically shaped case of the transmitter fits comfortably in the hand and thus allows for comfortable operation of the transmitter and safe control of the model.

Four AA/mignon batteries are required to operate the transmitter.

Unless a speed controller with BEC circuit is used, the receiver also requires four AA/mignon batteries (or rechargeable batteries) with a suitable battery/rechargeable battery holder.

5. Delivery content

- Remote control transmitter
- Remote control receiver
- Binding connector
- Rubber handle for remote control transmitter (other size than the pre-assembled rubber handle)
- Operating instructions

Up-to-date operating instructions

Download the up-to-date operating instructions at www.conrad.com/downloads or scan the QR code shown. Follow the instructions on the website.



6. Safety information



Damage caused due to failure to observe these instructions will void the warranty. We shall not be liable for any consequential damage.

We shall not be liable for damage to property or personal injury caused by incorrect use or failure to observe the safety information! Such cases will void the warranty/guarantee.

Normal wear and tear in operation and damages due to accidents (like the receiver antenna tearing off, or the receiver case breaking etc.) are excluded from the warranty.

Dear Customer, these safety instructions serve to protect not only the product, but also your own safety and those of other persons. Read this section very carefully before using the product.

a) General information

- The unauthorised conversion and/or modification of the product is prohibited for safety and approval reasons.
- This product is not a toy and is not suitable for children under 14 years of age.
- Do not get the product damp or wet.
- Operation of a model (for example, a car model) may result in damage to property and/or personal injury. Ensure that you are sufficiently insured, e.g. by taking out private liability insurance. If you already have purchased such a policy, contact your provider to check that the remote controlled model is covered by the policy.
- Do not connect the drive motor to electric models before the receiver system has been completely installed. This stops the drive motor from starting before you are ready.
- Check the functional safety of your model and the remote control system before each use. Inspect the parts for any signs of damage, such as broken connectors or damaged cables. All moving parts should move freely, but there should not be any slackness in the bearing.
- The operation and the handling of RC models must be learned! If you have never steered such a model, start very carefully and get used to the model's reactions to the remote control commands first. Be patient!
- Do not leave packaging material lying around, because it could become a dangerous plaything for children.
- If you have any questions that are not answered by these operating instructions, contact us (see chapter 1 for contact information) or an experienced technician.



b) Operation

- If you do not have sufficient knowledge of how to operate remote-controlled models, contact an experienced model user or a model club.

- Before connecting a rechargeable battery to a model, place the model on a suitable surface. Do not touch rotating parts of the model while connecting the rechargeable battery. There is a risk of injury!

For a car model, the surface should be selected so that the wheels can rotate freely. Do not hold the car model by the wheels.

For a ship model, make sure that the ship's propeller can rotate freely. Always keep clear of the rotating area of the ship's propeller. There is a risk of injury!

- When putting the device into operation always turn on the transmitter first. Only then you can turn on the voltage/power supply for the receiver in the model. Otherwise, the model car can have unpredictable reactions.
- Before using the model, check whether it responds properly to the remote control commands.
- When operating a model, always make sure that body parts or objects are kept clear of the danger area of motors or other rotating driving parts.
- Improper use can cause serious injury and damage to property! Always keep the model in your line of sight and never operate it at night.
- Do not use the model if your responsiveness is impaired. Fatigue, alcohol and certain medications can affect your responsiveness.
- Never use the model in an area that may endanger other people, animals or objects. Only operate it on private sites or places which are specifically designated for remote-controlled models.
- In the event of a malfunction, discontinue use immediately and establish the cause of the problem before using the model again.
- Do not use the remote control during thunderstorms, under high-voltage power lines or in the proximity of radio masts.
- Always leave the remote control turned on when the model is in use. To turn off the model, always switch off the motor first, and then switch off the receiver system. Only then can the remote control transmitter be turned off.
- Protect your model and the remote control system from dampness and dirt.
- Do not expose the remote control to direct sunlight or excessive heat for prolonged periods.
- The weaker the batteries, the lower the range of the remote control. If the receiver batteries or the receiver rechargeable battery (or the drive rechargeable battery that supplies the receiver of a speed controller equipped with BEC) become weak, the model will no longer respond correctly to the remote control.

If this is the case, stop operation immediately. Then replace the batteries with new ones or recharge the receiver rechargeable battery.

- Do not take any risks when using the product! Always use the model responsibly, otherwise you may endanger yourself and your surroundings.

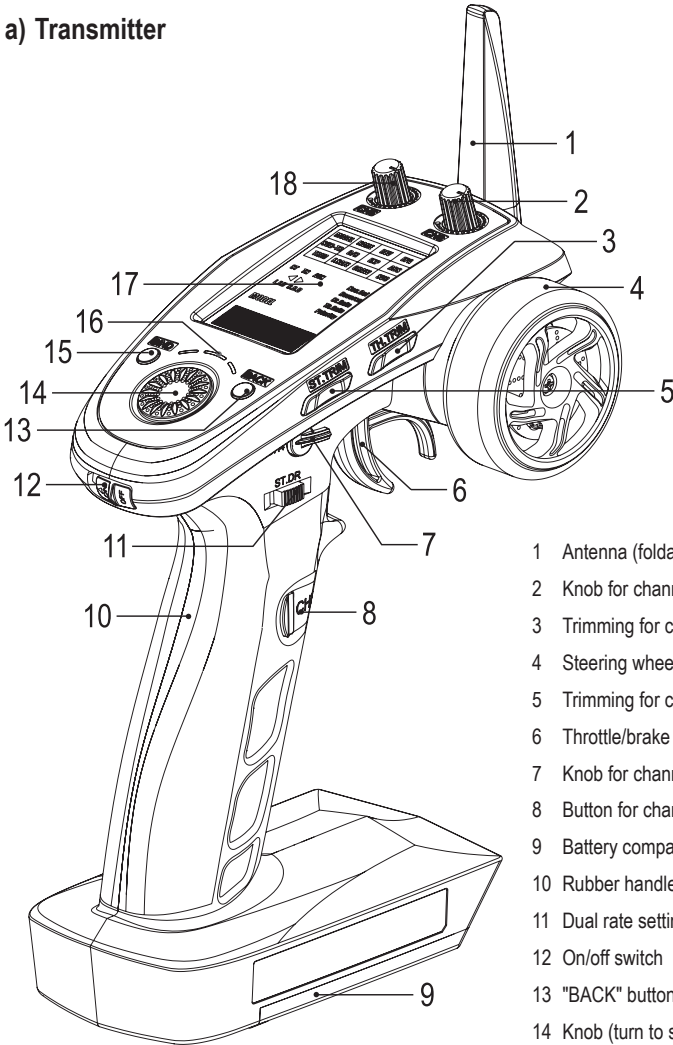
7. Battery information



- Keep all batteries out of the reach of children.
- Do not leave batteries lying around, as they present a choking hazard for children and pets. Seek immediate medical advice if a battery is swallowed.
- Do not short-circuit or disassemble batteries or rechargeable batteries. Do not throw them into fire. This may cause an explosion!
- When handling leaking or damaged batteries, always use suitable protective gloves to avoid burning your skin.
- Do not attempt to recharge disposable, non-rechargeable batteries. This may cause a fire or explosion! Only recharge compatible rechargeable batteries and ensure that you use a suitable battery charger.
- Please observe correct polarity (plus/+ and minus/-) when inserting the batteries/rechargeable batteries.
- If the device is not used for a longer period of time (e.g. storage), remove the batteries/rechargeable batteries from the remote control and from the car to avoid damage from leaking batteries/rechargeable batteries.
- Rechargeable batteries should be charged at least once every 3 months to prevent damage due to deep discharge.
- Always replace the entire set of batteries or rechargeable batteries. Do not mix full batteries or rechargeable batteries with half-full ones. Always use batteries or rechargeable batteries of the same type and from the same manufacturer.
- Never mix disposable batteries with rechargeable batteries.
- Because rechargeable batteries have a lower output voltage (1.2 V) than disposable batteries (1.5 V), we recommend that you use only batteries (not rechargeable batteries) in the remote control transmitter for operational safety reasons. Otherwise, the transmitter's voltage will become too low in a relatively short amount of time.
- Alternatively, a two-cell LiPo rechargeable battery with a BEC connector can be used in the transmitter (rated voltage 7.4 V).

8. Transmitter/receiver controls

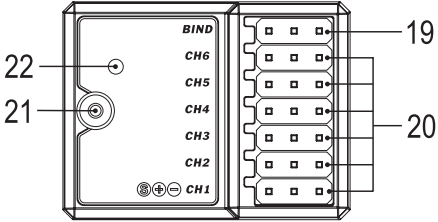
a) Transmitter



- 1 Antenna (foldable)
- 2 Knob for channel 6
- 3 Trimming for channel 2
- 4 Steering wheel (channel 1)
- 5 Trimming for channel 1
- 6 Throttle/brake lever (channel 2)
- 7 Knob for channel 4
- 8 Button for channel 3
- 9 Battery compartment cover
- 10 Rubber handle (replaceable)
- 11 Dual rate setting for steering function
- 12 On/off switch
- 13 "BACK" button
- 14 Knob (turn to set, press to confirm)
- 15 "BIND" button
- 16 LED indicator
- 17 LCD display
- 18 Knob for channel 5

b) Receiver

- 19 "BIND" connection
- 20 Channel 1 – 6 (CH1 – CH6)
- 21 Antenna
- 22 LED



9. Using the remote control

→ The numbers used in these instructions refer to the illustration alongside the text or the illustrations within the respective section. Cross-references to other figures are indicated with the corresponding number.

a) Inserting batteries into transmitter

Four AA/mignon batteries are required to power the transmitter (we recommend high-quality alkaline batteries).

To insert the batteries, proceed as follows:

- The battery compartment cover (9) is located underneath the transmitter. Press on the corrugated surface and slide the cover out in the direction of the arrow.
- Insert 4 batteries into the battery compartment, observing the correct polarity (see marks on the batteries and in the battery compartment). Slide the battery compartment cover back until it clicks into place.

→ Instead of 4 AA/Mignon batteries, you can also use a two-cell LiPo rechargeable battery (rated voltage 7.4 V) for the voltage/power supply of the transmitter.

You will find a corresponding BEC connection in the battery compartment. Pay attention to the correct polarity; it is indicated below the BEC connection.

b) Switching on the remote control

Fold up the antenna (1). Switch on the transmitter with the on/off switch (12) ("ON" = switched on).



Always switch on the transmitter before putting the receiver into operation and connecting it to the voltage/power supply.

The transmitter will emit a beep, the display indication will appear and the display backlight will be enabled.

→ The display backlight will automatically go out in a few seconds if the knob or the "BACK" or "BIND" buttons are not pressed.



If a voltage is lower than 4.40 V, the LED indicator (16) and the voltage value will flash on the display. In addition, the transmitter will emit warning beeps and vibrate (similar to a smartphone). Stop operating the model as soon as possible and replace the used batteries with new ones.

If the battery voltage drops further, a warning message will appear at the bottom of the display ("WARNING - Low Battery"). If it appears on the display immediately after switching on the transmitter, the transmitter will not work for safety reasons (menu functions and receiver controls will be disabled).

c) Turn off transmitter



Always disconnect the receiver from the voltage/power supply before switching off the transmitter.

Switch off the transmitter with the on/off switch (12) ("OFF" = switched off). When the transmitter is no longer needed, you can fold the antenna (1) down, for example, to transport the transmitter.

10. Basic functions of the transmitter

a) Selecting colour of LEDs or turning LEDs off

The colour for the LEDs (16) of the battery/rechargeable battery status indicator is adjustable, and these can also be turned off.

Proceed as follows:

- Switch on the remote control.
- Press and hold down the "BACK" button (13) and turn the knob (14) to the left or right until the desired colour (you can select green, blue, cyan, red, yellow and white) is set for the LEDs or until they are disabled.
- Now release the "BACK" button (13).

→ If you have deactivated the LEDs, the transmitter can no longer indicate by the flashing LEDs that the voltage is too low!

b) Calibrating the steering wheel and the throttle/brake lever

This calibration stores the end positions of the steering wheel (4) for channel 1 and the throttle/brake lever (6) for channel 2 anew.

→ If you do not bring the steering wheel and the throttle/brake lever to the respective end position (end stop) during calibration, the full control travel will not be available later. Additionally, this might make the vehicle uncontrollable.

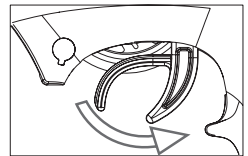
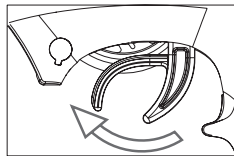
Proceed as follows for calibration:

- Switch off the remote control.
- Turn the steering wheel clockwise all the way to the right (as far as it will go); see figure on the right. Hold the steering wheel in this position and turn on the transmitter.
- The "STK.CAL." indication will appear at the bottom of the display.
- Release the steering wheel so that it is in the middle position.
- If you press the knob (14) briefly, the "STK.CAL." indication will start flashing.
- Now move the steering wheel (4) and the throttle/brake lever (6) to the respective end positions (end stop).



To do this, turn the steering wheel all the way to the right and then to the left until it stops. Release the steering wheel. Then pull the throttle/brake lever by the handle until it stops and push it away from the handle as far as it will go. Release the throttle/brake lever.

The order is irrelevant, only the respective end positions are saved.



- If you press the knob (14) briefly, the "STK.CAL." indication will stop flashing.
- The transmitter is ready for operation again.

→ If one of the end positions has not been saved correctly, you will not be able to exit the calibration mode; the transmitter will vibrate briefly (similar to the vibration alarm of a smartphone) and emit a warning beep. Then proceed as described above and bring the steering wheel (4) and the throttle/brake lever (6) into their respective end positions.

c) Resetting the transmitter to factory settings



This deletes all settings and model memories! In addition, the receiver can no longer respond to the transmitter's control commands and must be paired anew (binding function).

Proceed as follows:

- Stop operating the model and turn it off. Then switch off the transmitter.
- Turn the steering wheel counter-clockwise all the way to the left (as far as it will go), as shown in the right figure.

Hold the steering wheel in this position and turn on the transmitter.

- The following safety message will appear at the bottom of the display: "Reset Default Sure?" (= reset to factory settings?)
- Release the steering wheel so that it is in the middle position.
- If you press the knob (14) briefly, "FACY.RST" will appear at the bottom of the display. The transmitter emits a beep and is ready for operation.
- If all settings and model memories have been deleted, the receiver can no longer respond to the transmitter's control commands and must be paired anew (binding function); see chapter 10. e).



d) Dual rate setting for the steering function

The button (11) can be used to set the dual rate setting for the steering function (channel 2). Here, the possible steering angle is limited, for example, for fast straight-ahead driving.

If you switch off the transmitter, this setting will be lost again.

→ You can programme the dual rate setting using the setup menu; see chapter 13. h).

e) Pairing the receiver with the transmitter (binding function)

→ The manufacturer has already paired the included receiver with the transmitter.

However, if you would like to pair another receiver or if you have reset the transmitter to factory settings, the receiver must first be paired with the transmitter (also known as "binding") before it can respond to the transmitter's control commands.

Proceed as follows:

- Disconnect the receiver from the voltage/power supply. Switch off the remote control.
- Insert the included binding plug (A) into the "BIND" port (19) on the receiver (B).

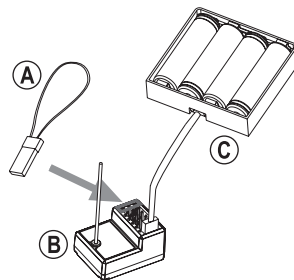
- Connect the receiver to the voltage/power supply (C); power up any channel (20) of the receiver.

An electronic speed controller with BEC and a suitable rechargeable battery for driving can typically be used instead of a battery box (C).

- Turn on the voltage/power supply of the receiver. The receiver LED (22) will now flash quickly.
- Press and hold down the "BIND" button (15) on the transmitter, and then switch on the transmitter.
- "BIND" will appear at the bottom of the display. Once the transmitter and receiver have found each other, the "BIND" indication on the transmitter display will disappear (the indication may not appear if the receiver is found quickly).

The receiver LED (22) stops flashing and glows steadily. The receiver is now paired with the transmitter.

- Disconnect the receiver from the voltage/power supply and unplug the binding plug from the receiver.
- Switch on the remote control.
- Connect the receiver to the voltage/power supply and switch it on (battery box or electronic speed controller with BEC). The receiver LED (22) will glow steadily.
- The transmitter and receiver are now ready for operation again.



f) Replacing the rubber handle

The rubber handle (10) mounted on the transmitter can be easily replaced with another rubber handle, supplied separately.

→ The rubber handles are different sizes so that the transmitter can be held with a larger or smaller hand. The size is indicated on the rubber handle ("L" = "large", "S" = "small").

If you want to replace the rubber handle, simply remove it from the transmitter (left and right on the handle). Insert the other rubber handle and push the 6 side retaining lugs into the holes on the transmitter so that the rubber handle sits flat.

11. Receiver

a) Connection

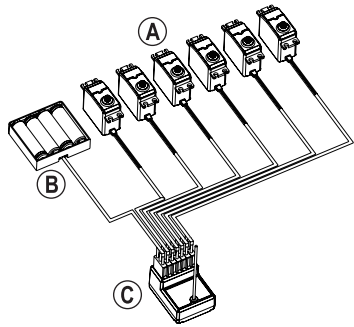
The receiver (C) can be connected to up to 6 servos (A), CH1 – CH6 connections, as well as a receiver power supply (B) and "BIND" port.

The connections are designed for polarity-proof Futaba connectors and can also be used with JR connectors, if necessary.

In the top right example, 6 servos (A) are connected to the receiver (CH1 – CH6 connections).

In this case, the "BIND" port (19) must be connected to the voltage/power supply (B) in the form of a battery box.

The servos and the receiver power supply can be connected in different ways depending on the model in which the remote control system is used.

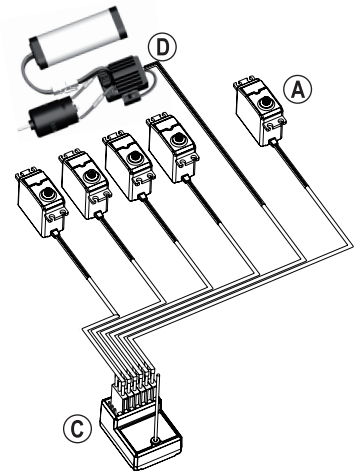


For example, if an electric car model uses an electronic speed controller (D) with BEC, it must be connected to channel 2 (CH2).

Do not connect a separate receiver power supply in this case!

If more than one electronic speed controller with BEC is connected to the receiver, only one may carry the positive lead to the receiver, while the positive leads of other electronic speed controllers must be interrupted in the connector.

If you still use a mechanical speed controller with a BEC connector, do not use it to power the receiver. The voltage applied to this connector is too high. Instead, use a separate power supply (battery box).



Always observe the correct polarity of the connectors when connecting servos or a speed controller.

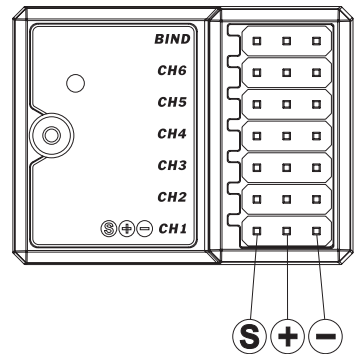
The pulse lead plug contact (yellow, white or orange depending on the manufacturer) must be connected to the inner (left) pin contact (in the direction of the antenna).

The minus/-/GND plug contact (black or brown depending on the manufacturer) must be connected to the outer (right) pin contact (towards the edge of the receiver).

S = pulse lead

+ = plus pole

- = minus pole/GND



b) Installation

The installation of the receiver depends on the model. For this reason, you should always follow the recommendations of the model manufacturer regarding receiver installation.



If you want to use the integrated gyro sensor in the receiver (SVC function of the transmitter will be enabled), the receiver must be mounted horizontally (max. 10° deviation from the horizontal plane). The receiver connections must point upwards vertically.

Failure to meet this requirement will result in unpredictable deviations of the control behaviour when using the gyro sensor.

Independent of this, you should always try to mount the receiver so that it is optimally protected from dust, dirt, moisture, heat and vibrations. Two-sided adhesive foam (servo tape) or even rubber rings that hold the foam-wrapped receiver securely in place are suitable for fastening.

Try to place the receiver on the model so that it is not directly next to an electric motor or speed controller.



Warning!

The antenna wire of the receiver has a precisely measured length.

So do not wind up, wrap or cut the aerial wire. This would decrease the range significantly and thus pose a considerable safety risk.

Guide the antenna wire out of the model through an opening. It is best to use an antenna tube.

For optimal range between the transmitter and the receiver, the transparent end of the antenna wire should protrude vertically from the model.

Do not place the antenna near metal parts, as this will greatly reduce the range.

c) LED display function

The receiver LED (22) has the following functions:

- LED off: No voltage/power supply
- LED solid light: Receiver is ready for operation, transmitter signal is available
- LED blinks slowly: No transmitter signal (transmitter is switched off or receiver is not paired with transmitter)
- LED blinks quickly: Pairing process (binding)

d) Calibrating the gyro sensor

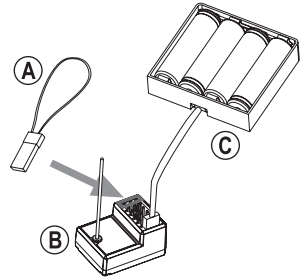
The receiver has a built-in gyro sensor. It can be used to automatically counter-steer (SVC function of the transmitter) a car model in case the rear is swerving (oversteer).

The gyro sensor is already factory-calibrated; however, you can also calibrate it yourself.

Proceed as follows:

- Switch off the transmitter (it must **not** be switched on during calibration of the gyro sensor).
- Place the receiver so that it is horizontal and fixed (this is critical for proper calibration).
- Connect the "CH1" connection of the receiver (or one of the other 5 servo channels, but **not** to the "BIND" port) to the voltage/power supply (C) and turn it on.

The voltage/power supply can also be connected via an electronic speed controller with BEC and not via a battery box, as shown in the figure.



- The receiver LED (22) will now flash slowly.
- Insert the included binding plug (A) into the "BIND" port (19) on the receiver (B).
- The receiver LED (22) will flash three times quickly and then slowly again.
- The gyro sensor is now calibrated.
- Disconnect the receiver from the voltage/power supply and unplug the binding plug from the receiver.
- If you have disconnected the connected servos for calibration, connect them properly to the receiver again.
- Switch on the transmitter first and then the voltage/power supply of the receiver.
- The transmitter and receiver are now ready for operation again.

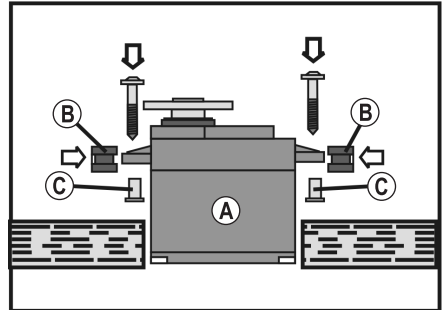
12. Installing the Servos

The installation of a servo (A) always depends on the model used. For specific information, refer to the design documents of the model.

However, generally you should try to fasten the servos with screws in such a way that vibrations are minimised. For this purpose, servos are usually provided with rubber grommets (B) with metal sleeves (C).

In case of stiff linkages, servos can not run in the required position. They consume excess power and the model control behaviour will not be correct.

The linkages must work as smoothly as possible without clearance in the bearings or deflections.

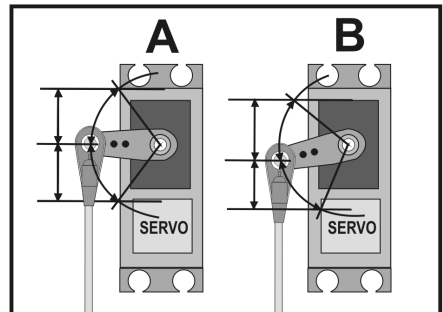


Before mounting servo levers, operate the transmitter and then the receiver and check the correct middle position of the trimming on the remote control transmitter.

Always mount the servo levers at a 90° angle to the linkage rods (A).

If the servo lever is inclined towards the linkage rod, the control travels will have a different size (B) in both control directions.

A slight mechanical inclination, which is due to the linkage of the servo lever, can be corrected later with the trimming.



13. Transmitter setup menu

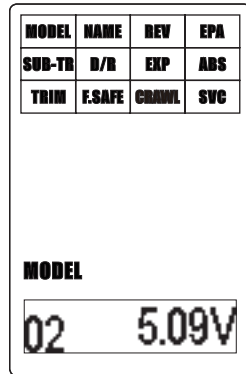
a) General information

After switching on the transmitter (see chapter 9. b), the transmitter will emit a beep, the display indication will appear and the display backlight will be enabled.

→ The display backlight will automatically go out in a few seconds if the knob or the "BACK" or "BIND" buttons are not pressed.

The display shows various adjustable/programmable functions at the top, the number of the currently enabled model memory at the bottom left and the current voltage of the inserted batteries at the bottom right.

If you move the knob (14) to the left or right, the indication at the bottom of the display will change to the indication of the current servo positions, or the model memory number and model name (4 characters) will be displayed.



b) Operating the setup menu

Opening the setup menu

Briefly press the knob (just like pressing a button). The first **MODEL** function will be greyed out.

Select function

After entering the setup menu, you can select the desired function and change its setting by turning the knob to the left or right. The setting will be greyed out.

Briefly press the knob (just like pressing a button) to start the setup.

Setup

Change a setting by turning the knob.

Confirm the setting by briefly pressing the knob.

Exiting the function or setup menu

After changing a setting, the transmitter is in the setup menu again (a function is greyed out). You can now either select another function or briefly press the "BACK" button (13) to exit the setup menu.

c) "MODEL" function: Selecting model memory

The transmitter has a total of 20 model memories (01 – 20). This provides the opportunity to operate up to 20 car models.

→ Please note that a receiver can only be paired with one model memory at a time.

If you have several vehicles, each with its own built-in receiver, first select a model memory and then pair the receiver with the transmitter. Proceed in the same way for all other models/receivers.

However, if only one receiver is being used for several vehicles for cost reasons, the receiver must be paired with the transmitter again as a matter of principle after the model memory has been switched over; see chapter 10. e).

The same typically applies if several different setups (or model memories) are to be used for one vehicle.

Proceed as follows:

- First turn off the voltage/power supply for the vehicle receiver of the currently selected model memory.
- If you press the knob (14) briefly, the **MODEL** function will be greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the number of the model memory will flash at the bottom left of the display.
- Turn the knob (14) to the left or right to select another model memory.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

→ If you forget to turn off the voltage/power supply for the vehicle receiver of the currently active model memory, an error message "Turn off the receiver first" will appear on the display.

The model memory cannot be changed (for example, from memory 01 to 02) for safety reasons if the receiver has not previously been turned off or disconnected from the voltage/power supply.

- If you press the knob (14) briefly, the model memory number will stop flashing; the model memory is selected.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

d) "NAME" function: changing the model memory name

A 4-digit name can be entered for each of the 20 model memories. The letters A – Z and the numbers 0 – 9 are available.

Proceed as follows:

- If you have not already done so, first select the desired model memory; see chapter 13. c).
- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **NAME** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the first input position of the name will flash at the bottom of the display.
- You can change the flashing character by turning the knob (14) to the left or right.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

Briefly press the knob (14) to change the input position.

- If you have changed the last input position and pressed the knob (14), the display will stop flashing. The model memory name has been changed successfully.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

e) "REV" function: reverse setting

It may be necessary to change the direction of rotation of a servo or to reverse the reaction of the speed controller depending on the model installation position and linkage.

The reverse setting can be made separately for each of the 6 channels of the transmitter.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **REV** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.
- You can select the channel number (1 – 6) and change the desired reverse setting by turning the knob (14) to the left or right.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

"AUX" (= "auxiliary" = auxiliary channels) also flashes for channels 3 – 6.

- If you press the knob (14) briefly, the current setting for the previously selected channel ("NOR" = normal, "REV" = reverse) will flash at the bottom right of the display.
- To change the setting, turn the knob (14).
- If you press the knob (14) briefly, the indication will stop flashing. The current setting is saved.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

f) "EPA" function: setting the maximum servo deflection

This function can be used to determine the maximum permissible deflection for the steering, throttle or auxiliary servo on each side (EPA = "end point adjustment").

This feature is typically used to protect the mechanical system of a fully deflected servo from hitting an obstacle mechanically.

You can set a value from 0% to 120%. The smaller the value, the shorter the servo way on the corresponding side.

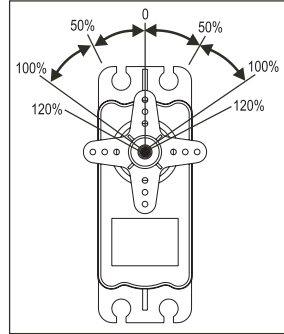
Try to organise the mechanical control via a servo so that the EPA setting values of 100 – 120% can be used.

The direction of rotation of the servo (or setting for speed controller) can be limited depending on the model you use.

Set the maximum possible steering deflection for steering so that the steering servo does not bump and hum. Should a lower steering deflection be required for subsequent operation (for fast or slow driving), it can be adjusted with the so-called "dual rate" function.

If you use an electronic speed controller for the drive function, you can also set a maximum control value. However, in order to be able to use the highest motor speed possible, you should not set a value of 100% for both directions.

To make a car model slower for a beginner, set a smaller value for forward driving (for example, 70%). The brake function (or reverse driving) can be set to 100%, so you have the maximum braking force for a speed controller with brake function.



➔ Before limiting the steering servo deflection with the EPA function, you should first check if the factory setting of 100% is still stored in the dual rate setting.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **EPA** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

"AUX" (= "auxiliary" = auxiliary channels) also flashes for channels 3 – 6.

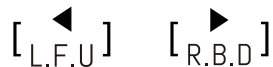
- To set the left or right end position, move the control of each channel to the left or right. The display will show the corresponding indication:

Left end position = "L.F.U." (= "left, front, up")

Right end position = "R.B.D." (= "right, back, down")

- If you press the knob (14) briefly, the setting value for the servo deflection (for example, 100%) will flash at the bottom right of the display.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC



- Turn the knob (14) to the left or right to adjust the servo deflection in the range of 0% to 120%, as shown in the top right figure.
- If you press the knob (14) briefly, the setting value for the servo deflection will stop flashing. The current setting is saved.

If you want to set the servo deflection in the other direction (or for another channel), start over (briefly press the knob, then select a channel, etc.).

→ If no indication is flashing, you can select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

g) "SUB-TR" function: adjusting the servo centre

When installing the servos, the model manufacturer usually describes the exact central position for the servo levers. However, the cogs on the servo lever may not always allow the exact positioning of the servo lever if the operating levers and the corresponding trim are in the central position on the transmitter.

In this case, the trimming would not be centred when driving straight ahead. This limits the trimming travel, and the full trimming travel cannot be used on both sides. This drawback can be eliminated using the servo centre adjustment.

In addition, the trimming indicator is thus exactly centred when driving straight ahead, which allows for easier estimation of straight-ahead driving and possibly the necessary trimming.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **SUB-TR** function is greyed out on the display, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

"AUX" (= "auxiliary" = auxiliary channels) also flashes for channels 3 – 6.

- If you press the knob (14) briefly, the setting value for the trimming travel will flash at the bottom right of the display.
- You can change the setting by turning the knob (14) to the left or right.

The middle position can be changed to the left/right, front/back and up/down depending on the channel.

→ These directions typically depend on the specific model and the servo function. However, the respective letters on the display are used for the centre adjustment.

Channels 1 + 5 + 6: (L = "Left", R = "Right")

L120....R00.....R120 = left 120.....middle.....right 120

Channel 2: (B = "Back", F = "Front")

B120.....F00.....F120 = back 120.....middle.....front 120

Channels 3 + 4: (D = "Down", U = "Up")

D120....U00.....U120 = down 120.....middle.....up 120

- If you press the knob (14) briefly, the setting value for the servo middle position will stop flashing. The current setting is saved.

→ If no indication is flashing, you can select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

h) "D/R" function: dual rate setting

You can use this function to set the servo travel for channel 1 (steering servo) and channel 2 (throttle/brake servo or speed controller).

For example, it can be used to limit the maximum steering angle, which makes it easier to steer the vehicle when driving faster, as it reacts more sensitively.

The function can also be used to limit the maximum speed of a vehicle for a beginner. If an electronic speed controller is connected to channel 2, a limitation to 50% means that only 50% of the motor power is available despite full deflection on the throttle/brake lever.

→ The setting affects both sides of the servo travel.

If the value for channel 1 (steering servo) is reduced too much, the turning circle will increase greatly. If the value for channel 2 is reduced (throttle/brake servo or speed controller) too much, the vehicle may stop moving.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **D/R** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.
- You can select the channel number (1 – 2) and change the desired dual rate setting by turning the knob (14) to the left or right.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

→ Channels 3 – 6 have no dual rate setting.

- If you press the knob (14) briefly, the current setting value will flash at the bottom right of the display.
- To change the value, turn the knob (14).
- If you press the knob (14) briefly, the indication will stop flashing. The current setting is saved.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

i) "EXP" function: exponential setting

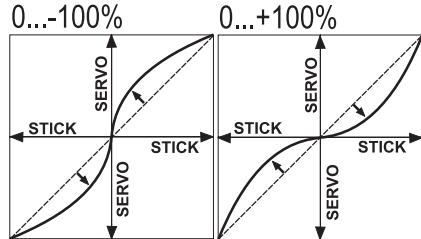
You can use the exponential setting to change the linear pairing between the control transmitter and the servo travel in the middle position range.

→ The maximum possible servo deflection (servo end positions) is not limited by the setting of the exponential function.

The servo travels may be stronger or weaker in the middle position range depending on the value set.

For "0" setting, servo travel is linear.

If a +50% value is set for the steering servo on channel 1, the result will be a more sensitive steering behaviour in the middle position range (large turning angle at the steering wheel, small turning angle at the steering servo).



Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **EXP** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.
- You can select the channel number (1 – 2) and change the desired exponential setting by turning the knob (14) to the left or right.

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

→ For channel 1, these settings apply in both directions at the same time. For channel 2 (throttle/brake servo or speed controller), the exponential setting can be set separately for both directions. Channels 3 – 6 have no exponential setting.

- If you have selected channel 2, move the throttle/brake lever on the transmitter in the direction of the handle ("L.F.U" flashes on the display, exponential setting for forward travel) or push it away from the handle ("R.B.D" flashes on the display, exponential setting for reverse travel).
- If you press the knob (14) briefly, the current setting value will flash at the bottom right of the display.
- To change the value, turn the knob (14).
- If you press the knob (14) briefly, the indication will stop flashing. The current setting is saved.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

j) "ABS" function: ABS brakes

With the ABS function, you can optimise the braking behaviour of your model car. The brake function is clocked electronically to prevent blocking the wheels when braking in a curve.

In a "real" car, special wheel sensors and electronics detect blocked wheels. Reduce the brake pressure on individual wheels so that a blocked wheel can rotate again. This is noticeable because of a pulsating brake pedal. For example, understeering and oversteering can thus be prevented in case of emergency braking in a curve, and the vehicle can be safely controlled through the curve despite emergency braking (within the limits of physics).

Of course, a model car does not (yet) have this control, so different values can be set to come as close as possible to ABS braking behaviour in a "real" car.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **ABS** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, "ABS" will flash at the bottom of the display.
- You can choose between the following setup functions by turning the knob (14) to the left or right:

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

Function	Value range	Default setting	Description
ABS	ON/OFF	OFF	Turn ABS on or off
BRK	0.....100%	50%	Brake power for each braking pulse
DLY	0.....100%	0%	Time until ABS is enabled after braking action
CYC	20.....100%	50%	Number of ABS cycles; if the value is the higher, fewer ABS cycles take place, and control will be more rough.
TGP	10.....100%	30%	Specifies the throttle/brake lever position from which the ABS is enabled
DTY	-4...+4	0	Changes the ratio between the time at which the brake is enabled or disabled; the lower the value, the lower the actual braking time per ABS cycle
STM	E 10.....100% N 10.....100%	OFF	Establishes a connection between the steering angle (channel 1) and the ABS: "OFF": The ABS works independently of the steering angle. "E": The ABS is only active when the steering angle exceeds the set value. "N": The ABS is disabled when the steering angle exceeds the set value. % value: Sets the value for the steering angle.

- If you press the knob (14) briefly, the relevant setting value will flash at the bottom right of the display.
- To change the value, turn the knob (14).
- If you press the knob (14) briefly, the indication will stop flashing. The current setting is saved.



If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

k) "TRIM" function: Trimming

In addition to the "SUB-TR" function for setting the servo middle position, the trimming function is used , for example, to set the straight-line stability of the vehicle.

- The trimming for channel 1 (steering) and channel 2 (throttle/brake servo or speed controller) can also be set with the rocker buttons (5 + 3) on the right-hand side of the transmitter. However, this trimming is only temporary and will be lost after switching the transmitter off and on again. To set the trimming permanently, do so via the setup menu.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **TRIM** function is greyed out on the display, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

"AUX" (= "auxiliary" = auxiliary channels) also flashes for channels 3 – 4.

- The trimming cannot be changed for channels 5 and 6.
- If you press the knob (14) briefly, the setting value for the trimming travel will flash at the bottom right of the display.
- You can change the setting by turning the knob (14) to the left or right.

The trimming can be changed to the left/right, front/back and up/down depending on the channel.

- These directions typically depend on the specific model and the servo function. However, the respective letters are displayed for the trimming.

Channel 1: (L = "Left", R = "Right")

L120....R00.....R120 = left 120.....middle.....right 120

Channel 2: (B = "Back", F = "Front")

B120.....F00.....F120 = back 120.....middle.....front 120

Channels 3 + 4: (D = "Down", U = "Up")

D120....U00.....U120 = down 120.....middle.....up 120

- If you press the knob (14) briefly, the setting value for the trimming will stop flashing. The current setting is saved.

- If no indication is flashing, you can select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

I) "F.SAFE" function: switching failsafe on/off

As a special feature, the receiver has a failsafe function for all 6 channels. You can programme a specific servo position for each channel to be called up if the transmitter signal fails (for example, the throttle/brake servo runs at 100% brake in a car with an internal combustion engine). The programming takes place directly in the transmitter and is then transmitted to the receiver.

If you do not programme a specific servo position, all channels will remain in the last position if the transmitter signal fails.



For safety reasons, you should always programme a failsafe position for model vehicles, for the drive motor at the least (controlled by throttle/brake servo or speed controller). For a vehicle with an internal combustion engine and electric vehicles, it is advisable to enable the brake and neutral position, respectively.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **F.SAFE** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, the channel number 1 will flash at the bottom of the display.
- You can select the channel number (1 – 6) and change the failsafe setting by turning the knob (14) to the left or right.

"ST" (= "steering") also flashes for channel 1.

"TH" (= "throttle") also flashes for channel 2.

"AUX" (= "auxiliary" = auxiliary channels) also flashes for channels 3 – 6.

- If you press the knob (14) briefly, either "OFF" or the current value for the position of the respective transmitter control will flash at the bottom right of the display.
- You can switch between "OFF" and a percentage value by turning the knob (14).

If you set "OFF", all channels will remain in the last position if the transmitter signal fails.

When a percentage value flashes, you can change it with the respective control of the previously selected channel of the transmitter. If you have selected, for example, channel 2 ("TH"), move the throttle/brake lever away from the handle (brake function). This will change the percentage value and the bar graph indication at the bottom of the display.

- If you press the knob (14) briefly, the indication will stop flashing. The current failsafe setting will be saved.



If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

m) "CRAWL" function: Crawler mode

Here you can set the steering mode for a crawler vehicle. This is for a vehicle built specifically for manoeuvring tests. For this purpose, crawler vehicles usually have steerable front and rear axles. The steering of the front and rear axles is controlled via a separate steering servo.

This function enables you to switch between front axle steering, rear axle steering, reverse steering or co-steering of the two axles.





→ Channel 3 of the receiver is always used to control a steering servo of the rear axle. Channel 1 typically serves to control the steering servo of the front axle.

In addition, both steering servos can be controlled simultaneously using the steering wheel (4).

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **CRAWL** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, "OFF" will flash at the bottom of the display.
- You can select one of the four steering functions by turning the knob (14) to the left or right. When "OFF" flashes, the crawler mode is switched off.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

A:		C:	
B:		D:	

A = Only front axle is steered

B = Only rear axle is steered

C = Front and rear axles are steered in the same direction (thus the vehicle can move diagonally)

D = Front and rear axles are steered in opposite directions (thus a smaller turning circle is achieved)

- If you press the knob (14) briefly, the indication will stop flashing. The current crawler mode setting will be saved.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

When the crawler mode is switched on, the indication (A, B, C and D; see above) will remain on the display (even if you exit the setup menu). When steering, you always have an overview of the currently active steering function.

n) "SVC" function: gyro function

The receiver has a built-in gyro sensor. It can be used to intervene in the steering or the throttle function (throttle/brake servo or speed controller) so that the vehicle does not oversteer.

Proceed as follows:

- If you press the knob (14) briefly, the **MODEL** function will be greyed out.
- Turn the knob (14) to the left or right until the **SVC** function is greyed out, as shown in the right figure.
- If you press the knob (14) briefly, "SVC ON" will flash at the top right of the display.
- You can select one of the following functions by turning the knob (14) to the left or right.

MODEL	NAME	REV	EPA
SUB-TR	D/R	EXP	ABS
TRIM	F.SAFE	CRAWL	SVC

"SVC ON": switching gyro function on/off

When "SVC ON" flashes, briefly press the knob (14). Use the knob (14) to switch the gyro function on ("ON" flashes) or off ("OFF" flashes). Briefly press the knob (14) to confirm.

→ If you have enabled the gyro function, "SVC ON" will be displayed later when you exit the setup menu.

"Neu.Cal": calibrating neutral position

When "Neu.Cal" flashes, you can calibrate the neutral position. Release the steering wheel (4) on the transmitter so that the steering is in the middle position. Make sure that the model is level and steady before proceeding with the calibration. Now briefly press the knob (14). The calibration will start and last only a few seconds.

→ Calibration is only possible when the gyro function is enabled.

"Reverse": enabling/disabling the reverse steering setting for the gyro function

When "Reverse" flashes, briefly press the knob (14). You can switch between "NOR" (Normal) and "REV" (Reverse) by turning the knob (14). This affects the direction of rotation of the steering servo when the gyro sensor detects a swerving vehicle. Briefly press the knob (14) to confirm.

→ If set incorrectly, the gyro function will enhance the swerving of the vehicle. The setting must be selected so that the steering servo is counter-steered.

"St.Gain": setting gain for steering function

When "St.Gain" flashes, briefly press the knob (14). You can now adjust the extent to which the steering function will be affected by the gyro sensor by turning the knob (14) (the higher the value, the more the steering servo is counter-steered). Briefly press the knob (14) to confirm.

"Th.Gain": setting gain for throttle function (throttle/brake servo or speed controller)

When "Th.Gain" flashes, briefly press the knob (14). You can now adjust the extent to which the throttle function (throttle/brake servo or speed controller) will be affected by turning the knob (14) (the higher the value, the greater the effect). Briefly press the knob (14) to confirm.

The setting prevents the vehicle from swerving when accelerating out of a curve.

→ The gyro sensor only affects the throttle function (throttle/brake servo or speed controller) for forward travel.

"Priority": oversteering the gyro function by steering movements

When "Priority" flashes, briefly press the knob (14). You can now adjust the extent to which the gyro function will be affected by "desired" steering movements by turning the knob (14). Briefly press the knob (14) to confirm.

The higher the setting value, the lower the effect of the gyro function on the actual steering movements with the steering wheel (4). Steering movements with the steering wheel (4) thus take precedence over the gyro sensor.

- If you press the knob (14) briefly, the indication will stop flashing. The current crawler mode setting will be saved.

→ If desired, you can now select another function to be changed by turning the knob (14).

To exit the setup menu instead, briefly press the "BACK" button (13). The transmitter will emit a short beep, and the greyed out field will disappear from functions at the top of the display. The transmitter is back in its normal mode.

14. Checking the steering and driving functions

a) Steering function

Place the vehicle on a suitable surface so that all wheels can rotate freely and the vehicle is secure. Do not touch rotating or moving parts. There is a risk of injury!

First switch on the transmitter and, if you have not already done so, set the trimming for the driving and steering functions in the middle position.

Then turn on the voltage/power supply of the receiver. If you have connected and mounted everything properly, then the model should respond to the turning movements of the steering wheel (4).

When the steering wheel is in the middle position, the wheels of the vehicle should be aligned straight. If the wheels are at an angle, even though the steering wheel is in the middle position, check that the servo lever is correctly positioned on the steering servo. The steering linkage rods can be readjusted, if necessary.

If you turn the steering wheel on the transmitter to the left, the wheels of the vehicle must turn to the left. If you steer to the right, the wheels must turn to the right.



Warning!

The operation of the steering wheel on the transmitter requires only slight force. Therefore, it is absolutely sufficient if you operate the steering wheel only with your fingertips. Attempting to turn the steering wheel with increased force upon reaching the end stop can lead to the destruction of the steering mechanism in the transmitter. This will void the warranty.

If the wheels turn in exactly the opposite direction, you can enable the reverse steering setting. This will reverse the servo direction. Under certain circumstances, a readjustment of the steering trimming may be required.



Important!

Adjust the steering linkage on your model so that the full steering deflection to the left and right is achieved without any mechanical impact or limitation on the steering. If the steering linkage turns out to be too large when operating the model, it can be reduced with the EPA setting.

b) Drive function

If you pull the throttle/brake lever (6) all the way to the handle, the model should accelerate. If you push the throttle/brake lever forward away from the handle, the model should brake or switch to reverse travel.

If the drive of your model behaves exactly the opposite, then you can enable the reverse setting for the driving function.



Important!

For a model with an internal combustion engine, adjust the carburettor and brake linkage rods so that the throttle/brake servo is not mechanically limited. The trimming setting for the driving function must be in the middle position.

For a model with an electronic speed controller, different positions of the operating lever for the driving function (forward, stop, reverse) may have to be programmed in the speed controller. Further related information can be found in the documents for the speed controller. If the speed controller is not programmable, adjust the trimming so that the vehicle is stationary when the operating lever for the driving function is in the middle position.

c) Auxiliary channels

Always make sure that the servos do not run against the stop. This means that the servos do not strike mechanically in the respective end positions. This leads not only to increased power consumption, but also to an overload of the servo gearbox.

You can limit the end positions of the servos using the EPA setting, if necessary.

15. Maintenance and cleaning

This product does not require maintenance. Never disassemble it (except for the procedure for inserting the batteries into the transmitter described in these operating instructions).

Clean the outside of the transmitter and receiver only with a soft, dry cloth or brush. Never use abrasive cleaning agents or chemical solutions, as these may damage the surface of the case.

16. Disposal

a) Product



Electronic devices are recyclable waste and must not be disposed of in the household waste. At the end of its service life, dispose of the product according to the relevant statutory regulations.



Remove any inserted batteries and dispose of them separately from the product.

b) (Rechargeable) batteries

You as the end user are required by law (Battery Ordinance) to return all used batteries/rechargeable batteries. Disposing of them in the household waste is prohibited.



Contaminated (rechargeable) batteries are labelled with this symbol to indicate that disposal in the domestic waste is forbidden. The designations for the heavy metals involved are: Cd = Cadmium, Hg = Mercury, Pb = Lead (name on (rechargeable) batteries, e.g. below the trash icon on the left).

Used (rechargeable) batteries can be returned to collection points in your municipality, our stores or wherever (rechargeable) batteries are sold.

You thus fulfil your statutory obligations and contribute to environmental protection.

17. Declaration of Conformity (DOC)

Conrad Electronic SE, Klaus-Conrad-Straße 1, D-92240 Hirschau, hereby declares that this product conforms to Directive 2014/53/EU.



Click on the following link to read the full text of the EU Declaration of Conformity:

www.conrad.com/downloads

Select a language by clicking on the corresponding flag symbol, and then enter the product order number in the search box. The EU Declaration of Conformity is available for download in PDF format.

18. Troubleshooting

Even though the remote control system was built to the latest available technology, malfunctions or faults might still occur. The following section shows you how to troubleshoot potential faults.

Problem	Solution
The transmitter does not respond	<ul style="list-style-type: none">• Check the batteries in the transmitter and replace them with new ones, if necessary.• Check that the batteries are inserted correctly.• If you are using a two-cell LiPo rechargeable battery (rated voltage 7.4 V) with BEC connection for the transmitter, be sure to charge it.
The servos do not react.	<ul style="list-style-type: none">• Check the voltage/power supply of the receiver.• Test the BEC function of the speed controller.• Check the polarity of the servo plugs.• Re-pair the receiver with the transmitter (use the binding function).• Check the dual rate setting of the transmitter (if the dual rate setting is too low, the servos will stop working).• Check the EPA setting of the transmitter.
The servos shake.	<ul style="list-style-type: none">• Check the voltage/power supply of the receiver.
One servo is humming.	<ul style="list-style-type: none">• Check the voltage/power supply of the receiver.• Check that the linkage rods run smoothly.• The servo is running against the stop, limit the servo travel using the EPA setting.• For test purposes, operate the servo without the servo lever.
The system has only a low range	<ul style="list-style-type: none">• Fold up the transmitter antenna.• Do not point the transmitter antenna to the model. Both antennas must be parallel for optimal range.• Check the voltage/power supply of the receiver.• Check the batteries in the transmitter and replace them with new ones, if necessary.• If you are using a two-cell LiPo rechargeable battery (rated voltage 7.4 V) with BEC connection for the transmitter, be sure to charge it.• For test purposes, reorient the receiver antenna. To achieve a high range, the antenna must protrude as vertically as possible from the vehicle.
The transmitter turns off straight away or after a short while	<ul style="list-style-type: none">• Check the batteries in the transmitter and replace them with new ones, if necessary.

Vehicle does not steer	<ul style="list-style-type: none"> • Check that the steering linkage is running smoothly. • Check the steering servo and steering linkage. It may be blocked by stones/ foliage or the like. • Check the connection of the steering servo (channel 1). • Check the dual rate setting of the transmitter (if the dual rate setting is too low, the servos will stop working). • Check the EPA setting of the transmitter. • Check the setting of the "CRAWL" function (it is only useful for crawler vehicles with all-wheel steering).
Indefinable driving behaviour when steering	<ul style="list-style-type: none"> • Check the setting of the "SVC" function. If it is enabled (the display shows "SVC ON"), switch it off for test purposes.

19. Technical data

a) Transmitter

Transmission frequency.....	2.408 - 2.475 GHz
Transmission power.....	<20 dBm
Canal	6
Voltage/power supply	4 AA/Mignon batteries or two-cell LiPo rechargeable battery (rated voltage 7.4 V) with BEC connection
Dimensions (H x W x D)	243 x 95 x 158 mm
Weight	approx. 296 g (without batteries)

b) Receiver

Power supply	4.0 - 8.4 V/DC
Canal	6
Coding	AFHDS2A
Plug-in system	Futaba/Graupner JR
Gyro integrated	yes
Dimensions (L x W x H)	30 x 22 x 16 mm
Weight	approx. 8 g

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