

C€0678**①**

RC Logger R8 Radio System



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1. INTRODUCTION

Dear customer.

Thank you for making the excellent decision to purchase this RC Logger® product. You now have a high-quality product with a name that represents outstanding products.

This product complies with the applicable National and European standards and regulations. We kindly request the user to follow the operating instructions, to preserve this condition and to ensure safe operation! These operating instructions relate to this product. They contain important notices on commissioning and handling. Please take this into consideration when you pass the product on to third parties.

Please keep these instructions for future reference!

All company names and product designations contained herein are trademarks of the respective owners. All rights reserved.

We wish you a great deal of enjoyment with your new RC Logger® product!



From here onwards the RC Logger R8 Radio transmitter is simply referred to as »Transmitter and the RC Logger R8

2. DELIVERY CONTENTS

- 1x Transmitter
- 1x PPM Receiver
- 1x PPM cable
- 1x Telemetry cable
- 1x Binding cable
- 1x USB cable (Trainer port to A-type USB plug)
- 1x Metal plate
- 1x Operating instructions

3. MODULES



The operating instructions have been designed in a fashion that you as the end user can easily navigate them and operate the product safely and to your full satisfaction. For easier handling, we have divided up the operating instructions/maintenance manuals into different modules.

Each set of instructions is labelled with its corresponding MODULE INDICATOR in the right bottom corner on the cover page (e.g. M2). These indicators are used when crossreferring to other modules.

4. LATEST OPERATING INSTRUCTIONS



ENGLISH: Please download the latest version of the operating instructions from our website at www.rclogger.com. Navigate to the product page and open the "Downloads" tab. Click on "Operating instructions" to start the download.



DEUTSCH: Bitte laden Sie die neueste Ausgabe der Bedienungsanleitung von unserer Website herunter, unter www.rclogger.com. Navigieren Sie bis zur Produktseite und öffnen Sie das Register "Downloads". Klicken Sie auf "Operating instructions", um den Download zu starten.

5. SYMBOLS



RED stands for danger and alert. Read these sections always to avoid accidents and product damage.



BLUE provides you with additional useful information, and



GREEN stands for user safety. GREEN also stands for good practice, protecting your product from damage.

6. INTENDED USE

Use the »Transmitter to control the »NovaX 350 model guad copter, for which it has been specifically designed. The »Transmitter is solely intented for private use in the model making area. Do not use it for commercial applications.

Any use other than the one described can damage the device. Moreover, this involves dangers such as short circuit, fire and electric shock, etc. Observe the safety information under all circumstances! The product must not become damp or wet.

For safety and approval purposes (CE), you must not rebuild and/or modify this product. If you use the product for purposes other than those described above, the product may be damaged. In addition, improper use can cause hazards such as short circuiting, fire, electric shock etc. Read the instructions carefully and keep them.



Make this product available to third parties only together

7. SAFETY INSTRUCTIONS



Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling in this manual, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.

Persons/Product 7.1

- > The device is not a toy. Keep it out of the reach of children and pets.
- > Do not leave packaging material lying around carelessly. These may become dangerous playing material for children.
- > If it is no longer possible to operate the product safely, take it out of operation and protect it from any accidental use. Safe operation can no longer be guaranteed if the product:
 - » is visibly damaged,
 - » is no longer working properly.
 - has been stored for extended periods in poor ambient conditions, or
 - has been subjected to any serious transport-related stresses. The product must not become damp or wet. It uses delicate electronic components which are sensitive to temperature fluctuations and are optimised for a particular temperature range. Operating temperatures below 0°C must be avoided.
- > Do not place the product under any mechanical stress.
- > Handle the product carefully. Jolts, impacts or a fall even from a low height can damage the product.
- > Never expose the product to direct sunlight or excessive heat for an extended period of time

- > Do not place the »Transmitter on the ground when model and »Transmitter are turned on. In case the »Transmitter tips over, the motors may accidentally start and the model take off
- > Do not use the product during rainy weather or thunderstorms, in wet conditions, or when lightning is expected or present.

Radio signal

- > Maintain a distance of at least 20 cm between the »Transmitter's antenna and persons.
- > Large objects, walls, pillars, etc. may reduce the radio signal quality, which may result in the loss of control over the model. Avoid flying behind such objects.
- > High voltage power lines or communication broadcasting towers may influence the quality of the radio signal and lead to signal loss. Keep sufficient distance.
- > Do not touch or hold the »Transmitter's antenna during operating. This may consequently degrade the quality of the transmitted signal.
- > The strongest area of transmission is located at the sides of the antenna. As such, do not point the antenna directly at the model. You may easily correct this situation by adusting the angle between antenna and model (e.g. Slightly turn the »Transmitter to the left or right).

7.3 Before commissioning

- > Before every flight, check the functional reliability of the product. Watch out for any visible damage such as defective plug connections or damaged cables and wires.
- > Before you fly, make sure the batteries have sufficient capacity. If the batteries are empty, always replace the complete set.
- > Before you turn on the »Transmitter, move sticks and set switches to their neutral or zero positions.
- > Always switch on the »Transmitter first before connecting the battery to the model.
- > Test all controls and ensure proper functioning. If »Transmitter and model support "Fail Safe" functionality run the necessary tests before every flight.

7.4 During operation

- Do not take any risks when operating the model. Your own safety and that of your environment is solely down to you being responsible when dealing with the model.
- > Use the product only if your ability to respond is unrestricted. The influence of tiredness, alcohol or medication can cause incorrect responses.
- Never switch off the »Transmitter while the model is in use. After landing, always disconnect
 the flight battery first and then switch the »Transmitter off.

7.5 Batteries

- > Correct polarity must be observed while inserting the batteries.
- > Batteries should be removed from the device if it is not used for a long period of time to avoid damage through leaking. Leaking or damaged batteries might cause acid burns when in contact with skin, therefore use suitable protective gloves to handle corrupted batteries
- > Batteries must be kept out of reach of children. Do not leave batteries lying around. There is a risk that children or pets swallow them.
- All batteries should be replaced at the same time. Mixing old and new batteries in the device can lead to battery leakage and device damage.
- > Batteries must not be dismantled, short-circuited or thrown into fire. Never recharge non-rechargeable batteries. There is a risk of explosion!

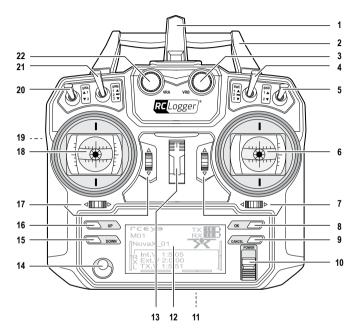
7.6 Miscellaneous

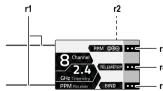
- > Consult an expert when in doubt about operation, safety or connection of the device.
- Maintenance, modifications and repairs are to be performed exclusively by an expert or at a qualified shop.
- If you have questions that remain unanswered by these operating instructions, contact our technical support service or other technical personnel.

8. UNPACKING

- > Work on a soft and clean mat.
- Open the box, take out all parts and open the polybags. Place all parts on the mat, but keep them together as packed in the polybags.

9. PARTS AND COMPONENTS





Transmitter (Tx)

- Antenna
- Handle
- Analog knob VRB
- Auxiliary switch (3 pos.) SWA
- Auxiliary switch (2 pos.) SWD
- Right control stick
- Right trims
- Key OK
- Key CANCEL
- Power switch POWER
- Battery compartment (underside)
- 12 LC Display
- 13 Neck strap attachment
- Binding key
- Key Down
- Key UP
- 17 Left trims
- Left control stick
- Trainer port TRAINER (backside)
- Auxiliary switch (2 pos.) SWA
- Auxiliary switch (3 pos.) SWB
- 22 Analog knob VRA

Receiver (Rx)

- Antenna
- Indicator light
- Header connector PPM
- Header connector TELEMETRY
- Header connector BIND

10. RECEIVER (RX)



WARNING! DO NEVER let the bare wire of an antenna touch PCB boards, carbon fibre parts, electrical/electronic or metal components. The electronic system may immediately be destroyed!

10.1 Bind transmitter and receiver



»Transmitter and »Receiver are bound during production. It may, however, at some point be necessary to manually

In simple terms, binding can be described as establishing a communication channel between »Transmitter and »Receiver

The »Receiver relies on an external power supply. There are two ways to supply power during binding:

- > PPM port on the »NovaX 350
- > External power source (voltage range: 4.0 to 6.5 V/DC):
 - » USB
 - » 5 V/DC BEC regulator RC EYE: UBEC (3A) 90012RC (visit www.rclogger.com for more information)

10.1.1 PPM port on NovaX350



When using the flight battery for binding, always remove the propellers before you start.

- 1. Study the »Receiver statuses table in section '10.2 Receiver statuses' on page 11 before you start.
- 2. Remove the canopy from the »NovaX 350.
- 3. [If »Receiver is installed] Disconnect the PPM cable from the »Receiver. Doing so eliminates the likelihood of the »NovaX 350 inadvertently starting up.
- 4 Turn the »Transmitter off
- 5. Install the flight battery into the »NovaX 350.
- 6. Plug the binding cable into the 3-pin header connector BIND (r5) on the »Receiver.
- 7. Connect the PPM cable to the 3-pin header connector PPM (r3) on the »Receiver and the other end to the PPM IN socket on the power board.
- 8. Connect the flight battery and power cable on the »NovaX 350.
- 9. The RED indicator light on the »Receiver starts to flash fast, indicating the binding mode.
- 10. Press and hold the binding key (14) on the »Transmitter and slide the power switch POWER (10) up to turn the »Transmitter on. The LC display (12) displays "RXBinding..".
- 11. Binding is complete when the indicator light (r2) on the »Receiver is solid.
- 12. Disconnect the »Receiver from the power supply.
- 13. Turn the »Transmitter off.
- 14. Remove the binding cable from the »Receiver.
- 15. Connect the »Receiver to the »NovaX 350's power supply.
- 16. Turn the »Transmitter on.
- 17. [If channels are assigned] If you have previously assigned channels, test the »NovaX 350's functions. If necessary, refer to the corresponding chapters in the »NovaX 350 operating instructions. If the »NovaX 350 does not function as expected repeat the binding procedure.

10.1.2 External power source

You may use an external power source to supply the »Receiver with power (e.g. a USB charger or BEC regulator). Observe the operating voltage range specified on the »Receiver and make sure your power source can operate within this range. Necessary connecting cables/adapters are not supplied and can be purchased from specialist shops or www.rclogger.com.

As for the binding procedure (excluding the connection of the flight battery), follow the instructions provided in section '10.1.1 PPM port on NovaX350' on page 10.

10.2 Receiver statuses

The indicator light (r2) of the »Receiver indicates different statuses, which are summarized in the below table:

Indicator light	Status
Blinks fast	Binding mode
Blinks slowly	Disconnected
Solid	Connected

11. TRANSMITTER

11.1 Batteries



Do not use rechargeable batteries.

- 1. Turn the »Transmitter over.
- 2. Open the battery compartment in the direction of the arrow and remove the compartment cover.

- 3. Insert 4 new alkaline AA batteries into the battery recesses. Mind the polarity indications
- 4. Close the battery compartment and make sure it locks properly.
- > When replacing the batteries, proceed in the same fashion.

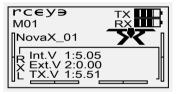
11.2 Basic functions



Always remember to first disconnect the power supply to the model and then turn off the »Transmitter.

11.2.1 Turning the transmitter on and off

Refer to the chapter '10.1 Bind transmitter and receiver' on page 10 in order to fully understand this section.



!! Warning !! Place all switches in their up position and lower the throttle

Fig. 3 Fig. 4

11.2.1.1 Turning on

Slide the power switch POWER up to turn the »Transmitter on. The LC display lights up. Wait until you see the home screen [Fig. 3] and hear a triple signal sound.

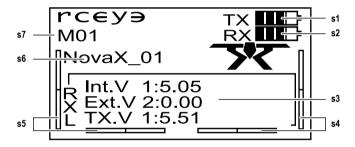
> If not all auxiliary switches are in their neutral or zero position (position 1) a warning message (See. [Fig. 4]) will appear and audible alert sounds be emitted. In this case, turn the »Transmitter off and set all switches to position 1 before turning it on again.

If the »Transmitter does not detect any user input within a preset time interval an audible alert will sound. Refer to section '11.4.9 Alarm settings' on page 15 for more information.

11.2.1.2 Turning off

- 1. Disconnect the flight battery.
- 2. Slide the power switch **POWER** down to its off position.
- 3. The LC display goes out.

11.2.2 Home screen



- s1 Transmitter battery status ('Beep' alert if < 4.2 V)
- s2 Receiver battery status (power supply via power board)
- s3 Data feedback
- s4 Right trims
- s5 Left trims
- s6 Model name of selected model
- s7 Model number of selected model

11.2.3 Main menu

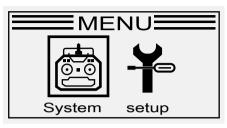


Fig. 5

The main menu [Fig. 5] is divided into two submenus: { System } and { Functions }

- > With the system menu you manage up to 20 models (A model is a unique set of settings) and set up the »Transmitter. With the functions menu you set up individual models.
- > Press and hold the key **OK (8)** to enter the main menu.

Study the following table to learn more about the menu keys:

Key	Function	Sound pitch
OK	Press and hold to enter the main menu Enter submenus Confirm selection or setting	Medium
OK	Press and hold to confirm settings	High
CANCEL	Exit submenu or menu; Cancel input	Low
UP	Move up; Make adjustments	Medium
DOWN	Move down; Make adjustments	Medium

11.2.4 Backlight

The backlit LC display allows you to safely operate the »Transmitter in the dark as well as in bright conditions. In order to minimize battery drain, the backlight goes out after approx. 15 seconds counting from the last registered input via a menu key.

Every press of a menu key activates the backlight first (if off). It means that when the backlight is off you need to press a menu key twice in order to enter a submenu, save settings or execute a function.

11.2.5 LCD brightness

Navigate and set:

System » OK » LCD brightness » OK » UP/DOWN » OK (hold)

Adjust the screen contrast according to the surrounding light environment. A lower number provides less and a higher number more contrast.

11.3 Telemetry data

Telemetry data is collected real-time and transmitted to the »Transmitter for the pilot to monitor. Based on the data and the pilot's experience, the pilot may decide to tweak settings during flight or use the data for further analysis after flights.

Telemetry data comprises: Battery voltage, distance from home, flight altitude, GPS reception status, R.T.H. status, throttle timer, bank settings (AP/Sport/Custom mode).

To display telemetry data:

- 1. Turn the »Transmitter on.
- Press the key UP (16).
- 3. Telemetry data is displayed.
- Press the key CANCEL (9) to return to the home screen.

11.4 System settings

11.4.1 Selecting a model

There are in total 20 default models available. You can change their names and settings. After adjusting models to your own needs you can easily switch between them.

Navigate and set:

System » OK » Model select » OK » UP/DOWN » OK (hold)

11.4.2 Naming a model

Navigate and set:

System » OK » Model name » OK » UP/DOWN » OK » ... » OK (hold)

- 1. Select a model. See '11.4.1 Selecting a model' on page 13.
- 2. Navigate to and enter "Model name".
- 3. Select a letter with the keys UP and DOWN (15) and confirm the selection with the key **OK**. The cursor will move forward by one position. Continue naming your model.
- 4. Press and hold the key **OK** to confirm the name and exit.

11.4.3 Copying a model

You can copy settings of one model to another.

Navigate and set:

System » OK » Model copy » OK » UP/DOWN » OK (hold) » Yes/No » OK

- 1. Navigate to and enter "Model copy".
- 2. Select a source model and press the key **OK**.
- 3. Select a target model.
- 4. Press and hold the key OK.
- 5. Confirm or cancel your action.
- 6. Press the key **OK** to confirm your selection.

11.4.4 Resetting a model

Navigate and set:

System > OK > Model reset > OK > UP/DOWN > OK > Yes/No > OK

You can reset a model to its default settings (factory settings):

- 1. Navigate to and enter "Model reset".
- 2. Select the model you want to reset.
- 3. Press the key OK.
- 4. Confirm or cancel your action.
- 5. Press the key **OK** to confirm your selection.

11.4.5 RX setup



The following battery (power supply) settings are extremely important. These settings protect the model from crashing due to insufficient power supply and the flight battery from deep discharge.

Navigate:

System > OK > RX Setup > RX Battery > OK > UP/DOWN > OK > ... > OK (long)

It must be noted that the preset voltage values are not directly measured against the flight battery's voltage but the voltage supplied to the »Receiver via the power board. The default settings are in most cases sufficiently accurate to protect your model from damage. **The RX setup menu is read-only.**

Low voltage:

When the voltage of the flight battery falls or is below the preset value, the battery is considered discharged.

Alarm voltage:

When the voltage of the battery falls or is below the preset value, you will hear an audible alarm and the battery icon in the top tray of the display flashes.

High voltage

When battery voltage is equal to the preset value, it is considered fully charged.

11.4.6 Trainer mode

Navigate and set:

System > OK > Trainer mode > OK > UP/DOWN > ... > OK (hold)

The »Transmitter offers trainer/student collaboration, whereby the trainer (master) can temporarily hand over control to the student (slave) and take back control when necessary.

For this to work, another »Transmitter is required with identical stick modes (Mode 1 or Mode 2). Before you proceed, read the sections regarding trainer mode in the operating instructions of the other transmitter.

Connect a suitable trainer cable (not supplied) to the trainer port **TRAINER** (19) at the back of the »Transmitter. When the trainer mode is enabled, trainer/student collaboration is controlled by an auxiliary switch.

- 1. Navigate to "Trainer mode".
- 2. Switch "Mode" to "On" and press the key OK.
- Select an auxiliary switch (SWD is reserved for R.T.H. and cannot be assigned) for the trainer mode and press the key OK.
- 4. Press and hold the key **OK** to confirm the settings.
- 5. Flip the assigned switch to engage and disengage the mode:
 - >> 2-position switch: Pos. 1 = Disengaged, Pos. 2 = Engaged
 - >> 3-position switch: Pos. 1 = Disengaged, Pos. 3 = Engaged

11 4 7 Student mode

Navigate and set:

System > OK > Student mode > OK > OK > Yes/No > OK

In this mode, stick input is directly sent to the trainer's transmitter and all student settings are bypassed. When the »Transmitter operates in student mode it must not be connected to any receiver. Follow the on-screen instructions to enable and disable the student mode.

11.4.8 Timer settings

The »Transmitter is equipped with a timer and counter function.

11.4.8.1 Timer

Navigate and set:

System > OK > Timer Setting > OK > Timer > OK > UP/DOWN > OK (hold)

- > Start timer: Press the key UP or DOWN until "Start" is displayed. Press and hold the key **OK** to confirm the input and start the timer.
- > Cancel timer: Press the key UP or DOWN until "Stop" is displayed. Press and hold the key **OK** to confirm the input and cancel the timer. At this stage, even after leaving the menu, the time is preserved and you may restart the timer anytime. If you wish to reset the time, press and hold the key CANCEL after cancelling the timer.

11.4.8.2 Counter

Navigate and set:

System > OK > Timer Setting > OK > Counter > OK > UP/DOWN > OK >... > OK (hold)

- 1. Select counting mode: For the timer to count up set it to "Up" and to count down to "Down". Press the key OK to confirm the input.
- 2. Set the counter time (max. 60 minutes) with the keys UP and DOWN. Press the key **OK** to confirm the input.

- 3. Press the key **UP** or **DOWN** until "Start" is displayed. Press and hold the key **OK** to start the timer
- 4. When the preset time, depending on your settings, is reached or elapses, an audible alarm is emitted for a short time. Press and hold the key CANCEL to reset the time.
- > If you wish to prematurely cancel the counter, set "Start/Stop" to "Stop" and press and hold the key **OK** to cancel the counter. At this stage, even after leaving the menu, the time is preserved and you may restart the counter anytime.
- > While the counter is running you can cancel the counter and reset the time at the same time by pressing and holding the key CANCEL.

11.4.9 Alarm settings

The »Transmitter is equipped with an audible alarm function that notifies you after a preset time elapses, during which no switch, stick or key input was detected.

Navigate and set:

System > OK > Alarm Setting > OK > UP/DOWN > OK (hold)

- 1. Set the alarm time (1 to 10 min.).
- 2. Press and hold the key **OK** to confirm the input.
- > Any switch, stick or key input restarts the counter.
- > Any switch, stick or key input cancels the alarm and restarts the counter.

11.4.10 Firmware version

Navigate and set:

System > OK > Firmware ver. > OK/CANCEL

The screen displays version and compilation date of the installed firmware.

11.4.11 Firmware update

Navigate and set:

System > OK > Firmware update > OK > UP/DOWN > OK

Latest firmware releases are available from www.rclogger.com. Check regularly. A Windows® computer with USB interface is required for updating the firmware.

- 1. Turn the »Transmitter off.
- 2. Disconnect the »Receiver from the power supply.
- Connect the trainer plug of the USB cable (supplied) to the trainer port TRAINER and the USB A-type plug to a free USB socket (USB2.0 or USB3.0) on the computer.
- 4 Turn the »Transmitter on
- Navigate to the firmware update section in the »Transmitter's menu and start the update procedure. Confirm the confirmation prompt if you are ready to continue or else cancel the update procedure.
- 6. Follow the computer's instructions to complete the update.
- 7. After the firmware has been updated, disconnect the USB cable.
- 8. Turn the »Transmitter off and on again.
- 9. The »Transmitter is ready for use.

11.4.12 Factory reset

Navigate and set:

System > OK > Factory reset > OK > OK > UP/DOWN > OK

This function will reset all »Transmitter settings to their factory default values.

Important! Note that all system and modes settings will be lost and cannot be recovered once the reset process is in progress.

11.5 Functions settings

In the functions settings menu you adjust the settings for each model. Before you start to make adjustments, select a model in the System Settings (see '11.4 System settings' on page 13 '11.4 System settings' on page 13).

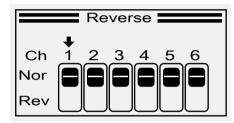
11.5.1 Reversing channels

This function lets you reverse channels (see [Fig. 6]). Set the channels according to your needs and preferences: **Ch** = Channel, **Nor** = Normal (Default), **Rev** = Reversed

Navigate and set:

Functions > OK > Reverse > OK > UP/DOWN > OK > ... > OK (long)

Use the key **OK** for navigating between the channels (CH1 – CH8).



Fia. 6

11.5.2 End points

This function lets you set the travel of each channel (see [Fig. 7]). Reduce travel with smaller and increase travel with larger values.

Navigate and set:

Functions > OK > End points > OK > UP/DOWN > OK > ... > OK (long)

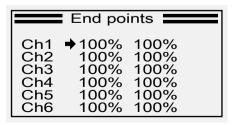


Fig. 7

Depending on the stick/switch configuration, switch and stick input make the channel bars move to the left (lower extent) or right (upper extent) when viewed in the "Display" menu (see '11.5.3 Display' on page 17).

Study the diagram of [Fig. 8] to get a better understanding of end point settings. The diagram shows two different lower extent end point settings (100 % and 30 % respectively) for the same channel. Stick travel (denoted by x) remains the same in each case.



Fig. 8

Setting the endpoints:

- 1. Navigate to the end point section in the »Transmitter's menu.
- 2. Select a channel with the key OK.
- 3. Adjust the percentage values with the keys UP and DOWN. Confirm the settings with the key **OK**. The arrow jumps to the next channel.
 - » The left column displays the lower extent values and the right column the upper extent values.
 - » To switch from lower extent to upper extent and back, move the corresponding channel stick/switch in the corresponding direction.
- Set the other channels.
- 5. To save and exit the end point settings press and hold the key **OK**.

11.5.3 Display

The "Display" screen [Fig. 9] displays the real-time status (upper and lower extent) of each channel (channel input). In the student mode, the settings of the trainer's transmitter are displayed.

Navigate and set:

Functions > OK > Display > OK > OK/Cancel

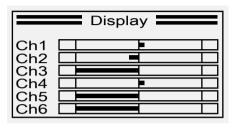


Fig. 9

11.5.4 Auxiliary channels

Navigate and set:

Functions > OK > Aux. channels > OK > UP/DOWN > OK > ... > OK (long)

This function lets you assign an auxiliary control (switch or analog knob) to channels 7 and 8. Channel 1, 2, 3 and 4 are assigned to the sticks (reserved).

Source designations:

> Switches: SwA, SwB, SwC, None (no assignment)

> Analog: VrA, VrB



Only channels 5, 6, 7, and 8 are assignable.

11.5.4.1 Assign switches/analog knobs

- 1. Navigate to the "Aux. channels" section.
- 2. Select a channel with the key UP or DOWN and continuously press the key OK to select a switch/analog knob.
- 3. Press the key **UP** or **DOWN** to select the next channel.
- 4. When you have set all channels according to your needs, press and hold the key **OK** to save all settings and exit the menu, or press the key CANCEL to exit without saving.

11.5.4.2 Upper and lower extents

The below table summarizes to you how the extents correspond to the controls' positions:

Control	Extent transmission*
2-position switch	Pos. 1: Lower extent
	Pos. 2: Upper extent
3-position switch	Pos. 1: Lower extent
	Pos. 2: None
	Pos. 3: Upper extent
Stick	Down/Left: Lower extent
	Up/Right: Upper extent
Analog knob	Turning anticlockwise from mid-position: Lower extent
	Turning clockwise from mid-position: Upper extent
	Mid-position: None

^{*}If a channel is reversed, the positions are reversed as well. Refer to section '11.5.1 Reversing channels' on page 16 for details.

11.5.5 Subtrim

Adjust the servo mid-points with this function (see [Fig. 10]).

Navigate and set: Functions > OK > Subtrim > OK > UP/DOWN > OK > ... > OK (long)

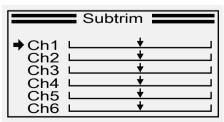


Fig. 10

- 1. Press the key **OK** to navigate between channels (CH 1 CH 8).
- 2. Press the key **UP** and **DOWN** to apply subtrim.
- Press and hold the key **OK** to save the settings and exit the menu, or press the key CANCEL to exit without saving.

11.6 Trimming

For fine trimming or trimming during flight, use the left (17) and right (7) trims. Fine trim settings are displayed on the LC display. Refer to 'Fig. 3' on page 11 for more information. Each fine trim position has a distinct sound pitch associated with it. Refer to the following table:

Left/Down	Mid position	Right/Up
Short sounds and lower pitch	Long sound	Short sounds and higher pitch

11.7 Direction of antennas during operation

It is important that you do not directly point the »Transmitter's antenna at the »NovaX 350 during operation as doing so weakens the transmitted signal. For best signal strength maintain an angle of 90° between »Receiver and »Transmitter antenna.

11.8 Channel learning

Channel learning is required if the »Transmitter shall be used to control the »NovaX 350. Refer to the »NovaX 350 operating instructions for instructions on how to calibrate the »Transmitter.

11.8.1 Auxiliary switch SWD

Channel 5 is permanently assigned to R.T.H. and switch **SWD** (5). Do not assign any channels to switch **SWD**. Refer to the »NovaX 350 operating instructions to learn more about R.T.H.

12. MAINTENANCE, CARE AND REPAIR

- > Disconnect the »Receiver from the power supply and remove the batteries from the »Transmitter before cleaning.
- > Never submerge the products in water or other liquids.
- > Regularily clean the products with a soft, dry cloth or brush. Do not apply too much pressure to the housing to prevent scratching.
- > Do not use any aggressive cleaning agents, rubbing alcohol or other chemical solutions as they can cause damage to the housing and malfunctioning.

12.1 Removing the throttle spring

The neutral position of the throttle stick is in the centre (zero position). A spring ensures that the stick returns to the neutral position when you let go of it.

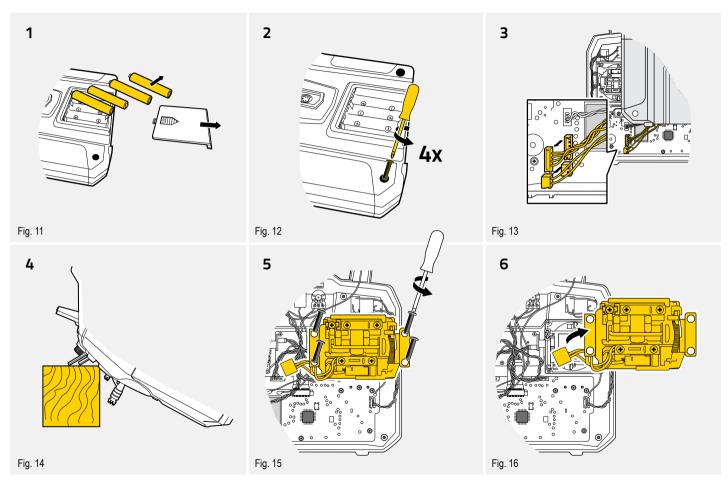
This design offers a lot of advantages to inexperienced pilots but may be impractical for more experienced ones. For this reason, pilots can remove the throttle spring by which the throttle's zero position is shifted from the centre to the bottom stop. In other words, the zero position is reached by moving the stick to the bottom. Follow the instructions.

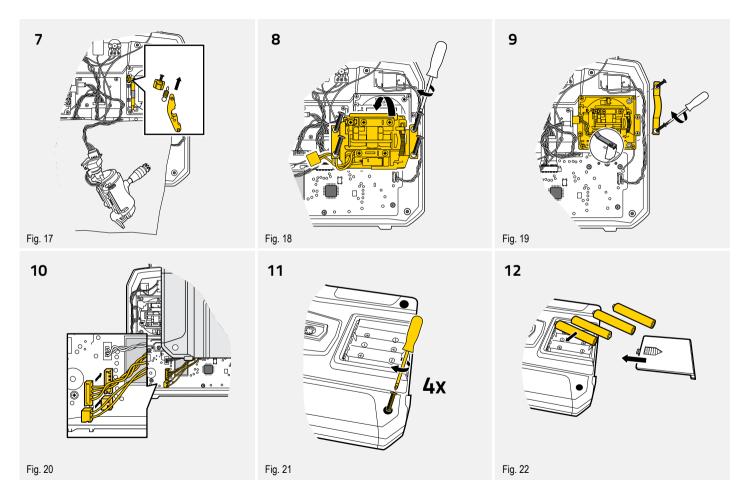


Avoid electromagnetic discharge! Discharge yourself before touching electronic components.

- 1. Turn the »Transmitter off, open the battery compartment and remove the batteries (see [Fig. 11]).
- 2. Remove the 4 screws that hold the housing together (see [Fig. 12]).
- 3. Open the housing. Mind the two cables that connect front and back! Carefully unplug the cables from the PCBA (see [Fig. 13]).
- 4. Place the transmitter on a wooden (or similar) block to prevent the sticks from touching the working surface (see [Fig. 14]). Work on a soft surface.
- 5. The throttle stick of a mode 2 transmitter sits on the left and on the right of a mode 1 transmitter. From this point forward, all instructions are based on a mode 2 transmitter. If you are working on a mode 1 transmitter, perform the same steps on the opposite side (note that the components are laterally-inverted).

- 6. Remove the 4 screws that hold the throttle stick in place (see [Fig. 15]).
- 7. From the front, gently push the throttle stick out of the housing (see [Fig. 16]). You do not need to disconnect the cable. Instead, use a piece of paper and carefully place the stick on it (see [Fig. 17]).
- 8. Remove the spring adjustment slider, spring and bar (see [Fig. 17]).
- 9. Replace the throttle stick and screws (see [Fig. 18]). Apply little force when tightening the screws
- 10. Place the supplied small metal plate over the straight knurled wheel on the right. Insert the nose of the plate into the notch as shown in [Fig. 19]. Bolt it down using the supplied screws. Adjust how hard or easy the throttle stick moves with the screw opposite the notch: loosen the screw for less or tighten it for more friction.
- 11. Re-connect the cables (see [Fig. 20]).
- 12. Close the housing and insert and tighten the four screws (see [Fig. 21]).
- 13. Insert the batteries (see [Fig. 22]).
- 14. The transmitter is ready for use.





13. DISPOSAL

13.1 General



In order to preserve, protect and improve the quality of environment, protect human health and utilise natural resources prudently and rationally, the user should return unserviceable product to relevant facilities in accordance with statutory regulations. The crossed-out wheeled bin indicates the product needs to be disposed separately and not as municipal waste.

13.2 Batteries



The user is legally obliged (battery regulation) to return used batteries and rechargeable batteries. Disposing used batteries in the household waste is prohibited! Batteries/ rechargeable batteries containing hazardous substances are marked with the crossed-out wheeled bin. The symbol indicates that the product is forbidden to be disposed via the domestic refuse. The chemical symbols for the respective hazardous substances are Cd = Cadmium, Hg = Mercury, Pb = Lead.

You can return used batteries/ rechargeable batteries free of charge to any collecting point of your local authority, our stores or where batteries/ rechargeable batteries are sold.

Consequently you comply with your legal obligations and contribute to environmental protection!

14. PRODUCT SUPPORT

Visit http://www.rcloager.com/support or call +852 2559 2662 for product support. Additionally, visit our Online Ticket System at http://support.rclogger.com for any RC Logger inquiry.

15. TECHNICAL DATA

15.1 Transmitter (Tx)

Frequency range	.2.4 GHz
Modulation	.GFSK
Channel resolution	.1024 steps
Number of channels	.8
Power supply	.6 V/DC, 4 x type AA batteries
Dimensions (W x H x D)	.approx. 190 x 174 x 89 mm
Weight	.approx. 392 g

15.2 Receiver (Rx)

Frequency range	2.4 GHz
Sensitivity	105 dBm
Modulation	GFSK
Number of channels	8
Antenna length	approx. 150 mm
Power supply	4.0 – 6.5 V/DC
Dimensions (L x W x H)	approx. 40 x 21 x 7.5 mm
Weight	approx. 6.4 g

16. DECLARATION OF CONFORMITY

CEI Conrad Electronic International (HK) Limited Manufacturer: License holder: CEI Conrad Electronic International (HK) Limited

Address: 18th Floor, Tower 2.

> Nina Tower, No. 8 Yeung Uk Road, Tsuen Wan, New Territories, Hong Kong

We declare on our own responsibility, that the product:

Kind of equipment: Digital Proportional Radio Control System

Model no: RC Logger R8 Radio System

is in conformity with following directives and standards or regulations:

FN 62311:2008

FN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 IEC 60950-1:2005 (Second Edition), Am 1: 2009

ETSI EN 301 489-17 V2.2.1 (2012-09) ETSI EN 301 489-1 V1.9.2 (2011-09) ETSI EN 300 328 V1.8.1 (2012-06)

CE marking on product:

C€0678⊕

CEI Conrad Electronic International (HK) Limited 18th Floor, Tower 2, Nina Tower, No. 8 Yeung Uk Road,

Tsuen Wan, New Territories, Hong Kong

(Ilian Ist)

Hongkong, 05/15/2015

Place and date of issue

Manufacturer/Authorized representative name and signature

17. FCC COMPLIANCE STATEMENT

FCC ID Transmitter: 2AARVRCL-R8RADIO FCC ID Receiver 2AARVRCI -RR8-TP

Statement according to FCC part 15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- > This device may not cause harmful interference, and
- > This device must accept any interference received, including interference that may cause undesired operation.

Statement according to FCC part 15.21

Modifications not expressly approved by this company could void the user's authority to operate the equipment.

18. LEGAL NOTES

These operating instructions are published by CEI Conrad Electronic International (HK) Limited, 18th Floor, Tower 2, Nina Tower, No. 8 Yeung Uk Road, Tsuen Wan, New Territories, Hong Kong.

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