# INSTRUCTION MANUAL



B-EX

## 5 CHANNEL OUTDOOR FLYING CAR

## SPECIFICATIONS:

Motors: 4x 2812 1560KV + 1x 2812 1000KV Speed controller: 3x 20A Simon K + 1x HW 25A EZRUN

Servo: 1x 9g metal geared

Rotor blades: 7x3.8 quad nylon + carbon fiber

Battery: 11.1V 6500mAh 25C

Flight time: mixed flight / drive - 15+ minutes

flying only - 8+ minutes

Maximum lift: 32 N Maximum side wind: 8m/s with

Flight Stabilization: Gyro stabilized on 3 axis, MW ii based

Radio Control (optional): 5 Channel

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## 1. THANK YOU

Thank you for your confidence in the product. You decided yourself to purchase a quality product, which results from a long time development.

The B-EX is readily mounted (plug and play) and was test flown and adjusted at the production site. It is necessary though to connect the battery to it, correctly. The power is delivered from a Lithium Ion Polymer Battery (Li Po-Battery) which is the latest standard in the industry.

Flying quad copters and this flying car is not a simple task. Even with the latest stabilization systems, the success will depend on the pilot after all. It is important that you read and understand this manual entirely prior to the first flight. The products of B go Beyond are subject to continuous quality control and hence provide top functionality and fun with the product. Technical perfection and solutions are our top directive. Experience, the feedback from clients and subsequent development of ideas and innovations makes it possible to provide state of the art products to our clients. The synergy of modern technology and the demand on high quality and paragon design lead to a long service life of our products.

We wish you a lot of fun with our product!

## 2. IMPORTANT NOTICES PRIOR TO FIRST USE

This manual helps you to use your B-EX in a safe manner. Every person, which operates, repairs, cleans or disposes of this B-EX must have read and understood the entire content of this instruction manual.

Please keep this instruction manual well stored, to be handy in case you need it.

If you sell or present this product to others, please pass this instruction manual along so that the next user is also able to use this product in a safe manner. This manual helps you to have a safe first flight. All steps are explained in this manual.

Get to know the functions of your B-EX - read "3. Description of product"

Read the Safety Notes - ("4. Safety Notes")

Charge the batteries - ("9. Handling of the Battery - Charging")

Prepare the B-EX - ("6. Getting ready for flying").

Start to your maiden flight ("8. Flying")

#### 3. DESCRIPTION OF PRODUCT

#### 3.1 PURPOSE OF USE

This B-EX is a radio controlled quad copter model, which can fly and drive indoors and also outdoors in calm wind conditions. This model is not suitable for high speed or acrobatic outdoor flights.

The B-EX is not a toy. I is a powerful and complicated aircraft. If handled inaccurately it can lead to personal injury or damage of property. The responsibility for safe operation is completely with you!

This product is intended for private use only and not for any commercial purpose.

#### 3.2 MODELS

Model Name: B-EX Item Number: B-EX-RTF, B-EX-PNP and B-EX-ARF. The product is available as a ready to fly version, plug and play version without transmitter and receiver as well as a kit version with no flight controller.

#### 3.3 DESCRIPTION OF FUNCTIONS

The B-EX is quad copter and car model, suitable for outdoor operation. Thanks to a stabilization the product flies extremely stable.

The power supply is provided by a Lithium-Ion-Polymer-Battery (LIPO), it is recommended to use a regular 11.1V 3500mAh 25C Battery with T-type plug (Deans).

The product is equipped with a prewired flight controller, that makes use of a 3 axis gyroscope and and a 3 axis accelerometer. The unit can even be equipped with an optional GPS sensor. Please refer to the MWW controller manual for these advanced setting changes on the controller.

It also comes along with a switching unit called "B-Control" which basically enables you to switch the car drive system on or off through a switch on your radio control. This switch is necessary to turn off the steering servo and the drive engine in flight.

## 4. SAFETY NOTES

This product was constructed and is produced according to actual industry standards. All common security directives and conformity requirements are met. Yet danger can come from the use of the product.

Your own safety should be worth 5 minutes of your time. It won't take longer to read through our safety notes. Probably you do know most of these, but please read through them anyway, so you won't miss an aspect unknown to you, which could protect you from harm.

## 4.1 GLOSSARY

You will find the following terms in this instruction manual:

#### Warning!

High risk. Ignoring this warning can cause injury and / or damage to property.

#### Caution!

Medium risk. Ignoring this warning can cause damage to the product.

#### Note:

Low risk. Issues which should be followed while using this product.

#### 4.2 COMMON NOTES

We want to inform you that it is required by law in certain countries to purchase a liability insurance to operate a radio controlled model. Prior to use, read this instruction manual completely and thoroughly. This manual is part of the product and must be kept available at any time.

Please understand that any warranty or liability can't be assumed if parts are used which are not recommended in this manual or if in case of repairs parts other than the original are used. This also includes repairs assessed by unqualified personnel.

Like all radio control locking elements – metal against metal – must be secured against loosening with blue Loctite® #222 thread lock. Accordingly all ball bearings have to be secured against slop in their bearing blocks with red Loctite® #641 bearing lock.

## 4.3 SAFETY AGAINST INJURY OR DAMAGE

#### Warning!

The B-EX is not a toy. I is a powerful and complicated aircraft. If handled inaccurately it can lead to personal injury or damage of property. The responsibility for safe operation is completely with you!

This quad copter contains four rotating rotors, which produce enormous force in flight. Persons, Animals and any obstacles must be kept off them. Parts of the body can be injured or cut off. If anything hits the operating rotors, the rotors and the object hitting it will be damaged or even destroyed. In case of a crash or after damaging the rotors, the quad copter has to be entirely checked and repaired. Otherwise the quad copter would become an unpredictable aircraft. Generally a continuous inspection and service of the quad copter is necessary, as this model consists of parts that do wear in flight. Prior to each flight a check must be performed, so that problems with the products can be solved prior to flight. Make sure that the batteries in your radio control transmitter are sufficiently charged, otherwise you may lose the control over your aircraft and the machine would fly uncontrolled and unpredictable. Radio controlled quad copters can become unpredictable if the radio control signal is jammed. The quad copter could suddenly move in any direction by itself in this case. Before you fly this product, it is necessary that you have read and understand this manual completely. Before flying, visit a hobby club or talk to an experienced RC model pilot. Changes in the construction of the model other than shown in the manual are not to be performed. As manufacturer and seller do not have any influence on the proper build and use of the product, all dangers that can result from use are clearly stated and not liability can be assumed from the use of this product.

The minimum free flight area for indoor use should be 3 meters in each direction. The allowed temperature range for operation is between +10 °C and +40 °C. Do not expose the model to direct sunlight longer than necessary,

humidity or dust. Do not fly the quad copter near persons or animals. Start your flight always with a fully charged battery. Have in mind that parts of the quad copter can warm up considerably.

## 4.4 SAFETY OF YOUR CHILDREN

#### Warning!

Children often are not able to evaluate dangers properly and are therefore subject to injure themselves easily. Therefore:

This model quad copter must not be operated by children under the age of 14. If operated by minors, it has to be operated only while an experienced adult is monitoring it. Make sure that the product is kept out of reach of children. Never place a portion of the product or the packaging in your mouth, it can cause severe injury or death.

#### 4.5 SAFETY AGAINST ELECTRIC SHOCK

## Warning!

The following safety notes should protect you against the risk of electric shock:

If the charger or the cable is damaged, it must not be used anymore. In this case, the item must be repaired by qualified personnel or replaced. Never let the quad copter or the charger get wet, or expose them to rain or other liquids, or to high humidity:

- Do not fly in rainy conditions
- Do not fly in very humid conditions
- Do not fly near open water

Do not touch charger, the power cord or the power plug with wet hands. Pull only the plug out of the socket, do not pull on the cord. Make sure not to bend or squeeze the power cord. Keep the power cord clear of hot surfaces. If you do not use the charger for a longer period, unplug it. Only then the charger is not consuming power. Avoid the use of power prolonging cords. If necessary, please make sure that:

- The prolonging wire is suitable for the required amperage;
- The prolonging wire is not damaged.

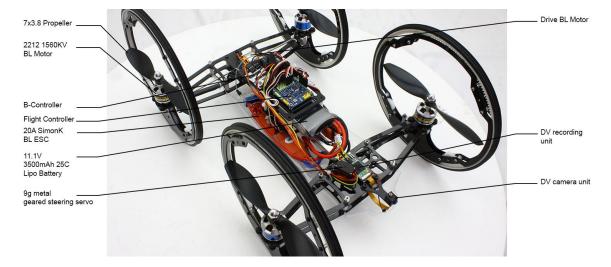
## 4.6 USE AND HANDLING OF BATTERIES

If batteries are empty, or if you do not intend to use the item for a longer period, the batteries have to be removed. Leaking batteries can damage the product. Dispose of empty batteries not properly, according to your local regulations. Make sure that you install batteries with correct polarity as shown (+/-). Batteries must not be charged while inside the remote control, nor are to be thrown into a fire, in both cases the batteries may explode. Use only the nominated battery type (type AA, 1,5V). Check the charge level of the batteries prior to each flight. The radio control does have a voltage indicator and will emit beeping sounds on low voltage levels.

## 5. DENOMINATION OF PARTS

#### **B-EX Components**

Canopy removed:



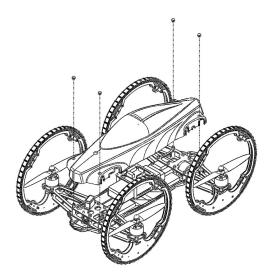
# 6. GET READY FOR FLYING

## 6.1 GETTING THE MODEL READY - RTF VERSION

- 1. Take the B-EX and all accessories out of the packaging.
- 2. Insert 8 AA Type batteries into the battery compartment on the backside of the radio control.



3. Remove the canopy from the B-EX by loosening the four screws.



4. Insert a fully charged flight battery into the battery compartment. You have to align it properly, so that the B-EX battery rests at the center of the model. Tighten the battery against movement during flight using the supplied Velcro.

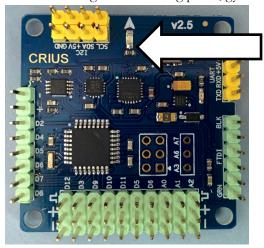
7

5. Switch on your transmitter.



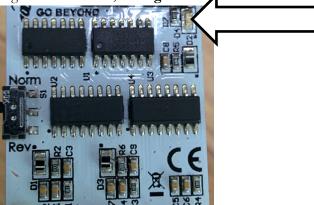
Note: The above pictures shows the Mode 1 configuration, with the throttle on the right hand side and Elevator on the left hand side. In Mode 2 configuration, the throttle is on the left hand side and the elevator on the right hand side. These two functions flipped. Also, the throttle lever is easy to identify, it's the lever without a spring return to center position.

6. Put the B-EX on even ground. **Caution!** In any case switch on the radio control prior to connecting the battery to the model. Jamming signals may result in an undesired takeoff or any other uncontrolled reaction of the model. Connect the battery to the B-EX and don't move it until the flight controller has calibrated and the blue LED stops flashing. **Caution!** If the B-EX is moved during this initializing phase, gyros may not be setup correctly.



7. If you want to drive, flip the Gear Switch on the radio, the green LED on the B-Controller will turn on. The car drive will now react to the forward and aft inputs as well as to the steering

inputs. If you can at any time switch of the drive mode, regardless of being on ground or in the air, by switching back the Gear Switch on the radio. If you move the model without having the flight mode enabled, the **flight** controllers blue LED will start blinking. This is normal.



8. If you want to fly, or fly and drive, you have to enable the flight controller. This is done by a joystick movement combination. The flight throttle lever has to be all way down to off, and then you have to move the rudder lever from the center position to full left rudder until the LED of the flight controller turns on solid blue. You can turn the flight controller off if the flight throttle lever is all the way down (the model has to be landed anyway, or it will fall out of the sky after turning off the controller) and then you have to move the rudder lever from center position to full right rudder, until the LED turns off.



**Warning!** Once the flight controller is armed and the blue LED turned on solid, it will start spinning the propellers at any flight throttle lever input above off immediately!

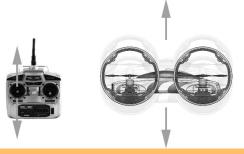
9. Move the throttle lever a little bit, so that the rotors start to spin slowly. Unarm the flight controller as described in step 8. The LED must turn off. Check the rotation direction of the rotors.



**10.** Flip the Gear switch on your radio control and watch the green light on the B-Controller go solid. Drive carefully forward and backward, check the steering of the car.

# 7. USE AND ADJUSTMENT OF RADIO CONTROL - MODE 2

## 7.1 THROTTLE



Left lever up/down: helicopoter rises and sinks.

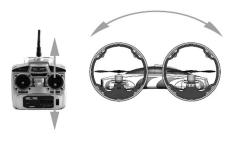
## 7.2 YAW



Yaw is the rotation of the quad copter around its main shaft. The quad copter will fly in the direction the nose points at:

Left lever left/right: Quad copter twists sidewards.

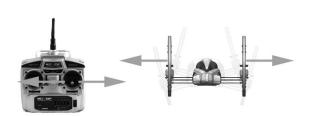
## 7.3 PITCH



Pitch means to pitch the quad copters nose up and down. Through pitching it, it starts flying forward and backwards.

Right lever up/down: Quad copter flies forwards/backwards.

## 7.4 ROLL



Roll means to fly the quad copter sideways. Through this function the quad copter flies left and right to the side:

Right lever left/right: Quad copter banks to the left/right.

#### 7.5 NOTES ON THE FLIGHT CONTROLLER MWII

The supplied flight control unit comes along with a couple of safety features. After connecting the battery pack, the systems LED will blink for a couple of seconds while the unit calibrates. It is necessary that model is not moved during this sequence. Unless a chain of security dependencies is fulfilled, the controller will not arm. Just after those dependencies are fulfilled, the LED on the unit will turn on. The unit is calibrated properly in the factory, it doesn't require any adjustment of the gyroscopes. But we want to mention at this point, that this flight controller has a lot of tuning parameters, can be connected to a GPS system and so on. A complete and thorough manual you can find for download on our website.

## 7.6 ADJUSTING THE MODEL

Now you have to adjust your B-EX. This means, that the radio control must be adjusted in a manner, that the B-EX keeps flying leveled and balanced. Put the quad copter at a distance of 2 meter from you on flat ground. Move the throttle lever up to around center position to make it start to hover. If you experience drift, you might have installed the battery out of the center of gravity. You can balance this drifting, you need to use the trims on your radio control (small levers next to the big control levers):

If the B-EX tilts back or forwards, move the trim lever of the pitch function in the other direction, until it stops.

If the B-EX twists left or right, move the trim lever of the yaw function in the other direction, until it stops.

If the B-EX tilts right or left, move the trim lever of the roll function in the other direction, until it stops.

These trim actions shouldn't be necessary at all if the model's battery is in the center of gravity.

#### 8. FLYING

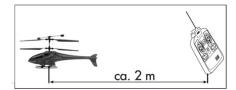
If you are a RC quad copter beginner, please make sure you are flying under the supervision of an experienced pilot. The spinning rotor blades produce enormous forces. Make sure that no children, animals or any other thing comes into the proximity of the quad copter, to avoid personal injury or damage of property. Make sure while flying indoors that the room is big enough. If you are flying outdoors make sure not to fly in windy conditions. The quad copter can cope with a certain amount of wind, but it still requires pilot skill to fly in windy conditions.

**Caution!** A quad copter consists of various parts which wear, such as bearings, linkages etc. A continuous maintenance is necessary to ensure safe operation. Like on real aircraft, a preflight check has to be performed to be able to find out problems prior to flight, so that they could not become the reason for a crash.

## 8.1 FLIGHT PRACTISE

Note: The most important rule is not to move the levers quickly on your radio control.

- 1. Put the quad copter on the ground.
- 2. Position yourself roughly 2 meters behind the quad copter.

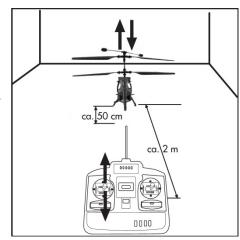


- **3.** Move the throttle lever up and see the rotors starting to turn.
- Increase the throttle quickly until the model starts to take off and hovers a few centimeters above ground.

If the quad copter will drift or turn strongly into one direction, you should repeat the adjustments (check "7.6 Adjust model"). Small adjustments can also be performed while flying by moving the trim levers accordingly.

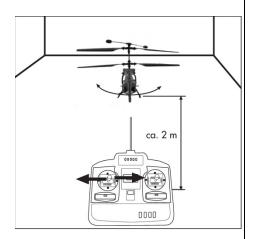
- 5. Practice until taking off and landing again a couple of times, until you feel safe with this exercise.
- 6. Then start to hover the model about 50 cm above ground.

Note: Above 30cm of ground clearance, the so called bottom effect is less strong. A kind of air cushion is built up below the quad copter, this disappears at heights beyond 50cm and the quad copter will hover much more stable and smoothly. The quad copter is now in hover. If in any stage you feel that you are losing the control over the model, pull down the throttle lever gently and land the quad copter safely. Repeat this exercise until you feel comfortable controlling a hover flight. You will have to learn how to correct with small inputs how to keep the quad copter in a spot, without drifting and turning.

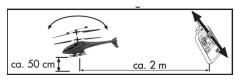


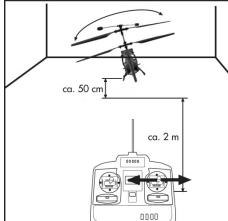
7. Now try to yaw the B-EX to the left and to the right:

Note: The yaw control performs rather slow on any quad copter. If you experience any movement right/left or forward/aft, you might want to check if the model is



- **8.** Then try to fly forwards and backwards with the quad copter:
- 9. Finally try to fly sideways to the left and right (roll it):





Repeat these excersizes as many times as necessary until you really handle the quad copter well. After that, you may start flying the quad copter around in any direction.

#### 8.3 IN CASE OF CRASH

If the quad copter is out of control and about to crash, pull back the throttle lever entirely. Once the rotors come to a standstill, disconnect the battery, then switch off the radio control. If you don't react in case of crash, further damage may come to the model.

## 9. BATTERY HANDLING / CHARGING

As B go Beyond can't supervise the proper way of charging and discharging the lipo batteries, any liability for defective batteries can't be assumed.

## 9.1 IMPORTANT INFORMATION

Lithium-Polymer-Batteries (Li Po-Batteries) are the newest generation of rechargeable batteries:

High Energy Density: In comparison to other technologies, like Ni Cd, Li Po batteries can carry up to three times the energy at the same cell weight. No Memory-Effect: Li Po-batteries can be charged anytime and at any given charge level. They do not require a metal housing, the electrodes are embedded in a plastic foil housing. Li Po batteries do not contain a liquid electrolyte, but the electrodes are embedded in a plastic polymer and therefore can be produced in any size and shape. The nominal capacity diminishes with each charge-discharge cycle, which is a normal. Li Po batteries will provide after 50 cycles a capacity of about 40-80% of the capacity of a new battery.

#### 9.2 SAFETY

Li Po-Batteries can cause – in case of improper handling – the following reactions: Explosion, Fire or Smoke.

Therefore one must follow this instruction manual, even lesser defects can result from improper handling, such as deformations or quickly diminishing capacities.

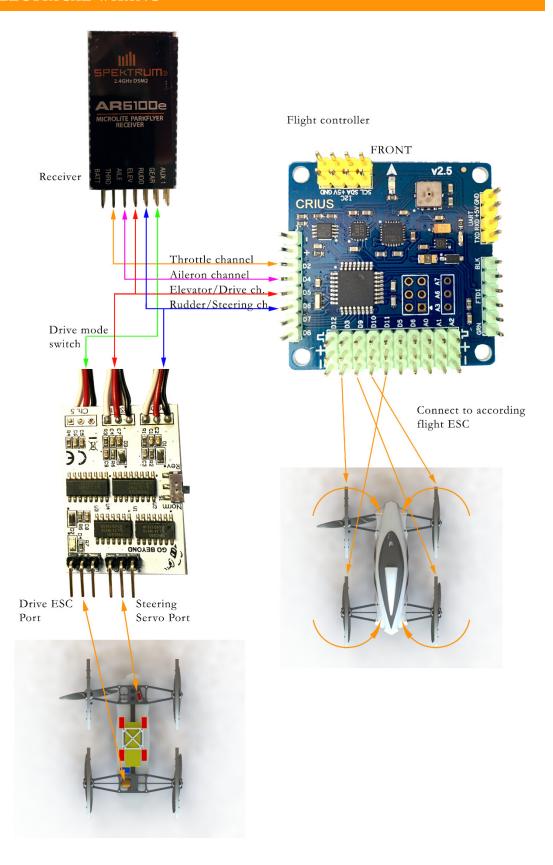
Improper storage reduces the battery capacity, therefore:

Protect Li Po Battery against direct sunlight and other heat sources and store at a temperature range from 0 °C - 50 °C. Charging the batteries must be monitored at all times! For charging, only certified Li Po battery charger must be used. While charging the battery must not be placed on a flammable or heat sensitive surface. Additionally, the surface should not be conducting electric currents. Easily flammable substances or items have to be kept at proper distance. Do not connect the batteries with wrong polarity to the charger (+/-). Lipo batteries should be stored at a capacity level of at least 10%. A deep discharge or storing them discharged will lead to the complete damage of the battery. Therefore also make sure that you never fly the batteries once they are depleted. Do not short circuit the batteries, the high currents may destroy it. Do not use sharp objects in the proximity of the battery, the soft housing can easily be pinched and destroyed. If air can enter into the battery, it will be completely destroyed. The battery should be mounted in a manner, that in case of a crash it will take no or minimum damage. As the battery does not have a metal housing, do not drop the battery and make sure that nothing will deform the surface of the battery. Damaged batteries are not to be used anymore and are to be disposed of properly. Make sure that the cells are completely discharged before disposing of them. Do not throw the batteries into open fire, nor let them get wet or in contact with any liquid. LiPo batteries are no toys for children and have to be kept out of their reach. If a part of the battery has been taken into the mouth, a doctor should be consulted immediately. Lipo batteries are not to be exposed to air pressures not suitable for humans, and are not to be placed into a microwave oven in any case. They are not to be disassembled, as this may lead to personal injury. The LiPo contains metals which are extremely poisonous. If any part of the electrolytes gets into contact with the skin or other body parts, a doctor must be consulted immediately. If the product is not in use, the battery has to be disconnected and take out of the model. The battery is not to be stored inside the model.

#### 9.3 CHARGING THE BATTERIES

The battery and the charger are optional equipment and a separate manual is supplied explaining the charging procedures. This manual does not address the process of charging.

# 10. ELECTRICAL WIRING



# 11. SPAREPART LIST

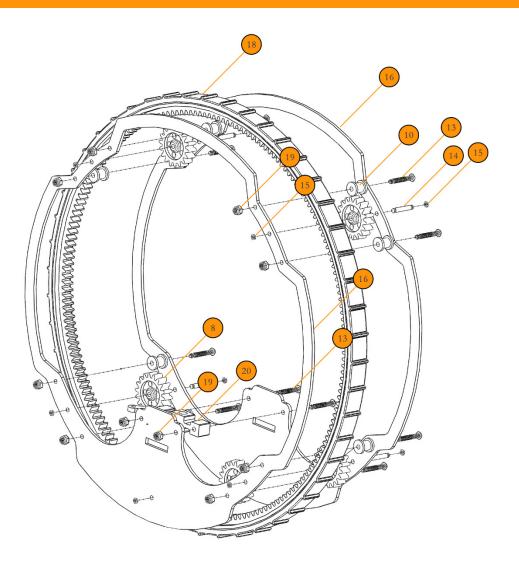
Spare part #	Name	Quantity	EXP Drawing #	Spare part #	Name	Quantity	EXP Drawing #
B-EX-001	Square Alu Tube	1	26	B-EX-011	Distance rod	8	4
B-EX-002	Drive Shaft	1	3		Distance rod	4	21
	Brass Gear 10T	2	33		Upper Tube Clamp	8	5
B-EX-003	Bushing	2	34		Lower Tube Clamp	2	25
	Bushing	2	35	B-EX-013	Upper Body	1	45
	AL Shaft	2	36		Lower Body	1	46
	Brass sleeve	2	37	B-EX-014	CW Prop 7*3.8	2	47
	Bushing	2	38		CCW Prop 7*3.8	2	48
B-EX-004	Inner Clamp	2	11	B-EX-015	Front Wheel Frame	4	16
	Outer Clamp	2	12		Back Wheel Frame	4	17
	Wheel Joint	2	39		Foam Tire	4	NA
B-EX-005	Gear Shaft & Clips	20	14	B-EX-016	Front Top Arm	1	49
B-EX-006	Spinner Base	4	28		Front Lower Arm	1	50
	Spinner Nut	4	27		Back Top Arm	1	1
B-EX-007	Canopy Screw	4	31		Back Lower Arm	1	2
	Canopy Distance rod	4	32	B-EX-017	AM Long Linkage	2	51
B-EX-008	Screw Pan head	16	30		AM Linkage	1	52
	Screw	16	6		AM Dog bone	2	53
	Screw Pan head	2	40	B-EX-018	Lower Battery Plate	1	23
	Nyloc Nut	32	7		Upper Battery Plate	1	24
	Screw Pan head	38	13	B-EX-019	20A Fly ESC	4	54
	Screw Pan head	2	41	B-EX-020	2212 1560KV Motor	4	55
	Screw Pan head	16	22	B-EX-021	25A Drive ESC	1	56
	Screw Pan head			B-EX-022	2212 1000KV		
	CS Screw	4	42	B-EX-023	Motor MW	1	57
	Nyloc Nut	40	43	B-EX-024	Controller  B Controller	1	58
	Set Screw	49	19 29	B-EX-025	MG Steering Servo	1	59 18
	Washer	-T	2)	B-EX-026	720p DV Cam & SD	1	10
B-EX-009	Carri 10T		44	B-EX-027	CARD	1	60
	Gear 12T	18	8		Plugs	XX	NA
	Gear 39T	2	9		Plugs	XX	NA

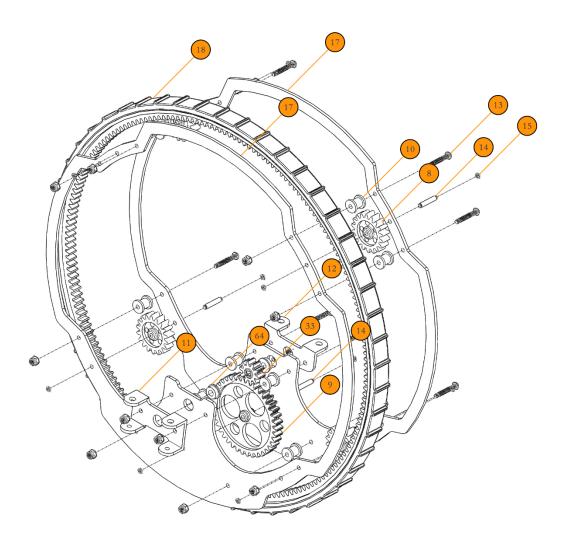
B-EX-010	Internal Gear 190T	4	18		Heat shrink	XX	NA
B-EX-011	Distance rod	36	10	B-EX-028	Battery 3500mAh 3S	1	61
B-EX-012	Steering Block	2	20	B-EX-029	MC6 Radio	1	62
				B-EX-030	Storm 6	1	63
				B-EX-031	E Clips		15

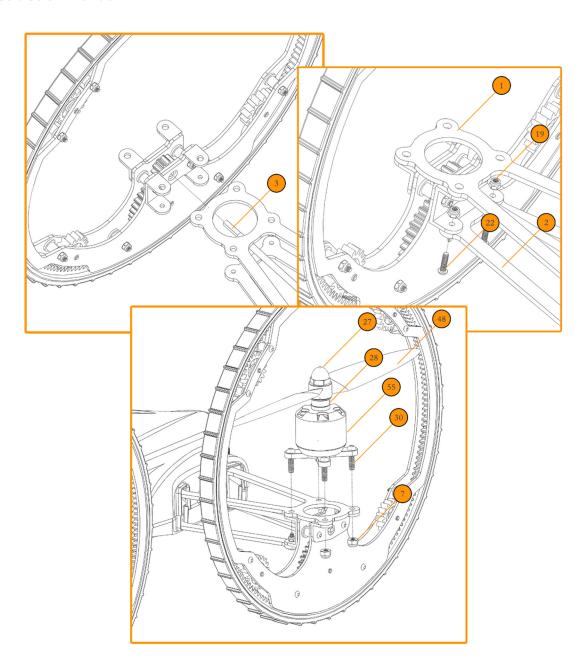
## 12. SPAREPART PICTURE LISTING

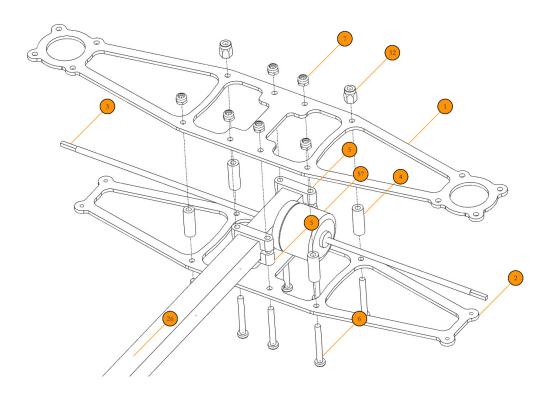


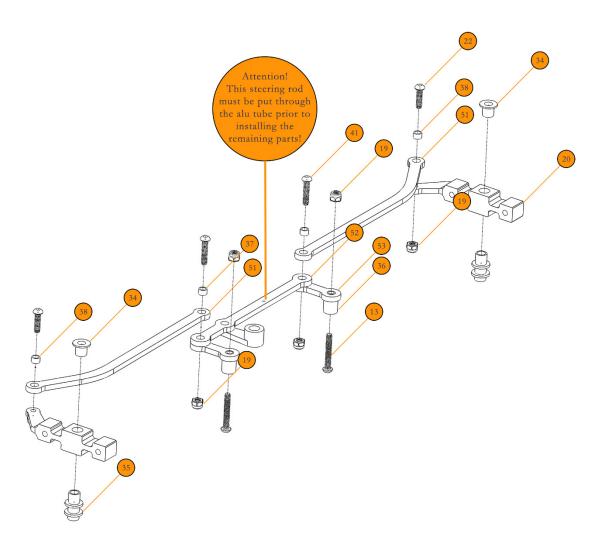
#### 13. EXPLOSION DRAWINGS

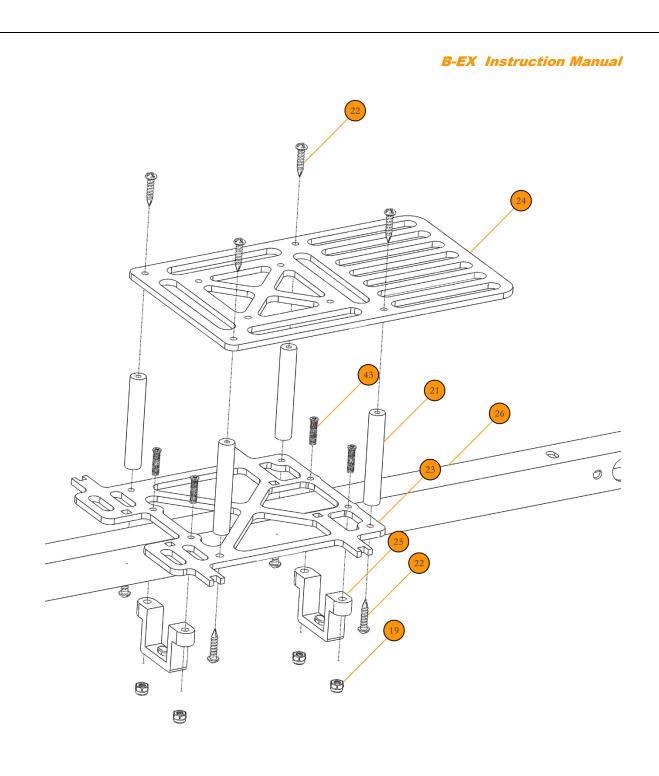


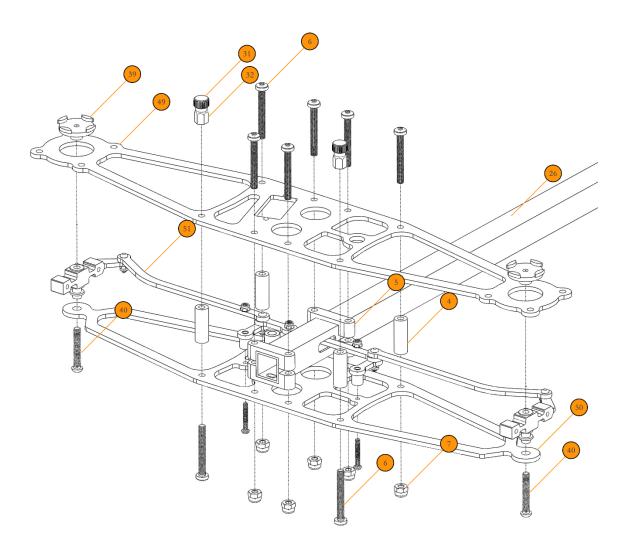












## DECLARATION OF CONFORMITY / KONFORMITÄTSERKLÄRUNG

Gemäss dem Gesetz über Funkanlagen und Telekommunikationseinrichtungen (FTEG) und der Richtlinie 1999/5/EG (R&TTE)

In accordance with Radio and Telecommunications Terminal Equipment Act (FTEG) And Directive 1999/5/FC (R&TTE Directive)

Der Hersteller/ Die verantwortliche Person The manufacturer / responsible person **C€**0678

Vitenzo Ltd. 590 KINGSTON ROAD LONDON, SW20 8DN United Kingdom Technischer Leiter Michael Binder den 1. Mai 2014

Erklärt hiermit, dass folgende Produkte hereby declares that following products

Telekommunikations(Tk-)- endeinrichtung: Telecommunications Terminal:

Verwendungszweck / Intended Purpose:

Geräteklasse / Equipment class

Angewendete harmonisierte Normen harmonized EU standards applied Sender-Empfänger BLOO-ME MC6S (CH450-FST)

Funkanlage Radio Equipment

Modellfernsteuerung / Model radio control transmitter

2

EU EN 60950-1 2006+A11:2009 EN 301 489-1 V1.6.1

EN 301 489-17 V1.3.2

EN 61000-4-3 :2006 + A1 : 2008

EN 61000-4-2:1995 + A1:2008 + A2:2001

EN 61000-6-1:2007 EN 61000-6-3:2007 EN 61000-4-2:2009 EN 55022:2006 + A1:2007 EN 300 328 V.1.7.1

Den grundlegenden Anforderungen des §3 und den übrigen einschlägigen Bestimmungen des FTEG (Art. 3 der R&TTE) bei bestimmungsgemässer Verwendung enstspricht.

Complies with when used within its intended purpose. Essential requirements of §3 and other relevant provisions of the FTEG (Article 3 of the R&TTE directive).

Hersteller / Verantwortliche Person Vitenzo Ltd. 590 KINGSTON ROAD LONDON, SW20 8DN United Kingdom

Technischer Leiter Michael Binder, den 1. Mai 2014

## Letter for the Certificate of Compliance to EU RoHS Directive [2011/65/EU] EU RoHS

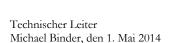
Vitenzo Ltd., ("we") hereby reports that six restricted substances designated in Article 4(1) and ANNEX II of EU RoHS Directive (Pb, Cd, Cr 6+, Hg, PBB, PBDE "Restricted Substances") are not intentionally contained in our Applicable Products listed as below which are to be supplied to your company on and after the date above ("Applicable Products")., except for the cases of the exempted application and/or less than maximum concentration values of EU RoHS Directive .

Product Name: B-EX (including all replacement parts)

\*1) In this letter, EU RoHS Directive means the EU RoHS Directive applicable as of the date above

\*2) In the event that your company suffers actual damage because Restricted Substances in Applicable Products exceed the Threshold by reason attributable to us, we will assume responsibility only as required by the written agreement(s) of sales and purchase with your company, subject to the limitations therein, and, if such written agreement(s) do not exist, only as required by applicable environmental laws and regulations. In no event will we be liable for indirect, consequential and/or punitive damages.

Hersteller / Verantwortliche Person Vitenzo Ltd. 590 KINGSTON ROAD LONDON, SW20 8DN United Kingdom



## Report of Confirmation of EU REACH 10th SVHC

Vitenzo Ltd., ("we") hereby report that, based on the information provided by our suppliers and the information on parts/materials used in those products, the products below do not contain any of the 151 Substances of Very High Concern (SVHC) listed on the candidate list updated on December 16, 2013 by the European Chemical Agency (ECHA) above concentration of 0.1wt%.

Product Name: B-EX (including all replacement parts)

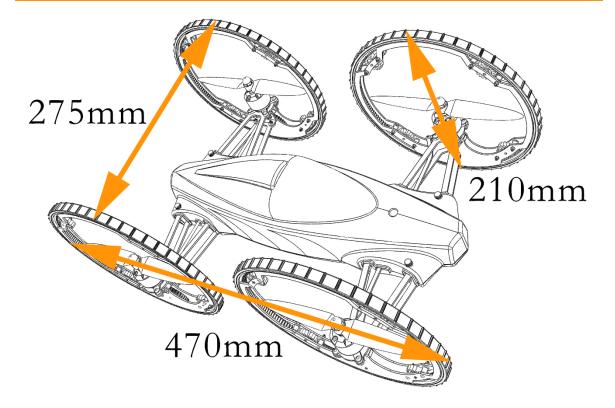
(\*1) We state "do not contain SVHC" in this letter when certain SVHC is present in Applicable Products in concentration equal to or below 0.1wt % based upon the calculation, subject to (i) the information of SVHC provided by our supplier and (ii) the information of parts/materials used in Applicable Products.

(\*2) The view of the Electronic Components Industry is that "diboron trioxide (B2O3)", or "lead oxide (PbO, Pb3O4)" in glass or ceramics are not Substances of Very High Concern. The industry also has the view that "complex oxides containing lead (lead titanium trioxide [PbTiO3], lead titanium zirconium oxide [(Pbx Tiy Zrz)O3]) " in ceramics are not Substance of Very High Concern (SVHC). For more details, refer to JEITA's position statements (24JEITA #207, #247, and #248). URL: <a href="http://home.jeita.or.jp/ecb/ceramic.html">http://home.jeita.or.jp/ecb/ceramic.html</a>

Hersteller / Verantwortliche Person Vitenzo Ltd. 590 KINGSTON ROAD LONDON, SW20 8DN United Kingdom

Technischer Leiter Michael Binder, den 1. Mai 2014

# 15. SIZES



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