TOPGUN PARK FLITE R/C Aircraft

# CESSNA EP

## READY TO FLY ELECTRIC SEMI-SCALE MODEL COMPLETE WITH 4-CHANNEL RADIO


**SPECIFICATION**
- WINGSPAN: 960 MM
- LENGTH: 762 MM
- WING AREA: 15.3 DM2
- WEIGHT: 430G

**RTF PACK:**
- RADIO: 4 CHANNEL
- SERVOS: 8.4G, 1.5KG TORQUE/0.12 SEC
- MOTOR: BRUSHLESS MOTOR
- BATTERY: 11.1V 1250MAH 10C LIPO
- ESC: 25AMP BRUSHLESS
- CHARGER: LIPO 12V

# INSTRUCTION MANUAL

WWW.CMLDISTRIBUTION.CO.UK

# Cessna Skylane

## RTF MODEL


# INSTRUCTION MANUAL

*CONGRATULATIONS ON PURCHASING THE CESSNA SKYLANE RTF*

**CML Distribution are proud to present this high performance sport scale model of the popular Cessna Skylane. We feel that this model emulates the style, performance and character of its full size counterpart.**

**Supplied as a Ready to Fly package with transmitter, LiPo flight battery and charger, this model has been designed with the utmost care and attention to detail to produce a light weight, strong, and realistic looking model aeroplane with excellent flying characteristics.**

**This model is a high performance miniature aircraft that allows novice to intermediate model pilots to perform both scale and aerobatic manoeuvers. The light weight, large wing area and high wing design allow the model to fly extremely slowly, in a stable manner while still maintaining full control.**

**It is not a basic trainer and should not be tackled until the pilot is proficient on a dedicated high wing trainer type model.**

**These instructions assume a reasonable level of competence for both building and flying and we recommend that the model is flown at a recognised club with frequency control measures and suitable third party insurance.**

**The owner – pilot of this model should take note of regulations, and local bylaws before flying this aircraft.**

**Please take time to read through these instructions before commencing assembly. We list operations in order of works to reduce the risk of damage during assembly.**


## PLEASE READ THROUGH THE WARNINGS BEFORE USE.

**An 11.1V 1500 mAh lithium polymer (LiPo) battery rated at 10C and mains charger is included as part of this package and these cells must be operated with care to prevent the risk of fire.**

**LiPo Batteries are soft cased and can be easily damaged by sharp items, puncturing of the soft casing can cause fires and we recommend that they are stored and handled carefully.**

**Use only a LiPo rated charger, set to a maximum of 3 cells (11.1v) and 1 amp charge current.**

**Remove battery from the aircraft and charge on a non flammable, non conductive surface**

***Due to continual and ongoing product development the parts shown in the manual may differ from those supplied.***

## SPECIFICATIONS

| | |
|---|---|
| **WING SPAN** | **960 MM (38")** |
| **LENGTH** | **780 MM (31")** |
| **WING AREA** | **14.8 DM_ (230 SQ INCHES)** |
| **WEIGHT** | **440 G (15.5 OUNCES)** |
| **LOADING** | **29 G/DM (9.7 OZ. SQ FT)** |
| **RADIO** | **4 FUNCTION 35MHZ PPM**<br>**3 QTY MICRO SERVOS**<br>**25 AMP BRUSHLESS ESC** |
| **MOTOR** | **BRUSHLESS OUT RUNNER**<br>**8" X 4" PROPELLOR**<br>**11.1V 1250MAH LIPO BATTERY** |

# WARNING

**This R/C aircraft is not a toy and can result in serious bodily harm, injury and property damage if misused.**
**Fly only in open areas and at preferably BMFA recognised clubs and sites.**

# SECTION 1: KIT CONTENTS AND DESCRIPTION


**1. Wing with ailerons connected to factory installed servos**

**2. Fuselage with motor, Electronic Speed Control (ESC) receiver, two quantity servo, steerable nose gear, pushrods.**

**3. Fin and rudder assembly**

**4. Horizontal stabiliser (Tail plane) with elevator**

**5. Main undercarriage assembly with mounting plate, wheels and spats**

**6. 4 function fully proportional 35Mhz transmitter**

**7. Control horns and back plates for elevator and rudder**

**8. Tube of adhesive**

**9. LiPo Battery 3cell 11.1V 1250 mAh (10c)**

**10. LiPo charger and 12v power lead**

**11. Propellor – 2 off 8" diameter x 4" pitch**

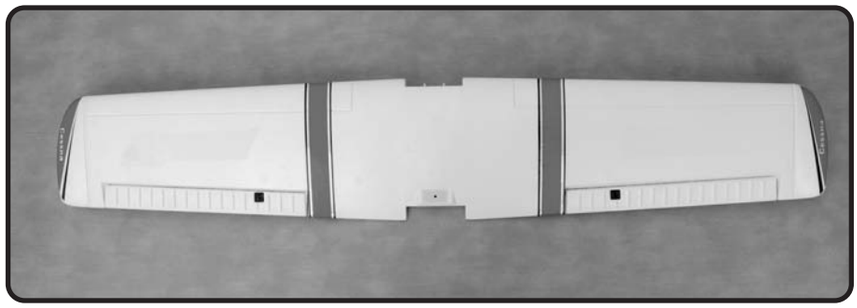
**12. Allen Key & wing screw**

## FUSELAGE ASSEMBLY.

**Supplied complete and ready for use. Brushless motor installed and connected to Electronic Speed Control (ESC), 35mhz receiver, rudder, elevator servos connected to push rods Steerable and Sprung nose wheel**

## WING ASSEMBLY.

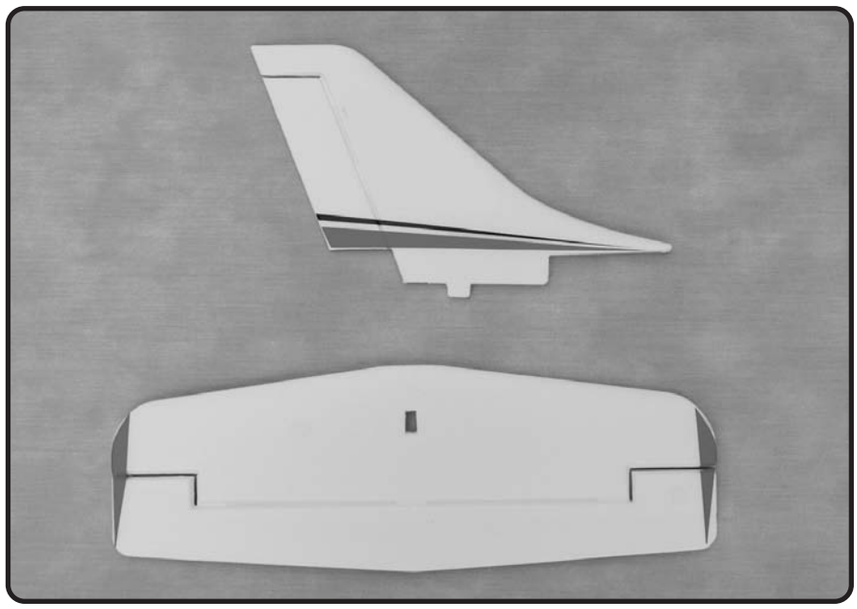
**Supplied complete and ready to fit with servo, push rods clevis connectors and control horns installed.**



## VERTICAL AND HORIZONTAL STABILISERS.

**Vertical Stabiliser (Fin and rudder) with moulded in hinges.**

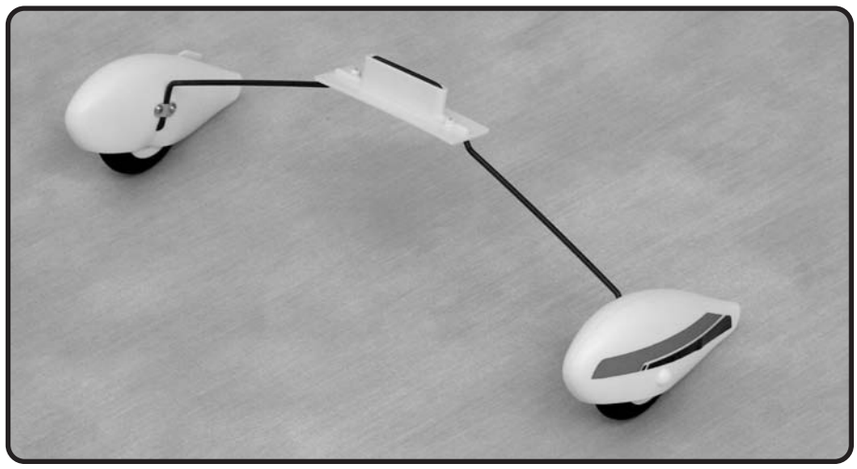
**Horizontal Stabiliser (tail plane and elevator) with moulded in hinges.**



## UNDERCARRIAGE ASSEMBLY.

**Ready for use, with mounting plate, wheels and spats.**

**Nose wheel is pre fitted to fuselage.**



## PROPELLOR

**2 off E-Pro 8” diameter x 4” pitch moulded propellors.**

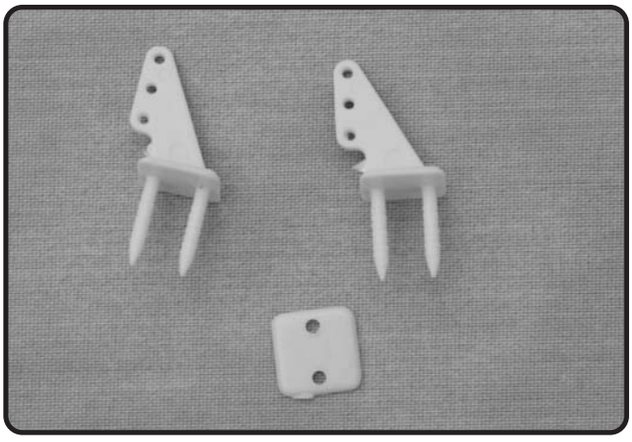
**Ensure text is on front face when mounting.**

# SECTION 1: KIT CONTENTS AND DESCRIPTION – CONTINUED


## BATTERY AND CHARGER

**11.1V (3 cell) 1250mAh LiPo Battery rated at 10C max discharge.**

**2v DC input 0.8 to 1A output fast charger and connecting lead.**



## CONTROL HORNS AND BACK PLATES 2 OFF

**One each for elevator and rudder.**

## ADHESIVE

**5ml tube of foam safe adhesive. Note pierce end of tube with pin in screw on lid.**

# SECTION 2: BATTERY AND CHARGER

## WARNING

**A lithium polymer (LiPo) battery rated at 10C and charger is included as part of this package and these cells must be operated with care to prevent the risk of fire.**

**LiPo Batteries are soft cased and can be easily damaged by sharp items, puncturing of the soft casing can cause fires and we recommend that they are stored and handled carefully.**

**Use only a LiPo rated charger, set to a maximum of 3 cells (11.1v) and 1 amp charge current.**

**Remove battery from the aircraft and charge on a non flammable, non conductive surface.**


## BATTERY AND CHARGER

**The Skylane includes a high performance 11.1V (3 cell) 1250mAh LiPo Battery rated at 10C max discharge.**

**This must be charged using the dedicated 12v DC input 0.8 to 1A balance charger and connecting lead.**

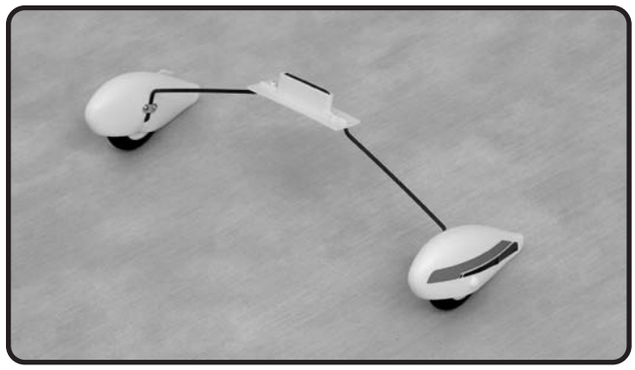

**Connect the crocodile lead connectors to a 12V DC power source (a 12V car battery is ideal), ensuring that correct polarity is observed. Red is positive (+) and Black is Negative (-).**

**Plug 12v DC cable into balance unit and both LEDS will be green before you connect the Lipo battery.**


**Connect lipo battery balance connector into balance unit and charging LED will illuminate red.**

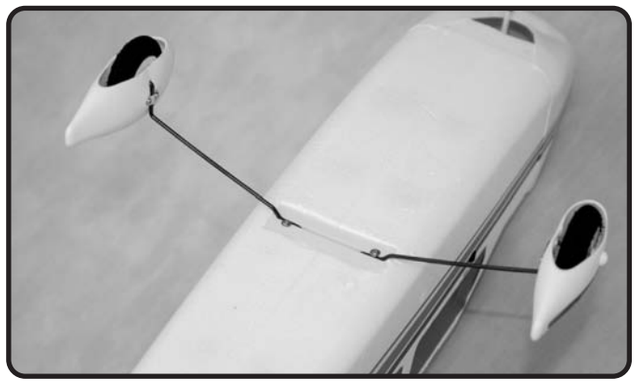
**Charging takes approximately between 1-2 hours until charging LED turns to green to indicate a full charge.**

# SECTION 3: ASSEMBLY



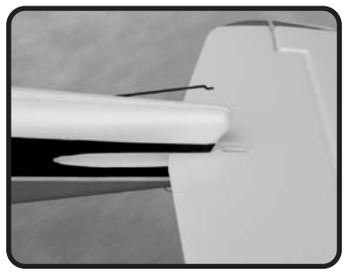
**1. Locate the preformed undercarriage and spat assembly.**

**Position over recess on underside of fuselage with tapered edge of spats facing aft.**



**2. Use the point in the cap of the adhesive to pierce the end of the tube and apply adhesive into mating slot.**

**Push mounting plate in position and allow adhesive to dry. Use a damp cloth to wipe off excess adhesive.**



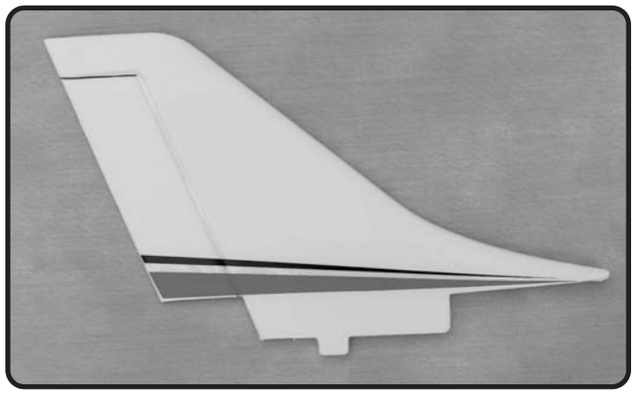
**3. Locate the horizontal stabiliser and fuselage.**

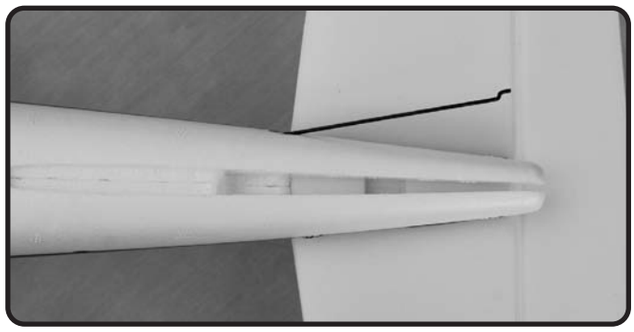
**Apply adhesive into the tail plane seat and insert the horizontal stabiliser.**

**Check that stabiliser is central, level and square to the fuselage**

**Use a damp cloth to wipe off excess adhesive and allow to dry.**

# SECTION 3: ASSEMBLY – CONTINUED

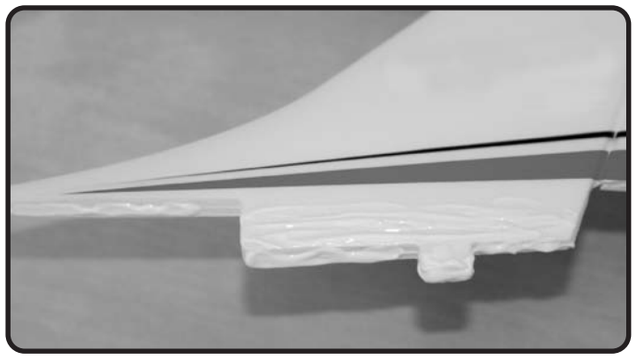




**4. Locate the fin & rudder assembly.**

**Apply adhesive to the fin and insert in to the fuselage and horizontal stabiliser.**

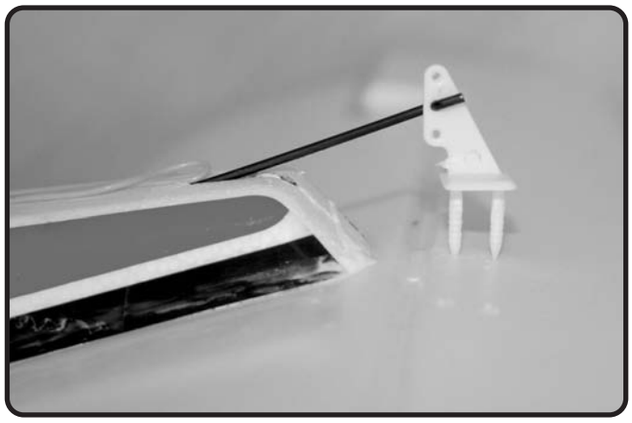
**The notch in the fin locates with the hole in the stabiliser.**



**5. Check that fin is vertical and square to the tail plane and press firmly in place.**

**Use a damp cloth to wipe off excess adhesive.**

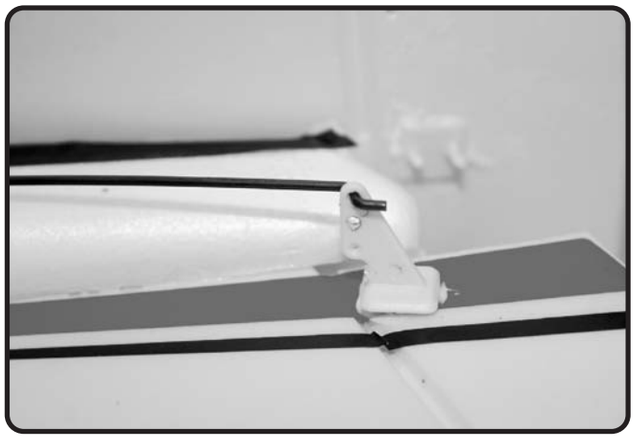
**Allow to dry.**



**6. Locate control horn and insert z-bend of elevator pushrod through second hole.**

**Position holes of control horn above hinge line and push control horn pins through the elevator surface. Apply a spot of adhesive to the control horn and its backplate before pushing tight to surface and fitting backplate.**

**Use a damp cloth to wipe off excess adhesive and allow to dry.**



**7. Locate control horn and insert z-bend of Rudder pushrod through third hole.**

**Position holes of control horn above hinge line and of push control horn pins through the rudder surface. Apply a spot of adhesive to the control horn and its backplate before pushing tight to surface and fitting backplate.**

**Use a damp cloth to wipe off excess adhesive and allow to dry.**

# SECTION 4: TRANSMITTER


**The NE-KO 4 is a fully proportional 4 function 35Mhz transmitter**

**The transmitter is supplied in a Mode 2 configuration.**

**Mode 2 is also known as Throttle Left.**

**The left stick controls Throttle and rudder movement.**

**The right stick controls aileron and elevator movement.**

**Battery state is indicated by a bank of coloured LED's. With green for full and red for empty.**

**As soon as the indicator changes to amber the model should be landed to allow battery replacement.**

**A red LED indicates dangerously low voltage. The model should be landed immediately to replace batteries before all control is lost.**

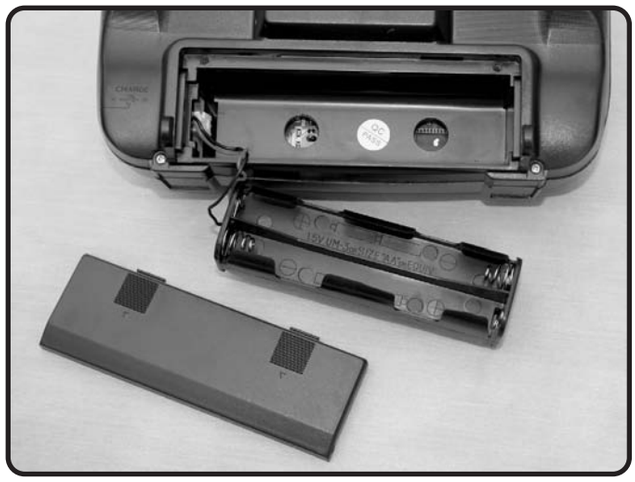
**Frequency control is by removable crystal The transmitter frequency is identified on the crystal holder located at the rear of the transmitter.**

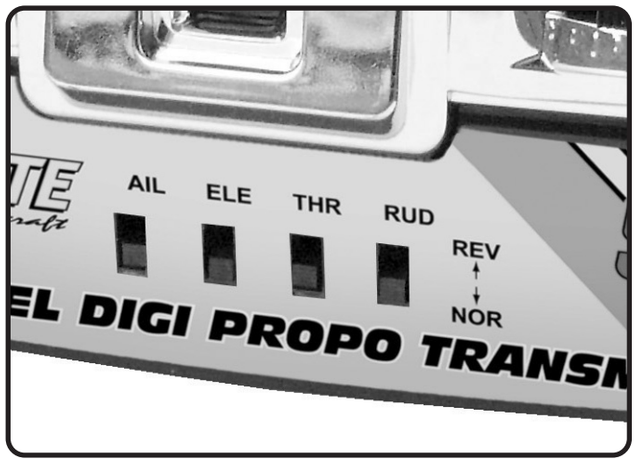
**8 off AA size dry cells or high capacity Nimh batteries must be inserted before operation.**

**Remove the rear cover and install batteries into the battery tray as directed by the moulded in polarity (+ & -) markings.**

**A small panel of four small slide switches is set on the front panel of the transmitter.**

**These are electronic servo reversing switches and should be adjusted to give the correct control surface deflections relative to stick movements.**





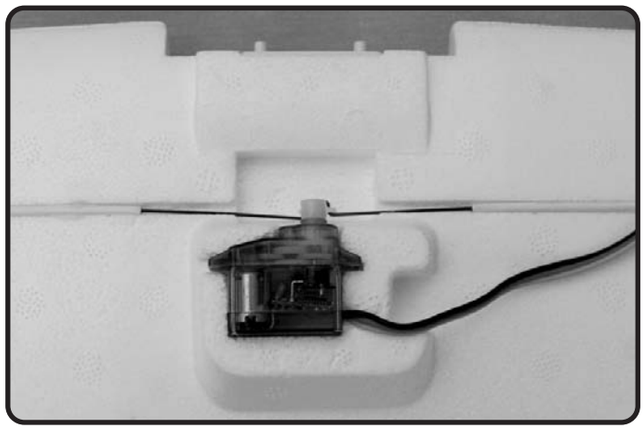
# SECTION 5: FINAL SET UP


**1. Install the LiPo battery into the fuselage.**

**Ensure that the hook and loop tape on the battery and fuselage floor locked into each other.**

**This prevents the battery from moving during flight.**

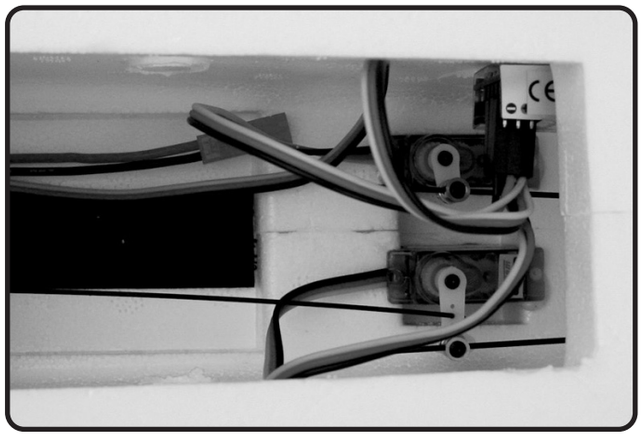
**Check that the fuselage mounted off-on slide switch is in the off position and connect the battery to the ESC lead.**



**2. Locate the wing assembly and position it over the wing seating area with the servo on the underside.**

**Take the plug on the aileron servo lead and push plug into channel no 1 of receiver.**

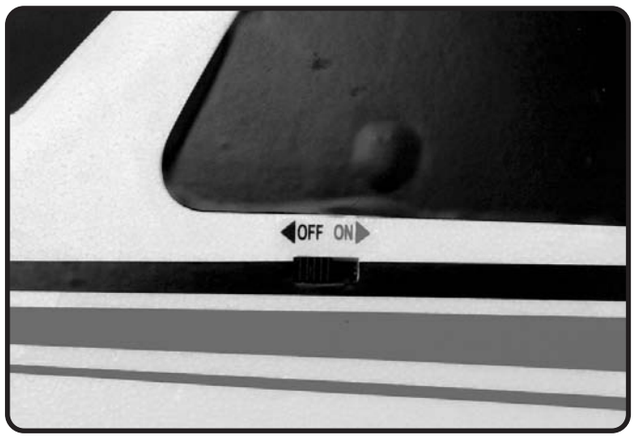
**Note that black is (-) Negative and yellow is signal.**



**3. Switch on transmitter**

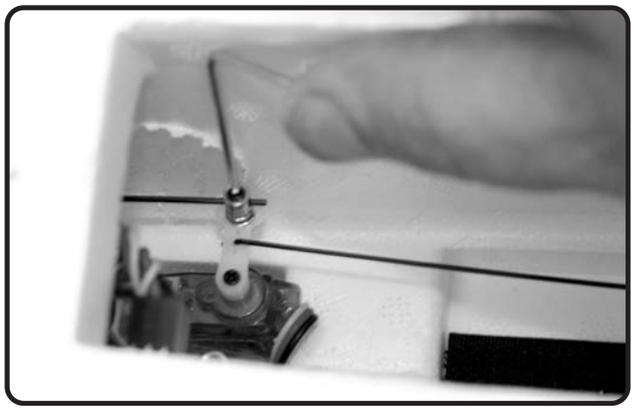
**Check that rudder, elevator and aileron trims and sticks are central and that throttle trim and stick is fully down.**

**Slide fuselage mounted switch to the On position.**




**WARNING**

**With the battery connected and the model switched on the motor is now live. The Electronic speed controller (ESC) will go through its start up procedure and will emit a series of beeps while it configures throttle positions. The motor could start unexpectedly and we recommend that the model is restrained and that the operator keeps clear of the propellor during handling.**

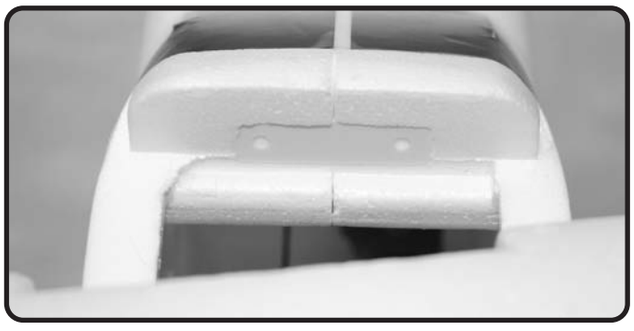


**4. Check that control surfaces for aileron, elevator and rudder are level.**

**Adjust if required by loosening clamp connectors using the supplied Allen key.**

**Adjust pushrod locations until surfaces are level and then tighten clamp connectors.**

**Move transmitter sticks to ensure free movement of the control surfaces.**



**5. Align the wing leading edge pegs with the front mounting plate.**

**Push the wing firmly down onto its seat until wing leading edge pegs locate into mounting plate.**

**Ensure that aileron wire is inside fuselage**

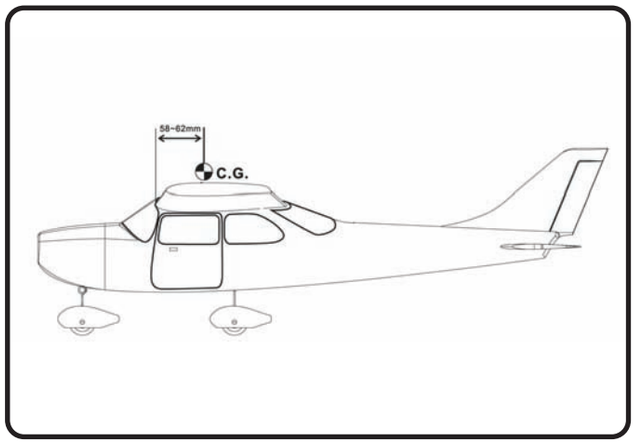
**The wing Trailing edge clips into the fuselage to ensure correct alignment**

**Screw the steel wing fixing bolt through the support plate on trailing edge of wing and secure tightly.**

**6. Slide fuselage mounted switch to the OFF position and then Switch OFF transmitter.**

**Fix propellor to prop shaft using M3 nuts and washers.**

**The text on the propellor faces forward.**




**7. Check the Balance.**

**The model should sit level or slightly nose down when supported off a point 58 to 62mm from the wing leading edge.**

**Move the battery forward or aft as required.**

**DO NOT ATTEMPT TO FLY WITH A REARWARD BALANCE POINT.**

# SECTION 6: FIRST FLIGHT

**On completion of the model take time to test rig the model in the workshop several times.**

**Connect radio gear and double check that all surfaces operate in the correct manner without stalled servos.**

**Check for adequate range with and without motor running.**

**If everything is okay, take it to the flying field and rig it up again.**

**Always follow the frequency control procedures of your local flying site and ensure that you have adequate third party insurance cover.**

**Repeat the full pre flight inspection before flying.**

## WARNING

**Do not advance the throttle unless the model is restrained. With the powerful motor propellor combination, the model will accelerate across a smooth surface very quickly.**

## FLYING

**The Skylane is easily capable of 15 to 20 minute flight times and can R.O.G (Rise Off Ground) from smooth closely cut grass runways. It is aerobatic and able to perform loops, rolls, stall turns and prolonged inverted flight.**

**Due to its light weight it should not be flown in wind greater than 10mph.**

**Control throws set during assembly will produce a model capable of flying smooth scale like performance and medium to high speed aerobatic manoeuvers.**

**The control surface movements can be increased by moving the Z Bends or clamp connectors nearer to the control surfaces. A further increase is possible by moving the Z Bends or clamp connectors further out along the servo output arms**

**To reduce movements move the pushrod connections nearer to the servo on the output arms and further out along the control surfaces horns.**

**ENJOY YOURSELF BUT ALWAYS FLY SAFE!**

# IMPORTANT SAFETY INSTRUCTIONS AND WARNINGS – READ BEFORE USE

- **Lithium Polymer batteries can be volatile. Whilst some of the instances listed below are rare, they can occur and it is important for you to be aware of how to handle such situations. Failure to read and follow the below instructions may result in fire, personal injury and damage to property if charged or used improperly.**
- **Top Gun Park Flite, its distributors or retailers assume no liability for failures to comply with these warnings and safety guidelines.**
- **By using this battery, the buyer assumes all risks associated with lithium batteries. If you do not agree with these conditions, return the battery immediately before use.**
- **The final use and preparation of the battery pack is ultimately beyond our control and those of our representatives and retaillers. Your decision to use this product incorporates your agreement that you have read and understood the safety precautions listed below and on each battery pack, and that you agree to accept full responsibility for any injury, loss or damage resulting from all circumstances surrounding your use or misuse of this product.**

# GENERAL GUIDELINES AND WARNINGS

1) **Only use the supplied specific Lithium Polymer charger. Do not use a NiMH or NiCd charger - Failure to do so may a cause fire, which may result in personal injury and property damage.**
2) **Never charge batteries unattended. When charging LiPo batteries you should always remain in constant observation to monitor the charging process and react to potential problems that may occur.**
4) **If at any time you witness a battery starting to balloon or swell up, discontinue charging process immediately, disconnect the battery and observe it in a safe place for approximately 15 minutes. This may cause the battery to leak, and the reaction with air may cause the chemicals to ignite, resulting in fire.**
5) **Since delayed chemical reaction can occur, it is best to observe the battery as a safety precaution. Battery observation should occur in a safe area outside of any building or vehicle and away from any combustible material.**
6) **Wire lead shorts can cause fire! If you accidentally short the wires, the battery must be placed in a safe area for observation for approximately 15 minutes. Additionally, if a short occurs and contact is made with metal (such as rings on your hand), severe injuries may occur due to the conductibility of electric current.**
7) **A battery can still ignite even after 10 minutes.**
8) **In the event of a crash, you must remove battery for observation and place in a safe open area away from any combustible material for approximately 15 minutes.**
11) **Never store or charge battery pack inside your car in extreme temperatures, since extreme temperature could ignite fire.**

## CHARGING PROCESS

1) **Never charge batteries unattended.**
2) **Charge in an isolated area, preferably inside a tin and away from other flammable materials.**
3) **Let battery cool down to ambient temperature before charging.**

## DISCHARGE

**Ensure that you adhere to the warning beeps on your transmitter and land the model accordingly. Do not fly until the battery is completely discharged as damage will occur.**

## STORAGE & TRANSPORTATION

1) **Store battery at room temperature between 40 and 80 degrees F for best results.**
2) **Do not expose battery pack to direct sunlight (heat) for extended periods.**
3) **When transporting or temporarily storing in a vehicle, temperature range should be greater than 20 degrees F but no more than 150 degrees F.**
4) **Storing battery at temperatures greater than 170 degrees F for extended periods of time (more than 2 hours) may cause damage to battery and possible fire.**

## BATTERY LIFE

**Batteries that lose 20% of their capacity must be removed from service and disposed of properly. Discharge the battery to 3V/Cell, making sure output wires are insulated, then wrap battery in a bag for disposal.**

## PRODUCT WARRANTY

**Product warranty is limited to original defects in material and workmanship. Warranty does not cover collateral damage. Due to the nature and use of the battery there is no term warranty. Misuse, abuse, incorrect charging and other inappropriate use of this product are not covered under warranty.**

# TRAINER VERSION

The RC Flight Simulator Experience

# RC PlaneMaster

## INSTALLATION AND SET-UP INSTRUCTIONS FOR PC FLIGHT SIMULATOR SOFTWARE

**Welcome to the world of flight simulation. Listed below are some very brief instructions and FAQ's to help you along the way.**

**Set-up is extremely simple with the instructions available on screen.**

**1. Install CD and upload software as instructed. Planemaster features easy install feature that detects the correct installation directory for you.**

**2. Once installed locate and click on the Planemaster icon on your desktop. Make sure that your radio is plugged into the USB port and you have installed batteries and turned it on.**

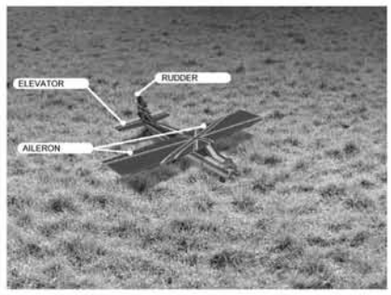
**3. The Flight Simulator opening window will appear. Before clicking the fly button you will need to calabrate your controller. Therefore please click controller button first.**


**4. Once in the controller window make sure that PPM is selected for the controller. Following the on screen instructions for centering all the controls and then moving controls to their extents.**

**Then set your screen to look the same as the one below so that the same function buttons are highlighted. Click Finish.**


**5. Click fly and you will be taken to the flying field. Note the throttle stick (left) will need to be set down, or your plane will already be moving when you switch to the flying screen.**

**It could be at this point that you will realise that your transmitter settings may not reflect your aircraft, i.e. ailerons, rudder, elevator are not set to the correct stick. This can be rectified simply by hitting the esc button, clicking the controller button. Here you can re-assign all the functions as well as reverse them.**





REALITY CRAFT
The Art Of Simulation
www.realitycraft.com

***CML products are available from all good model shops. For a full listing check the CML catalogue or www.cmldistribution.co.uk***
***CML Distribution, Saxon House, Saxon Business Park, Hanbury Road, Bromsgrove, Worcestershire. B60 4AD. Email: info@cmldistribution.co.uk***

# FAQ'S

**When I run the program it doesn't work or I get no mouse cursor. I get a blank or funny screen or am experiencing graphical glitches.**

Update your graphics drivers from your manufacturers website. If you have a GeForce card go to;
http://www.nvidia.comor if you have an ATI card go to www.ati.com
If you have a different one then you will need to find your manufacturers website.
Make sure you install the driver properly.
You must click 'Continue Anyway' when or if Windows throws you a warning. This is normal.

You may also need to update your motherboard drivers from your chipset manufacturer. e.g. VIA at www.viaarena.com, Intel, etc. You will need
to find out who the manufacturer of your motherboard is. Ask your computer manufacturer or right click on 'My Computer' -> 'Properties' -> 'Hardware' tab -
> 'Device Manager' -> 'System Devices'. The manufacturer should be labelled as the AGP or PCI make.

**When I use my controller it moves erratically.**

Recalibrate the controller. Go to the controller menu and select your controller.
Then click Re-calibrate. Follow the instructions as they appear. For more information on setting up your controller check out the relevant section in the manual.

**The controls move in the wrong direction.**

Go to the controller menu and click on the toggle switch to reverse the channel on the axis concerned. For more information on setting up your controller check out the relevant section in the manual.

**Do I have to put the CD in every time I run the program?**

Yes. It is very common practice for entertainment/multimedia software.
The alternative is to force people to buy high cost hardware (i.e. USB controller/interface) with the software.


# TOP GUN PARK FLITE CESSNA SKYLANE SPARE PARTS LIST

| | |
|---|---|
| **TGP0035** | **Cessna EP Fuselage** |
| **TGP0036** | **Cessna EP Main Wing** |
| **TGP0037** | **Cessna EP Canopy & Cowl** |
| **TGP0038** | **Cessna EP Landing Gear** |
| **TGP0039** | **Cessna EP Elevator** |
| **TGP0040** | **Cessna EP Rudder** |
| **TGP0041** | **Cessna EP Propellers** |
| **TGP0042** | **Cessna EP Decal** |
| **TGP0501** | **8.4g servo** |
| **TGP0510** | **4ch transmitter** |
| **TGP0516** | **Lipo 12v Charger** |
| **TGP0517** | **Adapter for li-po charger** |
| **TGP0522** | **Lipo 11.1v 1250mAh 10c** |
| **TGP0531** | **Bell Outrunner Brushless motor** |
| **TGP0552** | **Brushless 25 amp** |
| **TGP0570** | **Control Horns** |
| **TGP0571** | **Quick Link Colla** |

**DISTRIBUTORS OF QUALITY MODEL & HOBBY PRODUCTS**

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