VOODOO MUSTANG EP

Requires: 5-channel radio w/ 5 micro servos, Outrunner Motor KM0283010 w/ Propeller Adaptor HW2340100, 20A brushless ESC, 3 cells 11.1V 2100 mAh Li - Po battery & charger.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>39.5 in / 1000 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>282 sq in / 18.2 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>28 oz / 790 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>34.5 in / 880 mm</td>
</tr>
</tbody>
</table>

* Specifications are subject to change without notice.*

Warning! This model is not a toy.

It is designed for maximum performance. Please seek advice if one is not familiar with this kind of electric powered precision model. Operating this model without prior preparation may cause injuries. Remember, safety is the most important thing. Always keep this instruction manual at hand for quick reference.
BEFORE YOU BEGIN

1. Read through the manual before you begin, so you will have an overall idea of what to do.

2. Check all parts. If you find any defective or missing parts contact your local dealer. Please
   DRY FIT and check for defects for all parts that will require CA or Epoxy for final assembly.
   Any parts you find to be defective after the gluing process may be difficult to remove for
   warranty replacement. The manufacturer will replace any defective parts, but will not extend
   to the parts that are good before gluing to defective parts during assembly. Warranty will
   not cover any parts modified by customer.

3. Symbols used throughout this instruction manual comprise of the following :-

   - **Apply epoxy glue.**
   - **Apply instant glue (C.A.glue, super glue.)**
   - **Apply thread locker**
   - **Must be purchased separately!**
   - **Assemble left and right sides the same way.**
   - **Ensure smooth non-binding movement while assembling.**
   - **Peel off shaded portion covering film.**
   - **Cut off shaded portion.**
   - **Drill holes with the specified diameter (here: 3mm).**
   - **Pierce the shaded portion covering film.**
   - **Pay close attention here!**
   - **Warning! Do not overlook this symbol!**
Parts List

1. MAIN WING -- 1 pc.
2. RETRACTABLE LANDING GEAR -- 1 pair
   RETRACTABLE LANDING GEAR COVER -- 1 pair
   PVC PLATE 0.5mm -- 2 pcs
3. LINKAGE CONNECTOR Ø2.1mm w/ Set Screw -- 2 sets
4. MICRO AILERON SERVO MOUNT PL5310020 -- 1 pair
   SCREW PA1.7x8mm -- 8 pcs
   SCREW PB2x16mm -- 4 pcs
   FUEL TUBE d2xD4x4mm -- 4 pcs
   STRAPER PL4112106 -- 2 pcs
   CLEVIS PL4112105 -- 2 pcs
   HORN PL4113102 -- 2 sets
   PUSHROD Ø1.4x57mm w/ Threads (For Aileron) -- 2 pcs
5. STABILIZER & ELEVATOR -- 1 set
   FUSELAGE -- 1 pc.
   ELEVATOR LINK PL4510010 -- 1 pc
   SCREW PB2x8mm -- 2 pcs
   BALSA 3.5x13.2x35mm -- 1 pc.
6. VERTICAL FIN & RUDDER -- 1 pc.
   TAIL LANDING GEAR PL3410030 -- 1 pc.
   TAIL WHEEL Ø23mm -- 1 pc.
   PLASTIC COLLAR d1x5x2mm -- 2 pcs
   SCREW PA2x8mm -- 2 pcs
   STEERING BRACKET 0.3mm -- 1 pc.
   SCREW PM2x8mm -- 1 pc.
   M2 NUT -- 1pc.
7. PUSHROD Ø1.4x413mm w/ Threads (For Rudder) -- 1 pc.
   FUEL TUBE d2xD4x4mm -- 1 pc.
   CLEVIS PL4112105 -- 1 pc.
   HORN PL4113102 -- 1 set
   SCREW PB2x8mm -- 2 pcs
8. PUSHROD Ø1.4x372mm w/ Threads (For Elevator) -- 1 pc.
   FUEL TUBE d2xD4x4mm -- 1 pc.
   CLEVIS PL4112105 -- 1 pc.
9. SOCKET HEAD SCREW M3x6mm -- 4 pcs
   WASHER d3xD7mm -- 4 pcs
   FOLDING PROPELLER SET PL6314020 -- 1 set
10. BATTERY TIE 200mm -- 1 pc.
    FUEL TUBE d2xD4x4mm -- 2 pcs
    STRAPER PL4112106 -- 2 pcs
11. NYLON WASHER d2.6xD9mm -- 2 pcs
    NYLON SCREW M2.5x20mm -- 2 pcs
12. AIR SCOOP -- 1 pc.
    SCREW PWA2.3x8mm -- 2 pcs
13. CANOPY -- 1 pc.
    PILOT PC101042A -- 1 pc.
    SCREW PWA2x8mm -- 5 pcs
14. DECALS: E230RXMDEC -- 1 pc.

**COVERING:**
- LIGHTEX SGX 230000
- LIGHTEX SGX 241 TURQUOISE
- LIGHTEX SGX 330 CADMIUM YELLOW
- LIGHTEX SGX 561 PEARL PURPLE
1 Main Wing

- Apply instant type CA glue to both sides of each hinge.

2 Retractable Landing Gear

3 Retract Servo

! Please refer to attached sheet for linkage connector installation.
4 Aileron Servo

- Ø1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

- Please choose either 02L & 02R or 03L & 03R or 04L & 04R that suits your servo.

5 Stabilizer & Elevator

- Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.

- Apply instant type CA glue to both sides of each hinge.

- Completed
6 Vertical Fin, Rudder & Tail Landing Gear

- Apply instant type CA glue to both sides of each hinge.

C = C'

Completed

Bottom View

7 Rudder Pushrod

- Ø1mm pilot holes for World Models horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.
8 Elevator Pushrod

- Bottom View

9 Outrunner Motor / Cowling

- Make sure rotating motor casing is not in contact with wirings or anything.

1. Don’t over-tighten the PM3 screws, too much stress on the screws could split the firewall.

2. Outrunner Motor 28/30
   - KM0283010
   - Propeller Adaptor (d3xD5)
     - HW2340100

3. PM2x12mm

4. M5 Nut

5. Ø45mm Spinner
   - PA2.6x8mm
   - PWA2x8mm

Optional Parts

- PWA2x8mm Screw
- PM2x12mm Screw
- M3x6mm Socket Head Screw
- PA2.6x8mm Screw
- d3xD7mm Washer

1. Don’t over-tighten the PM2 screws, let the propeller blades align themselves when spinning.
10 Radio equipment

- Install and arrange the servo as shown in the diagram.

Front
- Battery Tie 200mm
- Sponge 10x50x150mm
- Fuel Tube d2xD4x4mm
- Elevator Pushrod
- 20A Brushless ESC
- N.I. Battery
- N.I. Receiver
- N.I. Straper
- N.I. Rudder Pushrod
- N.I. Rudder Servo

Bottom View

Completed
11 Main Wing

- M2.5x20mm NYLON BOLT (2)
- d2.6xD9mm NYLON Washer (2)

Bottom View

12 Air Scoop

- PWA2.3x8mm Screw (2)

Front View

Completed

13 Canopy

- PWA2x8mm Screw (5)

Pilot
14 Wing Setting

- Adjust the wing and fuselage configuration as shown in the diagrams.

A=A'  B=B'  C=C'  D=D'
**15 Control Throws**

Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

- **Elevator**
  - 20mm
  - 20mm

- **Rudder**
  - 10mm
  - 10mm

- **Ailerons**
  - 8mm
  - 8mm

**16 C.G.**

- The ideal C.G. position is **88mm (3.46 in)** behind the leading edge measured at where the wing meets the fuselage. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.

- Measure C.G. with the wheels in retracted position.

**Warning!**

Important Safety Precautions

- First time flyer should never fly by himself / herself. Assistance from experienced flyer is absolutely necessary.

- Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.

- VOODOO MUSTANG EP is specially designed to be powered by KM0283010 Outrunner Motor.

- Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller. Extreme caution should be exercised when working with electric powered models. Make sure the propeller is cleared of all objects, especially your hands before connecting the battery to the model. Make sure you understand the operation of the ESC (Electronic Speed Control) by studying the ESC manual. Once you plug in the battery for electric powered model, always treat the propeller as a rotating one, as accidental movement of the throttle stick will spin the propeller and could cause injuries.

- If you find wrinkles on the covering as a result of weather changes, you can use hot iron to remove the wrinkles. Please begin with lower temperature setting and gradually raise the temperature until the wrinkles are gone. Too hot an iron may damage the covering. Don’t use hot iron near the seams or edges, hot iron will melt the glue and shrink the covering at the same time, causing the seams to pull away.

- Check and re-tighten up all factory assembled screws, use thread locker if necessary.
Drill 2mm hole at servo horn.

Insert linkage connector into servo horn.

Make sure shoulder of screw is cleared from servo horn.
Add washer to reduce play if necessary.

Shoulder

Tighten up the round nut against the shoulder. Apply CA or permanent thread locker.

After fastening the round nut, make sure that the linkage connector can rotate freely.
Product Registration Form (US Customers)

We would like to share with you any relevant information regarding your model, including product news and free upgrade parts when applicable. Please fill in the following and send to AirBorne Models, 4749-K, Bennett Drive, Livermore, CA 94551 USA.

1. Name:__________________________________________________________

2. Address:________________________________________________________________

3. Phone #:____________________ E-mail:__________________

4. Model:______________________________________________________________________

Wing QC#__________ Fuselage QC# _______________________
(QC numbers are stamped on wing and fuselage)

5. Date of Purchase:____________________________________________________

6. Store Name:_____________________________________________________

Please call AirBorne Models at 925 371 0922 for any assistance in filling this form. Thank you very much for purchasing our product.
Optional Parts

(3WM ACCESSORIES)

3 - Pin EZ Connector

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP0011310</td>
<td>40A Max. Current</td>
<td>1 set</td>
</tr>
</tbody>
</table>

-ideal for electric models

2 - Pin EZ Connector

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>KP0011210</td>
<td>40A Max. Current</td>
<td>1 set</td>
</tr>
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</table>

-ideal for electric models

Clevis Wrench

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI8210010</td>
<td></td>
<td>1 set</td>
</tr>
</tbody>
</table>

Special tool for clevis installation. Suitable for standard and small (EP) clevis.

Propeller Adaptor

<table>
<thead>
<tr>
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<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW2340100</td>
<td>d3xD5</td>
<td>1 set</td>
</tr>
</tbody>
</table>

Outrunner 28/30

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM0283010</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

Brushless ESC

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>KC2025A02A</td>
<td>24x45x11mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>

- Voltage Range : 5.6 ~ 16.8V
- Current : 25A continuous
- Current (Burst, >10 seconds): 35A
- Weight : 24 g
  (with wires and connector )
- BEC : 5V / 2A
- Low Voltage Cut-off : /
- Light weight with low internal resistance for high current operation
- BEC function for Li-ion / Li-poly
  2 – 4 cells; Nimh / Nicd 5 – 12 cells operation.
- Low battery voltage auto cut off to reserve power to the servos.
- Safe start up motor.

E230RXMPO26791108
Ducted Fan

Pattern

Warbirds

Funfly

Scale

Electric

Sports

Glider

Trainer

Boat

Accessories

Covering
(Lightex / Toughlon)