

# Ripmax Coyote

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The reborn 'Coyote' reviewed in its electric guise.



The coyote and I after the successful test flight.

## Introduction

This new model of the 'Coyote' is not exactly new as the term goes. Some of you will recognise this model as the kit manufactured by Balsacraft of Watton in Norfolk, roughly 14 miles from my home. The model in the earlier version was basically a 2 channel slope soarer, with the later versions of the kit being able to convert to electric with a speed 400 size motor and 7 x 500 AR cells.

As you may know, Balsacraft has now



▲ Box contents.

ceased to exist in its original form and Ripmax have re-launched the model, now made in the Czech Republic in this new ARTF form. In my opinion they have done a fine job (not, I should point out, that the Balsacraft version was not a fine job).

The box itself is nicely done and will catch your eye on the shop shelf, the price is £44.99 for the electric version reviewed here and comes complete with a 400 motor



▲ Hardware required.

and a folding 6 x 3 prop. You will also need to buy a speed controller of, say, 15 - 20 Amp rating, capable of handling 8 cells and, to power the model, you will require a 7-cell pack of 500 or 600 mAh capacity. I have tried an 8-cell pack and this also fits in with a slightly more rearward CG position. The span of the model is 52 inches (1320 mm) and the target weight is 24 oz (680 g). This particular model finished up at 23 oz (666 g) but I did use mini servos. The model will take standard servos but will be heavier than the target weight.

Opening the box, you are presented with a nicely packaged set of parts, well protected against transit damage. The wing panels were the first to catch my eye, so light and very nicely made. Let's get building or assembling whichever way you look at it with ARTFs!!

## Let's Begin

As always, read the instructions first so you have a feel of how the model is going to go together. You should identify the parts and also check that they are all as they should be. The A4 size instruction manual is very well put together and basically consists of 40 very simple one-line type steps complete with pictorial diagrams for each step. This has been very well thought out and will help the not-so-confident builders to construct this model as the per the box artwork. For example, step number 18 just says - "Glue the aileron servo tray together from parts 18 and 19", and most of the steps are very similar. Forty steps may sound a lot but I had this model built in 4 evenings of around 2 hours per session, writing this whilst waiting for glue etc. to set.

As this is an ARTF model, I am not going to dwell on the construction too much.



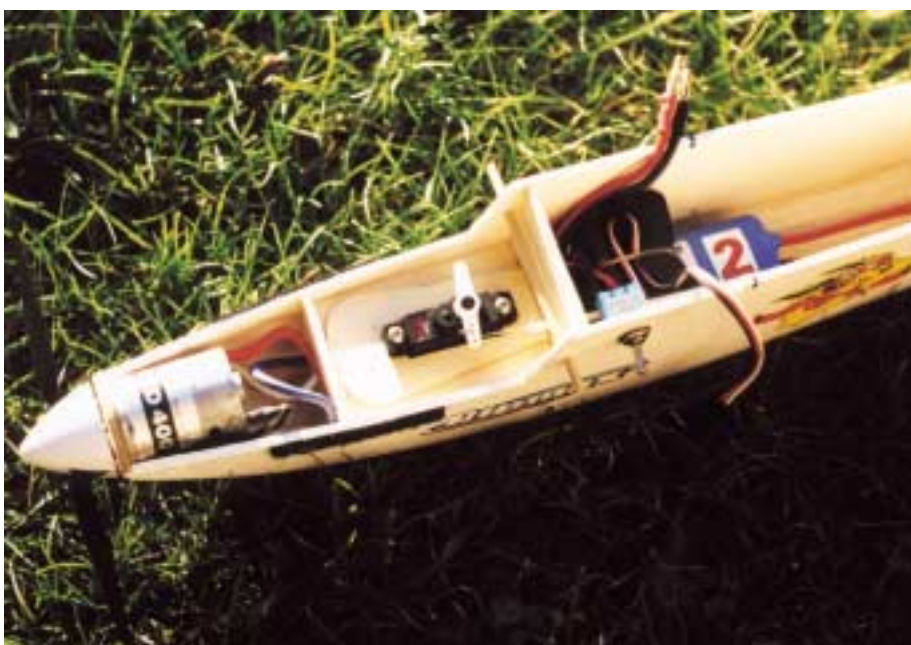
▲ Wing structure.



▲ Aileron torque rods.

When going through the instructions there are various points to observe in the positioning of the parts, in particular where it says "Electric Version Only" or "Glider Version only". Following the instructions you should not really come across any problems. However, there was just one small point of frustration for me - this came at step 13, the ply wing joiners or dihedral braces did not sink flush into the wing, they sat proud of the lower wing surface by 1½ mm and this caused the front of the wing not to sit flat on the fuselage and would alter the angle of attack. So before you epoxy these in check first. I used my Dremel tool to cut some ply shavings away. This sorted the problem and then I epoxied the braces in place.

Step 15, which is the fitting of the aileron torque rods, may confuse. They really do, as the picture suggests, fit on top of the wing and not underneath. This did cause me some head scratching at the time but don't worry about this when you come to it.



▲ Internal view showing motor, servo etc.

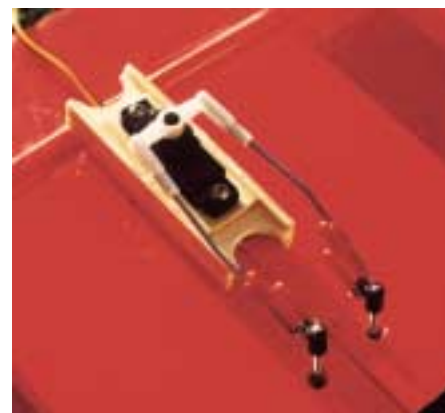
## Fitting the model out

As I said earlier in the article, I used micro servos rather than the standard size that the model can take. I used a pair of Hitec HS 81's that I had around at the time, this did mean that I had to add some ply parts of my own so they would not drop through the standard size hole. The aileron servo is set up in the normal fashion with 2 rods pushing and pulling the torque rods which actuate the ailerons. The elevator servo is connected up to the wire pushrod in the tube which is then fitted up inside the cleverly pre-drilled fin so that the pushrod comes out at the 'T' tail point to actuate the elevator.

I used a standard Graupner Speed 400, 6 volt motor simply screwed in with 2 bolts. The 6 x 3 folding prop was also a Ripmax item, actually marketed as the prop set for the Protech Topic 400 size glider, but a Graupner item will fit. I purchased the 22 amp Ripmax Xtra speed controller. I have been an avid fan of the Schulze controllers in the past, but since the release of the 'Xtra'

range of controllers, I have found these to be reliable and well-priced compared to similar products. This controller can handle up to 10 cells, which in the Coyote may not get used - note I used the word 'may'!

To keep weight and fitting problems down, I used a very reasonable priced Jeti Rex 4 receiver. This was wired up in the normal fashion (depending on which mode you fly) and then wrapped in tin foil and then foam which I believe to be the standard practice for most of us. Finally, this was all connected up to a 7- or 8-cell battery pack. I used Velcro to fit the battery, allowing it to be moved forward or back to achieve correct CG position, 60 mm from the leading edge. On this review model using a 7 cell 600 mAh battery, the model balanced on the target point first time with no adjustment. Using an 8-cell pack put the CG 65 mm back from the leading edge with no noticeable differences in flight characteristics. If you're not a confident or competent pilot I would strongly suggest that you stick to the recommended CG to start with, particularly if this is your first venture into a 400-size aileron model.



▲ Aileron servo with conventional rods.

## Finishing

Finishing off basically consists of fitting the rather delicate looking dowels and cutting the plastic moulded canopy with scissors to fit. The canopy is fitted to the model with transparent tape in step 37. I actually used 2 very thin strips of Velcro. I prefer this type of fixing rather than tape as it gives you quick access into the model and is easily replaced in field conditions.

Step 38 covers the setting up of the control surface movements. Be sure to follow these. The diagram is not too clear as to which is elevator and which is aileron so on the cautionary side I set both controls at the lower value of 20 degrees each way as opposed to the higher value of 25 degrees each way. As with all of my models, I set the dual rates on the TX to 60-65% of these values to calm things down on that first initial test flight.

Lastly, the nice colourful Coyote transfers are stuck on in their respective places, giving that bit of comedy factor to the model and reminding you of Wiley Coyote from the cartoon with his 'beep-beep'!

Give the whole model a complete check-over, making sure that it balances at the correct point and that the control surfaces are



▲ **Wing and fuselage.**

moving in the correct sense - then you are ready to fly the model!

**Flying**

The section at the end of the construction discusses the issue of flying the Coyote, it stresses that this model is not a basic trainer. However, due to its slow flight and gentle control responses, it is very suitable as a beginners model - but do get someone to help you for the first time and do not learn to fly this model in winds of more than 10 mph.

The model was ready for its maiden flight on New Year's Day 2002 - our club holds this day for the boys with their new toys to come out and play!

It was a beautiful, clear, cold and very near windless day with snow on the ground as you can see from the pictures. The model was given the usual precautionary range checks with both power on and off with the aerial up and down. I gave the 7-cell pack a top-up of juice, so to speak, placed my peg in the vacant slot on the frequency board,

▼ **General plan view.**



walked out with the model and gave it a gentle shove from the hand under its own power. It simply flew from the hand in a straight line, neither pitching nor dropping a wing.

The model was turned for the first time to the right and this was a very gentle affair with no tendency to roll quickly even at my high dual rate setting. No change in trims was required and I continued flying the circuit. I brought the model into wind and eased up the stick from level flight with full power into a really nice loop. I pulled off the power at the 1 o'clock position and held the model round for another loop with no power on, then another loop back to level flight. The model was put into an attempted roll but proved to be too gentle on these settings to do so in a quick manner, but a very ungainly slow roll was achieved with plenty of down elevator fed in at the inverted position.

Subsequent flights have been flown with more aileron throw and this has made the model perform more to my style of flying.

The model was flown power off on several passes with no sign of coming to terra firma, so this should be good on those hot summer days looking for thermals. Power off

and with the prop folded back it is very clean and glides very nicely. After about 7 minutes I decided to call landing and as the prop folded back and the model settled, it became very apparent that I was not going to get this one in first time, so a 'go around' was called with the motor power being cut earlier and the downwind leg extended slightly. Again the model did not seem to want to come to daddy! It quite simply floated slowly past and finally settled in the snow covered long grass around 40 feet past the edge of our mown strip. No damage was done to the model and I just had to walk a little to get to it.

One or two members commented on what a nice pretty little model it was and how well it flew. I would imagine with more cells, say 8 - 10, it would become an even more agile little plane to fly and a nice size to take on holiday.

**In Summary**

I would certainly say a beginner could fly this model although supervision is recommended. It flies very sedately and looks attractive both new in the box and in the air. It goes together very easily, with no great hardships encountered, and I must confess to having no dislikes about this model whatsoever. The appealing thing to most modellers is that it will not cost you a fortune either. Given the chance, I would buy one again!

The Coyote should be available at any model shop or supplier stocking Ripmax products. I assure you that you will love this little model in either the slope or electric form - so go on, give one a try!

That's all from me once again until next time, good flying.

**Q&EFI**

**SPECIFICATIONS**

**MODEL INFORMATION**

**Name:** Coyote  
**Manufacturer:**  
**Distributor:** Ripmax UK Limited  
**Model Type:** Electric Aerobatic Trainer  
**Engine/Motor:** Speed 400  
**Construction:** ARTF - Built-up wing and fuselage  
**Price:** £ 44.99

**R/C FUNCTIONS**

1. Aileron
2. Elevator
3. Speed Control

**MODEL SPECIFICATIONS**

**Wing Span:** 1.32 m (52 in)  
**Weight:** 0.62-0.68 kg

Required to complete  
 Speed Controller  
 Battery Pack  
 Radio Equipment and Chargers.