



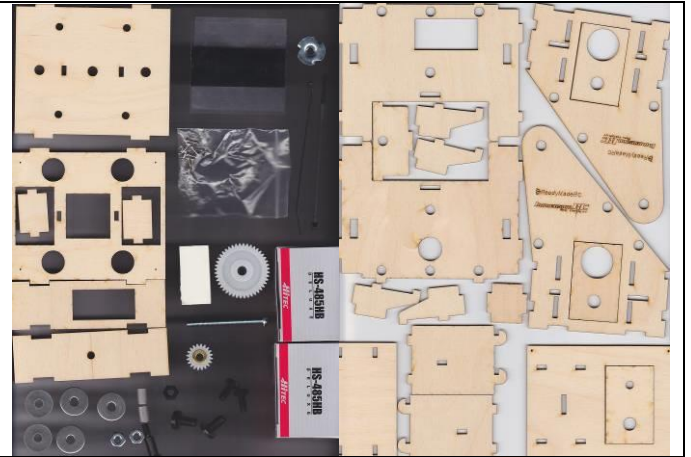
Easy Antenna Tracker Antenna Pan/Tilt Assembly Instructions

Note: prior to gluing pieces, dry fit the entire assembly to insure there are no binding joints. Lightly sand any connections that are excessively tight.

Items required for completion of kit:

- Medium CA
- 5 minute epoxy
- Your antenna, EZ Antenna Tracker, Battery, UBEC, RX, and wiring!

Verify all parts are included in the kit.



First start with the parts shown to assemble the main structure.



Lay the side supports as shown, and install the small reinforcement pieces.



Install the servo horn using the four included small screws. Install it on the left support pictured in the previous step.



Install bottom platform to side support as shown.



Install spacer as shown.



Install top platform as shown.



Combine with second side support.



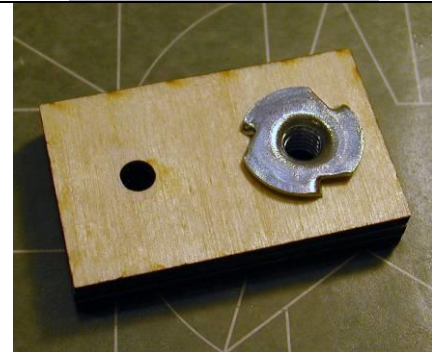
Obtain the three pieces for the tripod mount shown. The medium sized holes in the bottom of each part will all be aligned during the assembly in the next step.



Apply glue to the first piece as shown. Add the second identical piece next, and add glue to the top of that piece. Add the third piece, making sure the medium holes are aligned.



Using a hammer, insert the tee-nut on the side of the support shown.



Insert the bolt with one washer as shown.



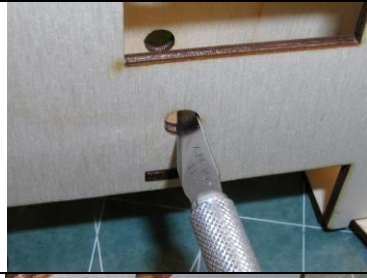
On the opposite side, add a washer and a nut. Tighten securely.



Add another washer and one of the threaded spacers.



With a hobby knife, scrape a small amount of material from the holes on the top and bottom plates until the threaded spacer slides through without binding. Do not remove too much material or there will be excess slop in the pan assembly.



Insert the bolt into the hole on the bottom plate.



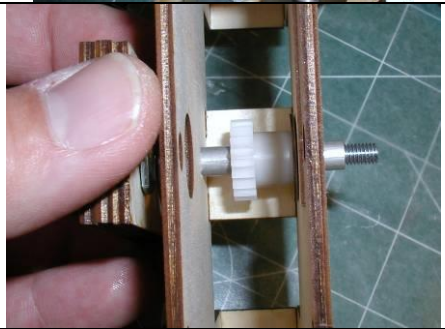
With the bolt partially inserted through the bottom hole, slide in the small gear and slide the bolt through the gear. A set of needle nose pliers may be helpful in this step for holding the gear.



Using needle-nosed pliers, add a washer above the gear.



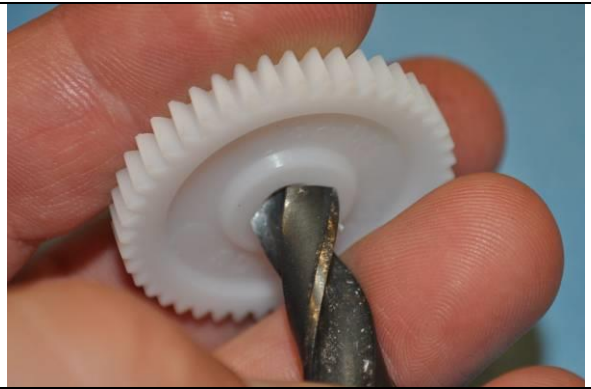
Insert the bolt through the hole on the top plate, and add the second threaded spacer.



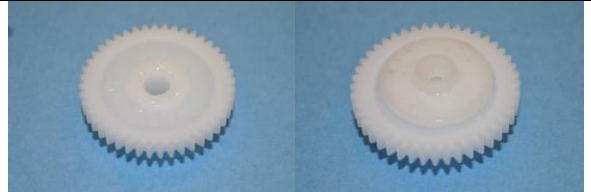
Add the last washer and the nut to the bolt and tighten securely. A good amount of force is helpful to prevent any slippage of the assembly during use. At this time you should also tighten the set screw on the gear.



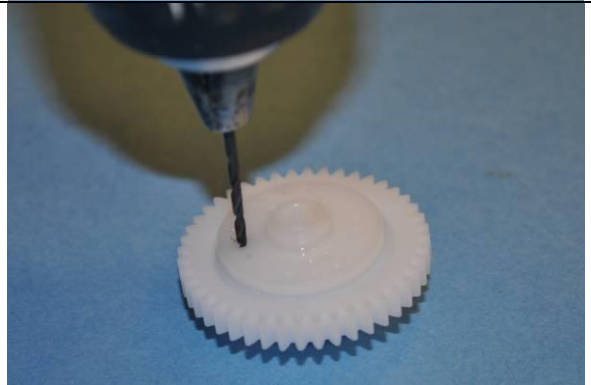
Remove some material at the center of the large gear as shown using a drill bit (MANUALLY!), or with a knife. This is so the servo arm will fit flush with the gear.



Mist the servo arm with kicker, and apply some CA to the gear as shown. This will hold the gear in place for drilling screw holes. Carefully (and quickly!) place the servo arm on the gear, making sure it's centered as perfectly as possible.



Once the CA has hardened, drill 4 pilot holes for the screws.



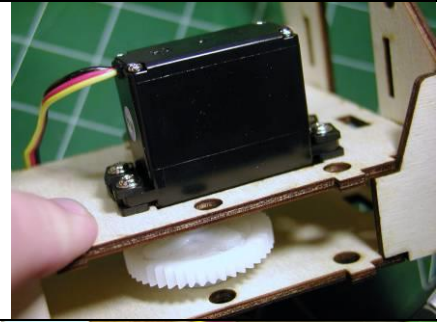
Insert the screws



Slide the gear into the bottom plate as shown.



After adding the spacers included with the servos, place the servo in the hole as shown and push the gear assembly onto the servo shaft. Making sure the servo gear is engaging the smaller gear snugly, screw the servo into place using the included screws.



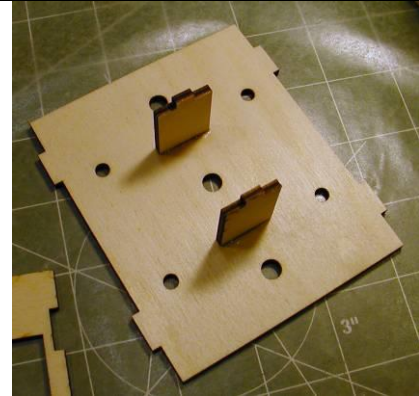
Screw gear assembly to servo.



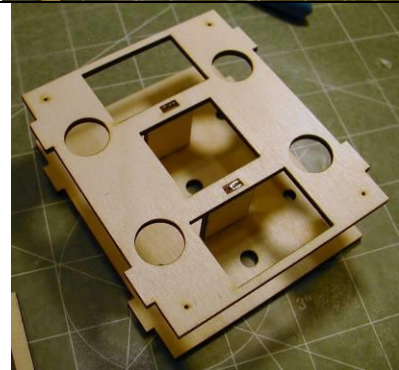
Obtain the parts shown for the antenna mounting bracket.



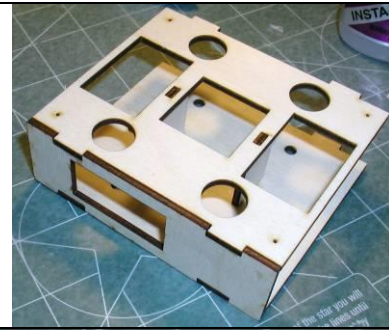
Add the two spacers to the front plate as shown.



Add the back plate as shown.



Add the side supports as shown.



Mount the servo as shown.



Insert the screw through the hole on the side plat and into the hole on the side of the antenna support.



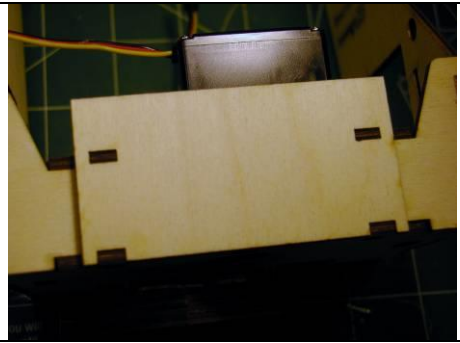
Add the nut to the inside and tighten securely.



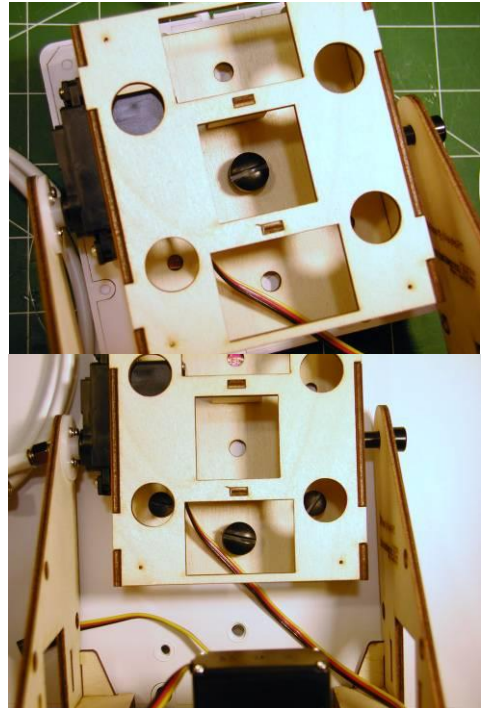
With the servo centered, align the antenna support to the line shown (no line on beta models, align at a 45 degree angle from vertical). Attach servo to servo horn on the side support.



Add the EzOSD support plate as shown.



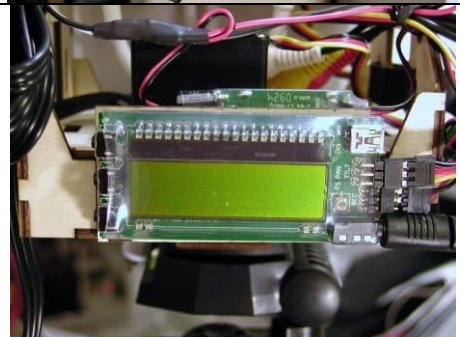
The antenna should be installed with the cable coming out of the top or bottom and should be centered as much as possible on the mount. For the standard L-Com large antennas typically one large and two small bolt holes will line up. For the smaller 8dBi 2.4GHz antennas, the mounting hole on the antenna will line up with the center hole on the mount. The recommended antenna for 2.4GHz systems using the Duo2400 is the 11dBi diversity antenna available here.



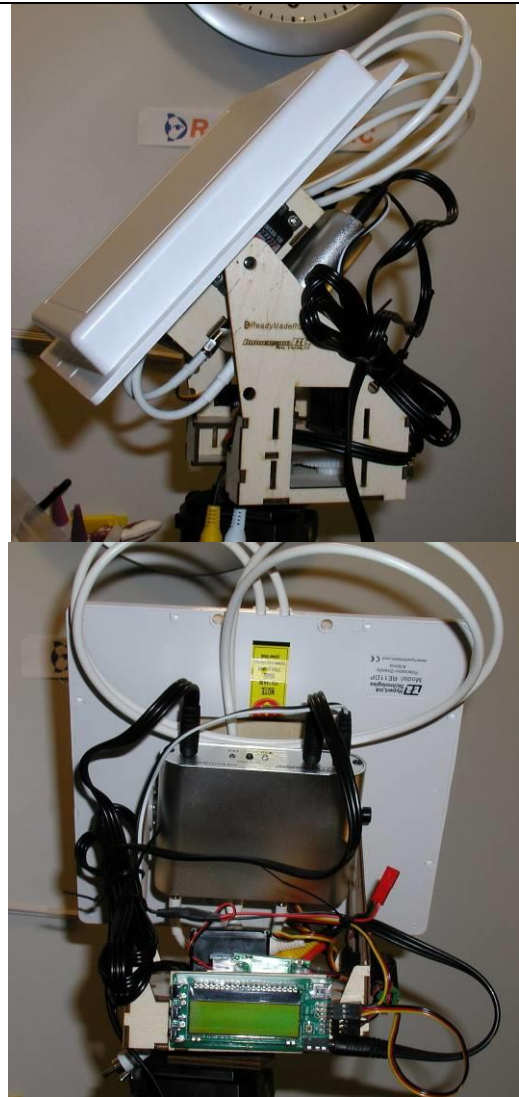
Depending on the receiver type, the receiver can be mounted either with hook-and-loop or with screws. If using the Duo2400, it is recommended that the receiver be mounted with hook-and-loop as shown. The antenna lines should come out of the top of the antenna and be fed through the inside of the mounting plate and hooked to the Duo2400 receiver. Make sure there is clearance for the tilt assembly to move to the vertical position.



The EzOSD is mounted to the back plate using the hook and loop tape.



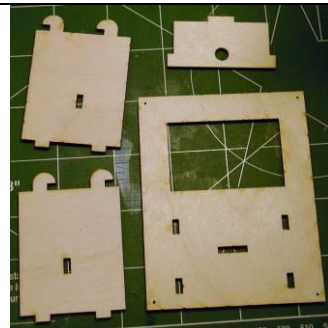
Make sure wiring is free from binding. Sample installation is shown.



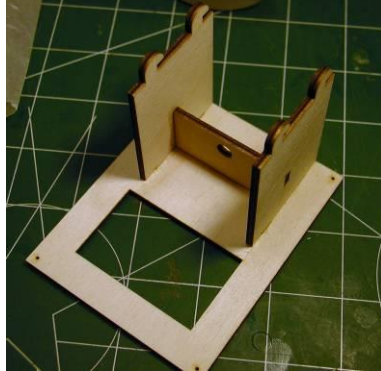
OPTIONAL “SIDE CAR” Installation Instructions

The “side car” can be used to mount a second receiver with a vertical whip antenna or as a spot to mount additional equipment.

Pieces Used



Assemble as shown



Hangs on either side of pan/tilt unit



Setup screen samples for the EZOSD. Your settings may vary slightly, but these should be close!

