

Assembly and Use Guide for the KAPtery Redstone Rig Kit

Parts List and 3D Printing guide at [KAPtery.com/guides](http://kaptery.com/guides)

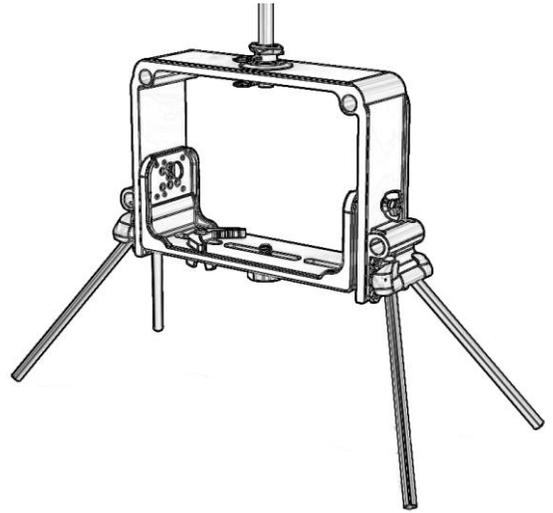
Technical support: <http://kaptery.com/contact/>

The Redstone Rig can be suspended from a kite or balloon line for aerial photography. It is designed for small point & shoot cameras like Canon PowerShots, or mirrorless cameras like the Canon EOS M series. A Picavet or pendulum suspension from the KAPtery clips on easily.

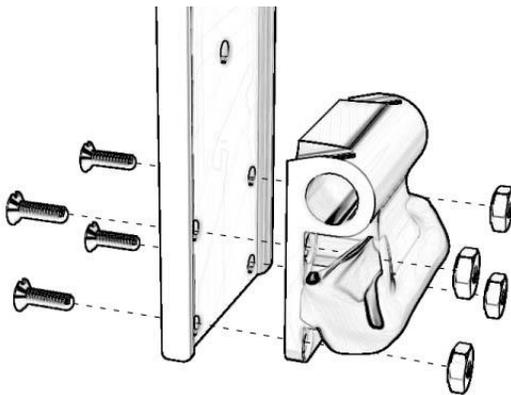
Assembly (time: 1 hour)

Tools needed

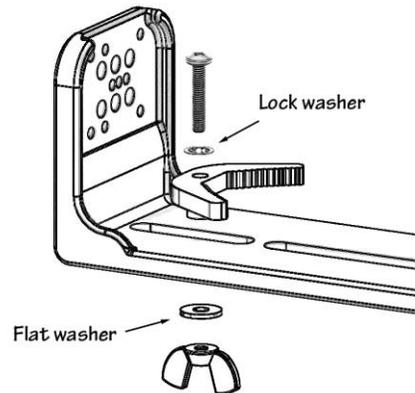
- small flat and Phillips screwdrivers
- small pliers



Step 1. Attach leg brackets to upper frame

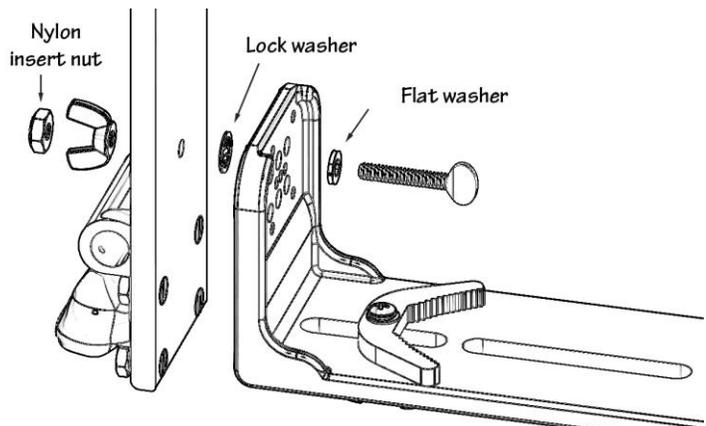


Step 2. Attach camera grasper to tray

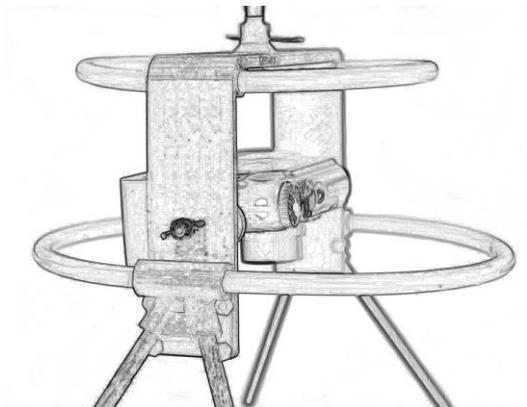


Step 3. Attach camera tray to upper frame

1. The camera tray has six holes for the thumb screw. Use the one which allows your camera to balance front-to-back with the lens extended.
2. Thread the nylon insert nut on until it is flush with the end of the thumb screw and the wing nut can turn freely but cannot fall off.



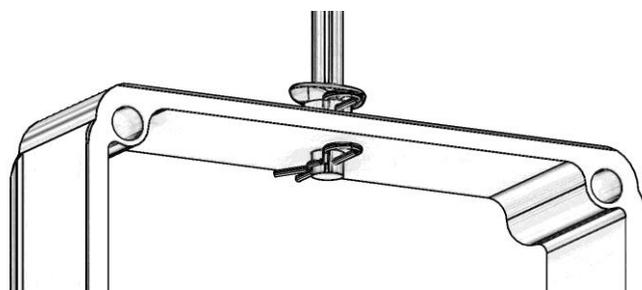
Step 4. Attach legs and bumpers



1. Insert four oak legs **all the way** in to the leg brackets.
2. The longer white tubing bumper slides through the upper plastic tubes on the rig.
3. For oblique photography, the lower horizontal bumper might be in the field of view. That bumper is made from the two shorter pieces of tubing so half of it can be removed to clear the view for the camera.

Step 5. Attach the rig to a suspension system

1. The shaft for a Picavet or pendulum can be inserted into the top of the frame.
2. When flying, always insert a second cotter pin below the frame. *Don't trust a single pin.*



Both cotter pins are required.

Step 6. Mount the camera

Mount the camera (with battery) on the tray with the yellow thumb screw. Support the rig with one finger on the lower end of the suspension shaft, then slide the camera sideways until the rig balances side-to-side. Tighten the thumbscrew, then slide the grasper snug against the camera and tighten the wingnut. If the rig is not balanced front-to-back (with the lens extended), use different holes in the camera tray to attach it to the upper frame. To adjust front-to-back balance more, mount the camera on the tray pointed in the opposite direction (the slot in the tray is not centered).

Step 7. Safe flying

Always secure the camera to the Redstone Rig with a lanyard. The wrist strap on point & shoot cameras works well for this.

Caution: The plastic parts of the Redstone Rig are 3D printed from poly lactic acid (PLA) which will deform if it gets too hot. **Don't leave the rig in a closed car in direct sunlight on a hot day.**