

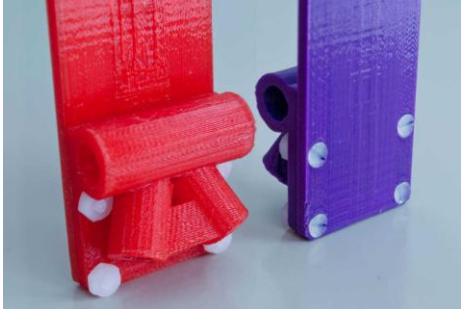
# Quick Start Guide for the KAPtery [Titan 2 Rig Kit](#)

Full instruction guide at [KAPtery.com/guides](http://kaptery.com/guides)

For spare parts: [KAPtery.com](http://kaptery.com)

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

## Attach leg brackets to upper frame



Fasten eight nylon bolts and nuts as shown. Tighten firmly. The included bolts are nylon and the nuts are either nylon or steel.

## Drill camera platforms for tripod screws

The goal is to fasten the cameras to the platforms with their backs snug along the platform's lip and

their centers of mass centered side to side (along the long axis of each platform). Almost every camera will require a hole drilled in a different location. Detailed instructions for finding the correct hole locations and drilling the holes are in the full [Titan 2 Rig Guide](#). The 1/4" thumb screws can fit snugly in the holes so they don't fall out, but they should turn freely or you risk stripping the threads of the camera's tripod socket.

*The cameras are not centered side-to-side – but their mass is. The tripod holes must be drilled so the camera backs are snug against the tray lips and the whole tray is balanced side-to-side.*



## Attach camera tray to upper frame

Attach the hardware as shown. The nylon insert lock nut should be threaded onto the end of the thumb screw just far enough so the screw end is flush with the outside of the nut.



## Configuring legs and bumpers

There are two sizes of tubing — the thicker one (3/8") is only for leg loops at the lower end of the upper frame. Insert short (3 cm) pieces of 1/4" oak dowel to attach the larger size polyethylene tubing.

*The wing nut and lock nut go on the outside of the frame.*

For all other brackets, 5/16" tubing can be attached as legs or bumper loops. See photos at [The KAPtery](#). Where the ends of a loop of tubing meet inside a plastic tube, insert a 1" (2.5 cm) piece of 3/16" dowel rod (wood or plastic) in the ends to join the tubing more securely.

### Attaching the rig to a suspension system

The shaft for a Picavet or pendulum suspension can be inserted into the vertical, cylindrical bracket at the top of the Titan 2 Rig frame. A single hole through the side of the bracket is for a cotter pin.

1. If the shaft from the suspension is too tight, smooth the upper and lower ends of the bracket tube with a blade or ream the hole with a 9/32" drill bit.
2. Insert the shaft so one of the holes through it is below the frame and the other hole aligns with the hole through the cylindrical bracket.
3. Insert a cotter pin through the bracket and the shaft.
4. Always insert a second cotter pin below the frame.



*The upper cotter pin prevents spinning and the lower pin can prevent disaster.*

### Connecting electronics

External electronics for triggering camera shutters simultaneously can be mounted on the shoulders of the upper frame. USB cables can reach the cameras through the oval holes in the sidewalls of the tray. If the alignment is not right, the oval windows can be enlarged. The plastic is easy to grind away with a Dremel tool or drill.



*The Titan 2 Rig with normal and infrared Canon A495s and external shutter trigger electronics on the shoulders of the upper frame. USB cables reach the cameras through oval windows.*

### Safe flying

Always secure the cameras to the Titan 2 Rig with a lanyard. The wrist straps on point & shoot cameras work well for this.