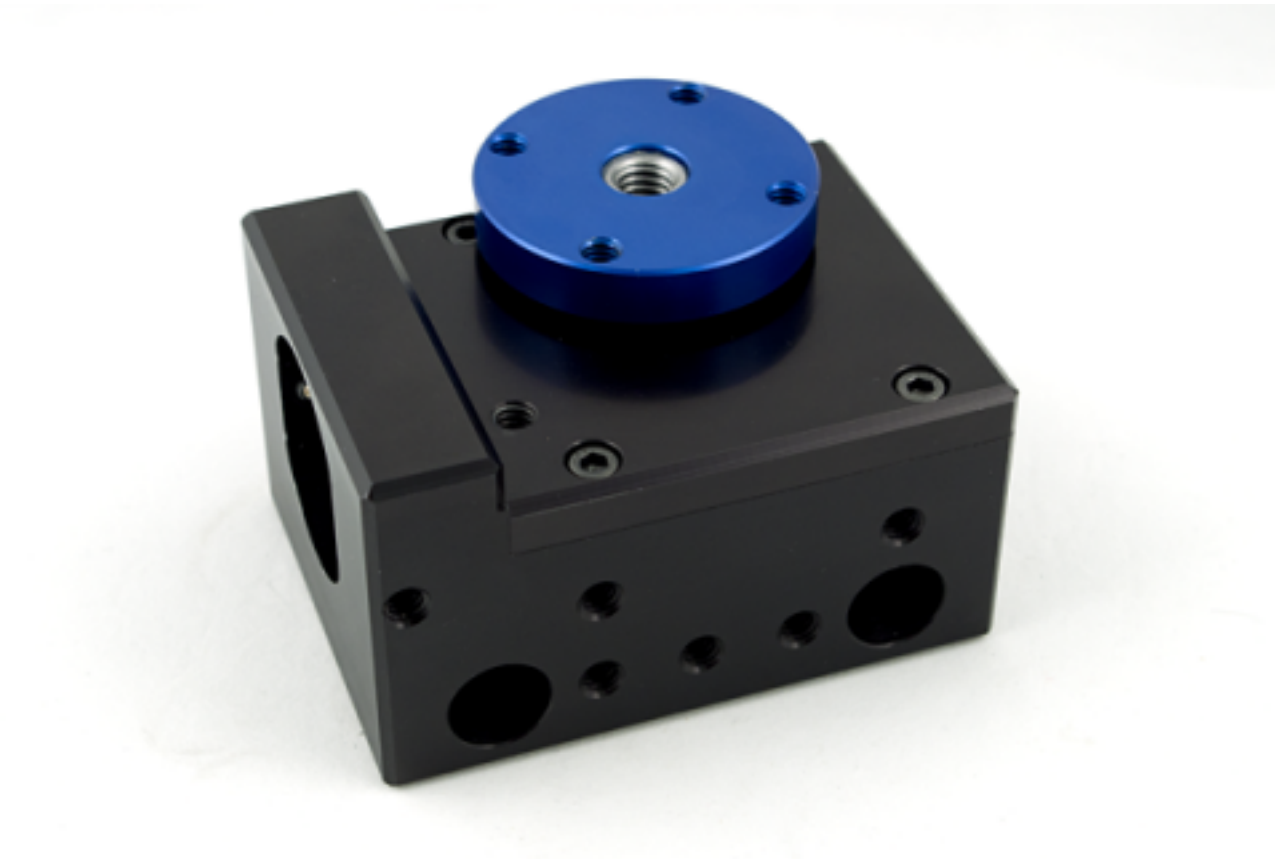
Introducing the Dynamic Perception VX1 Rotary Motion Blocks

Submitted by andre on Tue, 05/14/2013 - 20:46



[1]

Dynamic Perception has announced their upcoming VX1 motion blocks. These blocks can be used to create creative motion control solutions. We at ElysiaVisuals.com will have these blocks available in our store as soon as they are available for the market. Here is the original announcement:

Around the holidays we showed a sneak peak of a motion block design for pan and tilt axes that we were working on. Our goals were somewhat lofty: create a truly modular motion block design, with high performance, great load capacity, support for nearly any kind of motor, use common components in the setup, and do it all for a price that wouldn't break the budget.

Since our initial preview, we've taken the feedback we received and re-visited the concept several times -- increasing the capabilities, safety, performance, and reliability of the blocks. We're proud now to show you the fruits of our labor that we hope will be the next great tool in your creative kit!

Welcome to the next generation in modular motion control: Say hello to the VX1.

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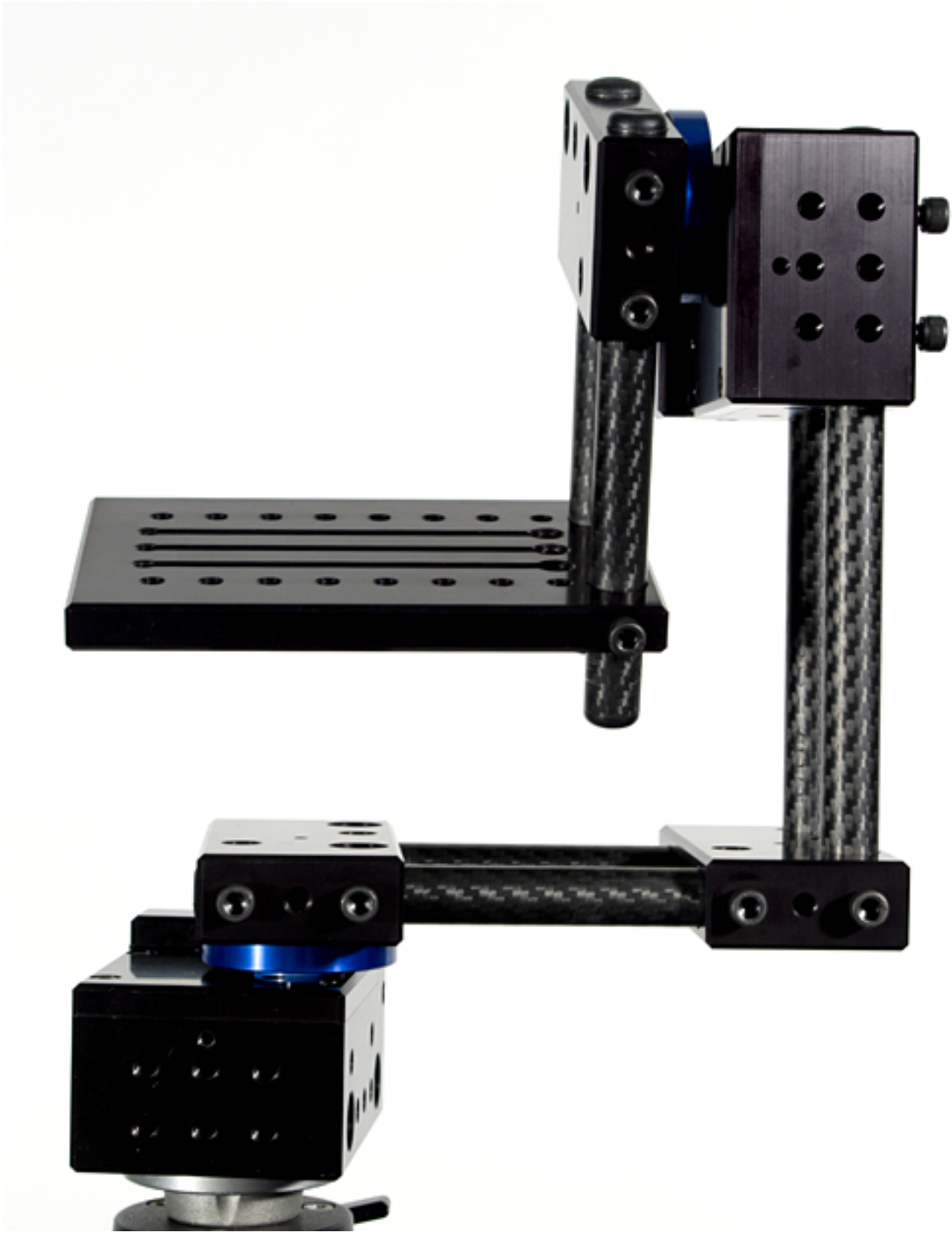
The VX1 is a specialized right-angle gearbox for film motion control applications, self-braking with a 10:1 gear ratio, and integral 15mm rail mounts for use with standard equipment, and of course all of the accessories needed to get it up and running.

Flexibility

Any motor with a 36mm gearbox and 8mm D-shaft simply snaps in and out (with a provided stainless steel collar adapter) in one second flat, without the need for any tooling. This allows you to use any of our EZ-Swap DC motors or common geared stepper motors without having to purchase additional blocks, giving you the flexibility for both budget and creativity based on the needs of your project.

Integral 15mm rail mounts and specialized 15mm rail brackets for connecting multiple units together mean the VX1 will fit right in with your cages and other equipment. No bulky connection brackets required to swap out when switching between cameras, and you can use the equipment you already have laying around.



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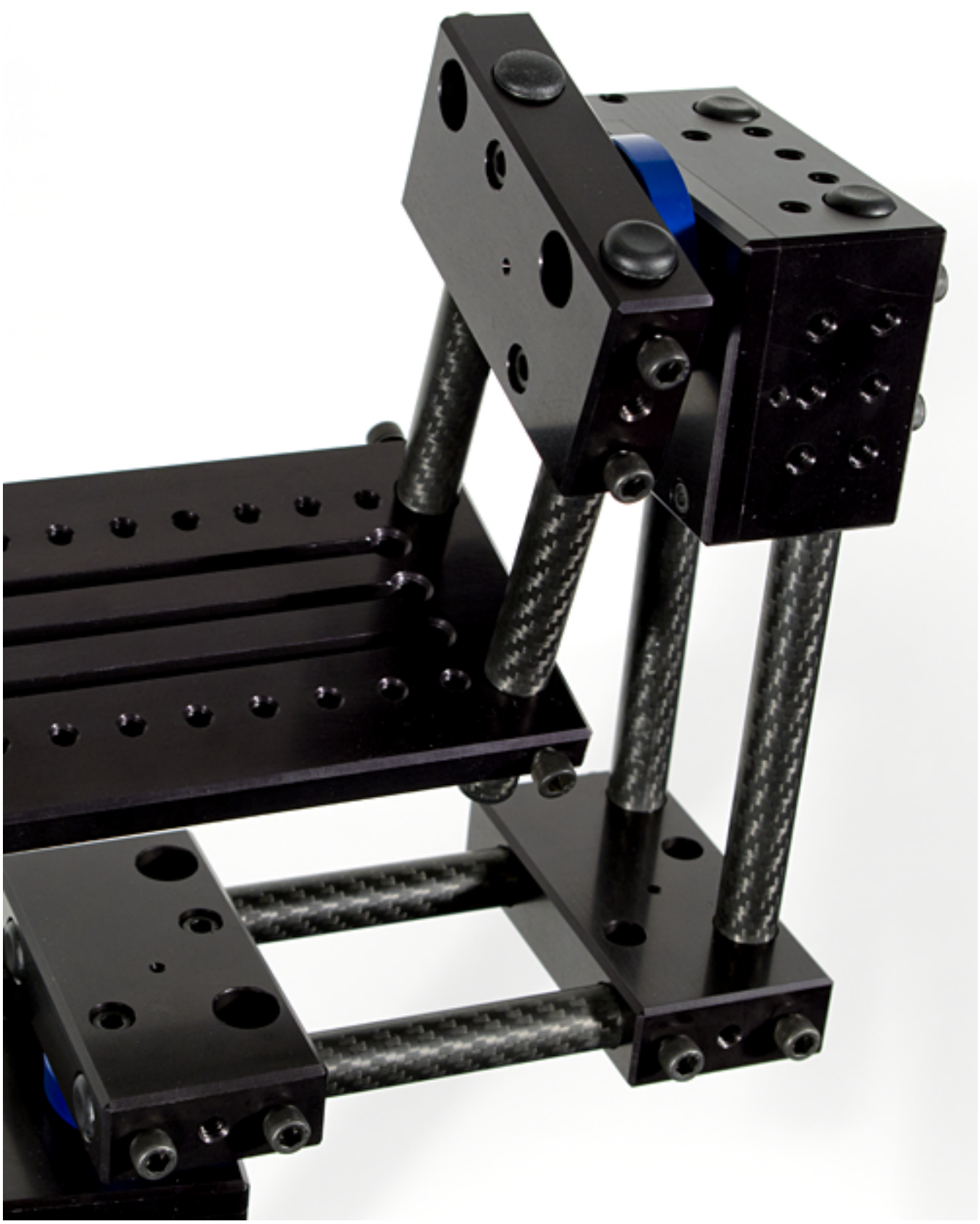
Strength and Reliability

High quality, high precision, and high strength make beautiful music together in the VX1. With a maximal radial payload of 30 lbs, and a maximal thrust payload of 60 pounds, the VX1 is a force to be reckoned with.

Manufactured to extreme specifications, and designed for high reliability - the VX1 is a zero-service unit. There are no adjustments to be made to the unit, there are no screws to come loose, and all key drive components are secured at up to 10,000 pounds of force with additional secondary securing techniques that won't succumb to vibration over the life of the unit. Every unit will be tested at several phases during manufacturing and assembly, and again run through a battery of tests before final approval to ensure that each unit performs as specified.

Safety is insured: when set up in accordance with instructions, all critical drive components have fail-safe features that will prevent separation of the unit in case of complete destruction of the internal components.



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Affordability

The best equipment in the world is useless for your project if you can't afford it. As you've come to know from us by now, our goal is always to provide with the best capabilities we can offer in a price range that meets your budget. Note: prices are estimates, exact pricing will be released later.

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Portability

Even though it will support full-size cameras, and even video camera, the entire two-axis setup shown, along with two EZ-Swap DC Motors fits in a single Pelican 1400 case!

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Availability

The first retail available units will be ready for sale in July 2013.

Specifications

NOTE: All Specifications Subject to Change Before Release

- Weight (VX1) : 29 ounces (822 gm)
- Dimensions (VX1) : 3.7" x 2.1" x 2.75"
- Max Payload
    - Radial (tilt) : 30 lbs (13.6 Kg)
    - Axial (pan) : 60 lbs (27.2 Kg)
- Gear Ratio: 10:1 Self-braking
- Maximal output wheel backlash: 1 Arc Minute
- Supported Motor Parameters: 8mm D-Shaft, 36mm standard gearbox, with required coupler ring
- Gearbox lifespan (Continuous Rotation under maximal load)
    - Radial (tilt) : 1,000 hours
    - Axial (pan) : 1,500 hours
- Mounting
    - VX1:
        - 2x 15mm rods spaced 60mm apart
        - 1/4-20 and 3/8-16 threaded holes on one side, spaced at 15mm centers alternating
        - 1/4-20 threaded holes on three sides, spaced at 15mm centers

- Camera Output:
  - 4x 1/4-20 threaded holes at 30mm circle
  - 1x 3/8-16 threaded hole at center
  - Optional camera mount plate and wheel mounting bracket

Note: several photos show pre-production components. Fixture bolts, brackets, and other accessories shown are early models, which will be changed before production.

Blog [8]
Time lapse photography [9]
dynamic perception [10]
VX1 [11]
motion block [12]

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Links
[1] http://elysiavisuals.com/sites/default/files/field/image/vx1-1.png [2] http://www.elysiavisuals.com/sites/default/files/vx1-2.png [3] http://www.elysiavisuals.com/sites/default/files/vx1-3.png [4] http://www.elysiavisuals.com/sites/default/files/vx1-4.png [5] http://www.elysiavisuals.com/sites/default/files/vx1-5.png [6] http://www.elysiavisuals.com/sites/default/files/vx1-6.png [7] http://www.elysiavisuals.com/sites/default/files/vx1-7.png [8] http://elysiavisuals.com/article/blog [9] http://elysiavisuals.com/article/time-lapse-photography [10] http://elysiavisuals.com/tags/dynamic-perception [11] http://elysiavisuals.com/tags/vx1 [12] http://elysiavisuals.com/tags/motion-block