

# Operating Instructions

Thank you for purchasing the FlowPod, our versatile patented stabilizer/support. The FlowPod will provide you with several shooting options that will help to improve and distinguish your productions. Before you begin using the FlowPod, **please read the instructions below.**

The FlowPod can be used in at least three distinct operating modes: stabilizer, monopod, and low-flow (for low-level shots). Since the FlowPod was designed with versatility in mind, you may discover other creative ways to use it, but first read these **WARNINGS:**

- **We do not suggest running at full speed with the FlowPod, as you could be distracted and trip or collide with something, possibly resulting in injury or damage to your gear.**
- **Do not use it in stabilizer mode with the monopod section extended.**
- **Exercise caution when operating in low-flow mode to ensure that you do not strike the camcorder or FlowPod on the ground, other objects or your feet and legs.**
- **Do not overload the FlowPod or lean on it like a walking cane.**
- **Do not subject the FlowPod to excessive moisture or submerge it in water.**
- **Do not overtighten the knurled handle-lock knobs. Tighten only enough to secure the handle.**
- **When using the supplied hex key to tighten or loosen the counter weights, grip firmly, insert the hex head thoroughly, and do not overtighten.**
- **To prevent damage, hold on to the camcorder while adjusting the mounting plate (X-Y plate) to ensure that it doesn't slide and fall.**

It may take a little while to learn how to use the FlowPod properly, so please read the instructions thoroughly before attempting to use it. As packed, the unit is configured for basic stabilizer mode, and you will have to complete a few steps before you will be ready to shoot.

## **STABILIZER MODE**

### **Attachment and Balancing**

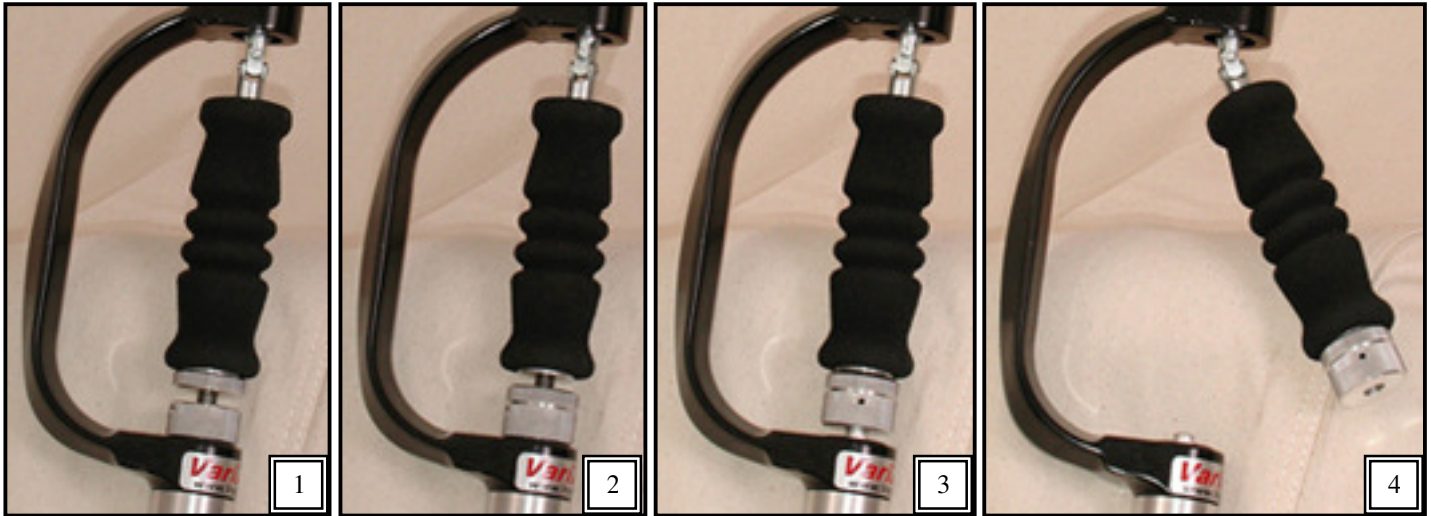
1. The first step is to attach the camera to the mounting plate (the top section of the X-Y assembly). Detach the mounting plate by removing the 3 side screws (with lock washers). Find the lengthwise center of gravity of your camera. Do this by balancing the camera on top of a pen or pencil oriented perpendicular to the camera's length. The spot at which the camera comes closest to balancing is the lengthwise center of gravity. Position the center of gravity at the center of the mounting plate, then fix the camera to the plate using the closest available hole. Put the mounting plate back onto the X-Y assembly and attach it with the 3 screws w/ lockwashers. Now you are ready to start balancing the unit.



### **On stabilizer balancing**

*The basic idea of stabilization is to enable the operator to keep the camera level and to move it fluidly. This is achieved through careful re-distribution of mass and a friction free pivot point (the gimbal). In practice, this means you want the section of the FlowPod below the gimbal to be effectively heavier than the upper section (vertical balance), and you want the camera's mass to be centered on the rotating axis of the gimbal to keep the camera level (horizontal balance). Vertical balance is adjusted by attaching counter-weights (usually on the lower section of the FlowPod), while horizontal balance is adjusted by positioning the X-Y plate side-to-side and front-to-back.*

2. In order to center and balance the camcorder you will have to unlock the handle. Do this by adjusting the two knurled metal knobs directly under the handle. The locking system operates by screwing the knurled knobs in opposite directions so that the thinner one butts up against the handle and the thicker one lodges against the base of the C-handle (1).



To free the handle you need to screw the thinner knob all the way down (clockwise from top - 2) so that it sits directly on top of the thicker knob (completely flush), and then screw both all the way up into the handle (counter-clockwise from top - 3). When the knobs are screwed all the way into the handle, it should be free (4). The handle should be free when operating in stabilizer mode.

If you have difficulty loosening the knobs, you can turn the handle in the opposite direction (clockwise from top), but make sure the brake is loosened, too. To lock the handle back in place, screw both knobs down to the base (clockwise from top) and then screw the thinner knob up against the handle until tight. You should also tighten the brake when locking the handle.

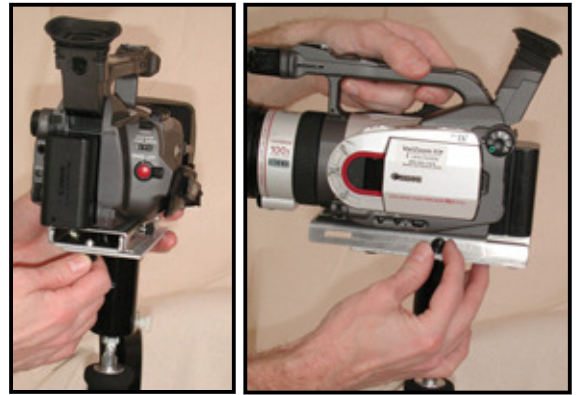
3. Now that the handle is free (4, above), you can begin balancing. In order to balance the unit properly, you need to have the camera set up exactly as it will be used. For example, you should remove the lens cap, flip out and position the LCD monitor, and add on any accessories prior to balancing the unit. The smallest change to the weight distribution on the camera can significantly affect the balance of the FlowPod.

4. If you have a very small camera, you may not need to use the included counter-weights, but if you have a medium to large camera, we recommend that you initially attach some counter-weights prior to balancing the FlowPod. Most cameras above 2.5lbs will require you to add at least one counter-weight to make the lower section of the FlowPod heavier (*pictured at right*). Because of the variety of accessories and configurations available for DV cameras, it isn't possible to prescribe an exact weighting guide. See section 6 to determine how much counter-weight you need.



- Adjust the X-Y assembly so that your camera's mass is centered. Loosen the brake (white nylon screw) and adjust the X-Y assembly front-to-back and left-to-right so that the camera becomes level.

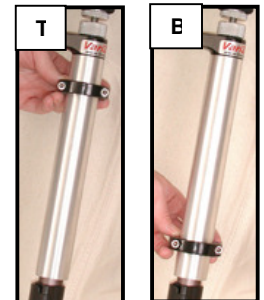
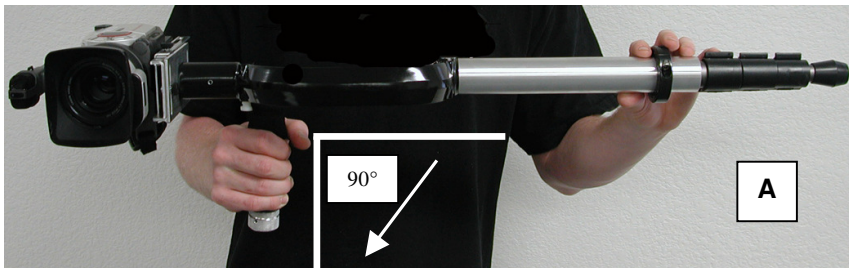
Once the camcorder is balanced, tighten the adjustment screws thoroughly.



- Now you can check the vertical balance of the FlowPod to see if you need to add, remove, or adjust the position of the counter-weights. Use as few weights as possible, and start with the weights at the top of the shaft (see picture below, "T"). Continue reading:

### **"The Drop Test"**

To test the vertical balance, hold the unlocked handle straight up and turn the FlowPod on its side to a horizontal position (A), then let it fall back to the vertical position (the "Drop Test"). It should fall gradually, taking 2-3 seconds to go from horizontal to vertical. Note that it will swing past the vertical position – you are only counting the time it takes to go 90 degrees (from horizontal to vertical). If it does not swing down, slide your weights down one at a time (B) and retry the Drop Test. If that doesn't help, add another weight and retest. If the FlowPod swings down too fast, you should remove weights or slide them upward, as necessary. **NOTES:** -With some very small cameras, you may need to add a weight above the gimbal to achieve a good balance. -With heavier cameras you may need more than 3 counter-weights, available direct from VariZoom.



- After setting your counter-weight, you may want to fine-tune the X-Y adjustments. Once you have achieved a good balance, you are ready to begin practicing with the FlowPod. **There are two important things to keep in mind at this point: (1) The FlowPod is designed to be operated with two hands and (2) it requires practice to master (but it only gets easier with time).**
- You can adjust the drag on left-right movement by slightly tightening the brake just above the handle, or you can leave it completely loose and steer with your free hand. **Keep the handle unlocked for operation, and we recommend using your free hand to steer and aid in stabilizing the unit. Using your thumb and forefinger, lightly grasp the 'neck' of the black C-handle (right by the brake) to control the left-right movement. Practice walking with the unit and try to hold it close to your body. Move deliberately and carefully – the FlowPod cannot compensate for drastic movements. Spend some time practicing to determine what works best for you. Operator skill is critical for success with a handheld stabilizer. We recommend shooting at the widest angle possible, and if you have a wide-angle adapter you should try using it. You will also probably want to shoot at a fixed focal length (manual focus) to prevent the 'hunting effect' caused by autofocus constantly adjusting on a mobile camera.**

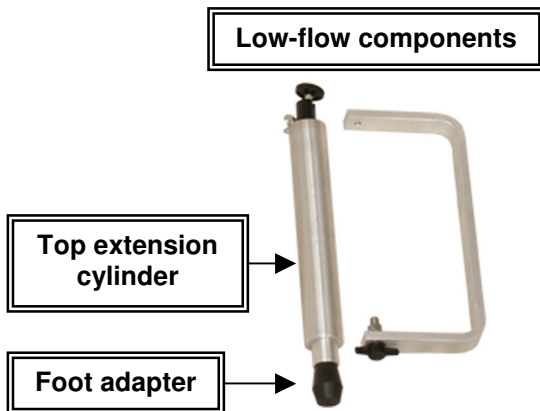
## MONOPOD MODE

1. To use the FlowPod in monopod mode, you should lock the handle in place (see Step 2, "STABILIZER MODE" – p. 2), and tighten the brake.
2. To extend the leg sections of the monopod pull out on the hinges and slide each section out, then lock the hinges back in place.



## LOW-FLOW MODE (optional accessory) - ASSEMBLY

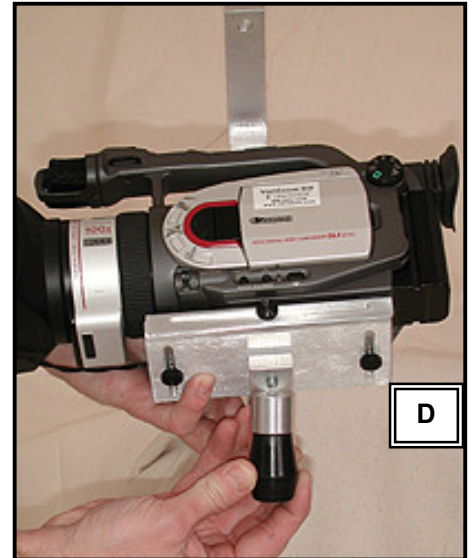
1. The first step in setting up your Flowpod for Low-Flow mode is to remove your centered and balanced X-Y assembly (with camcorder mounted) from the top by unscrewing it counter-clockwise (A). Support the weight of the camcorder as you unscrew the plate. *Note: Don't lose the plastic washer sandwiched between the X-Y assembly and the C-handle.*



2. Next, remove the rubber shoe from the end of the monopod section of the FlowPod (B, the rubber shoe may seem difficult to remove, but it will come off with a little twisting and effort). Unscrew the aluminum foot adapter from the top extension cylinder and slide on the rubber shoe (C).



3. Mount the camcorder and X-Y assembly inside the Low-Flow frame on the bottom half, which is distinguished by its smaller hole. The threaded mounting post on the base of the X-Y plate fits through this hole so that you can screw the threaded aluminum foot adapter all the way on until it secures the X-Y plate to the frame (D).



4. Secure the Low-Flow frame to your FlowPod using the supplied tee head attachment screw (3/8"-16) and lock washer (E, see picture below). The attachment screw will fit through the larger hole at the top of the frame and screw into the bottom of the monopod section of the FlowPod. We recommend leaving the monopod collapsed when setting up and operating the Low Flow kit (as pictured at right).



5. You should screw the extension cylinder into the spot previously occupied by the X-Y plate (F). Now you can add weights and/or a monitor to help balance the unit top to bottom and improve functionality. It isn't absolutely necessary to add the weights, but you may find it beneficial.



## **LOW-FLOW MODE - OPERATION**

1. You can operate the Low-Flow unit with the handle locked in place, but you may determine that the freely rotating handle suits you better. You will achieve smoother shots if you do not extend the monopod. It may also be beneficial to add weight to the top extension cylinder, but it will require some practice to determine what works best for you.
  2. Once you have fully assembled and adjusted the Low-Flow unit to your needs, exercise caution while walking along with it to make sure you don't strike the ground, other objects, or your feet and legs. You can achieve smooth, low-level shots in this configuration and you may find creative new ways to implement this feature, but as always, rely on common sense to help prevent unforeseen problems.
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*Special Note: If at some point you don't need the monopod feature and want to use the FlowPod as a standalone stabilizer, just unscrew the monopod section from the main unit (counter-clockwise from the bottom) and remove it. This may be especially useful if you are using a very small camera that does not need much counter-weight.*

Also Available:

VZ-DV Sportster – Upgrade to a vest and spring-arm supported system by adding the DV Sportster to your FlowPod

<http://www.varizoom.com/flowcam/dvsportster.php>



*The VZ-FP has a one-year factory warranty that covers defects in materials or workmanship. Please retain your sales receipt for warranty verification. If you have any problems or questions, please contact us on the web ([www.varizoom.com](http://www.varizoom.com)) or toll-free 888-826-3399.*

# **VZ-FPB Balancing/Docking Plate for the FlowPod**

The VZ-FPB consists of the mounting plate and a c-clamp

Using the VZ-FPB is simple, but first you may have to adjust the foam grip on your FlowPod handle. The FlowPod handle has a machined groove near its top that enables you to slip the handle into the u-shaped slot of the VZ-FPB plate, securing the FlowPod for the balancing procedure. You can expose this groove by pushing the foam grip down about 1 inch. Start by pushing down on the top flared section of the foam grip and then working the grip further down by grasping it firmly and pulling downward along the handle.



You must secure the VZ-FPB to a sturdy, flat, level surface (e.g., table or workbench) with either a clamp or bolts. The easiest thing to do is clamp the plate to the table using the supplied c-clamp. Note that the top of the plate has a recessed circle to accommodate the fixed contact pad of the c-clamp. See the picture above.

Once you have secured the VZ-FPB, slide the FlowPod handle into the u-shaped slot of the plate, *but make sure the foam grip has been pushed down far enough so that it won't get pinched in the u-shaped slot.* The handle should drop into the sunken round section at the back of the slot, locking the FlowPod into position. Make sure your FlowPod handle is unlocked and adjust the X-Y assembly so that the camera becomes level (horizontal balance).

**SPECIAL NOTE:** We recommend testing the vertical balance while holding the FlowPod in your hand, because the swinging of the FlowPod and camera could cause one or the other to strike the table. If you choose to test the vertical balance while the FlowPod is mounted on the FPB, please keep your hands close to the unit to prevent any collisions.

The real benefit of using the VZ-FPB is that it will provide a strain-free balancing platform AND you can use it as a docking stand to hold the FlowPod while you're not using it. [www.varizoom.com](http://www.varizoom.com)

