

Orion® VersaGo™ II HD Altazimuth Mount

#10104

Orion® VersaGo™ II Altazimuth Mount

#10105



OrionTelescopes.com

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Figure 1a: The VersaGo II HD Altazimuth Mount.

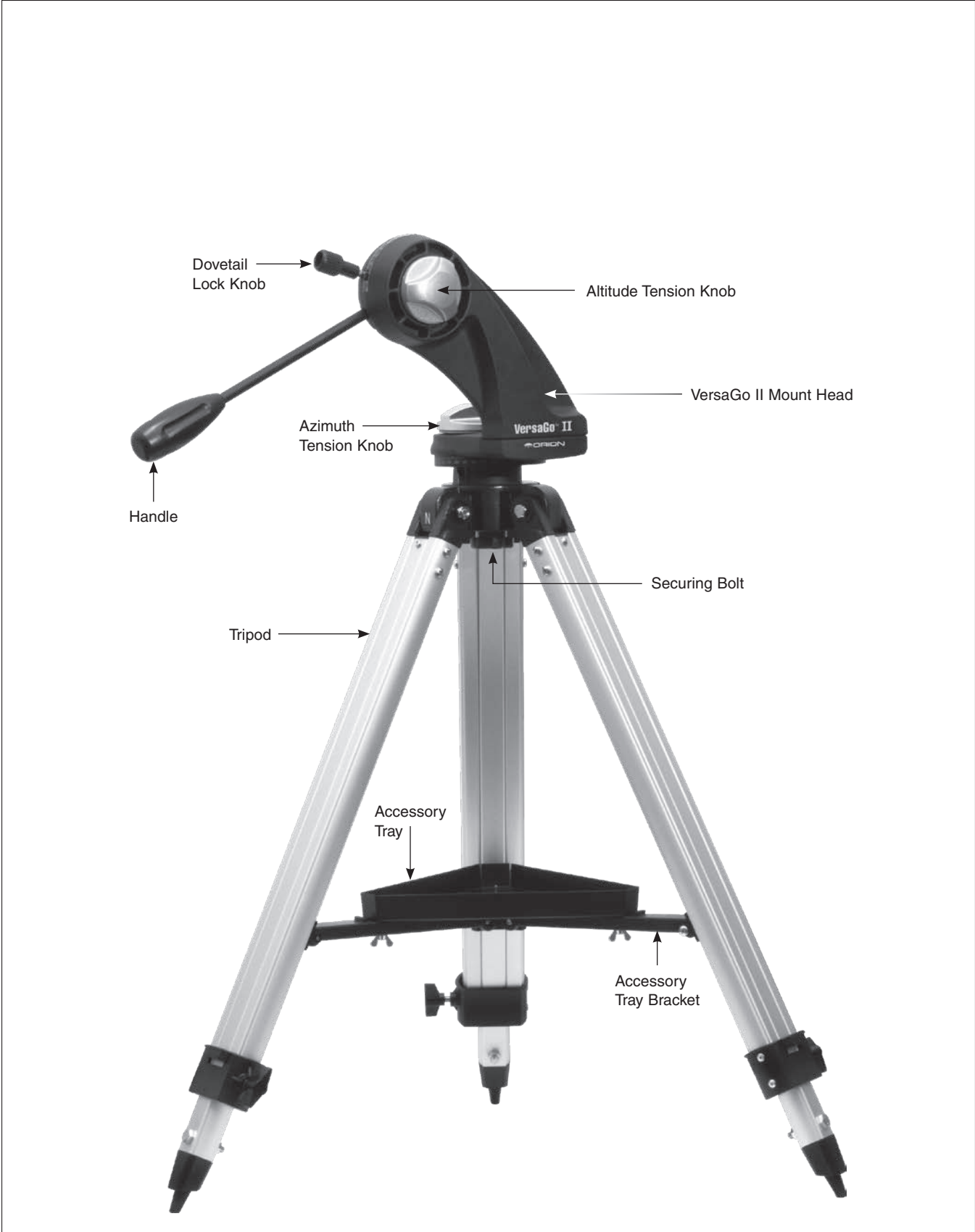


Figure 1b: The VersaGo II Altazimuth Mount

Congratulations on your purchase of a quality Orion product. Your VersaGo II Altazimuth Mount is a sturdy, yet highly portable observing platform for small telescopes, spotting scopes, and binoculars. The simple design makes setting up and using the mount very easy. Teflon bearing surfaces for both axes of motion insure smooth telescope pointing, even when making very small, precise positional adjustments. Great for exploring scenic daytime vistas or scanning the night skies, you'll find yourself observing more and fussing with equipment less when using the VersaGo II.

These instructions will help you set-up, properly use, and care for your mount. Please read them over carefully before getting started.

1. Parts List (refer to Figure 1)

Qty.	Description
1	Aluminum Tripod with accessory tray bracket installed (10105 only)
1	Steel Tripod (10104 only)
1	Center support shaft with knob (10104 only)
1	Accessory Tray (10105 only)
1	VersaGo II Mount Head
1	Handle

2. Assembly

Carefully open all of the boxes in the shipping container. Make sure all the parts listed in the Parts List are present. Save the boxes and packaging material. In the unlikely event that you need to return the mount, you must use the original packaging.

Initial assembly of the mount is extremely easy as the mount is mostly pre-assembled at the factory. Just install the head onto the tripod and attach the accessory tray. It is recommended to completely unpack all of the parts and lay them out in your workspace before beginning. All bolts should be tightened securely to eliminate flexing and wobbling, but be careful not to over-tighten or the threads may strip. Refer to Figure 1 during assembly.

A. VersaGo II HD (Steel) #10104

- Stand the tripod upright and spread the legs out as far as they will go. Keep the tripod legs at their shortest (fully

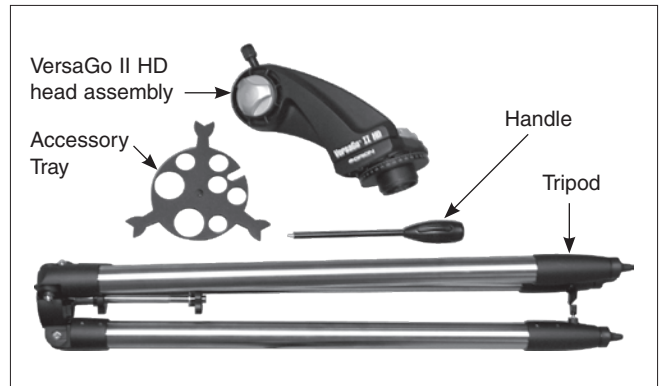


Figure 2: Component parts of the VersaGo II HD mount

- retracted) length, for now; you can extend them to a more desirable length later, after the mount is fully assembled.
- The center support shaft arrives already installed in the tripod so you need to just secure the head and accessory tray.
- Place the base of the VersaGo II head into the base of the tripod. Orient the VersaGo II head so that the post on the base (referencing north) of the tripod lines up with the notch on the VersaGo head (Figure 4).
- Thread the center support shaft into the VersaGo II head until tight. Hold the mount head with one hand while tightening the lock bolt with the other. Be careful not to cross thread when assembling. This will secure the VersaGo II head to the base of the tripod.
- Remove the knob and washer from the bottom of the center support shaft. Slide the tripod support tray up the bottom of the center support shaft until the three tray arms are touching the legs of the tripod. The flat side of the accessory tray should be facing up. Place the knob washer on the center support shaft against the tray, and follow it by threading the securing knob all the way up the center support shaft until it is tight against the tray. The tripod support tray provides additional stability for the tripod, and holds up to five 1.25" eyepieces and two 2" eyepieces.
- Thread the handle into the threaded receptacle of the VersaGo II head. Please note the handle threads in at a slight angle to position it at a more comfortable angle to use in the field. If you wish to have the handle in an alternate position you can remove the Phillips-head screw and thread the handle on the other side of the lock knob that secures the telescope. You can use the Phillips-head screw to cover the additional hole.

Your VersaGo II HD mount is now fully assembled, and should resemble Figure 1a. All that is left is to connect your telescope to the mount. Please skip ahead to section 3.



Figure 3: Component parts of the VersaGo II mount

B. VersaGo II (Aluminum) #10105

1. Stand the tripod upright and spread the legs out as far as they will go. Keep the tripod legs at their shortest (fully retracted) length, for now; you can extend them to a more desirable length later, after the mount is fully assembled.
2. Attach the accessory tray to the accessory tray bracket using the three wing screws already installed in the tray. Remove the wing screws from the tray and place the tray on top of the accessory tray bracket oriented with the flat surface against the accessory tray bracket. Thread the wing screws from underneath the assembly by first placing the wing screw up through the hole in the bracket and threading into the tray itself. Do not completely tighten the wing screws until all three are in place as it may be necessary to make minor adjustments to the tray position in order to align all three holes.
3. Place the base of the VersaGo II head into the base of the tripod. Orient the VersaGo II head so that the post on the base (referencing north) of the tripod lines up with the notch on the VersaGo II head (Figure 4). There is a captive bolt located on the underside of the leg casting to secure the mount head to the tripod. Use the black knob to insert the post into the threading on the head and turn until tight. Be careful not to cross thread when assembling.
4. Thread the handle into the threaded receptacle of the VersaGo II head. Please note the handle threads in at a slight angle to position it at a more comfortable angle

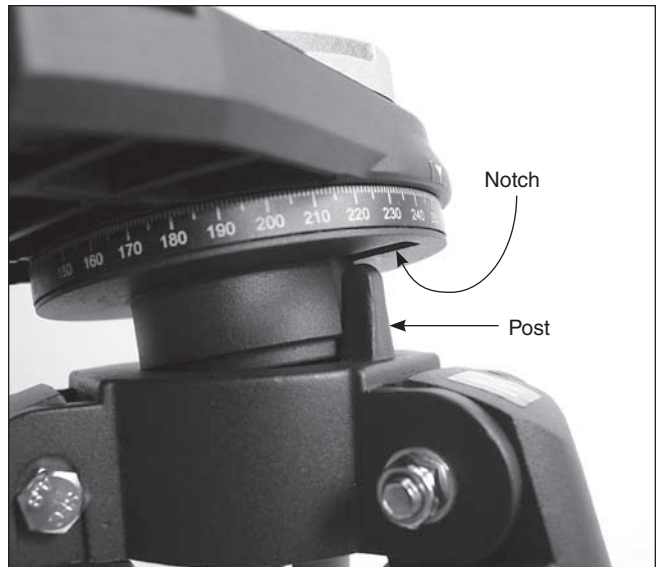


Figure 4: The post on the tripod base goes into the notch on the underside of the head assembly. The VersaGo II connects to the tripod with the knob directly under the tripod head; be sure to tighten this knob firmly. (#10104 shown)

to use in the field. If you wish to have the handle in an alternate position you can remove the Phillips-head screw and thread the handle on the other side of the thumbscrew that secures the telescope. You can use the Phillips-head screw to cover the additional hole.

Your VersaGo II mount is now fully assembled, and should resemble Figure 1b. All that is left is to connect your telescope to the mount.

3. Connecting a Telescope

The VersaGo II mount was designed to be used with telescopes of apertures 6" or less; telescopes larger than this will not be able to point at the horizon (horizontal) or zenith (vertical). Also, for best results, the telescope optical tube assembly should not weigh more than approximately 15 lbs — less for longer optical tubes — otherwise it may not provide adequate stability.

To connect a telescope, a dovetail mounting bar is required. Some telescopes have this bar directly attached to the tube. If this is the case you can skip to the next paragraph. For telescopes that do not have a dovetail bar attached or employ a ¼"-20 mounting block you will need a set of tube rings to attach a dovetail bar (Figure 5). These accessories are available through Orion Telescopes and Binoculars. Additionally, if your telescope has a ¼"-20 threaded mounting hole, Orion

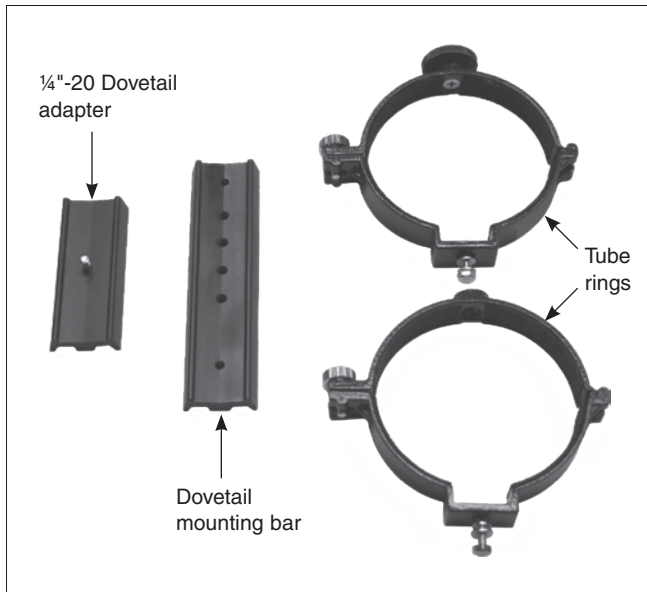


Figure 5: Orion sells a variety of optional mounting bars and tube rings that will couple your telescope to the VersaGo II mount.

offers a dovetail “L-bracket” that will fit the dovetail receptacle of the VersaGo II and thread into this hole.

Once you have a dovetail mounting bar on your telescope tube, connecting the telescope to the mount is exceptionally easy. First, unthread the knurled black plastic thumbscrew on the VersaGo II’s dovetail holder until the tips are flush with the interior wall of the dovetail holder. Then, insert the telescope’s dovetail bar into the mount’s dovetail holder, and tighten the thumbscrew firmly.

Note: *If you have a telescope with a dovetail mounting bar attached directly to the tube, or you are using the 1/4"-20 dovetail adapter), the finderscope may be oriented in an awkward position when connected to the VersaGo II. In most cases, this should not cause any problems in actual usage but may be awkward or uncomfortable. Contact Orion Customer Service or visit our website (oriontelescopes.com) for additional product information.*

For best up-and-down motion, the telescope should be balanced front-to-back when positioned horizontally. You can balance the telescope by loosening the thumbscrew slightly, and moving the dovetail bar slightly forward or back in the dovetail holder. If you are using tube rings, you can move the telescope tube forward or back in the tube rings. When the telescope doesn’t move up-and-down by itself when the arm’s tensioning knob is not very tight, you have achieved good balance.

4. Using the VersaGo II Mount

The VersaGo II mounts allow motion of the telescope in two axes: altitude (up-and-down) and azimuth (left-to-right). Hence, the VersaGo II is an “altazimuth” mount. Simply move the telescope up-or-down and left-to-right. The handle provides a convenient way to adjust the position of the mounted telescope.

If the motion of one or both of the axes is too loose or too tight, you can adjust the bearing tensioning by tightening or loosening the knobs. You should be able to adjust these knobs so that even the smallest motions of the mount are very smooth. If the motion on the altitude axis is not smooth no matter how the altitude tensioning knob is adjusted, then you will need to better balance the telescope front-to-back.

Unlike many altazimuth mounts, the VersaGo II can be used to point a telescope at zenith (straight up). This makes it especially well suited for astronomical observing.

When pointing a longer telescope tube, like a refractor, at zenith, extending the tripod legs will help better position the eyepiece. For heavier telescopes, we recommend extending the tripod legs in order to give the mount a wider stance; this will help to stabilize the mount and minimize the chances it could tip over.

Tracking Celestial Objects

Celestial objects appear to move slowly across the sky because of the rotation of the Earth on its polar axis. When you observe an object through your telescope, you’ll see it drift gradually across the field of view. To keep the object centered in the field, use the handle to move the VersaGo II as needed. For these small, precise movements, you may need to readjust the axis tensioning knobs. Keep in mind that objects will appear to move faster at higher magnifications, when the field of view is narrower.

5. Care and Maintenance

If you give your VersaGo II mount reasonable care, it will last a lifetime. Store it in a clean, dry, dust-free place. Do not store the mount outdoors, although storage in a garage or shed is OK.

Your mount requires very little mechanical maintenance. The mount is constructed of aluminum and has a black anodized finish that is fairly scratch-resistant. If a scratch does appear, it will not harm the mount. Dust, dirt, or moisture on the mount should be wiped off with a soft cloth. If the mount needs more extensive cleaning, use a household surface cleaning fluid.

When transporting the mount to an observing location, we recommend removing the handle in order to prevent it from being damaged. You can also fold the tripod legs together once the accessory tray is removed. For extra portability, you can also remove the VersaGo II mount entirely from the tripod; simply unthread the knob under the tripod head. To protect your mount during transport, Orion offers optional soft padded carry cases.

6. Specifications

VersaGo II HD (Steel) #10104

Mount:	Altazimuth
Material:	Die-cast aluminum black anodized throughout
Maximum load capacity:	Approximately 15 lbs.
Maximum tube diameter:	Approximately 7.5" (6" aperture telescope)
Bearing surfaces:	Teflon
Axis tensioning:	Via molded plastic, triangular-grip knobs
Pointing handle:	Included, foam grip
Telescope connection:	via dovetail rail
Tripod:	Stainless steel, includes accessory tray
Assembled weight:	18.5 lbs.
Assembled height:	47" (retracted) to 63" (extended)

VersaGo II (Aluminum) #10105

Mount:	Altazimuth
Material:	Die-cast aluminum black anodized throughout
Maximum load capacity:	Approximately 15 lbs.
Maximum tube diameter:	Approximately 7.5" (6" aperture telescope)
Bearing surfaces:	Teflon
Axis tensioning:	Via molded plastic, triangular-grip knobs
Pointing handle:	Included, foam grip
Telescope connection:	via dovetail rail
Tripod:	Aluminum, includes accessory tray
Assembled weight:	13 lbs.
Assembled height:	41.5" (retracted) to 63" (extended)

One-Year Limited Warranty

The Orion VersaGo II and VersaGo II HD Altazimuth Mounts are warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid to: Orion Warranty Repair, 89 Hangar Way, Watsonville, CA 95076. Proof of purchase (such as a copy of the original receipt) is required.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For further warranty service information, contact: Orion Customer Service (800) 676-1343; support@telescope.com.

Orion Telescopes & Binoculars

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