

Quick Start Guide

AZ Mount Pro™ “Level and Go” Altazimuth Mount Models: #8900, #8920



PACKAGE CONTENTS¹

- Telescope mount – with built-in GPS, WIFI and rechargeable battery (11.1V, 4400mAh)
- Hand controller (HC) – Go2Nova® 8407
- 6" Vixen/Losmandy dual dovetail saddle
- Controller cables X1
- RS232-RJ9 serial cable
- AC adapter for battery charging – 100-240V
- Aluminum carrying case
- 2" heavy duty tripod with 3 leveling screws (#8900 only, as shown)
- 4.5kg counterweight (#8900 only)
- Two year warranty on the mount, 90 day warranty on the battery

ONLINE RESOURCES (at www.iOptron.com, under “Support”)

- User's Manual
- Tips for set up and using the products
- Hand controller and mount firmware upgrades (check online for the latest version)
- Reviews and feedbacks from other customers

¹ Actual contents may change from time to time without notice.

Please read the full online instruction manual and FAQ for detailed information.

1. **Un-package the Mount:** Remove the AZ Mount Pro™ (AZMP) mount from the aluminum carrying case. Make sure that the Altitude Lock is fully tightened. **Charge the mount** using the included AC battery charger to fully charge the mount, until the LED indicator on the AC adapter changed to green. **NEVER charge the battery when it is below 0°C. DO NOT use any other AC/DC adapter.**

A slowly flashing battery status LED indicates the battery is low, which you still have about 30 minutes of operation time. You may keep using the mount by plugging in a 12V DC power source. **NEVER** use the mount this way when it is below 0°C. iOptron is **NOT** responsible for any damages and consequences caused by misuse

2. **Tripod Setup:** Evenly extend tripod legs to a desired length. Then lock legs using the locking knobs on sides. If set a tripod on an uneven surface, make sure the tripod head is leveled.



3. **Attach Mount:** Install three star-shaped adjustment screws onto the tripod head. Raise the screws up about 5mm.



Carefully position telescope mount onto the tripod by aligning the three holes on the bottom of the mount base to the three level adjustment screws on the top of the tripod.

Thread the tripod bolt into the bottom of the mount while holding the mount with your hand. Slightly tighten the tripod bolt by turning the tripod bolt lock knob.



4. **Level Mount:** Adjust level adjustment screws to level the mount using the bubble level on the base.
5. **Lock Mount:** Tighten the bolt lock knob to secure the mount. Slide tripod support spreader onto the bottom of bolt. Position the three edges to fit against the three tripod legs. Then hand tighten tripod lock knob to secure the tripod support spread in place. **Re-check leveling.**



6. **Attach Telescope:** Attach a telescope to dual dovetail saddle. Make sure that the telescope objective end is pointing to the direction as the arrow mark on the dovetail pointed to. The dovetail saddle can be rotated freely when the altitude lock knob is released. Fully tighten the altitude lock knob afterwards.



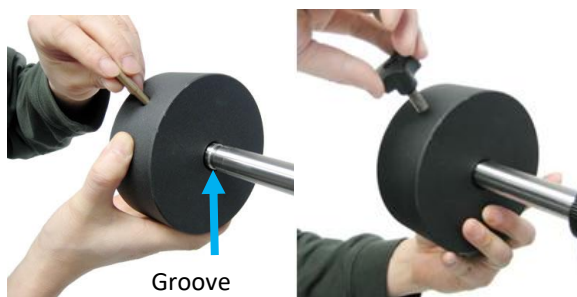
Tighten two dovetail saddle lock screws to secure the telescope.

NOTE: Push the CW shaft out first if a counterweight is needed.

7. **Install Counterweight:** Make sure the altitude lock knob is tightened. Back out CW shaft lock screw slightly. Push the CW shaft out of the mount from the center of the dovetail saddle. Retighten the CW shaft lock screw.



Slide the counterweight (optional) onto the CW shaft **with large opening hole facing inward**. Insert the brass pin into the hole on the CW. Secure the CW by tightening the CW lock knob. (The groove on the CW shaft is designed for secondary dovetail saddle use.)



(**Note:** if you have a small and light scope that weights a few pounds, attach a CW is optional.)

8. **Balance Payload:** After attaching scope and accessories, the mount needs to be balanced. To balance in altitude direction, release the altitude lock knob, rotate the scope to horizontal position. Move the telescope back and forth to find the balance point and lock the altitude lock knob.



CAUTION: The telescope may swing freely when the altitude lock knob is released.

For azimuth balance, it can take up to 10lb of non-balanced payload. Add one (1) 4.5kg if the scope at the primary side is over 5kg, and add two (2) 4.5kg CWs if the payload is

over 10kg. (**Note:** This number is estimated and it is telescope size dependent.)



A simple and safe method to estimate the CW and its position is by calculating the torques (*weight times the distance to the center*) of the payload and CW, and making them equal or close.

(An optional secondary saddle is available for dual balanced OTAs).

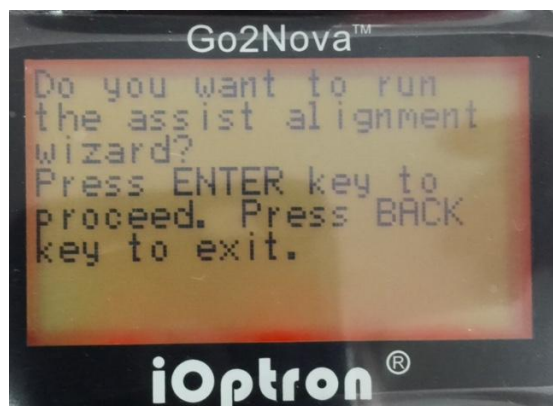
9. **Connect Cable:** Connect the Go2Nova® 8407 Hand Controller to the HBX port on the mount using the supplied coiled control cable. Put the hand controller onto the hand controller hanger. **Double check the level of the mount.**
10. **Power the Mount On and GO:** **Just flip the power switch ON and wait!** The mount will first perform the **alignment wizard**. Just click **ENTER** button to let the mount find the Zero position: Zenith and magnetic south. Ignore “**verify the following settings**” screen and wait the mount pick up the GPS signal. Then the mount will slew to a bright star/planet for star calibration. Follow the instruction on the hand controller screen to center the bright star in azimuth direction using ► or ◀ button **ONLY**. This will correct the declination between the magnetic south and the true south. Press **ENTER** and then center the star in your eyepiece using four arrow keys. If the star displayed is blocked by a tree or building, just press the **BACK** button to go to next one. Now you can use **Select and Slew** to go to any objects!
- Note:** The date and time displayed on the hand controller may differ from your local time. Just ignore it. You can change it later, as indicated in **Step 13**.
- Note:** In the event that the mount fails to perform self-calibration or you would like to skip this at all, please refer to on-line Instruction Manual for **Set Up the mount Manually**.
11. **Go to an Object:** Press **MENU => “Select and Slew”**. Select a category (for example, “**Solar System**”), then select an object of interest (for example, “**Moon**”). Press **ENTER** and

the telescope will slew to the object and automatically start tracking.

12. **Sync to Target:** If the object is not in the center of the eyepiece, use this function to center and synchronize the object to improve local GOTO accuracy. Press **MENU** => "**Sync to Target**". Follow the on screen instruction to perform the function.

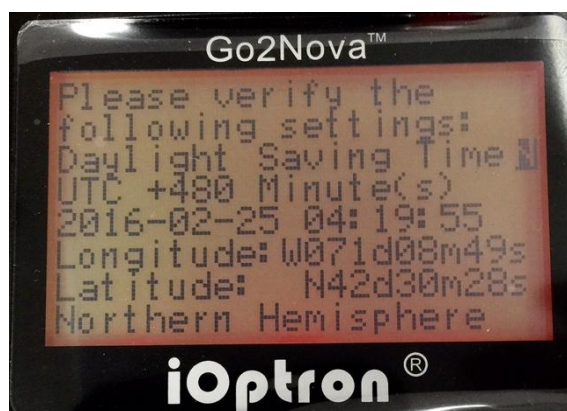
(**TIP:** After slewing to an object, a list of nearby bright object(s) can be displayed by pressing "?" button.)

13. **Setup Controller:** After turn on the mount power, the mount will ask if you want to run the "assist alignment wizard." Press **ENTER** or do nothing to start the wizard. Or press **BACK** to cancel.



The mount will start to **perform self calibration** by rotating in both altitude and azimuth directions to find the Zero Position.

When it stops, the hand controller will display your current time and site info.



If all the information is correct, you may press **ENTER** to confirm and skip waiting for GPS signal. Or if the mount could not pick up the GPS signal (the mount won't advance to next step to start slewing), you can manually change it by setting Daylight Saving Time (DST) to Y(es) or N(o); adjusting the date and time; inputting your location coordinates; entering the time zone offset to the UTC; for examples:

- Boston is "UTC -300 minutes"
- Los Angeles is "UTC -480 minutes"
- Rome is "UTC +060 minutes"
- Sydney is "UTC +600 minutes"

(**TIPS:** All time zones in N. America are "UTC -XXX minutes". Latitude and longitude coordinates can be obtained from GPS-equipped devices (navigator, phone), or from internet, if you are entering them manually. "W/E" = western/eastern hemisphere; "N/S" = northern/southern hemisphere; and "d" = degree; "m" = minute; and "s" = second. Use arrow and number keys to enter location information.)

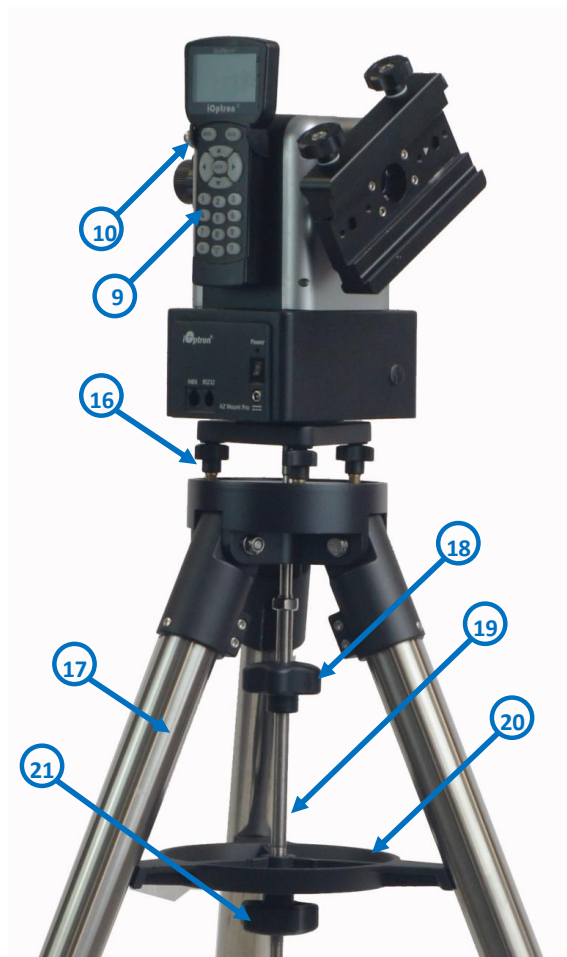
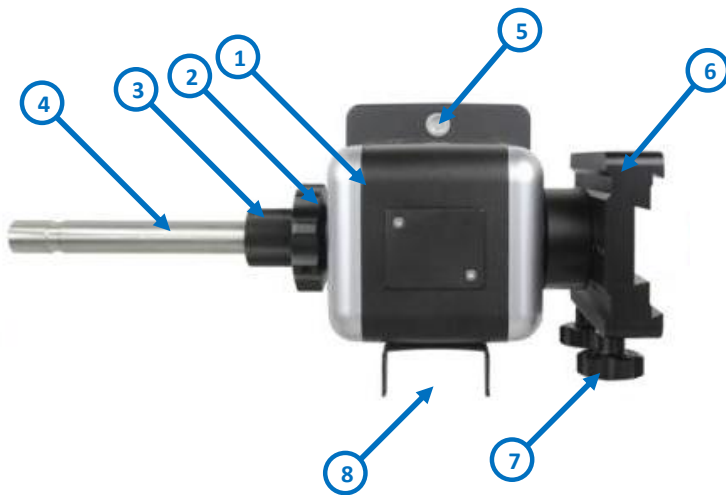
Note: You also can adjust these parameters through the hand controller **Setting** menu. The hand controller will remember the time zone, DST and coordinates after power off. The real time clock is powered by a battery in hand controller.

14. **Zero Position and One Star Alignment:** The default mount power on position is **NOT** necessarily the zero position for AZMP mount. Perform a self-calibration will establish the Zero Position. Or you can set the Zero Position by press **MENU** => "**Zero Position**" => "**Set Zero Position**".

Use support@ioptron.com for technical supports.

Optional Accessories:

- #8953 Secondary Vixen-style dovetail saddle
- #3006-10 4.5kg counterweight
- #3006-05 2kg counterweigh
- #8034 Tri-Pier
- #8034-RC Tri-Pier with rolling case



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|----------------------------------|-----------------------------|
| 1. AZ Mount Pro Head | 12. RS232 Socket |
| 2. Altitude Lock | 13. Battery Status LED |
| 3. Counterweight Shaft Lock | 14. Power Switch |
| 4. Counterweight Shaft | 15. Battery Charging Socket |
| 5. Bubble Level | 16. Level Adjustment Screw |
| 6. Dovetail Saddle | 17. Tripod Leg |
| 7. Dovetail Saddle Lock Screw | 18. Tripod Knob |
| 8. Hand Controller Hanger | 19. Tripod Bolt |
| 9. Hand Controller | 20. Tripod Support Spreader |
| 10. Altitude Lock Lever | 21. Tripod Lock |
| 11. Hand Controller Socket (HBX) | |

IOPTRON TWO YEAR TELESCOPE, MOUNT, AND CONTROLLER WARRANTY

A. iOptron warrants your telescope, mount, or controller to be free from defects in materials and workmanship for two years. iOptron will repair or replace such product or part which, upon inspection by iOptron, is found to be defective in materials or workmanship. As a condition to the obligation of iOptron to repair or replace such product, the product must be returned to iOptron together with proof-of-purchase satisfactory to iOptron.

B. The Proper Return Merchant Authorization Number must be obtained from iOptron in advance of return. Call iOptron at 1.781.569.0200 to receive the RMA number to be displayed on the outside of your shipping container.

All returns must be accompanied by a written statement stating the name, address, and daytime telephone number of the owner, together with a brief description of any claimed defects. Parts or product for which replacement is made shall become the property of iOptron.

The customer shall be responsible for all costs of transportation and insurance, both to and from the factory of iOptron, and shall be required to prepay such costs.

iOptron shall use reasonable efforts to repair or replace any telescope, mount, or controller covered by this warranty within thirty days of receipt. In the event repair or replacement shall require more than thirty days, iOptron shall notify the customer accordingly. iOptron reserves the right to replace any product which has been discontinued from its product line with a new product of comparable value and function.

This warranty shall be void and of no force of effect in the event a covered product has been modified in design or function, or subjected to abuse, misuse, mishandling or unauthorized repair. Further, product malfunction or deterioration due to normal wear is not covered by this warranty.

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Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

iOptron reserves the right to modify or discontinue, without prior notice to you, any model or style telescope.

If warranty problems arise, or if you need assistance in using your telescope, mount, or controller contact:

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NOTE: This warranty is valid to U.S.A. and Canadian customers who have purchased this product from an authorized iOptron dealer in the U.S.A. or Canada or directly from iOptron. Warranty outside the U.S.A. and Canada is valid only to customers who purchased from an iOptron Distributor or Authorized iOptron Dealer in the specific country. Please contact them for any warranty.