

# SmartStar<sup>®</sup> CubePro™ GOTO AltAz Mount with GPS

### #8200

#### **FEATURES**

- Alt-Azimuth Mount

   The Cube™-- The only mount of its kind for ultimate rotation
- Includes the GoToNova® Controller. The most intuitive controller on the market.
- 130,000 object database with 256 user-defined objects
- The largest LCD screen on the market with 8 lines and 21-character Hand Control with backlit LED buttons.
- USB Port for PC Laptop control and firmware upgrades (ASCOM protocol)
- Drive motor with 9-speed setting for precise tracking
- Dual-axis Servomotor with optical encoder
- 1-inch stainless steel tripod
- Built-in 32-Channel GPS
- Operates on 8 AA batteries (not included)
- Included AC adaptor (Optional DC adaptor available)
- 8 lb. payload

### **PACKAGE CONTENTS**

- The Cube<sup>TM</sup> telescope mount (with built-in GPS)
- Go2Nova® #8401 hand controller
- Controller cable
- 1" stainless steel tripod with tripod tray
- 1.5 kg Counterweight and CW shaft
- AC adaptor with cord

## ONLINE CONTENTS (click under "Support" menu) www.iOptron.com

Manuals (you will need to refer to the manual for details on set-up and operation).

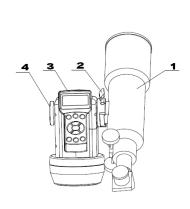
Tips for set up

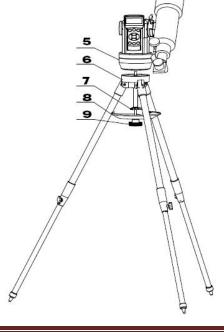
Hand controller firmware upgrades (check online for latest version)

Reviews and feedback from other customers

#### **ASSEMBLY TERMS**

- 1. Telescope tube
- 2. Dovetail lock
- 3. Hand held controller
- 4. Altitude lock
- 5. Mount
- 6. Tripod
- 7. Inner support /Tripod bolt.
- 8. Tray
- 9. Tray lock
- 10. CW and CW shaft (not shown)





# **Quick Set-up**

Note: This is a brief outline for getting started. Please refer to the full manual at ww.iOptron.com for details.





Step 1. Installing Tripod
Extend tripod legs to full extension.

Attach mount to tripod using the long bolt (#7). Slide tray on bottom of shaft. Then screw on round black knob (#9).



# Step 2. Installing Batteries

Pull the batteries compartment cover (shown) open.

Gently pull the batteries holder out of the compartment to avoid breaking the attached wires.



## Step 2a.

Insert 8 AA batteries (not included) according to the diagrams on the holder \*

Replace the holder back into the batteries compartment and replace the cover.

<u>Note</u>: fit the batteries holder back into the compartment with the attached wires at the bottom right corner (see arrow in the photo).

\* Use only fresh batteries; do not mix fresh and old batteries; insufficient battery power may cause error messages.



## Step 3. Attaching Telescope

Attach telescope to mount using the dovetail lock knob (#2).

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# Step 4. Connecting Hand Controller

Plug hand controller into any one of the HBX (handbox) ports on the mount. Plug in power plug if a AC adaptor is used.

Turn on power. Now you are ready to observe. Use the 4 Arrow keys  $(\blacktriangle \blacktriangledown \blacktriangleleft \blacktriangleright)$  to rotate the scope Up, Down, Left, and Right. Use the Number key to change the slew speed from the slowest (1 - 1X) to the fastest (9 - MAX).

The other HBX is reserved for accessories, such as electronic focuser, laser pointer and autoguider adapter. *DO NOT plug non-iOptron accessories into the unit to avoid damaging the mount or accessories* 



# Step 5. Installing counterweight Shaft

This step allows you to attach the counterweight to the mount. (note: if you have a scope less than 7 lbs., attaching a counterweight is optional).

Unlock and remove the altitude lock (#4). Screw on the counterweight shaft and tighten it.



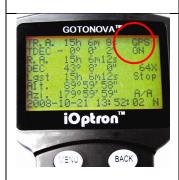


# Step 6. Installing CW

Slide the counterweight onto the counterbalance shaft. Next, insert the brass pin into the hole on the counterweight.

Secure the counterweight by tightening the lock knob.

Counter weight is heavy. Please handle with care to avoid injury!



# Step 7. Power on the mount

Turn on the mount and wait for controller to display "GPS-OK" in top right corner —not "GPS-ON". GPS provides Latitude, Longitude, and current universal time (UT) time only.



### Step 8. Setting up controller

Press the MENU key once.

Scroll (with the ▲/▼ keys) to "Set Up Controller" Press ENTER.

Then go to Set Up Local Time and Site in the next screen. Select and then press ENTER.



## Step 9. Set Up Local Time

Enter date and day-light savings (Y-yes. N-no).

(Note: use arrow keys to scroll through screen and use numbered keypad to change numbers)



## Step 10. Set Up Site

GPS will provide the longitude and latitude information. If GPS signal is not available, these values can be manually entered here.

The last line of this screen is for setting time zone information.

# Examples: minutes "behind" UT or "ahead of" UT

New York: 300 Min. "behind" UT
Los Angeles: 480 Min. "behind" UT
Rome: 60 Min. "ahead of" UT
Sydney: 600 Min. "ahead of" UT

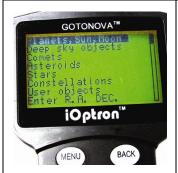
Press ENTER when finished.



### Step 11. Select and Slew to an object

The mount is now ready to find (GOTO) and track objects.

Press Menu button. Scroll to "Select and Slew" Press ENTER.



#### Step 12

Select a category (ex. "Planets, Sun, Moon") by scrolling with the arrow keys.

Press ENTER.

Then select an object (ex. "Moon") by scrolling with the arrow keys. Press ENTER.

The telescope will automatically slew to the object and lock on. It will automatically begin to track once it locks on to the object.



# Step 13. Sync to Target (Use this to center and synchronize the object selected in Step 12).

Press MENU. Scroll to "Sync. To Target". Press ENTER.

Next use the arrow keys ( $\blacktriangle \lor \blacktriangleleft \gt$ ) to center the object in the eyepiece. Then press ENTER again to synchronize the object with the memory.

To slew to other objects simply repeat steps 11 and 12. You do not need to repeat step 13 except for adjustments as needed.

(Refer to the full online manual for 1-star and 2-star alignments. Sync to Target is similar to 1-star Alignment except that you choose the object to align to.)