DIMM Documentation Addendum	
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Version	Modifications	Date
1.0	First Version	Oct 16th 2025

Acronym List

DIMM : Differential Image Motion Monitor.
PRISM : Astronomy software from Alcor-system company
OTA : Optical tube assembly (Here the 300- or 400-mm diameter telescope tube)

1. Document scope

This document provides additional information for DIMM system when used with NOVA 120 ALTAZ Mode. **The next picture (figure 1) can be regarded as a reference / template picture and must be used to install the whole system properly. It gives directions and OTA orientations. Not following the rules in this documentation may very likely led to DIMM system operation failure.**

Figure 1 : The whole system. **This must be mounted exactly same way** and is a reference picture.

2. Prerequisites

Please read first the “Direct Drive Equatorial/Altaz Mount NOVA 120 mount User manual”.

This document gives information that are peculiar to NOVA 120 Altaz mount version and Automatic DIMM System.

3. Important considerations

!! NEVER LEAVE BRAKES SWITCH LEVER TO HAVE A MANUAL FREE AXIS DURING MOUNT SLEWS by software !!

!! FINDER AND ELECTRONIC FINDER MUST BE ABOVE THE OTA : Direct mode ALTAZ Mode !!

!! MOUNT PILLAR MUST WITHSTAND A WEIGHT OF 150 kg AND MUST BE EXTREMELY STIFF !!

4. Mounting the OTA to the mount

Prior mounting the OTA, the direct drive mount must be attached to its pillar that must be very stiff.

The direction of the mount with respect to the south is shown on the next picture and must be taken into account.

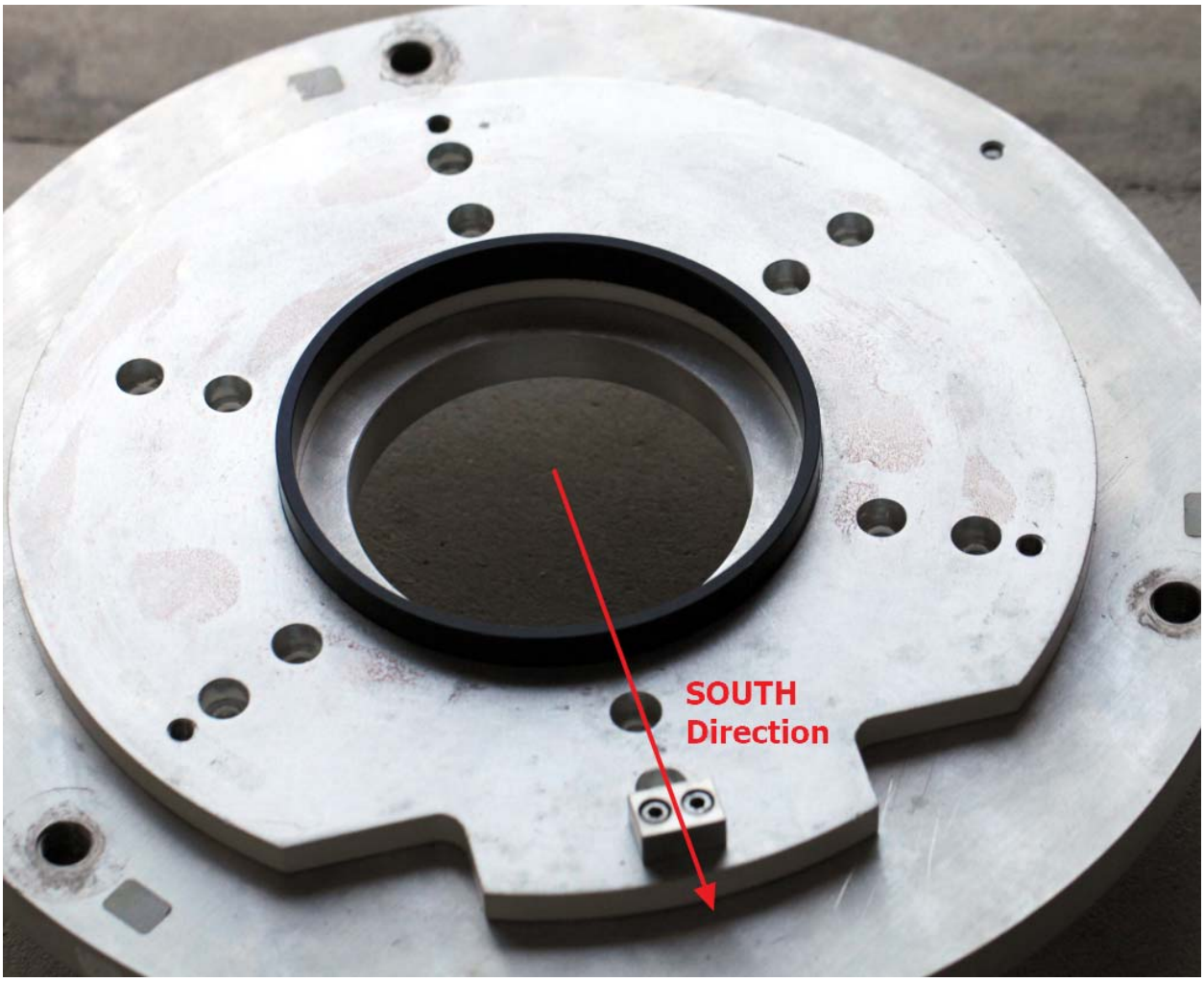

Figure 2 : Mount base plate must be oriented to the **South** this way.

Once the complete mount is installed into its pillar, before mounting OTA, both axes must be locked with pin locks as shown on the next picture. The mount has brakes, but do not have enough torque to lock the axis.

Figure 3 : Mount pin lock that prevent axis from rotating

The OTA have dovetails allowing to be attached to the direct-drive mount. Please follow :

- Only one side of the dovetail OTA must be used to it to the mount, see sticker that indicates “Do not attach mount from this side”
- Set 125 mm from the backside of the OTA versus one side of the mount’s female dovetail
- “This side must aim at the sky” sets the direction of the OTA light entrance with respect to the mount

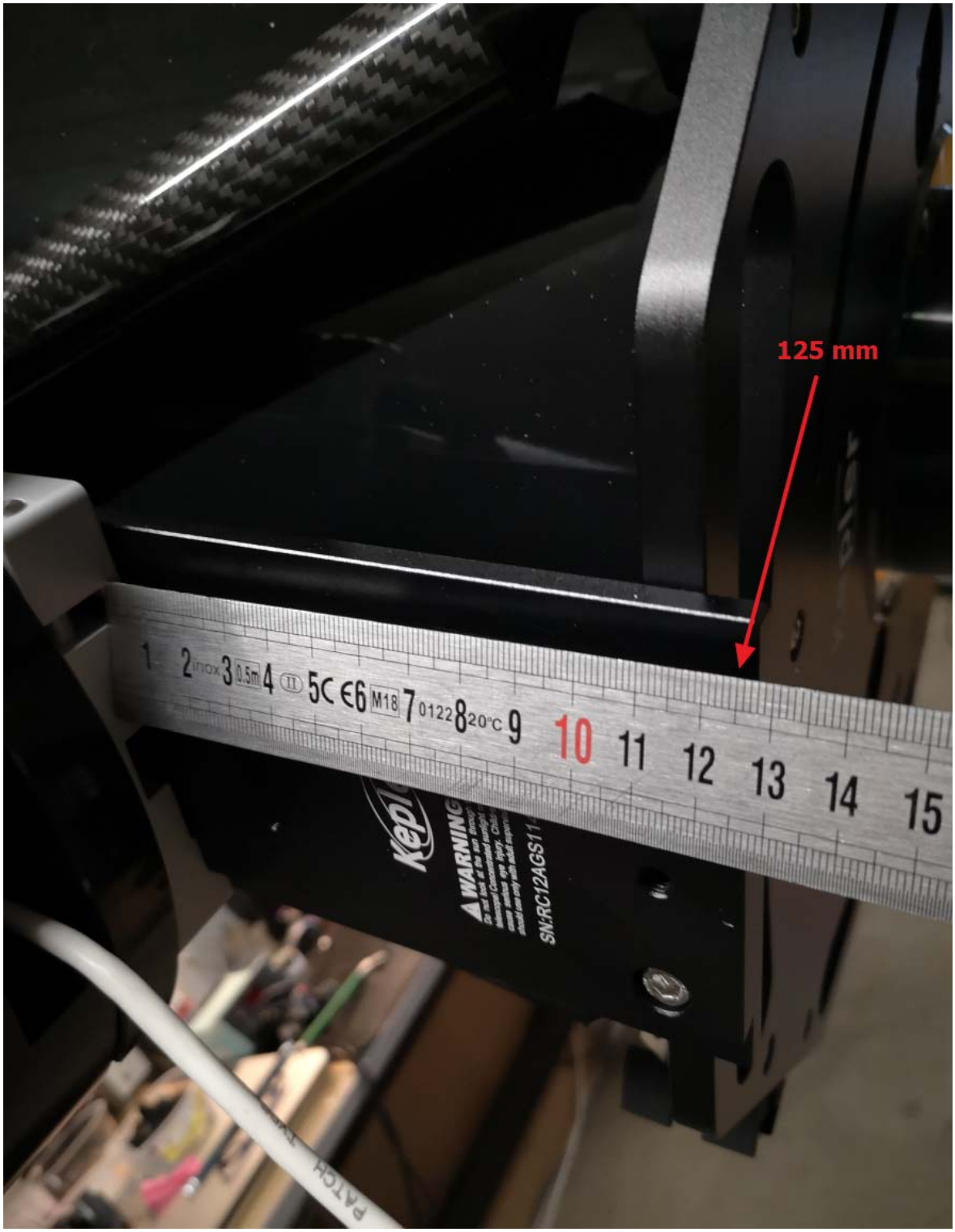

Figure 4 : The distance from the OTA backplate must be set to 125 mm

Figure 5 : The OTA light entrance must be located at the same side of the yellow sticker

Figure 6 : The OTA must not be attached to the mount from this side.

5. Counterweight mounting

The 15kg counterweight must be put in the counterweight bar, and set to a distance of 175 mm from the last part of the mount. This is very important. Please refer to the following picture.

Figure 7 : The 15 kgs counterweight distance

6. Controller cables

From left to right

- 220V Main AC
- ON/OFF button
- Ethernet cable, must go to the PC can go thru switches
- Elevation motor cable, and elevation encoder cable

- Azimuth motor cable, and azimuth encoder cable (both have red rings)

The bottom switch lever (with “Freins” labels controls axis brakes), this is for manual rotation, when axis is free to rotate the LED nearby the “libre” label is lit. Please keep brake closed for operation, the controller software will operate the brakes automatically according to the required state of the mount.

Figure 8 : The front panel of the NOVA 120 mount controller

The hard disk that is provided with this system have all the mount parameters set in the DDRAstro and PRISM software set to allow the mount to work as a turn key system. This saves a lot of hassles regarding system setup.

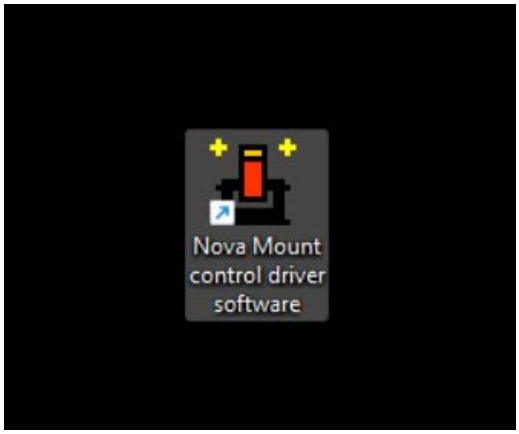

Figure 9 : Desktop icon to access to the mount software on Windows 11

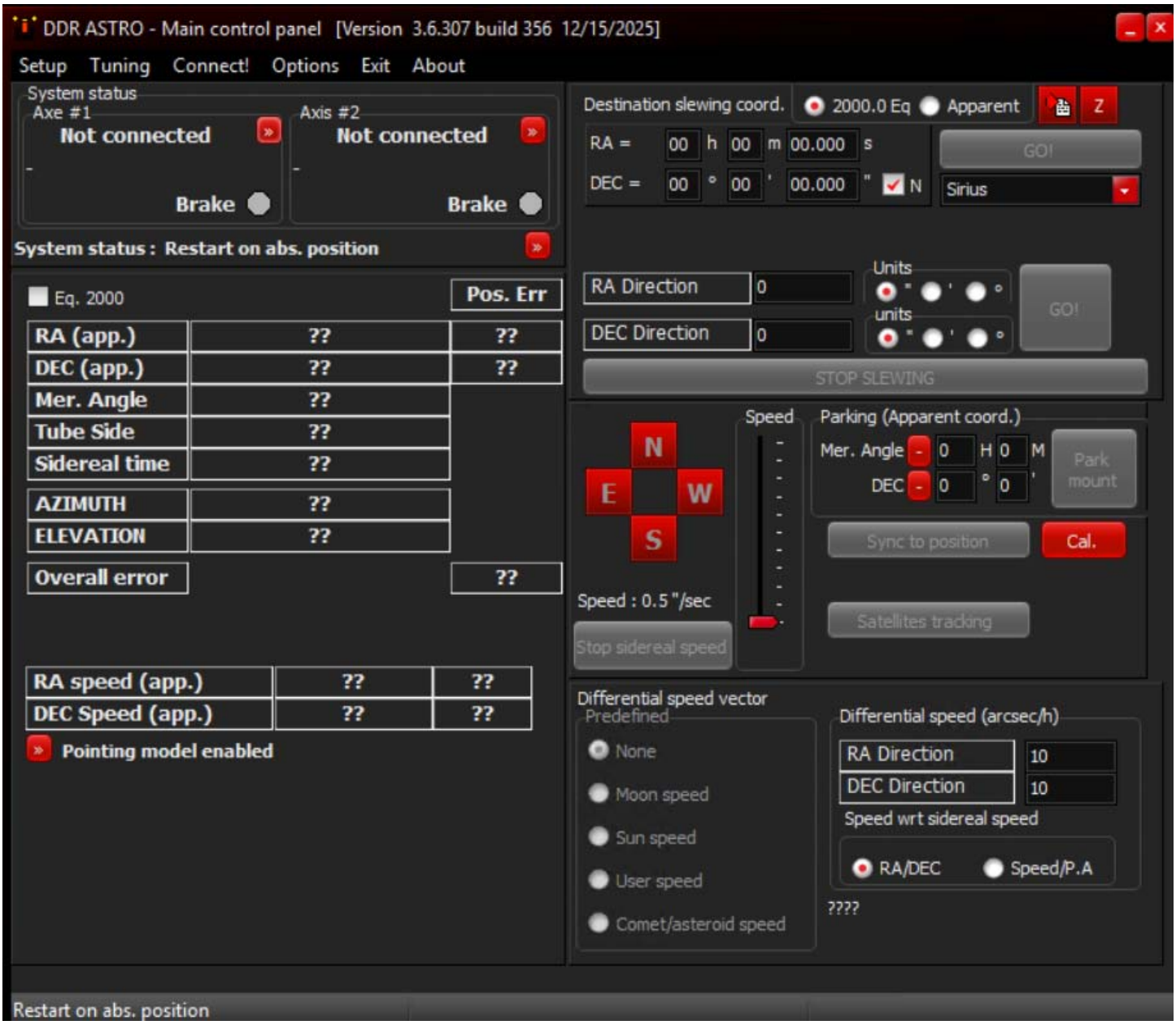

Figure 10 : The mount control software

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