

MeMstar Notice

Precautions for use

- MeMstar is a pointing aid solution for an instrument equipped with an alt-azimuth mount only.
- MeMstar is not designed to work in the rain!

Download the MeMstar application

- Download the MeMstar application from the Android Play Store or the Apple Store.

Inserting the batteries

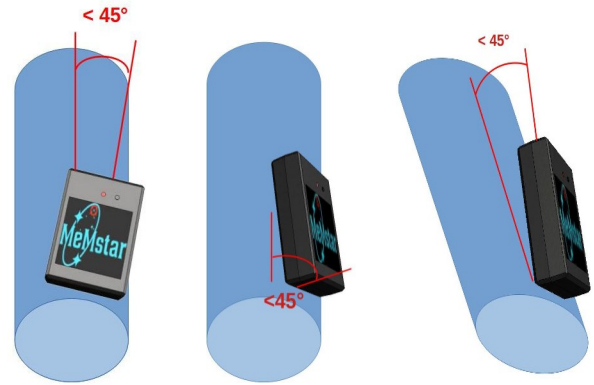
- The MeMstar box requires 3 AAA batteries to operate.
- To change or insert the batteries, unscrew the 2 screws and open the case. You will find the battery compartment.
- Please make sure that the batteries are facing the right way!
- When you have placed the 3 batteries, the red light will start to flash.
- Close the MeMstar box and screw the 2 screws back in.
- Do not force to reassemble the MeMstar box! The MeMstar is equipped with polarizers. If you find that the reassembly force, make sure that you follow the direction of assembly.

Attach your MeMstar box to your Instrument

- The MeMstar box must be attached to the optical axis of your instrument. This can be done directly on the tube or on a part that is integral with the optical axis.
- The attachment mode is up to you but it must be strong enough to prevent the MeMstar box from moving during your observation sessions.
- Observe the mounting direction of the MeMstar box: The arrow on the label must point to the viewing axis!
- For a better stability of the accuracy, we recommend fixing MeMstar on the bottom of the instrument, as shown in the picture below (green area).



- It is not necessary to be strictly parallel to the axis of your instrument. MeMstar's internal algorithm will take care of the correction. A maximum deviation of 45° is possible according to the 3 angles.



Location

- Remember to activate your GPS if your smartphone is equipped with it.
- You can also enter coordinates in the Settings menu of the MeMstar application

Connect MeMstar

- Press the button on the MeMstar box to bring it out of sleep mode. The red light will start flashing.
- The Bluetooth connection between the phone and the MeMstar box is done through the MeMstar application.
- In the MeMstar application, click on "Connection", then select the "Memstar" device.
- During the Bluetooth connection of the MeMstar device, an internal calibration is performed for a few seconds. Do not move the device during the connection!
- Once the Bluetooth connection is established, the red light on the MeMstar box will remain on without blinking.

Installation

- The MeMstar application offers you an Installation procedure. This procedure allows you to correct the positioning of MeMstar on the optical axis of your instrument.
- This procedure consists in pointing several stars. At each pointing of a star, you will be asked to validate on the MeMstar application.
- To get the best accuracy from MeMstar, it is necessary that the pointed stars are well in the center of the eyepiece. You can look for stars with a wide field eyepiece, then use an eyepiece with higher magnification to validate the pointing.
- Reduce the time between the pointing and the validation ! We advise you to select the star on the MeMstar application before pointing it with your instrument, and validate as soon as the star is in the center of the eyepiece.
- For a better installation, it is necessary that the stars are at very different heights. The MeMstar application automatically filters out stars that do not meet this criterion.
- Once all the necessary stars have been validated, MeMstar performs the calculations. This procedure

may take about 30 seconds. Do not move your instrument during the calculation time!

- Once the installation is done, MeMstar is operational.

Installation is required each time the MeMstar box is attached to the instrument. If you choose a permanent attachment you will not have to repeat this installation. If you notice a loss of precision after several observation sessions, it would be preferable to redo this procedure (each time you consider it necessary).

Putting in Station

- In case the MeMstar box is still attached to your instrument and the installation has been done, you can opt for a Putting in Station. This quick procedure consists in pointing only one star.
- For the pointing of this star, the same advice as for the installation is recommended.

Observation

- Once the Installation or Setup is complete, you can start searching for objects using the MeMstar application.
- The accuracy of MeMstar is up to 1 degree. Depending on the eyepiece used, it is possible that the pointed object is at the edge of the field, or even just outside. If it is not in the eyepiece, simply turn your instrument around the coordinates indicated by the application to find the object.
- It is advisable to use an eyepiece with low or medium magnification when looking for an object to increase the field of view of the eyepiece.
- During your observation session, azimuth accuracy may decrease. If the deviation is too great, realignment is necessary. This is done by placing the object in the center of the eyepiece and pressing the "Align Azimut" button in the MeMstar application. Alignment affects azimuth only.
- For "Align Azimut", the same advice as for the installation is recommended.
- It is not advisable to align on large objects. Prefer small objects such as stars.
- You can perform an alignment as many times as necessary.

Standby mode

- At the end of your observation, we advise you to put the MeMstar box on standby, this will preserve the batteries.
- Press the button on the MeMstar box, the Bluetooth connection is automatically broken and the LED starts to flash.

- When the light on the MeMstar box is flashing, it is waiting for a new Bluetooth connection. If no connection is established after 3 minutes, the box automatically goes into standby.

Technical Specification

- Autonomy: Approximately 150 h.
- 3 AAA - 1.5V batteries
- Android 7+ and IOS8+.
- Bluetooth 5.0
- Weight (including batteries): 85g
- Case size: 78x57x21mm
- MEMS technology
- Catalog : 15000 objects
- Temperature range: -20°C to 50°C
- Humidity 10% to 90% non-condensing

Malfunction

I press the button on the MeMstar box but the light stays off:

- Check that the batteries are correctly placed
- Change the batteries

I can't get a Bluetooth connection:

- The connection is made with the MeMstar application and not with the phone manager!
- If the light on the MeMstar box is on, press the button and try to connect again
- Restart the MeMstar application
- Check access rights in the application settings if you have an Android phone
- Change the batteries
- Check if your smartphone is compatible

The MeMstar box disconnects itself:

- Check that the batteries are correctly placed
- Change the batteries

During the observation the azimuth changes continuously while the instrument remains fixed:

- The MeMstar unit may have moved during the Bluetooth connection. Disconnect the Bluetooth by pressing the button and reconnect it, being careful not to move the MeMstar box and your instrument during the connection.

The coordinates indicated do not correspond at all to the object:

- Make an alignment by pressing the "Align" button in the application
- Check to see if your GPS is active or if your manually entered coordinates are correct. If you have just activated your smartphone's GPS, it may take a few minutes before your position is updated.
- Check if the case is well fixed on the instrument and repeat the installation procedure

MeMstar is a product developed and manufactured in France

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