## **ZWO AM5 Mount FAQ**

Topic	Question	Answer
AM5	Will the AM5 fit a standard photography tripod or just the ZWO supplied one?	The AM5 mount can work with any 3/8" screw mount. It is recommended to use the ZWO supplied tripod which will be more convenient, provide better stability and improved safety in use.
AM5	How do you calculate how much counterbalance weights would be needed?	According to the engineering calculations, we can calculate the maximum load capacity of AM5 mount:  13kg without the counterweight 20kg with the counterweight.  Supported counterweight: ≤5kg.  The counterweight should be secured on a counterweight bar of no more than 25cm in length.
AM5	How do you balance the telescope with the AM5?  Will the axis unlock to check balance, or does it allow a significant difference in balance?	It's OK to keep them roughly balanced. There is no need to precisely adjust the balance.
AM5	Are there any guiding graphs we see yet?	Not at a stage we can currently share – details will be published when available.
AM5	Will ZWO be supplying the counterweight arm for purchase?	Yes – Details will be provided shortly via the website

AM5	Will ZWO be making a travel case available?	We will not be making a travel case for the AM5.  The mount will be sold with an outer packing box in the material which normally used for packing drones.
AM5	Does the AM5 have a home position sensor?	Yes, A zero (home) position sensor is fitted, the AM5 mount also features a one-button go to zero position function. At meridian flip the mount will stop. Automated meridian flips will be possible using the ASIAIR.
AM5	Is the AM5 based on the OnStep system?	The AM5 uses a system developed completely and independently by ZWO.  This guarantees system stability and interoperability with ZWO products like ASIAIR and means that future development and system improvements are built by ZWO developers versus 3 <sup>rd</sup> parties.  The AM5 operating system features an online upgrade functionality.  It is compatible with the LX200 command set.
AM5	Can you connect a ZWO camera to the body to act as a polar alignment camera?  What the three screws at the front are for?	ZWO cameras can be connected to the AM5 to act as polar alignment cameras.  The front three screws are used for fine tuning the laser alignment tool.
AM5	Laser alignment - many countries prohibit the import of lasers - this will be an issue.	The Laser function will be removed from the first edition of AM5.
AM5	How about a Wi-Fi enabled polar camera and app - great opportunity for ZWO here!	That's a good idea which we will consider. At the current period we can use ASIAIR or other computer-based software for polar alignment.
AM5	Is the braking on both axis - RA and DEC?	Only on the RA axis.

Tripod	Is there a price for the pier extension?	We are still working on optimising the pier extension. Pricing information will be announced when this work has completed.
Tripod	When is the tripod/pier available for order - can pre orders add a pier/tripod later?	The tripod can be booked from December 24, 2021. When we complete the development of the pier extension, we will offer the bundle on the ZWO website (you can also order it separately for sure.)
Tripod	Will the tripod support adding counterweights at low latitudes without the pier extension or just with it?	Depending on the length of the OTA you might need a pier extension to avoid collisions. For the low altitudes, if you are adding the counterweight, then you may need to add pier extensions to prevent the bar and the counterweight from hitting the mount.
AM5	Does the AM5 have 1:3 synchronous belts on both RA and DEC axis	Yes, it does.  Drive - Harmonic drive + Synchronous belt (Reduction ratio: 300:1)  Reducer specification (RA) - Model No.17 (Reduction ratio: 100:1)  Reducer specification (DEC) - Model No.17 (Reduction ratio: 100:1)  Periodic error - <±20"  PE duration - 432s  Drive (RA) - Harmonic NEMA42 stepper motor + Brake  Drive (DEC) - Harmonic NEMA35 stepper motor

AM5	Is the Harmonic Drive size 17 on RA and DEC axis?	As above
AM5	How is the AM5 different from the Rainbow Astro 135?	The AM5 and Rainbow RST-135 both use harmonic drive speed reducers. The AM5 has a larger mount weight and increased load capacity, making it more stable in use.  Each ZWO AM5 harmonic drive speed reducer is tested for periodic error, ensuring it meets the accuracy and the required performance with the benefit that the AM5 is only half the price of the RST-135.
AM5	How come you recommend a shorter focal length at 900mm? The screenshots of Rosette Nebula and Horsehead are pinpoint	The 900mm focal length is just an estimate based on the 1"-2"/px suitable sampling rate (normally the pixel size of an astronomy dedicated cooled camera is 3-4um), so not a recommended value but a guideline. We do recommend keep your pixel scale above 1"/px.
AM5	Does the AM5 connect wirelessly to the ASIAIR Plus, Pro and Original version?	Yes - all ASIAIR editions can wirelessly control the AM5.

AM5	Does the AM5 emit its own WIFI signal?	The mount itself does not have Wi-Fi. The hand controller contains the Wi-Fi functionality, which can be wirelessly controlled by ASIAIR or other software in your computer.
AM5	Will there be any power outlets available?	We will add a power output at the side of the mount for supplying additional equipment
AM5	Why ZWO is developing a harmonic drive mount?  The harmonic drive mount is not that accurate in guiding compared to traditional mounts.	Compared to other mounts the harmonic drive mount offers greater portability, its lightweight construction is easier to transport and so is the perfect choice for astronomers who enjoy field trips to dark locations for their imaging.  The harmonic drive mount is also more suitable for beginners since it does not need accurate balance.  The ZWO AM5 mount has a strong performance combined with a very reasonable price.
Tripod	The tripod might not be very stable for larger loads?	There is a centre 3/8" locking knob along with 3 x M6 screws for securing the AM5 head to the tripod.  The tripod is also supplied with a weight bag, which will provide additional stability to your mount when loaded with sand, stones or even your portable batteries.

AM5	Can the AM5 mount carry a Celestron C11HD?	To ensure stability of such a large OTA we recommend you use the optional counterweights to prevent large and heavy telescopes such as Celestron C11from tipping the tripod over.  The load capacity of AM5 mount without counterweights is 13kg, 20kg with counterweights. If you plan on large OTA's like the C11 then don't forget to take the counterweights with you when heading out to image.
AM5	How accurate is the AM5 capable of guiding?	The guiding accuracy is 0.5-0.8" Sky conditions will dictate how well it performs and we will present results as the selected testers carry out their initial tests using a variety of telescope weights and focal lengths
AM5	Will the mount be integrated with ASIAIR?  How to use the GOTO function if I do not have the hand controller?	The ASIAIR will provide full control functionality for the AM5 and connect wirelessly.  You will also be able to connect and control the mount using the dedicated AM5 app via wireless connection.  GOTO functionality is also available via USB, and you can connect the AM5 to other astronomy compatible software using a USB cabled connection. In this configuration the hand controller does not need to be used.  We consider integrating the ASIAIR into the mount in any possible future designs.

AM5	Which mount is better, Sky-watcher AZ EQ6 or ZWO AM5?	The maximum load capacity of both AZ EQ6 and AM5 is 20kg.  While the AZ EQ6 can work at 10-90 degrees latitude, the ZWO AM5 can reach 0-90 degrees. That means you might not be able to use the AZ EQ6 for imaging if you live near the equator.  The tripod of the EQ6 is also very heavy, making transport and storage difficult compared to the lightweight carbon fibre AM5 tripod.  Controlling the EQ6 via the hand controller can be very exhausting. There are many steps, and many people encounter connection difficulties.  Every time the mount is turned on you need to re-enter the GPS data again. The AM5 with its built in GPS.  Overall, the AM5 is very user friendly, has an improved latitude compatibility, an easy-to-use hand controller, is very portable. We think it it's a very attractive option compared to the EQ6 if you are in the market for a lightweight portable mount.
AM5	Does AM5 mount support ASCOM?	Yes, it supports ASCOM, INDI and is compatible with the LX200 command set.
AM5	Why is the mount called AM5?	A represents ASI; M represents mount; 5 represents the grade.
AM5	Will there be any encoder upgrades in the future?	Currently no, the AM5 mount is still considered an entry-level mount.  In any future design we may consider adding encoders.

AM5	Does the mount support PEC?	No PEC functionality is included at this time.
Ordering	Does the pre-order stage mean we need to pay the full amount or just a deposit?	Mount orders require payment in full at time of ordering
Ordering	Will ZWO be selling the optional counterweights?	Currently ZWO does not plan to sell counterweights. You can utilise any commonly available ones that fit the counterweight bar diameter.
Ordering	When will payment be taken at ordering?	Payment will be taken at time of order. The estimated shipping date is the end of March or early April.
After- sale	If purchased direct from you and item has warranty issues, can it be dealt with by a local dealer or does it have to be shipped back to you?	We will consider giving the maintenance rights to our dealers once they are fully trained.

## Notes:

Specification and features may change without notice until the final production versions are confirmed