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The GSO Dobson 8 "DeLuxe 203/1200 M-CRF telescope is equipped with a high-quality main mirror with a rotary paraboloid shape, diameter 203 mm and focal length 1200 mm (light f / 6). The Taiwanese GSO factory is a recognized supplier of optics high quality, with limited diffraction quality (ie the quality of the images is limited only by the nature of the light.) The telescope allows to obtain excellent images of both the Solar System objects and the clusters of stars, nebulae and galaxies. The typical, simple Dobson telescope concept has been optimized in the GSO DeLuxe series telescopes through the use of a number of useful design improvements. Observation possibilities The GSO Dobson 8 "DeLuxe 203/1200 M-CRF telescope is a universal tool for conducting advanced visual observations of all types of astronomical objects.It works well in all observational conditions, but - as any astronomical telescope - loves the dark, rural sky and under such conditions He will show the most in the sky. During observation, we can count among others on very successful observations of the following objects: â€¢ craters on the moon - countless number of formations, excellent plasticity around the terminator â€¢ Mercury's and Venus's phases - in the case of the latter one can be tempted to observe the delicate formation of its atmosphere â€¢ ice caps on Mars are very visible (it is worth buying red, orange, yellow filters) â€¢ stripes in the atmosphere of Jupiter along with their structure, both "tropical" and circumpolar, the Great Red Spot, four Jovian moons â€¢ Saturn ring with Cassini break and Encke break, belts â€¢ Uranus and Neptune shields â€¢ many asteroids, including the lightest Ceres and Westa â€¢ comets - ice lumps traversed by the Solar System â€¢ hundreds of double stars, multiple stars and variable stars â€¢ hundreds of Deep Sky facilities, including all from Messier's catalog, as well as many from NGC, IC and the Caldwell catalog; open clusters will be visible, such as Crib in Raku, hi chi in Perseus or Gromada Ptolemy in Skorpion, globular clusters (M13 broken up to 1/2 diameter on single stars, or M53 in Barkniki's Warkocz), gas and dust nebulae (perfectly visible structure M42 in Orion, North America in Cygnus), galaxies (M31 in Andromeda with two satellite galaxies, i.e. M32 and M110), supernova remnants (such as Veil in £abêdziu or the famous Ring (M57)) in Lutnia) and much, much more. In addition to astronomical observations, this telescope is great for observing and photographing airplanes at cruising altitudes. Tube The telescope's tube is metal and rigid enough, while the precise and solid frames of the main and secondary mirror ensure long-term collimation of the telescope. A matte, intense blackening of the inside of the tube minimizes glare and light fading through the optical system, thus providing a higher contrast to the images obtained (this is especially important when observing the Moon, planets and bright stars). Dobson's assembly The weight and dimensions of the telescope are acceptable in relation to the observation possibilities and the size of the mirror - the tube sits in the rear seats of the majority of passenger cars. Using the telescope is very simple and there is no problem with folding and handling by one observer. Just like any telescope on Dobson's box assembly, the object is positioned in two axes - azimuth axis (level) and height (vertical). They differ from the competing solutions by far better bearings in the azimuth - they are roller bearings, guaranteeing, on the one hand, smoothness and lightness of the "walking" of the structure, and on the other - higher precision of the setting. Metal bearing tracks prevent biting into the assembly wood, thanks to which a high durability of the assembly structure was achieved. There is a new bearing system developed by GSO in the height axis. The telescope is guided and held by two handles. The desired pressure is adjusted using the knobs on both sides of the assembly. This is especially helpful when changing the eyepiece to maintain position and balance. In addition, the telescope has the ability to adjust the balance by changing the mounting height. Eyeglass extractor The telescope is equipped with a high quality Crayford's microfocus puller with a gear ratio of 1:10. Thanks to this, the focusing is very precise even at high magnifications. The extractor is designed for 2 "and 1.25" glasses Advantages of the Crayford spectacle: â€¢ much smoother and more precise movement when setting the focus compared to simpler sliding and rotating pulls â€¢ thanks to the use of a brass ring (clamp ring), the fixing of the glasses becomes more reliable, the axiality is perfectly maintained, and the surface of the eyepiece sleeve is also avoided. Cooling the main mirror The telescope is equipped with a 12V fan mounted at the end of the tube, which when turned on greatly speeds up the leveling of the telescope's mirror with the ambient temperature. Set â€¢ optical tube on Dobson mounting on ball bearings â€¢ Crayford extract with a micrometer 1:10 â€¢ Erfle wide eyepiece 30 mm (AFOV 70 °) / 2 "and Plossla eyepiece 9 mm (AFOV 52 °) / 1.25" â€¢ 8x50 finder with a cross â€¢ fan speeding cooling â€¢ 35 mm 2 "/ 2" bushing with 2 "filter thread OFFERED TELESCOPIC LINKS TO START OBSERVATIONS IN THE FIRST FRONTIGHT OF NIGHT - INCLUDES ALL NECESSARY ACCESSORIES, OPTICAL OPTICAL TUBE OPTION, SET WITH GLASSES AND DOOR INSTALLATION Usage Moon the planet star clusters nebulae planes Technical parameters â€¢ Optical system: Newton's headlamp â€¢ Diameter of the mirror: 203 mm â€¢ Focal length of the lens: 1200 mm â€¢ The efficiency of the reflecting surface: 94% â€¢ Lighted: 1/6 â€¢ Accuracy of the mirror's performance: 1 / 8? â€¢ Mirror glass type: BK7 â€¢ Switching capacity: 0.7 arc seconds â€¢ Star range: 13th magnitude â€¢ Maximum useful magnification: 400x â€¢ Diameter of the tube: 23 cm â€¢ Length of the tube: 115 cm â€¢ Assembly height: 60 cm â€¢ Diameter of mounting base: 50 cm â€¢ Transport dimensions (2 boxes) :: 129 x 40 x 35 cm + 69 x 57.5 x 13.5 cm â€¢ Weight: 21 kg (tube: 9.5 kg, assembly: 11.5 kg) Warranty 2 years Additional photos (GSO Dobson 8 "Deluxe telescope - front view) (GSO Dobson 8 "Deluxe telescope - rear view) (main mirror diameter 203mm, secondary mirror fixing - so-called spider pairs - with thin arms) (finder 8x50, Crayford extractor with planetary gearbox 1:10) (fixing the tube for assembly, checking the pressure of the tube through the knobs, it is possible to move the mounting point of the tube to obtain the optimal balance for a given set of accessories) (Crayford eyepiece with microfocus 1:10) (2 "extractor with Erfle eyepiece 30 mm / 2", visible millimeter graduation on the extractor) (finder 8x50 with a cross, straight) (main mirror cooling system - fan powered by 8xAA, ie 12V, main mirror holder with full collimation regulation) (shelf for glasses / accessories) (with an assumed eyepiece 1.25 "by 2" / 1.25 "reduction - included) (accessories included: extender 2 "/ 2" 35 mm, 30 mm / 2 "eyepiece, 9 mm / 1.25" eyepiece, fan power supply, 2 "/ 1.25" adapter) (ball bearing in the azimuth axis) (changing the position of the tube in the azimuth axis - ie "left - right") (changing the position of the tube in the height axis - ie "up - down") >> FREQUENTLY ASKED QUESTIONS << Question : Is the mirror from Pyrexu? Is there a version with a Pyrex mirror? Is BK-7 Pyrex? Which is better, Pyrex or BK-7? Why is the mirror not made of Bak-4 glass? Answer: Pyrex is the commercial name of boron-silicon offered by Corning. Many companies offer glass with the same composition and parameters, but often the name Pyrex is used to describe the borosilicate glass (a bit like sports shoes are called sneakers). The characteristic feature is that the glass has an expansion coefficient of about three times lower. From the

point of view of the astronomy lover, its advantage is to reach the figure a little faster when the telescope is cooled down, for example after moving from the house to a frosty yard. It should be noted that the use of Pyrex in amateur telescopes (6 "- 16") is not necessary, because these mirrors are quite thin and they cool down quickly. At the same time the mirror image, reaching the proper figure by it, is not everything - also the tube has to reach the ambient temperature, otherwise there are turbulences inside the tube, and the image will be of low quality. In practice, it is important that the WHOLE telescope is at a temperature close to the ambient temperature. BK-7 is a decent optical glass, also commonly used in the best optical systems. This is not a bad glass, as it is sometimes believed. What's more, from the point of view of the user of the Newton telescope, the optical characteristics of the glass are irrelevant - an important element is the figure of the mirror and the properly applied reflective layer. The physical characteristics of glass can be significant - the mirror itself is only a "bracket" for the reflecting layer. In short: â€¢ no, mirrors of GSO telescopes are not from Pyrex, they are made of BK-7 glass â€¢ BK-7 is not Pyrex â€¢ Pyrex is more expensive, but its use must be justified; in the case of a cooled telescope, there are no differences in the images obtained between Pyrex and BK-7 â€¢ BaK-4 is quite expensive optical glass, with a high refractive index, used practically only in prisms (telescope, binoculars, angular connectors with Amici prism etc.), not very useful and rarely used in objective lenses and glasses â€¢ The presence of active cooling ("fan") in the back of the mirror shortens the mirror cooling time to 15 - 30 minutes, thus eliminating the difference between BK-7 and Pyrex.