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The largest in the world, the first in Europe, mass-produced telescope for visual observation - Sky-Watcher Dobson 18 ". This lattice type Dobson Ultra-Light with parabolic mirror with a diameter of 458 mm and light ? f / 4, which can be folded into a very small form for transport. It is impressive that this powerful telescope can be folded alone and packed into a small sedan or hatchback, and leave the city under the dark sky! Until now it was unbelievable with Dobson, even 12-inch. The large, 18-inch mirror, in turn, provides an extraordinary visual experience, which will be magnified by the dark sky away from pollution and city lights. Innovative construction Sky-Watcher when designing the new Dosbon 18 "took a whole new path. Modern art of creating contemporary telescopes, inspired by great Dobsonami from USA, resulted in a rational construction. During the construction of the prototype Sky-Watcher consulted with the largest specialists from the US, including with Howie Glatter and Don Pensacki. Instead of large and massive chipboard, a calculated numerically light frame was used to form the main mirror frame and the lattice from pipes twisted into two parts, so that the tubes forming it had the shortest possible length of transport. The secondary mirror cage has a

symbolic shape - it helps to keep the center of gravity at a low height, making the base height minimal. A lot of attention was paid to reducing the height of the extract during the zenith observation, the majority of the time the observer can observe from the ground. Instead of a standard bearing in the height axis, wide skids have been used to improve the telescope's stability while loading the 2-inch glasses with a weight of up to 1 kg. SynScan AZ system The telescope is equipped with Go-To system allowing automatic detection of thousands of objects and their automatic tracking in the two axes of Dobson's rotation, thanks to high precision stepper motors. This is a completely different class drive than the one used in other Dobson telescopes, precision comparable to the professional EQ8 parallactic montage. The use of the Go-To system greatly improves the comfort of observation. The objects can be selected from the list and the telescope can be precisely adjusted using electronic micromovements. Thanks to the dual axle encoders and unscrewed axle locks, you can rotate the telescope manually without losing trackability. When set to a new object, the telescope automatically starts to follow its movement. The drive of the ALT axle on the steel cable and the gears on the toothed bars ensure almost no looseness! The GoTo system, thanks to its precision of guidance, is ideal for planetary photography using a simple camera or specialized CCD cameras. In addition, the system tracking objects will allow you to perform short-term exposure of deep sky objects and transfer high-quality HD image to the live monitor screen for educational and demonstration purposes, after retrofitting the telescope with a suitable CCD camera. Advanced optics The heart of the telescope is equally innovative. The parabolic main mirror with a diameter of 458 mm and a focal length of 1900 mm was made in an innovative technique - the pyrex blank is made in the form of a ribbed cone reducing its mass and thermal capacity. Along with the open construction of the mirror fixing, allowing the free flow of air, its thermal balance with the surroundings was significantly accelerated. The mirror is mounted permanently in a manner known from Dobson's 16 ", which protects it against accidental falling out, facilitates maintaining the collimation and mirror cleanliness in case of willingness to clean it. Teflon slide bearings guarantee the lightness and unparalleled smoothness of movements in both axes, so that it is possible to drive manually even at magnifications exceeding 300x. Amazing range and quality of observation The optical parameters of this giant are just as amazing as its design. The collective capacity at this aperture is more than five times higher than what can be obtained from the popular 8-inch Synta, and the aggregate area is 26.5% larger than the largest 16 "Dobson model so far. The stellar range expressed in units of magnitude is about 9 mag. bigger than for the unarmed eye, making stars and asteroids up to 15,5 mag. they can be seen in this telescope. This means that the brightness and sharpness of images is impressive, and in a good eyepiece, with a dark sky, the views of nebulae, galaxies or planets are breathtaking and reminiscent of photos from the Internet. Powerful magnifications up to 500x are easily obtainable, and the quality of the image is limited only by atmospheric conditions. New possibilities in the world of Dobson's large telescopes At the end, which is worth mentioning, the new Dobson telescope on Sky-Watcher has a chance to win a whole new circle of recipients with an unmatched combination of compact design, mobility and monstrous aperture. Anyone who dreamed about Dobson 16 "and was afraid of his huge dimensions, should be impatient to wait for the first copies of new telescopes, especially that they can be equipped with the known Go-To SynScan AZ system with a base of over 42,000. astronomical objects. Technical parameters â€¢ optical system: Newton (reflector) â€¢ The diameter of the main mirror: 458 mm â€¢ focal length: 1900 mm â€¢ luminous: f / 4.2 â€¢ Secondary mirror diameter: 120 mm â€¢ main mirror: parabolic, conical profile, ribbed â€¢ main mirror substrate: BK7 â€¢ coating: Aluminum + SiO2 quartz protective layer â€¢ fixing the main mirror: central, fixed â€¢ main mirror collimation: tool-free, collimation screws from the bottom â€¢ truss: 6-point, â€¢ truss pipes: single, twisted in two parts â€¢ fixing of truss pipes: ball joints â€¢ the largest useful magnification: 916x â€¢ range: 15,6 mag â€¢ resolution: 0.26 " â€¢ assembly: Dobson azimuth â€¢ 2 "Crayford extractor with reduction to 1.25" â€¢ 1:10 microcomputer â€¢ weight of the entire structure: 50 kg â€¢ weight of the heaviest element: 18 kg â€¢ length of truss pipes: 180 cm â€¢ maximum width of the base: 60 cm â€¢ total height: 210 cm â€¢ height of the lift at the zenith: 182 cm Go-To system specification â€¢ remote control: SynScan V4 â€¢ power supply: 11 V / 5 A to 15 V / 3 A â€¢ drive: hybrid stepper motors, step 0.9 degree â€¢ drive transmission: worm gears + backlash-free gears on the toothed belt â€¢ number of steps for motor rotation - AZ: 400, ALT: 1523,8 â€¢ resolution for axis rotation - AZ: 10,240,000, ALT: 39,009,182.2 â€¢ resolution of the axis encoder: AZ: 19 136 counts per revolution, ALT: 212 622.2 â€¢ tracking modes: star, lunar, solar â€¢ tracking method: azimuth, in two axes â€¢ setting modes: for the brightest star, for 2 stars â€¢ database of objects: 25 defined by the user, Messier catalogs, NGC, IC, part of the SAO catalog, including 4,290 objects â€¢ adjustment accuracy: up to 5 minutes Usage Moon the planet star clusters nebulae planes Equipment The set includes the following accessories: â€¢ Crayford 2 "focuser with 1.25" reduction and 10: 1 microfocus â€¢ LET 2 "/ 28 mm (68x) glasses, SPL10 (190x) â€¢ Dobson (azimuth) assembly with GOTO â€¢ 9x50 optical finder â€¢ truss cover â€¢ collimation eyepiece Warranty 3 years Warning! This device focuses a lot of light. Looking directly at the sun through this device can result in partial or complete loss of vision. For the observation of the Sun, we recommend the safest method of spectacle projection, that is, projecting the image of the target of our day star on a piece of paper. ADDITIONAL MATERIALS READ THE NEWTON TELESCOPIC TELESCOPIC GUIDE [PDF] READ : A SHORT OPTICAL CLEANER GUIDE [PDF] READ : HOW TO GET A COMPACT WITH A TELESCOPIC [PDF] PLEASE READ : HOW TO GIVE A DIGITAL MULTIPLE TELESCOPE [PDF]