Laser Guided Chinese Luopan

ABSTRACT

The Chinese Luopan is oldest instrument to measure direction of a particular place or a building. It originated in Chinese astronomy with couple thousands year ago. In order to identify the direction of a building with matching star direction, Chinese people is using the magnetic compass with the marking of Chinese Naming "Star "on the turning disk. In the year of development, Chinese people is also put the "24th Shan" and " 64th of Gua of Yi Jing" inside the compass. In the old day, checking the direction of the object or building, we normally use the eye sight to do estimation of the direction related to the star or the particular "Shan" or "Gua" to the object. For improving the accuracy, it uses a laser pointer which is building inside the Chinese Luopan. Whenever, you want to verify an object relative to the star or to direction of the north pole, it just need to use the laser point to point the object and turning the compass needle with the alignment of the true north direction, then, you can obtain a reading on the turning disk with the direction of the laser pointing direction. As a result, it becomes a laser guided Chinese Luopan (see Figure **A1**).