A method and device for measuring the tilt of an optical disc drive (1) is disclosed. The optical disc drive (1) comprises two lasers (31, 41) generating two laser beams (32, 42) having mutually different optical characteristics. One of these laser beams (32) is continuously ON, and is used for writing or reading data to or from the disc. The other laser beam (42) is repeatedly switched ON and OFF. Tilt is measured by comparing a normalized error signal (RES(ON)) during the ON-phase (TON) with a normalized error signal (RES(OFF)) during the OFF-phase.