Sun is a very abundant source of power. Even so, only a fraction of the entire energy is harnessed and that too not efficiently. The main cause of this is the high cost of installation of solar cells. Also solar cells are mostly kept fixed, so they do not obtain the optimum amount of sunlight throughout the day. A new micro-controller based solar-tracking system is proposed, implemented, and tested. The scheme presented here can be operated as independent of the geographical location of the site of setting up. The system checks the position of the sun and controls the movement of a solar panel so that radiation of the sun comes normally to the surface of the solar panel. The developed-tracking system tracks the sun in the single plane. PC based system monitoring facility is also included in the design. In this paper we have proposed a single axis tracker for our discussions. This avoids the complexity of construction and usage.