FREEPLAY SELF- POWERED LANTERN 1998

The Freeplay self-powered electric lantern, designed by Syzygy, is a robust, ergonomically designed, environment friendly, cost-effective long-life lantern that does not require batteries. However, unlike other "wind-up" lanterns, the Freeplay is capable of storing energy for use at a later stage.

CORE FUNCTION
Illumination
DESIGNER
SB Qually,
E Rijkheer,
R Mulder,
J Hutchinson
COMPAN
Y Syzygy

This unique lantern features an internal, constant torque wind-up spring that powers an electricity generator on demand. A full wind of about 3o seconds duration will supply about four minutes of shine time. The energy to be stored can be delivered via the winder or an adaptor for mains or motorcar electrical outlets. The latter two options will provide a shine time of up to two hours. It also features a flashing light and a 3 V DC outlet that makes it possible to use the lantern as a power source for devices such as a walkman and some cellular telephones.

The lantern has multi-functional high-efficiency electronic circuitry that not only controls the output of power to the low-power light bulb to keep the beam at a constant strength, but also protects the bulb from over-voltage and acts as a dummy load for the generator should the bulb fail. The efficiency of the lantern is further enhanced by a patented HI-GAIN lens/reflector that maximises the available light and projects it as a bright, focused beam. It is manufactured in South Africa and exported to Africa, the USA, the UK, Canada and Europe.

The Freeplay lantern utilises the same technology as the Freeplay radio that was designed in the United Kingdom by Trevor Baylis who realised the need for radios that could operate at low cost, without an external source of electricity. He envisaged particular applications in emergencies and in underdeveloped countries where electricity is not available.

Baylis received a British design award for the radio in 1996 but failed to interest major electronics companies in the United Kingdom in the radio because they regarded the technology as archaic. A South African company, Baygen, became interested and obtained sponsorship in South Africa for research into the viability of manufacturing the radio. Syzygy designed a South African version of the radio that was manufactured by Freeplay Limited in Cape Town and distributed by Baygen. As is the case with many other products, the radio has gone through successive stages of design by different designers. The latest version is also being manufactured by Freeplay Limited and distributed by Baygen. The radio is also manufactured under contract in China for distribution in the Northern Hemisphere. Syzygy's design for the radio received an award in the 1997 SABS Design Institute Design for Development award scheme.

Besides being available commercially, the wind-up radio has been purchased, amongst others, by various agencies for distribution in different countries. The Red Cross has purchased large numbers for distribution in Uganda for a massive AIDS Awareness campaign and in Bosnia for landmine warnings. The Japanese government has provided radios to Kenya for AIDS awareness campaigns, and the World Bank has used it for distance education in Zambia. It has also been sold in Nigeria, Mauritania, Sierra Leone and Burkina Faso. Since receiving the 1997 SABS Design for Development Award two additional models of the radio have been launched, one of them being a radio with a built-in solar panel to power it.