



BOOLEAN ENGINEERING PTY. LTD.

Electronics Technology Consultants

 robin@booleanengineering.com

APPLICATION NOTE

AN-56

www.booleanengineering.com

ES240 -110 – PFD Power Fail Detect Model

Power Fail Detection Functionality

This note describes an application for using the **Easyswitch PFD** as a means to detect the loss of mains power to a connected appliance

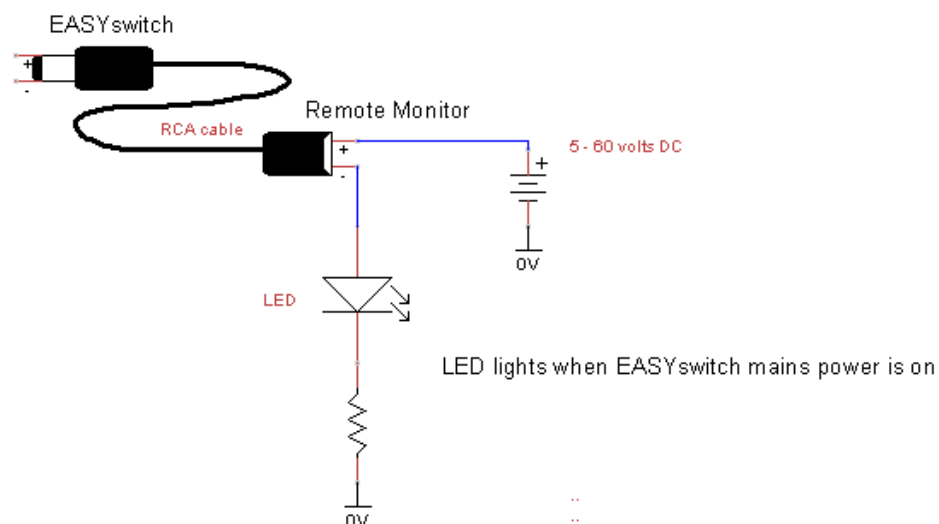
It is often desirable to be aware of the loss of mains power to equipment when used in a mission critical system or operating at a distant location.

The **PFD** model provides an **RCA** chassis socket to allow external connection to the contacts of an internal solid state relay (**SSR**) that are closed whilst power is available.

In this state the **SSR** contacts can pass up to 150 ma at up to 60 volts DC to drive remote indicators, alarms, modems etc. to report the condition of mains power presence.

When mains power supplied to the **Easyswitch** fails the **SSR** contacts open and this condition can be sensed remotely via the connecting **RCA** cable.

The **Easyswitch** itself is functionally unchanged and can be remotely operated in Standard Mode or defaulted on by bridging a wire across the trigger terminals.



Simple application of ES240 - 110 - PFD to monitor the loss of mains power supplied to a connected device

Maximum Load = 500ma On-state Resistance < 0.1R Off-state Leakage < 100nA