

Visonic Ltd.

Ceiling Mounted Dual Technology Detector

DUO-240E

FCC ID: GSADUO240E

OPERATION DESCRIPTION

Theory of Operation

DUO 240 is a microcomputer-controlled, ceiling-mounted dual- technology intrusion detector. Its operation is based on two physical phenomena - the infrared (IR) radiation emitted by the human body and the Doppler frequency shift caused by a person moving in a microwave (MW) field. The IR and MW technologies, when combined in a single detector, complement each other to assure the most reliable detection and immunity to false alarms.

This advanced motion analysis method provides the DUO 240 with the ability to distinguish between the true motion of a human body and any other disturbances which invariably cause false alarms.

Another unique feature of the DUO 240 is the MW Motion Simulator circuit (patents applied for), which simulates the effect created by a human body moving in the MW field. The simulation routine is carried out periodically for self-testing, supervision and assurance that the MW detector operates properly.