

Visonic Ltd.

Ceiling Mounted Dual Technology Detector

DUO-220E AM

FCC ID: GSADUO220EAM

OPERATION DESCRIPTION

Theory of Operation

The DUO 220 (MW/PIR) and DUO 220AM (MW/PIR/anti- masking) are state-of-the-art, microcomputer controlled dual- technology intrusion detectors. The PIR and MW technologies, when combined in a single detector, complement each other to assure the most reliable detection and immunity to false alarms.

The superiority of the DUO 220 series over other dual detectors has been achieved by the advent of the True Motion Recognition™ algorithm (patented). This advanced motion analysis method provides the DUO 220 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 220 is the MW Motion Simulator circuit (patents applied for), that 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.

In addition, the pyroelectric sensor and its circuitry are tested at regular intervals by application of a short-duration heat pulse. If they do not react properly, a trouble alert is initiated.

To complement the detection pattern provided by the front lens, the DUO 220 is fitted with a down looking lens at the bottom part of the front cover. The purpose of this lens is to prevent access to the detector by sneaking below it.