

Operation Description

Wireless Smoke and Carbon Monoxide Detectors (51000-600), (51000-601)

The wireless smoke and Carbon Monoxide detectors are designed for residential installation. The devices detect fire (smoke) or the presence of carbon monoxide and produce an audible alarm, and send radio notification to a control panel for monitoring and supervision. The two devices use the same radio and similar firmware.

A processor regularly measures sensor input, battery status, and button input (for test/hush). The processor makes a calculation based on inputs and sets internal status flags to indicate normal, alarm, and trouble status. In alarm the piezo sounder is activated.

Status is communicated from the main circuit board to the radio by means of digital logic signals. The radio monitors these signals for state changes. The radio transmits a frame of data when the state changes and at regular intervals depending on the detector state.

For Models 51000-600 and 51000-601 all hardware and firmware remains identical, with the only difference being of a configuration bit set in production, which only allows use with this specific control panels.