

## WLS1300 WATER LEAK SENSOR Operational Description

The WLS1300 WATER LEAK SENSOR transmitter is a low powered, fixed unit for remote controlling the home security feature. See the function descriptions in attached. A 3VDC battery powers the transmitter. It is designed to operate on a single fixed frequency at 433.92MHz  $\pm$  150 kHz. See the attached block diagram and schematic.

There are two triggers the integrated circuit (U1) that produces the digital control signals and will modulate the carrier signal (ASK). SAW Resonator generates the carrier signal / amplifier circuit comprised of X1 and transmitter IC (U2). The modulated output of the RF stage is coupled to the helical antenna. The Antenna is attached on helical antenna permanently around 20 mm.

The transmitter is manually operated by the external cable switch (SW3) and COVER switch (SW1A) pushed momentarily within 0.2 second and will automatically deactivate send signal to receiver. This feature is incorporated by the U1 internally.

All tuning and verification are performed by the manufacture and there are user can make no adjustments.