

# **Pour Top Description & Operation**

The Capton Pour Top Transmitter consists of a microprocessor that controls all functions of the device via a preloaded program. The peripheral circuits to the microprocessor consist of a switch to sense when the unit is installed/removed from a liquor bottle, a tilt sensor to tell when liquor is being poured and by measuring the time of the pour how much liquor is dispensed in each pour, sensors to monitor the temperature and battery condition, a SAW oscillator to set transmit frequency, and a transmitter to send the data that the microprocessor measures.

The basic operation is as follows:

The microprocessor is asleep until awakened by an event from either the tilt sensor or the on/off bottle switch. It then monitors its condition and composes a message to be sent that consists of data describing the event, temperature, battery voltage, serial number (to ID the bottle transmitting), and time data (to determine how much liquor was poured). When the time is proper to send the message it sends a data stream to modulate the SAW oscillator and cause the transmitter to output an On/Off keyed data stream, and then shuts down and goes to sleep to await the next event.