

## Control Unit operational description

The Control Unit is responsible to Activate and Deactivate the pool alarmsystem.

- Transmitters Information:
- 2.4 GHz Transmitter:
  - Modulation – GFSK
  - Data Rate – 1 Mbps
  - Antenna Gain – 4.5 dBi
  - PCB reversed-F antenna
- 433.92 MHz Transmitter:
  - Modulation – 2FSK
  - Data Rate – 625 kbps
  - Antenna Gain 2.33 dBi
  - Antenna Type – PCB spiral antenna with wire antenna extension.
- Activation/Deactivation of the control unit can be applied in two manners:
  - User Button
  - Smartphone Application using 2.4 GHz Radio.
- When Control unit is activated, it sends a control message to the Float unit, and waits for acknowledge message from Float Unit. Messages between units are sent over 433.92 MHz Radio.
- After activation, Control Unit is listening for messages from:
  - Float unit over 433.92 MHz.
  - Smartphone Application over 2.4GHz.
- Every 15 minutes the Control Unit sends a “KeepAlive” message and will wait for acknowledge from Float Unit.
- If received Alarm Message from Float Unit, the Control Unit Siren will alert.