VR2C wired acoustic receiver

Application:

Use this hardwired underwater omni-directional acoustic receiver to listen for and record acoustic detections of tagged sharks and fishes in the vicinity of Manhattan Beach Pier. Depending on the power output of the transmitters, tagged animals should be detectable by the receiver at distances out to 800 m from the end of the pier. This system will record the ID # of the tag, associated sensor data, date and time of detection.

Programming needs:

1) We need to interface this receiver to a PC computer at the end of the Pier (we'll provide the computer, which will be used for web interface and data storage)
2) We need to interface and be able to control the receiver via web (IP) connection.
3) There will be times when we'd like to stream real-time data (be able to turn this on and off via web connection
4) We'd like to have the ability to send out an email alert when a detection is recorded.
5) We need to be able to archive the following stored data:
    a. Number of pulses detected per day
    b. Number of syncs detected per day
    c. Number of detections per day
    d. All detection data (ID, date, time, any associated sensor data)
6) Generate a public friendly website where they can access last week/month worth of detections and streaming new in-coming data in a separate window.