

ABSTRACT

Water is a daily necessity which includes life on a small scale, namely households and large scale in office partners, whose availability must be maintained. Along with the times, we need a tool that can monitor the availability of water in water reservoirs. However, the problem that arises when the float in the reservoir is unknown, it causes the water in the reservoir to overflow or empty, due to the lack of a control device for the reservoir, so we need a device that can replace the work of the buoy in the water reservoir so that it can monitor the water level automatically.

In this Level Project, a water level monitoring system in the reservoir has been realized using visible light communication as the transmission medium. For components in this system using an ultrasonic sensor as an indicator to determine the water level. LED as a sender of information data coming from the sensor. The LED will send the data emitted by the LED light emitted and the information data sent by the LED will be received by the Photodiode. The data received by Photodiode will be output into 3 LCD parts, 3 LEDs, and a Buzzer.

From the results of the tests that have been done, it shows that the system succeeds in providing data information sent by the sensor. In addition, the ultrasonic sensor has an accuracy of 98% of the actual data. The maximum distance of data to be received is 45 cm.

Keywords: Visible Light Communication, Tandon