ABSTRACT

At the present time the use of radio is often used as a medium of communication. Now the radio has RDS technology which is a technology that can transmit digital information over radio waves. Radio that usually only receives audio can now receive text information from a radio station using RDS.

On this occasion the author wants to design an information system that can transmit information using RDS. The device that is designed using Raspberry Pi, NRF24L0l + Module, Antenna and PC / Laptop. Raspberry Pi is used to transmit RDS via FM with copper wires as antenna will be connected to pin GPIO4 on the Raspberry Pi. To control Raspberry Pi, we need PC / Laptop that will use SSH (Secure Shell) to perform controlling mode. Module NRF24L01+ is an additional module that is used to receive information from a sensor that sends information water level or flow of water to the Raspberry Pi and then will be transmitted to a receiver that has the FM receiver that supports RDS feature that can display text information that has been transmitted by the Raspberry Pi .

Information systems that is designed to transmit information about the name of the radio station as well as the text information in the form of information from the sensors water level or flow of water that can be displayed on the receiver side.

Keywords : **Raspberry Pi, RDS, NRF24L01+**