

ABSTRACT

MP3 is a sound encoding format. In Indonesia at this time the utilization and development of electronic equipment, especially in audio playback is very rapid, this can be seen from various kinds of music playback tools such as mp3, but if you pay attention to the development of audio playback tools it is still limited to music playback. Audio playback tools can be further developed in a wider direction, such as, for example, an information processing tool equipped with other settings and features so that they can carry out status or two-way communication in residential areas.

They developed a data processing device that uses MP3 to disseminate information to the populace. Therefore, when designing this system, the RTC DS3231 module was used as a time source to provide actual time information on the device so that the MP3 file stored on the SD card is played at a predetermined time. This system uses an Arduino-based scheduled MP3 that uses this module to deliver information to the population. Making this technology a media source for disseminating information to the public is the aim of this research..

The design of the mp3-based RT/RW information processing tool that has been made can run well, the MP3 player system can play stored mp3 files. From the results that have been tested that the infrared transmitter sensor can emit infrared signals as far as 100 centimeters and infrared will not work if there are obstacles when sending signals to the receiver. And the RTC sensor that functions as a digital clock and time reminder, there is still an average time difference of 13 seconds..

Keywords: *Arduino, MP3, RTC DS3231, SD Card.*