

RANCANG BANGUN ALAT PENGGERAK MUSIK TRADISIONAL ANGKLUNG OTOMATIS BERBASIS ARDUINO UNO

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ABSTRACT

Angklung is one of the traditional musical instruments originating from West Java. The angklung musical instrument began to be forgotten along with the times due to the emergence of modern musical instruments. To foster a sense of care for the Indonesian culture, especially in music, an innovative angklung musical instrument that can be played automatically and played manually is made. To operate the angklung manually, the user can press the buttons in the Android application to sound one of the angklung. While in automatic operation the user only has to press the buttons located on the angklung and the angklung plays the song automatically. The android smartphone will be connected via a Bluetooth connection network, so it can be played remotely and does not require a cable to connect it. This android application will send a text to the Arduino microcontroller when the virtual buttons on the application are pressed, which then becomes a command to run angklung. The existence of a Bluetooth connection on angklung can make it easier for users to play it remotely, ranging from 23 meters without being blocked by a building. However, if a building obstructs it, the Bluetooth connection can only reach 12 meters. This Android application can also be installed easily on various types of smartphones so that anyone can use it. In its use, smartphone devices can only be connected by one user, so other users cannot connect via smartphones. Other people cannot operate the angklung apart from the first user who connects it first.

Keywords: *Angklung, Android, Bluetooth, DC Motor, Microcontroller*