

ANGKLUNG KEYBOARD MIDI CONTROLLER ROBOTIC MICROCONTROLLER ARDUINO CHROMATIC 2½ OCTAVE

**by Dott. Birul Walidaini, S.Pd., M.Mus., Drs. AM. Susilo Pradoko, M.Si., Dra. Maria Goretti Widyastuti,
M.Sn, Sonia Sahra Safira, Annisa Meiliasari**

ABSTRACT

This research produces a set of angklung musical instruments that can be played using robotic techniques. The artificial intelligence instruction system uses an Arduino micro controller, while the sway drive uses an electric motor commanded by the midi controller.

The method in this study uses Research and Development with a process adapted to musical works in the following order: data collection, product design, design validation, design revision, art creation process, revision of artwork creation, trial use of artificial intelligent robotic angklung arduino and electric motor angklung drive.

The results in this study are an arduino system that is able to receive commands from the midi controller keyboard through the keys being pressed in order to move the electric motor, then the electric motor is able to move the angklung according to the keys being played.

Kata Kunci: *angklung robot, arduino, electric motor*