**Development of Automatic Handwashing with Sound Complement**

**to Prevent Covid 19**

By:

Sukir 1, Edy Supriyadi 2, Haryanto 3, Nur Kholis 4 , Yuwono Indro Hatmojo 5

 Sa’adilah Rosyadi6, Moh Khairudin 7 , and Rohsan 8

1,2,3,4,5,6,7 Lecturer in Electrical Engineering Education, Faculty of Engineering, Yogyakarta State University.

8 Student in Mechatronics Engineering Education, Faculty of Engineering, Yogyakarta State University

E-mail: sukir@uny.ac.id

Abstract. This research aims to: (1) produce automatic handwashing with sound complement; (2) knowing the performance of automatic handwashing with sound complement; and (3) knowing the users assessment of automatic handwashing with sound complement to prevent Covid 19. The research method used was research and development which refers to the ADDIE model according to Branch. The results showed: (1) automatic handwashing with sound complement had been produced with a sink holder measuring (160x57x60) Cm3, a mirror sticking board measuring (160x85) Cm2, and a sensor on the sound unit installed as high as 50 Cm at the gate; (2) the automatic handwashing with sound complement to prevent Covid 19 had excellent performance, which was characterized as 100% of the job description and can function as planned very well; and (3) the users assessment of automatic handwashing with sound complement obtained a score of 90.65% which was classified as very good.

Key words: hand washing, automatic, voice, covid 19.