

**Project Title**

Comprehensive digital master switch

Electronic &amp; computer

**Researchers**

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**Abstract**

The cranes are one of the most important and most sensitive parts of industrial and production units. It is necessary to pay attention to this part in increasing productivity and increasing the speed of production, and obviously any invention and innovations in this way will facilitate the transfer and increase the speed of moving objects. At present, the cranes are worked by mechanical controllers (levers) that have a strong need for manipulation and rapid wear and even the number of movements on them, for example, it can be used 5 million times the electromechanical controller. This technical problem has caused the industrial units to be troubled and have a severe need for these controllers. The presented device is the digital master switch (lever). The master switch converts driver's commands to electrical signals, which are signaled by the control panel to move the crane in the desired path and direction. In a cabin's crane, usually uses a number of separate switches to apply any movement (up and down movement of the hoisting-left and right moves of bridge). The presented master switch is new invention and it is exactly made to the needs of a crane. Due to the lack of mechanical components, its life is much longer than the life of mechanical samples. On the other hand, the comprehensive use of all cranes and any equipment has a joystick and only needs to change the settings in the shortest time.

