

Colour Based Object Sorting Machine

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Abstract: *Sorting is a process in which two or more objects of similar, yet different characteristics are arranged in a systematic order. This is generally carried through manually or by using sensors in automation. Automatic color sorting is very much convenient in industry. Color and size are the most important features for accurate classification and sorting of product which can be done by using some optical sensors or analyzing their pictures. Color sorting machines are machines that are used on the production lines in bulk food processing and other industries. They separate items by their colors, detecting the colors if things that pass before them and using mechanical or pneumatic ejection devices to divert items whose colors do not fall within the acceptable range. The Color sorting machine using microcontroller is a fascinating and renowned project for techies, who would like to combine electronics, machine building and programming. The Color Sorting Machine is used for sorting mainly RGB colors. A simple robot arm is used to apply a color sorting to a physical system. The objects are placed to the conveyor belt using robot arm with servo motors. One conveyor belt is used, which is controlled by DC motors.*

Keywords: Color Sensor, Ultrasonic sensor, ARM7 LPC2148, LCD Display, DC Motors, Conveyor Belt.

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