Remote Manipulation of a Robotic Arm by using Infrared Sensors

ABSTRACT

This project consists in how to adapt a manipulation system to a Robotic Arm by using infrared sensors. A personal computer is used as a control device to have a graphic interface. The control program was developed in Visual Basic so as to have a screen with an interactive menu showing the different parts of the robotic arm. This program has its main feature in the "keyboard-mouse" interface, which has a graphic screen with buttons to make the robotic arm react to the instructions sent by infrared signals. The words assigned to any button are made of two parts: The first one takes the four most significant bits to start up the power module and the second one, takes the four least significant bits to specify which joint will be moved.

Keywords: Infrared sensors, digital design, robotic arm, Visual Basic