Rancang bangun modul praktikum sensor cahaya = The light sensor practicum module

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Abstrak

[ABSTRAK
Sensor cahaya merupakan perangkat yang mengubah besaran analog (besaran cahaya) menjadi sinyal listrik. Ada bermacam sensor cahaya yang sering digunakan, beberapa di antaranya ialah sensor cahaya LDR, fotodioda, dan OPT101. Masing-masing sensor memiliki karateristik yang berbeda. Perbedaan yang mencolok adalah jenis sinyal listrik yang dihasilkan oleh masing-masing sensor sebagai dampak dari terangsangnya material di dalam sensor terhadap perubahan besar penerangan. Sensor cahaya LDR memiliki resistansi yang semakin kecil nilainya dengan bertambah besarnya penerangan, sedangkan arus listrik dari fotodioda semakin besar nilainya dengan penerangan yang semakin besar pula nilainya. Modul praktikum sensor cahaya mampu untuk memberikan semua fitur yang diperlukan untuk mempelajari karakteristik sensor-sensor cahaya tersebut dengan menggunakan pengatur besar penerangan, dan rangkaian-rangkaian pendukung seperti voltage divider dan low-pass filter.
ABSTRACT
Light sensor is a device that is able to change analog property (light) into electric signal. There are various kinds of light sensors such as LDR, photodiode, and OPT101. Each sensor has different and unique specification. The difference between those three sensors that is easy to be identified lies in the kind of output signal of each kind of light sensor. The output comes out of each of the light sensors as the respond of the sensor's material that reacts to the change of lighting. The LDR?s resistance gets lower as the amount of incident light gets higher, the electric current from the photodiode gets higher as the amount of incident light gets higher too. This light sensor practicum module has all of the features, like the lighting controller, voltage divider and low-pass filter electric circuits, that are required to learn about each sensor's characteristic.;Light sensor is a device that is able to change analog property (light) into electric signal. There are various kinds of light sensors such as LDR, photodiode, and OPT101. Each sensor has different and unique specification. The difference between those three sensors that is easy to be identified lies in the kind of output signal of each kind of light sensor. The output comes out of each of the light sensors as the respond of the sensor's material that reacts to the change of lighting. The LDR?s resistance gets lower as the amount of incident light gets higher, the electric current from the photodiode gets higher as the amount of incident light gets higher too. This light sensor practicum module has all of the features, like the lighting controller, voltage divider and low-pass filter electric circuits, that are required to learn about each sensor's characteristic., Light sensor is a device that is able to change analog property (light) into electric signal. There are various kinds of light sensors such as LDR, photodiode, and OPT101. Each sensor has different and unique specification. The difference between those three sensors that is easy to be identified lies in the kind of output signal of each kind of light sensor. The output comes out of each of the light sensors as the respond of the sensor's material that reacts to the change of lighting. The LDR’s resistance gets lower as the amount of incident light gets higher, the electric current from the photodiode gets higher as the amount of

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