

基于单片机带时间与声光提示抢答器的设计

摘要

抢答器是通过设计电路，软硬件有机的结合起来，准确判断出最先抢答者的电器。在各种学校组织的文体和体育娱乐活动以及公司社区的日常休闲竞赛活动以及电视知识科学竞赛当中，都能运用到各种抢答器。抢答器可以判断出最先抢答的选手，使竞赛活动更加公平，准确，直观。而且现在对抢答器的需求越来越多，抢答器功能也复杂多样，受到许多人的喜爱。能够使各种活动充满挑战性，趣味性，使每个人都能够在各种竞赛活动拥有良好的体验感，并且能促进团队之间的竞争合作意识和感情。

当代生活中，随着科技的发展和进步，人们生活也逐渐提高，各种竞赛活动也丰富了人们的生活，而竞赛中的抢答器也是千篇一律，可以满足人们的在各种竞赛中对抢答的需求，现在的抢答器有着数字化、智能化的趋势方向发展。使用操作简单，精准，功能齐全的抢答器也是现代人们的喜爱。这次设计的抢答器是以 AT89C52 单片机做为核心器件，加上存储模块，显示模块，语音模块，以及按键模块等来实现带时间和声光提示的 8 位抢答器抢答器。这些基本功能可以得到一个符合大众使用的简易抢答器。而且它结构简单，实用，功能多，相信也深受当今时代人们的喜欢。

关键字：抢答器,AT89C51,数字化,智能化

Abstract

Responder is an organic combination of hardware and software by designing a circuit to accurately determine the first responder's electrical appliance. All kinds of answering devices can be used in cultural and sports and sports entertainment activities organized by various schools, daily leisure competition activities in company communities, and television knowledge and science competitions. Answering device can judge the first answering player, making the competition more fair, accurate and intuitive. And now there is more and more demand for the answering device, and the function of the answering device is also complicated and diverse, which is loved by many people. It can make various activities challenging and interesting, so that everyone can have a good sense of experience in various competition activities, and can promote the sense of competition and cooperation between teams.

In contemporary life, with the development and progress of science and technology, people's lives have gradually improved, and various competition activities have also enriched people's lives, and the answerers in the competition are also the same, which can satisfy people's responses to various competitions Demand, the current answering device has a digital and intelligent trend. The easy-to-use, accurate and fully-functional answering device is also a favorite of modern people. The answerer designed this time uses the AT89C52 microcontroller as the core device, plus a memory module, display module, voice module, and key module to realize an 8-bit answerer answerer with time and sound and light prompts. These basic functions can get a simple answering device that is suitable for public use. Moreover, it is simple in structure, practical, and versatile. I believe it is also popular among people in this era.

Keywords: Responder ,AT89C52 ,Digitization ,Intelligent

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