

# 广播与电视技术

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Radio & TV Broadcast Engineering

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《广播与电视技术》是由国家广播电视总局主管,国家广播电视总局广播电视规划院主办,《广播与电视技术》编辑部编辑出版的国家级技术期刊,是发布广播电视科技政策,反映事业建设成就,介绍高新技术,交流工作经验,传播各种信息的重要媒体。本刊主要面向各级广播电视行业主管部门、各级广播电台、电视台、网络公司、发射台、微波站、卫星站、节目制作单位及电教系统,同时对企业、工矿、学校、部队等具有公共广播电视设施的管理人员、技术人员也有参考价值。

为繁荣学术交流,本刊已加入《中国学术期刊网络出版总库》、“万方数据”和“维普中文科技期刊数据库”,有权选取部分论文在本刊关联平台(如广电猎酷网 www.lieku.cn、“广电猎酷”微信公众号等)发布,作者著作权使用费已随论文稿酬一次性给付。本刊充分尊重作者的原创成果并合理保护作者享有的权利,如作者不同意本刊之外其他形式的发布,请在来稿中声明,本刊将作适当处理。本刊及主办单位对本刊已发布作品的内容和观点不持有任何立场、不做任何承诺或保证、不承担任何责任。

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### [32] 中国蓝云县级融媒技术平台建设运营实践

中国蓝云县级融媒技术平台持续进行业务迭代, 入驻新县级融媒租户, 探索省级技术平台的服务思路。本文详细阐述了中国蓝云省级技术平台对县级融媒支撑的技术架构, 设计实现要点, 业务流程和运营实践, 可咨广电相关机构构建县级融媒技术平台时参考借鉴。

### [68] 广电网络智能一体机在医疗领域的设计与应用

伴随着智慧广电的深入发展, 国内很多广电网络公司越来越重视垂直行业客户的智能业务拓展。本文介绍了一款集定制化医院宣教、智能语音播控、便民生活服务为一体的集团电视类病房智慧屏, 该设备的推出以及在医院的实际应用, 可为持续探索广电智慧化发展路径的广电同仁提供一些创新思路。

### [80] 小频率间隔的调频多工器解决方案

在无线发射系统中应用多工器, 可以极大地节约塔顶资源, 降低系统成本, 提高覆盖增益, 提升无线发射系统的稳定性和可扩展性。本文介绍了调频多工器的典型结构, 分析了调频多工器频率间隔对于调频多工器主要技术指标的影响, 以及调频带通滤波器的不同拓扑结构, 提出了不同频率间隔的调频多工器所应采用的技术方案, 对于调频广播发射台站调频多工器技术方案的选型具有参考价值。

### [110] 电视节目文件化安全送播系统的设计与实现

电视台内传统的节目采用信号采集方式耗时长、送播效率低, 纸质签播单不便于统计记录。本文设计建设的电视台制作域节目电子化签播、文件化送播的安全送播系统, 采用系统化、流程化设计, 减轻操作人员工作量, 明晰部门责权, 提高管理效率, 实现了全台高清节目文件化安全送播。



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**[ 32 ] Construction and Operation Practice of “China Blue Cloud” County-level Converged Media Technology Platform**

“China Blue Cloud” county-level converged media technology platform continues to carry out business iteration, settles in new county-level converged media tenants, and explores service ideas of provincial-level technology platform. This paper describes in detail technical framework, design and implementation points, business process and operation practice of “China Blue Cloud” provincial-level technology platform for county-level converged media, which can be used for reference for radio and television related institutions to build county-level converged media technology platform.

**[ 68 ] Design and Application of Radio and Television Network TV in Medical Field**

With in-depth development of smart radio and television, many domestic radio and television network companies are paying more and more attention to intelligent business expansion of customers in vertical industries. This paper introduces a group TV-type ward smart screen that integrates customized hospital publicity and education, intelligent voice broadcast control, and convenient life services. The launch of this device and its practical application in hospitals can provide some innovative ideas for radio and television colleagues who continue to explore intelligent development path of radio and television.

**[ 80 ] Solution of FM Channel Combiner with Small Frequency Spacing**

The application of FM channel combiner in wireless transmission system can greatly save tower top resources, reduce system cost, improve coverage gain, and improve stability and scalability of wireless transmission system. This paper introduces typical structure of FM channel combiner, analyzes the influence of frequency interval of FM channel combiner on main technical indicators of FM channel combiner, as well as different topological structures of FM bandpass filters, and puts forward technical scheme that should be adopted by FM channel combiner with different frequency interval, which has reference value for technical scheme selection of FM channel combiner in FM radio transmitting station.

**[ 110 ] Design and Implementation of TV Program Documented Security Broadcasting System**

Traditional program used signal in TV station has the problems of long time-consuming acquisition method, low transmission efficiency and inconvenient statistical recording of paper signature sheet. This paper designs and constructs safe broadcasting system of electronic signature and documented broadcasting of programs in production domain of TV station, which adopts systematic and process-based design, reduces the workload of operators, clarifies responsibilities and rights of departments, improves management efficiency, and realizes documented safe broadcasting of HD programs of the whole station.