

## ABSTRACT

Hotel Crown is a city hotel with three star predicate lies in central Tasikmalaya. Following the development of this hotel, it needs value-added services to attract the hotel consumer. That kind of value-added service can be implemented in the form of a multimedia-based network to provide data communication services such as Internet and audio-video services. The CATV network is the network that can be built in the broadband architecture. This architecture could make the network simultaneously brings many information signals in high speed.

In this project, the transmission media that is used as a connector of all the network wares is coaxial cable. The field of the service is not too large can be expected to be served by coaxial network. While, the software used to design the network is Cable Tools. This software gives useful information in the coaxial network design.

Since service multimedia require wide bandwidth and digital transmission signal, hence required higher level performance network and the better stability. Therefore the design is done by refers to standard which have been determined. Passive peripheral election and determination of level of operational Amplifier become very matter determine.

This design performance fulfill standard which have been determined, the lowest CNR of network system is 61.97 dB (min. standard 43 dB), the lowest CTB of network system is 64.46 dB (min. standard 51 dB), the lowest CSO of network system is 67.87 dB (min. standard 51 dB), the lowest XMOD of network system is 60.92 dB (min. standard 51 dB). Those show that design of coaxial network for multimedia service can be implemented in Hotel Crown Tasikmalaya.