TECHNIQUES FOR IMPROVING CONTINUITY OF SERVICE IN A CATV DISTRIBUTION SYSTEM

John Dahlquist

JERROLD DIVISION
GENERAL INSTRUMENT COPRORATION

ABSTRACT

No longer is the only purpose of a CATV Distribution System to be a very reliable vehicle for providing interference free, entertainment television programming to the residents of a community. Today's modern CATV Distribution System is now being defined in proposals to municipalities as nearly 100% reliable communications network; capable of delivering non-entertainment services (i.e. security, electronic fund transferring, data base access, etc.) to CATV entertainment and institutional subscribers in a more timely fashion, displayed in a more conveniently used medium, and at a lower cost to the user.

With this being the functional objective of modern CATV Distribution Systems, it is clearly seen that the need for the system to provide uninterrupted service, in both the forward and return signal transmission paths, has increased dramatically.

This paper discusses techniques to improve the continuity of service from the overall system design viewpoint and from an amplifier configuration viewpoint. Separately, particular focus will be placed on forward and return transmission paths. The paper will present various methods of implementing the techniques, the potential cost impact of each, and the expected improvement in the continuity of service.