# **Television Multiplex Broadcasting System**

TV multiplex broadcasting includes TV audio multiplex broadcasting, text broadcasting, still image broadcasting, etc., and in this study, research and development into a system with high originality and development for these various multiplex broadcasts was carried out, greatly contributing to the pioneering of new fields of TV broadcasting such as the practical application of TV audio multiplex broadcasting, the establishment of teletext broadcasting and still picture broadcasting systems. In particular, practical receivers with high penetration have been developed for TV audio multiplex broadcasting, and have greatly contributed to the world's first practical use.

### B-83

## Ghost Prevention Technology

This is the result of fundamentally elucidating the complex ghost phenomenon of television broadcast waves. The multi-propagation phenomena including urban structures which caused the ghost failure were elucidated, and a method for measuring these physical quantities by separating multiple waves was developed and implemented, and a unified evaluation method for multiple ghost failures was developed. This result has led to the promotion of concrete measures such as the development and commercialization of the world's first radio wave absorption wall, and has greatly contributed to the improvement of television broadcast receiving technology.

### B-84

## **Television Synchronous Broadcasting System**

Television synchronous broadcasting systems are the result of enabling the same channel to be repeatedly used in nearby areas without being limited to three stations as in the offset carrier system by precisely matching the carrier frequencies of the two stations that may cause interference. This technical development solved the technical problem of introducing synchronous broadcasting, and the synchronous broadcasting system was put into practical use in 1987.

#### B-82