B-96

Facsimiles

Developing the facsimile coding systems "READ method," "AM-PM- VSB method" and so on and being adopted as a facsimile standard contributed to the rapid spread of facsimile and facsimile communication network services (F-net service) on a global scale, from businesses to ordinary households. It also contributed to the international standardization of G3 facsimile machines, and has made a major contribution to securing facsimile intercommunications internationally and to future progress.

B-97

Communication Standard Equipment

Current communication technology and standard equipment for communication and sound have been realized. Tadaatsu Tani has developed equipment that will be an internationally accepted acoustic standard and has achieved the first objective of the physical measurement of sound. Toshio Hayasaka theoretically proved the reversible relationship of electroacoustic conversion of audio equipment, proposed a mutual calibration method using this reversibility law, and contributed to the research and practical application of audio equipment and speech quality. Taneshito Miura and Zenji Yamaguchi rebuilt the Japanese main telephone standard equipment conforming to SFERT (Europe main telephone standard equipment) for transmission quality control of international calls, and implemented this function in standard Japanese telephone equipment to respond to CCIF (International Telephone Advisory Committee) 's ARAEN (Standard telephone equipment for A.E.N. determination) which adopted A.E.N. (Clarity equalization attenuation).

B-98

Magnetic Card-type Public Telephones

From December 1982, Japan's first public telephone using a magnetic card-type prepaid card (Telephone card) to charge and make calls was developed and installed. Because of the convenience of being able to make calls without coins, it was used by users all over Japan as a means of contact from outside the home in the era when mobile phones were not widespread.

In March 1990, a digital card-type public device using a digital line was developed and installed, and a modular jack for connecting terminals for facsimile and data

transmission/reception was added in addition to calls, and this was also used as the infrastructure for data communication. It is still being installed and used throughout Japan today, and is making a significant contributions as an essential utility especially in emergencies.