

TV PICTURE INTERFERENCE STUDY  
PART II - PSYCHOMETRIC ASPECTS

Robert E. Welch, Jr.

University of Missouri at St. Louis

ABSTRACT

Categorical procedures have been used almost exclusively for rating television pictures. Magnitude estimation, a well know psychometric technique, was employed in this study, perhaps for the first time for evaluating viewer perceptions of various kinds and degrees of interference with television pictures. Under a grant from the National Science Foundation, a comprehensive series of tests has been conducted, using video tape recordings and split-screen techniques, to measure the ability of subjects representing a cross section of the viewing population to detect specific interference, and their degree of annoyance because of interference. During the tests, interference from random noise, single frequency interference, intermodulation noise, and cross-modulation were investigated, separately as well as in combination. Some interesting findings from these studies will be reported.