

Correlation system serves for leveling time delays of signals that propagate in two channels from one source, thus restoration of correlation of those, and can be used in communication apparatuses, in radio-engineering, radio-location and other areas of engineering. To correlation system from one source by two channels signals come, in first of those block for permanent delay is included, its input is connected to first input of system, and connected through first block of delay by $\Delta\tau$ to first input of first correlator and directly to first input of second correlator. First and second correlators consist of connected in sequence multiplier and smoothening filter, output of second channel is connected to first input of block of controlled delay output of which is connected to second output of system, and to second input of first correlator and through second block of delay by $\Delta\tau$ to second input of second correlator. Outputs of the first and the second correlators are connected to subtraction device output of which through connected in series amplifier-transformer, first adder and executive element is connected to second input of block of controlled delay and to input of mathematical model of block of controlled delay output of which through model of correlation transformer is connected to first input of second adder second input of which is connected to output of subtraction device and output – through correction element is connected to second input of first adder. The invention makes it possible to increase dynamical accuracy and operation speed of correlation system for leveling time delays of signals.