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The invention relates to the electrical measuring technique and radio electronics and may be used for high-precision reproduction of voltage-controllable impedances of any character, with the possibility of independent control of the active and reactive components.

Summary of the invention consists in that the impedance converter contains an operational amplifier 1 with two inputs, a first resistor 2, having one contact connected to the output of the operational amplifier 1 and the second contact to its inverting input and to the first clip 3, a second resistor, having one contact connected to the noninverting input of the operational amplifier 1 and the second contact to the common electric conduit and to the second clip 5, a differential amplifier 6, having its first input connected to the output of the operational amplifier 1 and the second input to its noninverting input, a programmable amplifier 8, having its input connected to the output of the differential amplifier 6, a phase shifter 9, having its input connected to the output of the programmable amplifier 8. The impedance converter additionally contains a programmable amplifier 7, having its input connected to the output of the differential amplifier 6, and a differential amplifier 10, having its first input connected to the output of the amplifier 7 and its second input to the output of the phase shifter 9, and the output to the noninverting input of the operational amplifier 1.

The programmable amplifiers are equipped with digital slide control of the carryover factor in the value range from -1 up to +1, and the phase shifter introduces a phase shift equal to 90^{o}.

The result of the invention consists in reproducing voltage-controllable simulated impedances represented in Cartesian coordinates with separate control of the active and reactive components.

Claims: 2
Fig.: 1