

The invention relates to the industry of telephone communication and measuring devices and can be used for adjustment and control of transmitters for automatic identification number apparatus in the signal-calling devices of automatic telephone system (ATS). A control signal analyzer of ATS containing an analog-to-digital converter, a memory block and an indication block, at that a control block, a timer, a Fourier transformation block and an analysis block are introduced in the device, at that device input is connected to informational input of the analog-to-digital converter which control input is connected to the output of control block and control inputs of timer, analysis block, Fourier transformation block and memory block which input is connected to the informational input of the Fourier transformation block connected by its output to the first informational input of the analysis block which second informational input is connected to the timer output, and the first and second outputs of the analysis block are connected to the inputs of the control block and indication block respectively.