

**UNIVERSAL DEVICE FOR CONJUGATION SPECIAL PURPOSE  
DATA TRANSMISSION EQUIPMENT WITH A PERSONAL  
ELECTRONIC COMPUTING MACHINE**

*Dr. Sci. (Engin.), prof. O.V. Kolomiitsev, stud. I.S. Rudakov, NTU "KhPI",  
Kharkiv*

An analysis of the problems of using a personal computer (PC) as part of hardware paths for exchanging digital information of typical complexes of automation means (CAM) of automated command points (ACPs) showed that it should be solved thanks to the creation of universal coupling devices (UCD) with special purpose (SP) data transmission equipment (DTE) AI-011 with PC. At the same time, PC information exchange with external subscribers is carried out according to the principles of channel and software information (data) exchange.

The main task in the development of the UCD is the creation of special software (SS), which is able to implement the codegram conversion algorithm from the format of the exchange of information electrical signals in the DTE SP AI-011 to the interface format of the RS-232 PC serial port and vice versa.

Thus, a high-reliability and high-speed microprocessor was selected and an SS was developed for it. Formulated technical proposals regarding the structural and principle (electrical) UCD schemes. The principle of operation of the UCD of channel and software exchange of information (data) between the personal computer and the DTE SP AI-011 (using the interface of the RS-232 standard with the possibility of choosing COM or USB ports) is revealed. This will allow to increase the degree of automation of solving special tasks, reliability and information support of the work of the CAM of ACPs.