

DESIGN OF TELEPHONE METERING UNIT

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In most of the telephone exchanges installed in Sri Lanka a subscriber has no verification regarding the telephone bill he receives from the Department of Telecommunications. Hence a meter which keeps the subscriber informed about his telephone cost would be very useful.

A microprocessor based unit has been developed to achieve this purpose by informing the subscriber the cost of each in terms of units and these accumulative number of units. It monitors the telephone line voltage and extracts the necessary information (i.e. number dialled, duration of the call) from changes in it. Other than monitoring the telephone line, the unit displays the time in digital form. The timing is achieved by interrupting the microprocessor once every 2.5 minutes. The hardware and software were developed using the ZX Spectrum Microcomputer.