

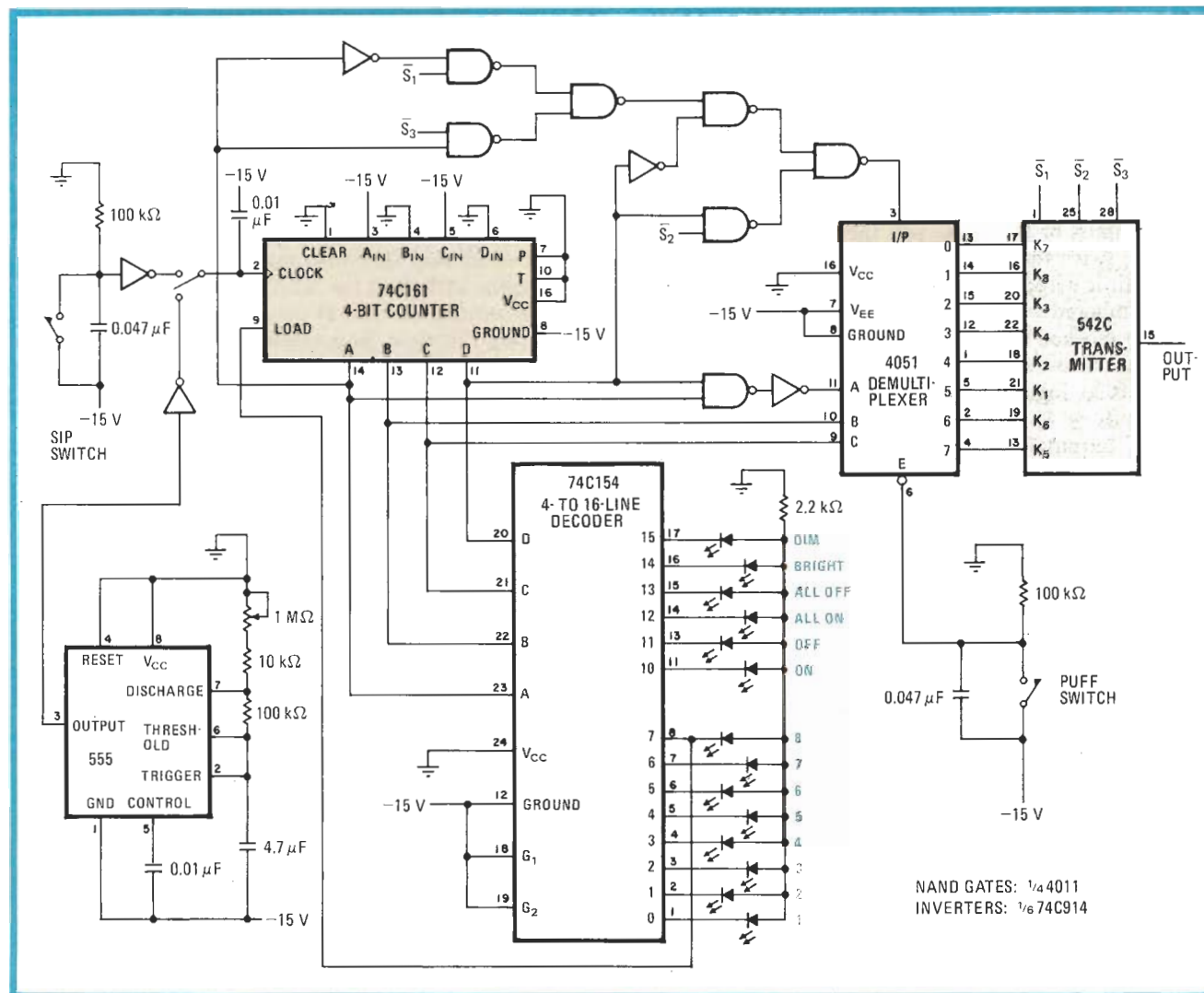
Appliance-controller interface aids the paralyzed

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The popular BSR System X-10 controller, which serves so well in home-security systems, can be easily adapted for use by the paralyzed with this interface, whose puff-and-sip switches enable the handicapped to turn on

appliances. Here, the switches are used to activate the desired output device via a stepped counter, instead of the push-button console normally required. Light-emitting diodes provide the visual feedback to the user.

The heart of the X-10 controller is BSR's 542C chip, which transmits a common-carrier code on the ac power line corresponding to the user-defined location of the desired appliance in the system, when it is appropriately addressed. The control signal is then decoded by plug-in modules connected to the individual appliances. This standard scheme is modified by adding circuitry to accommodate the sip switch, which is used to select the desired appliance, and the puff switch, which is used to



Handy. BSR X-10 controller, the heart of the Sears Home Control System, is easily adapted for the physically handicapped with interface that uses tongue-depress, head-activated, or sip and puff switches. Eight appliances can be activated. Eight additional commands provide all-on and all-off functions, light-dimming duties, and so on. Light-emitting diodes supply user with required visual feedback of controller's state.