TELEVISION SYSTEM of Advanced Design

AFTER eight years of experimenting, the Philco Radio and Television Corporation recently have demonstrated their television apparatus. While this system uses principles that have been the basis of research work of the two pioneers in the electronic television field, their engineers claim to have developed them into instruments of a high degree of perfection. The pick-up camera, shown above, uses a tube known as the "electric eye"; the extremely feeble television signal is amplified about 10,000 times in the control room until it has sufficient strength to modulate the ultrahigh-frequency transmitter.

A cathode-ray tube, 19 in. long and 12 in. in diameter, is employed in the receiver console, front and rear views of which are given. This tube is mounted in the cabinet in a vertical position, hence the moving images appear on a mirror set in the half-opened lid of the console. This picture is about 8 by 10 in. and has sharp definition with good contrast.

All power-supply units are located in the bottom of the cabinet. The total number of tubes used in this combined sight and sound receiver is thirty-six.