

The 1936 Summer Olympic Games in Berlin provided a unique opportunity to the German authorities to show the latest state of the art in television technology to visitors from all over the world. This was the first time television was present at the Olympic Games and ever since then its influence has increased, to the point where it has finally become a dominating factor for their organization.

In 1936, the event was covered for eight hours every day by means of three cameras of different characteristics: one constructed by Fernseh AG, one developed by W. Heimann (RPZ) and one built by Telefunken; the first used P. I. Farnsworth's "image dissector" tube, and the last two were equipped with Iconoscope tubes. Walter Bruch, then a young engineer with Telefunken, acted as cameraman for one of them. The 180-line pictures thus obtained were offered to the viewers in 25 public "television rooms" in Berlin, and two others, in Potsdam and Leipzig, were fed via broadband cable. Moreover, two large viewing rooms were equipped with large projection screens.

These large screen projections of "live" pictures from the Olympic stadium were obtained by means of the Schubert system mentioned earlier: a 60-m loop of blank film was coated by a wet light-sensitive gelatine layer, dried for two minutes, exposed by the television picture using the "reversal film" procedure, and then (within 65 seconds) developed, fixed, washed and used for film projection. The coating was then washed off and the film freshly coated. The sound was recorded magnetically and synchronized by introducing the corresponding delay. The whole installation was housed in a van which, moreover, was fitted with a platform usable for film cameras. Later on, the endless loop of blank film was replaced by ordinary film material which, amongst other advantages, permitted its use for archive purposes.

Purely electronic projection devices were already presented in the same year, at the Radio Show: one by Fernseh AG on 180 lines, and one by Telefunken on 375 lines using picture tubes of about 10-cm diameter and capable of producing very bright pictures on a 1.2 to 1.4-m screen by using anode voltages up to 80 kV.

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Courtesy of David Boynes