

The Hellschreiber

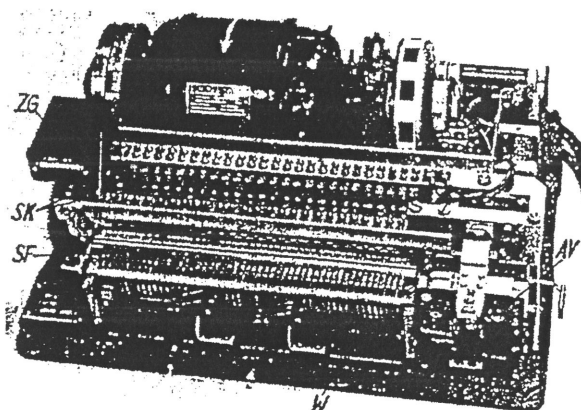
The Siemens Lochstreifensender

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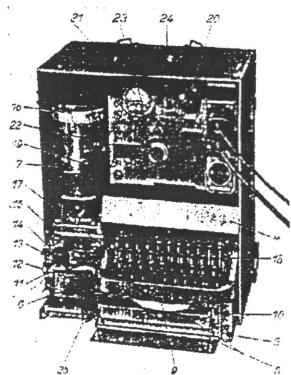
Hugh Skillen

The model measured 31 cms long, 23 deep and 21 high and worked on universal motors on 220 v.A.C. with possibilities for 125 A.C. and 110 DC. It took eight years to develop and was improved with 12 lines instead of 7. Finally they built a field instrument which was for use with small transmitters, and measured 45,5 cms high, 24 cms deep and 39 long. This incorporated the receiver and worked off a 4.5 v. battery, like the Enigma machine.

The commercial model was used pre-war by press and news agencies and from Berlin to foreign desks, by radio. It could also be used on landlines.



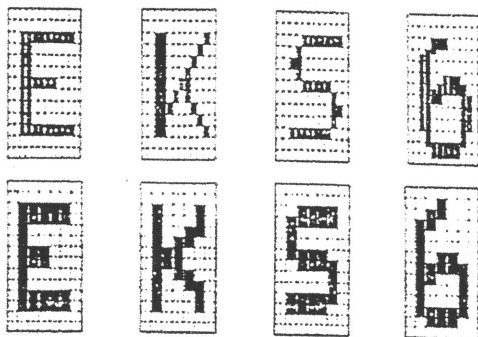
The Siemens-Hell Punch-Tape Transmitter



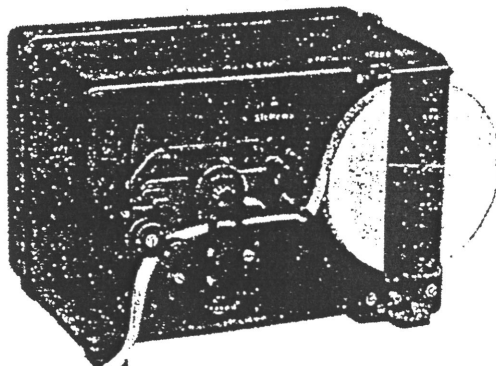
Siemens-Hell Field Transmitter

The paper strip was moved forward on a roller against a helix which built up the letter or figure with dots, half-lines and lines, both vertical and horizontal. In the 12-line model the sender-roller had to make 12 revolutions to make one letter. On the 12-line model the symbols were made from top to bottom with a right-handed spiral; on the 7-line model from bottom to top with a left-handed spiral.

It was like the Enigma slow but apparently little affected by weather or atmospheric. Sent by hand messages were transmitted at 25 w.p.m and by punch-card at 50 w.p.m. In military use the messages were in cipher. Colonel Geoffrey Claridge had seen the instrument in Italy and later intercepted messages on wireless as he did with the Geheimschreiber on landline.



Symbols as received on the 12-line machine



Latest model of the receiver