

The years from 1983 to 1992

I started work on December 1st, 1983. A new employee was waiting outside the personnel office to fill out his personnel form. We quickly got into conversation. The new employee came from Heidelberg and took the train to Darmstadt. He first studied French for 4 semesters (?) And then electrical engineering.

He also said that he borrowed a suit from a friend for the interview. To our surprise, we should start in the same department.

When it was my turn, my colleague recommended that I switch from AOK to Techniker-Krankenkasse, which would be cheaper. From then on, my health insurance was the Techniker-Krankenkasse. Now about the actual building. In addition to the main entrance, which is always manned by staff, there are two further entrances and exits. One was a lock across from the train station. The lock consists of a booth the size of a telephone booth (what was that). Now the porter at the main entrance can compare the picture on the company ID with the person (two cameras). Then he can let the person into the company premises or outside.

Another exit entrance was at the Mozart Tower. This exit was only manned in the morning and in the afternoon. The company was located next to the ESA on Robert-Bosch-Street

Now we came to the room where the video mixers were being tested. We waited about an hour to be assigned a job. At the time, an extensive project for a television studio in Hilversum in the Netherlands was in the works.

And so my foreman and I got to work on the equipment. First connect the power cable to the control cabinets and then connect the control cables. Then curiosity overtook me and I pressed a button on a keypad and then I heard a relay click in a control unit. That was in the spring of 1984. When I asked why relays and no semiconductors were installed, my foreman replied that the relays had proven themselves. In addition, there were standard relay cards that simplified planning and thus reduced the planning time.

. The I²C bus was not used for the control units until years later. Semiconductors were also used here and an update could be simplified by installing new software. During this time I was supposed to accompany the engineers from Hilversum to dinner. My boss told me that I had to get a receipt pad from the secretary of his superior and when I asked where the customer canteen was, I should just run after the Dutch.

Now I saw the customer canteen for the first time with tablecloths and flowers on the tables and pictures on the walls. There were three menus to choose from in the staff canteen. The third menu was also expensive and the food was served to guests. When everyone was seated, the meal was served. When everyone had a plate, I picked up a knife and fork. Now the only thing missing was the sound that you make when you handle a knife and fork. I looked around and saw the customers, petrified, staring at their plates. Suddenly someone said "Amen" and then we could finally start. I was surprised to hear the "Amen" before the meal and then maybe a quiet "Thank God" the food was better than I thought. Personally, I don't think much of the idea. After all, I've eaten here several times and everything has turned out very well for me. The Kaiserschmarrn with warm vanilla sauce, raisins and sliced almonds was particularly good.

Since the new TV technology was not yet trusted, we dealt with three employees with a telecontrol system for Hilversum. As so often, nothing worked at first. After three days of troubleshooting, it was clear that the addresses at which the modules recognize each other were incorrect. A query with the development confirmed our suspicions. . Development had given the fitters the wrong addresses and they were wired in terms of hardware. See 1984.

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After all devices for the telecontrol system had been checked, there was now a training that lasted 6 weeks. The induction consisted of 3 weeks of theory and 3 weeks of practical training. The theoretical part took place in a classroom with tables, chairs and a blackboard like in a real school. The lecturer explained a lot about the PAL color television and the special measuring devices such as a vectorscope or a level meter. Possible measurement errors and their avoidance were also discussed. The most important characteristics of video signal cables and the appropriate terminating resistors have not been forgotten either.

After the theoretical part, the practical part followed. My colleague who started with me and I came into the impulse group. All pulse generators that were used in the company were checked and, if necessary, repaired.

We had the task of checking some of these devices according to the calibration specification and calibrating them if necessary. Probably the beginners always got the same Devices (samples) to check.

Then we came to different departments but both in the mixer group.

The colleague found his job troubleshooting and balancing mixers with 18 to 24 inputs and a wealth of functions.

A colleague and I were supposed to bring a new small mixer with 8 inputs + 4 additional inputs to series production. The mixer with the designation R51 ME was the last in this mixer generation. Some levels could be taken over from the previous models. Also the control of test equipment for the Testing new circuit boards was one of our tasks. The colleague took on the design and description of the test instructions. A phone call stuck with me.

The caller wanted to know how much the little mixer weighs. The problem was easy to fix as our workroom was next to the shipping department. They had all kinds of trolleys in the gram range and those for euro pallets. Now I have weighed all components except for the connection cables and transmitted the total and the individual weights by telephone. The weight is of particular interest if the mixer is to be installed in a vehicle (OB van).

Now the adjustment work, troubleshooting and repair of the R51 ME video mixer began. We noticed a mistake at the beginning. There was a problem with an adjuster for the selectivity of the chroma key function. With this function e.g. with a speaker in front of a blue or green background, a TV signal or a slide can be faded into the background. This selectivity adjuster was used to make this setting easier. The answer from the development was that this circuit part was copied from the predecessor models and would therefore be error-free.

The second mistake could only be recognized when a cross or a grid structure was displayed on the monitor. One pixel was missing from the intersection. The developer also had a solution that I should then test. After I had shown the cross through a modification, this error was fixed.

The mistake of the selectivity adjuster was also evident to a customer in England. The customer described this problem to our service employee, who then told the developer. It then turned out that an incorrectly installed "Zener diode (1.4 volts)" caused this error. Before I could take my vacation, I had to convert a mixer from Euro-PAL in Brazil to PAL. Which modifications had to be made was stated in the documents of the previous models. When the renovation was finished, the mixer was put on our shelf.

When I came back after my vacation, my colleagues told me that they were given two control panels and both of them didn't work. The error was only found after two weeks of troubleshooting. Two EPROMs labeled A and B were inserted into the

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sockets, which were also labeled A and B. And it wasn't until late that you found out that the EPROMs were labeled

A and B were swapped and the control panel could not be put into operation. Such errors had not occurred in the future. Once I had to go to Zurich for a day and show a potential customer how the mixer was working. I don't know whether the customer bought the mixer in the end. Incidentally, the mixer with Brazil-Pal was rebuilt in Euro-Pal because a Euro-Pal mixer was needed.

After about 10 months, a developer had developed a switched-mode power supply especially for the small mixer. When testing there was a large voltage peak of around 10 mV in the image signal. I then took some pictures of the oscilloscope screen with a Polaroid camera and described the problem to him. According to the regulations, interference signals of 1% of the video signal, i.e. 7 mV interference signal with 700 mV video signal amplitude, may be present. All attempts to reduce the pulse amplitude failed.

And as before, the mixer was supplied with power using three switched-mode power supplies.

After about a year, I came to the project appraisal department. First

I helped with projects and in early 1986 I had the clock center for Bavarian Radio in Munich - Freimann had to check. Then I was in Munich Freimann for 6 weeks until the clock center was accepted. The clock center delivered several blackbursts (signals with everything except image content, i.e. black) and the time code with DCF 77 synchronization.

After that I went to Südwestfunk in Stuttgart about three times. The work never lasted more than two weeks. At the end of the 80s there was something again larger project for Studio 1 of the Hessischer Rundfunk. The whole thing was first set up in Darmstadt to avoid unpleasant surprises.

Then my colleague and I were in Frankfurt for about 8 weeks. This time without hotel accommodation. You could drive the distance Egelsbach Frankfurt every day. I took my girlfriend with me to Niederrad in the morning and then took the S-Bahn to HR.



In 1989-1990 I was not fully operational. Since 1989 I have lived in Weilburg again. Now I drove with a car pool of 4 people from Weilburg and Limburg to Darmstadt. During this time there was another project for Beijing. The acceptance with two engineers from China took two weeks. It was a mobile studio, where all components in transportBoxes were housed. The Chinese have always given something to their colleagues at BTS. They gave me a key

ring (see picture). They gave me a key ring (see picture). One picture shows the Holy [Shou Xing](#). If you give someone a Shou Xing as a present, you wish the recipient a long life. A nice gesture from our Chinese colleagues. For the Winter Olympics in Albertville in early 1992, BTS built 3 HDTV OB vans that a colleague and I checked. In the summer of 1992 I received the resignation from BTS. The company no longer exists in its former form.