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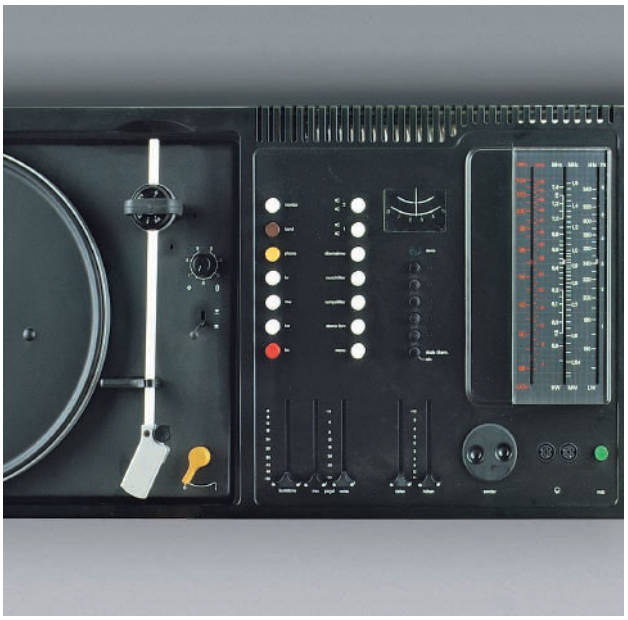
Esslinger Straße 24
D-70736 Stuttgart-Fellbach
tel. +49-0711-5747 59
fax +49-0711-5747 84
www.AxelMenges.de



Bernd Polster
BRAUN – Fifty Years of Design and Innovation
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Braun products have been shown more frequently at exhibitions than those of any other comparable company. Some people find that they reflect basic human values such as authenticity and integrity. For others, they are the very incarnation of German perfectionism. Braun is not merely a trademark; it stands for an all-encompassing concept. For the last five decades, this concept has spawned innovative products with an unprecedented regularity that begs to be explained – especially as the era spanned by the history of Braun design is not exactly one characterized by continuity. Instead, the second half of the 20th century witnessed a dramatic change in living conditions. Prosperity and greater ease entered our daily lives, but also widespread disorientation and alienation. It is to the credit of those who set the Braun design project in motion that they were able to counteract this feeling of alienation – which manifested itself to them not least in poorly designed objects of daily use – with a vision of design reform. There had already been attempts made along these lines. What was new was that a commercial enterprise spearheaded the movement. Also new was the systematic approach, the application of design principles to modern products and the innovative dynamic thus triggered. Finally, the considerable commercial success this design project enjoyed was likewise a revelation. All of this led the company to establish a design department that was not merely an appendage, but rather an active decision-maker in the development of products from the initial idea to realization. This is how Braun and design became synonymous.
Bernd Polster is one of the best-known German design authors. Nearly all of his books have been translated into other languages as well. His most recent publications are *German Design for Modern Living* (2008) und *bauhaus design* (2009). During his university studies Polster tried to learn dialectical thinking from philosopher Leo Kofler. He subsequently traded promising careers as centre forward, artist and psychologist for books on cultural history and journalistic reporting.

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Distributors

Brockhaus Commission
Kreidlerstraße 9
D-70806 Kornwestheim
Germany
tel. +49-7154-1327-33
fax +49-7154-1327-13
menges@brocom.de

Gazelle Book Services
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Tower Books
Unit 2/17 Rodborough Road
Frenchs Forest, NSW 2086
Australia
tel. +61-2-99755566
fax +61-2-99755599
info@towerbooks.com.au

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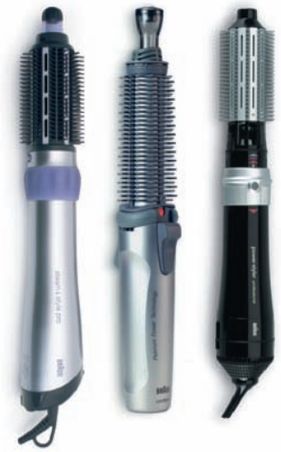

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Bernd Polster

BRAUN

Fifty Years of Design and Innovation

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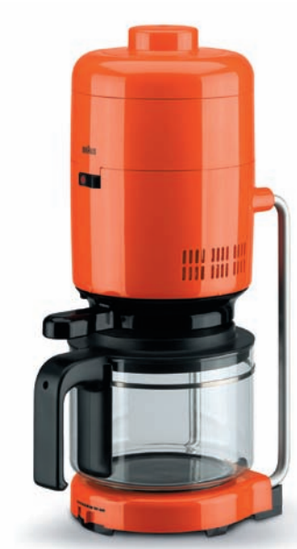
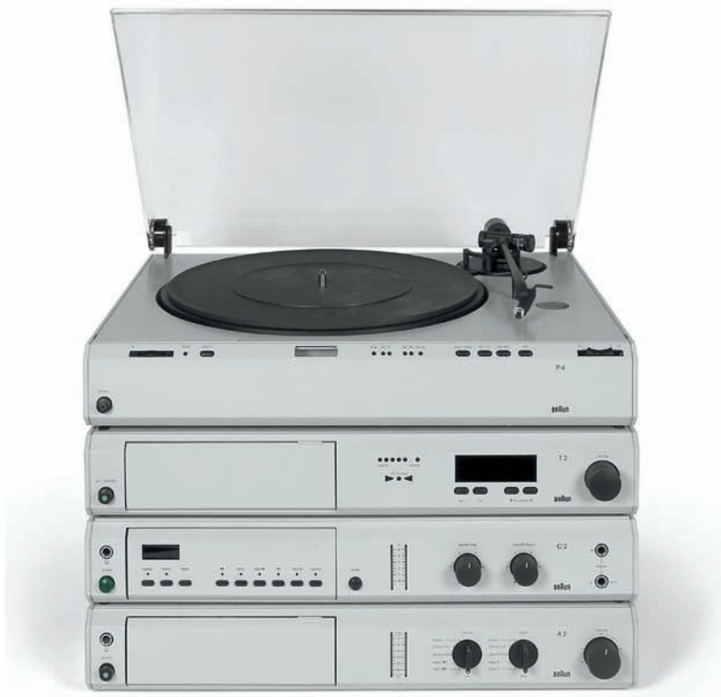
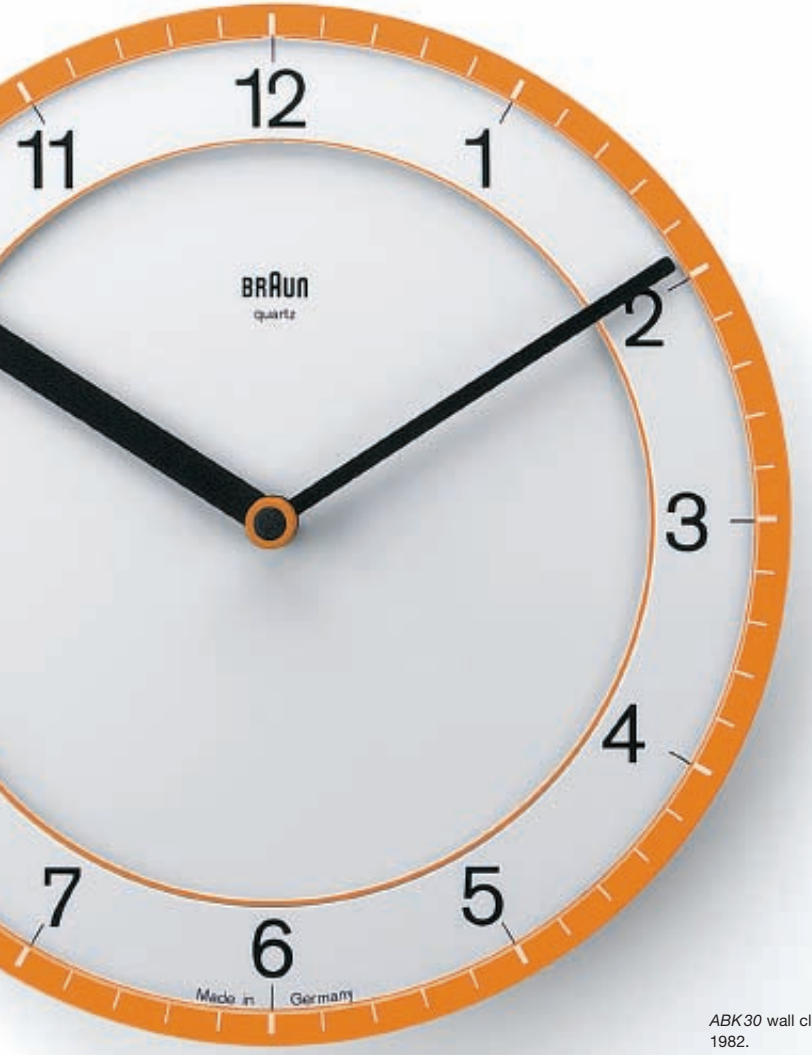




BRAUN

Fifty Years of Design and Innovation



ABK30 wall clock. Design: Dietrich Lubs, 1982.

Bernd Polster

BRAUN

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About this book

A selection of interconnected forms of text allows each reader to map out his own route through the world of Braun Design.

The functional components of the book:

1 The introductory **Picture Gallery** shows close-ups of exemplary products from the eight product groups in the historical and current Braun product range.

2 The **Company History** names the major figures and describes the concept behind Braun Design. It provides an overview of the main lines pursued in the company's design concepts and innovations from the 1950s to today.

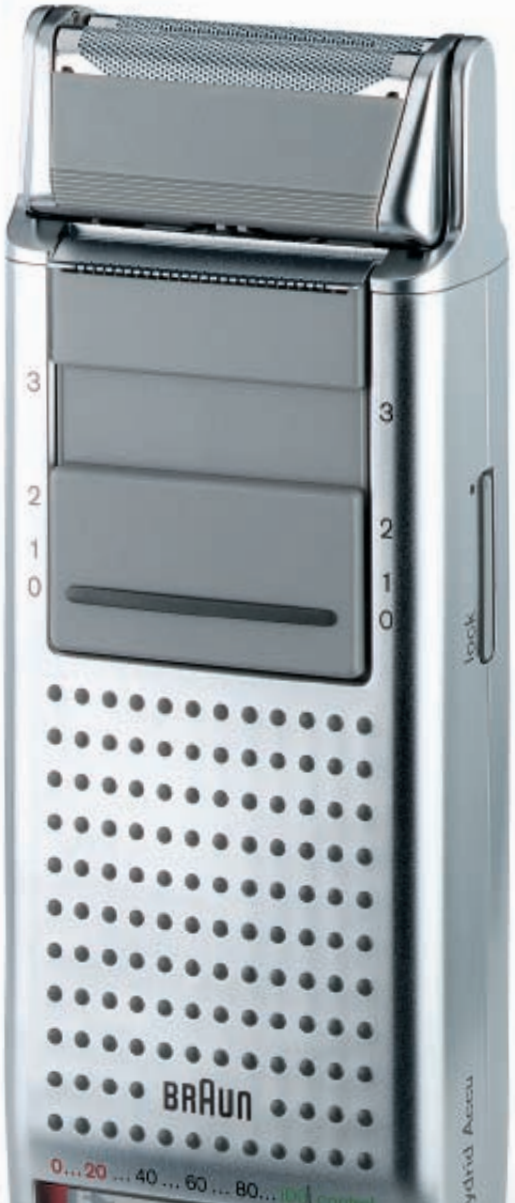
3 The main section of the book is divided according to eight **Product Groups**, each of which is introduced by a short portrait describing the chief lines of development.

4 For each of the product groups, key products – **the Milestones** – are described in detail and placed in the context of the history of Braun Design as well as the general product history.

5 In the long **Picture Series** the development of the product groups can be traced visually, with brief commentaries.

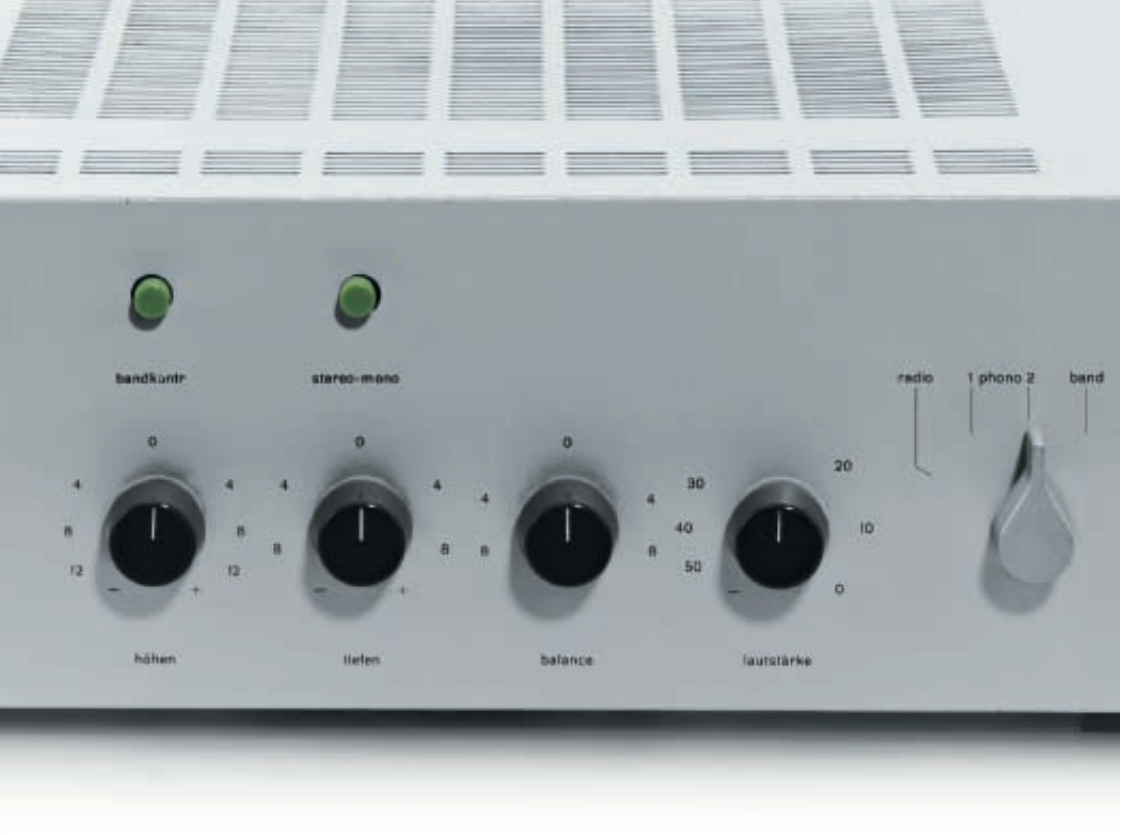
6 A **Product List** in the appendix lists all Braun products, indicating the page numbers of those pictured in this book.

7 **Compact Biographies** present the main figures behind Braun Design.



Flex control 4550 universal cc electric razor.
Design: Roland Ullmann, 1991.

Content



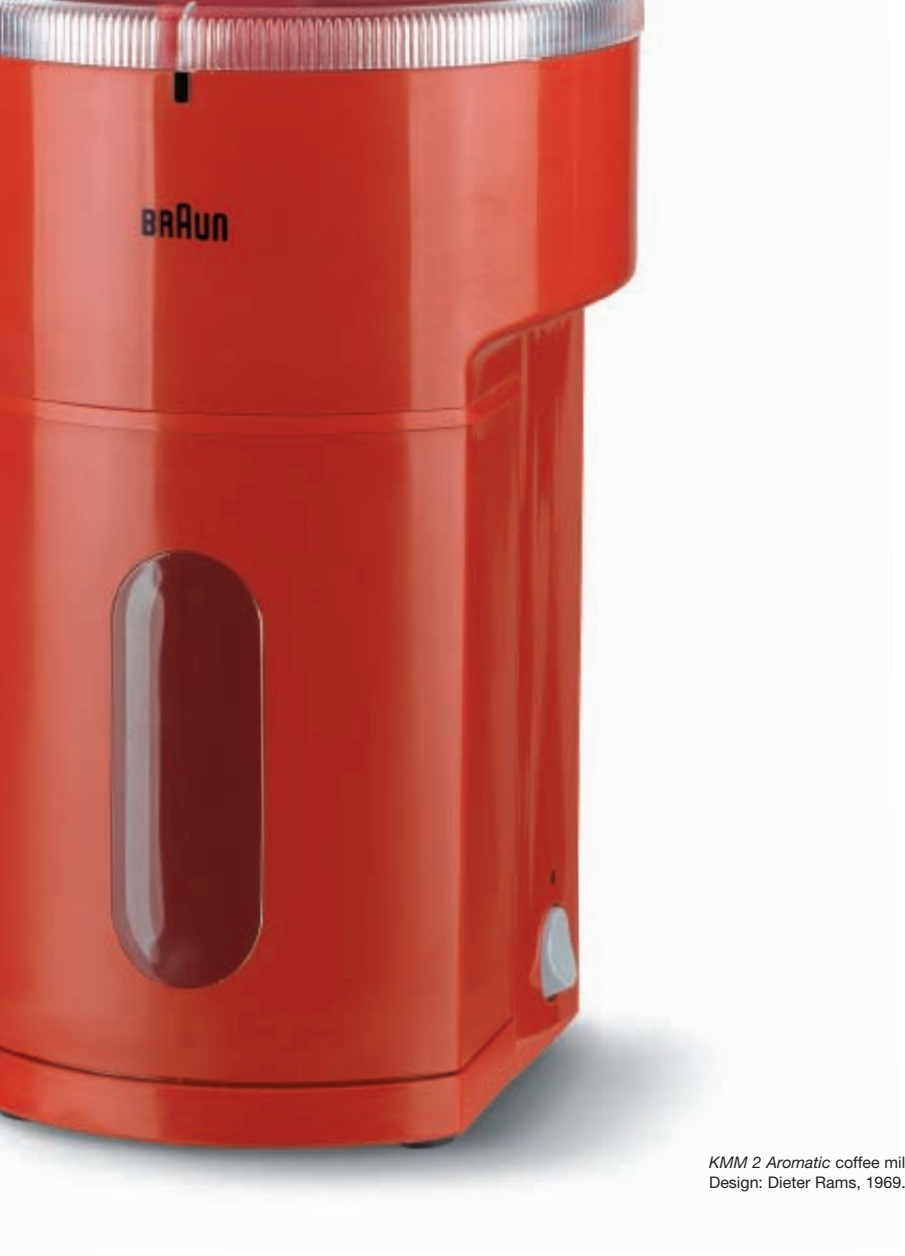
CSV 12 amplifier. Design: Dieter Rams, 1966.

A Design Journey

The first Braun product I ever used was a record player. We threw a party at the home of a classmate whose father was an architect and I kept playing *Stand Up*, the latest LP from Jethro Tull, over and over again. It was 1969. That same year, our art teacher gave a slide presentation on the topic of “good design”. Naturally, he was a Braun fan. His observations fell on fertile ground in my case, coming as I did from a family of “free thinkers” who had brought me up to reject all frills. My physics teacher in my senior year met with less success in his efforts to explain to us the principles of electronics using the *Lectron* construction kit. I couldn’t afford to buy my first Braun appliance until I went to college. The *370 BVC* flash was a major purchase for me at the time.

Although I was never part of the inner circle of Braun enthusiasts, Braun products accompanied me during every phase of my life. Just how firmly they are anchored in our everyday lives became apparent to me recently when I was watching a play. It began with a dark stage and the beeping of an alarm clock. This was unmistakably the typical Braun sound, an acoustic icon that everyone recognizes. Braun-brand alarm clocks have accompanied me on travels through a host of countries. *Voice control* was something I appreciated from the outset as representing a major step toward the humanization of the wake-up process. When my son discovered this technique at four, I suddenly understood that it also had a playful dimension. Oh yes, and then there’s the Braun shaver – I’m on my third one by now – which is always ready and waiting for me in the bathroom.

I made my first personal contact with the Braun company in 2002, when I already had a few books on design under my belt. I was doing a radio show on that firebrand of functionalism, Dieter



KMM 2 Aromatic coffee mill.
Design: Dieter Rams, 1969.

1 The accomplishments of Jo Klatt and Günter Staeffler are especially worthy of mention in this context. In their book *Braun + Design Collection*, published in 1990 and reissued in 1995, compiled with the assistance of dedicated Braun employees – chief among them Claus C. Cobarg and Professor Dieter Rams – they systematically traced the development of Braun products in the period from 1955 to 1995. We would like to thank them for their pioneering efforts, which led to the first comprehensive overview of Braun products.

Rams, and had prevailed upon the expert knowledge of Jo Klatt, who knows the historical Braun products better than almost anyone.[1] Even more importantly, I paid a visit to the company's design department during my research, where my meeting with Peter Schneider, the current director, gave birth to the idea for this book. What followed was a fascinating, ultimately two-year-long journey through the galaxy of Braun design.

No, in this oh-so-famous design department there's no cupboard harbouring a book of secret teachings. Modern product design is instead a constant search. A creative process whose results vitally depend on the people involved, the designers with their individual personalities, strengths and the special credentials they bring to the team. Just as important is the exchange with other departments, with those responsible for development, manufacturing and marketing. This interdisciplinary communication flow, the pre-eminence of which Braun recognized at an early stage and with which the designers therefore have a wealth of experience, is perhaps the true secret of success.

What astounded me was the joy, the enthusiasm with which the designers helped me during my interviews. This is surely based in part on the fact that most of them had never been questioned so intensely about what it is they do. The close-ups of Braun Design that resulted are assembled here for the first time to form an historic trajectory. This book therefore also represents an attempt, in an industry that always has its eye on tomorrow and beyond, to achieve a modicum of balance with what went before.

Bernd Polster

Introduction: **Entertainment Electronics**

From the minimalist SK 1 radio to the monumental *atelier* hi-fi system: there is a world of difference between the first and the last of the myriad classics that emerged from Braun's audio sector.[1] Yet there are also similarities to be found between the two extremes – for example, the box-like shape as well as the organizational principles that made Braun appliances so simple to use and which made the brand world famous. The popular radios of the 1950s, which varied only in terms of small nuances, transformed people's living rooms into concert halls, complete with curtains (the large fabric-covered expanses of the speakers), keyboard (rows of ivory-coloured control keys) and gold-coloured baroque ornamentation. Braun can be credited with bringing about the demise of great-grandpa's bourgeois "music furniture". Here, Herbert Hirche and Hans Gugelot were initially entrusted with the rather thankless task of designing contemporary wooden housings for the existing radios and radio-phonographs.[2]

The box became the basic shape for audio equipment, and the battle against kitsch became its common denominator.[3] We can already recognize systematic thinking at this stage – for example, when the position of the speakers was varied.[4] Parallel rows of grooves for ventilation and for speakers became a distinguishing characteristic. Even the legendary *SK 4*, which Hans Gugelot and Dieter Rams designed together, features this type of facade. This flat-roofed architecture, was a manifesto against the stuffiness of the post-war years and marked a breakthrough for the Braun Design project.[5] The *SK 4* also established the line of compact systems with the controls on top.[6] The next milestone – a stereo system made up of individual components[7] – was even more epoch-making. Rams[8] endowed the *studio 2*, the archetype of this innovation, with its technoid face. The principle of stacking almost inevitably resulted in the development of the block shape with a vertical front panel,[9] which soon prevailed worldwide. Braun, which was known for its asceticism as far as colours were concerned, had often been a trendsetter in this regard.

1 Not to mention the downfall of worlds, such as the nearly complete disappearance of the German audio industry, which – Braun included – was not able to stand its ground against the ever-increasing competition from the Far East.

2 Stylistic devices: straighter contours, simplified control buttons and lighter-coloured woods. The console designs were consistent with the then-popular Scandinavian style in which functionality was given a "human" interpretation. This style dominated the work of contemporary architects as well as the interior decorating magazines of the time. But prior to the turning point in design that Braun initiated, there were no phonographic appliances that complemented this style of room.

3 Other, more organic approaches, such as that used in the radio-turntable combination *combi* (1955), were not pursued further in the audio sector.

4 For example, in the tabletop *TS-G* model (with speaker on top).

5 This breakthrough consisted in the renunciation of symbolism, which itself became a powerful symbol: for technology.

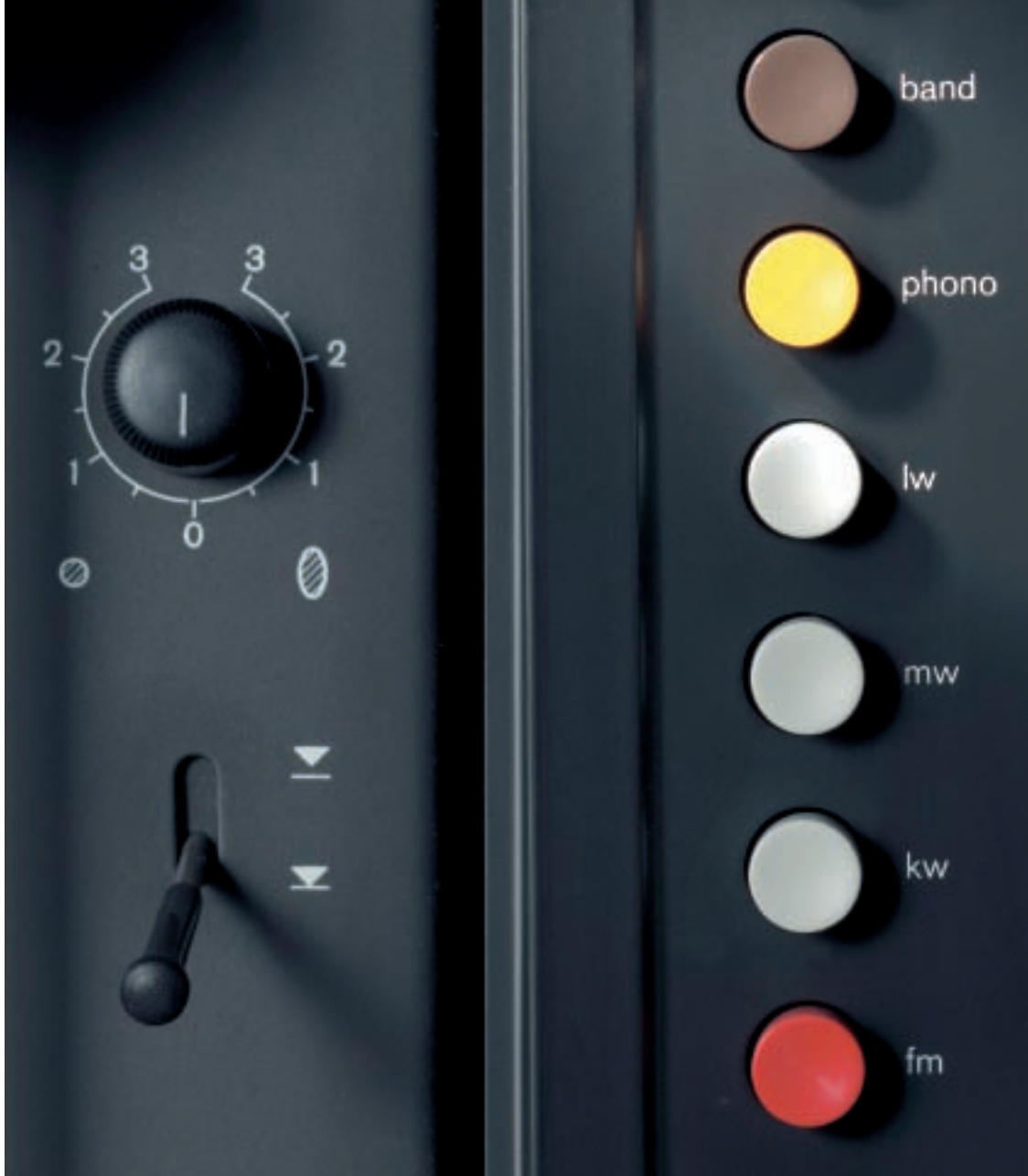
6 Over the course of two decades, Braun introduced numerous such record player-radio or record player-receiver combinations. The *PC 4000* audio system (1977) was the last of these.

7 A principle first formulated by Herbert Lindinger, professor at the Ulm Academy of Design, which dominated the audio sector until the 1990s, when it was pushed aside by integrated mini-tower systems and portable "ghetto blasters".

8 His designs shaped the industry for a quarter-century.

9 A configuration whose functional industrial aesthetics are reminiscent of another design innovation that introduced technology into the living space: the tubular furniture of the 1920s.

Illus.: *audio 308* compact system; detail



1955 *TS-G* tabletop radio
SK 1 tabletop radio

1956 *PK 1*radio-phono combination
SK 4 radio-phono combination
exporter 2 portable receiver

1957 *L 1* speaker
studio 1 compact system

1958 *HF 1* television set

1959 *studio 2* modular system
TP 1 transistor radio-phonograph

1963 *T 1000* short-wave receiver

1964 *audio 2* compact system

1965 *CE 1000* receiver
PS 1000 record player
TG 60 reel-to-reel tape recorder

1968 *regie 500* control module

1969 *L 710* speaker

1972 *regie 510* control module

1973 *audio 308* compact system

1977 *PC 4000* compact system

1980 *A 1 atelier 1* amplifier

1986 *R 2 atelier* control module
TV 3 atelier television set

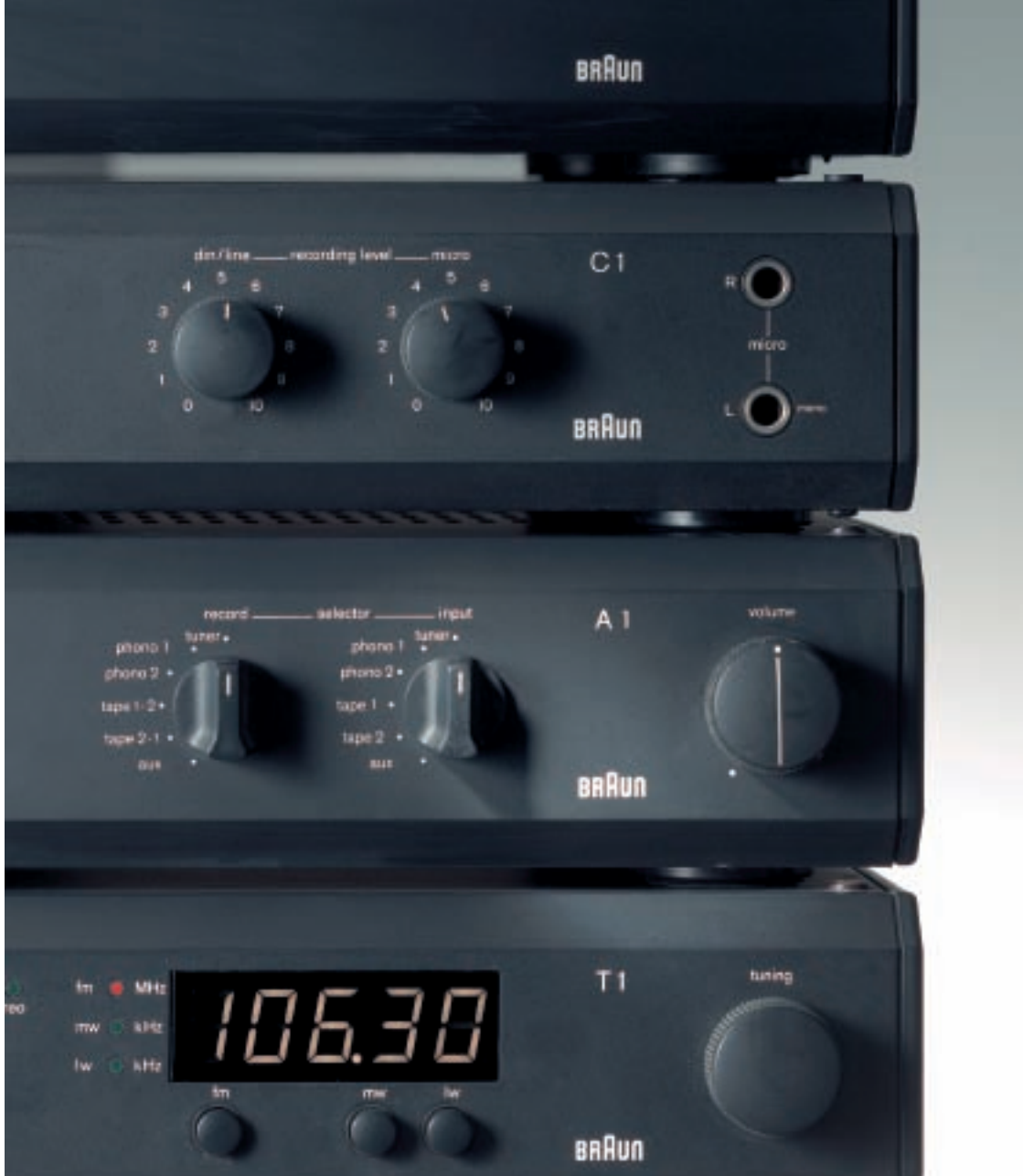
The earliest systems established cool silver as the “in” colour. Later, in the 1970s, deep black set off another fashion wave. Both variations are still current today (at Braun as well as throughout the entire consumer electronics industry) and their associative horizons would be worthy of an in-depth examination.

In the case of static audio appliances, whose purpose is contemplative and whose operation consists primarily of switching and adjusting, the organization of the control elements is the most significant formative step. Braun’s organizational systems are legendary. In the early years of the audio industry, the company produced a few special radio models which likewise set fashion standards, even as they remained intermezzi – for example, the portable and transistor radios and the globetrotting *T 1000*. *Studio*, *audio*, *regie*, *atelier*: the names of these hi-fi systems – now the core element in entertainment electronics – can still make connoisseurs’ hearts beat faster today. These were perfectly developed ensembles which often served as blueprints for the entire industry. In the 1960s, once the gap between good design and high-performance appliances had been closed, Braun established itself as the top-of-the-line brand. By this time, neutral aesthetics had already become the generally accepted standard.[10] The all-inclusive programme remained an anomaly.[11] Behind the invitation to consumers to fully equip their homes with audio appliances from Braun, in which all the individual components in a single product line complemented one another, lay the company’s design standard of delivering ideal product types. The appliances were part of an overall design. This conceptual approach helped Braun achieve its exceptional status.[12] Unfortunately, however, the brand’s outstanding characteristics were not reflected in sufficiently high sales figures. With *atelier*, Braun’s last hi-fi system, Peter Hartwein underscored this moment of smooth-surfaced sleekness. His monolithic creation, available in black or grey, was one of the most completely successful designs in phonographic history.

10 Certain manufacturers, such as Wega, based their designs very closely on Braun’s. Others, such as Dual, took advantage of external similarities to siphon off the mass market.
11 Here, Braun sometimes adopted its technology from other manufacturers: for example, in the case of television sets, VCRs and CD players.

12 Other design-oriented audio companies, such as Bang & Olufsen or Brionvega, were never able to achieve this position.

Illus.: *atelier* hi-fi system; detail



SK 1

Tabletop radio
1955
Design: Artur Braun / Fritz Eichler
Kleinsuper, FM
light blue, pale green, light beige, graphite

At the Design Triennale in Milan in 1957, two versions of the *SK 1* radio were displayed in the "Showcase of Nations" as examples of German industrial design. However, the effect was anything but impressive. After all, it belonged to the category of small-format radios typical of that time. In a pinch, these "Goggomobils" of the radio world could even be placed on a windowsill.[1] Such additional or starter models generally imitated the theatrical gestures of the larger radios.[2]

Braun's *Kleinsuper* was something completely different. This design by Artur Braun and Fritz Eichler is a lesson in the art of frugality. It is a radio in paperback-book format; an exercise in restraint, which it achieves through its simple, self-contained shape, framed by a plastic case, and by abandoning every feature that is not absolutely necessary – including the otherwise obligatory keys. The radio was operated by means of two simple, unlabelled buttons and the large dial.[3] With the *SK 1*, the small-format radio took on a form all its own. Round dials had been seen before this, but never with such unadorned numerals and never as part of a front panel whose graphic structure was so clearly articulated – with the geometric interplay of a circle and a rectangle[4] reiterated in the structure of the perforated panel. Here the design refers back to its origins: the factory floor.[5] At the same time, the dot pattern vaguely recalled the spartan severity of military equipment[6] as well as reminding the observer of the "abstract" art that was inundating German living rooms at the time.[7] Braun's most inexpensive floor-mounted appliance still carried the stylistic aura of the 1950s. Ultimately, the *SK 1* was actually a rudimentary building block for a not-yet-existent "system".[8]

1 Braun had also built the small-format *Piccolo 50* and *Piccolino 51* radios (preceded by the *Piccolo BSK 441*, released in 1941), whose appearance was modelled after American designs.

2 One example of this was the *Philetta* from Philips, the best-selling model in this sector. All the details were included – from the ivory-coloured control buttons to the obligatory gold edging.

3 This feature was modified several times in subsequent models, making it the most crucial detail for dating purposes.

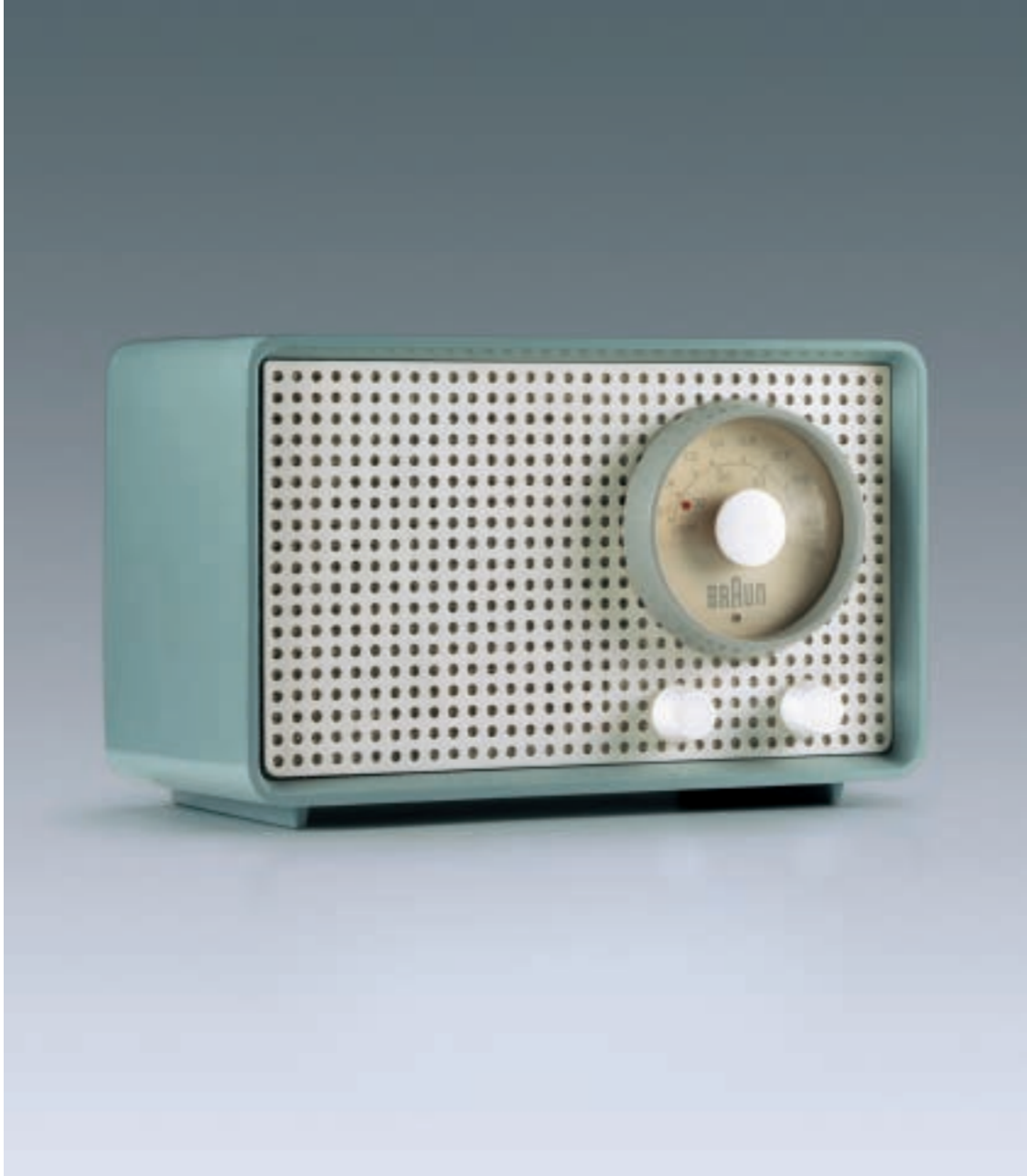
4 In 2002, a new small-format radio, the *Tivoli Model One*, became a worldwide success. Its format and interplay of shapes echo those of the SK 1.

5 Initially, the radio was also available in light yellow, pale green, beige and blue – colours typical of the era. Later, only white and graphite were produced.

6 Braun and Eichler had been soldiers in the Second World War; thus, the *SK 1* was jokingly known as "Kommissbrot" ("non-coms' bread rations").

7 In the cause of "good form", Braun entered an alliance with the Rasch wallpaper company, which produced artistic wallpapers.

8 The *SK 1* had two jacks and could also be used as an extra speaker. With dimensions of 23.4 x 15.2 x 13.0 cm, it was only half the size of the *Philetta* (price: 129 DM). Up until 1961, a number of subsequent versions of the radio were produced which, in addition to FM, could also receive MW (*SK 2*) and LW signals (*SK 3*). They cost 145 and 165 DM, respectively.



SK 4

Radio-phonograph combination
1956
Design: Hans Gugelot / Dieter Rams / Herbert Lindinger
white / elmwood
Shown here: *SK 5*

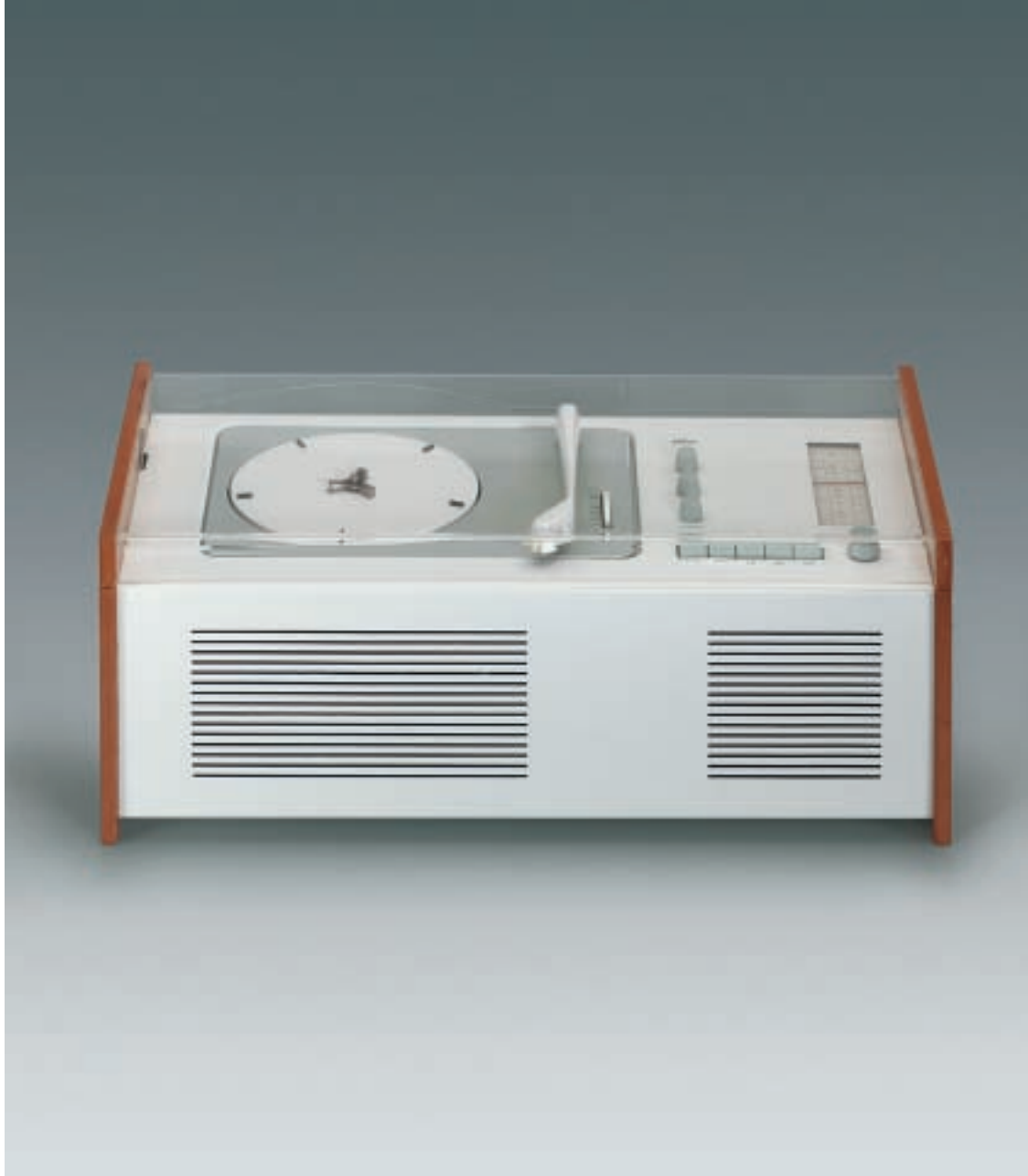
If today one were to take a survey about the best-known products from Braun, this appliance from the early years would most certainly be near the top. According to Fritz Eichler, the *SK 4* became the virtual "embodiment of Braun Design." In the 1950s, radio-phonograph combinations[1] were the top-of-the-line product for radio manufacturers – usually in the form of corpulent Musiktruhen ("music chest" radiograms). The *SK 4* was an alternative design that "consciously rejected the form of 'music furniture'."[2] Thus, the company used materials here that had no place in a bourgeois sitting room: a metal case and transparent plexiglas cover – an invention attributed to Dieter Rams. This was the show-stopping feature of this design milestone. The wondrous object proved so unsettling to people's accustomed visual aesthetic that it acquired the nickname "Snow White's coffin".

This lightweight artificial glass – as "unbreakable" as the vinyl of the record discs – was the kind of technological promise that set off waves of euphoria.[3] The *SK 4* was one of the first audio appliances whose design emphasized its functional character rather than concealing it. Further breaks with tradition were the compact box shape as well as a degree of minimalism that bordered on culture shock. The appliance appeared naked, almost obscene: a white hexahedron, defined by right angles. The resemblance to Bauhaus-style "functionalism" was no coincidence. Here, the application of ascetic architecture to modern industrial products celebrated its premiere. There were also other principles whose origins could be traced to classical Modernism: whereas the design pioneers of the early 20th century reduced their furniture creations to their component parts, the same principle was now applied to an audio appliance. Behind this concept lay the soon-to-be executed option of developing the product into a hi-fi system, as well as that of transposing the design onto other products. In contrast, as far as sound was concerned,

1 They had been part of Braun's product line since 1929 (with the *Mozart* model); after the Second World War, they usually took the form of "chests" or "cabinets". *Phonosupers*, later called "compact systems with record players", were produced until the late 1970s.

2 From the Braun brochure, 1956.

3 "Unbreakable" was also the magical adjective applied to the new record discs made out of vinyl. Plexiglas is the trade name for polymethyl methacrylate (acrylic glass), a material that has been in use since 1928. Since the 1930s, it has been used as a non-splintering glass substitute in such products as protective goggles and automobile taillights. Used here on a record player for the first time, the transparent plexiglas cover (here, too, the authorship is disputed) subsequently became a standard feature for decades to come. Plexiglas was soon put to use in other Braun products – for example, for the cover glass for the *HF 1*. In the 1990s, the principle of transparency experienced a second boom, in such products as Apple computers.



SK 4

Braun's most famous Phonosuper with its four (!) watts of power output provided a rather ordinary level of listening enjoyment. This product, in which Braun's new design concept materialized for the first time, was a joint effort. Eichler and Rams were responsible for the practical yet still novel placement of the controls on top of the appliance as well as for the revolutionary stripped-down design.[4] A special chassis was created for the L-shaped arrangement of the control buttons. The typography of the dial was based on Otl Aicher's specifications, and the design of the record player – with its somewhat softer contours – came from the office of Wilhelm Wagenfeld.[5] In other words, the individual components were not simply ordered from a supplier, but rather – and this was also a seminal approach – the vast majority were produced according to the designers' specifications. Hans Gugelot had the idea of using a U-shaped steel plate for the housing; his younger colleague, Herbert Lindinger, also worked on developing it. The contrast between the white appliance block and its side panels further emphasized the construction principle. At the time, the reddish elmwood[6] was interpreted as a Scandinavian and therefore highly contemporary element. The warm colour of the material adds a certain tension to the *SK 4*'s appearance, and with it, a special, almost "timeless" charm.[7] The window-like ventilation grooves[8] are also a product of Gugelot's repertoire – even though the cutting process did not always function perfectly.[9] Since they are nearly identical on both the front and rear panels of the appliance, there was no longer any such thing as an unsightly back side. As an object in the room, the *SK 4* thus fulfilled another requirement of modern decorating philosophies. It comes as no surprise that it quickly became a favourite accessory among architects[10]. After all, with its matter-of-fact, rectilinear form, the cuboid phonograph corresponded perfectly to the blocks of stone, steel and glass that the master builders of the "economic miracle" were constructing on the bombed-out lots of German cities.

4 The same arrangement, with controls on the top surface of the appliance, had already been implemented in 1939, with the model *6740*. The geometry of the surface and the controls represented a dramatic contrast to the "everyman's radio" which prevailed at the time. They evolved from graphic as well as ergonomic considerations: rectangular, concave buttons for the radio, round buttons for the volume controls. The light, monochrome grey seems to anticipate the computer aesthetic of the years to come.

5 The *PC 3* was a further development of the record player in the combi portable appliance released in 1955 (Wagenfeld staffer Ralph Michel was responsible for this project).

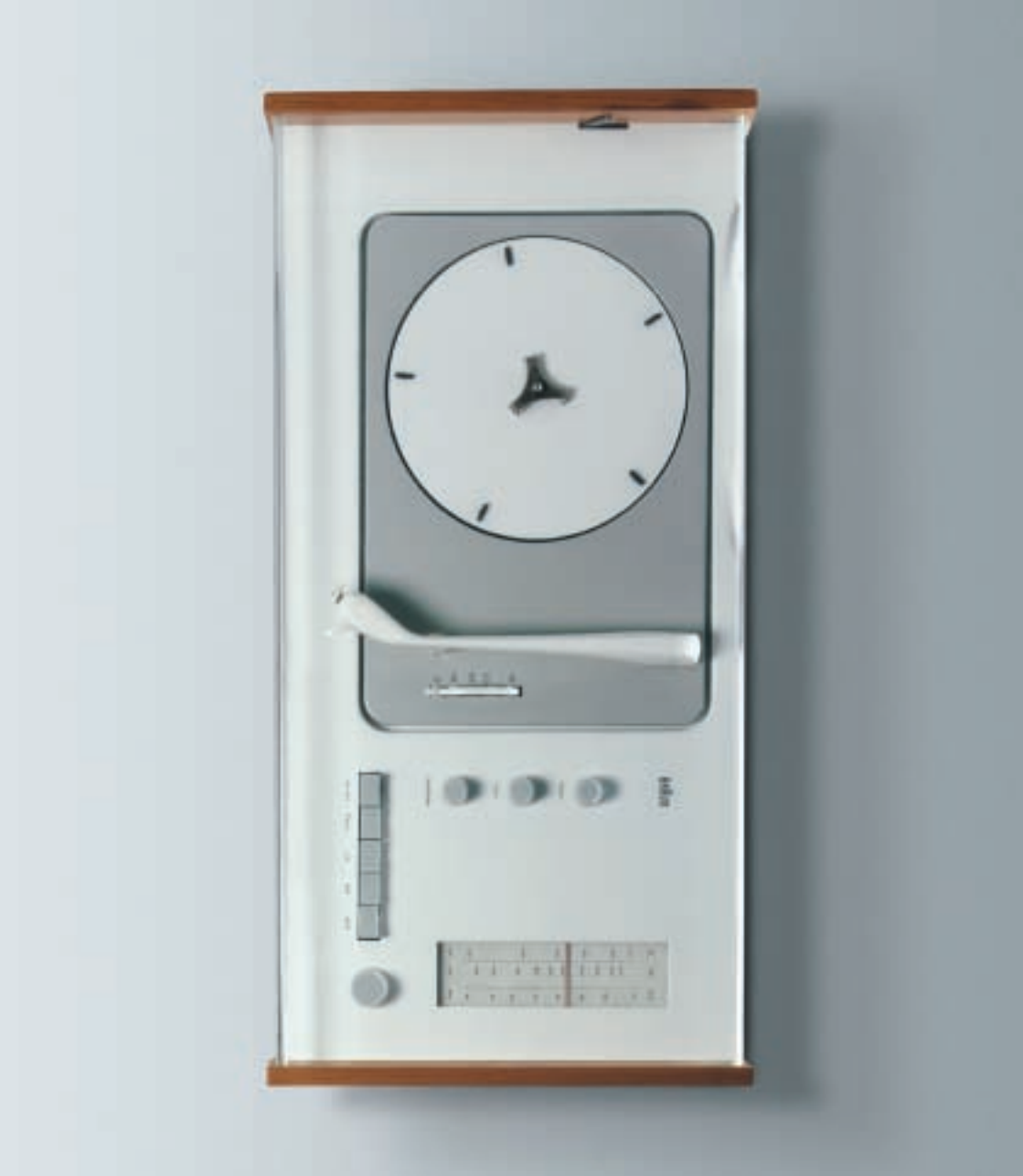
6 Also called red elm; Fritz Eichler is credited with selecting the colour.

7 The steel plate was mounted into the wooden side panels; Gugelot's *M 125* systemized furniture was also constructed using this technique, which we find frequently in his work. Originally conceived of as an inexpensive solution, the uniform bending of the steel plate proved to be an additional problem in production.

8 These grooves had already been seen in the *PK-G* radio, designed one year earlier, and on the *L 1* external speaker (which could also be connected to the *SK 4*). Dieter Rams later developed them further (the *SK 6*, for example, had larger, divided speaker grooves).

9 A characteristic of nearly every Braun radio during the thermionic era.

10 Up until that time, architects didn't really know what kind of radios they should place in their stylishly decorated living spaces. Up until the mid-1950s, they frequently dispensed with them altogether.



HF 1

Television set
1958
Design: Herbert Hirche
Tabletop appliance
(tubular steel stand available as an accessory)
dark grey / light grey

Braun achieved the goal that the Bauhaus had professed but had scarcely been able to implement: that of developing product types that serve as representatives of an entire genre.[1] An excellent yet nearly forgotten example of this achievement is the *HF 1*[2] television set, produced in the late 1950s. Herbert Hirche's dramatically clear-cut design signalled a break with the original forms taken by this category of appliances. Whereas two years earlier the *SK 4* had represented a departure from "music furniture", this new design succeeded in breaking away from the concept of "television furniture". The most striking characteristic of the *HF 1* is its box-like shape, which proved to be seminal, albeit over a protracted period of time.[3] Its monochrome colour scheme further emphasized the appliance's formal coherency.

The apparatus – which looks as foreign as an alien in a science fiction film – seems surprisingly modern even half a century later. Hirche's grey TV cube was the first set to be produced using no visible wood.[4] The severity of its colours and form gave it a neutral appearance that aided viewers' concentration on the screen – principles that have long since become the norm, but which were established only gradually. The thin-legged steel stand provided as an accessory completed the look of the *HF 1* as a solitary object in space. Another important characteristic is its consistent symmetry, further underscored by the conspicuous line pattern of the speaker grooves. Centred between them is a single on-off button[5]; the brand logo appears directly below. The controls that are not constantly in use are concealed under a flap on the top surface. Through this separation of the less essential functions[6] – a standard feature in today's television sets – the central on-off switch became the only visible control element. This was the ultimate in minimalism.

1 In this way, Braun put one of the fundamental objectives of the Bauhaus into practice.

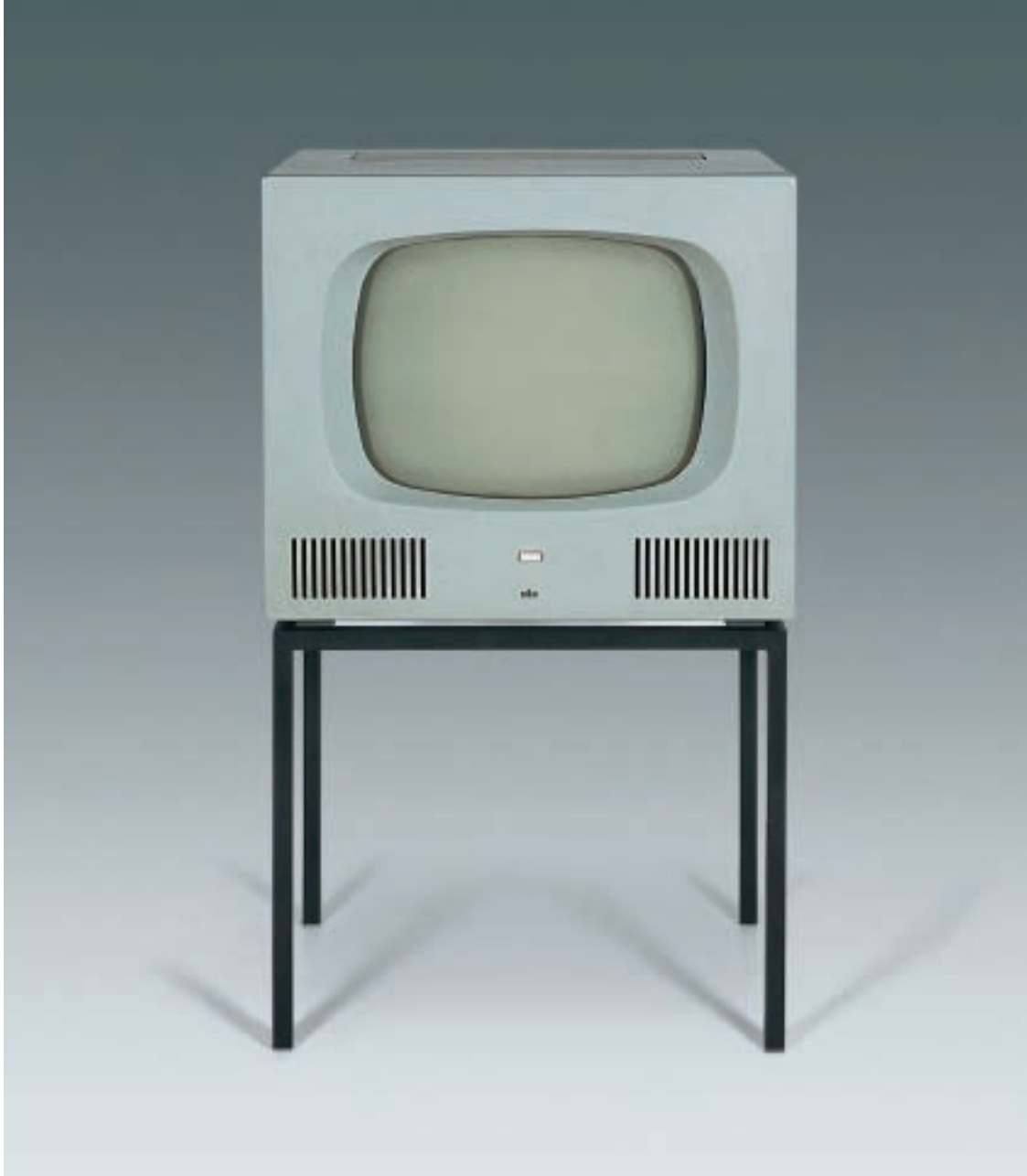
2 The technology for the appliance was developed by Telefunken.

3 In 1969, Marco Zanuso and Richard Sapper designed the rectangular Black *ST 201* (for Brionvega), a model that was far ahead of its time. The box shape became standard in the 1990s.

4 The matte dark-grey housing was fitted with a lighter-coloured front panel made of plastic.

5 At the time, Germany had only one television channel, the ARD (German Association of Public Broadcasters).

6 Braun picked up on this same principle in its atelier appliances.



TP 1

Transistor radio-phonograph

1959

Design: Dieter Rams / Ulm Academy of Design

combines the *T 4* and *P 1*

light grey

From the time that transistors made miniaturization possible, the sound of the pocket-sized radio was part of the background music of the rock'n'roll era. Braun entered the market early with the *exporter* model, which, thanks to the vivisections carried out by the Ulm School ascetics, was transformed into a pure slab shape, characterized by the geometric simplicity of its front panel.[1] Dieter Rams perfected this spartan approach by elongating the format to a manageable size (made possible by the use of transistors), repositioning the sunk-in control buttons onto the top surface, using a perforated panel for the speaker[2] and embedding the dial into the body of the appliance.[3] A silk-screening department was established to produce the high-quality typography; it would later play a significant role in the development of Braun's shavers. The special grey colour[4] of the housing – which was composed of two polystyrene shells[5] that provided a fitting cover for the messianic austerity of the design – simultaneously served as the template for a precise system of colours which facilitated easy comprehension of the controls.[6]

The idea of developing a portable appliance for the new 17 cm record discs had been in the works for some time.[7] But it was Braun's by now deep-seated practice of systematic thinking which allowed it to be produced as a single, harmonious unit.[8] The *P 1* portable record player, whose pick-up arm emerges like a cuckoo from a clock by means of a slide control, adopted the format of a transistor radio. Some of the most intricate details can be found in the metal parts: the turntable with its pneumatic rubber ring and the aluminium bars which hold the two elements together in the simplest possible way. A small set of headphones completed this multifunctional combination and anticipated the mobility of the *Walkman*, if not its sales success[9]: It was simply too far ahead of its time.

1 The *exporter 1* still had a shimmering gold housing typical of the period (it was sold primarily outside of Germany until 1960); the *exporter 2* (designed at the Ulm Academy of Design) was reworked in white, and the graphics were greatly simplified.

2 This was first seen in the *SK 1*.

3 As an inset disc (*T 3* and *T 31*), as a rectangular window with a numbered dial (*T 4*) and as a window with an inset sector of a circle specifying the frequencies (*T 41*).

4 Grey appeared early on, in the studio 1 compact audio system and in the *HF 1* television set. Fritz Eichler maintained sovereignty over the selection of colours.

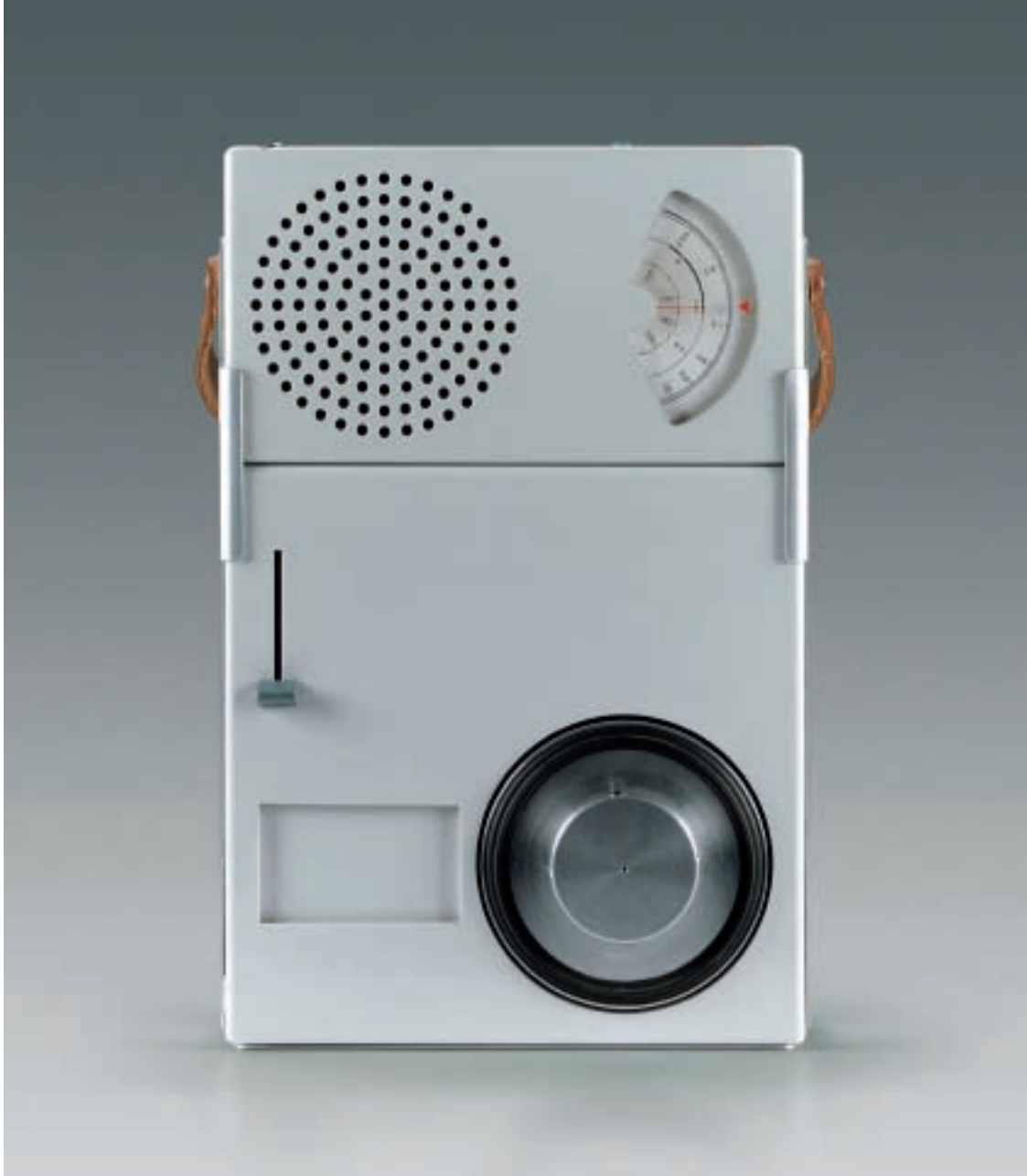
5 The same principle employed in the *Transistor 1* portable radio.

6 Thus, the red of the station control knob corresponds to that of the markings on the dial below. This type of informative colour coding was later used in other areas as well – for example in clocks.

7 The Metz company had already produced a portable tandem appliance of this kind. Dieter Rams came up with the idea for personal reasons: for his new position, he needed to learn English, and he wanted to be able to listen to recorded lessons even when he was on the road.

8 This is especially evident in combination with the *T 4* and *T 41* radios, whose circular perforated field corresponds with the radius of the turntable.

9 Transistor radios were the first line of products to be discontinued.



studio 2

Modular system
1959
Design: Dieter Rams
CS 11 control module / record player
CE 11 receiver
CV 11 power amplifier
light grey / aluminium-coloured

1 From the August 1959 Braun product catalogue. The first stereo records had been introduced onto the market one year earlier.

2 The first signs could already be seen in the *SK 1* (1955) and the *SK 4* (1956). The compact system *atelier 1* (1957), which contained no integrated speaker and could be operated with two separate speakers, is considered to be the first true stereo system.

3 They measured 11 cm high and either 40 or 20 cm wide; compatibility was a goal that was not always achieved in the years to come.

4 In the years that followed, many manufacturers specialized in certain individual components. By contrast, Braun typically continued to develop complete stereo systems.

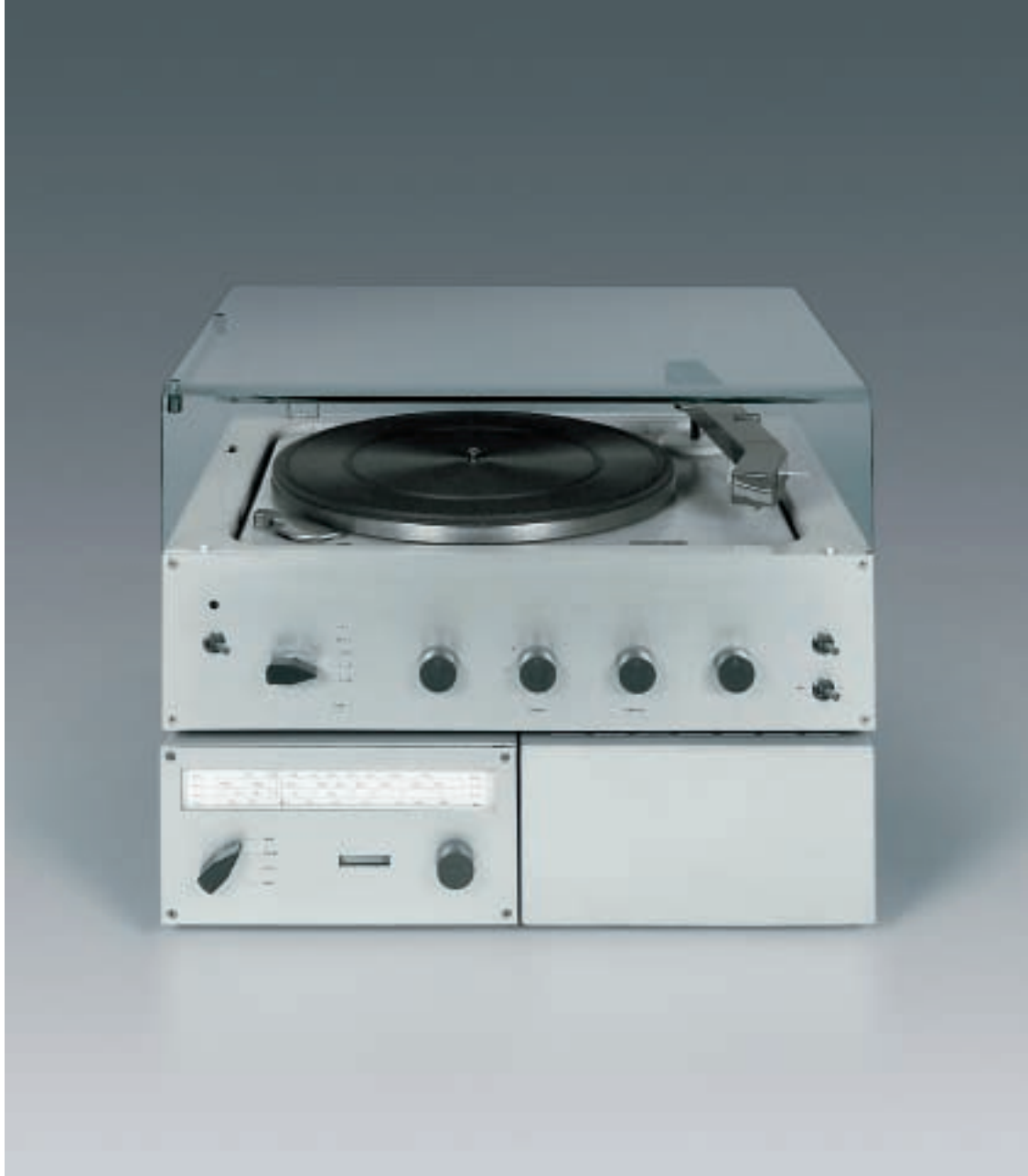
5 A format used in inexpensive systems that remained popular into the 1970s.

6 With the *CSV 13* amplifier, developed in 1961.

7 As a two-fold sensual metaphor for both technology and luxury, silver is a standard colour for hi-fi components even today. In the case of the *studio 2*, it matched the aluminium meshwork of the new speakers (the housing itself was made of light grey painted steel plate). Without speakers, the *studio 2* cost 1,350 DM – approximately the monthly salary of a high-ranking white-collar worker.

"Stereo reproduction requires two speaker units."[1] The *studio 2* audio combination, introduced in 1959, was so new that the catalogue had to explain the ABCs of stereophonics. *studio 2*, created by Dieter Rams, marked the final departure from the classic radio apparatus that Rams had already heralded in some of his earlier models.[2] This was the birth of what soon came to be known as an audio "system".

From an historical point of view, the transition from "music furniture" to audio system came about through the detachment of the radio. The *CE 11* "receiver" – the tuner – was the first component, or "building block", as they were called at the time. This principle of separation was groundbreaking, and the rationale behind it was revelatory: the compatible components[3] could be developed separately in accordance with the specific demands of each particular appliance,[4] and consumers could place them on top of or beside each other as they pleased. In addition, this approach allowed users the option of assembling their own individual hi-fi systems. The amplifier – which in the *CS 11* was still integrated into the record player[5] – was emancipated two years later.[6] In its appearance, the *studio 2* anticipated today's hi-fi systems – for example, with its format and its silver colour.[7] Shallow steel shoeboxes whose aluminium front panels served as the kind of vertical dashboard previously associated only with technical gadgetry became the cult objects of the Beatles generation. Nowadays we take this configuration completely for granted, and yet it was once as revolutionary as the introduction of tubular steel in the furniture designs of the 1920s. The control elements were also defined by an industrial coolness; their rational arrangement gave the impression of scientific precision. Such a clean, unemotional design could surely produce only pure sounds.



T 1000

Short-wave receiver
1963
Design: Dieter Rams
aluminium-coloured / black, white dial

Never before had so much radio taken up so little space. And high performance had rarely been so clearly legible in the look of an appliance. These unique qualities ensured the *T 1000* a regular place in the great design collections. The mobile radio,[1] one of Dieter Rams' seminal designs, is a multi-purpose appliance which, with its 13 wavebands, was the first radio capable of receiving almost any frequency being broadcast. It could also function as a component in a hi-fi system and it established a new category of appliance: the "world receiver". In the same era when the first manned spaceships were flying into the stratosphere, Braun was conquering the airwaves. With the cover closed, this über-radio was transformed into an elegant, high-tech box with a silver-coloured outer shell.[2] For many of its owners, this all-round appliance was also a status symbol – just as it was for the Braun company.

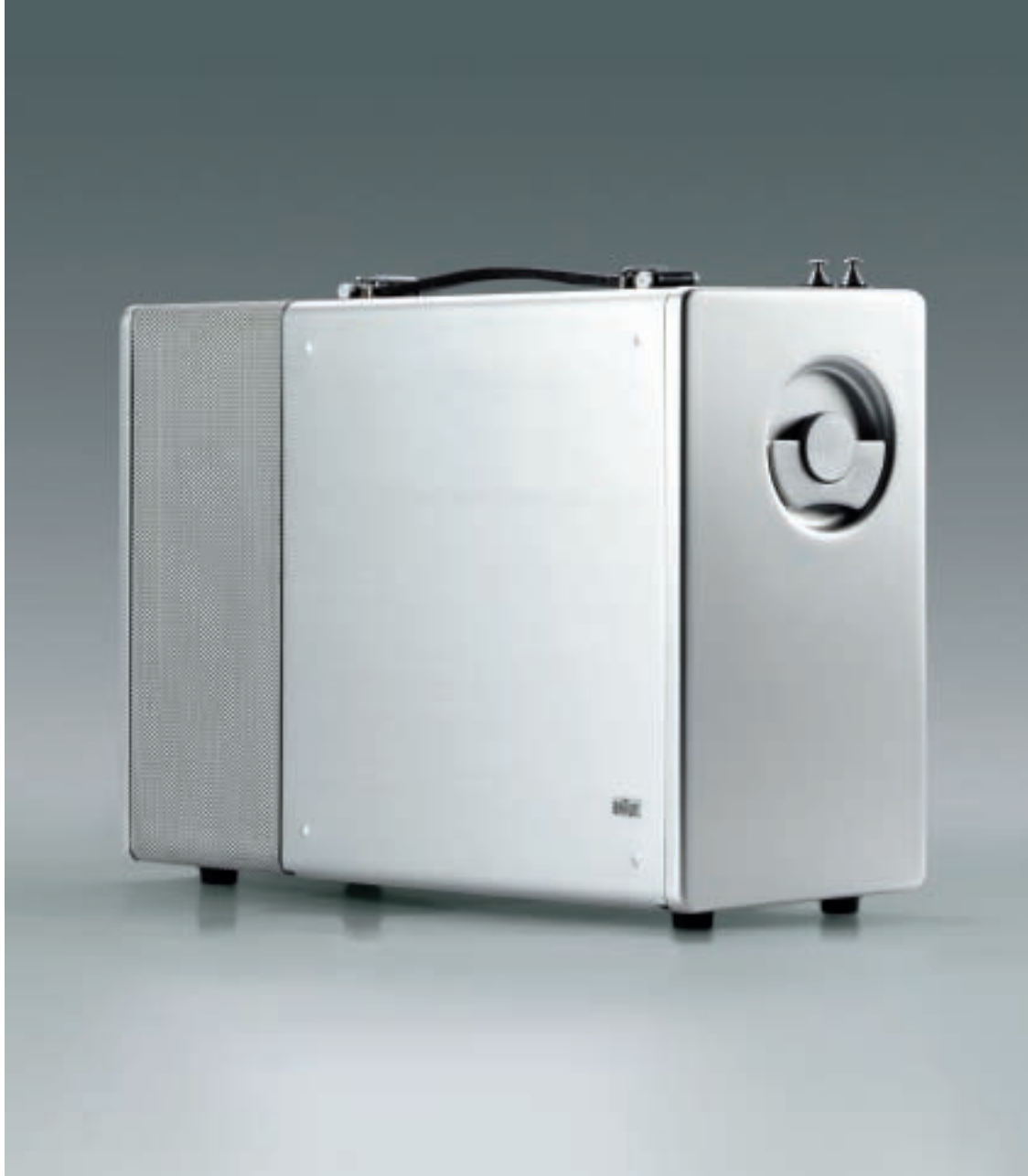
Never before had so much effort been put into the development of a single product. Once again, Braun had succeeded in creating a new category of appliance. Nevertheless, it was not the only appliance for which no successor models were produced – although designs for such models existed. The all-round radio was a masterpiece of German engineering,[3] comparable to the *Leica* camera in its versatility and its unique initial position – but at a weight of 8.5 kg. On top of all this, the *T 1000* represented a summation of the new, rational style of design. Many of the elements employed here had already been seen in the products of the previous eight years. In the open position, the appliance's overall appearance is shaped by the spatial layout of the speaker, dial and control panel. These three approximately equal-sized areas are placed in a ratio approaching a "golden mean", which ushered in a new formula for radio design. Each of the fields is intricately subdivided within itself: the speaker as a regular arrangement of holes,[4] the unusually large dial with a previously unseen degree of complexity,[5] and

1 "T" stands for "tragbar" (portable) radio.

2 It was introduced in 1959 along with the studio 2 stereo system. One year prior to the *T 1000*, the black and silver sixtant electric shaver had come onto the market – a strongly masculine colour combination.

3 In every area, the margin of positioning error was below 1 percent; a "short-wave bandspread magnifier" allows the user to "sample" sections of the dial. The appliance, which can even be operated on rough seas, was ordered by the German embassies. Accessory instruments such as direction-finding adapters, direction-finding antennas and direction-finding compasses are highly sought-after collectors' items today.

4 This had first been seen in the *SK 1* tabletop radio.

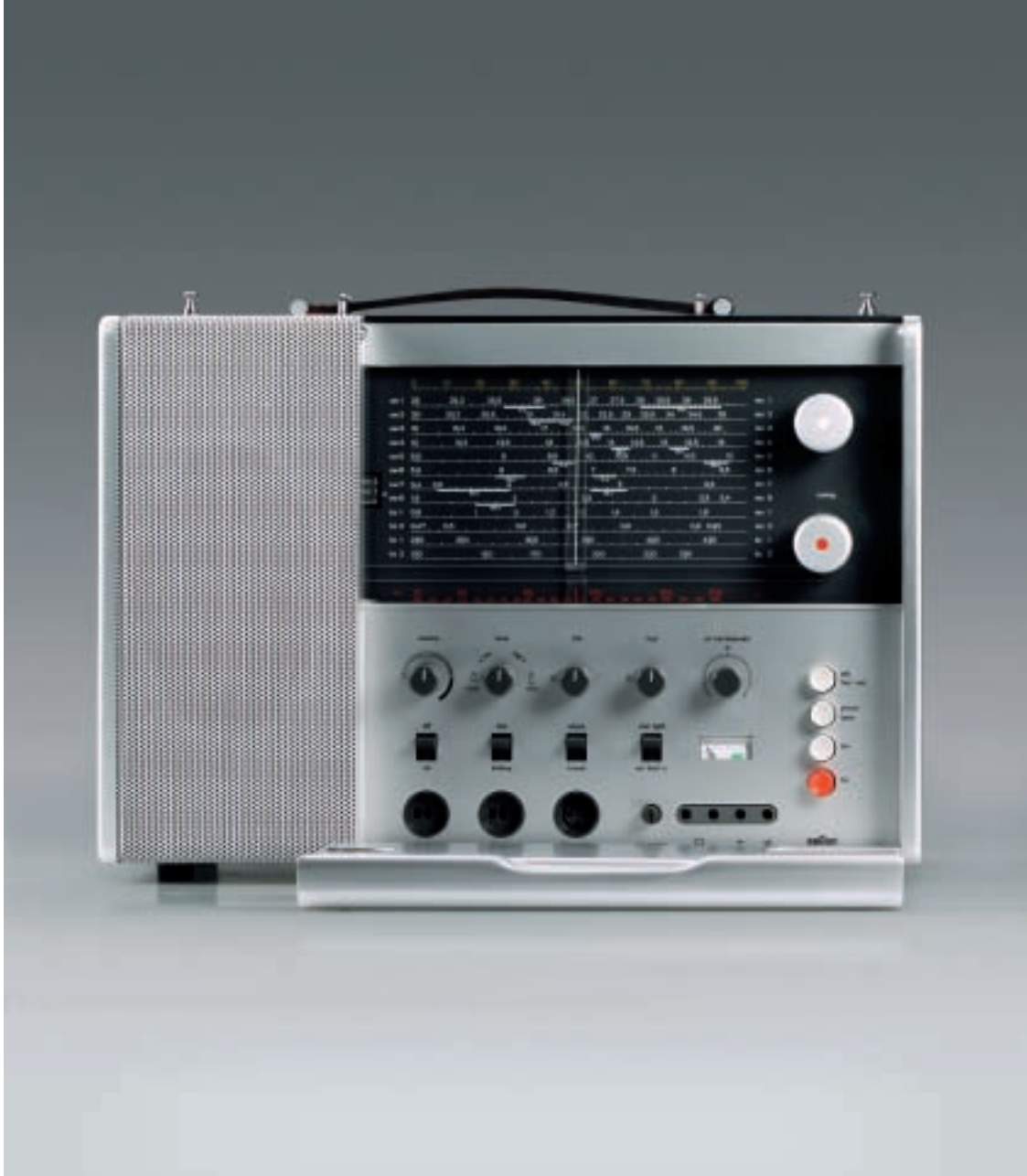


5 This was made possible through the use of new silk-screening technology.

6 The systematic use of colour coding had begun even earlier – for example, in the *T 41* transistor radio. Later, the approach was developed further in audio appliances such as the *audio 308* compact system, as well as in such products as clocks, pocket calculators and electric shavers.

the control knobs in a sequential array that both continued an established system of order and anticipated control hierarchies to come. Colourful accents such as the red FM button, the red dot on the lower adjusting knob for frequency settings and – directly adjacent – the red lettering on the lower edge of the dial place special visual emphasis on an important function: FM reception. This too, was an informative system that had already been put to use and would later be developed further.[6] The heart and soul of the *T 1000* is the 12-zone tuner drum that corresponds to the frequency control on the right side. The palm-sized metal lever is powerful and elegant at the same time. A cut-away area signals that the appliance can be opened; the recess indicates the direction and the comparatively large format illustrates the amount of effort involved.

An appliance of this degree of complexity required an equally extensive instruction manual, the likes of which had not been seen before. It was located in a compartment inside the metal cover. This was just one of the numerous extra features included with the radio, such as the flywheel drive for the frequency control buttons and the threaded holes on the bottom which allowed the appliance to be secured in place so that it could be operated even on an unsteady ship's deck.



PS 1000

Record player
1965
Design: Dieter Rams
anthracite

The record player was one of the everyday icons of the 20th century, and is now becoming an extinct species. Once the crown jewel of every good stereo system, it was also a lifestyle vehicle[1] – as much a cult object as the black discs that rotated upon it. Its emancipation as a pure playback device began in the 1950s,[2] largely brought about by the development of the stereo system,[3] which necessitated the standardization of its dimensions. The image of the modern record player – which Braun played a major role in shaping – included the following elements: a box-shaped underbody, a plexiglas cover[4] and a turntable in long-playing record format. Last but not least was the constructive element of the ensemble: the pick-up arm which, balanced out by a counterweight, brought a touch of precision engineering into people's living rooms. Its character was defined by the use of a steel tube,[5] a choice based on stability, light weight and cost, which simultaneously evokes an association with the tubular steel furniture of the 1920s. The shape of the counterweight was also cylindrical.

With its formal, dark-coloured underbody and elegant silver finish, the *PS 1000*[6] – a Dieter Rams design with which Braun carried the record player generation forward – displayed all of the above-mentioned characteristics and was equipped with a number of convenient extra features. The propulsion of the turntable by means of a friction wheel, an intermediate roll and a rubber belt ensured a constant velocity without the dreaded grinding sound. A continuous optical display regulated the four speeds needed to accommodate all of the record types available at that time.[7] Finally, the tone arm on the typically uncluttered surface of the appliance could be operated at the touch of a button via relay control.[8]

1 In the early years, Braun consciously linked its modern image with that of "cool" American jazz music.

2 The first Braun record player was the *G 12*, released in 1955, followed one year later by the *PC 3*; the first stereo records appeared in 1958.

3 Braun made a decisive contribution to this breakthrough with its *studio 2* system (1959). The placement of the record player at the top of the ensemble – for purely practical reasons – further underscored its symbolic importance.

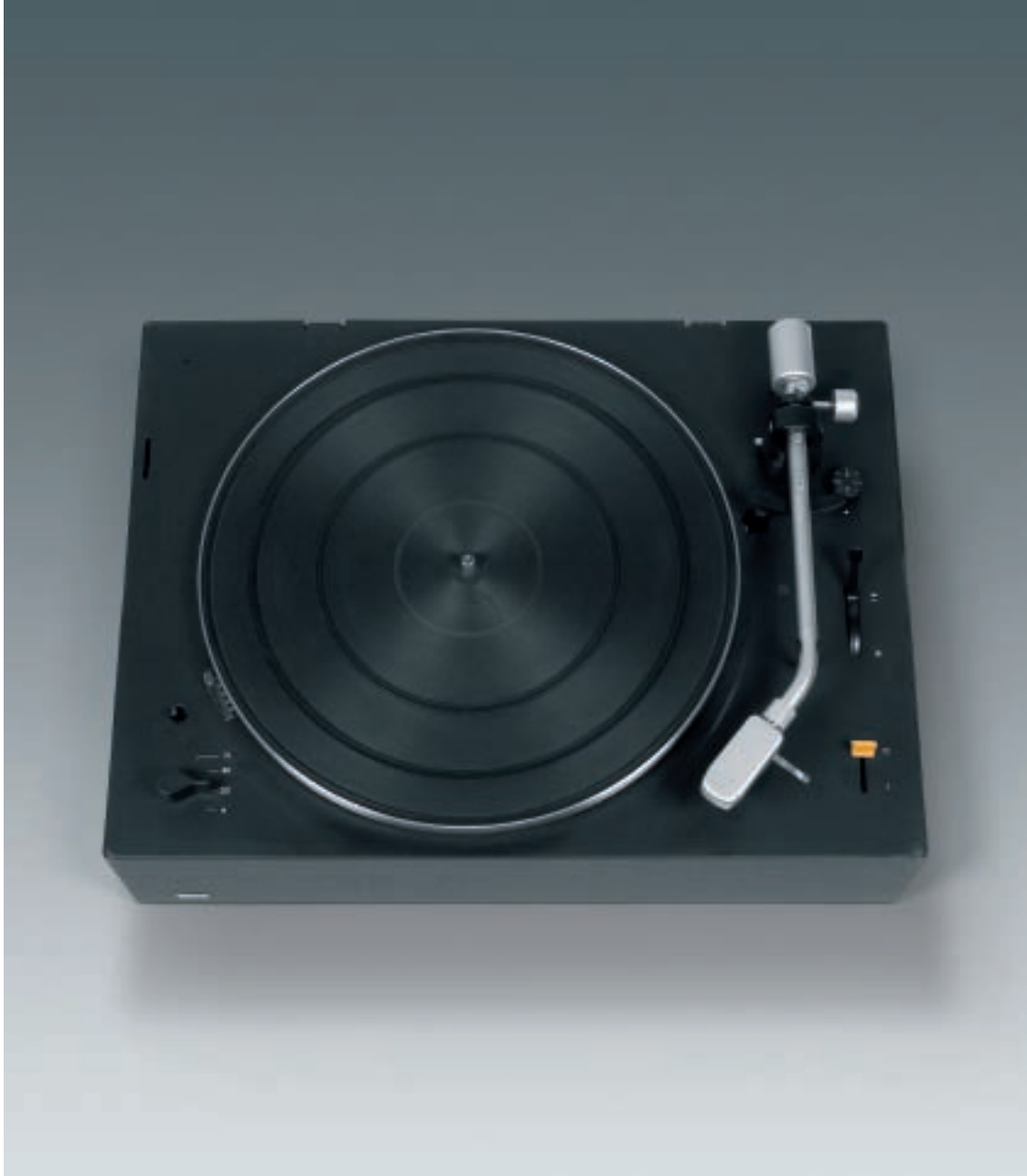
4 This element, which was introduced with the *SK 4*, was first seen in its modern form – as a plexiglas box set atop the appliance – in the *PC 5* model (1962).

5 The first metal pick-up arm (its configuration – including Rams' characteristic curve – was preceded, as usual, by heated discussions with the technicians) appeared in the *audio 1* system (1962); the record player was also available separately as model *PCS 45*.

6 The colour chosen for this legendary component of the *studio 1000* system was anthracite.

7 Thus, the record player could still be used to play shellac records with 78 or 16 rpm.

8 The arm was configured for a minimum weight of 0.4 ponds – an outstanding value for the time and one of the decisive criteria among record lovers.



TG 60

Reel-to-reel tape recorder
1965
Design: Dieter Rams
white / aluminium-coloured, graphite / aluminium-coloured

The creative possibilities seemed endless. Magnetic tape allowed people to copy records, edit radio programmes and record the voices of children and adults through a microphone. There was nothing to prevent you from assembling your own private sound archive. In the middle of the ever-wilder 1960s, when Braun released a home tape recorder onto the market, this already quite popular technology was intended to round off the home hi-fi system. As far as its dimensions were concerned, the *TG 60* model fit the requirements, albeit imperfectly.[1]

In stark contrast to competing products, designer Dieter Rams endowed the appliance with a sparse, industrial aesthetic. The numerous open screw connections contributed to this effect, as did the unusually long, bent pressure arm. This imposing lever, fitted with a spring and a rubber roller, was not hidden under the control panel as was usually the case; rather, it served as an emblem for the tape recorder's productive character. The symbolism was acoustic as well as visual: every time the "record" or "play" button was pushed, a magnet set the lever into operation with an audible click. The linear arrangement of the control buttons hearkens back to the repertoire of earlier audio appliances, as does the plexiglas cover – an unusual feature for a tape recorder. Designers approached the problem of combining the appliance[2] with other components in two different ways: the first, highly original, solution of hanging the appliance on the wall remained a brief episode.[3] A horizontal combination with the *audio 2* compact system[4] seemed to make more practical sense. Whatever the case, the dilemma quickly became irrelevant: The reel-to-reel tape recorder was soon supplanted in hi-fi systems and living rooms by the much simpler-to-operate cassette recorder.[5]

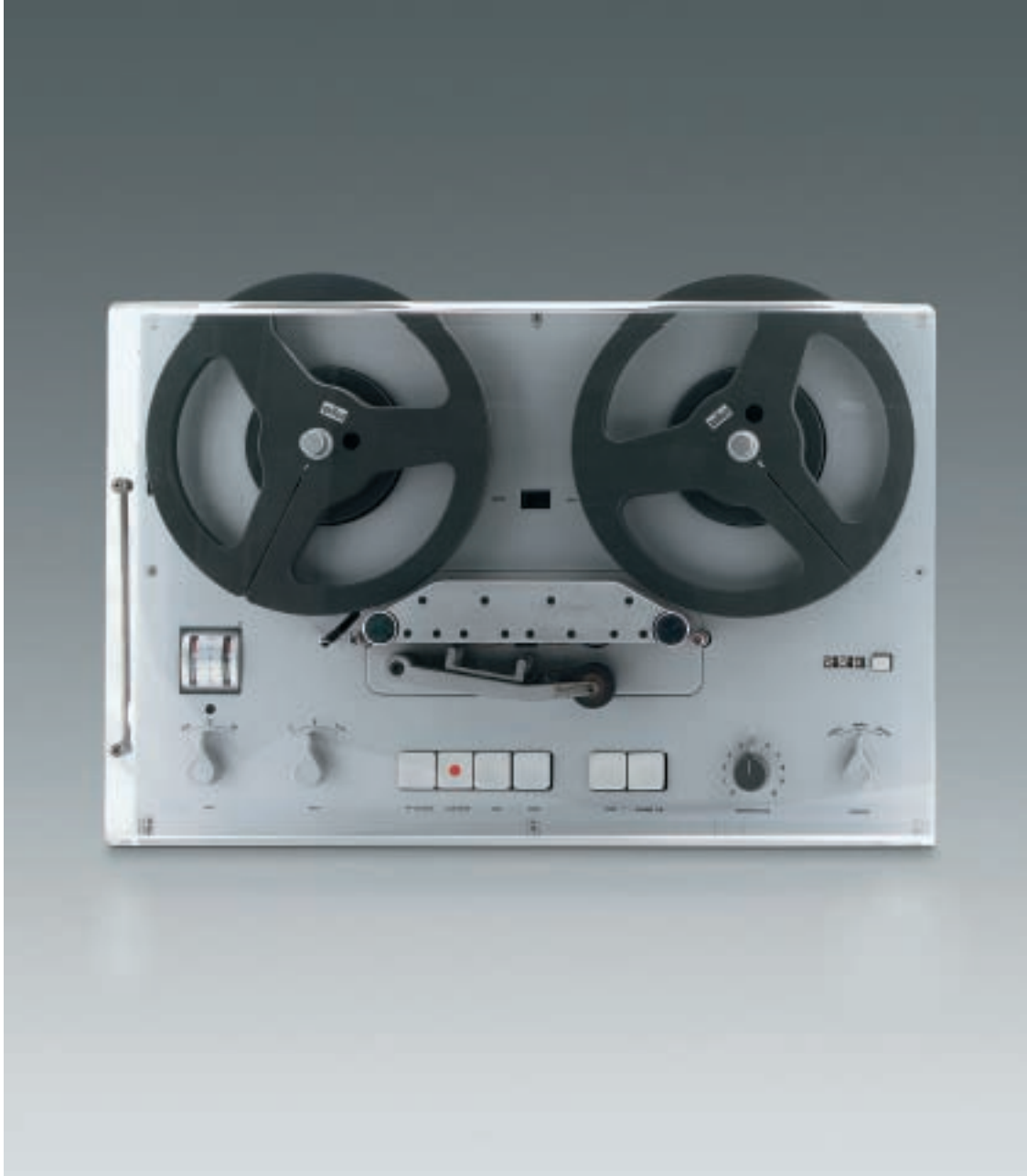
1 The low height requirement led to a tightly compressed inner structure. The subsequent model, the technically outstanding *TG 1000*, was compatible with the *TS 45* and the *L 45*.

2 A reel-to-reel tape recorder cannot be stacked.

3 Wall-mounted systems, an idea for which Herbert Lindinger obtained a copyright and which was attempted again later with the *audio 308* system, were quite difficult to put into practice in the home and were rejected by retailers. Furthermore, it was impossible to operate a record player in the vertical position. Nevertheless, wall-mounted systems are now experiencing a renaissance (e.g. at Bang & Olufsen).

4 Compatible stands were also available.

5 The magnetic tape era at Braun remained a brief interlude that lasted barely a decade – the last model, the *TG 1020*, was released in 1974.



L 710

Studio speaker
1969
Design: Dieter Rams
white / aluminium-coloured, walnut / aluminium-coloured, white / black

“A good speaker should not be heard.” This advertising slogan from the early 1960s got right to the paradoxical point. The imperative of categorical restraint was carried over into the area of acoustics. The first speaker to meet this requirement in terms of both technology and design was the *L 80*, which appeared in the early 1960s. It was followed soon afterward by the *L 700* or *L 710*, Braun’s first true hi-fi speaker, which included a groundbreaking extra feature in the form of its adjustable stand. Up until that time, radio speakers were generally covered with thick fabric that complemented people’s plush sofas. The result was a muffled sound. Braun developed alternative covers that greatly increased the sound output: first in the form of slatted wooden panels,[1] and later in perforated metal and rolled aluminium mesh.

These materials from the factory floor radically rationalized the look of hi-fi speakers. Single speakers had originally been seen only onstage. Braun’s first separate “additional speaker” for home use was the *L 1*, designed in 1957 by Dieter Rams, a horizontal wooden block whose length and height were designed to make it combinable with various other appliances.[2] Finally, one of the new products introduced at the 1961 Consumer Electronics Show was the *L 40* – the forerunner to the *L 80* and the first speaker in which an exposed aluminium meshwork was used,[3] and whose white housing was visible from the front only as a thin line. This was a speaker in pure block form, a point of sound in a room, so to speak – a material abstraction[4] that was just as style-defining as it was difficult to get used to.[5] Although Braun repeatedly came up with new innovations – such as the tripod-mounted tweeter or “active” speaker columns[6] – the overriding goal of producing speakers for use with other companies’ systems was ultimately never achieved.[7]

1 For example in the early music cabinets.

2 For example with the *SK 4*, produced in 1956, and the *atelier 1* “control module” (receiver), which was intended to be placed directly adjacent to it. The *L 1*’s successor, the *L 2*, released in 1958, for which a tubular steel stand was available, was the first truly freestanding “speaker box”. Here, Rams clearly offset the speaker opening – a black disc of perforated steel – from the white rectangle of the front panel. Braun retained this graphic approach for several years; in 1959, it produced the ultra-flat *LE 1*, a black rectangle that brings to mind today’s LCD screens, particularly when combined with its pedestal stand.

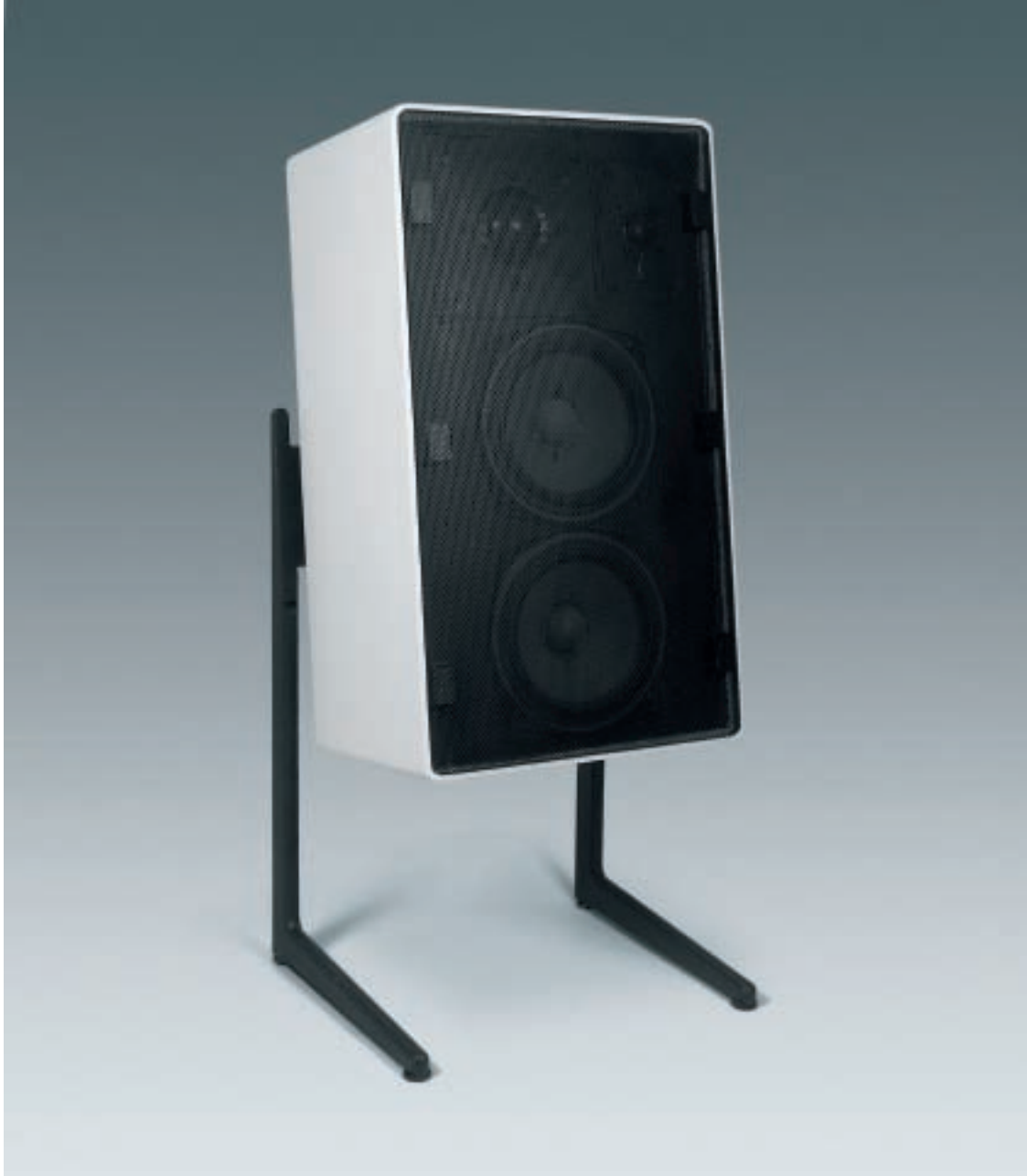
3 The aluminium was nevertheless rolled and anodized.

4 This was similar to the breakthrough achieved by the German lighting manufacturer Bega with its “Lichtbaustein” (“light building block”) lamps.

5 Both in common parlance and in Braun’s own production halls, the new speakers were soon known as “rabbit hutches”.

6 For example, the model *GSL 1030* (1977).

7 The Canton company, founded by former Braun employees, finally accomplished this goal.



audio 308

Compact system with record player
1973
Design: Dieter Rams
black

Around 1970, as the world's youth succumbed to rock 'n' roll fever and scoffed at conventions, Braun also hoped to attract younger customers to its showcase product segment – not only via pricing, but also by appealing to a generation that was eager to experiment with the new. Plastic seemed to be the ideal means to achieve both of these goals.[1] The radio-record player combination *audio 308*,[2] designed by Dieter Rams, was one of the first systems whose housing came out of an injection moulding machine.[3] The system consisted of a cover panel and a hull beneath, which contained the power units. The surprise effect came with the fact that the upper surface of the system was inclined forward by a moderate eight degrees.[4] When seen from the side, this slope resulted in a wedge shape, a dynamic form with which automobile designers were also experimenting at the time.[5]

If we place this sleek low-rider side by side with the orange-crate-size *SK 4*[6] of 13 years earlier, we can clearly see what a long way Dieter Rams had come in that time. From the user's point of view, the *audio 308* is a keyboard with equipment reminiscent of a DJ's mixing board. The rows of control knobs vaulted the art of operational geometry and colour symbolism to new heights – although the intense stoplight colours can also be interpreted simply as a mod style element.[7] By now, the black housing had become classy everyday attire for hi-fi systems. But ever since Op Art posters[8] had become available in every stationery store, black and white graphics had also assumed a new associative status. On the machine's surface, futuristic-looking details such as the large tuning dial with two finger indentations accompanied members of the hi-fi society on their trip into musical orbit.

1 The Bayer chemical company introduced an automobile body made of plastic. There was a veritable flood of spectacular plastic products coming onto the market – particularly in the area of seating furniture.

2 With Braun's *regie 308* receiver.

3 With its thermoplastic housings, Braun approached the limits of technical feasibility; in terms of sales, the low-priced system was highly profitable.

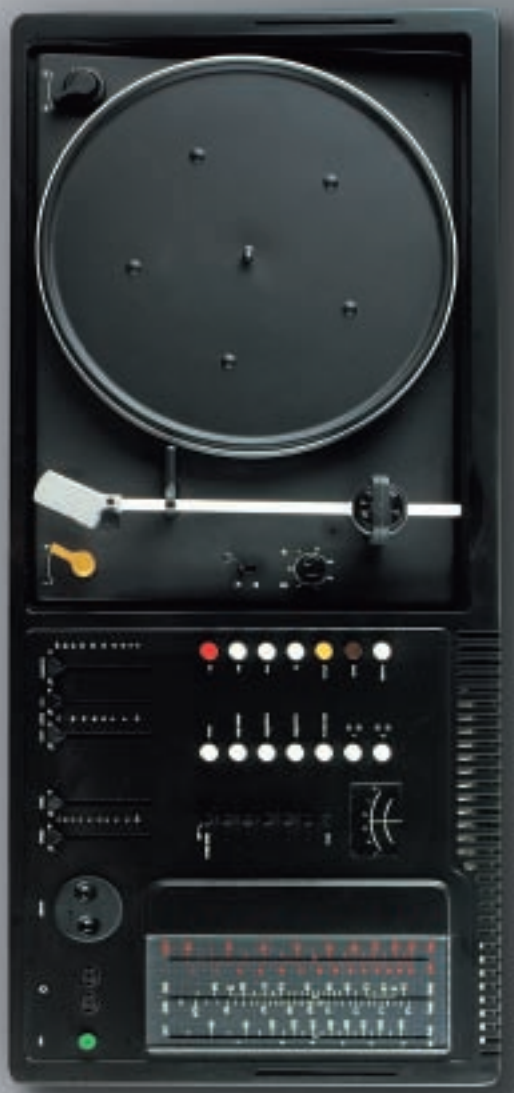
4 The plexiglas cover reciprocated the angle so that the appliance as a whole assumed the familiar block shape. However, attempts to incorporate this slope into the record player proved unsuccessful. The relatively low height of the housing (17 cm including the lid) was determined by the dimensions of the transformer. The receiver and speakers could also be operated vertically, as a wall-mounted system – which was most likely the exception. The accompanying *L 308* speakers incorporated the same angle.

5 The attempts to tilt the record player forward illustrate how highly prized the incline concept was. Nevertheless, this project proved to be too technically complex.

6 The category of appliance was virtually the same.

7 Designers of the era were experimenting with "pop colours", even in such product categories as hairdryers and cigarette lighters.

8 The most popular artist was Victor Vasarély.



atelier

Hi-fi system
1980–1987
Design: Peter Hartwein (atelier system) / Dieter Rams (pedestal stand)
black, crystal grey

1 Four components cost less than 2,000 DM.

2 The system was expanded several times before the "final edition" was successfully sold in 1989.

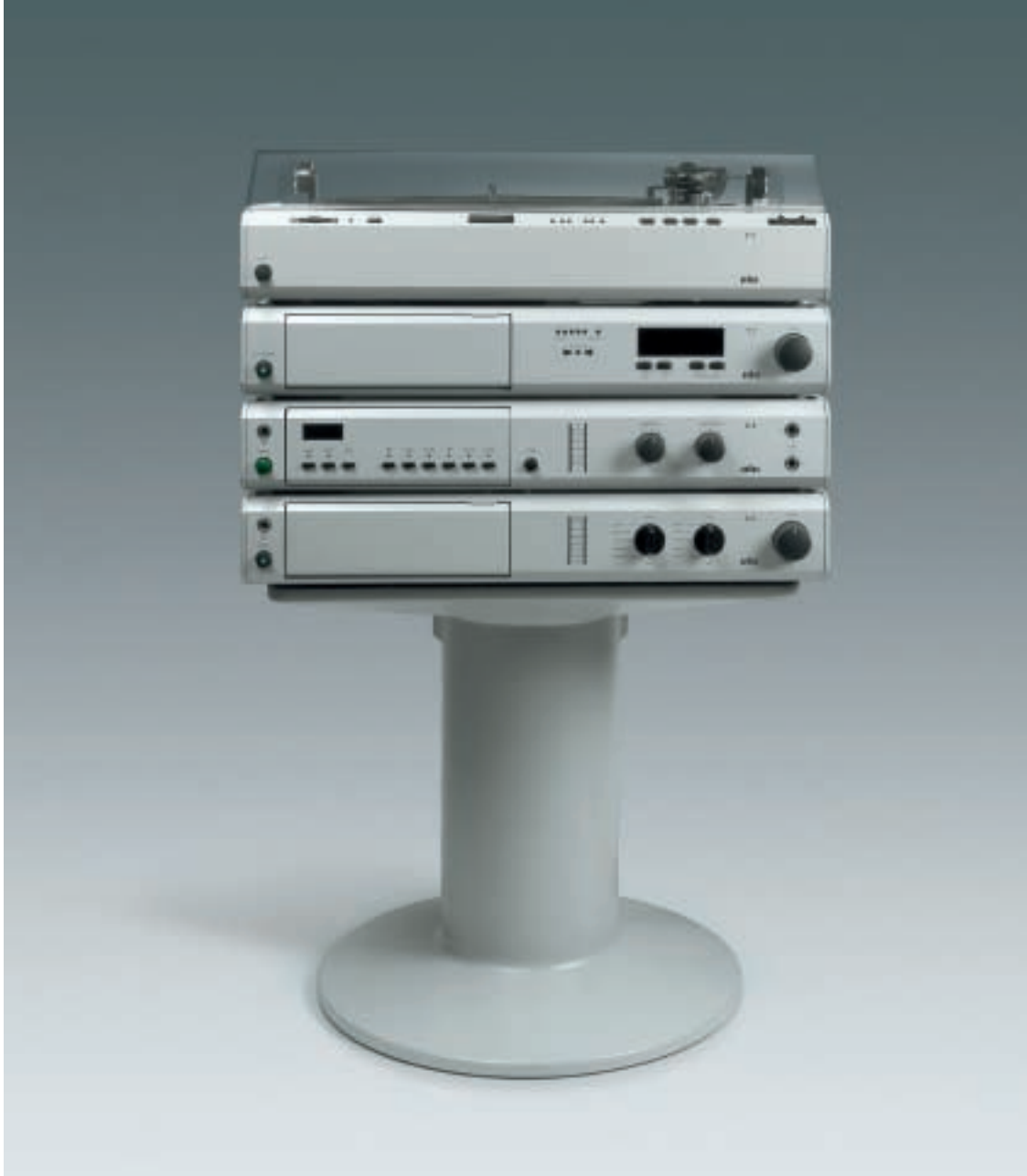
3 In 1979, the first CD player was introduced, and the *Walkman* ushered in a boom in the music cassette industry.

4 The system was so well thought-out that it could be assembled either vertically or horizontally. Despite their homogeneity, the individual components were clearly distinguishable from one another.

Illus.:
P 4 record player
T 2 receiver
A 2 amplifier
C 2 cassette recorder
AF 1 pedestal stand

Can a product advance into the "S Class" through design? *atelier* is a perfect example of how this is possible. Conceived as an inexpensive starter system[1] in the late 1970s, the later versions of this hi-fi system, designed by Peter Hartwein, became Braun's flagship entertainment electronics product. It was a holistic approach in the best tradition of the Ulm Academy; the final versions even included a television set. This was the closest anyone had ever come to producing a hi-fi video system.[2] In this era of technological breakthroughs,[3] it was essential to create a universal framework that would also be compatible with future categories of appliances. Hartwein developed an open, additive concept that could function vertically as well as horizontally. Subtle tapering on the upper and lower edges of the individual elements made them narrower and separated them optically from one another even as it emphasized their external congruence. At the same time, this artful touch provided a distinctive look for the system as a whole. Matching roll-front cabinets were also available.

This was a lesson in the dialectic of the whole as a sum of its parts,[4] achieved through a comprehensive grid of compatibly designed control elements and delicate seams, as well as unusually uncluttered surfaces. Hartwein achieved the latter by drastically reducing the number of visible control buttons. Infrequently used functions were hidden under flaps or in "drawers". Since the same technique was applied to the cables, the system had no unsightly back panel. All of these factors culminated in a blackbox effect, reinforced by the appliances' black – or crystal grey – housing. The stereo system became a total work of art. The stacking of the elements led to the ideal concept of an integrated hi-fi tower, whose neutrality in relation to the most diverse lifestyles and decorating schemes was stressed in the advertising. A special pedestal stand provided the fitting platform for this audio monument.



TS-G
1955 | Design: Hans Gugelot / Helmut Müller-Kühn
Tischsuper, RC 60
maple, walnut

Tabletop radios
1955

The speaker grooves (here, located below the dial), the simple grey control knobs and the horizontal and vertical elements were all defining characteristics of the early Braun radios.

G 11
1955 | Design: Hans Gugelot
Tischsuper, RC 60
maple

Gugelot had already used the technique of enclosing the body between outer panels in his furniture designs. These appliances could be placed either side-by-side or on top of one another. The *G 11* was identical in width and depth to the *G 12* record player.

SK 25
1961 | Design: Artur Braun / Fritz Eichler
Kleinsuper, FM and MW
graphite, light grey

RT 20
1961 | Design: Dieter Rams
Tischsuper, RC 31
beech / white, pearwood / graphite

Tabletop radios
1961

The perforated steel panel, which served as a front surface for the appliance and a speaker cover in one, reappeared in many other designs (e.g. the *TP 1* transistor radio). This small-format radio could also be connected to the *PC 3 SV* record player.

The apotheosis as well as the swan song. With its austere geometry, Braun's last large-format tabletop radio represented a complete departure from the "standard radio" of the 1950s. The arrangement of the control knobs was adopted from the *SK 4*.

T 22
1960 | Design: Dieter Rams
portable radio F/S/M/L
light grey

Transistor and portable radios
1960–1961

Right angles, neutral colour, clear typography: the frugal principles employed here were borrowed from classical Modernism. This was the birth of the portable radio genre.

T 52
1961 | Design: Dieter Rams
portable radio F/M/L
light grey, blue-grey

The Braun designers thought of themselves as researchers, and they varied their designs constantly. This portable appliance with the dial on top could also be used as a car radio.

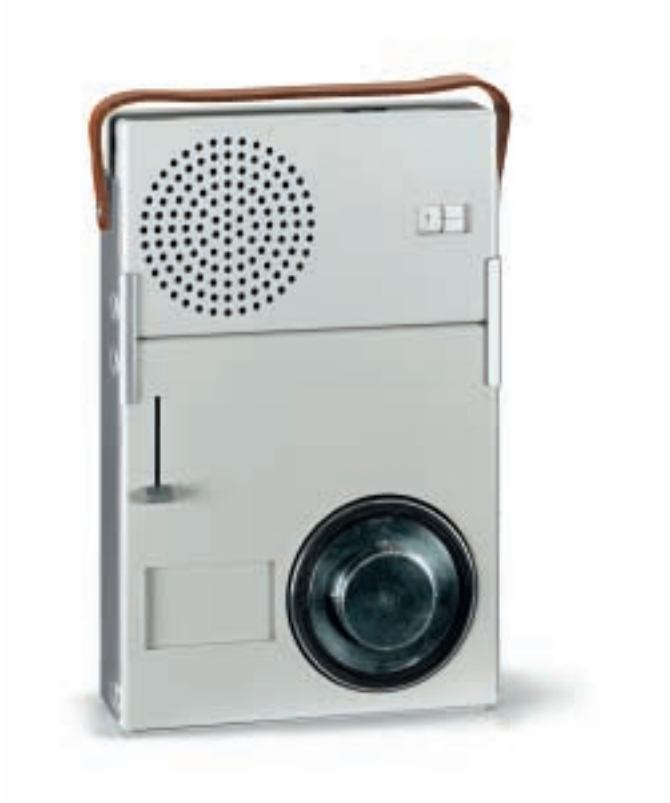
exporter 2
1956 | Design: Ulm Academy of Design (re-design) portable radio with *NA 2* power base
grey-blue / white, English red / white

Transistor and portable radios
1956–1962

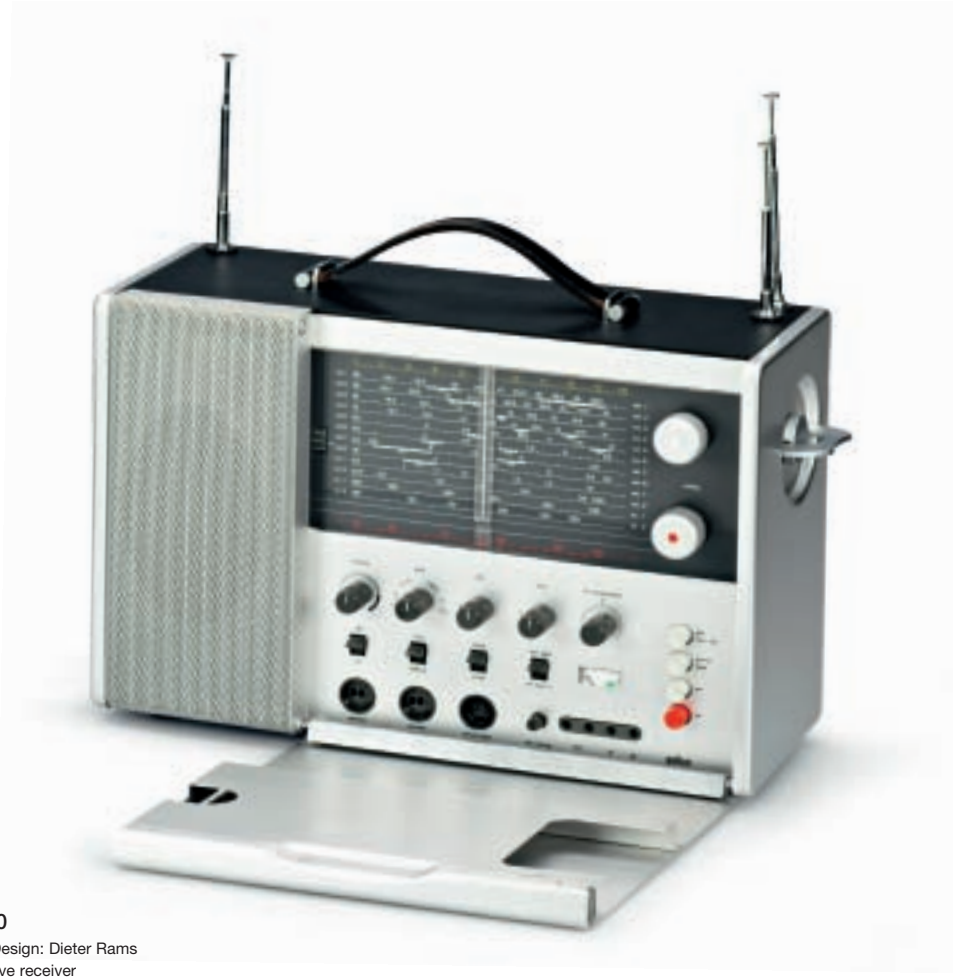
The Ulm School approach: to strip an already existing model of every type of stylish ornamentation. The speaker grooves correspond to those of the floor-mounted models, and the dial is reminiscent of the *Leica* miniature camera.

T 41
1962 | Design: Dieter Rams
transistor radio
light grey

Attention to detail is a Braunian virtue. The control knob is transposed to the top of the appliance here, the dial is integrated into the housing, and its radius is repeated in the perforated speaker field. All of these elements combine to lend the design a sense of completeness.



TP 1
1959 | Design: Dieter Rams / Ulm Academy of Design
transistor radio-phonograph consisting of models *T 4* and *P 1*
light grey

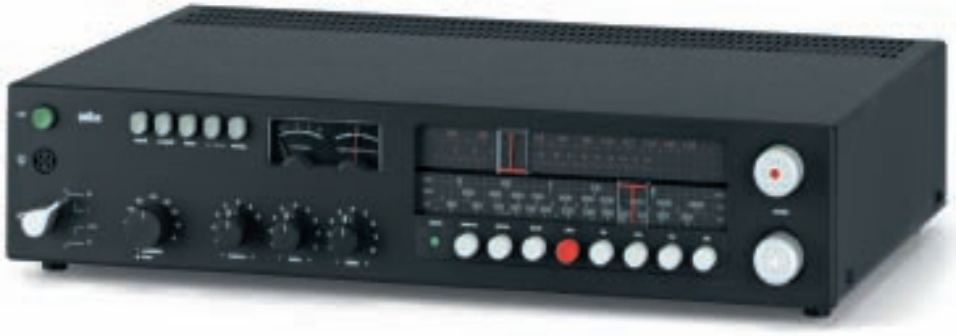


T 1000
1963 | Design: Dieter Rams
shortwave receiver
aluminium-coloured / black, white dial

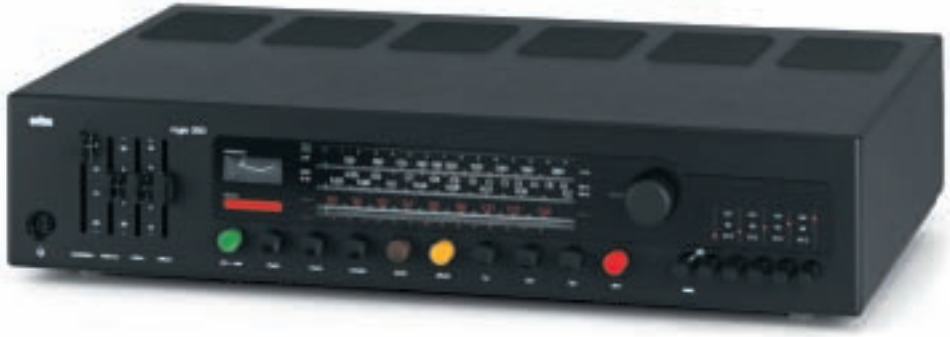
Transistor and portable radios
1959–1963

This set not only combined two portable audio appliances for the first time; it also combined formal brilliance with technical resourcefulness. The result was a category of appliance that was far – perhaps too far – ahead of its time.

This multiwave radio – a sensation at the time – was the embodiment of Erwin Braun's idea of "Grand Design". Since the appliance was sold out on the very first day, even customers who could afford it had to go on a waiting list.



regie 510
1972 | Design: Dieter Rams
control unit
anthracite / aluminium-coloured, anthracite / black

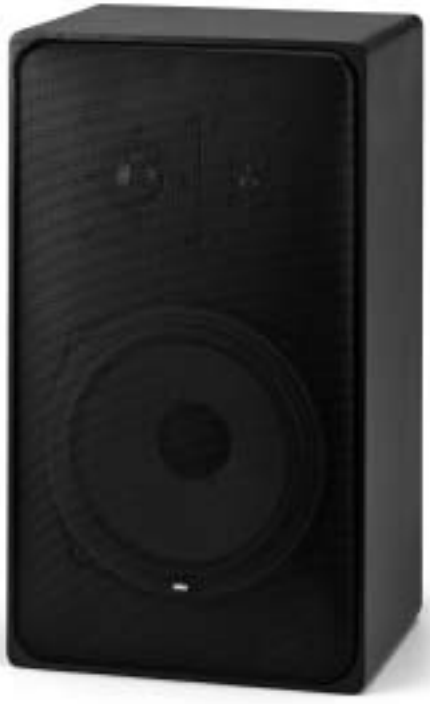


regie 350
1976 | Design: Dieter Rams
control unit
anthracite / black

Control units
1972–1976

This receiver was the first hi-fi module to be produced in black, a colour scheme that was already in use at the company and which would soon become typical for Braun. Black quickly became a standard colour, both inside and outside the audio industry.

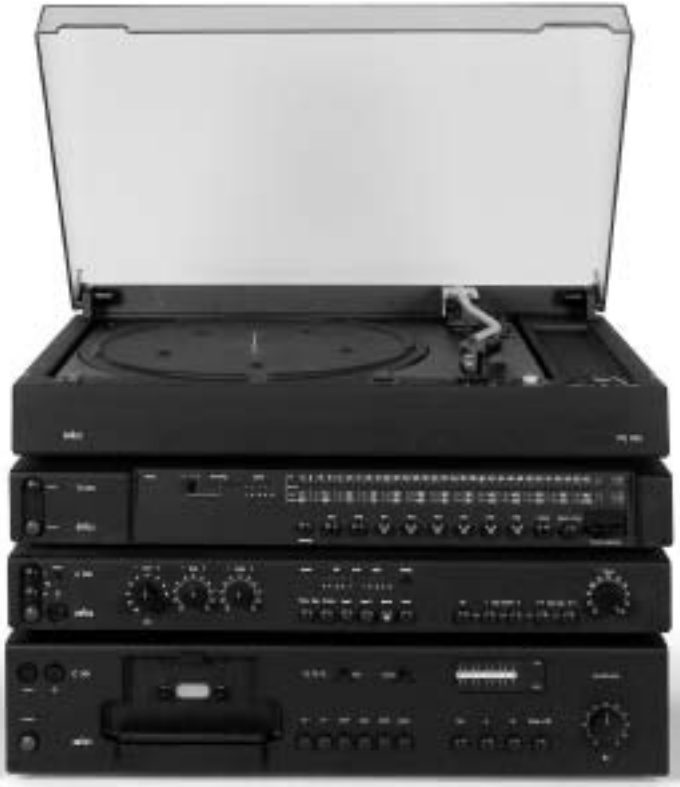
The sober black body also became an invitation to employ new visual contrasts – a necessary feature for an appliance that now boasted 21 control elements and seven dials.



SM 1005
1978 | Design: Dieter Rams
studio monitor, bookshelf or floor-standing speaker
white, black or walnut / aluminium-coloured; black / black

Hi-fi systems and components
1976–1978

In the late 1970s, Braun produced a completely black box speaker. The contrasting radii of the housing edges and cover corners gave it an elegant touch.



studio
1976 | Design: Dieter Rams / Robert Oberheim | *PS 550* record player
1978 | Design: Dieter Rams / Peter Hartwein | *TS 501* receiver | *A 501* amplifier | *C 301* cassette recorder
black, grey

Here we see a black-and-white aesthetic reminiscent of recording studios and slide rules. Now included among the “components” is a cassette recorder, which – due to the height of the cassette drive – does not share the slim format of the other elements.

Introduction: **Household Appliances**

1957 *KM 3* food processor
MP 3 citrus press

1959 *H 1/11* heater

1960 *M1/11* handmixer

1961 *HL 1/1* tabletop heater

1963 *HT 2* toaster

1964 *HTK 5* freezer

1965 *MPZ 1* citrus press
KSM 1/11 coffee grinder

1967 *H 7* heater

1972 *TT 10* hotplate
KF 20 coffee machine

1973 *US 10* universal slicer

1982 *KGZ 3/31* meat grinder

1984 *KF 40* coffee machine
PV 4 steam iron
KM 20 food processor

1 *Multimix* food processor (1950).

2 Large appliances such as refrigerators, washing machines and vacuum cleaners were not tackled.

3 There was already an "electric model kitchen" in Chicago in 1893.

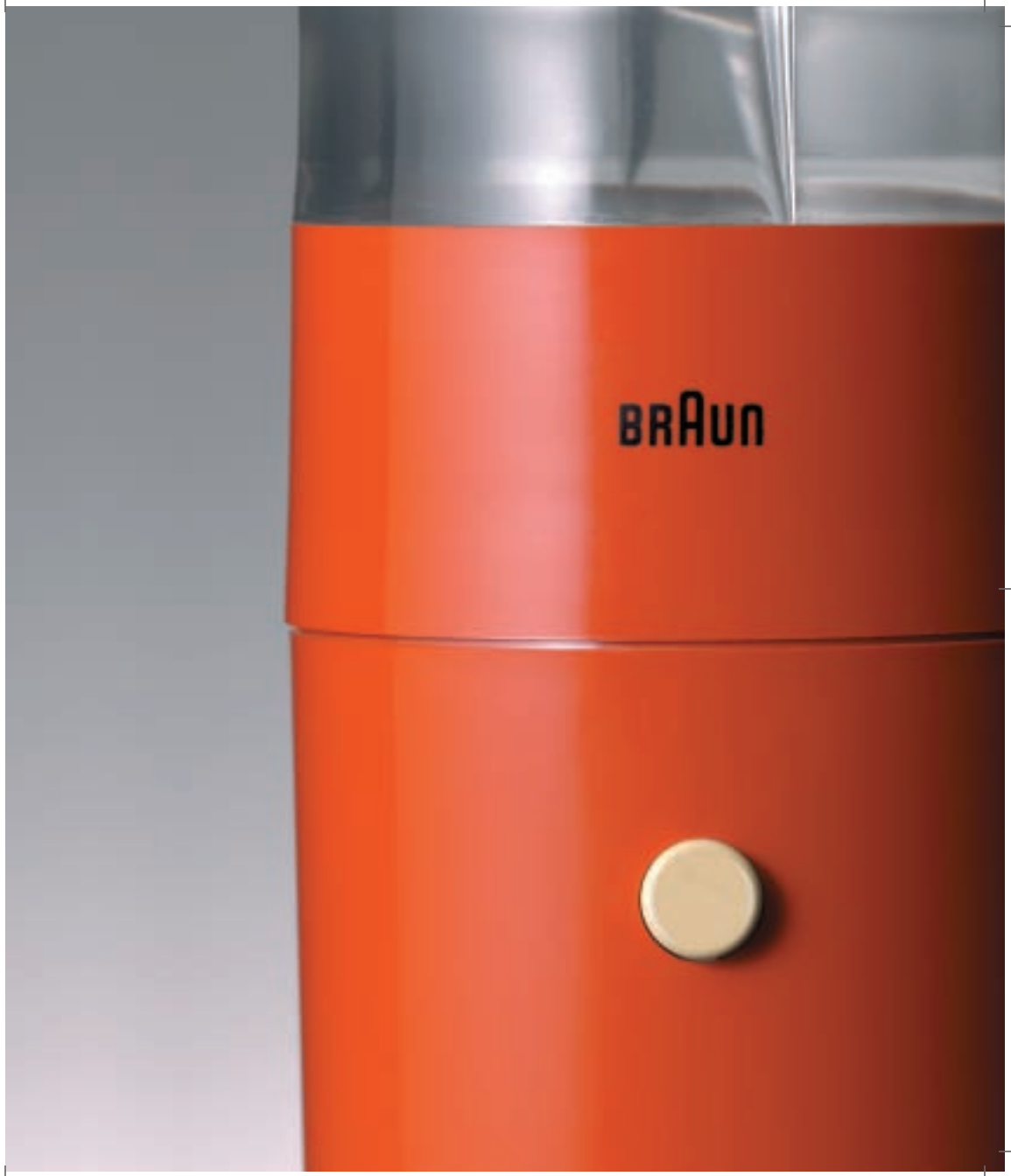
4 Although both involved a kitchen reform as well. The "Frankfurt Kitchen" in particular rose to fame.

5 This also applied to the first *Multimix*.

Illus.: *KSM 1/11* coffee grinder; detail

It all started with a kitchen machine that company founder Max Braun constructed himself.[1] Later this machine spawned a nearly complete set of household tools. Today household appliances are still one of the largest product groups in the Braun catalogue. The emphasis has always been on small appliances.[2] These motorized helpers were among the first electric devices for private use and were invented for the most part in the USA.[3] In Europe's sweeping early-20th-century design reform, they were simply neglected. Neither the workshop movement nor the "New Building" campaign took them on.[4] The appliances of the 1950s therefore often imitated the streamlined US style.[5] This is why the *KM 3* food processor by Gerd Alfred Müller caused such a sensation. It was the first device that also cut a fine figure sitting on the shelf. This curvaceous star plainly betrayed the touch of someone who had put thought not only into its functionality, but also into its proportions. That put this electromechanical kitchen helper into a whole different quality category. Braun was the first manufacturer to lend household appliances an aura. The *KM 3* ultimately evolved into a little factory, with a shredder, citrus press, meat grinder and coffee mill.

This type of multifunctional solution, in which the systematic approach seemed to take on material form, is still offered today, for example in handblenders. The majority of household appliances – for example, mixers, juicers, water kettles, toasters and coffee machines – are used to prepare food. Since in most cases it is a matter of processing one or more substances, the way they are fed into the machine naturally plays a role in its conception. Another central element of the design is the mechanics necessary for cutting, whirling or pressing, as well as their operation and regulation. The variety of foods is reflected in the diversity of these tasks, and these in turn in the number of different types of appliance. Since these devices usually leave the designer a wide scope



1991 *HT 80/85* toaster

1994 *M 800* handmixer
MPZ 22 citrus press
KF 140 coffee machine
E 300 espresso machine
KMM 30 coffee grinder

1995 *MR 500* handblender

1996 *FS 10* steamer

1998 *KF 140* coffee machine

2000 *K 3000* food processor
SI 6510 FreeStyle steam iron

2001 *MR 5000* handblender

2002 *WK 210* electric kettle

2004 *KF 600* coffee machine
WK 600 electric kettle

2005 *HT 450* toaster

for variation, they frequently represent challenging design tasks. The crucial contribution of the Braun design team, which consists almost entirely of men, is to rethink the logic of these machines, which are usually used by women, down to the last detail, and to come up with a distinctive and practical design for each one of them. The *KM 3* food processor is a perfect example of this process, as is its contemporary, the *Multipress* juicer. Hygienic white was the logical colour to use when it came to food – a rule that still applies today. The ensuing decades witnessed a series of seminal designs: from the *HT 2* toaster or the *KSM 1/11*[6] coffee grinder, to the *KF 20* and *KF 40* coffee machines, all the way to the *MR 500* handblender and the *FreeStyle* iron, both designed by Ludwig Littmann, the old master of Braun household appliances. A steady series of new fields of application opened up in this product range beginning in the 1960s. And Braun made many an excursion into areas that were later abandoned. Who still remembers grills, dishwashers, clothes dryers, freezers and espresso machines that bore the famous logo with the big “A”?

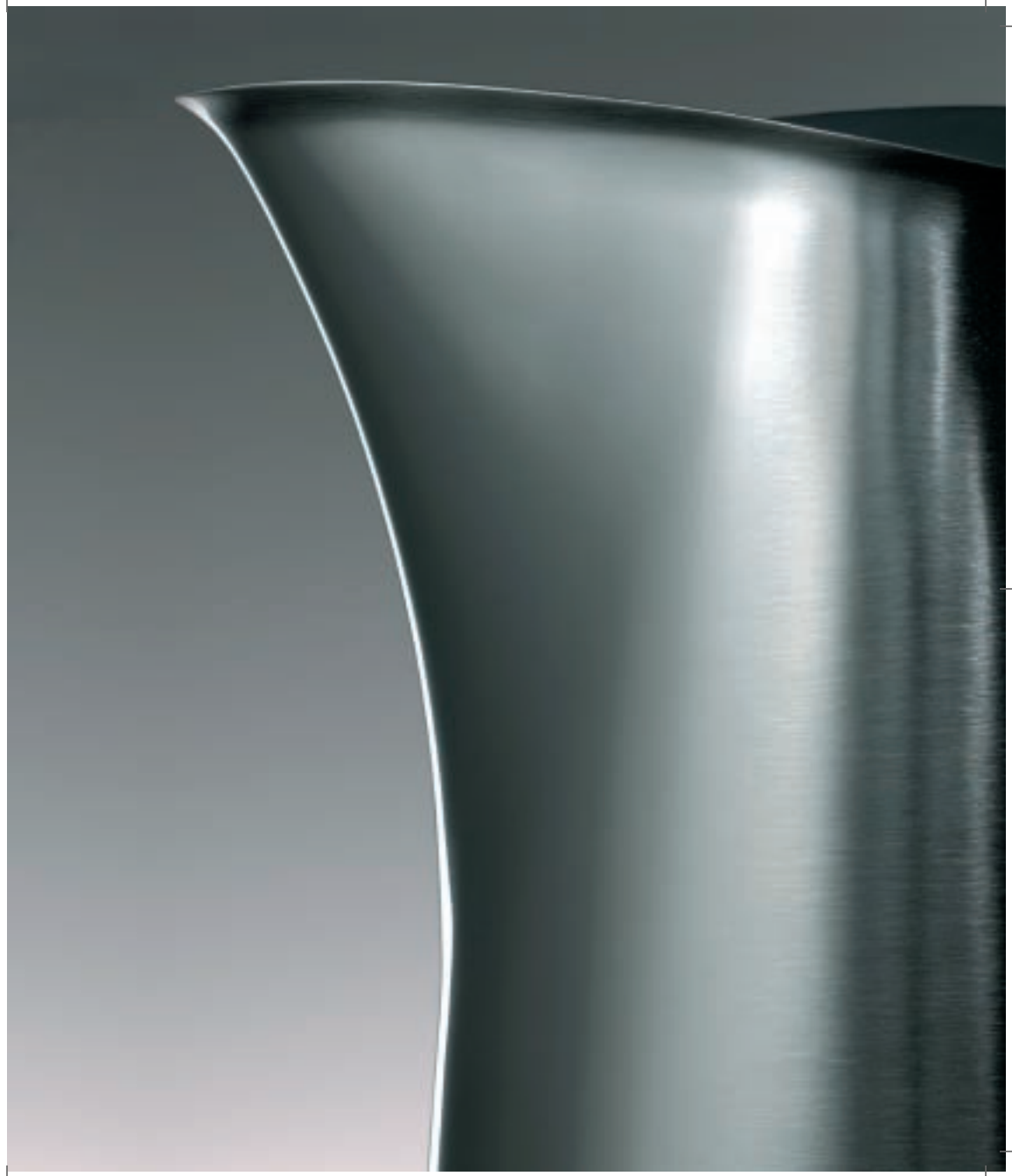
In an environment that has grown increasingly difficult,[7] the household appliance market has recently been set spinning again by technical innovations. The possibilities offered by digitally assisted design and the hard-and-soft technology that Braun developed – one that inevitably imposes itself when it comes to handling heat and liquids – have led to a paradigm change. Products like the *MR 5000* handblender demonstrate optimized handling and complex volumes, allowing them to offer not only more safety,[8] but also different silhouettes and a new sensory appeal.

6 Both were designed by Reinhold Weiss.

7 The trend toward processed foods is decreasing the demand for kitchen appliances, while competition both from Europe and abroad is rising. Of the German household appliance manufacturers that once led the market, only Braun has been able to stand its ground.

8 Through the almost complete seal.

Illus.: *Impression* water kettle; detail



KM 3

Food processor
1957
Design: Gerd Alfred Müller
No. 4203/4206
white/blue

It wasn't really an "earth-shattering novelty",[1] the company modestly claimed. As a matter of fact, the technology for electric mixing and chopping of food comes from the USA.[2] But Gerd Alfred Müller's model *KM 3* caused such a stir for good reason. Not least because this food processor[3] demonstrated for the first time that the new design ethos at Braun, until then applied only to radios, could be transferred to other products. The white appliance,[4] which in its plainness must have looked to contemporaries as naked as the *SK 4* radio-phonograph combination, was another culture shock.[5] But that's where the similarities end. These two first Braun classics speak different, indeed even contradictory, formal languages. The boxy *SK 4* pays tribute to the 90-degree rationalism of the "New Building" movement, while the *KM 3* displays flowing forms and a voluminous approach, a "natural" element with a Scandinavian pedigree.[6]

Braun's Küchenmaschine, which established this word as the operative term in Germany, suddenly made all previous models look ungainly.[7] Never before had there been a design that integrated all the parts in such a self-contained figure while still remaining clearly recognizable for what it was. Müller chose the stacking principle. Parallel seams separate the functions – i.e. motor, drive and attachments – as clearly identifiable "storeys" in the housing. It is the dialectic between strict formal configuration and the lightness of the details that accounts for the appliance's straightforward appeal – just as can be said for major artworks. One secret behind the aesthetic quality of the overall design can be found in the balanced proportions of the mixing bowl and housing, the machine's two main components. Their upper edges form a continuous line. The housing hugs the bowl and both fuse to become one formal unit.[8] The broad-surface base attached to the housing conveys stability. The conically tapering housing seems to con-

1 1957 catalogue.

2 Kitchen Aid had already brought the first mixer with base and bowl onto the market in 1920, a product genre that was popularized in the 1930s primarily by the *Mixmaster* from Sunbeam.

3 The American term for the standing mixer also emphasizes the production aspect: "food processor". The German Küchenmaschine, "kitchen machine", by contrast, still resonates with the enthusiasm that accompanied the inroads made by technology into the household. Something similar had happened a few years previously with the Tanksäulen ("filling station columns"), which in the USA were prosaically called "pumps".

4 The housing is made of thermosetting plastic and the bowl, for the first time, of an impact-resistant plastic.

5 The *SK 4* had been launched a year earlier.

6 Among the best-known representatives of this style were the Finn Alvar Aalto and Arne Jacobsen from Denmark.

7 Including Braun's own *Multimix*, which had been in production since the early 1950s. This appliance could be transformed into a *Multimix* combination device with the addition of a baseplate, mixing attachment, brackets and bowl, already displaying the principle of the "food processor" (cf. October 1955 product catalogue).

8 The right edge of the bowl and the left edge of the housing (which seamlessly continued underneath the bowl) inscribed the same parabola-like curve – again as parallel lines. The relatively large radius supports the harmonious impression while underscoring the mobility of the bowl.

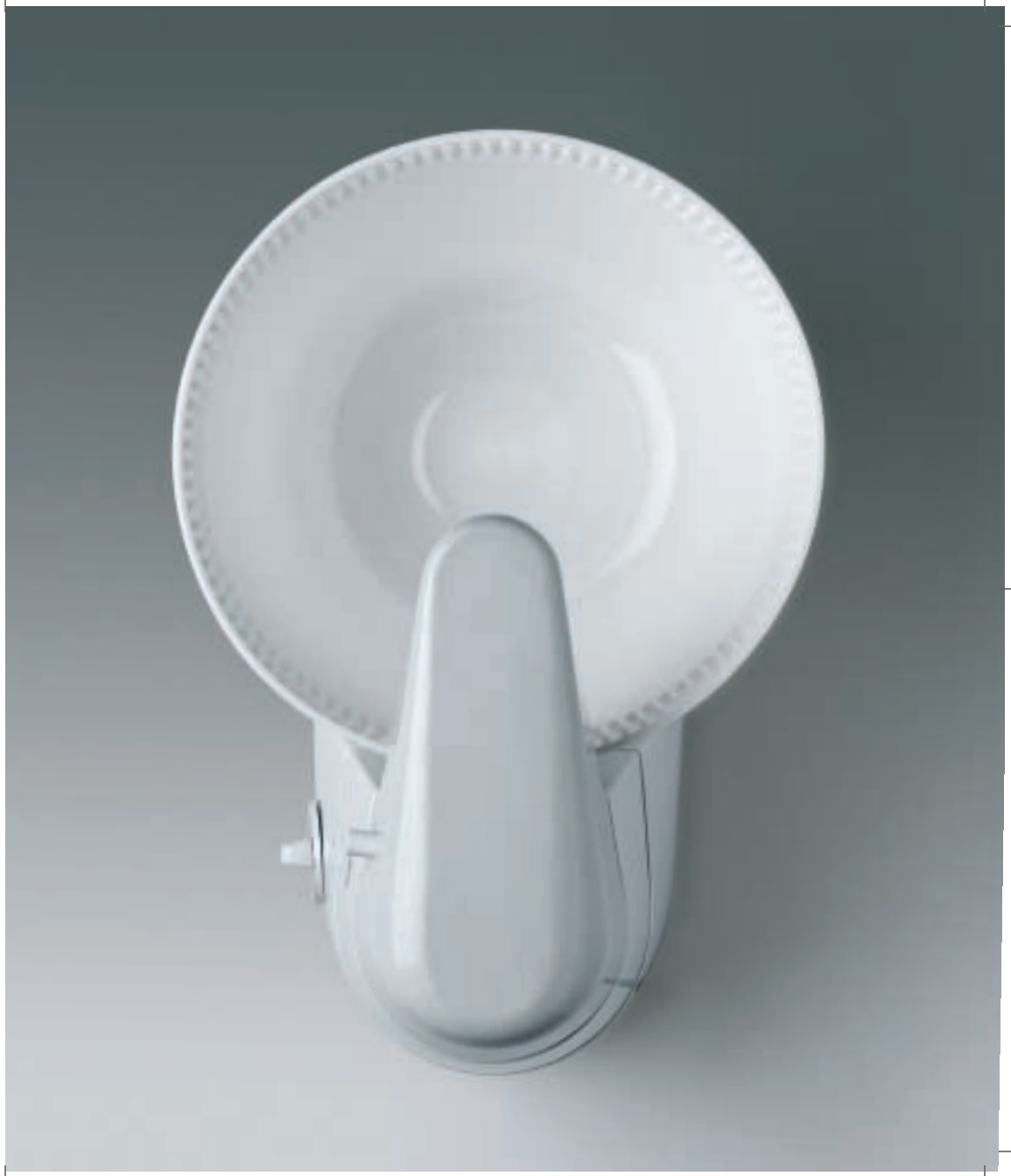
dense the power of the motor[9], whose loudness was a notorious feature of the *KM 3*. Only two control buttons are found on the otherwise virginal outer skin, whose immaculate surfaces broadcast the fact that the machine is abwaschbar, a German signal word in those years meaning that the surface can be wiped down with a wet cloth. After all, the mostly female clientele were interested primarily in the practical benefits of the household miracle-worker: the rotating mixing bowl, the easy-to-remove mixing arm (in mixers from other manufacturers, the arm was lifted out of the bowl on a hinge), and the unusually well-thought-out and uncomplicated handling, up to and including cleaning.[10]

The *KM 3* continued to be produced, with slight modifications, for over three decades, and is hence one of the longest-lived industrial products of all time, and one of the most copied. Some people regard it for this reason as the epitome of "timeless" design. But its rounded forms also fit effortlessly into the 1950s style panorama with its big-busted beauties and sweeping cantilevered concrete roofs. The *KM 3* was an apotheosis of the streamlining era and, at least in the kitchen, exuded a similar symbolic value as the cigar-shaped passenger aircraft[11] that in those years began circling the globe. Müller had discovered a middle path between sober functionalism and the mythic machine, creating the Marilyn Monroe of food processors.

9 We mention in passing here that this shape could also evoke other, much more archaic forms, such as a church spire or crane (the mixing arm is slightly tilted).

10 The appliance can be disassembled in just a few steps, and all of the main parts stand on their own without tipping over.

11 American "flying machines", such as the *Douglas DC 3* (1936) and the *Boeing 707* (1954), which had not only similarly smooth surfaces but also shapes that were functional through and through, became fetishes of Modernism.



H 1/11

Heater
1959
Design: Dieter Rams
Thermolüfter
No. 4305
white/grey

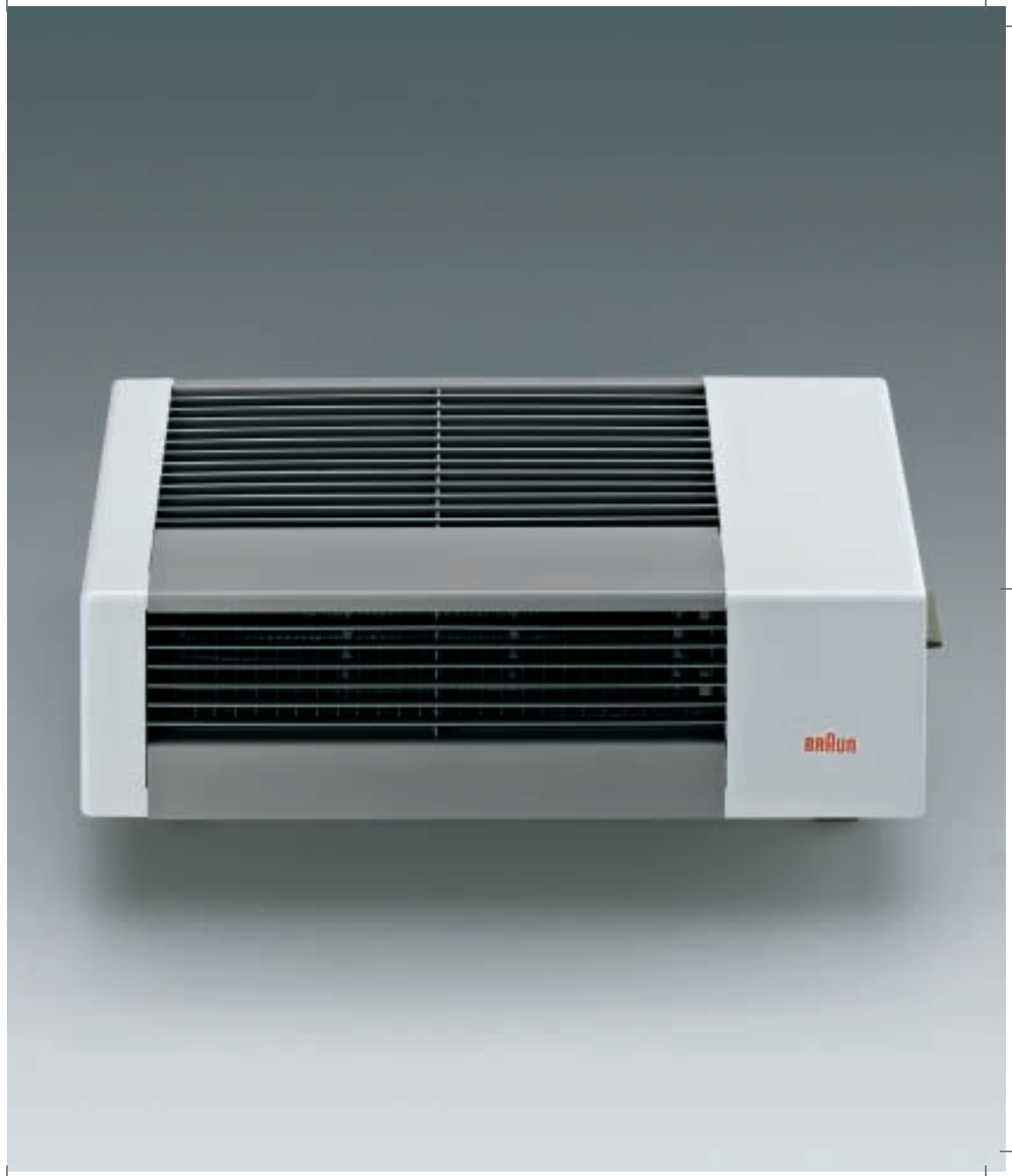
It was known as the “brick”. Braun’s first heater was one of those devices from the early days of design whose unorthodox form inspired an affectionate nickname. The disrespectful moniker went right to the heart of the matter: the model *H 1*, designed by Dieter Rams, was the smallest heater on the market up to that time, whose slab-shaped form as well as its dimensions[1] indeed called to mind a lowly brick. Other 2000-watt heaters were much larger. That sales got off to a slow start is no doubt attributable to the fact that people simply didn’t believe that the small appliance packed sufficient power. It was only when word spread of the heating performance of the *H 1* that things changed. The secret of its effectiveness was a cross-flow blower, a technical innovation that brought such additional benefits as a larger heating range and low-noise operation. The mighty mite was equipped with a thermostat and an adjustable base to modify the direction of heat. The metal housing was grey and white with plastic sections on the sides and slats on the front and top. They underscore the extremely simple geometry based on 90-degree angles. Parallel ventilation slits of this kind were part of the company’s corporate image in the late 1950s.[2]

The rectangular box,[3] an idiom that plays an important role in classical Modernism, in particular in architecture, is given a new spin here by Rams in the form of an industrial product with a facade. The *H 1* is an under-table bungalow in the style of Mies van der Rohe.

1 Width, height and depth were 26.5 x 8.5 x 13.5 cm.

2 First seen in the new radios designed by Hans Gugelot.

3 The *SK 4* (1956) was already conspicuous for its angular shape.



KSM 1/11

Coffee grinder with
hammer mechanism
1967
Design: Reinhold Weiss
Aromatic
No. 4024/4026
white, orange, red, yellow, green,
chrome/black

Coffee grinders, like meat grinders or eggbeaters, were common early mechanical household helpers.[1] The fact that they were capable of sparking such euphoria in Europe when they came out in electric versions[2] is easy to understand for anyone who has ever ground his own coffee. The naïve joy provided by this "little factory" – one of the first electrical appliances that was affordable for broad sections of the populace – may perhaps be attributable to its minimal dimensions. The small size means, namely, that the user holds the device in his hand, and can feel the vibrations of the motor when it takes off like a race car in the Grand Prix.[3]

When Braun brought out the model *KSM 1/11* in the mid-1960s[4] – designed by Reinhold Weiss – this cylinder was the simplest object yet to bear the Braun logo. The most noticeable feature of the minimalist monument is the lonely red dot-shaped control button.[5] Upon closer observation, we can also detect a slight downward tapering in the housing.[6] This nearly intangible touch makes the grinder easier to grip and elevates it above the banal character of a mere tube. The slightly bulging body, which weighs much more than a pound of coffee, lies snugly in four fingers, to be operated with the thumb. *KSM 1/11* came in the obligatory white, but also – we are, after all, talking about the Pop sixties – in red, yellow, orange and green[7] as well as in an exclusive black-and-silver version, a quote of the company's own success.[8] The dual colours make the tiered structure visible: the black base holds the motor, the band encircles the bowl in which the coffee is ground, and the thick-walled plexiglas top, which also works as a safety catch, makes the grinding process transparent.[9]

1 A mail-order catalogue brought out by the Tietz company around 1900 contains ten models, three of them wall-mounted mills and one "Children's Coffee Grinder" (Maribel Königer, *Küchengerät im 20. Jahrhundert*, Munich 1994, p. 57).

2 The first motor-driven coffee grinder came onto the market in 1903, produced by the Hobart company in Chicago. The mid-1950s appliances (*Siemens KSM 2* in 1955, *Moulinex* in 1956, *Onko D4* in 1958) all had a relatively simple basic shape.

3 The sensuous pleasure people take in electrically engineered devices is comparable to the visual pleasure of the washing machine, whose bull's eye exerts a certain fascination even for adults.

4 Two years previously, a standing version had already been developed, the model *KMM 1/121* (1965).

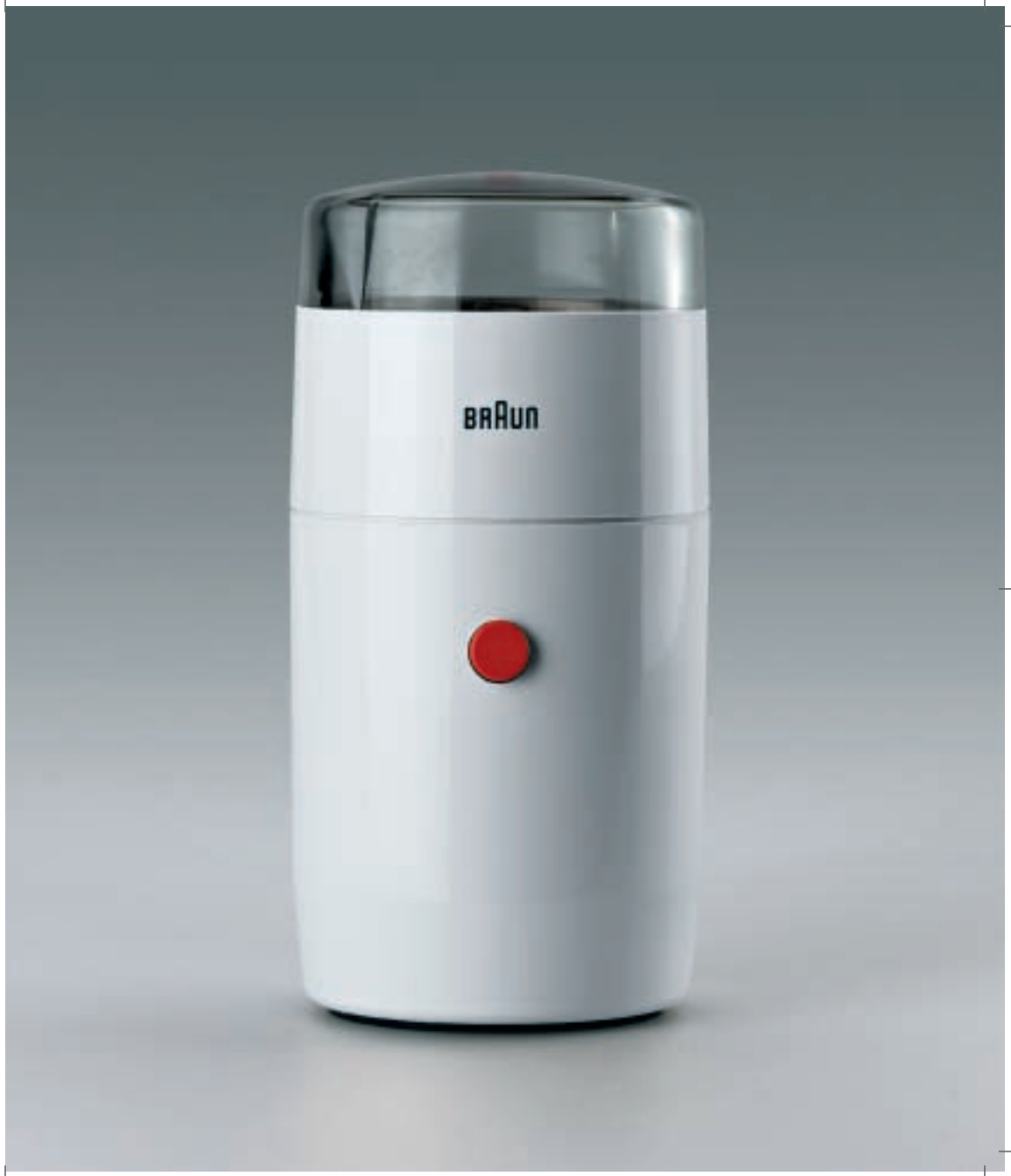
5 This solitary button was also featured in the *H 1* television (1958) and later in the Aromaster *KF 20* coffee machine (1972).

6 The circumference varies between 25.5 (glass and base at the bottom) and 26.6 centimetres (base at button level).

7 A similar colour palette was realized for the first time in the stab *B 2* shaver (1966), and later in the model *cassett* (1970).

8 The *sixtant* electric razor introduced five years before (1962) had made the black-and-silver colour scheme popular.

9 This was a new use for plexiglas. A wall thickness of 5 millimetres had never been realized before, nor had such a finely differentiated inner structure.



Multipress MPZ 22

Juicer
1972 | Redesign 1994
Design: Dieter Rams / Jürgen Greubel
citromatic / de luxe
No. 4979
white

When looking at this citrus press expressions like “good design” or “German quality workmanship” inevitably come to mind, phrases that were once common parlance and had thoroughly positive connotations, but that today are used, if at all, only in quotation marks. The values associated with them – such as technological perfection and ease of handling combined with ascetic reserve – are manifested in the model *MPZ 22*. It is also a good example of a product that is regularly updated. Like the VW *Rabbit*, this kitchen appliance saw a steady stream of new versions demonstrating careful rethinking.[1] But the cylindrical form always stayed the same.

Braun’s first electric juicer, the model *MP 3*, had a metal bracket and what was already an unusually compact form. *MP 50*, the next juice extractor,[2] was a redesign by Jürgen Greubel, one that was conspicuous for large radii at the edges.[3] It had a recess in the front to accommodate the container catching the juice. The *MPZ 22*, likewise by Greubel, brought further simplification: now there was only a horizontal seam between the two main sections of the appliance, the press and the motor housing. The press, into which the spout is integrated, is made up of three very lightweight nesting plastic parts that are not fixed in place.[4] Since the motor is started by downward pressure, this appliance needs no switch. During the pressing process, the power of the motor can be both felt and heard.[5] The little *MPZ 22* sounds as robust as a German mid-sized car.

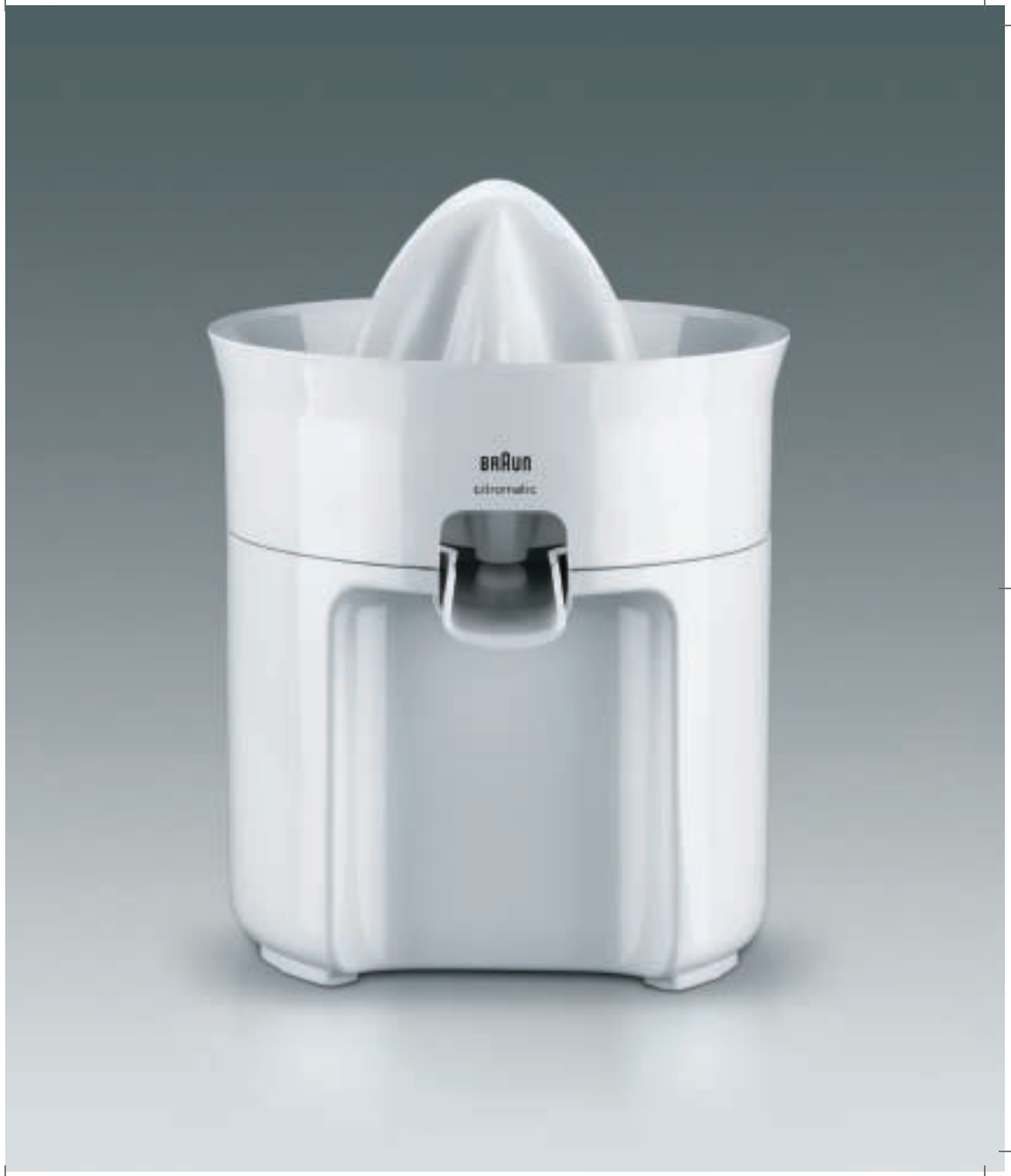
1 There were four generations between 1957 and 1994.

2 By Gerd Alfred Müller in 1957; it was considered somewhat complicated to operate.

3 From 1970.

4 This makes them lightweight and easy to clean.

5 Cf. coffee grinders and electric shavers.



KF 20

Kaffeemaschine
1972
Design: Florian Seiffert
Aromaster
No. 4050
white, yellow, orange, red,
dark red, olive

Once upon a time, the comforting gurgling sound of the coffee machine was as yet unknown in kitchens and offices. Although automatic coffee-making looked back on a long history, it took Braun to overcome the "Model-T stage"[1] and to turn the electric coffee machine with filter into a universal appliance. The model *KF 20*[2], designed by Florian Seiffert, was considered from the outset to be one of those classics that define a whole product genre for a certain period of time. Likewise classic was the arduous communication process that was apparently needed before the new product could be implemented. This involved the not entirely easy back-and-forth between the masterminds in the Design Department and the technicians with their professional and empirically based scepticism. This fraught but crucial relationship was aggravated further by the upheaval of the 1960s and the urge felt by a new generation of designers at Braun to flex their creative muscles.[3] And then there were technical hurdles, such as the development of a glass coffee pot in which details like an effective spout were completely unexplored territory for both the glass manufacturers and Braun.

These were the days when coffee drinking – which had always been something of a festive, ritualized act – gradually became part of the everyday routine.[4] The inevitable result of this change in lifestyle and purchasing habits was the coffee machine, one of the numerous everyday products that took shape during this era. An apparatus for the automated brewing of the dark brown beans leaves a relatively large degree of freedom in terms of layout.[5] Many different constellations are conceivable. Seiffert's product concept is based on the elementary idea that liquids always flow downward. This is why he selected a structure oriented around the hierarchical principle of the water tower: on top is the tank, in the middle the filter that snaps in at three labelled points (it is hung

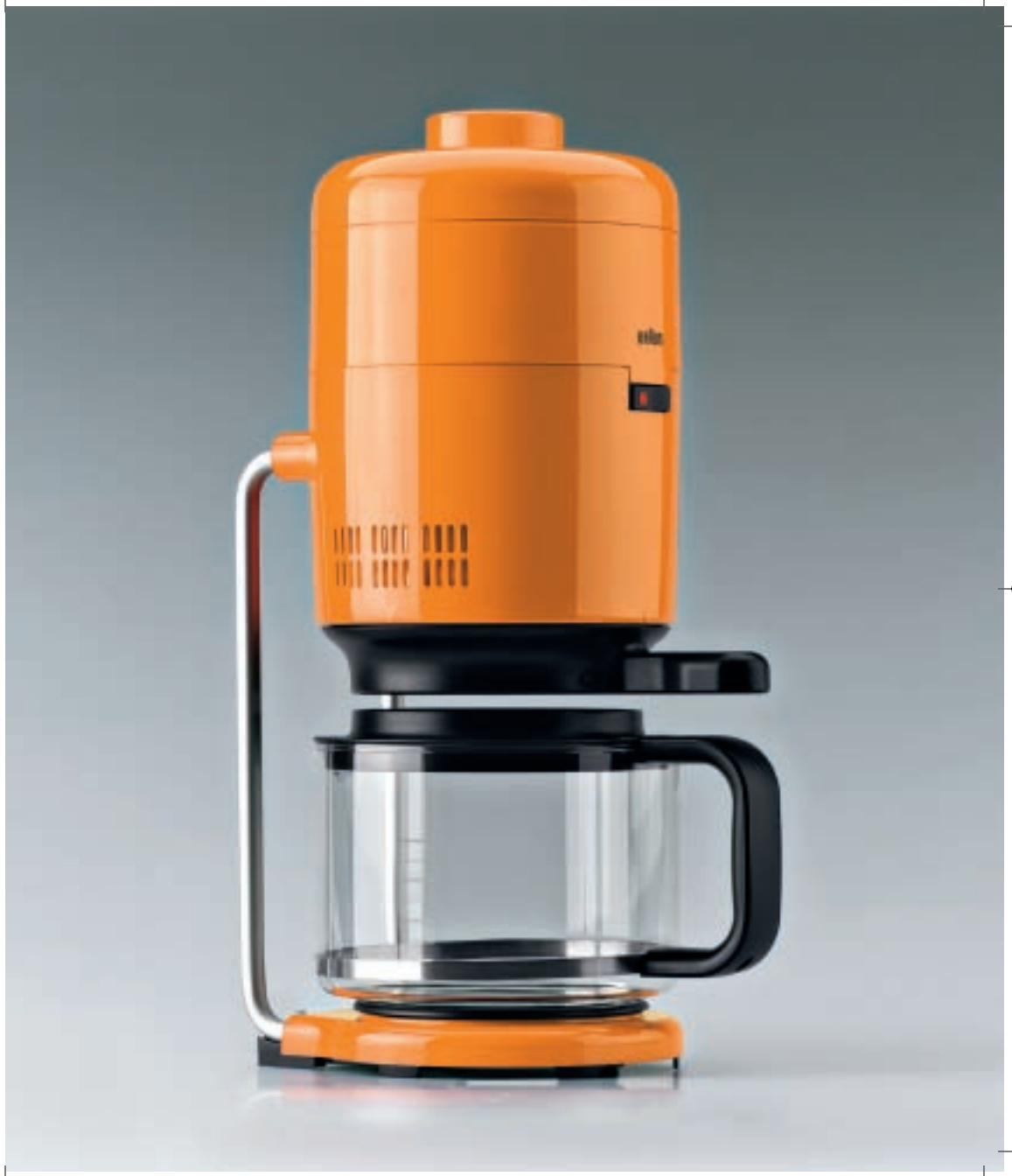
1 The Ford *Model T* from 1908 is regarded as the epitome of technical perfection, in which the structure determines the form and is plain to see.

2 In the basic version for eight cups, or as *KF 21* for 12 cups.

3 Older staff members like Fischer and Weiss retired and were replaced by a whole host of newcomers, such as Hartwein, Kahlcke, Schneider, Ullmann and Seiffert.

4 This trend was prompted by rising wages accompanied by falling coffee and electricity prices.

5 Compared to the much more basic electric coffee grinder, for example, whose basic form is identical from every manufacturer.

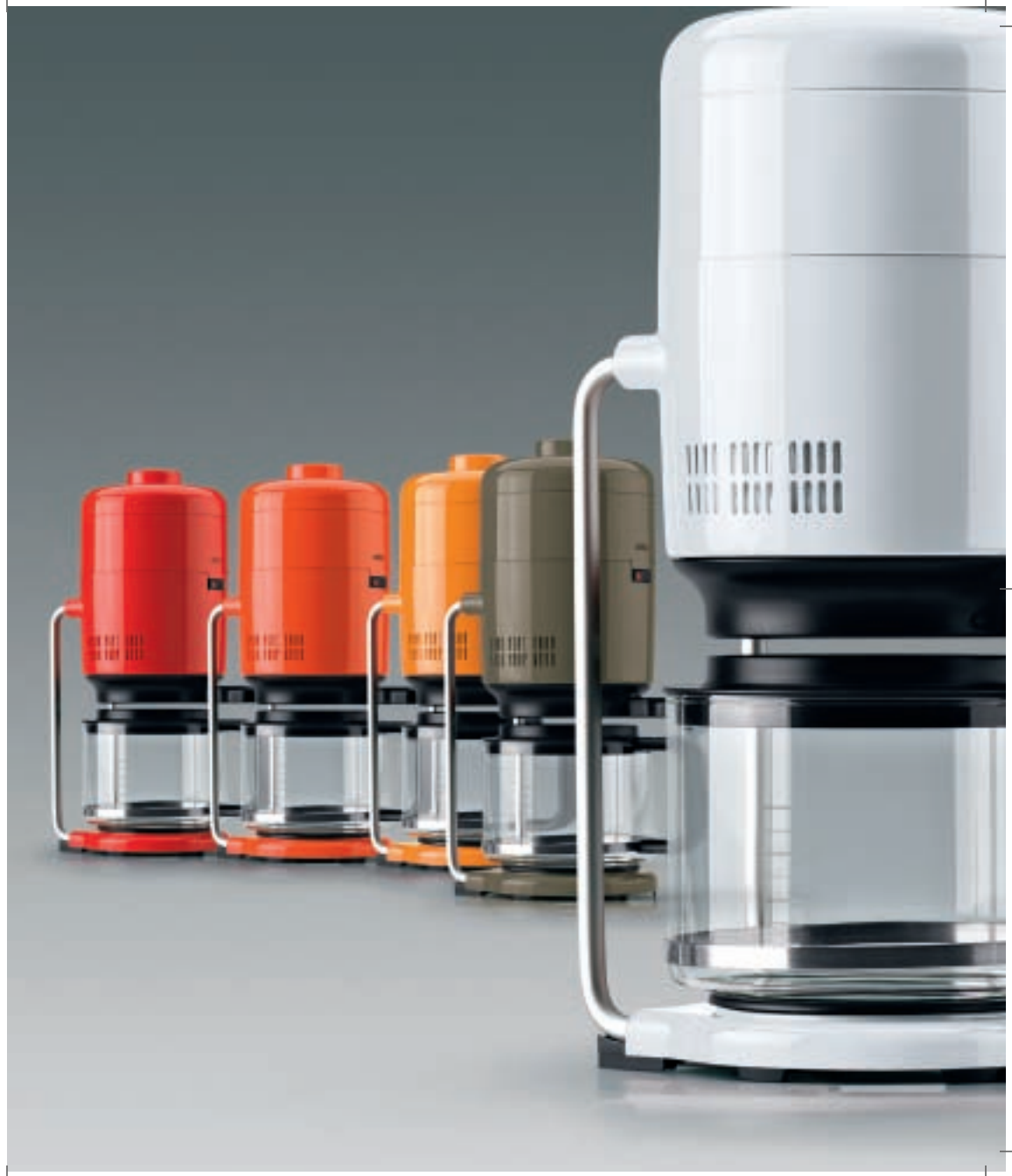


from below into the housing), and at the base a glass pot standing on a hotplate to hold the finished beverage. The cylindrical cross-section was the obvious choice for both pot and filter.[6] From these premises there logically emerged a stately column some 40 centimetres in height. With its choice of colours, some of them neon-bright, this coffee maker was no shrinking violet, betraying in its simple shape the principles on which it was predicated. The baseplate and the upper section that "floats" above the pot are connected by two bent metal pipes, an eye-catching detail to which the machine owes its graceful appearance.

This material with such a loaded design history (tubular steel!) underscores the mechanical character of the coffee-making process. The pipes were also needed, however, because two heating elements were required – one to heat the water and another to keep the coffee hot.[7] This dual role harboured a structural weakness that by no means dampened the passion design fans felt for the grand design. In practice, the *KF 20* rationalized the process of coffee-making considerably, not least due to extremely easy operation from the front by means of a solitary rocker switch with a clearly visible on-off lamp for the forgetful.

6 For coffee machines based on the German coffee filter.

7 The wires for the upper heating element are also conducted therein.



KF 40

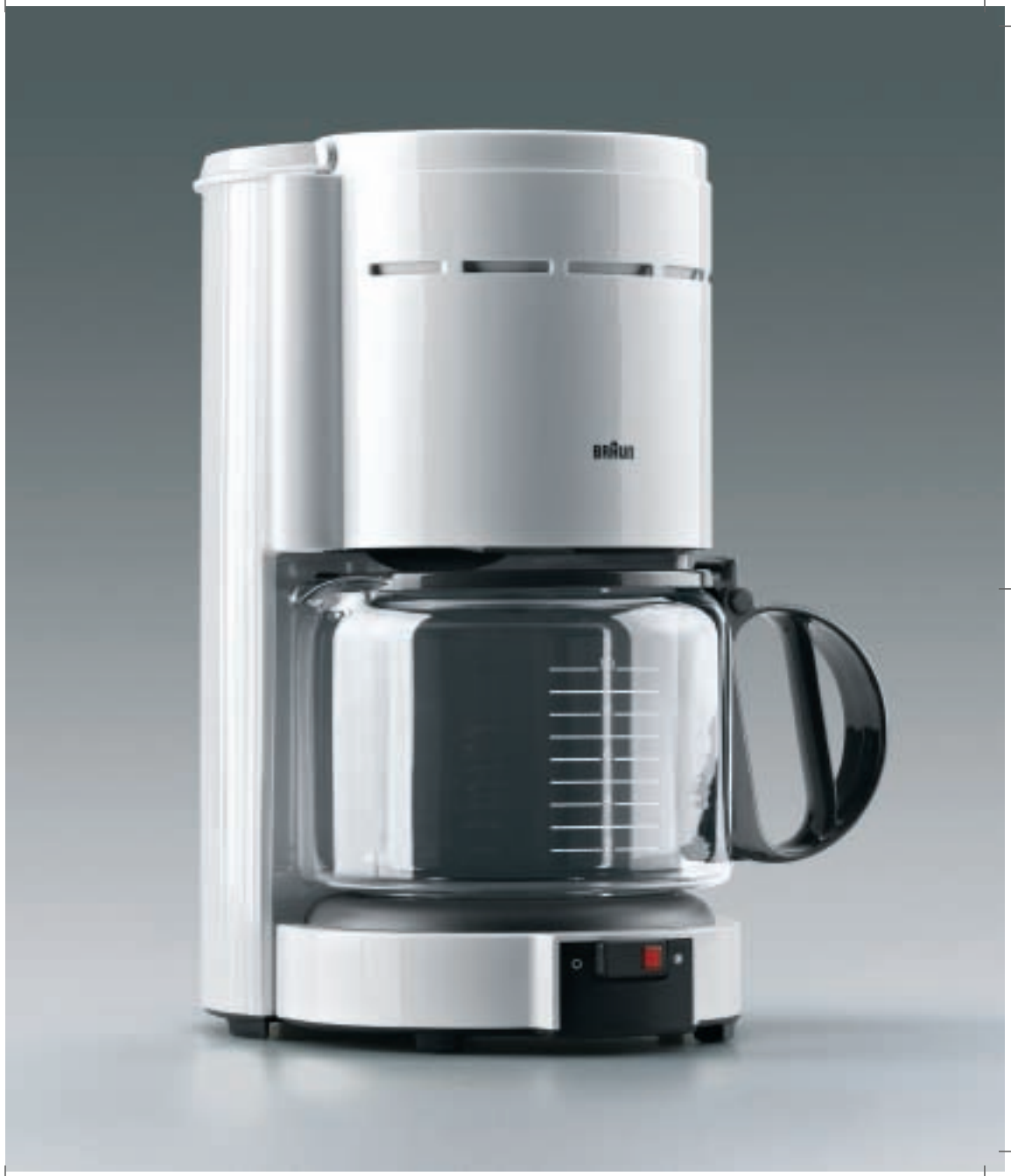
Coffee machine
1984
Design: Hartwig Kahlcke
Aromaster 10 / plus, 10 / 12 / plus, 12
No. 4057 / 63
white, red / grey, red / black, black

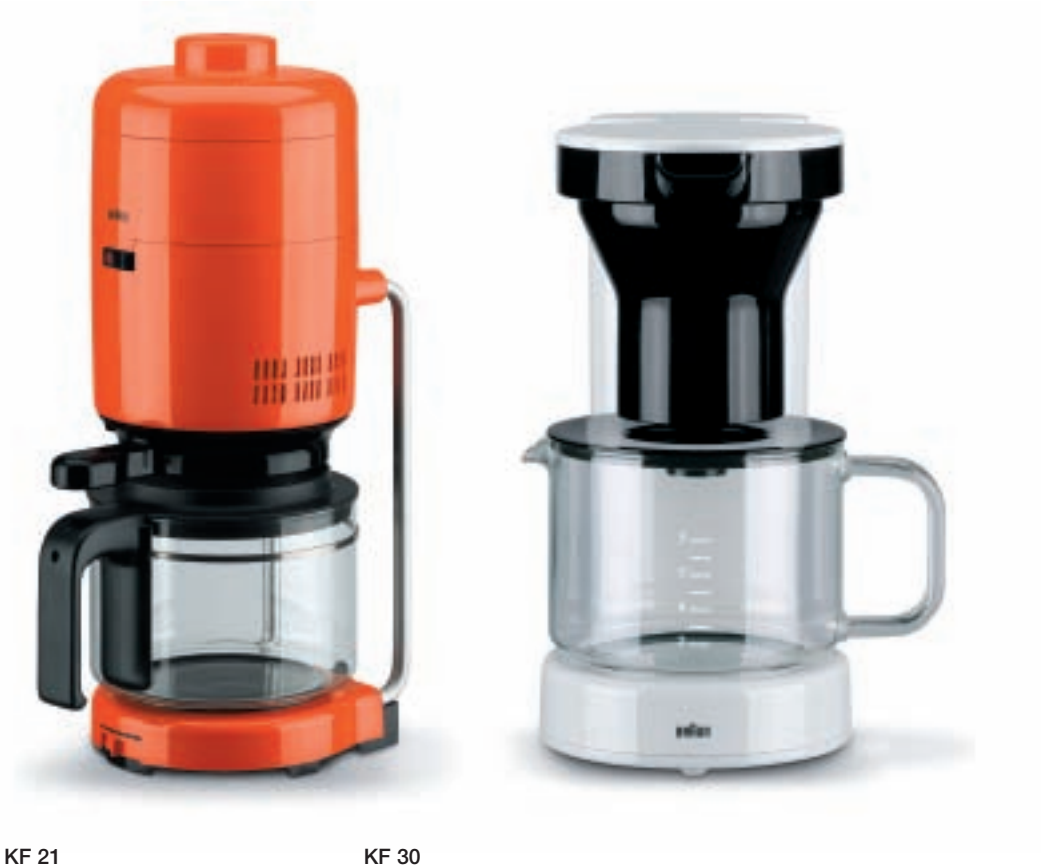
1 In the literature this is also referred to as an L-shape, which ignores the water supply section that forms the "roof" of the filter.

2 The free space in the lower part of the enclosure was used to stow the cord.

The most logical and easiest-to-produce layout for an automatic coffee machine based on the filter system is the C-shape[1]: the pot with filter on top is accompanied by a separate tank at the side. This configuration is not very pleasing formally or aesthetically, however, and usually looks ungainly. When Hartwig Kahlcke faced the task of eliminating this shortcoming in the early 1980s, he came upon one of those ingeniously simple solutions that are probably so hard to conceive of precisely because they are so obvious. The model *KF 40* is a prime example of how to solve a problem by looking at design from a different angle. Take two and make them one: Kahlcke did not depart from the tried-and-true layout, but instead simply integrated the two separate elements by telescoping the cylinders and melding them into a single unit.

Seen from above, the – formerly freestanding – tank hugs the filter-and-pot tower. In elevation, this structure looks like a "C" or a sickle.[2] The sure-footed *KF 40* represented not only a formal adjustment, but also a substantial rationalization, achieved not least through two hinge mechanisms: the feather-light lid atop the tank and the swivelling filter, both of which can be operated with one finger, considerably accelerating and facilitating daily coffee making. The same can be said for the frontal rocker switch. The ridges on the back of the water tank mask any indentations, which are not entirely avoidable in the inexpensive polypropylene used here. The *KF 40* is an affordable product appreciated both by consumers and by curators of design collections.



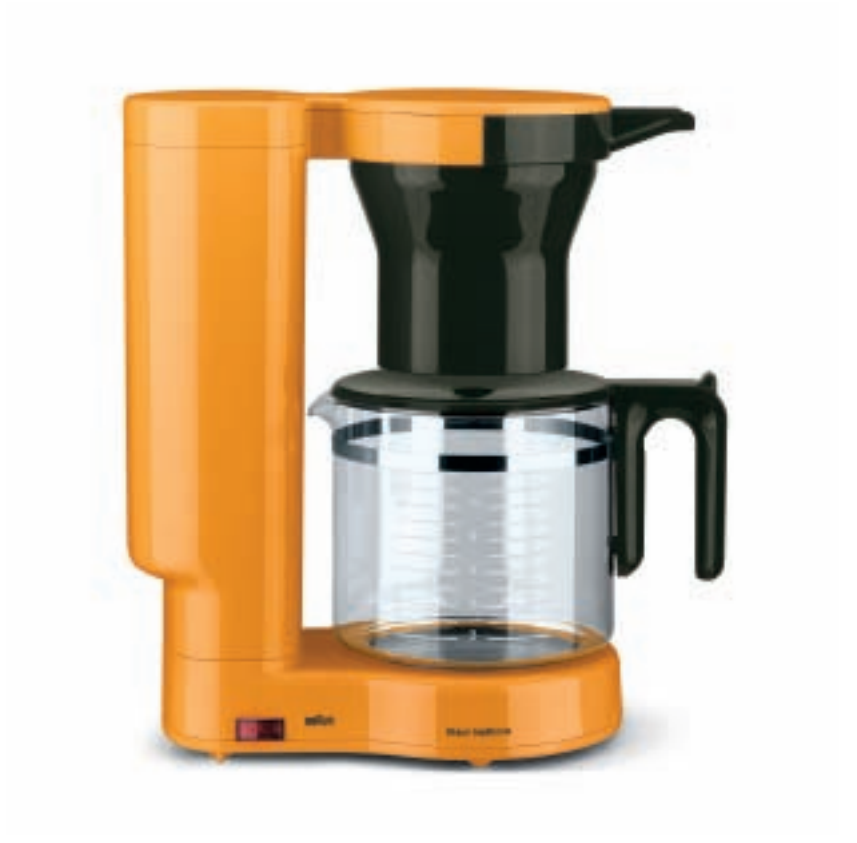


KF 21
1972 | Design: Florian Seiffert/Hartwig Kahlcke
Aromaster | No. 4051
white, yellow, orange

KF 30
1977 | Design: Hartwig Kahlcke
Aromat | No. 4052
white, yellow

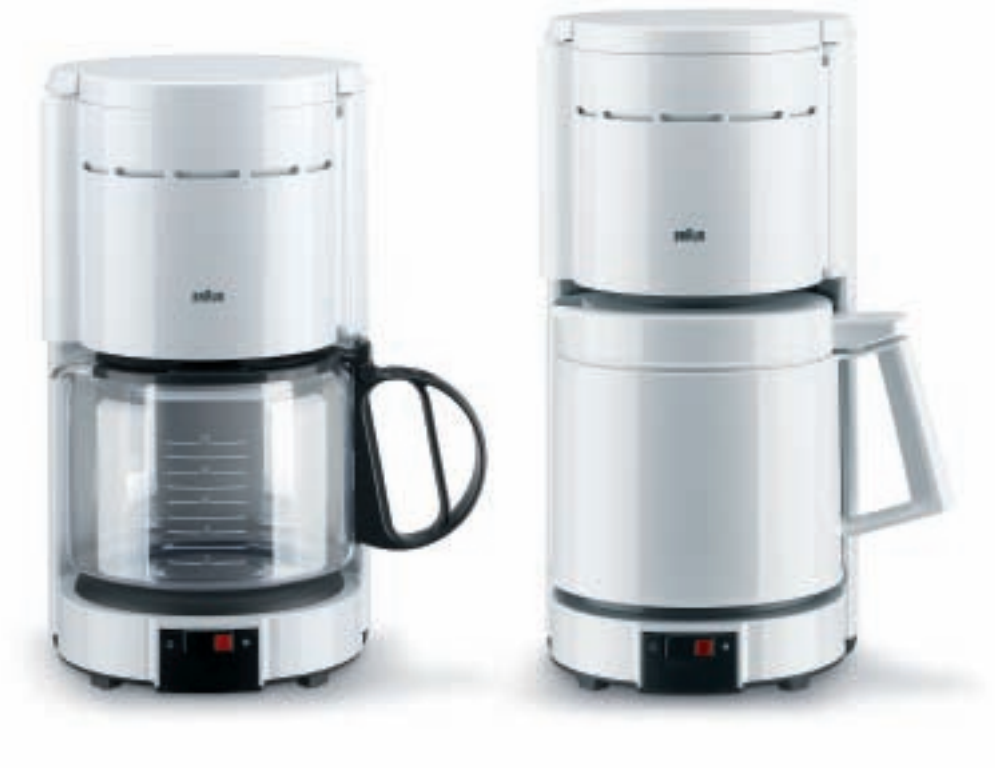
Coffee machines
1972–1978

The Aromaster *KF 20* coffee machine was a milestone both in terms of design and sales figures. The pot for the *KF 21* was designed by Hartwig Kahlcke, who later created whole coffee machines.



KF 35
1978 | Design: Hartwig Kahlcke
Traditional/2 | No. 4053
white, yellow

The various models were constructed of uniform parts, like building kits. In this simpler variation the switch was on the side. There were also models with a filter drawer.

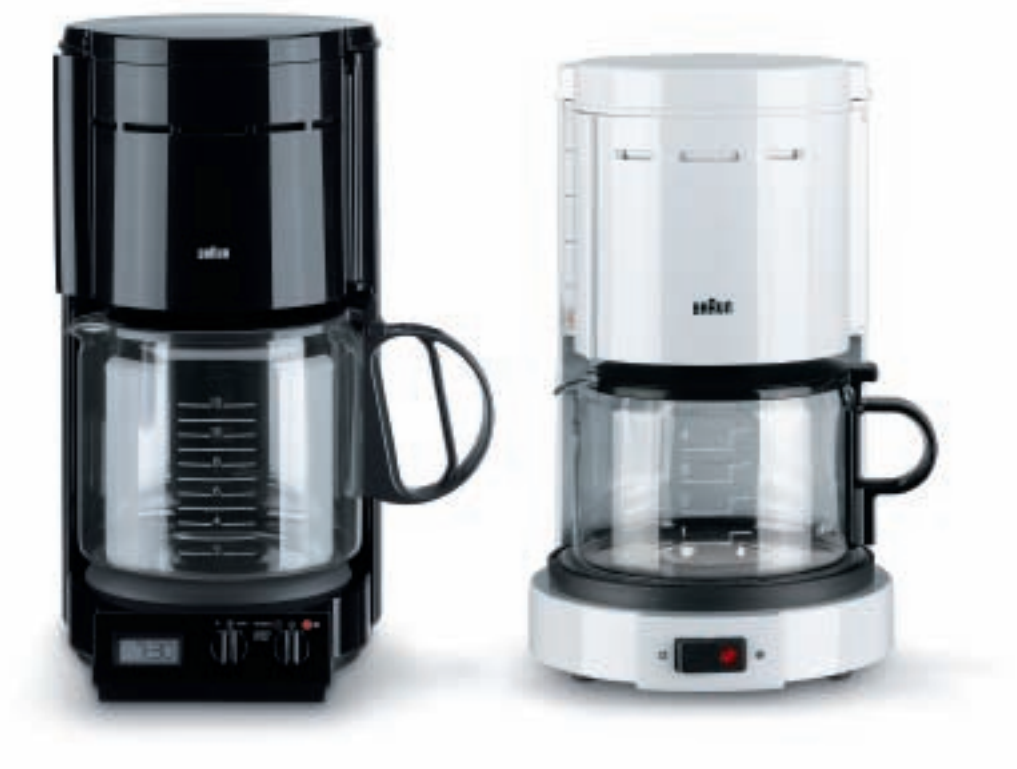


KF 40
1984 | Design: Hartwig Kahlcke
Aromaster 10 / plus, *10 / 12 / plus*, *12* | No. 4057 / 63
white, red / grey, red / black, black

KF 70
1986 | Design: Hartwig Kahlcke
Aromaster special 10 | No. 4074 / 4079
white

Coffee machines
1984–1994

The *KF 40 Aromaster* was mother to a whole generation of coffee machines, and not only those from Braun. It was also offered in a version with thermos (*KF 70*).



KF 80
1986 | Design: Hartwig Kahlcke
Aromaster control 12 | No. 4073 / 4091
white, black

KF 12
1994 | Ludwig Littmann
Aromaster 12 | No. 3075
white, black

The model *KF 80* had the proven swivelling filter, an electronic clock and capacity for twelve cups of coffee. *KF 12* was a smaller variation with a more delicate handle.