



## TELEVISION

### Keracolor

#### Design

Introduced in 1966, Eero Aarnio's futuristic Ball Chair made regular appearances on the ITC television series *The Prisoner*, filmed in 1966-67. With the arrival three years later of the similar sphere-shaped Keracolor televisions, designed in England by Arthur Bracegirdle, one wonders whether the Keracolor's spherical design might have been inspired by Number Two's Ball Chair on *The Prisoner*, and perhaps also the mysterious spherical bubble nicknamed "Rover", which emitted a high-pitched whine and an occasional frightening roar as it patrolled the surreal prison environment of *The Village*, intercepting any would-be escapees. Could the Keracolor be a case of a television programme helping to inspire the design of a TV set?

It is sometimes misreported that the Keracolor designs were inspired by an astronaut's helmet "after watching the first moon landing" and similarly - that they were designed to resemble the spherical Sputnik satellite launched in 1957. Both theories have been vehemently denied by Arthur Bracegirdle himself.<sup>1</sup>

The Keracolor is an example of pure space age design, a movement that made considerable use of spheres. Its design is consistent with the work of modernist designers of the '50s and '60s (such as Eero Aarnio, and Charles and Ray Eames) who eschewed traditional forms, substituting futuristic uses of basic streamlined shapes and testing the limits of new materials. The swivel tulip base used on some of the Keracolors resembles the Tulip chair of Finnish-American industrial designer Eero Saarinen. Tulip bases also appear on more conventional television stands of this period, sometimes with a tilt adjustment. The Keracolor's design was envisaged in 1968, which defines it as a product of sixties modernism, although the sets were not produced until late 1970.

Readers familiar with *The Prisoner* will recall how the opening sequence incorporated claps of thunder, timed for dramatic effect. Resonating with this is the name – Keracolor. It was derived from the Greek word *keranos* - meaning "thunderbolt". The Keracolor brand was described as being "synonymous in the television industry with the very latest and most modern and up-to-date design concept in the world".<sup>2</sup> The "U" in KERACOLOR was left out for aesthetic reasons – in order for the brand name to look symmetrical when displayed adjacent to other controls on the side of the set.<sup>3</sup>

#### Electronics

Arthur Bracegirdle was both a designer and businessman, but he lacked the technical knowledge to install the television chassis himself. In the spring of 1970 he placed a job advertisement in *The Manchester Evening News* for a qualified colour television engineer. The advert was answered by a young and talented television engineer by the name of Howard Taylor.<sup>4</sup>

The pair arranged to meet one evening in a pub in Wilmslow, Cheshire. Once they decided they could work together, they arranged a second meeting at Arthur's home in Cheshire a couple of days later. When Howard arrived, the pair entered Arthur's garage under great secrecy. This was the first time Howard would see the ground breaking spherical design. The combination of Arthur's business attributes and Howard's technical ability proved to be a winning combination.<sup>5</sup>

It was decided that Arthur would approach Decca Televisions with a view to using their 10 series chassis in the first cabinets, along with the Mullard colour picture tubes that Decca were using at that time. Decca were very pleased to provide the chassis as their own design team had been working on a sphere-shaped cabinet.<sup>6</sup> Howard then set about installing all of the new components. This was not a straightforward task as special brackets had to be fabricated, and a special shelf made for the chassis to sit on. They also designed a swivel mechanism so that the entire set could be easily rotated for different viewing angles.

The Decca chassis available at this time used valves, which together generated a great deal of heat. Heat build-up in the cabinets was managed in part by convection. The large volume of air in the cabinet circulated to disperse the heat from the valves evenly. This allowed for fewer unsightly air vents in the back of the set. Once the various design problems had been worked out, the pair built the first line of Group Systems (Keracolor) Ltd. televisions.

## Cabinets

The first run of Keracolor cabinets was made using fibreglass. There were floor-standing models, ceiling models, hanging versions, and even a conventional square table model. Cabinets could be ordered in any colour or even with a teak wood grain effect. Beautiful white and sophisticated black were the most recommended colours (to match any décor).<sup>7</sup> The 26" model with a built-in Decca 8-track cartridge player fitted (with twin speakers for full stereo) was considered the top of the line.<sup>8</sup>

It took twelve months to build a wooden sphere from which a fibreglass mould could be taken. The first cabinet was produced by a company called Waterside Plastics Ltd. located in Todmorden, West Yorkshire, northeast of Manchester.<sup>9</sup> Interestingly, the following year, Waterside built one of the space-age "Futuro" fibreglass leisure houses. The utopian prefabricated "Futuro" dwellings were originally designed in 1968 by a Finnish architect - Matti Suuronen. The flying-saucer-like dwelling was taken to the town centre for the celebrations of the 75<sup>th</sup> Anniversary of Todmorden's incorporation.<sup>10</sup>

The pair assembled the first 100 Keracolors whilst still working in Arthur's garage, before they moved production to a factory on Middlewich Road, Northwich Cheshire in 1970. At this point they were still using Waterside Plastics to produce the cabinets until there was some kind of falling out.<sup>11</sup> They moved production of the cabinets to another company that made a small number of cabinets, but due to the poor workmanship from this second company (not using enough resin in the making of the cabinets) Arthur decided that the only way to maintain quality was to make the cabinets themselves.<sup>12</sup>

## Sales & Distribution

The first Keracolor was supplied to Harrods of London in late 1970, priced at £375, with another four sets delivered the following week.<sup>13</sup> The exclusive exposure in Harrods was a shrewd marketing move by Arthur - it catapulted the design into the public eye. Once people heard about the ground breaking design in Harrods they asked their local dealers about the Keracolor. Orders started to arrive.

At first, many dealers were skeptical about these new sphere TVs until they discovered they were fitted with the Decca Bradford (30 series) chassis. It had a reputation for reliability, and service information and spare parts were readily available. In some of the later Keracolors, the Decca 80 and 100 series chassis were used.<sup>14</sup>

Sales brochures read "KERACOLOR offer a picture with crystal clear clarity, controls as easy as any, sound from the centre, in fact a safety-first set of British design and British manufacture -- in all a colour receiver for the connoisseur".<sup>15</sup>

## The Company Expands

After the move to the new factory in Cheshire, they recruited a laminator to make the cabinets on site. At this point they had made only 25 sets when Decca produced a new larger screen which still used the 30 series chassis. This meant a new set of moulds had to be produced to fit the larger 26" picture tubes. In early 1973, they decided to add a 19" model to the range. These moulds were later adapted to take a 20" screen. When these sets sold in reasonable numbers, they added an even smaller 12" model which sold in smaller numbers, and a 22" model. They continued to make the 20" square Keracolor "for the 'squares' of this world"<sup>16</sup> called the Conventional Model of which only a handful were ever sold.<sup>17</sup>

The 20" sphere model was available in a hanging version which could be suspended in its entirety from the ceiling on a chrome-plated chain. This came with a reinforcement kit for the ceiling. It could also be purchased as a floor-standing model which included an additional black metal frame to hang the Keracolor from. The first frames were made out of box section steel by a local blacksmith. The later frames were made by a car exhaust company out of round tubing.<sup>18</sup>

Keracolor had produced fewer than 200 televisions in fibreglass, and due to the increasing demand it became apparent they needed to start producing the cabinets on a larger scale. They were only able to produce 6 cabinets a week in glass-reinforced plastic (GRP).<sup>19</sup> A number of production techniques were considered, including injection moulding. They finally settled on making the cabinets from vacuum-formed plastic. Howard was given the task of making the vacuum-forming tools, whilst Arthur purchased the machinery required. When all this was in place, they started to sell the Televisions on a larger scale, offering them "to order" in any colour including the wood grain finish. The main drawback to the vacuum-formed plastic cabinets was a more prominent join around the circumference of the cabinet. Each half of the cabinet (hemisphere) was formed from a four-foot-square sheet of plastic. They would then cut the halves from the sheets and join them together. This created the unsightly join around the cabinet which resulted in a number of complaints from dealers.<sup>20</sup> However, it was now possible to produce up to 90 televisions a week, and add other products including a range of Keracolor audio equipment, window shutters, Lotus Europa front spoilers, Ford Capri spoilers, Christmas tree stands, flower tubes, steering-wheel desks, car tonneau covers, even a sledge.<sup>21</sup>

Keracolor had a close working relationship with Lotus cars which resulted in Lotus supplying three Europa Sports cars in kit form in 1973.<sup>22</sup> These were the last three Europas sold by Lotus in kit form before the introduction of VAT on kit cars. A deal was worked out that once the cars had been assembled at the Keracolor factory they would be painted yellow, with the Keracolor name spelled out in black letters. The cars were used to promote the new 12" Kerachrome TV, model B812, built around the chassis from the Decca Gypsy and incorporating an integral carrying-handle. The Kerachrome was the smallest set Keracolor produced.

Over their seven-year production run Keracolor filled a number of special orders, including five suspended monitors fitted with the Decca 40 series chassis for a theatre in London, and 20 suspended models for the Barbican Centre.<sup>23</sup>

## The Final Months

Due to the high cost of the internal Decca parts, Keracolor decided to start supplying their dealership network with non-working display models, which had false silver screens fitted. These were also sold as marketing tools for a number of companies and charities. A slot was cut in the false screen for people to insert completed questionnaires or donations to the charity. The 12" model was also used by a company making children's toys.<sup>24</sup>

In late 1976, Keracolor's technical director Howard Taylor decided to leave, although he carried on working within the television industry. In early 1977, a local television company was employed to install the televisions into the final remaining 20 cabinets to complete an export order for the Middle East. This is believed to have been the last run of original Keracolors produced.<sup>25</sup>

The Keracolor range of television sets was described in their 1970 sales brochure as "the most comprehensive offered by any manufacturer in the world".<sup>26</sup> Unfortunately, despite the company's efforts to expand, Keracolors never sold in large numbers. After seven years in business, fewer than 2000 sets had been sold.

Nonetheless, the Keracolor remains one of the most innovative television receiver designs ever offered to the public, and a product reflecting the popular culture of its time – as expressed in television and film by *The Prisoner* (1967-1968), and Stanley Kubrick's *2001* (1968) among others. Keracolor ultimately served an exclusive "niche market", a fact which, despite hopes of entering the mainstream, was acknowledged implicitly in one of the company's first sales pitches - Keracolor "a colour receiver for the connoisseur".<sup>27</sup>

Iain Logie Baird

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<sup>1</sup> John Dunne, *Vintage Keracolor History* [Online 2006-2008]. Available from: <http://www.keracolor.com/history/history.html> [Accessed: 2008]

<sup>2</sup> Group Systems (Keracolor) Ltd., *The Keracolor Sphere* (sales brochure, 1970)

<sup>3</sup> John Dunne, *Vintage Keracolor History* [Online 2006-2008]. Available from: <http://www.keracolor.com/history/history.html> [Accessed: 2008]

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Group Systems (Keracolor) Ltd., *The Keracolor Sphere* (sales brochure, 1970)

<sup>8</sup> Ibid.

<sup>9</sup> John Dunne, *Vintage Keracolor History* [Online 2006-2008]. Available from: <http://www.keracolor.com/history/history.html> [Accessed: 2008]

<sup>10</sup> B. R. Law, *Fieldens of Todmorden; A Nineteenth Century Business Dynasty* (Littleborough, George Kellsall, 1995)

<sup>11</sup> John Dunne, *Vintage Keracolor History* [Online 2006-2008]. Available from: <http://www.keracolor.com/history/history.html> [Accessed: 2008]

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> Group Systems (Keracolor) Ltd., *The Keracolor Sphere* (sales brochure, 1970)

<sup>16</sup> Ibid.

<sup>17</sup> John Dunne, *Vintage Keracolor History* [Online 2006-2008]. Available from: <http://www.keracolor.com/history/history.html> [Accessed: 2008]

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Group Systems (Keracolor) Ltd., *The Keracolor Sphere* (sales brochure, 1970)

<sup>27</sup> Ibid.

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