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Electronic Game (Bambino Basketball)
Emix Corporation

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Contents

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Emix Electronic Game Machine

The search for unique designs

(Note- Emix Corporation is the Japanese company that created the Bambino line of handheld electronic games. - Rik)

In the development of electronic games, the goal has always been to find new ways to revolutionize entertainment by coming up with new types of interactivity and making the process of gaming more involving through the creation of unique experiences. However, there is an ever increasing demand when it comes to duplicating emotional experiences such as the excitement felt from sports as well as improving overall visual appeal. There's something to be said about the feeling we get when we entertain such experiences for the first time and the excitement that entails. However, most conventional electronic games have tended to be flat designs that build on existing motifs, failing to convey the message of the new nature of electronic gaming from the design of its body.

The Emix Corporation electronic game introduced here has been a huge hit in the U.S. since it went on sale at the end of 1978, with sales of $22.5 million, and is a good example of how a well-designed game can successfully bring out the excitement of the real activity for the user.

This was due in part to the company's superior software development, but also to the fact that the design group (including outside designers) and top management were in direct contact in pursuit of a form that would allow the new software to make its mark. The development structure was such that designers could be involved in the entire design process, from image sketching to drawing to injection mold management.

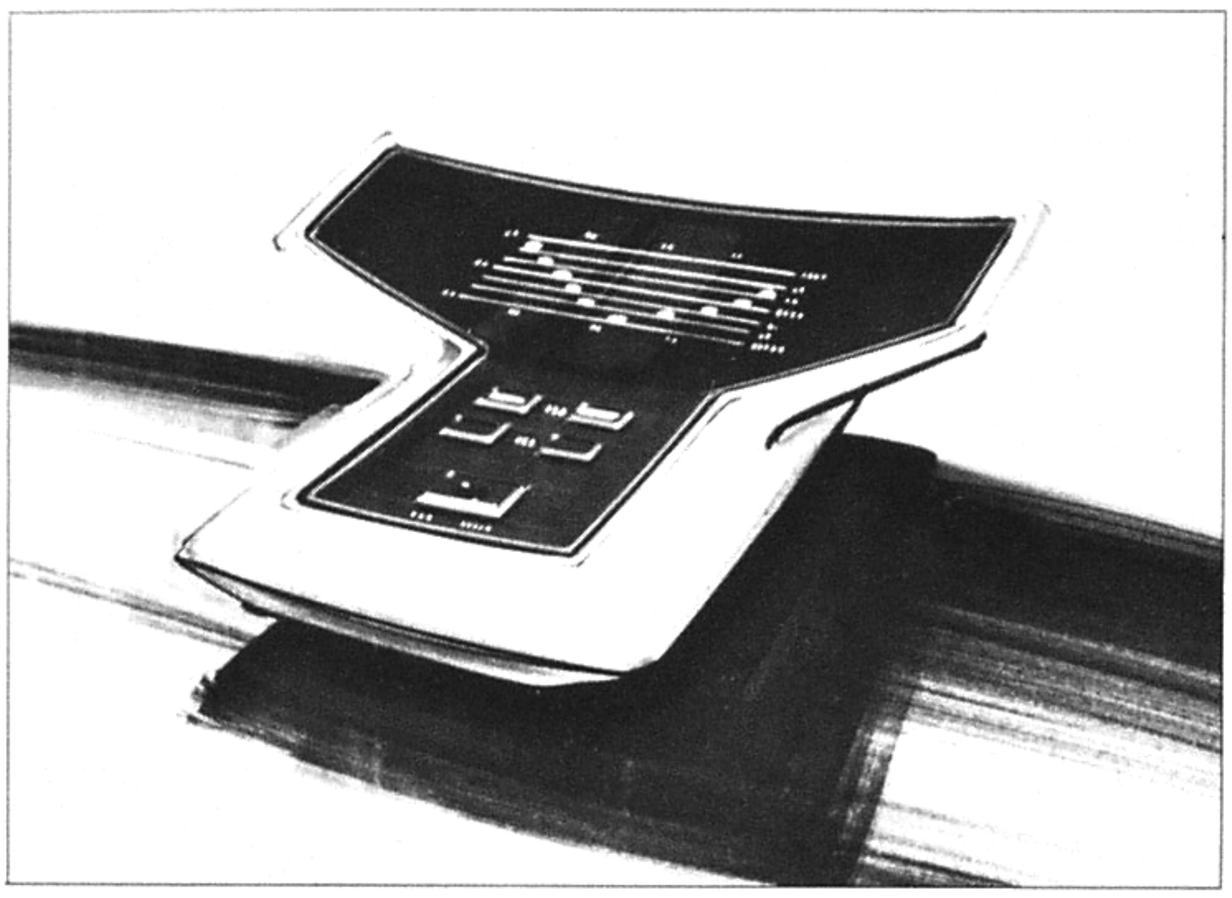
The pursuit of unique body designs and the direct involvement of designers were possible only because the products were in a new field and had fewer design requirements than other consumer products. This is not a generalization, but the fact that the company has created a new form of design expression separates their games from conventional electronic games, and in turn makes the product itself more exciting to the consumer.

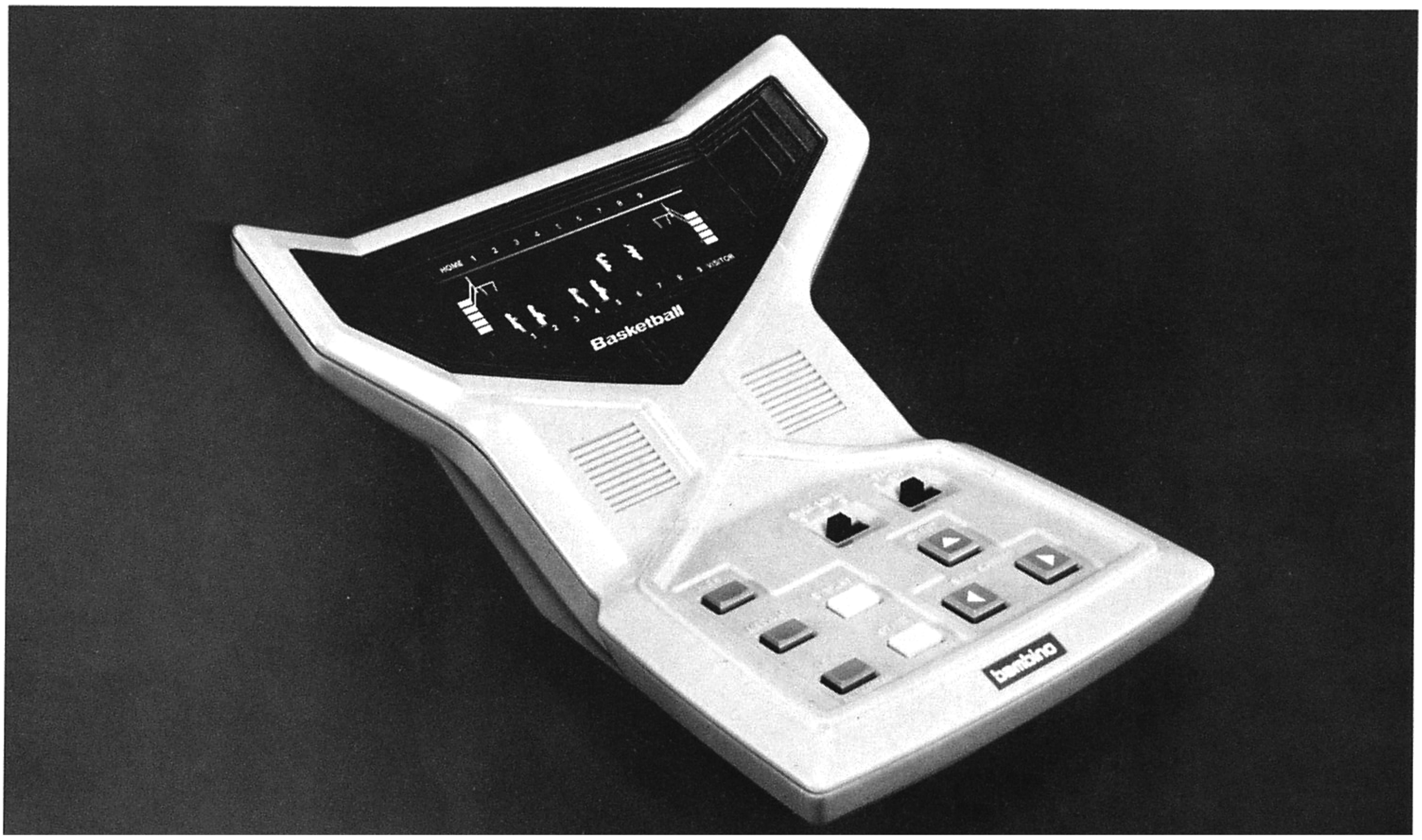
1 - A revolution in entertainment

❶ - Electronic Data Memorizer

<Automotive and Electronic Games> This is an unorthodox combination, but for us it was an extremely important turning point in the development of electronic games.

We have long paid attention to the fact that automobiles, which are currently at the cutting edge of culture, lag far behind in the development of their electrical systems, and we have been researching electronic technology that would enable simpler integration of instrumentation and more sophisticated centralized control. As a presentation by our researchers, we equipped the Lancia Megagamma (developed by Italdesign), which was exhibited at the Milan Motor Show in May 1978, with the "Electronic Data Memorizer," a device developed by our company. This was a great success (it was introduced in Japan in the August 1978 issue of Car Graphic and the 23rd issue of Car Styling in 1978). This was the beginning of the development that eventually led to electronic games.





To briefly describe the "Electronic Data Memorizer": it stores various necessary data (e.g., due date of inspection, time to change tires, time to change oil, due date of insurance, etc.) in a computer and allows the driver to view the data in a graphical display at a moment's notice with a single touch of a button. The system can also notify the driver automatically via the display at the time the event is due.

The graphical display is an application of the vacuum fluorescent display (VFD) tube that was originally used as a numerical display in calculators. Further research into the range of applications led to the development of a means of using the VFD display technology for tabletop electronic games, the results of which have now been launched in the form of an electronic game series.

In our fifth year of business, we launched the graphical display at the auto show, and only four months later, we launched our first tabletop electronic game (Bambino UFO Master Blaster). In February 1979, when we exhibited at the New York Toy Show, the toy industry was naturally focused on our electronic games.

❷ = In Search of Dynamics

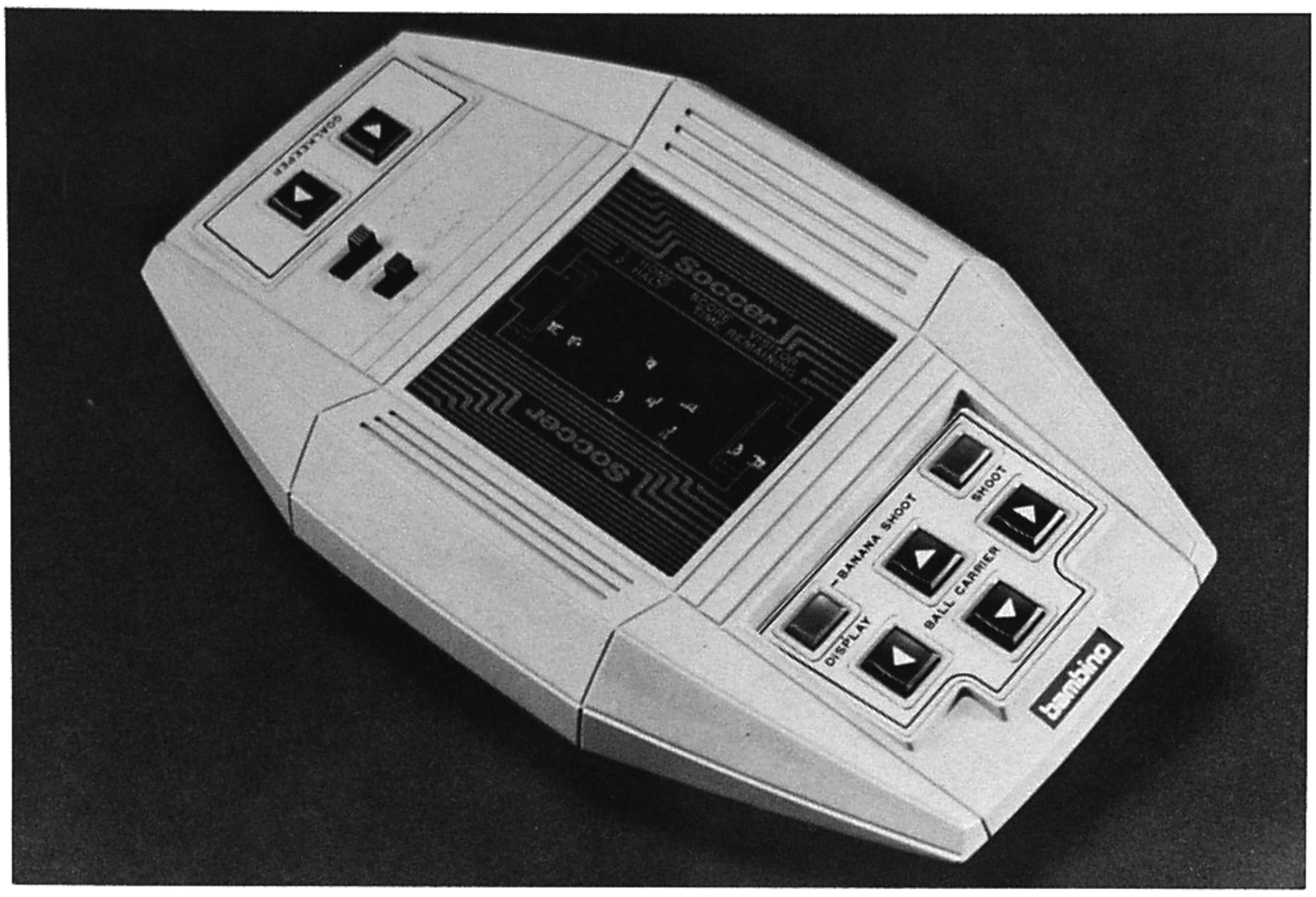
Traditional tabletop electronic games incorporate the following functions: 1. dexterity (speed and accuracy) 2. memory and agility 3. reflexes and concentration 4. logic and deduction 5. memory and strategy, all of which are combined to create a game. However, the method of displaying the process was often a matrix of LEDs (light-emitting diodes), and the person or object in the game was simulated by dimming the LEDs. This limited display technology often made it difficult for the player to recognize the LED as a person or a specific object.

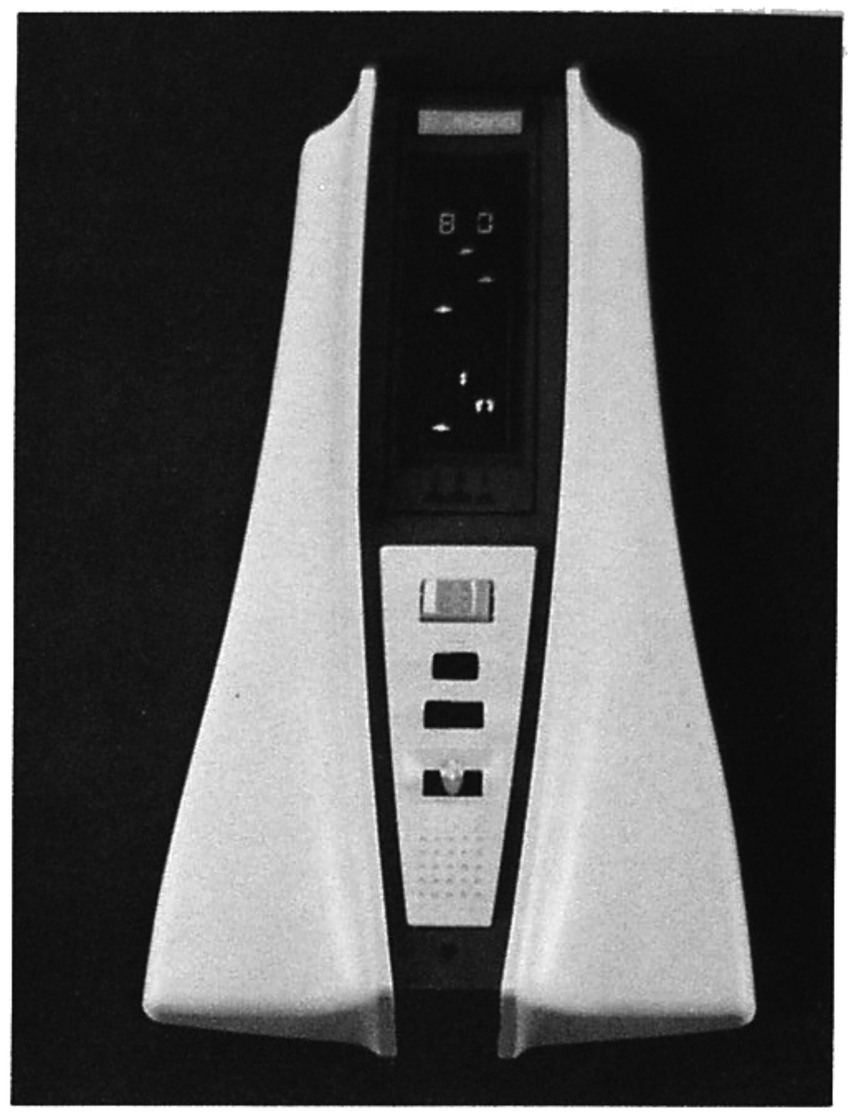
We also believe that sound (ideally, words), light (multiple colors), and action (free and independent action) are considered necessary for electronic games to be considered an enjoyable form of amusement, but in conventional tabletop electronic games, action displays are depicted as dots and lines (using LEDs), and in many cases the game-playing experience is lost.

Therefore, the company analyzed the current games and set the following development goals:

① Product Concept
To create a sense of experiencing the action.
To encourage communication.
To be enjoyable for adults as well as children.
To be fun to play and to recapture the real-world experience.
To be affordable.
The quality of the game itself must be such that defective returns are almost non-existent.

② Game Concept
Games that are impossible to create using only LEDs.
Games that are easy for everyone to play.
Games that upgrades the way you play.
Games that are more faithful to the real rules.
Games with more realistic images.





❸ = Increasing Player Motivation

In the development of electronic games, the most important point is how to inform and direct the conditions for the game's success (fun).

First, a method of representing the character in the game as realistically as possible had to be devised. For this, image development was carried out using a VFD display to represent the individual parts of the game characters. The most important point of this image representation was how to synchronize the changes in body shape to create a realistic image and performance. In addition to the visual presentation, the use of sound is also an important aspect of the game's design. Creating various sound effects that emphasized the sense of realism helped produce a feeling of enjoyment by the player, which is crucial for the game's success.

In a boxing game, for example, a boxer can control his movement and punches at the touch of a button, allowing him to stoop, back away, or stagger his opponent with an effective punch, or even knock him out. This more realistic action has the added attraction that, in a two-player game, the user is drawn into the game and becomes the character himself.

To increase motivation for the game, the basic design requirements are: ① How do you organize the relationship between the character's movement and the buttons you press? ② Whether the controls and the corresponding display should be horizontal or vertical. ③ Whether the game has two sets of controls or one. ④ Whether they are side-by-side, or head-to-head. The results of the study were reviewed and decided on according to the type of game.

2 - Making an Exciting Machine

❶ = Technology that begs to be touched

Toy designs generally tend to be simplified due to short-term development with limited and short sales cycles. With new technology and new game content, this electronic game required a departure from these concepts and a completely new design. In addition to the pursuit of shapes that would inevitably accent the functionality of the game play; we also sought designs that would emphasize the atmosphere created by the shapes themselves, the sense of wanting to touch them, and their freshness as "objects". In developing the design, the following points would be considered:

① Shapes that emphasize gameplay

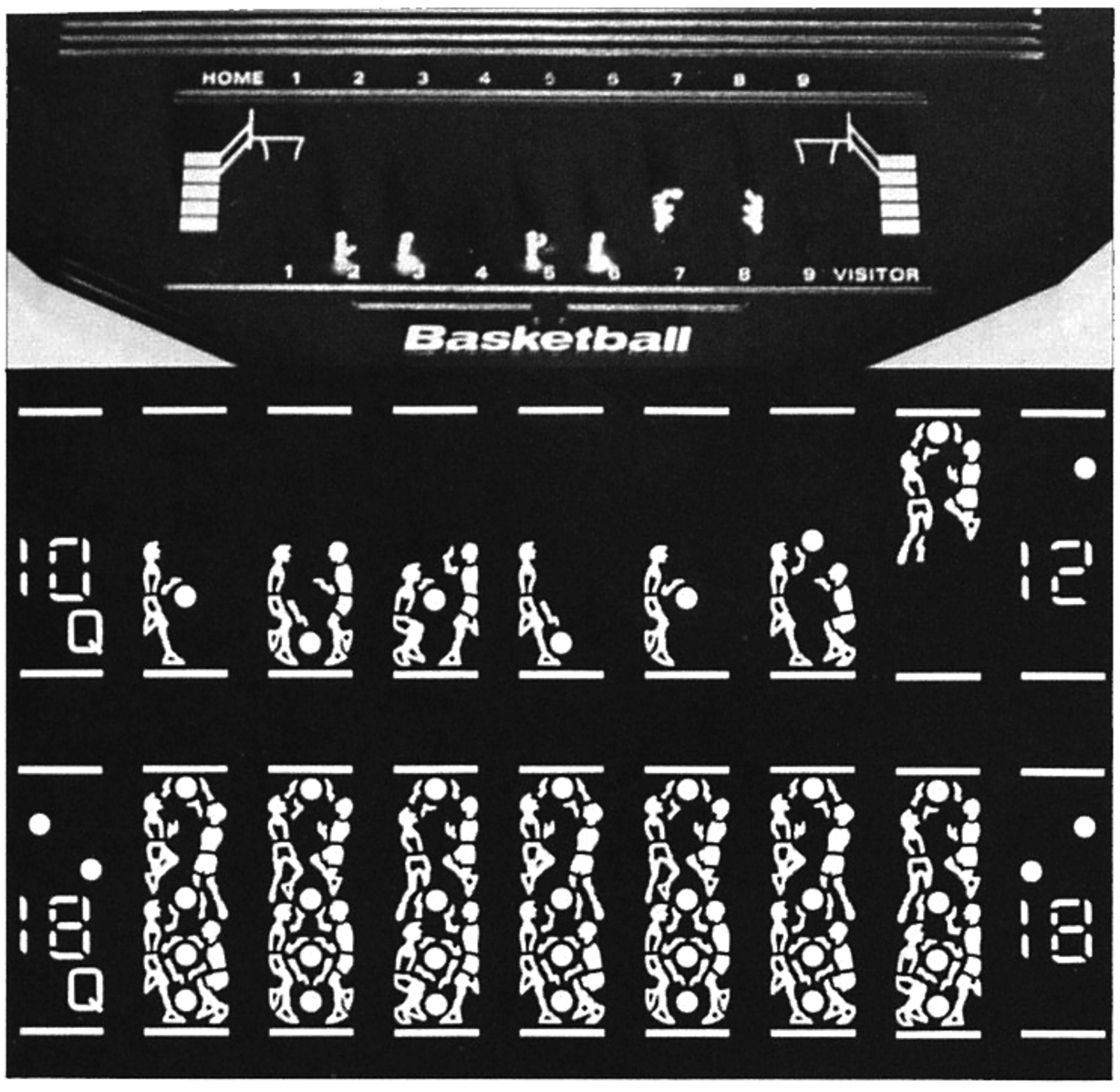
The newly developed VFD displays and graphical images are positioned appropriately to provide a more detailed image and enhance the overall sense of realism.

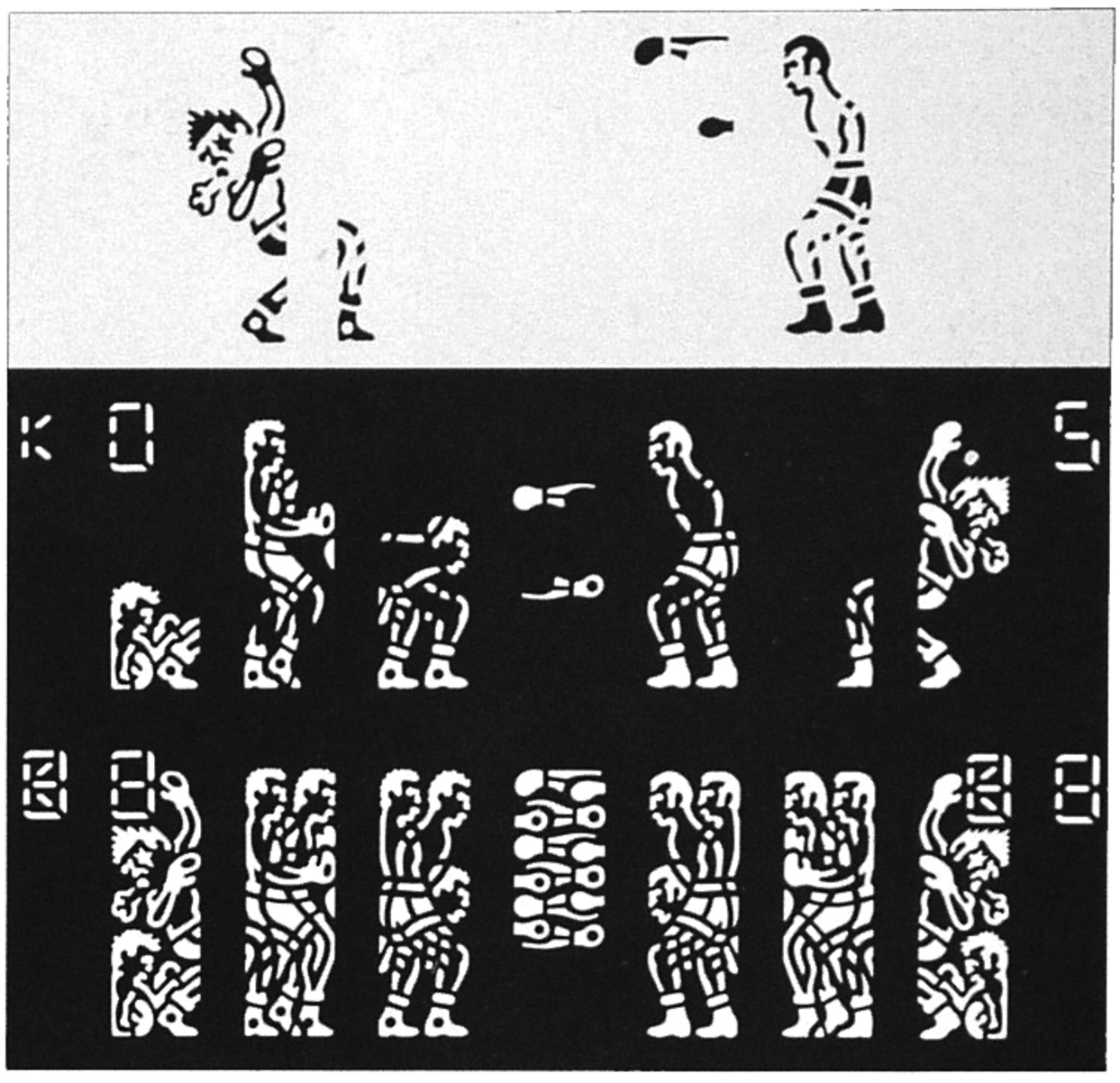
② Shapes that make you feel the technology

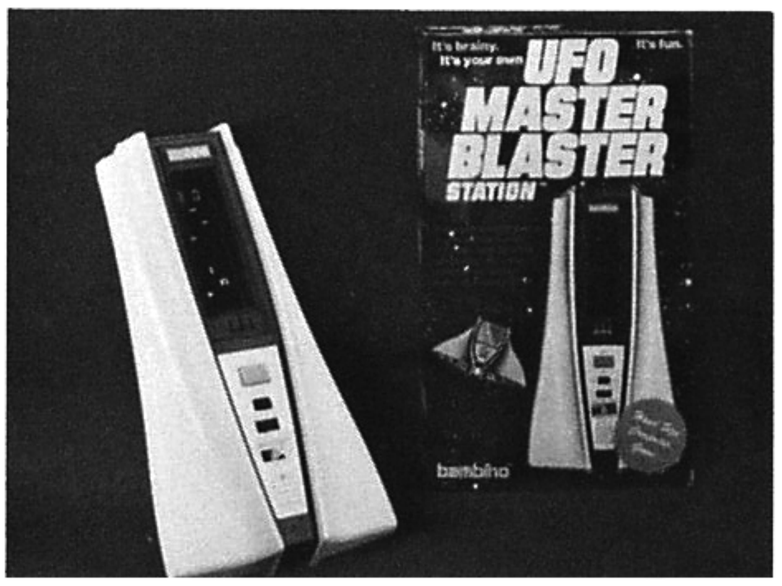
How far can we go in expressing the latest electronic technology in the external design of the game? Breaking away from the common flat design.

③ Exciting Shapes

Pursuing a shape that enhances the sense of realism and atmosphere of the game (with an emphasis on the graphic panels).







④ Science fiction and futuristic shapes

Pursuit of shapes that evoke a sense of outer space, and shapes that express a longing for and fascination with the unknown.

From these sketches, we selected shapes with a speedy and refined line expression, and tried to respect the initial design image as much as possible in the final product. Especially in prototyping and mold fabrication, there is a tendency to focus on ease of design and ease of manufacturing, and in the case of plastic injection molding, cracks and distortions occur due to the difference in wall thickness from the mold. In order to prevent this from happening in this electronic game, the mold was checked with the same precision as that used for consumer products. If distortion was detected, the mold was modified to insure the design remained true.

❷ = Standing Characters

The points that clearly distinguish this concept from conventional games in terms of design are: ① The screen is raised up. ② Separation of the screen from the controls. Explaining these two points in detail:

① The screen is raised up.

In order to emphasize the movement of characters in a graphic display, a more natural orientation is required, in which a standing character looks as if it is standing up, rather than looking as if the character is kneeling. This led to an increase in the cost of manufacturing due to separating the circuit board into two pieces. But in the United States, where house parties are popular, this gave the perception of the game being a small TV that would be enjoyable for onlookers to watch in addition to the individuals playing the game. For this reason, we also tried to make the game larger than conventional products. These concepts influenced the overall design of the game itself.

② Separation of the screen from the controls

In the case of two-player games such as “Boxing,” “American Football,” “Space Laser Fight,” and “Hockey,” which require high speed reaction and randomness, the designers sought to create a natural operating feel and functionality that allowed the player to focus their eyes on the display while operating the switches with their fingers. These design concepts satisfy the main elements that make up the game, and at the same time, they have made it possible to create a visually unique shape that evokes the game.

●Price

Basketball 8,800 yen, Space Laser Fight 9,750 yen, Boxing 9,750 yen, Soccer 8,800 yen, Safari 9,750 yen, Football 8,800 yen, UFO Master Blaster Station 6,800 yen, Race ‘N’ Chase 9,750 yen, Ice Hockey 8,800 yen

(Note- About $30-40 in 1980 dollars. - Rik)

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