

CONFIDENTIAL

PRODUCT SPECIFICATION



T-090473-1C

PRODUCTS INCLUDED	"A" PRICE	RTNS RATE
#2609 VIDEO GAME	N/A	N/A
MANUFACTURING SOURCE N/A		

REASON FOR REVISION

PRODUCT DESCRIPTION

In-home video game system which attaches to antenna hook-up of consumer's television set, utilizing the TV screen for display. System includes console deck; two hand-held control units; antenna switch and cable; and a football game cartridge. (Different game cartridges may also be purchased for use with the system).

By pressing control unit selector buttons, operator can pre-program plays into the system. During the course of a particular play, operator presses one of four action keys to execute the pre-programmed functions. Control unit also has a directional control disc.

Game cassettes plug into the side of the console deck. A channel selector (channel 3 or 4) switch is located on the bottom of the deck; power and reset switches on the top face. Deck has provision for storing the control units and power cord.

Antenna switch has selection switch for television or game modes.

SPECIAL NOTE:

ISSUE	DATE	WRITTEN BY	PROD. ENGRG	PROD. PLNG	MFG.	REL'Y
FINAL RELEASE		C. IRVING			////////	

"A" CLASSIFICATION

A defect severe enough to prevent product purchase, cause consumer to return product upon receipt, or result in an immediate service call upon product receipt. Generally these are defects which disallow consumer use of the product in its intended primary functional mode. Also included are aesthetic defects serious enough to result in a "no sale" condition even after all good units have been purchased from the store itself.

"B" CLASSIFICATION

A defect less severe than "A" which is more likely to result in a consumer complaint than in a defective return, cause 30% of product recipients to register a service call, or any defect which causes the consumer to choose one unit over another at the point of sale. Generally, major "B" defects disallow consumer use of product in one of its secondary functional modes.

PER SEVERITY CLASSIFICATION

Classification is assigned to those characteristics (e.g. soil, color, voice quality, aesthetic damage, tone quality, etc.) which, due to their nature, cannot be clearly categorized as major "A" or major "B" defects. Assignment of the degree of defect within this classification may, at the inspector's discretion, range from a non-defective condition up to, and including, "A" and "B" defects as defined above.

unless otherwise specified, the appropriate control group shall specify required number of units to be tested to any or all portions of this specification. Refer to defect classification statement for classification definitions.

NOTE: All judgements to be made at a 20 inch distance, unless otherwise specified.

I. AESTHETICS

A. MASTER CARTON

Check carton for:

- 1. Appearance
 - a. Carton damaged, wet, dirty, badly taped or stapled-----PS
 - 1. has damaged/will damage one or more units-----A
 - 2. may damage one or more units-----B
 - b. Carton open-----A
- 2. Labeling:
 - a. missing, illegible or wrong date code-----PS
 - b. illegible graphics-----PS
 - c. missing or wrong stock number-----B
 - d. type or model missing, illegible or wrong-----PS

B. INDIVIDUAL PACKAGE

Check package for:

- 1. Appearance:
 - a. package damaged, wet, dirty, badly glued-----B
 - 1. has damaged/will damage unit-----A
 - 2. may damage unit-----B
 - b. Package open-----B
- 2. Labeling:
 - a. graphics missing or illegible-----A
 - b. graphics misregistered-----PS
- 3. Interior Packing:
 - a. internal packing missing and/or damaged-----PS
 - 1. has damaged/will damage unit-----A
 - 2. may damage unit-----B
 - b. stray hardware or foreign objects in package-----PS
 - 1. has damaged/will damage unit-----A
 - 2. may damage unit-----B
 - c. accessories not tied down or incorrectly fastened-----PS
 - 1. has damaged/will damage unit-----A
 - 2. may damage unit-----B
 - d. wrong type or model inside package-----A

I. AESTHETICS (CONTD.)

C. INDIVIDUAL PRODUCT

1. Labeling:
 - a. instructions printed on product missing, wrong, or illegible----PS
 1. essential for correct operation-----A
 2. not essential for correct operation-- -----B
 - b. UL, DHEW, CSA, etc., labels missing, wrong or illegible-----B
 - c. control nomenclature wrong, missing, or illegible-----A
 - d. type/model number wrong, missing, or illegible-----PS
 - e. company name or trademark missing or illegible-----B
 - f. other required labeling missing, wrong or illegible-----PS
 1. essential for correct, safe operation-----A
 2. not essential for correct, safe operation-----B
2. Line Cord/plug, or any cable:
 - a. wrong or missing-----A
 - b. damaged-----A
 - c. dirty-----PS
3. Exterior appearance:
 - a. console/control unit or antenna switch appearance broken, cracked, split, discolored or very rough finish, poor lettering-----A
 - b. trim or overlays have poor fit, excess glue or scuff marks on console or control units: scratched trim-----PS
 - c. bubbles under decorative material-----PS
 - d. trim or overlays ride up on recess walls more than 1/32"-----B
4. Finished unit:
 - a. bottom mounting hardware not installed properly; foot omitted; defective knobs, or switches; loose bottom-----B
 - b. loose fitting or missing control knob(s), switches, buttons, or action keys:
 1. affects game play-----A
 2. does not affect game play-----B
 - c. stray hardware inside set component(s)-----B
 1. has damaged/will damage unit-----A
 2. may damage unit-----B
 3. affects game play-----A
 - d. buttons off center in **overlay** -----PS
 1. affects game play-----A
 2. does not affect game play-----B
 - e. control units do not sit flush with console face-----PS

I. AESTHETICS (CONTD.)

D. CONTENTS

Check for missing, damaged, wrong, or unuseable parts:

- 1. Console (including switches, cable receptacles, etc.)-----A
- 2. Two hand-held control units (including ANY button, action key, etc.)-----A
- 3. Antenna switch (including any connector, switch, etc.)-----A
- 4. Antenna cable or any connector-----A
- 5. Game cartridge or overlay-----A
- 6. Instructions-----A
- 7. Warranty card(s)-----A
- 8. Serial number-----B

E. LEGAL MARKINGS

Check to determine if the requirements of the legal markings drawing are met.

- 1. Any deviation from drawing-----Notify Supervisor

II. FUNCTION

A. BASIC FUNCTIONS

- 1. Product must function with ANY black and white or color television commercially available to the general public. Product shall not adversely affect, or be adversely affected by, any television used by the consumer. Failure to operate per above-----A
- 2. All characters produced by unit shall be complete, clearly visible, distinct, and recognizable, without smear (loss of detail) or overshoot (harsh outlines) regardless of screen size.
 - a. impaired visibility 3 feet from screen, game not playable-----A
 - b. impaired visibility 3 feet from screen, game playable-----B
 - c. impaired visibility 4 feet from screen-----PS
- 3. Picture or images produced shall not flicker. Straight lines (i.e. football sidelines, yard lines, baseball diamonds, etc.) shall remain straight, with no distortion, regardless of game played or game time duration.
 - a. intermittent or no picture-----A
 - b. faded player, boundry, score, etc. - brightness or contrast cannot be adjusted to an acceptable level-----A
 - c. picture will not sync properly, hum in picture-----A
 - d. continuous vertical or horizontal jitter-----A
 - e. snowy or weak picture-----A
 - f. any background, boundaries, player sizes, ball speed and size, etc., scoring or serve functions do not perform-----A
 - g. noise or beat in picture due to defective component-----A
- 4. Unit produced resolution ("dots" to produce optical images on TV screen) shall be:
 - a. 160 dots in the horizontal; 192 dots in the vertical for "moving" components.
 - b. 160 dots in the horizontal; 96 dots in the vertical for background components.

A. BASIC FUNCTIONS (CONTD.)

4. contd.

Resolution is measured by arranging dots in a grid, corresponding to TV screen size. For example, a screen measuring 16" horizontally will have 10 dots/inch using above resolution. Resolution shall be the same for any size screen.

- a. clarity of images defective, game not playable-----A
- b. clarity of images defective, game playable-----PS

5. Unit shall perform all functions of game cartridge(s) (for example: Football, Baseball, Basketball, Twenty-One), including appropriate color assignment, sound effects, game timing, directional control, pre-programmed play patterns, game sequence, scoring etc.

NOTE: Specifications will be written as required to cover cartridge functions.

a. Scoring

- 1. counter missing or does not score-----A
- 2. counter works on both sides at same time, intermittent, or no score-----A
- 3. continuous counter at end of game, excessive fast or slow scoring-----A

- b. 'Acceptable colors "produced" by unit shall be as follows. (MATTEL approved color chips to be used for comparison testing). Any one of the listings, per color, is acceptable.

1. PRIMARY COLORS:

a. RED

1. Dow:

- a. 13639 PS
- b. 17053 PS
- c. 14620 PS
- d. 13655 PS

2. Polychrome:

- a. 9759 PP
- b. 9518 RE PP

b. BLUE

1. Dow:

- a. 13696 PS

2. Polychrome:

- a. 74-8914
- b. 71-8166 PP
- c. 8481 PE/PP

c. YELLOW

1. Dow:

- a. 14580
- b. 17002 PS

2. Polychrome:

- a. 4691-6 Cel
- b. 75-4779
- c. 76-4864

2. SECONDARY COLORS:

a. ORANGE

1. Dow:

- a. 17400
- b. 17474

2. Polychrome: 9439 RE PP

b. PURPLE

1. Polychrome: 8740 PS-S

2. Avecor: 3787S

c. GREEN

1. Polychrome

- a. 73-5648
- b. 5720 PP

3. TINTS, SHADES, HUES

a. BLACK

1. Dow: 17228 PS

2. Polychrome: 605D PP

NOTE: Sixteen colors (total) are to be incorporated into product. The additional colors are to be determined by Product Engineering.

II. FUNCTION (CONTD)

A. BASIC FUNCTIONS (CONTD.)

5b. contd.

4. Acceptability:

a. background improper color, cannot be corrected with $\pm 45^\circ$ adjustment of tint control-----A

5c. Audio carrier modulation shall be within $+0\%$ and $- 50\%$ of that normally furnished the television set from a standard TV signal. (Peak sound carrier deviation of a standard TV signal is $\pm 25\text{KHz}$.) Carrier deviation monitor to be used for test.

a. no sound or intermittent sound-----A

b. continuous sound-----A

c. weak sound at a 4 foot distance in quiet environment representative of customer's home-----A

6. Noise produced by transformer shall be no greater than 65 dbA, when measured at the loudest orientation from a distance of 12"---B

7. Product shall function, per instructions, within a voltage range of 108 VAC to 126 VAC, and shall not be adversely affected by transient voltages normally encountered in a household. Failure to operate per above-----A

a. power plug cannot be pushed in far enough to engage, causes set to loose power-----A

b. power plug can be pushed past point of engagement to power the unit and when withdrawn a short distance:

1. operation is normal-----B

2. operation or power faulty or intermittent-----A

8. Product shall not be operational when unit switch is "off".

a. no "off"-----A

B. COMPONENT FUNCTIONS

1. Console

a. Check force to insert/remove game cartridge and antenna cable. Cartridge and cable shall not disengage during normal play.

1. insertion force exceeds 7 lbs-- ---B

2. insertion force exceeds 10 lbs-----A

3. cannot be inserted-----A

4. components disengage-----A

b. Check force to depress buttons and slide switches.

1. force exceeds 1 lb.-----B

2. force exceeds 3 lbs-----A

3. cannot be operated or intermittent operation-----A

c. Ventilation shall be adequate to prevent overheating of unit.

1. unit overheats-----A

d. With unit properly attached to TV (antenna switch to "game") and cartridge properly inserted, game situation shall appear "immediately" on screen when power switch is pushed "on".

1. no unit "on"-----A

2. intermittent "on"-----A

3. game situation fails to appear within 1 second-----A