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ARCADE MANUAL

Contents

1. Connector Instruction:

(Figure 1, Game board instruction)

CAUTION: The function of JAMMA connector power and J2 power is same; do not use them together that would destroy game board.

Trackball connection

J6 Trackball Connector

BY	BX	AY	AX	+
–	–	–	–	5V
9	7	5	3	1

10	8	6	4	2
GND	BY	BX	AY	AX
	+	+	+	+
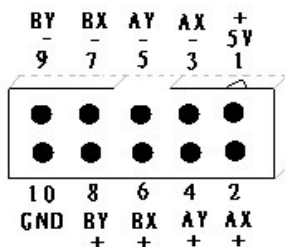
Trackball 6P Connector

1 Black	——	GND
2 light green	——	Y +
3 yellow	——	Y -
4 purple	——	X -
5 Green	——	X +
6 Red	——	+ 5V

Please connect the trackball 1P (A) and 2P (B) to J6 connector accordingly

2. Operation instruction

Remark: The picture of user menu only for reference, any difference, please refers to the products.   2

Connect the game board and switch on the machine power, after the logo of the "GAME ELF" appear, enter game list menu (about 20s-40s) as the figure 2.

（Figure 2）
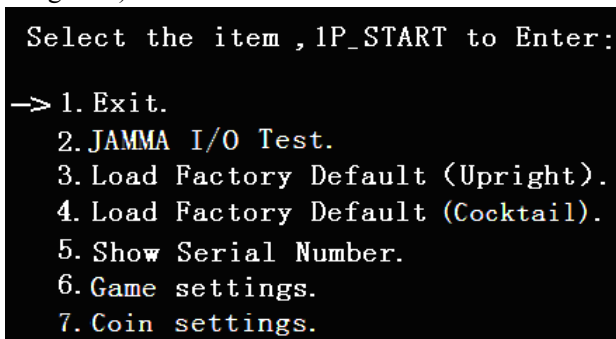
• **Caution: press 1P-C button to check the instruction.**

1) Insert coins first and select game. (No needs to insert coin for Free play or free browse)

2) Select game by moving 1P joystick up or down, and left or right moving is to view game list.

3) Press 1P- START button to enter game.

4）If **Coin recycling** is set to"No", after entering the game, all coins the player insert will be inserted into the game automatically. If **Coin recycling** is set to"Yes",Press 1P START button for 5 seconds or press 1P D button for 3 seconds to pop up menu, and select "continue" to insert coins.

5) All games on Cocktail mode and some games on Upright mode need 2 coins (or more coins) and press 2P-START button first to enable 2 players mode. If **Coin recycling** is setted to "Yes", for these games please press 2P-START to add coins.

6) Press 1P-START button for 5 seconds or press 1P-D button for 3 seconds to pop up menu, and select "exit" to return to the game list (as figure 2). Press 1P-Start for 5 seconds to return directly game list when it's in game loading process.

3. System Settings Configuration

• Switch on the machine power, when the string "Press S1 to setup"

appear, press S1 button to enter the system Settings menu (see the below figure 3)..

```
Select the item , 1P_START to Enter:

-> 1. Exit.
   2. JAMMA I/O Test.
   3. Load Factory Default (Upright).
   4. Load Factory Default (Cocktail).
   5. Show Serial Number.
   6. Game settings.
   7. Coin settings.
```
(Figure 3)

- Select item by moving 1P joystick up or down and press 1P-START to enter.
- According to the screen display prompts, perform the operation.
- Select "Exit" to quit and re-enter to the game list(as figure 2).

3.1 I/O Test

Check input/output buttons function is ok or no.(It is invalid for family mode.)

3.2 Factory default(Upright)

According to the screen display prompts, perform the operation step by step. All game configurations is returned to   factory configuration and loaded of Upright mode.

3.3 Factory default(Cocktail)

According to the screen display prompts, perform the operation step by step. All vertical version of games are loaded of Cocktail

mode.

3.4 Show Serial Number

This serial number is only marked number, we suggest that our customers note this number and be convenient for getting service in future.

3.5 Game Setting

● On the system menu (as figure 3), select item "6.Game Settings" to enter the games setting menu(as figure 4).
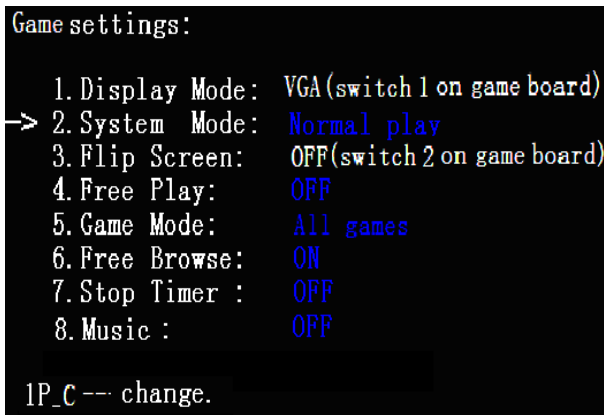
(Figure 4)

● Moving 1P joystick up or down to choose item, then 1P-C modify item.

● SW1 switch on game board adjust two items which are "Display Mode" and "Flip screen".

● After finishing modification, press 1P-Start to save setting(as figure 5),then press 1P-A to return system menu(as figure 3). Select "Exit" to exit, the new configuration is valid after system automatically restarts.

 (Figure 5)

3.5.1 Display Mode

The game board supports VGA and CGA display mode, its setting steps as below:

1) Adjust PIN 1(DIP switch SW1 on game board) to "ON" status, turn on the power, it shows the VGA display mode.

2) Adjust PIN 1(DIP switch SW1 on game board) to "OFF" status, turn on the power, it shows the CGA display mode.

3) Regardless of the setting of CGA or VGA mode, VGA port can normally output.

Before power is turned on, adjust PIN 2(DIP switch SW1 on game board) to "ON" status, VGA port output resolution is 640x480; when it's "OFF" status, its resolution is 1024x768.

▲ Note: <For SW1 Switch> Before turn on power, its resolution is valid for adjusting PIN 2(DIP switch SW1 on game board). After open the machine, it adjusts to Screen Revolve function.

Caution：After power on, when the system is booting process (it means：before entering the game list interface), do not adjust any one PIN of SW1 DIP switch. Avoid affecting the normal operation!

3.5.2 Flip screen

ON：Open the function--The game screen is rotated 180 degrees.

OFF：Close the function--The game screen is rotated 180 degrees.

Its setting steps as below: After turn on power, adjust PIN 2(DIP switch SW1 on game board) to "ON" status, the game screen is
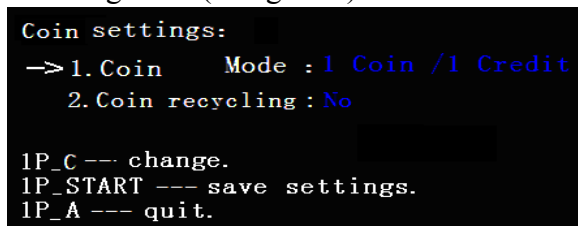
rotated 180 degrees; adjust PIN 2(DIP switch SW1 on game board) to "OFF" status, the game screen isn't rotated 180 degrees.

▲ 3.5.3 System Mode

Edit game list/Game difficult/Lives setting/Game configuration need to enter "Config/Edit Mode". If you don't need to adjust these items, please adjust to "Game Mode (Normal play mode)" for improving system stability.

3.6 Coin Setting

On the system menu (as figure 3), select item "7.Coin setting" to enter Coin setting menu(as figure 6).

（Figure 6）

- Moving 1P joystick up or down to select item, then use 1P-C modify the item.

1) **Coin mode:** to modify all games' coin setting.

2) **Coin recycling**：Select Coin recycling to "Yes" or "No".

 "Yes"：Coins which don't be inserted into game can be returned to the player after quitting the game.

 "No"：All coins will be inserted into the game, so no coins can be returned to the player after quitting the game.

- Press 1P-START button after finishing the setting and follow the instruction to save.

Remark：in single game mode, please change to "NO" in the coin recycling.

4.Edit game list

1) Enter Game Settings interface(as figure 4), set System Mode to Config/Edit mode, then save and quit the system setting. Enter the Game edit interface(as figure 7). (On the Config/Edit mode, press S1 button on the game list menu (figure 2) to enter the below menu also)
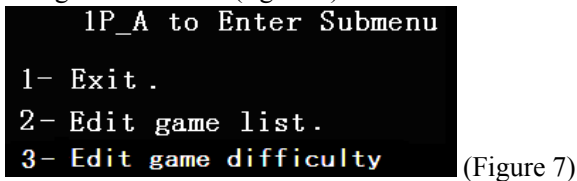
 (Figure 7)

2) Moving 1P joystick up or down to select "2-Edit game list" and enter the "Edit game list" menu(as figure 8).

 (Figure 8)
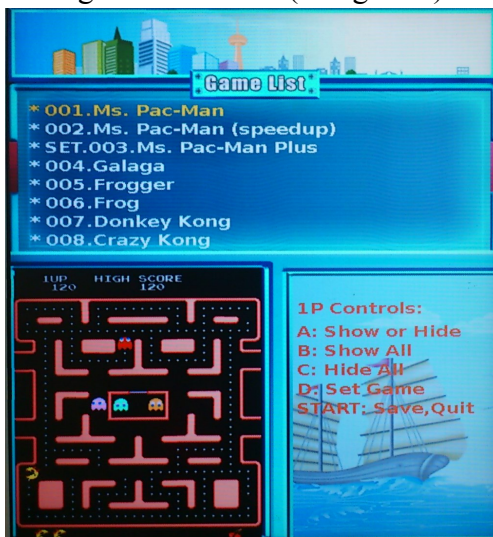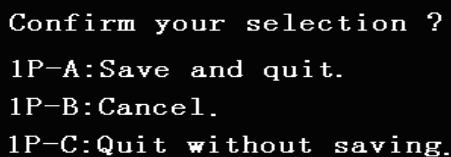
3) The item "*" means to show game list, no item "*" that means to hide game list.

- Select game list by moving 1P joystick (up or down to choose game, left or right to view game menu) and press 1P-A to decide

to show or hide the selected game.

● Press 1P-B button to show all games, press 1P-C button to hide all games.

4) After the game list edition is finished, press 1P-START button to enter the save menu (as figure 9). Please follow the instruction to save. Then return to interface (as figure 7), quit "enter game list interface" (as figure 2).

```
Confirm your selection ?
1P-A:Save and quit.
1P-B:Cancel.
1P-C:Quit without saving.
```
(Figure 9)

5) After editing the game list, please enter Game setting again (as figure 4), set System mode to Game Mode (Normal play mode) and save it. The game will be started in normal after the system reboot(as figure 2)

5.Single game setting and operation

1) Please refer to "Edit game list" as above, and enter the edit game list menu (as figure 8).

2) Moving 1P joystick up or down to select game, press 1P-D button to set. If it shows "SET" in front of game title you selected, that means the setting is successful.

3) Enter Game settings menu (as figure 4), set the **Game mode** to Single mode, set **System mode** to "Normal play" mode and save it. The Single mode will be started after re-entering the game.

Remark： in single game mode, please change to "NO" in the coin recycling.

6. Game difficulty and lives setting

1) Enter Game Settings menu (as figure 4), set System mode to Config/Edit mode, save and then enter the menu(as figure 7). Select the item "3.Edit game difficulty" to enter the menu as below(as figure 10).

 (Figure 10)

- 1P joystick: to select the game that needs to be changed.
- 1P-A button: to adjust the game difficulty.
- 1P-B button: to adjust the lives
- 1P-C button: to set all games to hardest.
- 1P-D button: to set all games to hard.
- 1P-E button: to set all games to normal.
- 1P-F button: to set all games to easy.

▲ **Notice**: when some games' difficulty show as "x(x)" or lives show as "x", it means this game has no difficulty and no lives to adjust, or it means this

game doesn't support to adjust game difficulty and lives. If it is the 2nd option, please enter the game and set the game configuration specifically. (See the detail setting on "Game configuration settings").

- After finishing it, press 1P-START button and follow the instruction to save. Press 1P-A button to save the modified games and press 1P-D button to force to save all games. Saving all games will cost a long time.
- Set the System mode to "Normal play" mode and enter the game list menu (as figure 2) to start game as usual.

7. Game configuration settings

Way 1 for Game configuration settings:

1) Enter the Game settings menu (as figure 4), set **System mode** to "Config/Edit" mode, save and quit the system settings menu, then enter the game list menu (figure 2).

2) Moving 1P joystick up or down to select the game you want to change, press 1P-Start button to start game and enter the game configuration editor menu(as figure 11).
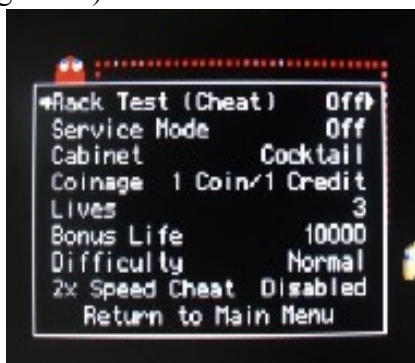
(Figure 11)　　　　　(Figure 12)

3) Move 1P joystick to select"Dip Switches"and press 1P-A button to enter the setting menu(as figure 12). (This operation is invalid

for some games, please refer to way 2.)

4) Select option by moving 1P joystick up or down, and press 1P-C or D button to adjust.

5) Select "Return to main menu" to quit the setting menu after setting (as figure 11), and select "Exit game" to back game list (as figure 2). Restart the game, then new settings is valid.

6) Please go on to set other games if you need. If not, please set System mode to "Normal play" mode and save it. Re-enter the game list and the game will be started in normal mode.

Way 2 for Game configuration settings (Original configuration adjustments):

1) Refer to Way 1, enter the game configuration editor menu(as figure 11), and select the item "Enter Service Mode（if have）" to enter game's original setting menu (when some games select this item, it's need to quit game first and enter again, then enter the game configuration setting menu).

2) Follow the instructions of the game configuration setting menu to modify game configuration and save it.

3) After finishing it, press S1 to show the game configuration setting menu, select "Exit game" and return to game list menu (as figure 2). Enter the game again and the new configuration is valid.

Caution： The game willl enter setting menu after starting if "service mode"is set to ON. Please refer to way 1,set "Service mode"to "OFF".

4) Set the System Mode to "Game Mode" and enter the normal playing mode.

8. S1 button function

1) System setting button, press S1 button to enter the system setting menu when the screen show "GAME ELF" logo (as figure 3).

2) On the Normal play mode, press S1 button to quit and return to the game list (as figure 2).

3) On the Config/Edit mode, press S1 button in the game to pop up or hide the configuration setting menu (as figure 11). Press S1 button on the game list menu (as figure 2), and enter the Edit game list interface.

9. Instruction for Home mode

1) PS2 game controller

Plug-in J5 USB port of game console (as figure 1-1) to PS2 game controller. Switch on the power, after the game controller is detected, the system will enter automatically Home mode.

For One player: connect one of PS2 game controller to J5 USB port of game console.

For Two players: add one USB 2.0 hub, connect two PS2 game controllers to hub, and then connect hub USB port to J5 socket of game console.

2) Free play

No free play on the home mode. Press SELECT to insert coins, and then press START to begin game. Set the game configuration settings to get free playing is available for most games. Please refer to page 11 to get more information.

3) Define 1P PS2 game controller **as below.**

(Figure 13)

Press 1P-G and 1P-H bottom at the same time to quit game.(as figure 2)

4) Sleep mode

The idle PS2 game controller will enter sleep mode when power is on.

Caution: When the controller is in sleep mode, the power switch of controller is invalid, you must press START button to wake it up, return to normal working state.

10.Common problems and solutions

Problem: the game screen is not synchronized in the cga mode when game start.

Solution: Adjust the horizontal stabilizer in the game monitor until the image is clearly visible.

11. JAMMA wire map

JAMMA WIRE PAP			
Part side		Soild side	
Definition	PIN	PIN	Definition
GND	1	1	GND
GND	2	2	GND
+5V	3	3	+5V
+5V	4	4	+5V
/	5	5	/
+12V	6	6	+12V
/	7	7	/
/	8	8	/
JMA9	9	9	JMB9
SPEAKER+	10	10	SPEAKER-
JMA11	11	11	JMB11
VIDEO R	12	12	VIDEO G
VIDEO B	13	13	VIDEO SYNC
GND	14	14	SERVICE
TEST	15	15	JMB15
1P-COIN	16	16	2P-COIN
1P-START	17	17	2P-START
1P-UP	18	18	2P-UP
1PDOWN	19	19	2PDOWN
1P-LEFT	20	20	2P-LEFT
1P-RIGHT	21	21	2P-RIGHT
1P-A	22	22	2P-A
1P-B	23	23	2P-B
1P-C	24	24	2P-C
1P-D	25	25	2P-D
1P-E	26	26	2P-E
1P-F	27	27	2P-F
GND	28	28	GND

▲ **Caution: Do not connect the PIN27 of JAMMA port to ground lead, it will affect the game's playing.**

Game list of game elf (Vertical)

	001.Ms. Pac-Man
	002.Ms. Pac-Man (speedup)
	003.Ms. Pac-Man Plus
	004.Galaga
	005.Frogger
	006.Frog
	007.Donkey Kong
	008.Crazy Kong
	009.Donkey Kong Junior
	010.Donkey Kong 3
	011.Galaxian
	012.Galaxian Part X
	013.Galaxian Turbo
	014.Dig Dug
	015.Crush Roller
	016.Mr. Do!
	017.Space Invaders Part II
	018.Super Invaders (EMAG)
	019.Return of the Invaders
▲	020.Super Space Invaders '91
	021.Pac-Man
	022.PuckMan
	023.PuckMan (speedup)
	024.New Puck-X
	025.Newpuc2
	026.Galaga 3
	027.Gyruss
	028.Tank Battalion
	29.1942
	030.Lady Bug
	031.Burger Time
	032.Mappy
	033.Centipede
▲	034.Millipede
	035.Jr. Pac-Man
	036.Pengo
	037.Son of Phoenix
	038.Time Pilot
	039.Super Cobra
	040.Video Hustler
	041.Space Panic
	042.Space Panic (harder)
▲	043.Super Breakout

▲	044.Arkanoid
	045.Super Qix
	046.Juno First
	047.Xevious
	048.Mr. Do's Castle
	049.Moon Cresta
	050.Pinball Action
	051.Scramble
	052.Super Pac-Man
	053.Bomb Jack
	054.Shao-Lin's Road
	055.King & Balloon
▲	56.1943
	057.Van-Van Car
	058.Pac-Man Plus
	059.Pac & Pal
	060.Dig Dug II
	061.Amidar
	062.Zaxxon
	063.Super Zaxxon
	064.Pooyan
▲	065.Pleiads
	066.Gun.Smoke
	067.The End
▲	068.1943 Kai
	069.Congo Bongo
	070.Jumping Jack
	071.Big Kong
	072.Bongo
	073.Gaplus
	074.Ms. Pac Attack
	075.Abscam
	076.Ajax
	077.Ali Baba and 40 Thieves
▲	078.Finalizer - Super Transformation
	079.Arabian
	080.Armored Car
	081.Astro Blaster
	082.Astro Fighter
	083.Astro Invader
	084.Battle Lane!
	085.Battle-Road, The
	086.Beastie Feastie

Caution: ▲ No flipped screen's games !

Game list of game elf (Vertical)

	087.Bio Attack
	088.Black Hole
▲	089.Block Gal
	090.Blue Print
	091.Bump 'n' Jump
	092.Cavelon
	093.Cheeky Mouse
	094.Circus Charlie
	095.Commando
	096.Darwin 4078
	097.Defend the Terra Attack - UFO
	098.Devil Fish
	099.Devil Zone
	100.Dingo
	101.Disco No.1
	102.Dock Man
	103.Dog Fight (Thunderbolt)
	104.Dommy
	105.Dorodon
	106.Dr. Micro
	107.Dr. Toppel's Adventure
	108.Dream Shopper
	109.Eagle
	110.Eggor
▲	111.Eight Ball Action
	112.Enigma 2
	113.Exciting Soccer
	114.Exerion
	115.Eyes
	116.Fantazia
▲	117.Labyrinth Runner
	118.Fighting Roller
	119.Fire Battle
	120.Fire Trap
	121.Fly-Boy
	122.Free Kick
	123.Funky Bee
▲	124.Funky Fish
	125.Funny Mouse
	126.Future Spy
	127.Galaxy Wars
	128.Gardia
	129.Ghostmuncher Galaxian

	130.Go Go Mr. Yamaguchi
	131.Gorkans
	132.Grobda
	133.Gun Dealer
	134.Guzzler
	135.Gyrodine
	136.Hangly-Man
	137.Hero in the Castle of Doom
	138.High Way Race
	139.Hoccer
	140.Hopper Robo
	141.Intrepid
	142.Jack the Giantkiller
	143.Joinem
	144.Jolly Jogger
	145.Joyman
	146.Jump Coaster
	147.Jungler
▲	148.Crazy Rally
	149.Kangaroo
▲	150.Kaos
	151.Kicker
	152.Korosuke Roller
	153.Lasso
	154.Lock'n'Chase
	155.Loco-Motion
	156.Looping
	157.Lunar Rescue
	158.Mad Alien
▲	159.VS Gong Fight
	160.800 Fathoms
	161.Mighty Guy
	162.Mighty Monkey
	163.Mikie
	164.Minky Monkey
	165.Mission 660
	166.Mister Viking
	167.Money Money
	168.Monkey Donkey
	169.Monster Bash
	170.Moon Alien
	171.Moon Alien Part 2
	172.Moonwar

Caution: ▲ No flipped screen's games !

Game list of game elf (Vertical)

173.Motos	216.SWAT
174.Mouser	217.Samurai Nihon-ichi
175.Mr. Jong	218.Satan of Saturn
176.Mr. Kougar	219.Saturn
177.Mr. TNT	220.Bagman
178.Mysterious Stones	221.Scrambled Egg
179.Naughty Boy	222.Senjyo
180.Naughty Mouse	223.Shot Rider
181.Navarone	224.Sindbad Mystery
182.Net Wars	225.Sky Base
183.New Sinbad 7	▲ 226.Seicross
184.Wild Western	▲ 227.Space King 2
185.Nibbler	228.Space Firebird
186.Ninja Emaki	229.Space Force
▲ 187.Jackal	230.Space Pilot
188.Gomoku Narabe Renju	231.Space Raider
189.Nunchackun	232.Space Thunderbird
190.Oli-Boo-Chu	233.Speak & Rescue
191.Ozma Wars	234.Speed Ball
192.Pandora's Palace	235.Springer
193.Strata Bowling	236.Star Force
194.Percussor, The	237.Star Jacker
195.Perestroika Girls	238.Stinger
196.Performan	239.Streaking
197.Phozon	240.Super Bagman
198.Pickin'	241.Super Basketball
199.Pinbo	242.Super Doubles Tennis
200.Piranha	243.Super Galaxians
201.Pisces	244.Super Mouse
202.Pit, The	▲ 245.Gigas
203.Polaris	246.Swarm
204.Pop Flamer	247.Syusse Oozumou
205.Popper	248.Tactician
206.Power Surge	▲ 249.Slither
207.Pro Baseball Skill Tryout	250.Top Roller
▲ 208.City Bomber	251.Tower of Druaga
209.Rafflesia	252.Traverse USA
210.Regulus	253.Triple Punch
211.Road Fighter	254.Turpin
212.Roc'n Rope	255.Tutankham
213.Round-Up	256.UniWar S
214.Rug Rats	257.Vastar
215.S.R.D.S.R.D. S.R.D. Mission	258.Vulgus

Caution: ▲ No flipped screen's games !

Game list of game elf (Vertical)

	259.Wanted		▲	302.Sky Soldiers
	260.Warp & Warp		▲	303.TNK III
	261.Water Ski		▲	304.Terra Cresta
	262.Wiping		▲	305.Air Duel
	263.Wiz		▲	306.Blazer
	264.Woodpecker		▲	307.Gals Panic
	265.Yamato		▲	308.Quester
▲	266.Omega Fighter Special		▲	309.Caliber 50
	267.Zig Zag		▲	310.DownTown
	268.Cutie Q		▲	311.Dyger
	269.Zodiack		▲	312.Tiger Heli
	270.Zzyzzyxx		▲	313.Slap Fight (Japan)
▲	271.Anteater		▲	314.Slap Fight (English)
▲	272.Blades of Steel		▲	315.Ikari Warriors
▲	273.Bomb Bee		▲	316.Ashura Blaster
▲	274.Turbo Force		▲	317.Master of Weapon
▲	275.Kuhga		▲	318.Gun & Frontier
▲	276.Thundercade / Twin Formation			319.Fighting Hawk
▲	277.Devastators			320.Twin Cobra
▲	278.Aero Fighters			321.Flying Shark
	279.Sonic Wings			322.Time Soldiers
▲	280.Tetris(1P)			323.Battlantis
▲	281.Truxton / Tatsujin		▲	324.The Hustler
▲	282.Out Zone		▲	325.War of Aero
▲	283.Lightning Fighters		▲	326.Galaga '88
▲	284.Super Contra		▲	327.Assault
▲	285.Rally Bike		▲	328.Dragon Saber
▲	286.Gang Busters		▲	329.Cosmo Gang the Video
▲	287.Mercs		▲	330.Sky Fox
▲	288.Time Scanner		▲	331.SAR - Search And Rescue
▲	289.Varth - Operation Thunderstorm		▲	332.Tail to Nose - Great Championship
	290.Argus		▲	333.Super Formula
▲	291.Image Fight		▲	334.Final Star Force
	292.Youma Ninpou Chou			335.Galaga '84
▲	293.Blast Off			336.Dangar - Ufo Robo
	294.Galaga (fast shoot)		▲	337.Last Duel
▲	295.Truxton II / Tatsujin II			338.Mad Gear
▲	296.Mahou Daisakusen		▲	339.Alley Master
	297.Zing Zing Zip		▲	340.Legendary Wings
▲	298.Armed Formation			341.Wrestle War
▲	299.Commando			342.Block Block
	300.Dragon Spirit			343.Rompers
▲	301.Gemini Wing		▲	344.Bowl-O-Rama

Caution: ▲ No flipped screen's games !

Game list of game elf (Vertical)

	345.Twin Eagle	▲	380.Speed Rumbler, The
▲	346.Victory Road	▲	381.Tac/Scan
▲	347.Extermination	▲	382.Tag Team Wrestling
	348.Plus Alpha	▲	383.Tempest
▲	349.Bells & Whistles	▲	384.19XX:The War Against Destiny
▲	350.Kageki	▲	385.Time Pilot '84
▲	351.1941 - Counter Attack	▲	386.Toobin'
	352.Alpine Ski	▲	387.Tournament Arkanoid
▲	353.APB - All Points Bulletin	▲	388.Tron
▲	354.Carnival	▲	389.Colony 7
▲	355.Electric Yo-Yo, The	▲	390.Play Girls 2
▲	356.fastfred	▲	391.Play Girls
▲	357.Front Line	▲	392.Bull Fighter
	358.Green Beret		393.Evil Stone
▲	359.Guerrilla War		394.Trick Trap
▲	360.Journey(1P)		395.Arkanoid - Revenge of DOH
▲	361.Joust 2	▲	396.Gorf
	362.Karate Champ	▲	397.Arbalester
▲	363.Kick	▲	398.1945k III
▲	364.Krull	▲	399.DonPachi
▲	365.Lost Tomb (easy)	▲	400.DoDonPachi
▲	366.Up'n Down	▲	401.Dimahoo
▲	367.Mad Planets	▲	402.Fantasia
▲	368.Mega Zone	▲	403.Fantasy '95
▲	369.Phoenix	▲	404.Gals Panic
	370.Q*bert	▲	405.New Fantasia
▲	371.Q*bert's Qubes	▲	406.Super Model
▲	372.Qix	▲	407.Guwange
▲	373.Qix 2	▲	408.Battle Bakraid
▲	374.Ring King	▲	409.Dangun Feveron
	375.Satan's Hollow	▲	410.ESP Ra.De.
▲	376.Sinistar	▲	411.Spiders
	377.Solar Fox	▲	412.Raiden
▲	378.Space Dungeon		
	379.Space Invaders		

Caution: ▲ No flipped screen's games !

Special note

1. This price is just for the computer hardware equipment.

2. Customers get the software by their own (including the purchase from the software provider or download free software from related web).

3. The way to get the software:

 (1) Purchase the software from the software provider.

 (2) Download the software from the related web.

4. Users assume all the legal consequences due to wrong download and use the software, it is unrelated with the equipment manufacturers and distributors.