PlayStation
switch interface







*"Arcade Stick" (c) namco 1995 : adaption and text (c) Barrie Ellis 1996, 2001

Introduction

With a switch interfaced Playstation, people of <u>absolutely all abilities</u> can control Music CDs, create music/vibrations and of course, play games. The Playstation 2 gives control over DVDs, as well as 95% compatibility with the original Playstation.

These instructions should help you get to grips with this technology. Hopefully you will gain ideas on how to offer more control and fun opportunities to people with severe disabilities. Give yourself time to learn, and don't be afraid to experiment. You won't break anything by pressing buttons!





MUSIC CD controller

3 MUSIC & VIBRATION CREATION











4 GAMES!

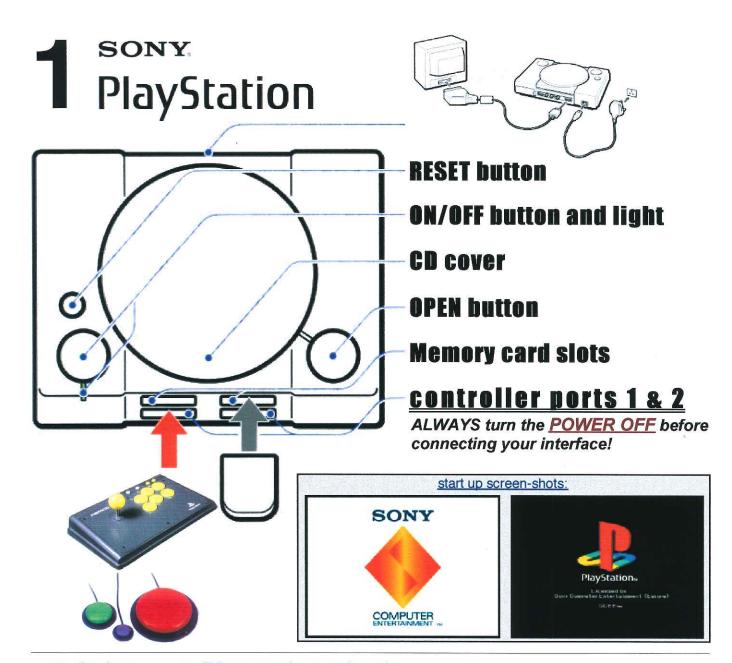
5 USEFUL CONTACTS











1. Index:

a. Playstation 1 basics b. the SWITCH INTERFACE

c. Stereo sound and VIBRATION

1.a: Playstation 1 basics:

There are only four things a Playstation needs: Power; Connection to a television; An interface plugged into the front, bottom-left socket (port 1); And a music or Playstation CD.

To start:

• **POWER OFF.** Make sure all leads are connected firmly.

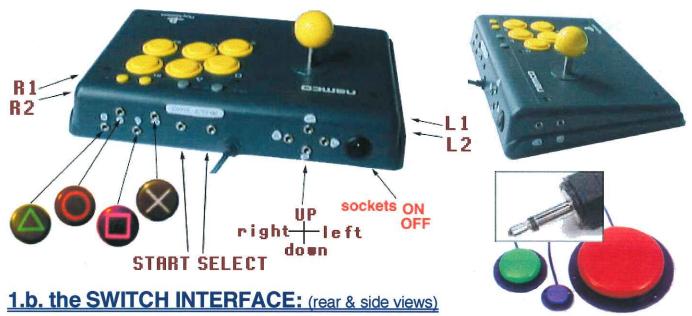
Press the OPEN button; Insert your CD (lable side up); close the lid.
Switch on your Playstation and television.

 Select the Playstation television channel (often "8", "0", "AUX", "AV" - see your TV manual for more help). You should get a clear, steady screen.

Position the interface in front of you, with the sockets to the back.

· Read on...

Refer to your official Sony instruction manual for more help.



The SWITCH INTERFACE allows you to connect disability standard switches & sensors to each of the 14 functions of a standard Playstation controller (excluding analogue controls).

You will need at least one switch/sensor with a 3.5mm jack plug (boxed picture). Plug a switch in (try the socket first), turn the interface around so the sockets are at the back, grab the joystick and experiment! If you get stuck, press **RESET**.

EMPOWERING IDEAS!:



- Cause and effect give people the power to control and change things.
- Team work share controls between two or more people, whatever their ability.
- Music & vibration creation CD control DVD control Simulations Games.
- <u>Exercise & Physiotherapy</u> position switches and pressure mats at different distances – stretch/move to reach, etc.; – make physio fun! Use your imagination.
- 2001 onwards: access to the <u>Internet, E-mail, on-line games</u> and experiences!?

People with severe communication disabilities:

Empathise with each individual's abilities, and adapt to them:

- If a person is sight impaired, position the TV appropriately, avoid window glare, darken the room, try to explain visual things they may miss.
- If a person has a hearing impairment, consider volume, reduce ambient distractions; Try sound vibration (see section 1.c).
- Try anything that may improve concentration, understanding and enjoyment.

Don't activate the switch or sensor yourself once set up. Let the person you are assisting trigger the effect. Have patience!:

· Always think about what may be confusing or disempowering.

Help a person experiment with different ways and means to work the Playstation, until they find the one that seems to suit them the best. Record this for others who may help later.

1.b. Extra interface adaptions:

MAPLIN ELECTRONICS

FP34

connect 2 switches into 1 socket: "FP34" [£1.29]

Get two independent switches to work the same function for team uses. (Technical data: Twin 3.5mm Socket/3.5mm Plug).



2.5M switch extension lead: "CN79" [£2.59]

Very useful if people are a long distance from the interface.

(Technical data: 3.5mm Stereo Plug/Socket Lead).



Operate 2 Playstation functions at once.

Connect a Playstation and one other device together.

N.B. This doesn't always work as you would expect. Pulling one plug partially out may cure a locking ON problem. ONLY link with simple switch devices. (Technical data: CK27E = 3.5mm Stereo Extension Lead).



1.c. Stereo sound and VIBRATION:

It's hard to overestimate the difference it makes when you connect a Playstation to a stereo. Add a "sub-woofer" or vibration seat and you can feel sound too!



How to connect to your sound equipment:

Look at the back of your Playstation. Does it say "AUDIO OUT" above two unattached round "phono" sockets? If not, you need the lead pictured left (from Argos, MAPLIN etc.) and a TV with a SCART or "phono" video socket.

RED = right sound channel WHITE = left sound channel



You will now need "phono to phono" plug leads (pictured above) (e.g. 3 Metres £3.99 "BV86T" MAPLIN), and possibly an adapter to connect these leads to your sound system.



Look at the back of your sound system. If you have two phono sockets for "auxiliary" sound in, that's all you need. If instead you have a 3.5mm (headphone style) socket, you'll need a "stereo phono socket adapter" (e.g. £1.29 "JK14Q" MAPLIN).

If you get stuck, play a music CD on the Playstation, then consult your stereo's instruction manual on how to connect an auxiliary/external sound source.



At cheapest, you can simply turn a speaker face down on the floor, turn the volume up and rest part of your body on it (try it though a balloon or bean-bag). A "sub-woofer" speaker emits very low frequencies unmuffled, which are felt as much as heard (get advice from hi-fi, computer and electrical stores). ROMPA (0800 056-2323; www.rompa.com) sell 'vibration furniture' including the "Q Chair" ["Sounds can be felt...moving left to right, up and down...through the back, upper legs and hands"], bean-bags and flooring.

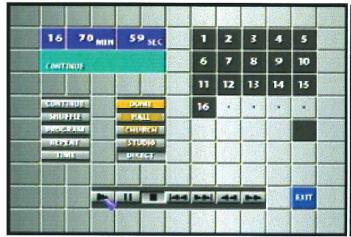
MUSIC CD controller













Playstation original and PS One CD Player

Alternative Playstation CD Player

CD Switch functions: plug in and try!

press **START** to operate PLAY/PAUSE

rewind/fast forward

skip back/skip forward

Use the joystick (up/down/left/right) to move the purple pointer around. Use to select the function.

IDEAS: (i) ® ®

- One switch in 'START' gives a person power to choose to have music on or off.
- One switch in 'R1' gives a person power to skip tracks they perhaps don't like.
- Control sound effects for a theatre production (SFX CDs available from libraries).
- DJ at a club or party (ideally with two Playstations and a cross-fader).
- Stage a light show as a backing to your own music (recorded with a PC CD writer).

SENSORY EFFECTS: set a CD playing, then press **SELECT**

Any ordinary audio CD can be transformed into a colourful light show that you control.

left/right: change the visual effect up/down: speed up/slow down







then press up/down to adjust the scale of the effects



blur effect

NB. If nothing happens when you press **SELECT**, you have an early Playstation. You will need to obtain "Baby Universe 3D-Kaleidoscope" (see overleaf).



"BABY UNIVERSE" 3D-Kaleidoscope (SCES-00982) (c) 1997 Sony Computer Entertainment + Fumiya Fujii

"Welcome to Baby Universe! Take your mind to another level, submerge your senses in kaleidoscopic light shows generated by any audio CD and controlled and styled by

2. 'Sound Scope' audio CD player: how to get there









Press 'START' to bring up these five menu icons. Use left and right to highlight the fourth round icon (see picture above), press to select. Read on...



Switch functions: 'Sound Scope' only

You can physically change music CDs at any point.

eft / right: change the visual effect (out of 10) up / down: speed up/slow down animation



₩ :skip CD track back



⋈ :skip CD track forward



:display CD information on/off



R1: blur R2: change colour **SELECT:** pause effect START: EXIT.

'L2: adjust scale of effect (up/down)

CD information on

Sound Scope: 50/I fps

CD-DA: 3/16 Repeat all Duration time: 1-8-640

Other areas of 'BABY UNIVERSE':

3D Kaleidoscope (main) Psychedelic Scope (1)



Electric Scope (5)



MUSIC & VIBRATION CREATION

'Fluid' and 'Music 2000' are two very different music tools but are amongst the most powerful means for people with severe disabilities to create their own music.





"Fluid"

b. "Music 2000"

c. Ideas



3.a "FLUID" (SCES-00985)

(c) 1998 Sony Computer Entertainment

There is no easier way for one-switch musicians to create their own music (once their helper has got the hang of it).

'CRUISE STAGE': Play in tune on one to four instruments over your own backing rhythms and grooves, created in the 'GROOVE EDITOR'

CRUISE STAGE: basic help

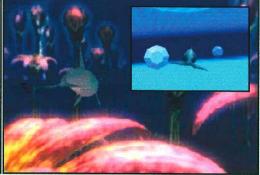
There are 12 different Cruise Stages each with a set of four musical instruments, played with the controls and joystick. Plug in and try!

pressina:

SELECT: alternates backing groove A/B

START: exits 'Cruise Stage'





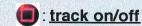
How do I get there?: Starting in 'Silent Space' (inset blue picture), use the joystick to steer your dolphin into any of the blue (unlocked) shapes, using any of the @@@@ controls to swim. Use: L1/L2/R1 or R2, to change the view if you like.



GROOVE EDITOR: basic help

Mix your own backing 'grooves' to accompany each Cruise Stage on the 8-track groove editor.

press: up/down: select track : track on/off





1 randomise all highlighted tracks

+ L1: randomise selected track only

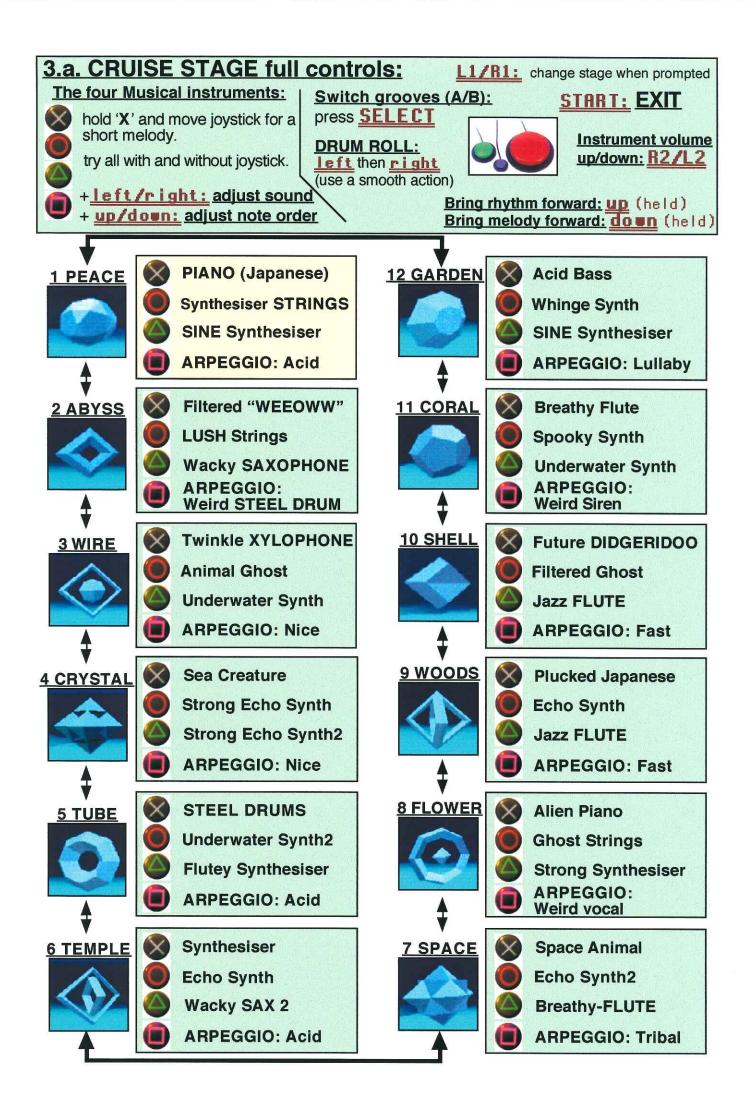
How do I get there?: On exiting a Cruise Stage you will be facing in the right direction. Swim straight ahead until you come to 8 swirling shapes (inset blue picture). Swim into them.

To turn all tracks on or off quickly, hold
and press down 8 times.

How do I get back to the Cruise Stage to play instruments over my grooves?: Press START to get to the lower menu bar, select "EXIT", then choose to "SAVE & EXIT" (providing you have a memory card) or just "EXIT". You should now appear just outside the entrance to the Cruise Stage', the grooves of which you have just been editing. Swim in!

Unlocking grey stone entrances: (NB. Save your progress & time with a memory card!)

Swim into any blue stone that is next to a grey stone; exit; "You've got new patterns..." appears; swim straight ahead into the Groove Editor swirling shapes; exit; swim into the blue stone ahead then play about until you get a prompt to press L1 or R1; press whichever leads to the locked stage; arrows should appear; you will then shortly be taken to the newly unlocked stage.







The 8-track GROOVE **EDITOR**









1. bass drum

2. snare

4. various

5. bass line

6. melody A

7. melody B

8. melody C



left/right: change Cruise Stage groove (1/12)

up/down: move selection box

sound on/off

reverse

L1: RANDOMISE all sounds on

solo

L2: Go back to previous sounds

edit

SHOUND

Cruise Stage name Tempo (Beats Per Minute)

SELECT: Switch grooves (A/B)

START:





go back

R1: help on/off



Choose

SNAP: allows you to copy the current groove, then paste it anywhere you like. Try it! BPM: change the number of Beats Per Minute (the TEMPO) using left & right.

LOAD: load an old pair of grooves (A/B) from your Memory Card.

SAVE: save to your Memory Card, but carry on in the 'Groove Editor'.

CLEAR: restore factory preset sounds.

EXIT: to 'Silent Space', where you will be facing the 'Cruise Stage' entrance of the grooves you were working on last.

R2: LIGHT SHOW ON/OFF

left/right: change style (1/48) up/down/R1:

speed up/slow down/reset

L1/L2: change colours

SELECT: crystallise FX on/off

STROBE SWIRL

START: blend FX on/off



ROLL-A-BALL



ZOOM in & out



Creation techniques:

When helping someone create something, it is important to try to avoid influencing their choices, even if it seems like a mess to you. It is equally important to make their choices as clear as you can. See Ideas sheet (3.c).

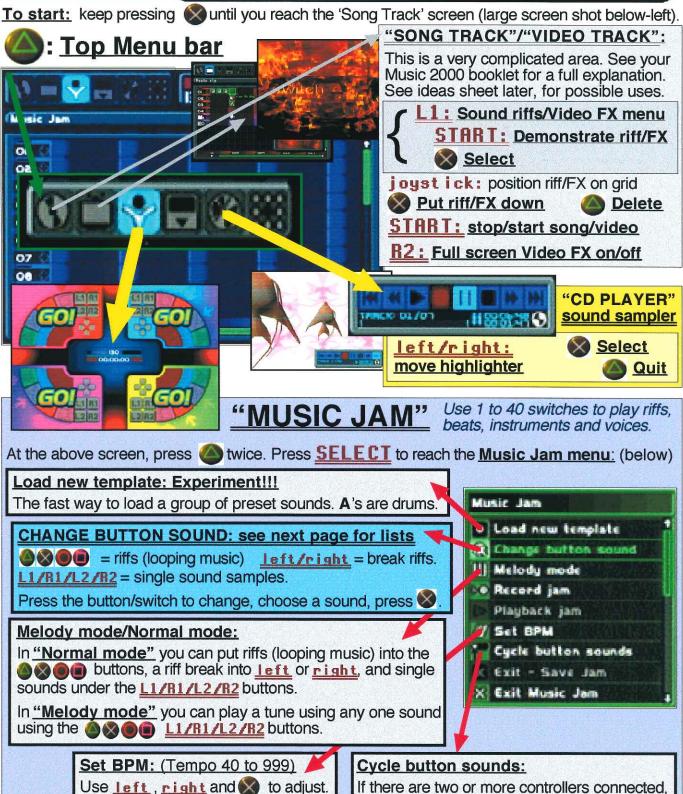


3.b "MUSIC 2000" (SCES-02224)

(c) 1999 Codemasters + Jester Interactive

Perform live music on 1 to 40* switches in the 'Music Jam', choosing sounds, instruments and riffs from a list of thousands. Alternatively, record your own sounds from an audio CD in the 'CD Player' to use in the "Music Jam'.

*: would require a Playstation "Multi-Tap" adapter, and four Playstation switch interfaces.



If there are two or more controllers connected, this swaps the sounds around. Try it!

Blue bar = memory used. See pages 31-33 of your Music 2000 manual for more help.



3.b. LOOPING RIFF buttons: press **START** at the same time as a riff button to lock on. Press that riff button again to turn off.

main riff buttons

left or right: break riff buttons

use with up/down: riff volume up/down



1. BEAT:

Bass Lines: (30); Drum Loops: (60); Melody: (36); Percussion: (81); Sound Effects: (30); Vocals: (32).

2. DRUM N BASS:

Bass Lines: (30); Drum Loops: (49); Melody: (41); Percussion: (77); Sound Effects: (22); Vocals: (6).

3. HOUSE:

<u>Bass Lines:</u> (35); <u>Drum Loops:</u> (50); <u>Melody:</u> (69); <u>Percussion:</u> (135);

Sound Effects: (3); Vocals (+ad lib): (42).

4. ROCK:

Bass Lines: (43); Drum Loops: (40); Melody: (62); Percussion: (8); Sound Effects: (6).

5. TECHNO:

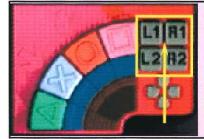
Bass Lines: (100); Drum Loops: (37); Melody: (56); Percussion: (130); Sound Effects: (17); Vocals: (12).

6. TRANCE:

Bass Lines: (30); Drum Loops: (27); Melody: (67); Percussion: (74); Sound Effects: (do not load); Vocals: (9).

<u>7. SONG BLOCK PALETTE:</u>

User defined RIFFs from 'Song Track' area.



SOUND SAMPLE buttons: L1/R1/L2/R2

use with **left/right: sound pitch down/up** (tapped=fast) use with up/down: volume up/down

Melody mode musical notes:

C(low), D, E, F; G, A, B, C (high) = **L2, R2, L1, R1**



1. BASS:

Acoustic: (8); Electric notes: (23); Electric riffs: (33); Synth: (120).

2. GUITAR:

Acoustic notes: (55); Acoustic riffs: (62);
Distorted notes: (77); Distorted riffs: (48);
Distorted wah: (28); Effects: (38); Electric notes: (1); Electric riffs: (58);

Electric wah: (38).

3. MELODY:

acoustic: (58); hardsynth: (85); softsynth: (68); stab: (11).

<u> 4. ORGAN:</u>

acoustic: (2); electric: (32).

acoustic: (17); hardsynth: (30); softsynth: (33).

6. PERCUSSION: cymbal: (21); hi hat: (39); human: (64); kickdrum: (84); metal: (28); snare: (73); strange: (33); toms: (31); wooden: (16); world: (27);

7. RAPPING: Danny (USA); Mandy (USA); Paul (USA); Sean 1,2 (JAM); Sheena (USA); Stepz (USA); Steve 1,2,3 (UK - cockney).

8. SINGING: Cathi 1, 2 (includes scatting); Howard 1, 2; Jackie 1,2; Mandy; Paul; Ruby; Sheena 1, 2 (all USA soul).

9. SPOKEN: Laurel (USA female); Ted (USA male)

10. SOUND EFFECT:

animal: (23); musical: (27); objects: (9).

11. VINYL:

<u>crackle: (2); rocking: (14); stops: (5).</u>

12. INSTRUMENT PALETTE: Use your own sounds! Recorded from any audio CD:

Select "CD Player" from the main menu bar; select "No video"; select recording quality (11KHz-44KHz); insert your audio CD; Use Left/right + Left/right + <a href="Red to set position for recording to exit.

3.c. Music making ideas:











Helper Non-interventionism:

This is an ideal difficult to achieve, but important to aspire to: To use systems that take all creative influence away from the helper, and give it back to the artist.



FLUID / solo one-switch-musician / DEMONSTRATION SYSTEM 1:

requires: one switch; Playstation; Interface; 'Fluid' CD; Electronic dice (see page "5. Contacts"):

Standardise an image and short sound to always represent the idea of music creation. Present this (and their switch) to the potential artist before starting. If they respond in a positive way carry on:

Ask the musician to roll a die. Strictly follow the corresponding set of rules below:

"Drums": Swim to the 'Groove Editor'. Set the speed*. Turn the top 4 tracks on, and the bottom 4 tracks off (as pictured). Give the musician a switch/sensor connected to L1 Stop after 5 minutes (use a stop watch).



2. "Play an instrument": Throw 2 dice then go the 'Cruise Stage' with that number (eg. throw a 5, go to "TUBE"). Exit to the 'Groove Editor'. Set the speed*. Turn all 8 sounds off. Exit and swim back into the 'Cruise Stage' . Roll one die. Plug a switch into the corresponding socket:

 $1= \otimes$; $2= \bigcirc$; $3= \bigcirc$; $4= \bigcirc$; $5= \underline{select}$; $6= \underline{doun}$ (with \otimes held down by helper)

N.B. 1-4: Whenever the musician blinks, briefly move the joystick in the direction of their eyes.

"Play on others' music": Roll two dice, swim into that 'Cruise Stage'. Roll a die. Refer to instrument selection guide directly above. Stop after 4 minutes (use a stop watch).

4. "Create your own Groove (basic)": Swim to the 'Groove Editor'. Set the speed*. Turn on all 8 tracks. Give the musician L1 and let them press that switch as many times as they like within a minute, counting down the last 10 seconds. Switch the interface off. Turn all 8 sounds off. Plug the musician's switch into. Switch the interface back on. Press down every 10 seconds, whispering "different" as you do (use a stop watch for accuracy). Play for 4 minutes then stop.

5. "1 track experiment": Swim to the 'Groove Editor'. Set the speed*. Turn all the tracks off. Ask the musician to roll one die. Turn that number track on (1-6) (1. bass drum - 6 melody A). Give the musician 'L1'. Stop after 4 minutes (use a stop watch).

6. Insert your system here!

*** : Setting Beats Per Minute:** Roll a die: **1=** 80 **2=** 100 **3=**110 **4=**120 **5=**130 **6=**150

The system above is just a set of conditions enabling one person to create music in a certain limited way. These rules are in effect the same as those which govern how a musical instrument is made and tuned. Once these are in place, the musician has the freedom to create their own music.

The more systems or instruments a musician has available to them, the greater the scope of music they can create. Experiment creating your own systems, try to make them clearer to the musician, using demonstrable examples. Contact Barrie Ellis (see 5. contacts) for information on my current progress, or to share yours!

Extra ideas:

- · Massively broaden the range of sounds from your Playstation by connecting it to an external multi-effects processor (available from musical instrument shops). Brilliant with 'Fluid'!
- Add microphone sounds and extra instruments by using a <u>mixer</u> or <u>multi-track recorder</u>.
- · Record CDs of your own music via a PC CD-Writer, then distribute them to friends etc.
- Record MP3 files of your own music using a PC, then download them to internet music sites.

GAMES









There are many ways to involve people in games individually, in teams and against others by imaginative use of controls. You may find it best to change the rules and targets of a game to make things more achievable (eg. to drive around a race track once could be a goal, or just to operate a switch). Most importantly, try to find what an individual seems to find interesting or enjoyable, and help them follow it up.

It may aid understanding to turn the background music off at the options screen, so that when a person presses their switch, the effect it makes is hopefully clearer.

NB. A switch in Significant gives a lot of control over most games. E.g. Jam with a guitar in 'Um Jammer Lammy' (beginner); Open doors, examine things, and shoot Zombies in 'Resident Evil'!

4. Index: a. "Destruction Derby" b. "Caesar's Palace"

c. "True Pinball" d. Real vs. virtual games



4.a. "DESTRUCTION DERBY" (SCES-00008)

(c) 1995 Psygnosis Ltd. (Infogrammes)

Banger Car Racing for all! Can be played with just one switch (left or right, if accelerator jammed on) thanks to crash barriers guiding you around the tracks and assisted steering (on 'Rookie'), helping you face the right way.

eft / right: steer car left / right

(hold L1 or R1 for full lock turn



Accelerate

START: PAUSE/QUIT



Brake/reverse

Z: **ZOOM** view out



R2: **ZOOM** in

Menu: Use the joystick + 🔀



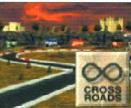
to move around the menu screens.



Helping someone choose a race track: Highlight the track icon (2nd top left box), press . Plug a switch in .

Read the track name, wait a few seconds, if the person you are helping makes no reaction, press right and read the next track name until they press to make a choice. (Alternatively, give switch control over **right**, a reaction/long pause = a choice?).











4.a. "DESTRUCTION DERBY" (continued)

You can change the nature of the race via the race menus (3rd top left box):



Wreckin' Racing: Points are awarded for spinning cars. Racing for 1st place is easier here than Stock Car Racing.

Stock Car Racing: Straight race.

Destruction Derby: Madness! Survive as long as you can.

Time Trials: START HERE! Practice in peace.

Beginner? Select 'Time Trials' and practice on the 'SPEEDWAY' track. Once you've got the hang of this, try a 'Wreckin' Racing' 'Race Practice'. This pits you against 19 other drivers. Turn the volume up and good luck!

IDEAS:

- Race against a friend using a Playstation Link Cable (needs two PS set-ups).
- · Race in teams, one person steers, the other controls the accelerator and brake.
- · Keep a High-score table; Try a BASS seat (see 1.c) to feel the car revving up!
- · INVINCIBLE CAR: enter !DAMAGE! as your name on a Wreckin' Racing Championship, then EXIT.
- · CHANGE NUMBER OF CARS: enter NPLAYERS as your name on a Wreckin' Racing Championship, EXIT, then go into the track selection menu, choose your track, then choose the 'Number of racers' to compete against.

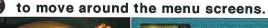


4.b. "CAESAR'S PALACE" (SCES-01008)

(c) 1997 Interplay Productions

Includes Roulette, slot machines and Blackjack. Perhaps play Roulette so that people only have to guess RED or BLACK. Take turns to spin the wheel, and set a winning target using your own betting 'chips'. Use cards and signing for colours, SAME and DIFFERENT?

Menu: Press START to begin. Use the joystick + 🚳 to move around the menu screens.











Place Bet (use joystick to move pointer)

R1: Spin wheel



Remove Bet





NB. Always turn 'computer player' off at 'Management' before selecting 'Roulette'.

To play ROULETTE with 1,000,000 dollars:

Go to the 'Cashier' screen (above left). Use the joystick to enter a new name as 'GROUP', (colored). Press (colored), then push up to enter the password: 'QBQ,KVK,RKDC'. Keep pressing wuntil you return to the 'Sign Post' (2nd picture above).



4.c. "TRUE PINBALL" (SCES-00052)

(c) 1996 Ocean Software Ltd. + Digital Illusions

Pinball is a fast, difficult game, "True Pinball" being just one of many pinball games for the Playstation. Despite the difficulty, there are various ways to get people involved whatever their ability...

Options screen



'3D-Hi-Res' view



START: 1 player game



add extra players (2-8)



right/ : left / right flipper





L1/ /R1: nudge: left / up / right

SELECT: reset/quit

i) One switch works left & right flippers: (read 1.b "Extra interface adaptions") ii) Player one operates the plunger (circle), Player two works flippers. iii) Player one controls left flipper, Player two controls right flipper.

4.d. Real vs. virtual games: ideas and techniques















Computer versions of real-life games, such as darts, pool & roulette, can be set up alongside the real thing, enabling people of all abilities to compete on the same game. Take this system with you to social clubs, snooker halls, pubs & casinos!

Snooker and Pool: You will need to find a game which allows you to move the balls on the table freely (look for practice or trick shot options). After the person using the real Snooker/Pool table has taken their shot, rearrange the balls on the computer table to match the real table. The Playstation user takes their shot (see 'aiming'), when the balls settle, rearrange the balls on the real table to match those on the computer screen and carry on alternating in this way.

Darts: It may be best to adapt the rules, eq. closest to the bull, round the clock to 5, 'Killer darts', etc. 'Jimmy White's Snooker' has a darts board, but it isn't great.

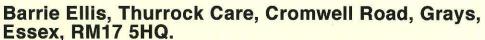
AIMING and SELECTING techniques:

In Snooker/Pool: Turn the interface off; Point out the hit-able balls, slowly, one at a time; When the person responds, aim the shot up; Turn the interface back on; Slowly and continuously move the aim around that angle until they take their shot. This is <u>essential</u> as it means the player can pot or miss depending on their skill and/or luck. Likewise in Darts, you might continuously adjust the aim around a point (eg. if aiming for 20, hover around 5, 20 and 1) until the player hits their switch.

5 USEFUL CONTACTS

(i) The SWITCH INTERFACE+new ideas:

For any help regarding this interface, plus information on new projects, such as the Art & Music non-interventionist project, universal bowling machine, Commodore 64 Darts vs. real darts, please contact:



Tel: 01375-373561 or 390212; E-mail: dobre@rano106.freeserve.co.uk



(ii) SWITCHES: The following three companies supply switches and switch activated equipment - contact them and request their free catalogue.

LIBERATOR (www.liberator.co.uk); e-mail: Sales@Liberator.co.uk; Tel: 0800 458 2288

ROMPA (www.rompa.com); e-mail: Sales@Rompa.com; Tel: 0800 056 2323

QED (www.QEDLtd.com); e-mail: Sales@QEDLtd.com; Tel: 0870 787 8850



(iii) Interface adaptions, hi-fi connections, and general electronics: MAPLIN ELECTRONICS: 0870 264-6000 (www.maplin.co.uk).

(iv) SOUND & VIBRATION FURNITURE:

ROMPA advertise a wide range of vibration furniture in their catalogue (see picture). Telephone: 0800 056 2323. E-mail: sales@rompa.com.

The Aequilibrium Collective make 'The Sensorium Stereo Chair', which is an extremely expensive alternative. More info at www.aequilibrium.co.uk or tel: 0207 581 1302.



(v) SOFTWARE: If you find it hard to find a Playstation title, it may have been discontinued. Try the 2nd hand section of games shops, newspaper free ads, pawn shops or the internet (try searching in WWW.EBAY.CO.UK for Playstation stuff auctioned cheaply). You'll find what you are looking for eventually.

CHEATS:

There may be ways to make your Playstation games easier via special 'cheats'. Try: www.gamewinners.com/playstation/index.html, if you have a game in mind.

(vi) SWITCH ACTIVATED ELECTRONIC DICE: ROMPA (0800 056 2323)

This has uses in Music and Art creation as well as giving people the power to bet at Greyhound and horse races.









(vii) Thurrock Care
SWITCH
PROGRAMMES

Talking YES/NO selector; Dice; versatile number generator; speech switch and Talk-type. Easy to use, with many applications. £30-£50 contact Barrie Ellis Thurrock Care, Cromwell Road, Grays, Essex, RM17 5HQ (01375-373561).