Technical Requirements Checklist for PlayStation® Software

Standard Software Development Rules for SCEI/SCEA/SCEE territories

Version 1.3

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About these Requirements

Changes Since Last Release

In addition to the major changes listed below, a large number of items have been modified for clarity in this version of the document. Also, please be aware that the inclusion of new items has caused extensive renumbering in some sections.

New Requirements:

5.4	Conditions under which machine should boot and run correctly.
6.7	Displaying other corporate logos.
6.8	PlayStation logo sound played at start up.
8.1	Placement of essential text in relation to edges of screen.
11.3.2	neGcon calibration feature implementation.
11.5.2	Pachinko controller calibration feature implementation.
11.10	Analog Controller (DUAL SHOCK) feature implementation.
12.2.4	Save title name in the Memory Card screen and application.

New Recommendations

11.6.1, 11.6.2	Message display after link error.
13.3, 13.4	Message display while retrying
18.1-18.7	Territory Localization recommendations

Deleted Items:

1.3.1	#/ and #8 were deleted.
12.3.4	This item from ver 1.2 has been deleted.
12.8.7	This item from ver 1.2 has been deleted.
12.8.8	This item from ver 1.2 has been deleted.
12.8.10	This item from ver 1.2 has been deleted.
12.8.11	This item from ver 1.2 has been deleted.

Substantially Modified Items:

Cover	Modified to add document release date and effective date information.
2.1.4	Information on the pause time between tracks has been corrected.

3.3 Description of "SIPS-xxxxx" has been changed.

10.8, 10.8.1 These items from ver 1.2 were moved to section 18.0 (SCEA/SCEE only) in ver 1.3.

20.3 This item from ver 1.2 is now item 8.1 in ver 1.3.

When to Use these Requirements

Please complete the attached Publisher Information Form and Technical Requirements Checklist for each title you are submitting to us. Prior to completing the Form, please confirm that you have the latest version of this Requirements Checklist by contacting your SCEI/SCEA/SCEE representative.

Completing the Checklist

Most sections of the Checklist begin with questions to determine whether or not a given requirement applies to the master discs of the title you are submitting to us.

If you mark a section as "Applicable" to your title, then you must meet all requirements stated in that section; otherwise you can skip to the next section.

NOTE: If you do not comply with all of the stated technical requirements, this may delay the testing cycle and approval of your title.

Your submitted title should also meet all of the requirements presented to you within any documents supplied by your account executive, or posted on the BBS, website, etc.

Master Disc Version Numbering System

To ensure accurate tracking of all titles, SCEA and SCEE require the use of the Master Disc Version Numbering System outlined below for all Master Disc submissions. SCEI does not require this.

The version number created using this system should be used whenever you refer to the version number of a product on all paperwork and discs

The Version Number for any Master Disc submission comprises two parts - M.N where M=the Major Version and N=the Minor Version. The Version Number is assigned as follows:

Version Description
0.1, 0.2, 0.3, etc., pre-master discs
1.0 first set of master discs

2.0, 3.0, 4.0 etc. subsequent sets of re-mastered discs

Examples:

The first pre-master submission (such as for a standards check) would be Version 0.1.

The first master submission (for Approval to Manufacture black discs) would be Version 1.0.

A re-submission (such as for Approval to Manufacture black discs after failing QA, or for bug corrections) would be Version 1.1.

A re-master (for subsequent manufacturing of a title due to a running change in the software code or product recall) would be Version 2.0.

Publisher and Software Information Form

We, the publisher of this title, confirm that we have read and completed this Technical Requirements Checklist and that our submission disc(s) completely meet these requirements.

Date of this submission:	 	
Name of Title:	 	
Product Code: (as described in section 3.3)	 	
Master Disc Version: (as described on previous page)		
Creation Date: (as described in section 3.4)	 	
Name of Publisher:	 	
Name of person in charge of this submission:		
Signature:	 	
Title:		
Phone:	 	
Fax:		

Mastering Checklist

1.0 Basic Mastering Rules

1.1 Required: All submission discs contain exactly the same data.

To avoid confusion, we compare bit images of all submitted discs on receipt.

Please ensure that file creation dates for all submissions are identical. Note that in some mastering environments, such as the NEWS environment, different creation dates can easily occur when using several CD-Writers.

In the case of duplicated discs, some information such as master disc IDs cannot be duplicated. Therefore, the masters to be verified should be created directly from the hard disc using CD-ROM Generator.

SCEL

Three verified masters required. Duplication is acceptable for the five remaining discs.

SCFA

Four verified masters required. Duplication is NOT acceptable for any of the nine discs.

SCFF

Three verified masters required. Duplication is NOT acceptable for any of the eight discs.

1.2 Disc Duplication Method (SCEI only)

(Please mark A or B below)

- A) Not applicable. (All of the submitted discs are created directly from the hard disk using CD-ROM Generator software and the CDW 900E or 921S; skip to section 1.3).
- B) Applicable. (This submission includes both verified master discs and duplicated discs; complete this section).
- 1.2.1

 Required: Discs are duplicated using Hoei Sangyo Corporation products (such as SR-4400.)

Please make sure that disc duplication is carried out using Hoei Sangyo Corporation products (SR-4400, etc.) Contact your SCEI/SCEA/SCEE representative for details.

1.3 Marking the label side of the Master Disc

1.3.1 Required: The following information is written using a soft-tip pen in the upper half of the gold side of the disc.

Nothing is written on the signal side and no adhesive materials such as tape, labels, stickers, etc. are attached to either side of the CD-R.

1) "Title"
Name of title
2) "Licensee Name"
Name of publisher
3) "Ref. No."
Product code

4) "Rec. Date" Master disc creation date 5) "Ver. No." Master disc version

6) Notice of verification (indicate that the disc has been verified, if applicable)

Note that using a hard-tipped pen to write this information may cause the reflective layer of the CD-R to become scratched. Since this can make it impossible for the data on the disc to be read correctly, please use only a soft-tipped pen.

Avoid attaching adhesive items to either the label side or the signal side of the CD-R as this may cause irregular turning and abnormal functioning.

1.3.2 Required: At least three discs (or four for SCEA submissions) are verified and annotated as such on each disc and are created using CD-ROM Generator.

Please verify discs after creation (that is, check that the data written on the CD-Recordable disc is identical to the original data on the hard disk).

Please verify at least three out of the eight discs (or, for SCEA, verify at least four of the nine discs). Make sure that the verified discs can be distinguished from the non-verified ones.

1.3.3 Required: Before creating the master discs and submitting them to SCEI/SCEA/SCEE, make sure that there are no scratches, dust, soiled areas (particularly fingerprints, etc.) or stains on either the label side or the signal side of the

Since CD-R discs are extremely delicate, handle them with care and make sure to check the above points before the master discs are created and submitted.

1.4

Required: This submission uses Sony CD-R71PS recording media.

1.5 Required: Discs have been created under one of the conditions below:

- □ A) Discs are created by CDW-900E with single speed mode.
- □ B) Discs are created by CDU-921S with double speed mode.

Notes on disc creation speed:

- When using the CDW-900E, single-speed mode creates discs with lower error rates.
- When using the CDU-921S, double-speed mode creates discs with lower error rates

Other disc creation notes:

- For CD-Writer, the use of a dedicated power outlet is recommended.
- Use a PC in a stand-alone environment (no network connection) to create Write-once discs.
- Please do not create Write-once discs while running any type of screen saver.
- Please use files on local hard disk(s) as the source files, not network files.

2.0 CD-ROM Regulation

2.1 General CD-ROM Regulation

2.1.1

Required: All Program Data (excluding CD-DA data) must be contained on track one.

This is due to ISO-9660 standards.

2.1.2

Required: Total data length (total time of all tracks combined, including CD-DA data) must be more than one minute.

This is due to Red Book standards.

IMPORTANT: Your software title must also conform to section four of the TRC which requires that the total data length be more than three minutes.

2.1.3

Required: The length of each track is greater than four seconds.

This is due to Red Book standards.

The pause time should not be included when calculating track length. It is recommended that the length of each track be more than 4.5 seconds.

2.1.4

Required: Pause time between all tracks must be two or more seconds.

This follows Red Book standards and is the default setup for the CD-ROM Generator software.

2.2 Noise on CD-DA tracks

(Please mark A or B below)

- A) Not applicable. (This title does not utilize CD-DA data or the CD-DA data has been checked and no unintended sounds, such as
 "clicks", "pops", or white noise are present; skip to section 3.0.)
- □ B) Applicable. (This title has been checked and it has been confirmed that the CD-DA data contains unintended sounds; complete this section.)

It is highly recommended that no noise be put in the CD-DA data.

Note that when converting sound files with the Macintosh RAW2DA tool, the input data must be in Sound Designer II format. If you use AIFF format, some noise might appear before and after the converted sound data. Also, when transferring data from Macintosh to PC, do not choose MacBinary format. Doing so sometimes changes the resource part into noise.

3.0 IDs for Master Disc Input on CD-ROM Generator

Please be certain that your license file (LICENSE?.DAT) is the latest version. Some early versions of LICENSEA.DAT and LICENSEE.DAT that were available at product launch can no longer be used.

SCEI:

License data file: (LICENSEJ.DAT) for SCEI market.

SCEA:

License data file: (LICENSEA.DAT) for SCEA market.

SCFF

License data file: (LICENSEE.DAT) for SCEE market.

The items mentioned in 3.1 and 3.2 above can be checked by booting the program with the Debugging Station. If it is booted successfully, the licensing screen (black with PlayStation logo) will appear after the white SCE logo.

3.3

Required: In the Master Information dialog box (accessed from the Layout Screen), enter the Product Code assigned by SCEI/SCEA/SCEE for this title into the "Disc Name" field.

The Product Codes for each territory are given below, where "xxxxx" = the numeric part of the Product Code as assigned to your title by SCEI/SCEA/SCEE in the applicable territory:

Product Code	Description
SLPS-xxxxx	for 3rd party published software for SCEI territory
SCPS-xxxxx	for SCEI published software for SCEI territory
SIPS-xxxxx	for SCEI published software for SCEI territory
SLUS-xxxxx	for licensed software for SCEA territory
SCUS-xxxxx	for SCEA published software for SCEA territory
SLES-xxxxx	for 3rd party published software for SCEE territory
SCES-xxxxx	for SCEE published software for SCEE territory

Note that special versions such as demo versions should have the individual product code.

The creation date must be the same as the master disc burn date. If discs are burnt over two or more days, the burn date must be the same.

- 3.6
 Required: In the Master Information dialog box (accessed from the Layout Mode screen), enter the Publisher's name into the "Producer Name" field.

"J" for SCEI market

"A" for SCEA market

"E" for SCEE market

Note that this information is not stored when the .CCS file is saved and must be re-entered every time the CD-ROM Generator (prior to version 1.3) is used.

The information required in paragraphs 3.3 - 3.7 can be input in the window that appears when you click the button named "Master", located in the bottom-right corner of the Layout Mode screen.

- 3.8

 Required: All CD-ROM Generator fields not specified in requirements 3.1 to 3.7 above (inclusive) are not required for the generation of PlayStation masters, and must be left blank (unfilled).
- 3.9 Required: The disc has been checked using ID-CHECKER (M-CHECK.exe).

ID-CHECKER (M-CHECK.exe) can verify whether 3.3 - 3.7 (above) have been correctly written onto the disc or not. This check can be performed on a Windows PC connected to a CDW-900E or CDU-921S into which the disc to be checked has been inserted.

Please ensure that the latest version of the file is used.

SCFI:

Master Disc Check Program MCHECK.EXE ver 1.20 (supports CDW-900E and CDU-921S) and ver. 1.00 (supports only CDW-900E) are located at the SCE-NET Web Site: https://sce-net.scei.co.jp or at the BBS site.

SCEA:

To download M-CHECK.EXE for the CDW-900E only or to download M-CHECK.EXE for both the CDW-900E and CDU-921S, go to the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev.

SCEE:

M-CHECK is located in the "CD ROM Writer" file area as MCHECK.ZIP on the Developer Support Web Site at https://www-s.playstation.co.uk/

4.0 Special Notes on Creating CD-ROM Discs

4.1

Required: The title does not seek within the last three minutes of the written area of the disc.

This refers to the extreme outside edge of the written area of the disc, including CD-DA; not the extreme outside edge of the disc itself. For example, if there are 10 minutes of data on the disc, the last three minutes are the 8, 9 and 10 minute areas.

Note that currently, seeking in the last three minutes of the written area of a PlayStation disc may be unsuccessful.

(Please mark A or B below)

- A) Not applicable. (Dummy data has been burned into the last three minutes of the written area of the disc; skip to section 4.2).
- □ B) Applicable. (One of the alternative solutions listed below has been used; complete this section).

(Please mark B1, B2 or B3 below)

- ☐ B1) The length of the last CD-DA data is greater than three minutes and there is no data seek within the last three minutes of the CD-DA data.
- □ B2) The length of the last movie or other data on the disc is more than three minutes and is only read continuously beginning-to-end (there is no seek within the last three minutes).
- ☐ B3) The total length of the last file located at the edge of the written data area and the dummy data located after this file is more than 3 minutes and there is no seek within the last three minutes

Figure 4.1: Solutions to "seek problem" in last three minutes of PlayStation data.

Α	Any Data		Dummy data in last 3 minutes	
B1	CD-DA data of more than 3 m	inutes with	no seek in last three minutes	
B2	Movies,etc. of more than 3 mi	nutes with	no seek in last three minutes	
		T		
B3	Any Data	Last	Data File	Dummy Data

4.2

Required: Files which are not used by the application are not included on the disc.

Example: Do not use data and files such as Windows wallpaper, screensavers, etc., which are designed for use on other platforms.

5.0 Aging and Boot Tests

An "aging" test is a test to find out whether or not the title hangs or malfunctions when it is left running for eight hours in the following conditions:

- 5.3

 Required: This title continues to function correctly after aging tests of eight hours have been performed in all areas of this title where a consumer could reasonably be expected to leave this title unattended for extended periods (e.g. menu screens, save game screens, etc.)
- 5.5

 Required: The boot tests and aging tests described in 5.1-5.4 are performed using the following debugging stations:

SCFI

DTL-H1000 or DTL-H1100 (at least one required) and DTL-H1200 (required).

SCEA

DTL-H1001 or DTL-H1101 (at least one required) and DTL-H1201 (required).

SCEE

DTL-H1002 or DTL-H1102 (at least one required) and DTL-H1202 (required).

Text and Graphics Checklist

6.0	So	ony Corporate Logo, PlayStation Logo and other corporate trademarks
6.1		Required: The four-letter "SONY" logotype is not used within this title (software and packaging) except where this logo appears on a digitized image of the PlayStation console or on a licensed peripheral by SCEI/SCEA/SCEE.
6.2		Required: The PlayStation logo, or logotype and the SCE logo is not used within this title software except where this logo appears on a digitized image of the PlayStation console or a licensed peripheral by SCEI/SCEA/SCEE.
6.3		Required: In the application, the design of the PlayStation console and any PlayStation peripherals should not be used or shown unless necessary, for example, to explain software operation. Any deformation or characterization of the console or peripheral designs is strictly prohibited.
6.4		Required: The PlayStation logo described in the exceptions to 6.1 and 6.2 above (seen in digitized images of the PlayStation console and peripherals) is not defaced or blurred and the design/inscription on the face is correct. If such problems exist with the PlayStation logo within the digitized image, please remove the logo from the image.
6.5		Required: No effects or fade out processes are carried out on the PlayStation logo during the booting procedure. The screen is cleared instantaneously when shifting to the section in the software which displays the image (when changing resolution, etc.)
6.6		Required: Other corporate logos or properties are not used in the title without permission of the property holders.
6.7		Required: Other corporate logos, properties, or trademarks cannot be displayed on any image of the PlayStation console or any licensed peripheral by SCEI/SCEA/SCEE.
6.8		Required: The trailing note of the PlayStation logo sound played at start-up must terminate at the same time the logo is cleared.

7.0 PlayStation Component Naming Conventions

	English	French	German
	PlayStation	PlayStation	PlayStation
General PlayStation	console	console	Konsole
component names	connector port section	section des connecteurs	Anschlüß
	controller port	port de mannete	Controller-Anschlüß
	controller port 1	porte de manette N°1	Controller-Anschlüß 1
	controller port 2	port de manette N°2	Controller-Anschlüß 2
	Memory Card slot	fente pour carte mémoire	Memory Card Steckplatz
	Memory Card slot 1	fente pour carte mémoire N°1	Memory Card Steckplatz 1
	Memory Card slot 2	fente pour carte mémoire N°2	Memory Card Steckplatz 2
	right audio output	sortie audio droite	Rechter Audioausgang
	left audio output	sortie audio gauche	Linker Audioausgang
	·		
	video output	sortie vidéo	Videoausgang
	PARALLEL I/O port	port PARALLEL I/O	PARALLEL I/O Anschluß
	SERIAL I/O port	port SERIAL I/O	SERIAL I/O Anschluß
	AV MULTI OUT connector S video output connector	connecteur AV MULTIOUT connecteur de sortie S-VIDEO	AV MULTI OUT Anschluß S-VIDEO-Anschluß
	· ·		RGB-Anschluß
	RGB output connector	connecteur de sortie RVB	
	video output jack	prise de sortie vidéo	Videoeingangsstecker
	POWER button	bouton POWER	POWER-Taste
	POWER indicator	indicateur de mise sous tension	Kontrolleuchte
	RESET button	bouton RESET	RESET-Taste
	OPEN button	bouton OPEN	OPEN-Taste
	disc cover	couvercle du compartiment à disque	CD-Fach
Controller component	directional button	touche directionnelle	Richtungstaste
names	SELECT button	touche SELECT	SELECT-Taste
	START button	touche START	START-Taste
	Δ button	touche Δ	Δ-Taste
	☐ button O button	touche O	☐ -Taste O-Taste
	X button	touche X	X-Taste
	L1 button	touche L1	L1-Taste
	L2 button	touche L2	L2-Taste
	L3 button	touche L3	L3-Taste
	R1 button	touche R1	R1-Taste
	R2 button	touche R2	R2-Taste
	R3 button	touche R3	R3-Taste
	right button	touche droite	Rechter-Taste
	left button	touche gauche	Linker-Taste
	right stick	joystick droite	Rechter Stick
	left stick analog mode switch	joystick gauche Interrupteur mode analogique	Linker Stick Analog-Modus Schalter
	LED	voyant	LED
	controller port*-A	port de manette*-A	Controller-Anschlüß*-A
	controller port*-B	port de manette*-B	Controller-Anschlüß*-B
	controller port*-C	port de manette*-C	Controller-Anschlüß*-C
	controller port*-D	port de manette*-D	Controller-Anschlüß*-D
	Memory Card slot*-A	fente pour carte mémoire*-A	Memory Card Steckplatz*-A
	Memory Card slot*-B	fente pour carte mémoire*-B	Memory Card Steckplatz*-B
	Memory Card slot*-C	fente pour carte mémoire*-C	Memory Card Steckplatz*-C
	Memory Card slot*-D	fente pour carte mémoire*-D	Memory Card Steckplatz*-D

Peripheral names	Controller	Manette	Controller
	Memory Card	Carte mémoire	Memory Card
	Mouse	Souris	Maus
	Link Cable	Câble de liaison	Link Kabel
	Multi Tap	Connecteur multi-manettes	Multi Tap
	Analog Joystick	Joystick Analogique	Analog Joystick
	Analog Controller (DUAL SHOCK)	Manette Analogique (DUAL SHOCK)	Analog Controller (DUAL SHOCK)
	Analog Controller	Manette Analogique	Analog Controller
	Euro-AV Cable	Câble Euro-AV	Euro-AV-Kabel
	S Video Cable	Câble S VIDEO	S-VIDEO-Kabel
	AV Cable	Câble AV	AV-Kabel
	AV Adaptor	Adaptateur AV	AV-Adapter
	RFU Adaptor	Adaptateur RFU	RF Adapter
	AC Power Cord	Cordon d'alimentation	Netzkabel
Names of discs in multi-disc	DISC 1	DISQUE 1	CD 1
applications	DISC 2	DISQUE 2	CD 2
	DISC 3	DISQUE 3	CD 3
	DISC 4	DISQUE 4	CD 4
Instruction manual	instruction manual	mode d'emploi	Bedienungsanleitung
Users Manual	software manual	manuel du logiciel	Software-Handbuch

Please refer to Appendix A for terms in other European languages and Appendix B for terms in Asian languages.

For the part name of each peripheral, please refer to the explanation in the instruction manual for that peripheral.

8.0 Text and Graphics Display

- Recommended: Text and essential display items are not placed close to display edges
 Due to variations in television displays, critical application text and graphics might be cut-off on some displays.
- 8.2 Language selection (Only for titles in SCEA/SCEE territories)

(Please mark A or B below)

- □ A) Not applicable. (This title does not include a language selection option; skip to section 9).
- □ B) Applicable. (This title includes a language selection option).

^{*} When referring to a Multi Tap connected to Controller port 1, the names of each Controller port on the Multi Tap are 1-A, 1-B, 1-C and 1-D. When referring to a Multi Tap connected to Controller port 2, the names of each Controller port on the Multi Tap are 2-A, 2-B, 2-C and 2-D.

Peripheral Handling Checklist

9.0	eneral		
9.1		Required: This title functions correctly when any licensed peripherals are added or removed at any time after boot.	
9.2		en supporting multiple licensed peripherals (such as both controller and mouse etc.) ase mark A or B below) A) Not applicable. (This title does not support multiple peripherals; skip to section 10). B) Applicable. (This title supports multiple peripherals; complete this section).	
9.2.1		☐ Required: Peripherals may be added or removed at anytime after boot without affecting the title.	
10.0	Pe	eripheral Handling	
10.1		Required: This title continues to function correctly when three or more of the directional buttons on any licensed controller are pressed simultaneously. After using the control device for an excessively long time, the props to support the buttons can become worn away. In such cases the controller may behave as if three or more directional buttons have been pressed simultaneously.	
10.2		Required: Even if unused buttons are pressed, this title continues to function correctly.	
10.3		Required: This title correctly recognizes any licensed controller even when it is inserted at any time after boot.	
10.4		Required: This title does not hang or otherwise malfunction when any licensed controller is connected or disconnected at a time after boot.	
10.5		Required: This title continues to function correctly with any licensed controllers fully supported by the title.	
10.6		Required: The title functions correctly (i.e. does not hang or otherwise malfunction) even after mode change (i.e. digital to analog or analog to digital) with multiple-mode controllers, such as the Analog Joystick.	
10.7		Required: A buffer of 34 bytes is reserved for any licensed controller.	

11.0 Specific Peripherals

11.1 Multi Tap

(Please mark A or B below)

- ☐ A) Not applicable. (This title does not support the Multi Tap; skip to 11.2)
- □ B) Applicable. (This title supports the Multi Tap; complete this section)
- 11.1.1

 Required: This title does not hang or otherwise malfunction even under the following circumstances:
 - Extra controllers or Memory Cards that are not used in the title are connected to the Multi Tap.
 - Controllers in use are unintentionally removed from the Multi Tap.

For example, if users 1, 2, 3 & 4 are controlled by peripherals in Controller ports 1-A, 1-B, 1-C & 1-D, users 1, 3 & 4 must continue to function normally if the peripheral in Controller port 1-B is removed.

Recommended: The user is offered the opportunity to reinsert the Controller(s) or reallocate the Controller(s) via a "settings display" and continue.

- 11.1.3

 Required: This title continues to function correctly when the Multi Tap is connected or removed anytime after boot.
- 11.1.4

 Required: Use either libtap.lib ver. 3.4 or later or libpad.lib for the Multi Tap library.

SCEI:

The newest versions of libtap.lib and libpad.lib are located at the SCE-NET Web Site https://sce-net.scei.co.jp/ or at the BBS Site.

SCEA:

The latest version of the Multi Tap and Controller libraries (libtap.lib and libpad.lib) are contained in the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev.

SCEE:

Available as "libtap.lib" and "libpad.lib" in the latest version of the PlayStation libraries in the "Developer Area" of the SCEE Web Site at https://www-s.playstation.co.uk/ and on the latest Developer Support CD-ROM.

11.1.5 Required: This title adheres to the correct Multi Tap connection and usage methods and these are documented in the software manual.

The Multi Tap must function correctly when connected to either Controller port 2 (with a control device in Controller port 1) or Controller port 1 alone. The explanation of the connection and usage must be shown in the software manual.

There is a possibility that the console will not recognize a Multi Tap unless a Controller is connected to Controller port 1-A or 2-A on the Multi Tap during the connection. In order to avoid this problem, a "Caution Clause" must be in the software manual.

For example:

"When using the Multi Tap, at least one controller must be connected to Controller port 1-A or 2-A".

Recommended location of the Caution Clause:

Include the Caution Clause on the page explaining Multi Tap usage or the page explaining Controller usage in the software manual.

11.2 Analog Joystick

(Please mark A or B below)

- □ A) Not applicable. (This title does not use the Analog Joystick; skip to 11.3.)
- □ B) Applicable. (This title uses the Analog Joystick; complete this section.)
- 11.2.1

 Required: Calibration Mode for center position correction of left/right sticks is present.

Center position detection and correction of left/right sticks.

Obtain the value of each stick with the sticks released from the user's hands (in neutral position). This value should be used as the center position value throughout the title.

Recommended: set up of idle movement, set up of idle sensitivity, etc.

Note: When using the Analog Joystick in analog input mode imitating digital, please provide Center position calibration or please set the value of 128 ± 32 as OFF and other values as ON.

Movable range detection and correction of left/right sticks

- 1) Obtain the value of each stick where the sticks are moved as far as possible to each direction.
- 2) With these values and the values of the center position obtained as described in 11.2.1, obtain the absolute values of difference between the center position values and the minimum, maximum values in the movable range of each stick.
- 3) Use the smaller values of the absolute values as the movable range, and the larger value should be corrected.

11.3 neGcon®

(Please mark A or B below)

- ☐ A) Not applicable. (This title does not use the neGcon® controller; skip to 11.4.)
- □ B) Applicable. (This title uses the neGcon® controller; complete this section.)

11.3.1 Required: Calibration mode for center position correction of twist is present.

Center position detection and correction of twist: obtain the value of twist with the neGcon® released from the user's hand (in the neutral position). This value should be used as the center position value throughout the title.

Recommended: detection of maximum value of twist, set up of idle position range, set up of sensitivity, A, B, L button detection etc.)

SCFI:

For details please refer to "Technical Information" at SCE-NET Web Site https://sce-net.scei.co.jp/ or "neGcon specifications" on the bulletin board at the BBS Site.

SCEA:

Refer to the Technical Note titled "neGcon" in the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev. This Technical Note is also available in Acrobat format on the Technical Reference CD release 1.9 and later in the Technical Notes directory.

SCEE:

controller.zip In the "samples" section of the Developer area of the SCEE Web Site at

https://www-s.playstation.co.uk/ and on the latest Developer Support CD-ROM.

devguide.zip In the "technotes" section of the Developer area of the SCEE Web Site at

https://www-s.playstation.co.uk/ and on the latest Developer Support CD-ROM.

11.3.2 This title requires a maximum twist value of larger than +/- 45 degrees.

(Please mark A or B below)

- □ A) Not applicable. (Skip to 11.4.)
- □ B) Applicable.

11.4 Volume Controller

(Please mark A or B below)

- □ A) Not applicable. (This title does not use the Volume Controller; skip to 11.5.)
- □ B) Applicable. (This title uses the Volume; complete this section.)

11.4.1 Required: Calibration mode for the detection of maximum value for turning in each left/right direction is present. Movable range detection and correction of the dial.

Obtain the dial values with the dial turned as far as possible to the left and right. These values should be used as the maximum values for turning in each direction throughout the title.

COLI	
SUEI	

For details please refer to "Technical Information" at the SCE-NET Web Site https://sce-net.scei.co.jp/ or "Volume controller specifications" on the bulletin board of the BBS Site.

SCEA:

Refer to the Technical Note titled "Volume Controller" in the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev. This Technical Note is also available in Acrobat format on the Technical Reference CD release 1.9 and later in the Technical Notes directory.

SCFF

controller.zip In the "samples" section of the Developer area of the SCEE Web Site at

https://www-s.playstation.co.uk/ and on the latest Developer Support CD-ROM.

devguide.zip In the "technotes" section of the Developer area of the SCEE Web Site at

https://www-s.playstation.co.uk/ and on the latest Developer Support CD-ROM.

11.5 Pachinko Controller (e.g. SANKYO F.F, N.ASUKA)

(Please mark A or B below)

- ☐ A) Not applicable. (This title does not use the Pachinko Controller; skip to 11.6.)
- □ B) Applicable. (This title uses the Pachinko Controller; complete this section.)

Obtain the handle value when the handle is released from the user's hands (in the neutral position). This value should be used as the 0 position value throughout the title.

11.5.2

Required: Calibration mode for the maximum position detection of the handle is present.

Maximum position detection and correction of the handle

Obtain the handle value with the handle twisted as far as possible to the right. This value should be used as the maximum position value throughout the title.

11.6 Link Cable

(Please mark A or B below)

- ☐ A) Not applicable. (This title does not use the Link Cable; skip to 11.7.)
- B) Applicable. (This title uses the Link Cable; complete this section.)
- 11.6.1

 Required: This title does not hang or otherwise malfunction if the Link Cable is removed during data transmission.

Recommended: After a link error, this title displays a message such as "Link Broken".

Recommended: After a link error, this title displays a message such as "Link Broken".

11.7 Mouse

(Please mark A or B below)

- □ A) Not applicable. (This title does not use the Mouse; skip to section 11.8.)
- □ B) Applicable. (This title uses the Mouse.)

11.8 Non-synchronized Lightgun (e.g.HYPER BLASTER®)

(Please mark A or B below)

- □ A) Not applicable. (This title does not use a non-synchronized lightgun; skip to section 11.9)
- $\ \square$ B) Applicable. (This title uses a non-synchronized lightgun; complete this section.)

11.9 Synchronized Lightgun (e.g. Guncon™, G-Con45™)

(Please mark A or B below)

- □ A) Not applicable. (This title does not use a synchronized lightgun. Skip to section 11.10)
- $\hfill \Box$ B) Applicable. (This title uses a synchronized lightgun; complete this section)

11.9.1 Required: Center position calibration mode is present. 11.10 Analog Controller (DUAL SHOCK) (Please mark A or B below) Not applicable. (This title does not use the Analog Controller; skip to section 12.0) A) Applicable. (This title uses the left/right stick, L3/R3 button or vibration functions of the Analog Controller (DUAL SHOCK); complete this section) 11.10.1 **Calibration Mode** □ Required: There is no calibration screen (function) for center position calibration and detection of maximum travel value. Since the Analog Controller (DUAL SHOCK) has a built-in auto-calibration function for center position calibration and maximum travel value detection, an application level calibration screen (function) for these two (center position calibration and maximum travel value detection) must not be implemented. The center position calibration mentioned above is to perform calibration using the value obtained when the Analog Controller (DUAL SHOCK) is inserted. Thus the set up of the center idle range can be done by an application. 11.10.2 **Vibration Function** (Please mark either A or B below) □ A) Not applicable. (This title does not use the vibration function; skip to section 11.10.3) B) Applicable. (This title uses the vibration function; complete this section) 11.10.2.1 Required: The user is able to turn the vibration function on and off within the application. Because the main Analog Controller unit itself is not able to turn the vibration function on and off, this function should be added to the application. 11.10.2.2 Required: The vibration function does not vibrate continuously for long periods of time. Please contact your SCEI/SCEA/SCEE representative for the appropriate vibration period. Required: Analog Controller (DUAL SHOCK) initialization is performed following the directions in the 11.10.3 documentation for the Analog Controller (DUAL SHOCK) compatible library (libpad.lib). The Memory Card must be initialized prior to initializing the Analog Controller (DUAL SHOCK). ☐ Required: Whenever referring to the Analog Controller (DUAL SHOCK) in the title or in the instruction manual 11.10.4 accompanying the title, the appropriate naming conventions should be used.

12.0 Memory Card

(Please mark A or B below)

- ☐ A) Not applicable. (This title does not support Memory Cards; skip to section 13.)
- □ B) Applicable. (This title supports Memory Cards; complete this entire section.)

12.1 File name of the Memory Card

12.1.1 Required: The Memory Card file name 12 byte header is input correctly. The file name consists of the Key code (as shown below) plus the Product Code (assigned to your title by SCEI/SCEA/SCEE in the applicable territory).

Following the key code + product code, there is an 8-byte Developer-definable area. Any characters can be used except "?" and "*". ("?" and "*" are recognized as wild cards, so avoid using them.)

Key Code	Product Code	Description
BI	SLPS-xxxxx	for 3rd party published applications for SCEI territory
BI	SCPS-xxxxx	for SCEI published applications for SCEI territory
BI	SIPS-xxxxx	for SCEI published applications for SCEI territory
BA	SLUS-xxxxx	for 3rd party published applications for SCEA territory
BA	SCUS-xxxxx	for SCEA published applications for SCEA territory
BE	SLES-xxxxx	for 3rd party published applications for SCEE territory
BE	SCES-xxxxx	for SCEE published applications for SCEE territory

If one of the following cases applies to your product, please follow the related instructions:

- 1) Besides the regular product, special versions of the product exist (such as a demonstration disc) which allow play in an entry stage or highlighted stage etc.
 - Required: With these versions, use a special version Product Code which is different to the code for a regular product.
- 2) Your title contains multiple discs.
 - □ Required: Use the Product Code corresponding to the first disc of the set.
- 3) You publish multiple variants of a single title (e.g. special editions); one contains only a disc, the others contain a disc and peripheral bundle.
 - Required: Choose one Product Code and use it for the Memory Card file name of all variants in order to maintain compatibility.

12.2	ואוט	olayiii	g the	console Memory Card screen (Icon, title name, etc.)
12.2.1				Required: The saved data icon is displayed as intended by the publisher.
12.2.2				Required: The save title name is displayed as intended by the publisher.
12.2.3				Required: The save title name is saved as intended by the publisher.
12.2.4				Required: The save title name displayed in the console Memory Card screen is identifiable as the save title name displayed in the application.
			Item	s 12.2.5-12.2.7 below concern the title data to be saved to the Memory Card.
12.2.5				Required: Saved data, icons and the save title name can be copied or deleted correctly.
12.2.6				Required: The Pad field (28 byte) following the save title name in the file header is filled with null characters (0x00) only.
			! ! !	The Memory Card can save a title name up to a maximum of 32 characters in length using Shift JIS code. If the save title name is less than 32 characters, use a null character (0x00) at the end or fill the vacant area with blanks (0x8140). Pad field (28 byte) following the name of the title should be filled with null characters (0x00). Only non-Kanji and Kanji Level 1 components of Shift-JIS code can be utilized for the save title name. ASCII code cannot be used because this can cause problems in the display of the application title name in some application Memory Card screens. A function to convert ASCII code to value Shift-JIS code is available (in the "Kanji" sub-directory of the Developer CD).
12.2.7				Required: When multiple save title names with the same name are created, additional information such as "(1)" or "No. 1", should be added to the save title names in order to make them mutually distinguishable (this does not apply when the user is able to input the filename.)
12.3	Size	of th	e file	to be saved to Memory Card (the number of blocks used)
	(Plea	ase ma A)		or B below) size of the file is fixed. (Skip to Section 12.4)
	_	B)		size of the file is variable.
	_	υ,		maximum number of blocks needed by the application for save data should be confirmed in advance in order to avoid a
			shor The exam at the need freel	tage of free blocks. number of Memory Card blocks needed to save data varies depending on how far the application has progressed. For nple, when the user has reached the final stage (eg. stage 20) in a game which requires a maximum of five blocks to save at point, but requires only two blocks to save at the opening of the game, ensure that the maximum number of blocks ded to save the game file data is reserved within the Memory Card in advance (the number of files can be increased
				net. Reserve a fixed 1 file 2 blocks in advance.
12.3.1				Required: The title lets the user know the necessary number of blocks required to save the title before saving or overwriting.
12.3.2				Required: The title has an application based Memory Card screen (In this case, the title also should follow the requirements stated in section 12.8.)
12.3.3				Required: When there is an insufficient number of free blocks, the title is able to delete other saved data on the application Memory Card screen.
12.3.4				Required: Even after entering Save mode, the Memory Card can be removed and/or reinserted. (except when saving has already started).
12.3.5				Required: Even after entering Save mode, the user can cancel at any time (except when saving has already started)
12.4		Req	uired	: 12.5-12.7 below are checked separately within the application.

12.5 The Memory Card can be formatted correctly

12.5.2

12.5.1 Required: Only when the title enters save mode with an unformatted Memory Card should the application automatically proceed to the formatting procedure and execute the save after formatting.

Prevent the user from unintentionally formatting the Memory Card. Do not allow the application to start formatting the Memory Card automatically.

Do not display a "format" option button since this may cause users to inadvertently erase all the existing data. Recommended: To avoid unintentional data erasure, the option not to format is the default formatting option.

□ Required: A prompt such as "Memory Card is unformatted. Do you want to format? Yes? or No?" is displayed.

When "Yes" is chosen, formatting should start. When "No" is chosen, the process should return to the beginning of save mode.

Connection noise, line noise or communication error might cause an already-formatted Memory Card to be regarded as unformatted. To allow the user to double check the Memory Card status, please display a prompt such as the one mentioned above.

Do not use auto-formatting in your title.

12.6 Procedure to be used when there are not enough free blocks

12.6.1 Required: Even in cases where the number of free blocks is equal to the number of blocks required, it can be saved correctly.

The determination whether there are sufficient free blocks in the Memory Card or not can be made by attempting to reserve the required numbers of blocks at that time. If the required number of blocks cannot be reserved, this is determined to be "a shortage of free blocks". Be sure to retry several times.

Alternatively, as another method, the number of free blocks can be calculated from the data size of each file by using firstfile(), nextfile(). In this case, please check all of files.

When determining the blocks available in a Memory Card, please count the number of free blocks, not the number of files. Since some titles require several blocks to save a file, the number of files already saved is not the same as the number of blocks already occupied in the Memory Card.

12.6.3

Required: A message such as "Insufficient free blocks" is displayed.

If there are an insufficient number of free blocks available on the selected Memory Card to save this title, the program must inform the user clearly and the user must be given the following options:

- 1) Display a message such as "Insufficient free blocks" and allow the user to return to the beginning of save mode.
- When the opportunity to delete (or overwrite) any data is given, the application Memory Card screen (which gives the user the option to insert a different Memory Card, update the list of files displayed after swapping Memory Cards, cancel the save, or overwrite a file), must be displayed to prevent the user from inadvertently erasing any data which should not be erased. (See 12.8.)

12.7 The procedure is correct when the Memory Card is NOT inserted into Memory Card slot:

(Please mark A or B below)

 A) A message such as "No Memory Card is inserted in Memory Card slot" is displayed every time the application attempts to access the Memory Card.

Please display a message such as "Memory Card is not inserted into the Memory Card slot" and return to the beginning of save mode.

□ B) When booting a title that automatically saves data to a Memory Card, a message such as "Memory Card is not inserted into the Memory Card slot" is always necessary.

Each time an auto save title is booted, it is necessary both to check whether or not a Memory Card is inserted and to display the message. At any time after boot, it is not necessary to display the message. However, it is still necessary to check whether or not a Memory Card is inserted.

The exception procedures for auto save titles are only in section 12.7. There is no difference between an auto save title and other titles in other sections.

12.8 When creating an application Memory Card screen:

(Please mark A or B below)

□ A) Not applicable. (There is no application Memory Card screen; skip to section 12.9)

		B)	Applicable. (The save title name, icon and number of blocks used to save data from other titles are displayed; complete this section)
			It is possible to display the title name in all Shift-JIS codes and, for reasons of backwards compatibility only, all ASCII codes, or in a combination of both. It must also be possible to display titles for the Japanese market in Kanji Level 1.
12.8.1			□ Required: The title does not have a "Delete All" function which can delete all the saved data in the Memory Card as an application Memory Card screen function.
			For the user, the "Delete All" function is equivalent to Memory Card formatting. In order to prevent the user from deleting all the saved data within the Memory Card with a "Delete All" function, do not provide such a function in the application.
12.9	Loa	ding	
12.9.1			□ Required: No write processing is performed when loading data from the Memory Card flow. Do not format the Memory Card if it is not initialized at loading and do not carry out maintenance on the Memory Card while loading.
12.9.2			□ Required: Allow the Memory Card to be inserted/removed up until immediately before the load flow.
12.9.3			□ Required: The Memory Card slot being used when both Memory Card slot 1 and 2 are supported can be changed prior to load during Memory Card insertion/removal or replacement.
12.10	Pro	blems	with some Memory Cards
			n confirmed that some Memory Cards which used libraries Ver.3.5 or older do not function correctly when access to the Memory empted before the program is ready to control the controller.
	(Ple □	ase ma A)	rk A or B) libcard.lib Ver.3.6 or later or libmcrd is utilized.
			In library Ver.3.6 or later, the problem was solved in the library.
		B)	libcard.lib Ver.3.5 or older is utilized.
			Before accessing the Memory Card, make sure that the program is ready to control the controller.
			InitCARD() should be 1.
			Note that titles which support Multi Tap or gun controller must follow different specifications. Please refer to the following for details.
			SCEI: For details, refer to "Technical Information" at SCE-NET website https://sce-net.scei.co.jp/ or "Problems with some
			cards" on the bulletin board at the BBS site.
			SCEA: Refer to the Technical Note titled "Regarding the trouble some memory card" in the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev. This Technical Note is also available in Acrobat format on the Technical Reference CD release 1.9 and later in the Technical Notes directory.
			SCEE: Refer to DEVGUIDE.ZIP in "PlayStation Documentation" file area of the SCEE Web Site at https://www-s. playstation. co.uk/, and on the "Developer CD-ROM Version 1.0 or later, or the technical note "Regarding problems with some memory cards" on the Technical Reference CD Release 1.9 and later in the Technical notes directory.
12.11	Apr	olicatio	on Reset Function
	Ana		tion reset function is a function in which the user uses a controller to forcibly switch to another process when the application is
	•		ark A or B below)
		A)	Not applicable. (Application reset function is not present, skip to section 12.12)
		B)	Applicable. (Application reset function is present, complete this section)
12.11.1			□ Required: The application reset function is disabled when saving to the Memory Card.
			When an application reset function is present and is used during a save procedure, normal access to the Memory Card cannot be guaranteed.

12.12	Other pro	cedu	ires		
12.12.1			rein	sertin	: Save, load, and overwrite of saved data can be performed correctly even after removing and a Memory Card or inserting a different Memory Card into a Memory Card slot. it is not necessary for the software to handle errors after saves, loads or overwrites have started.
12.12.2				uired boo	: Save, load, and overwrite of saved data can be performed correctly even if the Memory Card is inserted ting.
			Plea	se do	not design your title in such a way that it does not allow the Memory Card to be inserted after booting.
12.12.3					Every time before saving or loading the application checks that the Memory Card is in the Memory Card formatted and, if saving, that there are enough free blocks to perform a save.
			appli How	icatio	if the user has already performed a save or load so that the application knows the Memory Card is present, the n does not have to perform these checks. if the user has removed a Memory Card or inserted a new Memory Card, the application must perform these jain.
12.12.4					: When the title determines that loading, saving or formatting has failed or that the saved data has been , it attempts several retries and, if it continues to fail, it then displays an appropriate message.
12.12.5			Req	uired	: Use clear messages to explain all aspects of Memory Card operation.
			not u	ıse m	ple, "There is no Memory Card in Memory Card slot 1" or "Memory Card in Memory Card slot 1 is not formatted". Do ixed messages such as "Memory Card in Memory Card slot 1 is not formatted or there is not enough space on the card to save your game."
12.12.6		Card	d slot	s (als	accept Memory Cards in both Memory Card slots or a single Memory Card in either one of the two Memory o in case of Multi Tap titles):
		(Plea	ase ma A)		or B below) applicable. (This title uses only Memory Card slot 1; skip to 12.12.7).
			B)	Appl secti	icable. (The user can choose one of two Memory Card slots to be used to save or load this title; complete this ion.)
12.12.6.1					Required: The user is able to select the Memory Card slot to be used when saving and loading. The application does not make a decision automatically.
					Avoid situations in which data is automatically saved to the Memory Card in Memory Card slot 2 because the Memory Card in Memory Card slot 1 is not formatted (it is either missing or cannot be used for some reason). This is because it can become quite complicated to determine when data should be saved to the Memory Card in Memory Card slot 2 rather than the Memory Card in Memory Card slot 1 and programming mistakes can easily occur. Therefore, prepare the saving flow for one Memory Card only and allow the user to decide to which Memory Card data should be saved.
12.12.6.2					Required: When displaying messages regarding Memory Card operation, clearly indicate which Memory Card the message relates to.
12.12.7		Initi	alizati	ion of	f the Controller is performed using libpad.lib functions:
		(Plea	ase ma A)		or B below) iicable. (This title uses libpad.lib functions; skip to 12.12.8)
			B)	Not a	applicable. (This title uses functions other than libpad.lib functions; complete this section)
12.12.7.1					Required: Initialization of the Controller is performed before initializing the Memory Card.
					For details, please see:
					SCEI: For details, refer to "Technical Information" at SCE-NET website https://sce-net.scei.co.jp/ or "Controller/Memory Card initialization procedure" on the bulletin board at the BBS site.

SCEA:

Refer to the Technical Note titled "Controller/Memory Card Initialization" in the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev. This Technical Note is also available in Acrobat format on the Technical Reference CD release 1.9 and later in the Technical Notes directory.

SCEE:

Refer to DEVGUIDE.ZIP in "PlayStation Documentation" file area of the SCEE Web Site at https://www-s. playstation. co.uk/, and on the "Developer CD-ROM Version 1.0 or later, or the technical note "Controller/Memory Card Initialization" on the Technical Reference CD Release 1.9 and later in the Technical notes directory.

12.12.8 Recommended: Since it is possible to destroy data during saving if the PlayStation is reset, power is turned off, or the Memory Card is removed, display an appropriate message to warn the user about this.

Important: If your title uses any flow other than that described in Section 12.0 Memory Card, please contact your account executive or the Sony Computer Entertainment test department for your territory.

Programming Checklist

13.0 Handling CD-ROM Read Errors at any Time after Boot

13.1 ☐ Required: This title uses Runtime Library Version 3.4 or higher.

SCFI

The newest version library can be downloaded at "Download" at the SCE-NET Web Site https://sce-net.scei.co.jp/ or from "Software library" at the BBS Site.

SCEA:

SCEA recommends use of Runtime Library version 3.4 or later. The latest libraries are available on the latest release of the Developer Support Programmer Tools CD. The libraries can also be downloaded from the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev.

SCEE:

SCEE recommends use of Runtime Library version 3.4 or later. The latest libraries are available on the latest release of the Developer Support Programmer Tools CD. The libraries can also be downloaded from the "Libraries" Files area of the Developer Support Web Site at https://www-s.playstation.co.uk/

- 13.2

 Required: Error flags are checked for every CD access call that is made.
- 13.3

 Required: The program is designed to repeatedly retry on a failed CD Seek.

Recommended: Displaying an appropriate message while retrying.

13.4

Required: The program is designed to repeatedly retry on a failed CD Read.

Recommended: Displaying an appropriate message while retrying.

14.0 Naming the Boot File

Please name your boot file based on the following rule. Put the SYSTEM.CNF;1 in the root directory, so that the file can transmit the boot file name change to the OS. This is to prevent piracy.

If your title falls under one of the categories below, please follow the instructions indicated.

- Case 1: If you publish two SKUs where one contains only a disc and the other contains the disc and a peripheral bundle, please choose one of the assigned product codes and use that through the title as the boot file name.
- Case 2: If your title uses multiple discs, please make sure that each disc has a unique boot file name that corresponds to the product code allocated to each individual disc.

Boot File Naming Rule

Assuming the Product Code for a title is XXXX-AAAAA, put a full stop (period) between the 8th and 9th characters and an underscore between the two sections in place of the hyphen. The final boot file name should be XXXX_AAA.AA;1

Example:

Product Code = SLES-12345 Boot filename = SLES_123.45;1

Contents of SYSTEM.CNF;1

Assuming the boot file is XXXX_AAAAA,

BOOT = cdrom:\XXXX_AAA.AA;1
TCB = 4

EVENT = 10 STACK = 801fff00 Note: Be sure to use the complete file pathname

15.0 Compatibility with Revision-C Hardware (DTL-H1200 series)

- 15.2 Recommended: This title does not use Movelmage() with a rectangular area with width less than 16-dots.

 Usage of a rectangular area width less than 16-dots when using Movelmage() will adversely impact drawing performance.

16.0 Multi-disc Titles

16.1 General requirements for multi-disc titles

(Please mark A or B below)

- □ A) Not applicable. (This title is not multi-disc; skip to 17.0).
- □ B) Applicable. (This is a multi-disc title; complete this section).
- 16.1.2 Required: If an incorrect disc, such as a non-PlayStation disc or a disc from another PlayStation game title, is inserted during disc swapping, a message stating either "Incorrect disc inserted" or "Incorrect disc detected; insert correct disc" should be displayed
- 16.2 When exchanging discs on memory (i.e., when exchanging discs without pressing the RESET button).

(Please mark A or B below)

- □ A) Not applicable. (This title does not support exchange of discs on memory; skip to 17.0)
- □ B) Applicable. (This title allows exchange of discs on memory; complete this section)
- 16.2.1 Required: This title observes the rules mentioned in the documents described below.

SCEI:

For details please refer to "Technical Information" at SCE-NET Web Site https://sce-net.scei.co.jp/ or "Requirements for Multiple CD titles" on the bulletin board at the BBS Site.

SCEA:

Refer to the Technical Note titled "Requirements on Multiple CD Titles" in the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev. This Technical Note is also available in Acrobat format on the Technical Reference CD release 1.9 and later in the Technical Notes directory.

SCEE:

Refer to the "Multiple CD Titles" section of the "Developers Guide". The Developers Guide (devguide.zip) is available through the Developer Support Web Site at https://www-s.playstation.co.uk/. It is also available in Acrobat format on the Technical Reference CD release 1.8 and later in the Technical Notes directory.

17.0 Streaming Video

17.1 General requirements for streaming video

(Please mark A or B below)

- ☐ A) Not applicable. (This title does not use streaming video; skip to 18.0)
- B) Applicable. (This title does use streaming video; complete this section)

17.1.1 Required: The last frame is not accessed in streaming video.

When using streaming video, please do not read up to the last frame, but stop several frames prior to the last one. Alternatively, please insert several dummy frames at the end to absorb the time gap.

Note that if the last frame is the frame to be read and there is no dummy frame following it, a read error on the last frame

might cause it to hang or otherwise malfunction.

SCEA/SCEE Checklist

18.0 Territory Localization

18.1 Improving speed with which an application can start

Recommended: Include a "quick start" functionality that will allow a user to bypass the introductory credits or FMV sequences to start the application with a default or preloaded set of options.

For example, if the user depresses L1+R1 during the start of the application, the title will bypass non-essential title screens to allow the user to quickly start the application.

As an alternative to having a set of default options for the quickstart mode, the application could check for a relevant saved title on a Memory card and auto-load. This would mean that the publisher's logos would always be displayed the first time the application was booted.

18.2 Localization issues

Recommended: Consider any localization requirements during the initial design of the title.

For example, consider placing all language-dependent files in a single directory to allow easy translation at a later stage.

18.3 Single Item Selection Menus

Recommended: On screens where the selection of a single item takes the user to another screen/menu, pressing the X button should make the choice and advance. All of the same menu/list rules that applied to the original screen should also apply to the new screen.

18.4 Activation of Menu Items

Recommended: Selection (activation) of any option or menu item should be accomplished by pressing the X button. Once the user's selections are completed, the user should either 1) press START button to proceed, or 2) highlight an "exit" option and then press the X or START button to proceed.

18.5 Multiple Menus

Recommended: The Triangle button should be used to take the user back to the previous menu.

When the user presses the triangle button, the game must return the user to the previous screen without accepting any changes that may have been made on the screen they are quitting from.

18.6 Primary Button

Recommended: The X button should be the primary button throughout the title.

18.7 Loading

Recommended: During the initial load or any subsequent loads, the user should not be presented with a blank screen lasting more than 5 seconds.

Whenever loading occurs which may interrupt play, some sort of display should be used. Any load that lasts longer than 5 seconds while on screen should notify the user that a load is occurring.

18.8 Connecting/disconnecting peripherals anytime after boot

Recommended: This title enters Pause mode if a controller or peripheral becomes connected or disconnected any time after boot.

- 18.8.1 Recommended: This title enters Pause mode and does not hang or otherwise malfunction even during the circumstances below. Pressing the START button will unpause the game.
 - Extra Controllers or Memory Cards that are not used in the title are connected to the Multi Tap.
 - Controllers in use are unintentionally removed from the Multi Tap.
- 18.8.2 Recommended: This title enters pause mode when a peripheral is connected or removed from the Multi Tap anytime after boot.

19.0 Saved Data Icons (SCEE Only)

19.1 Required: The number of frames of animation for a saved data icon must not exceed the number of blocks required to save this title. In other words, one block = one frame of animation, two blocks = one or two frames of animation, three or more blocks = one or two or three frames of animation. The maximum number of animation frames is three.

20.0 PAL Conversions (SCEE Only)

For PAL conversions, consult the "Guidelines for PlayStation PAL Titles" (PALGUIDE.DOC version 2.1 or above). These Guidelines discuss all major issues which should be addressed when producing a PAL PlayStation product for SCEE territories. PALGUIDE.DOC can be obtained from the following locations:

SCEI:

The "Guidelines for PlayStation PAL titles (palguide.lzh)" and the "Guidelines for PlayStation PAL titles V2.1J (palg_21j.lzh) can be found under "Download" at SCE-NET Web Site https://sce-net.scei.co.jp/ or under "Software library" at the BBS Site.

SCEA:

PALGUIDE.DOC is available from the Files section of the Developer Support Web Site at http://www.scea.sony.com/dev and on the Developer Support CD release 1.8 and later.

SCEE:

PALGUIDE.DOC is available from the "PAL Issues" file area of the Developer Support Web Site at https://www-s.playstation.co.uk/ and on the Developer Support CD release 1.8 and later.

If you have any questions concerning PAL titles, you are strongly advised to raise them at the earliest opportunity with your Account Manager.

- 20.1 Recommended: Rendered sequences are running at the correct speed for PAL and look correct.
- 20.2 Recommended: The display is full screen PAL (at least 256/512 pixels).
- 20.3 Recommended: Game mechanics (including motion capture data where applicable) have been modified to ensure that a game converted from NTSC format does not appear inferior on a PAL system.

Appendix A

	English	Danish	Dutch	Finnish	Greek	Italian
General PlayStation	PlayStation	PlayStation	PlayStation	PlayStation	PlayStation	PlayStation
component names	Console	Konsol	Console	Pelikonsoli	Κονσόλα	Console
	Controller	Controller	Controller	Ohjain	Χειριστήριο	Controller
	Controller port	Controller-port	Controler-aansluiting	Ohjainportti	Είσοδος Χειριστηρίου	Ingresso Controller
	Memory Card slot	Memory Card port	Geheugenkaart-aansluiting	Muistikorttipaikka	Είσοδος κάρτας μνήμης	Ingresso Memory Card
Console component	Power button	Afbryderknap (POWER)	POWER toets	Virtanäppäin	Πλήκτρο λειτουργίας	Tasto accensione
names	Power indicator	Strøm indikator	POWER indicator	Merkkivalo	Ενδειξη λειτουργίας	Indicatore accensione
	Reset button	RESET knap	RESET toets	RESET-näppäin	Πλήκτρο RESET	Tasto RESET
	Open button	OPEN knap	OPEN toets	Avauspainike	Πλήκτροαν οίγματος καλίμματος δίσκου	Tasto apertura vano disco
	Disc cover	Låg	Disc-deksel	Levykansi	Κάλυμμα δίσκου	Coperchio vano disco
	Controller port 1	Controller-port 1	Controller-aansluiting 1	Ohjainportti 1	Είσοδος Χειριστηρίου 1	Ingresso Controller 1
	Controller port 2	Controller-port 2	Controller-aansluiting 2	Ohjainportti 2	Είσοδος Χειριστηρίου 2	Ingresso Controller 2
	Memory card slot1	Momory card 1	Geheugenkaart-aansluiting 1	Muistikorttipaikka 1	Είσοδος κάρτας μνήμης 1	Ingresso Memory Card 1
	Memory card slot2	Momory card 2	Geheugenkaart-aansluiting2	Muistikorttipaikka 2	Είσοδος κάρτας μνήμης 2	Ingresso Memory Card 2
Controller component	Directional button	Retningrtaster	Richtingtoets	Suuntaohjain	Πλήκτρο κατεύθυνσης	Tasti direzionali
names	Select button	SELECT tast	SELECT toets	SELECTnäppäin	Πλήκτρο SELECT	Tasto Selezione
	Start button	START tast	START toets	START näppäin	Πλήκτρο START	Tasto Avvio
	Δ button	∆ tast	Δ toets	Δ näppäin	Δ πλήκτρο	Δ tasto
	☐ button	□ tast	☐ toets	☐ näppäin	🛘 πλήκτρο	☐ tasto
	O button	O tast	O toets	O näppäin	Ο πλήκτρο	O tasto
	X button	X tast	X toets	X näppäin	Χ πλήκτρο	X tasto
	L1 button	L1 tast	L1 toets	L1 näppäin	ä1 πλήκτρο	L1 tasto
	L2 button	L2 tast	L2 toets	L2 näppäin	ä2 πλήκτρο	L2 tasto
	R1 button	R1 tast	R1 toets	R1 näppäin	ü1 πλήκτρο	R1 tasto
	R2button	R2 tast	R2 toets	R2 näppäin	ΰ2 πλήκτρο	R2 tasto
Peripheral names	Memory card	Momory crad	Geheugenkaart	Muistikortti	Κάρτα μνήμης	Memory Card
	RFU adaptor	RFU-adapter	RFU adapter	Antennikaapeli	Προσαρμογέας RFU	Adattatore RFU
	S video cable	S video Kabel	S Video Kabel	S video kaapeli	Καλώδιο σύνδεσης S video	Cavo Super VHS
	Euro-AV cable	Euro-AV Kabel	Euro AV Kabel	Euro AV kaapeli	Καλώδιο σύνδεσης Euro-AV	Cavo Euro-AV
	Mouse	Mus	Muis	Hiiri	Ποντίκι	Mouse
	Link cable	Link kabel	Link Kabel	Linkkikaapeli	Καλώδιο σύνδεσης δύο κονσόων	Cavo Link
	Multi tap	Multi tap	Multi tap	Multi Tap	Προσαρμογέας σύνδεσης τεσσάρωνχειριοτωι	Multi tap
	Analog joystick	Analog joystick	Analog joystick	Analoginen ohjain	Αναλογικό χειριοτήρίο με δύο μοχλους	Joystick analogico
Names of discs in	DISC 1	DISC 1	DISC 1	Levy 1	ΔΙΣΚΟΣ 1	Disco 1
multi-disc games	DISC 2	DISC 2	DISC 2	Levy 2	ΔΙΣΚΟΣ 2	Disco 2
	DISC 3	DISC 3	DISC 3	Levy 3	ΔΙΣΚΟΣ 3	Disco 3
	DISC 4	DISC 4	DISC 4	Levy 4	ΔΙΣΚΟΣ 4	Disco 4
Users Manual (for software)	Software manual	Spil Manual	Software Hnadleiding	Peliohje	Βιβλίο Οδηγιών Παιχνιδιού	Manuale software
Instruction Manual (for hardware)	Instruction manual	Manual	Gebruiksaanwijzing	Käyttöohje	Οδηγίες Χρήσεως Κονσόλας	Manuale Ist ruzioni

	English	Portuguese	Spanish	Bulgarian	Czach
General PlayStation	PlayStation	PlayStation	PlayStation	PlayStation	PlayStation
component names	Console	Consola	Consola	Конзола	Hernrí konzole
	Controller	Co m ando	Mando	Конт ролер	Ovladač
	Controller port	Porta para comando	Puerto del mando	Портза контролера	Vstup pro zapojeni ovladače
	Memory Card slot	Ranhura de cartão de memória	Runura de la tarjeta de memoria	Слот за карта за памет	Vstup pro pam ěťovou kartu
Console component	Power button	Botão POWER (ligar)	Bóton POWER (ENCENDIDO)	Бутон за включване	Tlačitko napájení
names	Power indicator	Indicador de Power (ligado)	Indicador POWER (ENCENDIDO)	Индикатор Power	Kontrolka napájení
	Reset button	Botão de RESET (recomeçar)	Bóton RESET (REINICIO)	Бутон за рестартиране	Tlačitko RESET
	Open button	Botão Abrir	Bóton OPEN (APERTURA)	Бутон за отваряне	Tlač tko otev i rání krytu CD
	Disc cover	Tampa do Disco	Cubierta del disco	Капак	Kryt CD
	Controller port 1	Porta para comando 1	Puerto del mando 1	Порт 1 за контролер	Vstup pro ovladač č.1
	Controller port 2	Porta para comando 2	Puerto del mando 2	Порт 2 за контролер	Vstup pro ovladač č.2
	Memory card slot1	Ranhura de cartão de memória 1	Runura de la tarjeta de memoria 1	Гнезда за картас памет 1	Vstup pro pami ovou kartu č.1
	Memory card slot2	Ranhura de cartão de memória 2	Runura de la tarjeta de memoria 2	Гнезда за карта с памет 2	Vstup pro pami ovou kartu č.2
Controller component	Directional button	Botão de Direcçao	Bóton de direccion	Бутон за посока	Směrov é tla čí tko
names	Select button	Botão SELECT (seleccionar)	Bóton SELECT (SELECCION)	Бутон за избиране	Tla čí tko SELECT
	Start button	Botão START	Bóton START (COMENZO)	Бутон за стартиране	Tla čí tko START
	Δ button	∆ botão	Δ botón	∆ бутон	Δ tla čí tko
	☐ button	□ botão	□ botón	□ бутон	🗆 tla čí tko
	O button	O botão	O botón	О бутон	O tla čí tko
	X button	X botão	X botón	Х бутон	🗙 tla čí tko
	L1 button	L1 botão	L1 botón	L1 бутон	L1 tla čí tko
	L2 button	L2 botão	L2 botón	L2 бутон	L2 tla čí tko
	R1 button	R1 botão	R1 botón	R1 бутон	R1 tla čí tko
	R2 button	R2botão	R2 botón	R2 бутон	R2 tla čí tko
Peripheral names	Memory card	Cartão de memória	Tarjeta de memoria	Карта с памет	Paměťová karta
	RFU adaptor	Adaptor RFU	Adaptador RFU	Адаптор за включване по висока честота	RFU adaptér
	S video cable	Cabo S video	Cable S Video	S видео кабел	Kabel S-Video
	Euro-AV cable	Cabo Euro-AV	Cable Euro AV	Euro AV кабел	Kabel EURO-AV
	Mouse	Rato	Ratón	Мишка	Myš
	Link cable	Cabo de Liga ç ão	Link cable	С вързващ кабел	Propoj ovaci kavel
	Multi tap	Ligação Multi-Comandos	Multi tap	Мулти тап	Multi Tap
	Analog joystick	Joystick Analogico	Joystick Analogico	Аналогов джойстик	Anal ogový j oysti ck
Names of discs in	DISC 1	Disco 1	Disco 1	Диск 1	CD č.1
multi-disc games	DISC 2	Disco 2	Disco 2	Диск 2	CD č.2
	DISC 3	Disco 3	Disco 3	Диск 3	CD č.3
	DISC 4	Disco 4	Disco 4	Диск 4	CD č.4
Users Manual (for software)	Software manual	Manual do Programa	Manual del Software	Инструкция за софтуер	Přírucka ke hře
Instruction Manual (for hardware)	Instruction manual	Manual de Instru ç ões	Manual de Instrucciones	Инструкция за експлоатация	Návod k použití

	English	Hungarian	Polish	Russian	Swedish
General PlayStation	PlayStation	PlayStation	PlayStation	PlayStation	PlayStation
component names	Console	Konzol	Konsola	Консоль	Huvudenhet
	Controller	Kontroler	Kontrol er	Контроллер	Handkontroll
	Controller port	Kontroller csatlakozó	Gni azdo sterow ni ka	орт пульта управления	Handkontrolls-port
	Memory Card slot	Memória kártya helye	Gni azdo karty pami ęci	Порт для карт памяти	Minneskorts-ingång
Console component	Power button	Bekapcsoló gomb	Przycisk WŁ/WYŁ	Кнопка включения питания	POWER- Knapp
names	Power indicator	Bekapcsol asj el zö	Lampka kontrol ana	Индикатор включения	POWER-indikator
	Reset button	RESET gomb	Przycisk RESET	Кнопка перезагрузки	Återst allningsknapp (RESET)
	Open button	Nyi tó gomb	Przycisk otwierania pokrywy	Кнопка открывания	Öppni ngsknapp (OPEN)
	Disc cover	Diszk fedó	Pokrywa konsol l	Крышка	Skivfack
	Controller port 1	Kontroller csatlakozó 1	Gni azdo kontrol era 1	орт контроллера 1	Handkontrolls-port 1
	Controller port 2	Kontroller csatlakozó 2	Gni azdo kontrol era 2	орт контроллера 2	Handkontrolls-port 2
	Memory card slot1	Memória kártya csatlakozó 1	Gniazdo karty pamięci 1	Гнездо карты памяти 1	Minneskorts-ingång 1
	Memory card slot2	Memória kártya csatlakozó 2	Gniazdo karty pamięci 2	Гнездо карты памяти 2	Minneskorts-ingång 2
Controller component	Directional button	Irányvátó gomb	Przyciski kierunku	Кнопки направлений	Riktnings knapp
names	Select button	SELECT gomb	Przycisk wyboru	Кнопка Выбор	Valknapp (SELECT)
	Start button	START gomb	Przycisk START	Кнопка Старт	Startknapp (START)
	Δ button	∆ gomb	∆ przycisk	Δ кнопка	D - knapp
	☐ button	gomb	☐ przycisk	□ кнопка	n - knapp
	O button	O gomb	O przycisk	О кнопка	O-knapp
	X button	X gomb	X przycisk	Х кнопка	X-knapp
	L1 button	L1 gomb	L1 przycisk	L1 кнопка	L1 - knapp
	L2 button	L2 gomb	L2 przycisk	L2 кнопка	L2 - knapp
	R1 button	R1 gomb	R1 przycisk	R1 кнопка	R1 - knapp
	R2button	R2 gomb	R2 przycisk	R2 кнопка	R2 - knapp
Peripheral names	Memory card	Memória kártya	Karta pami eçi	Карточка памяти	Minneskort
	RFU adaptor	RFU adapter	Przej ści ów ka RFU	Адаптер RFU	RFU- adapter
	S video cable	S-VHS kábel	Kabel S video	Кабель S Video	S vi deo kabel
	Euro-AV cable	EURO AV Kábel	Kabel EURO- AV	Кабель EURO-AV	Euro- AV- Kabel
	Mouse	Egér	Mysz	Мышь	Mus
	Link cable	Összeközó kábel	Kabel połączeniowy	Соединительный кабель	Link Kabel
	Multi tap	Többfunkci ós csatlakozó	Multi Tab	Разветвитель	Multi tap
	Analog joystick	Anal óg j oysti ck	Joystick analogowy	Аналоговый джойстик	Analog Joystick
Names of discs in	DISC 1	Diszk 1	Plyta 1	Диск 1	Skiva 1
multi-disc games	DISC 2	Diszk 2	Plyta 2	Диск 2	Ski va 2
	DISC 3	Diszk 3	Plyta 3	Диск 3	Skiva 3
	DISC 4	Diszk 4	Plyta 4	Диск 4	Skiva 4
Users Manual (for software)	Software manual	Szoftver leirás	Instrukcja obslugi gry	Описание игры	Användar manual
Instruction Manual (for hardware)	Instruction manual	Hansználati utasitás	Instrukcja obslugi konsoli	Руководстео по эксплуатации	Instruktionsbok

Appendix B

	English	Japanese	Simplified Chinese	Traditional Chinese
General PlayStation	PlayStation	PlayStation	PlayStation	PlayStation
component names		プ [®] レイステーション		
	Console	本体	┃机体	機體
	Controller	コントローラ	控制器	控製器
	Controller port	コントローラ端子	控制器端子	控製器端子
	Memory card slot	メモリーカード差込口	记忆卡插口	記憶卡插口
Console component	Power button	電源ボタン	电源按钮	電源按鈕
names	Power indicator	電源ランプ	电源指示灯	電源指示燈
	Reset button	リセットホ゛タン	再启动按钮	再啓動按鈕
	Open button	オープ°ンホ゛タン	室盖打开按钮	室蓋打開按鈕
	Disc cover	テ゛ィスクホルタ゛ー	CD 室盖	CD 室蓋
	Controller port 1	コントローラ端子 1	控制器端子 1	控製器端子1
	Controller port 2	コントローラ端子 2	控制器端子 2	控製器端子 2
	Memory card slot 1	メモリーカート*差込口1	记忆卡插口 1	記憶卡插口 1
	Memory card slot 2	メモリーカート*差込口2	记忆卡插口 2	記憶卡插口 2
Controller component	Directional button	方向キー	方向按钮	方向按鈕
names	Select button	セレクトホ、タン	选择按钮	選擇按鈕
	Start button	スタートホッタン	START 按钮	START 按鈕
	△ button	△ボタン	△按钮	△按鈕
	□ button		□按钮	□按鈕
	O button		○按钮	○按鈕
	X button	×** \$>	×按钮	× 按鈕
	R1 button	R1 ボタン	R1 按钮	R1 按鈕
	R2 button	R2 ポタン	R2 按钮	R2 按鈕
	L1 button	L1 * 52	L1 按钮	L1 按鈕
	L2 button	L2 ボタン	L2 按钮	L2 按鈕
Peripheral names	Memory card	メモリーカート	记忆卡	記憶卡
	RFU adaptor	RFU 75° 7° 9	RFU 转换器	RFU 轉換器
	S video cable	S端子ケーフ゛ル	S影像接线	S影像接線
	Euro-AV cable	RGB ケーフ・ル	RGB 接线	RGB 接線
	Mouse	マウス	滑鼠器	滑鼠器
	Link cable	対戦ケーフ・ル	对战接线	對戰接線
	Multi Tap	マルチタップ	复式插座	複式插座
	Analog joystick	アナロク゛シ゛ョイスティック		
	AV adaptor	AV 79°7°5-	AV 转换器	AV 轉換器
	AV aable	AV ケーフ・ル	AV 接线	AV 接線
	Power cable	電源ケーフ・ル	电源接线	電源接線
Names of discs in	DISC 1	DISC 1	DISC 1	DISC 1
multi-disc games	DISC 2	DISC 2	DISC 2	DISC 2
	DISC 3	DISC 3	DISC 3	DISC 3
	DISC 4	DISC 4	DISC 4	DISC 4
Users Manual (for software)	Software manual	解説書	解说书	解説書