

Installing Software Tools

Please note that the compilers are a product of SN Systems as part of the SDevTC toolkit, and the instructions below are intended as a guide, with information subject to change. If you have any questions or problems with the compiler, please contact SN Systems.

In the following steps, we assume that the local hard drive is your "c:\" drive and your PC CD-ROM drive is " d:\":

Step 1: Insert your Programmer's Tools CDROM

Insert the Programmers Tools CD (DTL-S2002) into your CD-ROM drive (not the DTL-H2010) of your system. **If you have Windows 95**, you can run the Setup program, "setup.bat" in the root directory of the CDROM. Follow all of the instructions. After the computer reboots (to set environment variables), skip to **Step 5**.

Step 2: Install the "psx" tool

The directory "[cdrom]:\psx" contains the PlayStation Development directory, which includes over 100 sample programs with full source code, the includes, and the linking libraries.

- If applicable, backup or delete your previous "c:\psx" directory.
 - To be consistent with the automatic installation of the software under Win95, we are creating a parent directory "PS" which all PlayStation software will be installed under. Copy the "psx" directory, d:\psx, from the CD to your local hard drive c:\ps\psx:

```
xcopy /s d:\psx c:\ps\psx
```

(or just drag and drop the folder).

- Add the line

```
set path=%path%; c:\ps\psx\bin
```

to the end of your "c:\autoexec.bat" file.

Step 3: Install the SN tools

The directory "[cdrom]:\pssn" contains the standard PlayStation development system, which includes an interactive debugger and the C compiler.

- If applicable, backup or delete your previous "c:\pssn" directory.
- Copy the " pssn " directory, d:\ pssn, from the CD to your local hard drive c:\ps\ pssn.
- Copy the contents of the "gnu" directory, d:\gnu, from the CD to your local hard drive c:\ps\ pssn:

```
xcopy /s d:\gnu* c:\ps\ pssn
```

The GNU license is labeled gnu.txt.

- Add the line

```
set path=%path%;c:\ps\pssn
```

to the end of your "c:\autoexec.bat" file.

Due to the way the new SDevTC environment operates it may be necessary to manually make changes to your SN.INI file.

SN.INI has been configured to work with the default install directory structure. If you have deviated from the default path you will need to modify the following lines within the file \PSSN\bin\sn.ini to reflect your computer's directory structure:

```
[ccpsx]
library_path=c:\ps\psx\lib
c_include_path=c:\ps\psx\include
compiler_path=c:\ps\pssn\bin
assembler_path=c:\ps\pssn\bin
linker_path=c:\ps\pssn\bin
```

Additional Note: Define the environment variable PSYQ_PATH (Bug fix).
In ccpsxd ver.3.05.0009 an error will be returned if PSYQ_PATH is not defined.
However, it is the directory specified in SN_PATH which will actually be referred to.

Example:

```
> set PSYQ_PATH=C:\TEMP
```

For more information please refer to the following documents:

\PSSN\BIN\Readme.1st & \PSSN\BIN\readme.txt

Step 4: (optional) Install the "psxgraph" tools.

The directory "[cdrom]:\psxgraph" contains the tools for converting between standard graphics file formats and the PlayStation formats. Although we are setting up the "Graphic Artist Tools program" area, it does not contain entire tool set for the Graphic Artist Tools. Only the conversion tools are included on this CD. Please contact your regional tool's coordinator on information on how to obtain the Graphic Artist Tools CD (DTL-S220).

- If applicable, backup or delete your previous "c:\psxgraph" directory.
- Copy the "psxgraph" directory, d:\psxgraph, from the CD to your local hard drive c:\ps\psxgraph.
- Add the line

```
set path=%path%;c:\ps\psxgraph\bin
```

to the end of your "c:\autoexec.bat" file.

- Copy the all files located in the "system" directory, d:\psxgraph\system, to the window's system directory, i.e. c:\windows\system. These files are used by the Movie Converter.
- If you have Windows 95, skip on to the next step, Step 6. Otherwise, you will have to create the groups and match the icons yourself, by performing the following steps in Windows 3.1:

Graphic Artist Tools program group Create a Graphic Artist Tools program group in the Windows 3.1 environment.

1. Under the Program manager "File" pulldown click on the "File>New" button.
2. Select Program Group; press OK

3. Fill in the Description "Graphic Artist Tools". You may leave the "Group File" field blank. A new group will be displayed.
4. You are now ready to add the individual tool icons. Please follow the individual program install instructions listed below if you are using Windows 3.1. Note: For additional details on setting up program icons, please refer to your Windows 3.1 manual

Movie Converter With the "Graphic Artist Tools" program group selected, create a program icon for the Movie Converter tool:

1. Under the Program manager "File" pulldown click on "File->New" button.
2. Select Program Item; press OK
3. A Program Item Properties dialog will pop up. Fill in the Description field with "Movie Converter"
4. Use the Browse, to identify the name of the executable to be placed in the "Command Line" field (i.e. c:\ps\psxgraph\bin\movconv.exe)
5. Click OK.

Movie Pack With the "Graphic Artist Tools" program group selected, create program icon for the Movie Pack tool:

1. Under the Program manager "File" pulldown click on "File>New" button.
2. Select Program Item; press OK
3. A Program Item Properties dialog will pop up. Fill in the Description field with "Movie Pack"
4. Use the Browse, to identify the name of the executable to be placed in the "Command Line" field (i.e. c:\ps\psxgraph\bin\movpack.exe)
5. Click OK.

3D Studio Plug-In This release is for 3D Studio plug-in utilities. We highly recommend the following: Please remove the Psy-Q dongle, and attach the 3DStudio dongle before progressing with a modeling session utilizing the 3DStudio plug in. **Warning:** Do not remove or add dongles while the PC is powered on. Do not start a 3DStudio plug in session before accomplishing the following:

1. remove dexbios (only if dexbios installed)
2. remove mess1.com (only if mess1 installed)
3. cdbios (only if CDBIOS installed)

Please read the files *.doc and *.txt in the "c:\ps\psxgraph\doc\3ds" directory. Specific installation instructions are included in the 3dstod_e.txt file.

Step 5: Add environment variables.

Edit your autoexec.bat file to contain the lines listed below. Note: This example depends on where you have set up your root PSX and "pssn" directory. The file paths contain forward slashes, unlike the normal DOS convention which uses backward slashes.

```
REM =====PSX Development Environment Variables =====

set PSYQ_PATH=c:/ps/pssn
set SN_PATH=c:/ps/pssn
set COMPILER_PATH=c:/ps/pssn
set PSX_PATH=c:/ps/psx/bin
set C_INCLUDE_PATH=c:/ps/psx/include
set C_PLUS_INCLUDE_PATH=c:/ps/psx/include
set LIBRARY_PATH=c:/ps/psx/lib

set GO32=DMPSTACK 1000000

REM ===== GNU C/C++=====
set GO32TMP=c:/tmp          set TMPDIR=c:/TMP
```

```

REM If your computer does not have a floating point
REM co-processor then uncomment the following line:
REM set GO32=emu c:\ pssn \emu387
REM =====

```

The file c:\ps\ pssn \SN.INI is referenced by the compiler. This file can be used to contain some of the DOS environment variables. When the environment variables and SN.INI are both defined, SN.INI is given preference. For example, your c:\ps\pssn\SN.INI file could include

```

[ccpsx] stdlib=libapi.lib .....
set SN_PATH=c:\ps\pssn
set PSYQ_PATH=c:\ps\pssn
set COMPILER_PATH=c:\ps\ pssn
set LIBRARY_PATH=c:\ps\psx\lib

set C_INCLUDE_PATH=c:\ps\psx\include

```

to achieve the same result.

Step 6: Turn off your computer.

Step 7: Reboot your machine.

Step 8: Verify your ability to compile.

To make sure you can compile, **reboot** your machine to register the environment variables. Make sure your paths are set correctly. If they aren't, you may have to increase the environment memory space in your config.sys, using a line like this:

```
shell = command.com /E:1024 /p
```

The '/E:1024' sets the environment size to 1024 (valid ranges are from 160 to 32768), and '/p' makes this command.com the default command prompt. (See p.342 of *Peter Norton's Complete Guide to DOS 6.22* 6th Edition for further details).

Once you are certain your paths are set up correctly, you can proceed to compile. At an MS-DOS prompt, type the following two lines:

```
cd c:\ps\psx\sample\graphics\balls psymake all
```

The sample should compile with no errors, and return a command-line prompt. If you have problems, please recheck your steps. Otherwise please contact us (refer to the section in Chapter 1 about Technical Assistance).

However, you cannot run the program, because the device drivers for the boards have not been set yet. For more information on setting up the hardware, refer to the following documents:

- [\psx\bin\DTLH2000\install.pdf](#)
- [\psx\bin\DTLH2500\install.pdf](#)



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