



PSION TEKLOGIX SIBO C SDK INSTALLATION PROCEDURES

Table of contents

Forewords.....	3
TopSpeed C installation procedures	4
SIBO C SDK installation procedures	9
System Path Configuration	11
Installation verification.....	13

Forewords

The following pages will guide you through the installation of the Clarion TopSpeed compiler and Psion Teklogix SIBO S SDK in a Windows 2000 environment.

Installation procedures will take place as follows:

1. Installing the Clarion TopSpeed C compiler and environment for DOS;
2. Installing of the SIBO C SDK and SIBO C libraries;
3. Configuring of your system path;
4. Verifying your installation.

Text conventions,

- **Blue** statements are the DOS commands you will need to key-in;
- **Green** statements are comments, which indicate that you might need to change the DOS command. They are not part of the command;
- **Red** statements are important information, which should not be overlooked.



TopSpeed C installation procedures

Insert the CD labeled '**TopSpeed C Compiler**' in your PC CD drive, then open a DOS session and follow the below instructions:

C:\>E: Switch to your CD drive

E:\>CD COMPILER

E:\COMPILER>INSTALL

=== TopSpeed Installation Program ===

This program copies files from the floppy disks on to your hard disk (the files are compressed, so you cannot simply copy them by hand). They will be stored in subdirectories of a root directory that you specify.

You do not have to install the whole system the first time. If you want the missing bits later, you just re-run this installation program and select the extra stuff. You can also use the program to delete (parts of) the system from your hard disk.

All the TopSpeed products are designed to work together, so if this is not your first TopSpeed compiler, you should install it in the same place as the first.

Root directory: C:\TS [ENTER]

Scanning installation in C:\TS\

Products currently installed:

None

Is this correct (Y/N)? Y

TopSpeed C Compiler for DOS 3.10

C:\TS\

Free: 638048K Required: 2880K

<YES> System files

<YES> He

<YES> Ex These are the fundamental files of this product.

<YES> Sm They should always be installed.

<NO> Me —————press F1 to toggle help—

<NO> Compact memory model libraries for DOS

<NO> Large memory model libraries for DOS

<NO> XLarge memory model libraries for DOS

<YES> MThread memory model libraries for DOS

<NO> Overlay memory model libraries for DOS

<NO> C interface to Modula-2 library

<NO> C interface to Pascal library

<NO> Multi language example

<NO> Select individual file

F1:help F2:install ↑↓:point CR:select Del:delete ESC:quit



At this stage, make sure that **'Small memory model library for DOS'** is selected as illustrated here:

```

TopSpeed C Compiler for DOS 3.10 C:\TS\
Free: 638048K Required: 2880K

<YES> System files
<YES> Help system
<YES> Example programs
<YES> Small memory model libraries for DOS
<NO> Medium memory model libraries for DOS
<NO> Compact memory model libraries for DOS
<NO> Large memory model libraries for DOS
<NO> XLarge memory model libraries for DOS
<YES> MThread memory model libraries for DOS
<NO> Overlay memory model libraries for DOS
<NO> C interface to Modula-2 library
<NO> C interface to Pascal library
<NO> Multi language example
<NO> Select individual file

Code: 64K Near code pointers
Data: 64K Near data pointers
Produce programs to run under DOS
press F1 to toggle help

F1:help F2:install ↑↓:point CR:select Del:delete ESC:quit

```

Now press **[F2]** to proceed with the compiler installation

```

TopSpeed C Compiler for DOS 3.10 C:\TS\
Free: 638048K Required: 2880K

<YES> System files
<YES> Help system
<YES> Example programs
<YES> Small memory model libraries for DOS
<NO> Medium memory model libraries for DOS
<NO> Compact memory model libraries for DOS
<NO> Large memory model libraries for DOS
<NO> XLarge memory model libraries for DOS
<YES> MThread memory model libraries for DOS
<NO> Overlay memory model libraries for DOS
<NO> C interface to Modula-2 library
<NO> C interface to Pascal library
<NO> Multi language example
<NO> Select individual file

Proceed with installation (Y/N)?Y

F1:help F2:install ↑↓:point CR:select Del:delete ESC:quit

```

```

Creating directory: C:\TS\SYS
Creating directory: C:\TS\SRC
Creating directory: C:\TS\PR
Creating directory: C:\TS\INCLUDE
Creating directory: C:\TS\EXAMPLES
Creating directory: C:\TS\DOC
Creating directory: C:\TS\LIB
Creating directory: C:\TS\OS2_SYS
Creating directory: C:\TS\SAVE

```

Disk space available: 637760K Required: 2880K



Backup any old text files overwritten to C:\TS\SAVE (Y/N)? **N**

[...]

Installing C:\TS\INCLUDE\SETJMP.H
 Installing C:\TS\INCLUDE\SHARE.H
 Installing C:\TS\EXAMPLES\SIEVE.C
 Installing C:\TS\INCLUDE\SIGNAL.H
 Installing C:\TS\INCLUDE\STAT.H
 Installing C:\TS\INCLUDE\STDARG.H
 Installing C:\TS\INCLUDE\STDDEF.H
 Installing C:\TS\INCLUDE\STDIO.H
 Installing C:\TS\INCLUDE\STDLIB.H
 Installing C:\TS\INCLUDE\STRING.H
 Installing C:\TS\INCLUDE\TIME.H
 Installing C:\TS\INCLUDE\TIMEB.H
 Installing C:\TS\SYS\TSC.DLL
 Installing C:\TS\DOC\TSC.HLP
 Installing C:\TS\SYS\TSC.TXT
 Installing C:\TS\SYS\TSCFG.XTX
 Installing C:\TS\INCLUDE\TYPES.H
 Installing C:\TS\INCLUDE\VALUES.H
 Installing C:\TS\EXAMPLES\WINDEMOC.C
 Installing C:\TS\EXAMPLES\WINDEMOC.PR
 Installing C:\TS\INCLUDE\WINDOW.H

Disk set installation complete.

Any more disk sets to install? (Y/N)? **Y**

Insert first disk of set, or indicate where files can be found (Esc aborts):

E:\COMPILER

E:\DOSENV <-- Change the folder name to DOSENV and press [ENTER]

Products currently installed:

DOS_C 3.10 TopSpeed C Compiler for DOS

Is this correct (Y/N)? **Y**

```

===== TopSpeed Environment for DOS 3.10.002 ===== C:\TS\
                                                    Free: 625728K Required: 2464K

<YES> System files
<YES> He
<YES> Sm These are the fundamental files of this product.
<NO> Me They should always be installed.
<NO> Co press F1 to toggle help
<NO> Large memory model libraries for DOS
<NO> XLarge memory model libraries for DOS
<YES> MThread memory model libraries for DOS
<NO> Overlay memory model libraries for DOS
<NO> Select individual file

===== F1:help F2:install ↑↓:point CR:select Del:delete ESC:quit =====
    
```



Again, make sure that **'Small memory model library for DOS'** is selected as illustrated here:

```

TopSpeed Environment for DOS 3.10.002 C:\TS\
Free: 625728K Required: 2464K

<YES> System files
<YES> Help system
<YES> Small memory model libraries for DOS
<NO> Medium memory model libraries for DOS
<NO> Compact memory model libraries for DOS
<NO> Large memory model libraries for DOS
<NO> XLarge memory model libraries for DOS
<YES> MThread memory model libraries for DOS
<NO> Overlay memory model libraries for DOS
<NO> Select individual file

Code: 64K Near code pointers
Data: 64K Near data pointers
Produce programs to run under DOS
press F1 to toggle help

F1:help F2:install ↑↓:point CR:select Del:delete ESC:quit
  
```

Now press **[F2]** to proceed with the 'TopSpeed Environment for DOS' installation

```

TopSpeed Environment for DOS 3.10.002 C:\TS\
Free: 625728K Required: 2464K

<YES> System files
<YES> Help system
<YES> Small memory model libraries for DOS
<NO> Medium memory model libraries for DOS
<NO> Compact memory model libraries for DOS
<NO> Large memory model libraries for DOS
<NO> XLarge memory model libraries for DOS
<YES> MThread memory model libraries for DOS
<NO> Overlay memory model libraries for DOS
<NO> Select individual file

Proceed with installation (Y/N)? Y

F1:help F2:install ↑↓:point CR:select Del:delete ESC:quit
  
```

Creating directory: C:\TS\EXP

Disk space available: 625696K Required: 2464K

Backup any old text files overwritten to C:\TS\SAVE (Y/N)? **N**

```

Installing C:\TS\SYS\TSCFG.TXT
Installing C:\TS\SYS\TSCFG.XTX
Installing C:\TS\SYS\TSCX.EXE
Installing C:\TS\SYS\TSDATA.OVL
Installing C:\TS\SYS\TSEXEMOD.EXE
Installing C:\TS\SYS\TSIMPLIB.EXE
Installing C:\TS\SYS\TSISL.DLL
Installing C:\TS\SYS\TSISL.TXT
Installing C:\TS\SYS\TSMMAIN.DLL
Installing C:\TS\DOC\TSMMAIN.HLP
  
```



```
Installing C:\TS\SYS\TSMMAIN.TXT
Installing C:\TS\SYS\TSMMAKE.TXT
Installing C:\TS\SYS\TSMKEXP.EXE
Installing C:\TS\DOC\TSPRAGMA.HLP
Installing C:\TS\SYS\TSPRJ.TXT
Installing C:\TS\SYS\TSX.EXE
Installing C:\TS\PR\UNNAMED.PR
Installing C:\TS\PR\UNNAMED.PX
Installing C:\TS\SYS\VID.EXE
Installing C:\TS\SYS\VID2CV.EXE
Installing C:\TS\SYS\VIDCFG.EXE
```

Disk set installation complete.

Any more disk sets to install? (Y/N)? **N**

Products currently installed:

```
DOS_ENV    3.10.002 TopSpeed Environment for DOS
DOS_C      3.10      TopSpeed C Compiler for DOS
```

Running Automatic Compiler configuration

Installation complete.

PLEASE read the following instructions CAREFULLY!

Please change your AUTOEXEC.BAT file so PATH includes
the directory C:\TS\SYS, eg:
PATH C:\;C:\COM;C:\TS\SYS;

The number of open files possible must be at least 20, so
your CONFIG.SYS should include the line: FILES=20

Then reboot your machine to make the changes take effect.

Please also read the text files *.DOC in C:\TS\DOC
which contain additional up-to-date information on your TopSpeed system.
Finally, we hope you enjoy working with TopSpeed!

E:\DOSENV>

**Congratulations, you have successfully installed the TopSpeed C
compiler and environment for DOS on your system.**



SIBO C SDK installation procedures

Insert the SIBO C SDK Disk labeled '**Installation Disk**' in your PC Disk Drive and follow the below instructions:

```
E:\DOSENV>A:                                     Switch to your Disk drive

A:\>INSTALL C:
Installing core SDK files
[...]
Inflating: C:/SIBOSDK/DEMO/FONTS.C
Inflating: C:/SIBOSDK/DEMO/HCSHELL.C
Inflating: C:/SIBOSDK/DEMO/LKSHELL.C
Inflating: C:/SIBOSDK/DEMO/LKSHELL.PR
Inflating: C:/SIBOSDK/DEMO/ALERT.C
Inflating: C:/SIBOSDK/DEMO/CLOCK.C
Inflating: C:/SIBOSDK/DEMO/BUTTON.C
Inflating: C:/SIBOSDK/HCMAS/ROMWRITE.IMG
Inflating: C:/SIBOSDK/S3ATOOL/ICONEDA.APP
Inflating: C:/SIBOSDK/S3ATOOL/SPYA.APP
Complete the installation by:
    * Reconfiguring the TopSpeed project system by copying
      TSMAN.TXT and TSPRJ.TXT from the \SIBOSDK\SYS\ directory
      into your TopSpeed \TS\SYS\ directory and executing TSCFG/EXE.
    * Customising the redirection file, TS.RED, as required.
For details, see the Installation chapter of the General Programming
Manual.
*****
*** Note that this version of the SDK does not supply copies      ***
*** of TS.RED in any of the demonstration software directories. ***
*** You must copy the (modified) \SIBOSDK\SYS\TS.RED either into ***
*** \TS\SYS or into each demonstration directory.                ***
*****

A:\>
```

Now, insert the SIBO C SDK Disk labeled '**Library Disk**' in your PC Disk Drive and follow the below instructions:

```
A:\>INSTALL C:
Install SDK CLIB source files
[...]
Inflating: C:/SIBOSDK/SRC/CLIB1.A
Inflating: C:/SIBOSDK/SRC/CIO1.A
Inflating: C:/SIBOSDK/SRC/CLIB2.C
Inflating: C:/SIBOSDK/SRC/SCANF.C
Inflating: C:/SIBOSDK/SRC/CSYS.C
Inflating: C:/SIBOSDK/SRC/CDATA.C
Inflating: C:/SIBOSDK/SRC/PRINTF.C
Inflating: C:/SIBOSDK/SRC/EPOC1.C
Inflating: C:/SIBOSDK/SRC/CIO2.C
Inflating: C:/SIBOSDK/SRC/CPFLOW.A
Inflating: C:/SIBOSDK/SRC/BCD.CPP
Inflating: C:/SIBOSDK/SRC/COMPLEX.CPP
```



```
Inflating: C:/SIBOSDK/SRC/CONIOSTR.CPP
Inflating: C:/SIBOSDK/SRC/FSTREAM.CPP
Inflating: C:/SIBOSDK/SRC/IOINLINE.CPP
Inflating: C:/SIBOSDK/SRC/IOSTREAM.CPP
Inflating: C:/SIBOSDK/SRC/NEW.CPP
Inflating: C:/SIBOSDK/SRC/STDIOSTR.CPP
Inflating: C:/SIBOSDK/SRC/STREAM.CPP
Inflating: C:/SIBOSDK/SRC/STRSTREA.CPP
```

A:\>

Now, **reconfigure the TopSpeed project system** as illustrated here:

A:\>C:

C:\>CD TS\SYS

C:\TS\SYS>COPY \SIBOSDK\SYS\TSMMAIN.TXT

Overwrite C:\TS\SYS\TSMMAIN.TXT? (Yes/No/All): Y
1 file(s) copied.

C:\TS\SYS>COPY \SIBOSDK\SYS\TSRPRJ.TXT

Overwrite C:\TS\SYS\TSRPRJ.TXT? (Yes/No/All): Y
1 file(s) copied.

C:\TS\SYS>TSCFG

TSCFG: TopSpeed System Configuration Utility V3.10 Copyright (c) 1992 Clarion Software Corporation

```
Reading TSCFG.TXT
Set DOS
Set C
Set SMALLMOD
Set MTHREADM
Set MASM
Reading TSMMAIN.TXT
Reading TSMAKE.TXT
Reading TSRPRJ.TXT
Reading TSC.TXT
Reading TSISL.TXT
Creating new TSDATA.OVL
TSCFG finished
```

C:\TS\SYS>

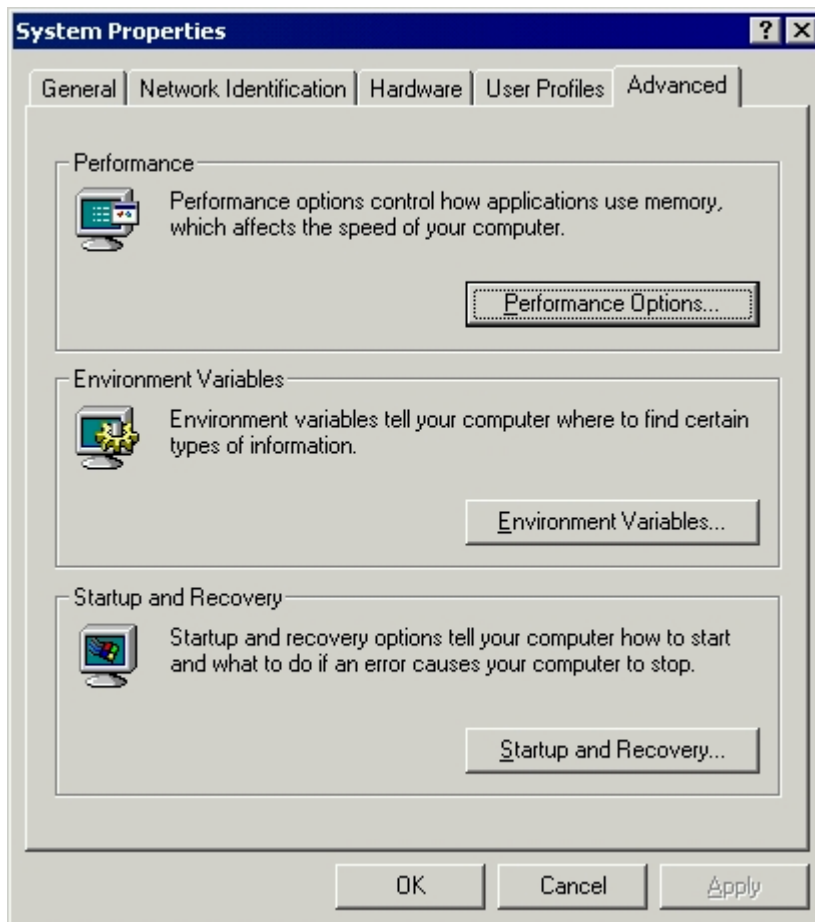
**Congratulations, you have successfully installed
the SIBO C SDK on your system.**

System Path Configuration

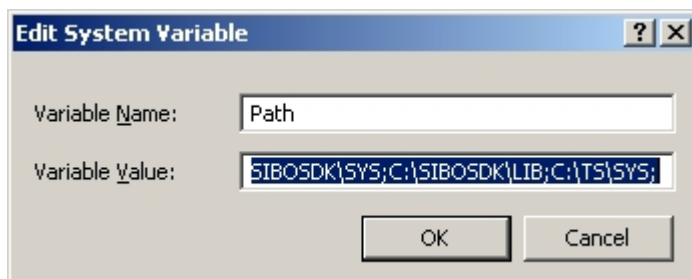
Before using the SIBO C SDK, you will need to change your system in order to add the following directories in your system path:

```
C:\SIBOSK\INCLUDE;C:\SIBOSDK\SYS;C:\SIBOSDK\LIB;C:\TS\SYS;
```

To do so, select the **'System'** option from PC **'Control panel'**, then click on **'Advanced'** as illustrated here



Now click on **'Environment Variables...'** and edit the variable **'Path'** listed under the **'System variables'** panel, to add the above mentioned directories:



Now, click on [OK] three times to store these changes.

In order for them to take effect, close your current DOS session and re-open a new one.

```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.
```

```
C:\>
```

Now type '**PATH**' to make sure your system path has been updated:

```
C:\>PATH
```

```
PATH=D:\WINNT\system32;D:\WINNT;D:\WINNT\System32\Wbem;C:\SIBOSDK\INCLUDE;C:\SIB
OSDK\SYS;C:\SIBOSDK\LIB;C:\TS\SYS;
```

```
C:\>
```

**Congratulations, you have successfully
configured your System Path.**

Installation verification

Finally, do the following to verify that the previous installations went fine.
Go to the SIBO C SDK demo folder:

```
C:\>CD\SIBOSDK\DEMO
```

Copy the **'TS.RED'** file in the in the current work directory. *ts.red* is a redirection file that allows the TopSpeed project system to find the SIBO SDK header files, library files, and other required files:

```
C:\SIBOSDK\DEMO>COPY ..\SYS\TS.RED
1 file(s) copied.
```

Then try to compile the CLIB HELLO project as illustrated here:

```
C:\SIBOSDK\DEMO>TSC /R/M HELLO
TopSpeed Release 3.10
Clarion Software Corporation          Copyright (C) 1992
Making HELLO.OBJ
Compiling HELLO.C
Sizes = Code: 16, Const: 21, Data: 0
No errors

Making HELLO.EXE
Making hello.img
No errors
```

And finally try to compile and build the PLIB P_HELLO project as illusrated here:

```
C:\SIBOSDK\DEMO>TSC /R/M P_HELLO
TopSpeed Release 3.10
Clarion Software Corporation          Copyright (C) 1992
Making P_HELLO.OBJ
Compiling P_HELLO.C
Sizes = Code: 21, Const: 21, Data: 0
No errors

Making P_HELLO.EXE
Making p_hello.img
No errors
```

In both cases, you should get an IMG image file. If you now copy these IMG files on a target Workabout unit (under the \IMG directory) you should be able to execute them.

- End -