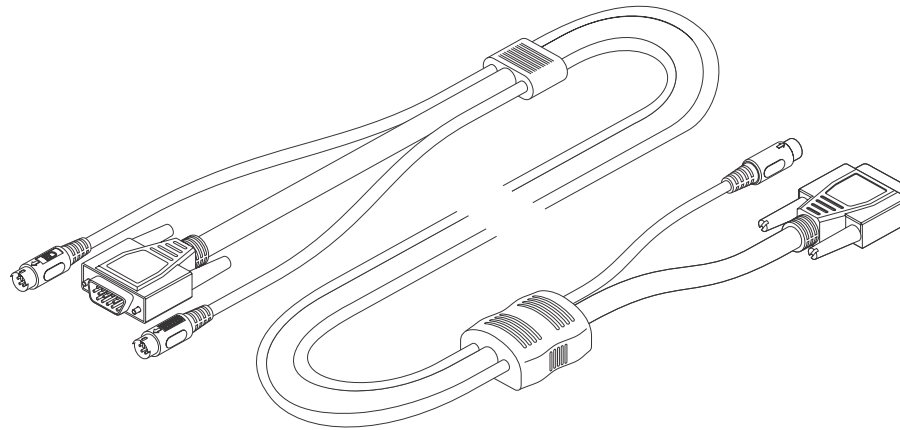# Sun® Converter Cable

Software upgrade and
keyboard emulation guide

Software upgrades and keyboard emulations

The internal software of your Sun converter cable can be upgraded to utilize the latest features and functionality. Additionally the converter cable can be made to declare a particular country code to the Sun computer when not used in conjunction with Black Box USB KVM switches.

This guide covers all of the steps needed to perform such operations, which are arranged into four main stages:

Note: You need to use a Windows®-based computer system to carry out the upgrade process.

- *Stage one*   Download upgrade files from the Black Box website.
- *Stage two*   Create a startup diskette
- *Stage three*   Copy the files and edit the control file.
- *Stage four*   Reconnect the Sun converter cable and reboot.

Stage one - Download the upgrade files

To download the files

1 Access the Black Box website ,enter
the Support section. Choose the upgrade option that best suits
your requirements and download it to your system.

2 Decompress the downloaded file. Depending on the chosen
option, there will be a collection of suitable files. As a minimum,
there should be the following files:

- AUTOEXEC.BAT – directs the computer to run the driver
update and firmware upgrade programs.
- PS2SUN.EXE – this is the upgrade program that causes
upgrade data to be sent to the Sun converter cable from a
Windows-based computer.
- SUN103.S19 – this is the Sun keyboard driver file.

Now please follow Stage two.

Stage two - Create a startup diskette

For this stage you will need a Windows-based computer and a 3½
floppy diskette that is either blank or has existing contents that are no
longer required. The write protect tab must be moved to the
'unprotected' position. Depending on your operating system, use one
of the following to create a startup disk:

To create a startup disk in Windows XP

1 Insert a diskette into the floppy disk drive.

2 Select 'Start' and then 'My Computer'.

3 Right mouse click on the '3½ Floppy (A:)' icon and select 'Format'.

4 Check the 'Create an MS-DOS startup disk' box and select 'Start'.

To create a startup disk in Windows 95/98/Me

1 Insert a formatted diskette into the floppy disk drive.

2 Select 'Start', then 'Settings' and then 'Control Panel'.

3 Double click on the 'Add/Remove Programs' icon.

4 Select the 'Startup Disk' tab.

5 Click 'Create Disk' and follow the instructions.

To create a startup disk in Windows 95/98 (alternative method)

1 Insert a diskette into the floppy disk drive.

2 Right mouse click on the '3½ Floppy (A:)' icon and select 'Format'.

3 Select the 'Full format' option and ensure that the 'Copy system
files' box is checked.

4 Select 'Start' to format the disk.

To create a startup disk from MS-DOS or a DOS window within Windows 95/98

1 Insert a diskette into the floppy disk drive and check that the drive
is configured as drive A (it usually is).

2 At the DOS prompt (C:\>) type:

```
FORMAT A: /S
```

and follow the instructions given by DOS.

Now please follow Stage three.

Stage three - Copy the files and edit the control file

In order to choose the appropriate upgrade/keyboard emulation options, you now need to copy the downloaded files to the diskette and then edit the AUTOEXEC.BAT control file.

1 Using Windows Explorer or the My Computer option, copy the downloaded and decompressed files from your computer to the floppy diskette.

2 Using a text editor, such as Notepad or Wordpad, open the AUTOEXEC.BAT file on the floppy diskette (A:). The file will contain a command line similar to the one shown here:

```
PS2SUN SUN103.S19 /C21
```

The command line relates to the country code that you wish to send to the Sun system.

• The `/Cnn` suffix optionally sets a country code that will be reported to the Sun system (in this case /C21 relates to the US country code). A full list of country codes is provided opposite.

3 When all required changes have been made, save the AUTOEXEC.BAT file. Do not change the name otherwise it will not be recognized by the system.

Now please follow Stage four.

Keyboard country codes

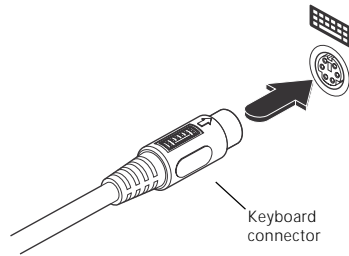| Country	nn code	Country	nn code
Chinese	3C	Lithuanian	3B
Czech	35	Norwegian	28
Danish	24	Poland	34
Dutch	27	Portuguese	29
Estonian	3A	Russian	36
Finnish	3D	Spanish	2A
French	23	Swedish	2B
French Canadian	32	Swiss French	2C
German	25	Swiss German	2D
Greek	39	Taiwanese	30
Hungarian	33	Turkish	38
Italian	26	UK	2E
Japanese	31	UNIX	22
Korean	2F	US	21
Latvian	37		

Stage four - Reconnect Sun converter cable and reboot

1 On the Windows-based computer from which you will run the upgrade, ensure that its BIOS settings will allow it to boot from the floppy diskette drive, rather than booting immediately from the hard drive.

2 Switch off the computer and remove its keyboard connector.

3 Disconnect your Sun converter cable (if connected) from its computer and KVM switch.

4 At the end of the converter cable that has three plugs, locate the keyboard plug (purple with ⌨ icon) and connect it to the keyboard socket of the Windows-based computer. This is the reverse of the usual connection method and the cable will automatically detect this to prepare itself for the ugrade procedure.

Keyboard connector

5 With the upgrade diskette installed in the drive, switch on the computer. The computer must boot from the floppy diskette and will then automatically perform the upgrade/apply the keyboard & country code. The upgrade process should take no more than two to three minutes and a progress indicator will be displayed on screen. Once the upgrade is complete, switch off the computer and disconnect the Sun converter cable.

6 Reconnect the Sun converter cable between the Sun computer and the KVM switch.

Sun system keypress equivalents

Once the Sun keyboard emulator has been downloaded, you can emulate the extra keys on a Sun keyboard using the following PS/2 key press combinations.

PS/2 keyboard	Sun keyboard
Right-[Ctrl] [F1]	Stop
Right-[Ctrl] [F2]	Again
Right-[Ctrl] [F3]	Props
Right-[Ctrl] [F4]	Undo
Right-[Ctrl] [F5]	Front
Right-[Ctrl] [F6]	Copy
Right-[Ctrl] [F7]	Open
Right-[Ctrl] [F8]	Paste
Right-[Ctrl] [F9]	Find
Right-[Ctrl] [F10]	Cut
Right-[Ctrl] [1]	Mute
Right-[Ctrl] [2]	Volume -
Right-[Ctrl] [3]	Volume +
Right-[Ctrl] [4]	Power*
Right-[Ctrl] [H]	Help

Certain PS/2 keyboards have a power key which will be mapped to perform the same function for a Sun system.