Troubleshooting

Drive Speed and Setting the number of Active Tracks per Unit

Most modern 2GB+ drives can record and playback 12 tracks simultaneously, but older, slower drives may have problems. The interface timing for formatted drives is reported in **About Soundscape...** under the **Help menu**. The formatted size for each drive in the system is also reported and each is identified as F' (fast), M' (medium) or S' (slow). Drives reported as F' will not automatically be able to record and playback 12 tracks, as there are other parameters that affect this (*e.g.* cache size, rotating speed etc.), but it is unlikely that drives reported as M' or S' will have reliable 12 track operation.

Under the **Settings menu** you can determine the number of **Active Tracks per Unit** as 8, 10 or 12. The setting is also shown in the status bar as T/U. If you select 12 tracks per unit and a DSP processing power limit reached' error message appears, then try reducing the number of tracks per unit to 10, as this is related to the drive performance. If you use a number of simultaneous fades in your arrangement, then you could also try checking the same arrangement with fades turned off.

If there are more active tracks in the arrangement than the active tracks per unit setting, the parts that cannot be played will be displayed with a large X'.

A list of tested drives and results appear on the last page of this chapter.

Warnings and Error Messages

The following warning dialogue boxes may be displayed on starting the Soundscape operating software or during use. **Error Codes** may also be given. It is very important that you take a note of the Error Code and also note the exact circumstances in which the error occured. The Error Codes relate to internal software functions and it is usually not straightforward to determine the cause of the problem without the context at the time of the error message.

Soundscape 1 '\\.\SSDEV0' can not be opened!

This warning is normally displayed when:-

1. The Soundscape Rack Unit is not powered on.

2. The flat connecting cable from the PC is not connected or is damaged.

3. The Unit 1/2 switch on the rear panel of the rack unit is incorrectly set, or you have clicked on the wrong icon.

4. The wrong Base Address is set on the Host Interface Card or in the Soundscape Device Driver.

5. The Host Interface Card is not fully inserted in the PC expansion slot or the card is faulty.

6. You have an old Soundscape unit with new hard drives and the motherboard requires the reset circuit modification for the faster spinup of newer hard drives. *Contact your Distributor for advice*

Power down your complete system, including your PC, check each of the above carefully, trying the software again after each check.

Hardware Not Responding Correctly

This warning is normally displayed when two rack units have their Unit 1/2 switches set the same, the Host Cable is damaged or the connectors are not fully inserted.
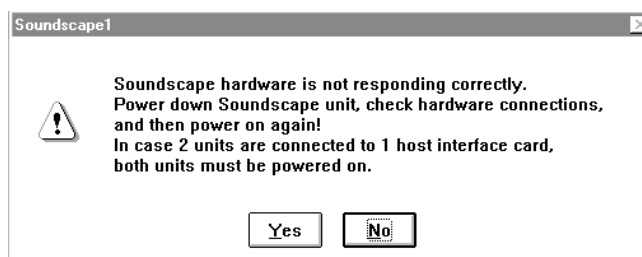
Soundscape tests the high speed data link from the PC to the rack unit(s) on start-up, and the test has produced errors.

Check the setting of the Unit 1/2 switch on the rear panel of the rack units, and that the Host Cable is fully inserted and undamaged, turn off and then power up the system and try again.

Soundscape 1: Unit communication error!

This warning is normally displayed when you have been using the Soundscape correctly and either:-

1. The power supply to the rack unit(s) has been interrupted or switched off.

2. The flat connecting cable from the PC has been disconnected.

3. The Soundscape software has hung, due to another Windows application not releasing any processing time. Power down your complete system including your PC, check the connections and restart.

SoundDisk Initialisation Error

This warning is normally displayed when:

1. You are installing a hard drive(s) for the first time and either:-

    a.   The jumper settings are incorrect.

b.   The drive connection cables are not fully plugged in or are reversed.

c.   The drive or connection cables are faulty.

d.   There is a short between the hard drive circuit board (*e.g.* from the jumpers) and the mounting plate.

e.   The Switched Mode PSU is faulty.

2.   A power glitch has caused the Soundscape to lock up.

Power down your complete system including your PC, check the connections and restart.

DSP Processing Power Limit Reached

This warning is normally displayed when a track buffer becomes empty during playing, due to one or more of the following occurring simultaneously:-

> **Soundscape V2.02.1**   [×]
>
> ⚠ Soundscape 1: DSP processing power limit reached. Audio may not be played or recorded correctly!
>
> [OK]

1.   The amount of fragmentation of takes on the drive is too high for the speed of drive that you are using.

a.   Reduce the amount of work that the disk head is asked to perform, by merging some of your edits on one track to form a new take.

b.   Buy a faster hard drive (10mS - 13mS is now the standard speed even for low cost drives). Check the latest list of recommended hard drives.

c.   Try setting the Tracks per Unit (T/U) to 10 or 8, as your hard drive may not be able to provide 12 tracks under some conditions.

2.   The DSP is performing a number of real-time fades,usually at 48kHz sample rate (generally combined with 1.)

a.   Reduce the number of active real-time fades by merging to a new take which includes the fade.

b.   Use a lower sample rate (*e.g.* 44.1kHz instead of 48kHz) - there is no significant benefit in audio performance when using 48kHz compared to using 44.1kHz.

Sometimes with 'slower' drives, at 48kHz, the drive will not record 10 simultaneous tracks, but will happily play 12. The solution is to temporarily switch to 10 tracks per unit for recording (**Settings menu** or **Status Bar**) and then switch back to 12 tracks per unit afterwards.

Soundscape

SoundDisk Error

This warning is normally displayed when the DSP detects an error message from the hard drive in the rack unit during a read/write operation.
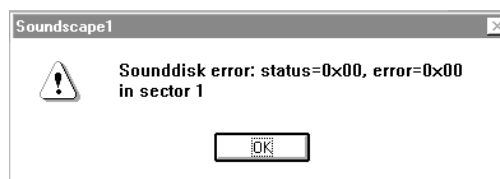
The sector number refers to the position on the disk where the error was detected. Sectors 0, 1 and 2 contain the Soundscape Disk Filing System (SDFS) table which holds information about where SFiles are stored on the SDisk. If the error is in these sectors and it is not removed by following the procedure given below, then it will be impossible to use the drive for Soundscape. The SDFS is normally saved for each rack unit when you exit the program, in files named with the disk type and serial number (*e.g.* Maxtor123456.SDFSA) in the **c:\Soundscape\Sdfs** folder.

This is similar to the situation for a drive used in a PC, where a disk error in the File Allocation Table (FAT) renders the disk unusable.

1. If the message appeared when you started the Soundscape software and this is not the first time that you have used the system then:-

    a.   Power down your complete system including your PC, check that the connection cable from the PC to the Soundscape rack unit is firmly plugged in at both ends, and restart.

    b.   If the same message appears again, check that both of the connecting cables to the drive inside the rack unit are firmly plugged in, also at the circuit board end.

    c.   If this does not cure the problem, check that the Host Interface card is firmly connected in the PC expansion slot.

    d.   If the fault is still reported on start-up, and is in Sectors 0, 1 or 2, you can still check whether the system still works by recovering the SDFS file as described later in this chapter.

One beep on start-up means that the fault was in sector 0, two beeps means that the error was in sectors 1 or 2.

You should be able to make a backup of the takes and then try to reformat the drive. If the format is successful, spend some time
testing the drive with non-critical material, before trusting it with your precious arrangements.

2. If you have just installed the hard drive, then check the connections as for 1. above, but you will not be able to start-up as in 1d., as no SDFS file exists.

3. If you are using two units, check that they are set as unit 1 and unit 2, because if they are set the same, this message can occur due to communication errors, even though there is no actual disk fault.

4. If the error appears when using the system normally, then first try following 1. above.

If the error was at a position other than sector at 0,1 or 2, then performing a disk format will log any bad sectors and will not use them in future. However, the nature of disk surface faults is that they can be intermittent, influenced by temperature or the particular head movement at the time, and usually become worse over a long period. It may be that when during the formatting, the sector does not cause an error, and so is not labelled as being bad.

Soundscape Disk Filing System (SDFS) File

Startup Errors due to bad SDFS or SDisk Format

Every time that you exit the software normally, if changes have been made to the sound disk (recording/deleting takes etc.), a file called *e.g.* **Maxtor123456.SDFSA** which resides in the Soundscape\Sdfs folder on the PC, is updated with the latest SDFS changes. This file can be used to recover from errors in the version of the SDFS table stored on the sound disk.

Soundscape keeps a history of the last **26 versions** of the SDFS file and names them {Maxtor123456.SDFSA}(newest), {Maxtor123456.SDFSB}… …{Maxtor123456.SDFSZ}(oldest). This makes it possible to attempt to recover deleted takes, several sessions after deleting them (as long as the area on disk has not been overwritten).

Recovering an SDisk - Retrieving Deleted Takes

This should be used with care !!!

Before you recover an SDisk, make sure that you have closed and re-opened the Version 2.XX software so you are sure that an up to date SDFS file for the SDisk has been saved. If may be that no new SDisk changes have been made since the last SDFS file was saved, so in this case a new SDFS file is not saved. Now start the **Format SDisk** (this is NON-DESTRUCTIVE) and click on **cancel**. You will now be able to use Recover SDisk.

Select **Recover SDisk** under the **SDisk menu** if you wish to write an old SDFS file from the PC onto a drive in order to attempt retrieval of a delected take. Each time that the Soundscape software is closed after changes have been made on the SDisk, a new SDFS file is copied to the c:\Soundscape\Sdfs folder on the PC. A list of SDFS files will be shown and you can select the SDisk and SDFS file.

Check the SDFS file date so that you select one that is likely to contain the take that you need. Also, the SDFS file must be one that relates to the drive you are

attempting to recover files from. Recovery of a Take is not possible if the area of the disk that contains the take has been overwritten with a new recording or processed take, or if an SDisk defragmentation has been performed. If you select an SDFS file that does not contain the take(s) you need, then before you can use another SDFS file, you need to perform a Format SDisk and cancel as before (remember this is NON-DESTRUCTIVE). After this you will be able to use Recover SDisk again.

Startup Errors due to bad SDFS or SDisk Format

When Soundscape formats the sound disk, it uses sectors 0, 1 and 2 of the disk for identifying that the disk has been formatted by Soundscape and for Soundscape Disk Filing System (SDFS table). This table contains the Take ID information, and the pointers to where the SFiles on the disk are located, enabling an arrangement to find the required takes even if they have been moved by Defragment SDisk, Backup/Restore or Take Export/Import to the PC.

Recovering from a Disk Error on Startup

If for any reason the SDisk had an error when writing to sectors 0, 1 or 2, then the SDFS table or formatting information can be corrupted (this could be due to a power surge or untimely disconnection of the power lead or host cable). On the next startup of the Soundscape software, when the disk is checked a message such as 'Sounddisk not Formatted' or 'Disk Size Error' may be reported, along with a 'Format Sounddisk ?' query.

In this case, **DO NOT CLICK ON OK** , but click on **CANCEL** to enter the software without formatting the SDisk. Select Recover SDisk under the SDisk menu to allow you to select the latest SDFS file from the list (xxxxxx.SDFSA). Each time that the Soundscape software is closed after changes have been made on the SDisk, a new SDFS file is copied to the c:\Soundscape\Sdfs folder on the PC. A list of SDFS files will be shown and you can select the SDisk and SDFS file. Check the SDFS file date so that it is the latest one that relates to the drive you are attempting to recover (*i.e. it has the same model and serial number as labelled on the disk). If the file is missing or is corrupted or if it specifies that a bigger hard disk(s) should be required, then as a last ditch attempt to recover the audio on disk, try a previous SDFS file (e.g. xxxxxx.SDFSB).* One reason for getting the Disk Size Error message may be that one disk has been removed from the unit, or you did not wait long enough for both drives to spin up before starting the software. However, replacing the disk or re-booting will solve the problem.

Recovering from SDisk Formatting

If you do format the SDisk for any reason, the data is not erased, but is just read and written back during the disk surface test. All entries in the SDFS on the SDisk are deleted, so you will not find any takes in the SFile Manager. The SDFS file on the PC is not updated until you leave the software normally, so to reload it, just start the SDisk format again (from within the program) and then click on **Cancel**. The formatting will exit, but now there is no Soundscape format ident

in sector 0 of the disk. Select **Recover SDisk** under the **SDisk menu** to allow you to select the latest SDFS file from the list (xxxxxx.SDFSA). Check the SDFS file date so that it is the latest one that relates to the drive you are attempting to recover (*i.e.i.e. it has the same model and serial number as labelled on the disk).* All of your recorded audio on the disk will be intact, and the arrangements will load perfectly.

Recovering a V1.18 or earlier DAT Backup which will not Restore

If a DAT backup will not load, first of all make sure that you are trying to load it using **Restore BUFV1.8**, or **BUFV1.7 or earlier from DAT**. If this fails, then listen to the preamble 'bong' at the start of the backup on tape and compare it with the sound of the backup direct from Soundscape s analogue outputs. If the preamble on tape sounds like it is shortened or has clicks right at the start, then there is a method to recover the backup.

First, record the entire backup sequence in stereo from the DAT into Soundscape using the digital inputs. Next, also record a good preamble from another backup sequence. Examine the waveforms of the good preamble and compare it with the bad version. If there is a difference, you will have to cut the good preamble and join it to the bad header, in exactly the same position as the original preamble. This must be accurate so that there are exactly the same number of samples between the end of the preamble and the start of the header as there were for the good version. Make sure also that Deglitch mode is turned off.

To test your composite backup sequence, record it back to the DAT (just using play mode) in stereo (track pans must be set hard left and hard right). It is not necessary to record the entire backup sequence at this stage. Save the current arrangement using a temporary name. Try to restore the preamble and data header. If the splice is successful, then either the backup will start to load correctly (even if no takes are recorded) or it will give you a Not enough Sounddisk space message.

Load the temporary arrangement again, and now record the entire backup sequence to DAT digitally. Then you should be able to restore the complete backup sequence. It may take some trial and error to produce the correct solution, but it should not be too difficult. However if more than 2 data header bursts are damaged, then it is almost impossible to retrieve the audio takes or arrange file, but you can record the audio back in and attempt to sort out the takes manually.

Mixer processing power limit reached!

This message is displayed when the current mixer configuration requires more than 100% DSP power (P) or DSP memory (M). Audio will be muted until you delete or mute a mixer element, or change to a lower sample rate (*i.e.* a mixer takes about 10% more DSP processing power at 48kHz compared to 44.1kHz).

Soundscape

Power Failure or PC Crash During Recording

When Soundscape is recording takes that will be at least 2 minutes in length, temporary take files are created on the SDisk. If the recording is stopped properly, the temporary takes are changed into completed takes. If the power fails before the recording is completed, then if the PC is still operating normally, you will be able to save the arrangement, but if not, just the takes that were being recorded will be saved. The next time that the Soundscape software is started, the temporary takes will be automatically recovered (Lost takes were automatically recovered on SDiskXX), so that everything that was stored on the SDisk up until the moment that the power failed is available for use.

The actual takes that were being recorded will be recovered as the full length that was allocated for recording, so you should listen to and edit the takes and then use the **Shrink Takes** function to just keep the relevant audio.

If the arrangement could not be saved (ie. The PC was not operational), then as the takes all have the Start timecode saved, you can easily recreate the arrangement by dragging the takes into the arrange window with the Ctrl key pressed to place them at the originally recorded timecode.

Tested Hard Drives for Soundscape

Tested Hard Drives				
Manufacturer	Model	Playback Tracks	Record Tracks	Speed
IBM 2.1GB Deskstar	DAQA-32160	12	12	F
IBM 4.3GB Deskstar	DCAA-34330	12	12	F
IBM 6.4GB Deskstar	DHEA-36480	12	12	F
IBM 8.4GB Deskstar	DHEA-38451	12	12	F
Maxtor 853MB	7850AV	12	12	F
Maxtor 5.1GB	85120A8	12	12	F
Western Digital 1.2GB	Caviar 21200	12	10	F
Western Digital 2.1GB	Caviar 32100	12	10	F
Western Digital 2.5GB	Caviar 32500	12	10	F
Western Digital 3.1GB	Caviar 33100	12	10	F
Western Digital 4.0GB	Caviar 34000	12	10	F
Western Digital 4.3GB	Caviar 34300	12	10	F
Western Digital 6.4GB	Caviar 36400	12	10	F
Seagate 2.1GB	Medalist Pro ST32132A	12	12	F
Seagate 2.5GB	Medalist Pro ST52520A	12	12	F
Seagate 6.4GB	Medalist Pro ST36450A	12	12	F
Seagate 9.1GB	Medalist Pro ST31940	12	12	F
Fujitsu 1.2GB	M1636TAU	12	10	F
Fujitsu 2.5GB	M1638TAU	12	10	F
Fujitsu 4.3GB	MPA3043AT	12	10	F

Soundscape

VITAL STATISTICS

SSHDR1-Plus Serial Number

SSHDR1-Plus Serial Number

SS8IO-1 Serial Number

SS8IO-1 Serial Number

Software Plug-in

Type

Password

Software Plug-in

Type

Password

Software Plug-in

Type

Password

Software Plug-in

Type

Password

Notes: