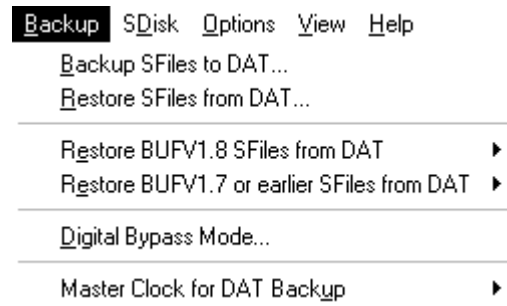


Backup Menu

Soundscape is able to use a standard DAT recorder for backup of the digital audio takes from the SDisk as well as arrange files, mixer files and any data files which are normally stored on the PC. This also allows an entire project that includes other related files (e.g. AVI, MIDI files etc.) to be backed up from the SDisk and taken to another system using just a DAT tape.



The backup is performed digitally in stereo and the files are arranged randomly, split between the left and right channels, to minimise the backup time. A sample rate of 44.1kHz or 48kHz is used and the backup is made via either of the S/PDIF outputs (or AES/EBU if the Pro-audio option is installed). There is also a selection to allow the sample rate being received at the digital input to be used during the backup instead of the internal clock. Normally, you should select the default 48kHz setting to perform the backup as fast as possible, but whichever sample rate setting is chosen for backup, it will not affect the sample rate that you use in your arrangements. The 44.1kHz setting would be used for making a backup using a CD Recorder.

Note: *Some CD Recorders can use a 48kHz input signal, but they use a sample rate converter to convert this to 44.1kHz. Do not use a sample rate converter as this will change the data and will make the backup unusable.*

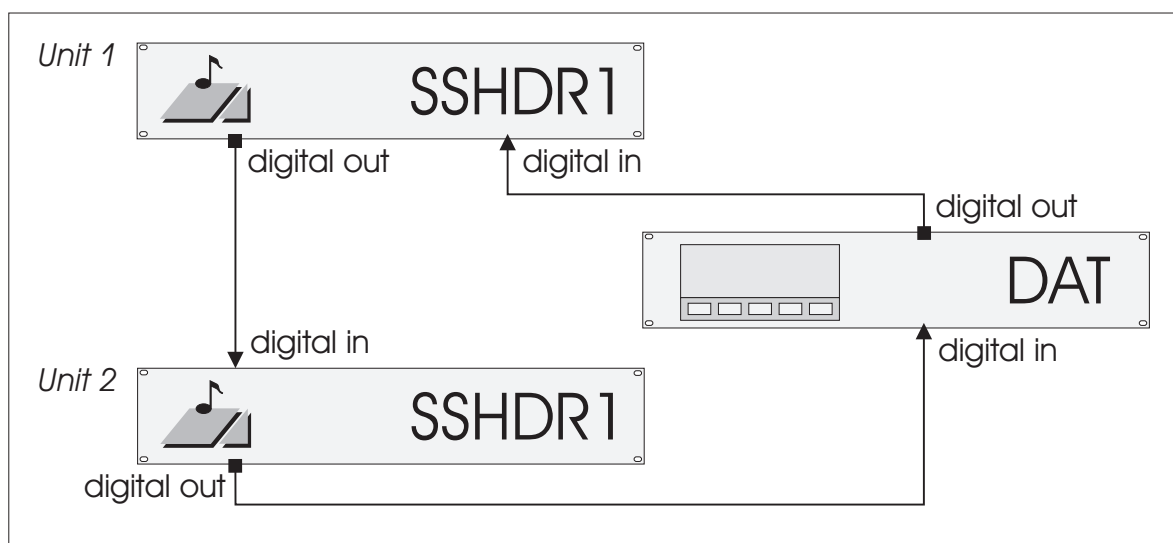
The backup format identifies each take with the 64 character backup session name, 128 character comment and a record number and it has an individual header with error checking/recovery (CRC) data. The SFile is split equally across the left and right channels, so that in the case of a take, you can hear the first half of the take on one channel and the second half on the other channel. As each SFile has it's own individual header, you could restore just one take from an entire session if necessary.

Error rates for DAT machines are very low (similar to computer tape drive backup systems), and this is always improved when the DAT machine is given the regular cleaning and maintenance that all tape machines need. The V2 DAT Backup/Restore has built-in error recovery, as do most DAT machines, but this does have limits. Always use new brand name tapes (i.e. not ones of unknown origin that have been lying around the studio for some time) and you should experience trouble free operation.

The backup automatically saves selected SFiles from any unit or drive. For multi-unit systems be careful to connect your DAT machine as instructed in the Backup/Restore windows and you must have a daisy chain' connection between digital out of the first unit to digital in of the next unit and so on.

Soundscape

For multi-unit systems, the other options allow SDisk remapping, so that backups records originally from one unit or drive can be restored to a different unit or drive.



Note: The V2 DAT backup format is completely different to previous formats from V1.18 or earlier software. However, old DAT backups can be loaded into Version 2.00 and an SFolder is created for the takes, named with the DAT backup name that was originally entered. The arrangement is also saved in the SFolder and can be opened by double-clicking on the SFile. Arrangements are identified on the SDisk with a special icon.

Backup SFiles to DAT...

Select **Backup to DAT** to start a backup session. A dialogue box will be displayed, allowing you to choose which SFiles and SDisks are to be backed up. Use the **DAT tape length** pull down to select your tape duration. The estimated number of DAT tapes, the number of SFiles and the approximate backup time will be displayed. You can also type in a session name (up to 64 characters) and some comments (up to 128 characters). The date and time of the backup are automatically included in the header, so you don't need to type them in.

Connect the DAT recorder as described in the box (shown next page). Unless you have selected 'Digital Input' for the 'Master Clock for DAT Backup' setting, Soundscape will automatically switch to the internal 44.1kHz or 48kHz sampling rate that is selected, as soon as the Backup dialogue box is displayed. You must set the DAT to record from its digital input, so that it should automatically lock to the the sample rate being received.

Note: Do not put the DAT recorder in Record/Pause mode or start recording until after the backup dialogue box is displayed (this is when Soundscape switches to internal 44.1kHz/48kHz or uses the digital input master clock), as many DAT recorders will not lock correctly if the sample rate is changed during Record/Pause or during recording.

Soundscape

Start the DAT recording, and click on **Backup** or press the **Enter** key. Soundscape will then display the dialogue box shown below:-

Note: When you start recording on the DAT machine, make sure to leave enough time for the DAT to lock correctly at the 44.1kHz or 48kHz sample rate before clicking on 'Backup'. The entire 'bong' (preamble) which precedes the 4 header bursts is necessary to synchronise the data being received.

When the backup has finished, another box will be displayed:-



You can print the detailed log report to keep with the DAT as a record of which SFiles were backed up.

Verifying a DAT Backup

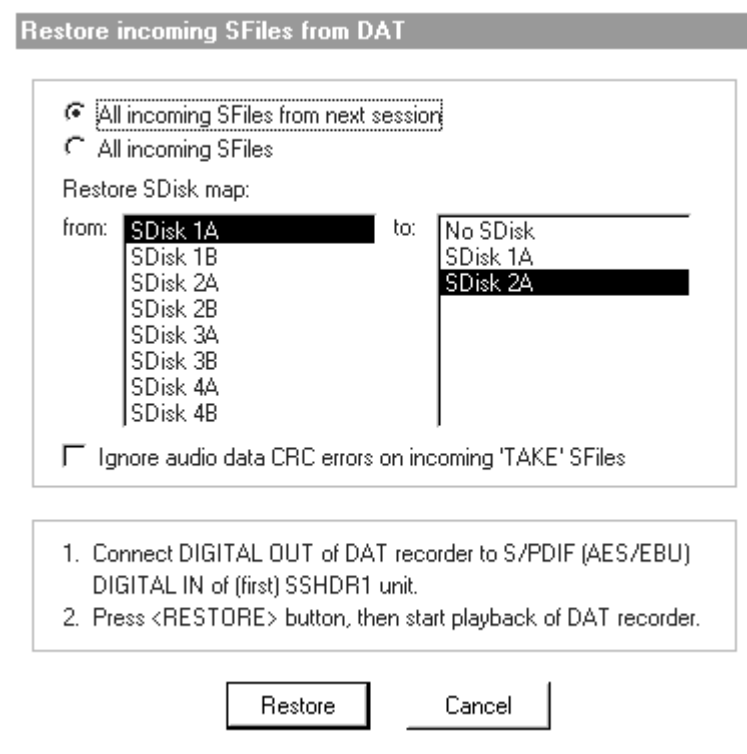
To verify that a DAT backup is good, select **Restore**, but in the Restore SDisk map select 'No SDisk' as the destination for each SDisk used in the backup. This means that SFiles will be skipped (*i.e. not loaded*) during restore, but the record header and data will still be checked for errors. The detailed log report will show which records could not be verified due to CRC errors.

Note: It is very important that you verify each backup session that you make. If you are relying on this backup and you delete the SFiles from your SDisk to save space, then without verifying that the backup is recorded correctly, there is a chance that you could lose all your valuable data. It is useful to print a copy of the detailed log report after verifying your DAT backup for future reference

Note: A "not enough sounddisk space" error message confirms that the backup header is correct, but you do not have enough space for all the files to be restored.

Restore SFiles from DAT...

To restore from a backup made on DAT, select **Restore from DAT**, under the **Backup menu**:-



Connect the DAT recorder as described above. Make sure that the DAT is rewound to the start of the backup (it is always best to use the DAT's **Start ID** feature when recording). The DAT should play back at the sampling rate stored on tape.

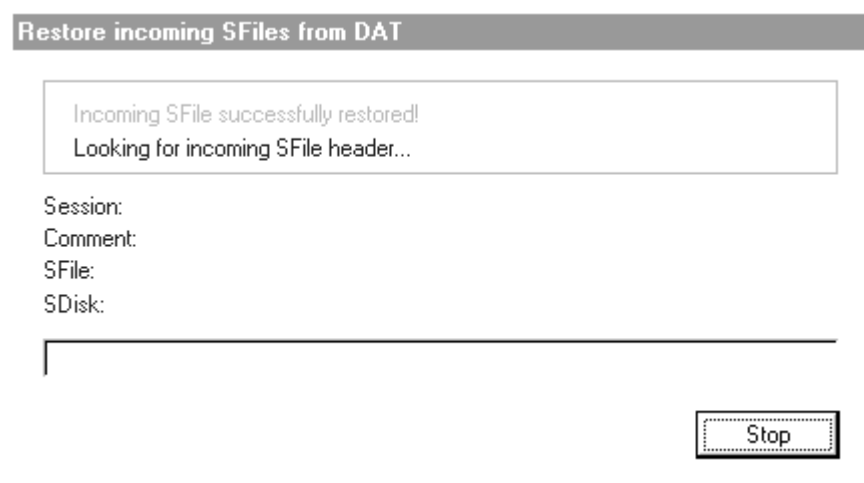
Soundscape will be automatically set to lock to the sample rate received at the digital input so you **do not have to change** the **Master Clock/Input** or **Sample Rate** values from the **Settings menu**.

You can select whether to restore just the SFile records from the next backup session found on the DAT, or to restore all SFile records found, even if they are from different backup sessions.

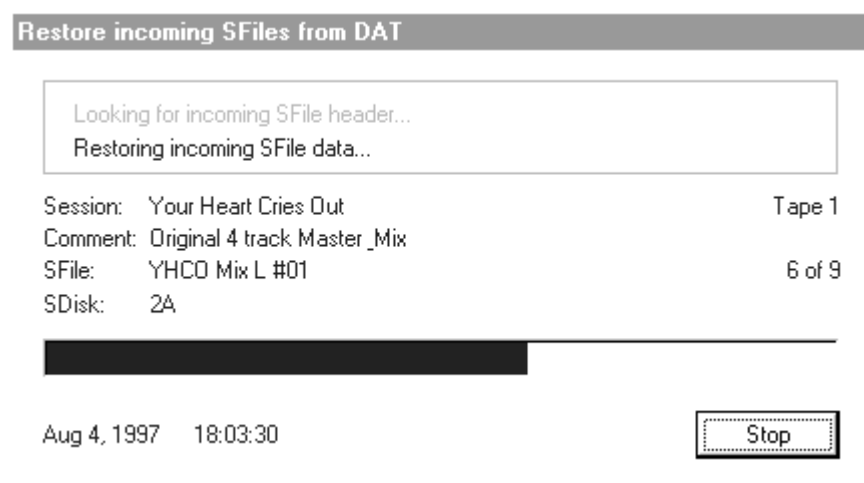
Click on the **Restore** button or press the **Enter key** on the keyboard. If you have an arrangement displayed in the arrange window, you will be asked if you want to save any changes you have made. The arrange window will then be cleared.

Soundscape

Soundscape will begin scanning for a backup header.

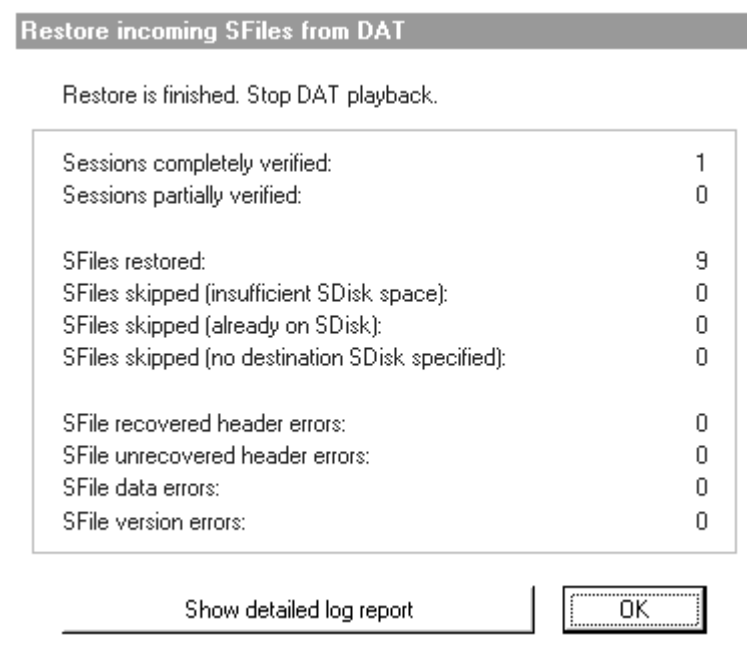


When a header is received, the date and time saved in the backup and the user backup information will be displayed, as shown below:-

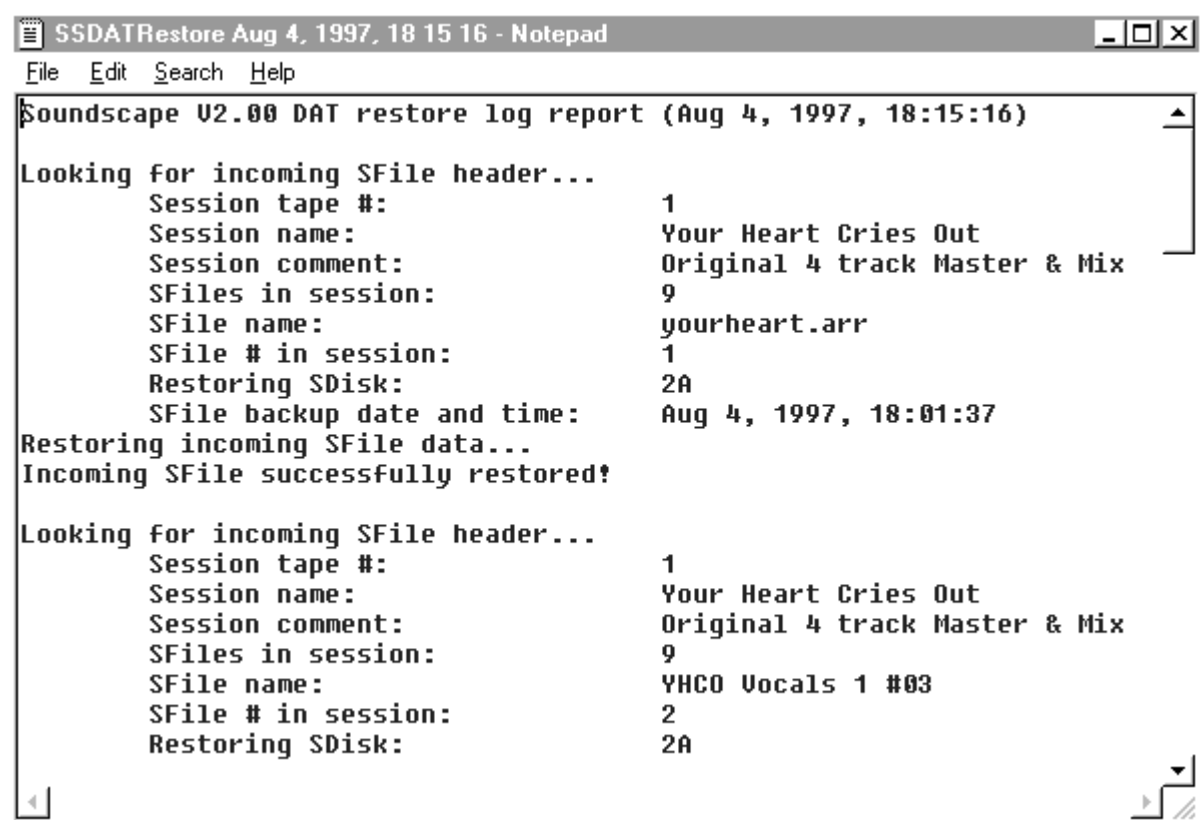


If you click on the **Stop** button, the restore will be aborted without storing the takes on the hard disk.

When the restore has finished and has been loaded correctly, the dialogue box below will be displayed:-



A log file is created during backup and restore operations, so that detailed information is available. This is especially useful if you have an unrecoverable error during restore and you need to identify which SFile failed to restore.



Soundscape

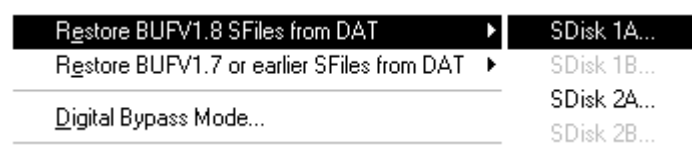
You can select an option for loading takes with unrecoverable CRC errors (this may be the best option available) so that at even if there is an audio error (e.g. a *click*) at least some of the take is usable.

Backing Up and Restoring to DAT with Multiple Soundscapes

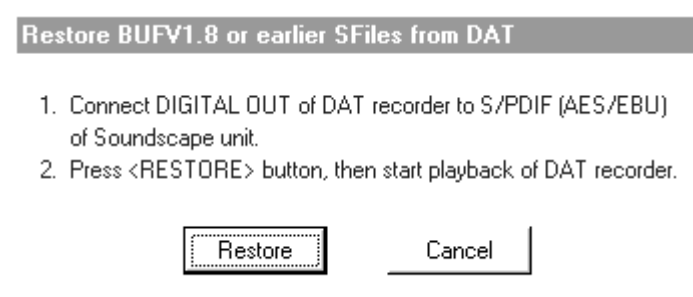
Backing up a Multiple Soundscape System requires that the digital inputs of all slave machines are already daisy chained for sample rate synchronisation to the digital outputs of the previous rack units. You don't have to connect each unit individually to the DAT recorder, as the **Backup/Restore** operation automatically selects a **Digital Bypass mode** for all units not being backed up or restored and routes the digital audio from the digital input straight through to the digital output of each unit. The input of the DAT recorder can then be connected to the digital output of the last rack unit in the daisy chain and the output of the DAT connects to the digital input of the master rack unit. The unit having SFiles being backed up or restored will then have it's digital signals connected through all the other units, to the inputs and outputs of the DAT recorder.

In this way, it is possible to backup and restore an arrangement which contains takes from any SDisk from multiple units. The backup record contains information about the unit and SDisk that the SFile was originally from, but you can remap the SFiles from one SDisk to a different SDisk when restoring.

Restore BUFV1.8 SFiles or earlier from DAT...



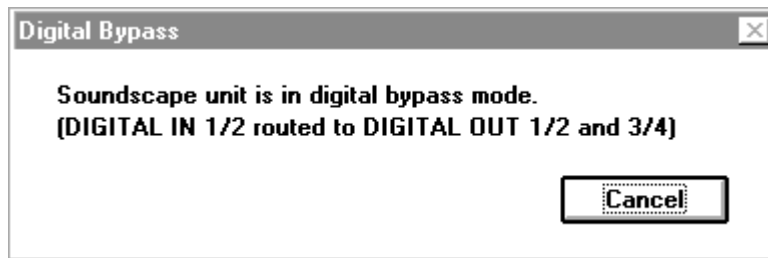
Backups made with early software releases (V1.13 - V1.18) have a different format and need to be restored using this setting.



Old backup versions will be ignored if you try to load them using the current backup/restore format (V2.0).

Digital Bypass Mode...

Select **Digital Bypass mode**, to route the digital signal from digital input to the digital output. The dialogue box shown below will be displayed:-



When you have finished making the backup, click on the cancel button or press the **Enter key** to exit Digital Bypass mode.

Master Clock for DAT Backup



Selects Internal 44.1kHz, Internal 48kHz or Digital Input master clock to be used when making a backup.

If you don't backup... you risk losing your valuable work. We can't help!