

First help

How to get help in the event of a problem:

If your HD-SX3 doesn't work properly, please follow the 3 steps below:

1. First read our trouble shooting and help information's on page 26.
2. If you cannot find a solution please ask your dealer or authorised service/installation centre. All dealers and authorised service/installation centres are informed regularly of the latest help information and solutions.
3. In the event that your dealer or authorised service/installation centre cannot solve your problem please contact us directly:

KEY SOFT SERVICE (Switzerland)

Postmatte 1, CH-6214 Schenkon, Tel. 0041 (0) 41-922 03 14, Fax 0041 (0) 41-922 03 15, e-mail: info@keysoftservice.ch

To assist us in helping you when you phone please have the following information ready:

w Serial no. of HD-SX3 and KN6000

w HD/Soft Parameter

w Detailed problem description

Please understand that we are only able to answer questions about the HD-SX3. Your Technics dealer will help you with all of your specific KN6000 questions

Warranty and obligation: KEY SOFT SERVICE offer a product warranty of 6 months. This will be handled from our domestic sales companies and can be different from country to country. Decisive are the terms and conditions of your dealer.

We strongly recommend to keep your original data (software disks) on a save place and to make regular backups of your HD-SX3 data to floppy disks.

All printed information and drawings in this owners manual are protected.

No part of this publication may be reproduced, transmitted or stored in a retrieval system without the prior written permission of the copyright owner, KEY SOFT SERVICE CH-6214 Schenkon. KEY SOFT SERVICE makes no warranties wit respect to this documentation and reserves the right to make changes without notice.

© Copyright 1995 by KEY SOFT SERVICE. All rights reserved.

PointStyle is a registered trade mark of KEY SOFT SERVICE (Switzerland). Printed in Switzerland.

Technics is a registered trade mark of Matsushita Electric Industrial Co., Ltd. Osaka, Japan. Microsoft and WINDOWS registered trade mark of Microsoft Corporation.

Content

Introduction - About this manual	2
Button description and meanings	3
SELECT SONG (Load a title)	
SELECT NAME	4
SELECT NUMBER	5
SAVE SONG	
Write protection	6
Directory naming	6
Save a song	7
SETUP & TOOLS	
COPY FD TO HDD	8
Write Protect, Write Confirm, Select Partition, Load by number	9
Quick Load, Jump after Load, Display freeze, Save Options, Format HDD	9
SUPPLEMENT	
Tips, Tricks and suggestions	10
Manipulation and trouble shooting	11

Introduction - About this manual

w Overview

HD-SX3 is a professional system extension with an internal (2.5") hard disk, program Flash-ROM and SRAM which is integrated into the main operating system of Technics KN6000. HD-SX3 follows the same operation procedures as other features on the KN6000.

You will very quickly be able to operate all of the functions of HD-SX3, but despite the ease of use of the HD-SX3, please don't be tempted not to read the manual! A hard disk drive is a precision piece of equipment and needs special care and attention.

❖ *Therefore, we strongly recommend that you read this manual.*

HD-SX3 uses a very safe data handling system, including head parking and motor off during play and data verifying during data write. In addition, the HD-SX3 offers highly advanced shock resistance and reliability. Nevertheless, we strongly recommend that you make monthly backup's of your valuable data. Every procedure is explained in this manual, including considerations about your own HD structure and HD handling practices. Supplement pages 25 and 26 have further details about this.

w This owners manual

The HD-SX3 owner's manual is a supplement to the Technics SX-KN6000 manual. You will find a menu guide for all functions similar to those in the main KN6000 manual. Additionally, special comments and notes in this manual highlight important features.

w Technical description

All data loaded from floppy disk to the internal KN6000 memory, and all data combinations made on the KN6000 can be stored on HD-SX3 hard disk drive. You can select with the load/save option which parts of a title are saved. When you turn the power ON the new HD-SX3 start-up display, followed by the regular Technics standard display appears. HD-SX3 uses this time to check the FAT (File allocation table) and boot sector of the HDD and copy all text information (Directories/ File names and your personal settings) from the selected partition to the HD-SX3 memory (SRAM). The Technics KN6000/HD-SX3 is ready to play after the start up procedure has completed. To increase data safety every written data block is verified before the data is stored on the HDD. Therefore saving takes a bit longer than loading. For copyright reasons (MS-DOS) and data read speed the HD-SX3 uses its own HDD format.

❖ ***The HDD does not keep running during play, which means data loading takes a little longer compared to MIDI direct play. The only reason for this is safety precaution is lifetime of the hard disk drive.***

Just for your reference: A progressive 2.5" hard disk drive can handle up to 150 G shock resistance during operation but regarding vibration this parameter will be reduced drastically to a critical 1.5G. To make the system open for updates and improvements, the

HD-SX3 uses Flash ROM for the program area. All HD-SX3 functions are handled and controlled by the KN6000 main CPU and will be shown as same as all other operation from the KN6000 display and powered by the new speedy 32-bit RISC processor. The hardware connection between the HD-SX3 and the KN6000 main board is made with an industrial 56-pin micro connector. HD-SX3 is controlled and tested to reach the CE certification.

w Specification:

- HD-SX3 system board with 2.5" E-IDE hard disk drive mounted
- HD-SX3 owners manual, Update disk and warranty card

Congratulations on choosing the HD-SX3 as your hard disk option for the Technics KN6000 and thank you very much for your valued confidence in our latest product.

HD-SX3 (HD=**H**ard **D**isk, **S**=System, **X**=eXtension, 3= smaller version of SX6) offers a huge memory capacity, a very quick loading and all the necessary option's which will support your performance.



Button description of HD-SX3



HD-SX3 naming

HD(D)	Hard Disk (Drive)
File	Single file
Song/Title	One or more files with the same name
Directory	Folder of max. 16 Song/Title = DIR

(*) A remark to some more information's in the appendix.

Select a song/title

Since the load function is the most important thing on stage, the HD-SX3 is primarily designed to offer fast HDD access and automated operation. Therefore, we start the function explanations with a simple file load.

Attention: If your HD-SX3 is empty (no data transfer from previous HDD systems) you need to save a song first. Please go to the page 11 (SAVE SONG) first.

"Function" *HD-SX3 entry point*



Because HD-SX3 uses the same page's for loading files, saving files and edit functions, we have added an dedicated HD-SX3 icon.

- ➔ 1. Press the DISK button on the MENU group followed by the HARD DISK MAIN MENU button on the DISK MENU.



Compare to all our previous sytem extensions the HD-SX3 doesn't read all the HDD parameter during KN6000 start-up. Only if you need access to the HD-SX3 system you have to wait about 6-8 seconds for reading and setting of all necessary parameters into the internal SRAM. This procedure is necessary just once you are working with the keyboard.

The HD-SX3 main menu page appears.

The right side buttons have direct access to the basic load selection.

The left side functions are reserved for tools and settings in the non playing mode.

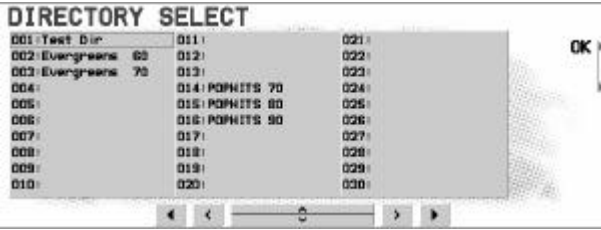
In the centre part of the display you can see the status of WRITE PROTECT, WRITE CONFIRM, SELECTED PARTITION, LOAD BY NUMBER MODE, QUICK LOAD MODE, JUMP AFTER LOAD and the free memory capacity of the actual selected HDD partition.

"Function" Selected Partition

One of the most important new features is the HDD division into 3 equal partitions for each 3'840 songs/titles. More about that below SETUP & TOOLS on page 23 .

SELECT NAME

➡ 2. Press the SELECT SONG button



The DIRECTORY SELECT page will appear.

Depence on the Display parameter (BigFont/SmallFont) the display is different and show 30 or 48 directories.

For an easier operation in the low light conditions such as on stage, the OK function is set to both top right buttons.

Use the UP/DOWN button, the LEFT/RIGHT or the Program/ Tempo wheel to select the directory you wish to display. If you or your service centre made

a data transfer from a previous HDD system you will find all directories in the well-known structure.

"Function" Directory select (Directory search)

The total of 240 directories are divided into 5 or 8 pages. Using the LEFT/RIGHT button you can change from column to column or with the area switches (most left/right) you jump to the next area of directories. Of course you can use eighter the buttons or the dial.

➡ 3. Select a directory and press OK.

The FILE SELECT page will appear.



SmallFont: In the left box you will see all the selectable songs/titles. The directory name is listed in the top box. The right box (grey label) is a preview of the following directory.

BigFont: Because of the bigger font sie there are 16 song/titles into 2 columns.

The types of data that can be loaded from the selected file are shown in the file info box.

"Function" Song/Title search

If you turn further on position 16, the following (grey labelled) directory appears and the cursor is positioned on No. 1. For a faster search method use the LEFT/RIGHT button to change to the next directory.



Change to the LOAD OPTION (press the page button) to load specific data only. (For example just Panel Memory, Sound Memory or any combination of the available data types). You can start the loading operation also from this page.

- ➔ 4. Select a Song/Title with the  (UP/DOWN) buttons and press LOAD.



Now you will see the LOADING ... PLEASE WAIT message for about 2-3 seconds.

Loading time depends on the number of file's size. If you just select a small sequencer file loading will take about 2 seconds. If you load the same title as a Performance file it can take about 4-5 seconds.

If you select a *.ast (ALL CUSTOM STYLE), the data are much bigger and they need to be stored into a Flash-ROM which can take up to 45 seconds.

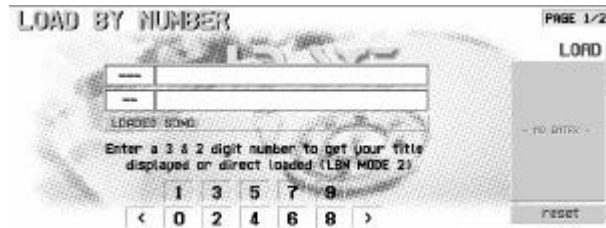
- ➔ After LOADING is completed, the keyboard is ready to play.

Please note, that the data's has the same condition as you loaded them from disk.

SELECT NUMBER

As many musicians organise their file's based on numbers the HD-SX3 also offer this kind of file loading.

- ➔ 1. Press SELECT BY NUMBER on the SELECT DIRECTORY page.



Load by number offer the same loading options as load by name.

Note, that there is no LOAD OPTION available when you have selected the LOAD BY NUMBER MODE 2 on the SETUP & TOOLS page.


"Function" 3 & 2 (5) digit number entry

Use the 10 marked buttons below the display and the HD-SX3 will automatically find the selected file.

The LOAD BY NUMBER MODE 2 will automatically load the file after receiving the 5th digit. Use CLEAR if your entry was wrong.



- ➔ 2. Type a 5 digit number with the UP/DOWN buttons

With the LEFT/RIGHT buttons  you can switch to the next Title forward and back

Important! Only a complete 5 digit number will display a file.
For example: 001-01, means first directory/first file. If you type an empty number, a warning message will be shown.

Save a song/title

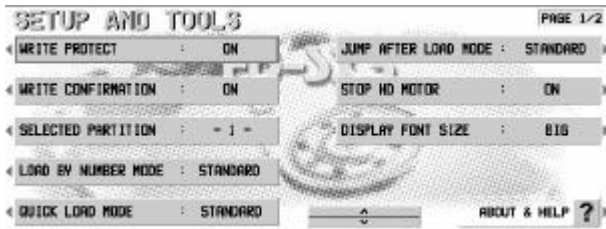
Write data to a hard disk drive is much more difficult than load. Therefore we have spent some more attention to this function. As already mentioned: The HDD is always write protected when you turn ON the keyboard!

"Function" WRITE PROTECTION

The SAVE function on the HD-SX3 is secured of several reasons:

1. Save functions are mostly used at home. During performance on stage you normally need LOAD functions only.
2. To prevent accidental loss of data the SAVE/EDIT buttons are hidden in standard mode
3. Other people cannot delete or overwrite your data.

-
- ➔ 1. Press the SETUP & TOOLS button on the HD-SX3 main page followed by the PAGE button
-



Further details you will find on the chapter SETUP & TOOLS, page 8.

-
- ➔ 2. Change the WRITE PROTECT from ON to OFF.
-

Directory naming

It's up to your decision how to proceed the naming of directories.

-
- ➔ 1. Press the SELECTION BY NAME button on the HD-SX3 main page.
-



You will find the same DIRECTORY SELECT page but there is the EDIT button in the right bottom corner.

The naming page looks almost the same as the KN6000 naming page.

-
- ➔ 2. Press EDIT and you will find the NAMING page
-

You can use all characters, as well as capital and small letters.

"Function" Long directory names

Taking advantage of the big screen directories can be named with a maximum of 16 characters. Additionally the LST button offers a small memory with the last naming string. Please refer also to the APPENDIX on page 10 and 11 for more information.

••••••••••

-
- ➔ 3. After generating a DIRECTORY name press the OK button to save the new name in the directory list.
-

Important! All data will be verified for safety reasons during saving, so this operation need a little bit more time.

Save a song/title to HDD

Save an existing file from a floppy disk (whatever type of file) to the HDD need the following procedure:

-
- ➔ 1. Load a file from FD, then press DISK, HD-SX3 and SELECT SONG, select a named directory and press OK.
-



You will find the same FILE SELECT page as for the load function but with the addition of the DEL.DIRECTORY, DEL. FILE and SAVE button.

If you don't want to save all types of file please change to page 2/2 and mark the files.

-
- ➔ 2. Select a free place and press SAVE. (The FILE NAMING page appear.)
-

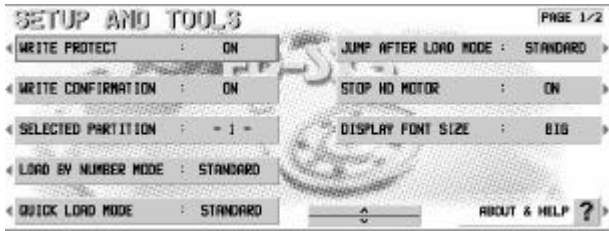
Also for the songs/titles you can use long names now, up to 26 characters (based on the international character set). Even here we have a LST button where you will find the last naming string. (see also Tips & Tricks)

-
- ➔ 3. Press the OK button to save the data to the hard disk.
-

If you have selected a place with an already existing song a warning page appear.

SETUP & TOOLS

With the extended HD-SX3 system the SETUP & TOOLS become more power and importance. Beside the already mentioned global settings (page 1/2), here you will find the functions like SAVE OPTIONS and HD FORMAT.



As a standard of our products you will find the personal settings on the PAGE 1/2 and the WRITE OPTIONS on the PAGE 2/2.

Please use this functions only in play stop condition, means not on stage, at home mainly.

COPY FD TO HDD

To automate LOAD/SAVE functions from floppy disk, HD-SX3 offer a very helpful and convenient COPY FD TO HARD DISK option. This HD write function is also only available when the HD write protection is turned OFF (refer to page 6).

1. With a floppy disk (*) on the disk drive press the COPY FD TO HD button on the HD-SX3 main menu



The disk directory will be written and displayed.

Since there is no space limitation on the HDD we always copy all files of a song/title.

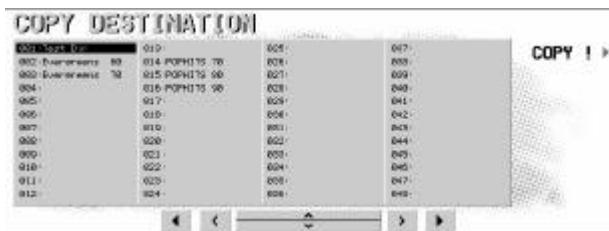
Use SMF to get the directory listed with your MIDI files.

2. Choose a song/title and press SELECT to mark it

When you mark a song an indication is added behind the name of the selected song. Continue by selecting other songs which you want to copy. With the SELECT ALL button all song/title will be marked at once.

3. Press the COPY * TO button

If you press the COPY * TO button before you have selected any files an attention message will be displayed.



On the DIRECTORY SELECT page, select a named directory as the location for your new files. Because you are in the edit mode, you can also name a directory for your files. To do this, press the EDIT button.

Note, that you can only copy files to a named and empty directory.

4. Press COPY to start the procedure

Depending on the number of song/title you would like to copy, the entire process can take some minutes.



There is also a 2nd page for the WRITE function like SAVE OPTION and FORMAT.

"Function" WRITE PROTECTION

As already mentioned on page 12, the installed hard disk drive is write protected always if you turn ON your KN6000.

Important! This function cannot be stored on the SAVE SETUP memory.

"Function" WRITE CONFIRM "ON/OFF"

All save functions normally need your confirmation by pressing YES or CANCEL. Experienced users may not want this confirmation procedure to appear every time, so it can be set to OFF.

"Function" SELECT PARTITION "1/2/3"

Since one of our main target was a compatibility to the HD-MEC2000, HD-HSO3000 and HD-AE5000 and the installed HDD is gigantic, we have decided to create 3 equal partitions. If you press SELECT PARTITION the UP/DOWN button will change to a 3 partbutton.

"Function" QUICK LOAD MODE "STANDARD/LBN BOX"

- STANDARD: Press and hold the DISK button for 3 seconds, and the last selected directory page will appear.
- LBN BOX: Like STANDARD but the LOAD BY NUMBER page will come up.

"Function" LOAD BY NUMBER MODE "STANDARD/AUTO LOAD"

- STANDARD: Standard will show directory and the song/title. The LOAD button need to be pressed to start loading.
- AUTO LOAD: With this mode the song/title will be loaded after the 5. character is entered.

"Function" JUMP AFTER LOAD "STANDARD/HD-SX3"

- STANDARD: This mode will set the display (after HD loading is completed) to the play mode screen.
- HD-SX3: HD-SX3 Mode will keep the file select list page for a fast selection.

"Function" DISPLAY SETTING

If you would like to change our standard display settings (bright background, dark elements) you can use also font and other colours.

"Function" SAVE OPTIONS

A small memory area store your personal settings like WRITE CONFIRM, PARTITION SELECT, QUICK LOAD, LOAD BY NUMBER and JUMP AFTER LOAD mode. The WRITE PROTECT ON/OFF setting cannot be stored.

"Function" HD-INFO

Software version and HD information's are displayed on this page.

APPENDIX

Tips, Tricks and suggestions

❖ DIRECTORY NAMING

Because of compatibility reasons (HD-MEC2000/HD-HSO3000/HD-AE5000) the HD-SX3 use the international character set and don't support umlaut and other special characters.

We recommend naming all directories with capital letters to distinguish them easily from file lists.

❖ LST (Last NAMING String)

If you have entered a new directory name or song/title it is very helpful that this name is stored on a small memory.

For example: You would like to name directories as Evergreen 1, Evergreen 2 and 3. With the LST button you only need to write the name EVERGREEN once and than press LST button on the naming page and only add the number 2 or 3.

❖ LOAD BY NUMBER


If your repertoire is numbered for example from 1 to maybe 3'840 we recommend to renumbering the songs like this:

001-010Dir 1/Files 1-10 11 to 16 are reserved for news/olds

011-020Dir 2/Files 1-10 11 to 16 are reserved for news/olds

021-030Dir 3/Files 1-10 11 to 16 are reserved for news/olds.....

181-190Dir 19/Files 1-10 11 to 16 are reserved for news/olds

If you type instead of the correct number 008-11 an empty or wrong number you can search trough the list by using the  buttons.

❖ COPY TO HDD

If you would like to copy songs/titles into a directory where already songs/titles are located, the new songs/titles will be placed on the end of the list.

If there is not enough space on the selected directory, only the number of free places will be copied.

Trouble shouting

One of the most important benefits of the HD-SX3 is data security. The hardware as well as the software is based on this objective.

Important! How to handle KN6000 with built-in HD-SX3

Even modern HDD has improved reliability very much, please be aware, that even such a hard disk drive is a mechanical unit and needs care during transportation and operation.

As previously mentioned, the Hard Drive is not accessed during play and the motor is always off during play mode. Additionally the heads are parked after every operation. Please also be aware of dramatic changes in temperature when you transport the KN6000 with the Hard Disk extension. The HDD can handle temperature variations from -40° to 60° C in the Non-Operation mode, but when you bring your keyboard from a cold place to a warm place, give the HDD a time of at least 60 min. to warm up to the room's temperature.

Don't turn ON the keyboard in this time!

Another very important point is the shock resistance. The HDD can handle a direct shock of 100G (Operating) and 500G (Nonoperating). More importantly, be careful of excessive vibration. The limits are 1 G (Operating) and 5 G (Nonoperating).

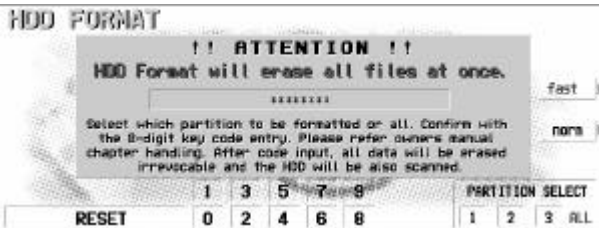
Therefore, we recommend strongly, to handle the KN6000 with HD-SX3 with all necessary care.

HD FORMAT

This icon is also only available with WRITE PROTECT OFF.

The format option is a very dangerous function because it will erase all of the data on the Hard Drive. However, this function has been added as some people may need to use it.

Also we have add here the QUICK and the FULL FORMAT. As said in the installation guide, for the first time you have to format your HDD as the FULL version. This function not only format the HDD but also scan the entire memory for bad sectors.



If you would like to reformat in a later time, you can select which partition and than you can also select the QUICK format.

For safety, please note that to execute this command you must type the following key code.

Format Code = **7 3 2 9 8 1 2 5**

Use the UP/DOWN button to type the format code.

