

S950 IB-109 SCSI Interface

AKAI professional

IB-109 Syquest Removable Hard Disk Interface Board For The S950-Operator's Manual

Foreword

Thank you for purchasing the AKAI IB-109 Interface Board for the exclusive use with the AKAI S950 Digital Sampler.

By installing the IB-109 and the system ROM's on the S950, you can connect the hard disk to save and load the data in the S950's internal memory.

The IB-109 is designed for use with the SYQUEST SQ555 removable hard disk unit (44 Mbytes). Use the above model its equivalent.

Note:

Even with a SCSI hard disk unit of a larger storage capacity, you cannot take advantage of its larger capacity because the IB-109 can handle only up to 64 Mbytes.

The IB-109 enables you to "digitally" record the sample directly from a CD player or digital audio tape machine (DAT) as long as the units in use are equipped with digital output. See "REC MODE" in your S950 Operators Manual for further information.

Important Notice

Installation of the IB-109 and system ROM

Consult your nearest "AKAI professional" dealer for installation.
Trying to service the unit yourself may lead to defects or malfunctions.

Handling a hard disk unit

Hard disk units are precision mechanisms. When handling, be aware of potential problems such as vibration, temperature, humidity, dust and installation angle. Handle cartridge disks appropriately.
See the manual of the hard disk unit for further details.

Backup of samples/programs

If your hard disk unit or cartridge disk becomes damaged, the stored data may be lost.
To prevent this, always make a backup of the required data on other storage devices (e.g. 2DD/2HD floppy disks or other cartridge disk).

IB-105 Atari/Supra Hard Disk Interface Board

cannot be used without changing the system ROM's back to the original ones.

Operation

Connection

Step 1:
Turn OFF the S950 and the hard disk unit.

Step 2:
Connect the SCSI cable (from hard disk unit) to the IB-109's 50-pin connector on the S950.

Step 3:
Set the SCSI ID for the Hard Disk Unit. The value should be set between "0" and "7" to match the SCSI ID of the hard disk unit in use.

Power-On Sequence

Step 1:

Be sure both machines are turned off.

Step 2:

Turn ON the hard disk unit first, then turn ON the S950.

This sequence must be followed at all times. Otherwise, the S950 will not recognize that the hard disk unit is connected. (When the S950 is turned on, the IB-109 SCSI ID will be set at "0" (the default value).

If you are using one hard disk unit, set the ID to "0". The "Hdrive" default value (logical unit number) should be "1". You will not have to reset them later.)

Step 3:

Enter PAGE01 in DISK mode.

Step 4:

Specify a "SCSI #" value using the CONTROL knob.

```
+-----+
|>01 VOLUME *Slct,create Floppy   S900|
|*SCSI #0 *Hdrive1 *Rename Floppy XXX%|
+-----+
```

Note:

If you are using several SCSI hard disk units, setting them to individual ID numbers (0-7) and logic unit numbers (1-8) will allow up to 64 (8x8) SCSI hard disk units to be connected to the S950 (via the IB-109) in a daisy chain.

Format and Wipe

Entering DISK mode

Step 1:

Insert a 2DD/2HD floppy disk into the S950 disk drive. Press the DISK key to enter the DISK mode.

When you press the DISK key without either of the above floppy disks inserted into the S950 drive, the S950 will display "OOPS! Disk not mounted".

Insert the floppy disk and press the DISK key again.

Step 2:

Go to PAGE09 in the DISK mode using PAGE UP key. You can now format or wipe (initialize) a hard disk (if a cartridge disk is in the hard disk unit).

```

+-----+
|*09 *Format floppy  >Format hard disk |
|*Wipe hard disk      Total free:  XXX%|
+-----+

+-----+
|*09 *Format floppy  *Format hard disk |
|>Wipe hard disk      Total free:  XXX%|
+-----+

```

To format a disk: use the ARROW/CURSOR key, move the arrow to "Format hard disk" and press the ENT key. The BUSY indicator on the hard disk unit will light and the disk will be formatted.

The formatting process takes a few minutes. It needs to be done only when a cartridge is first used for the S950.

The WIPE feature is useful when you wish to erase all data from the cartridge disk. To wipe (initialize) the disk, use the ARROW/CURSOR key and move the arrow to "Wipe hard disk". Press the ENT key. The BUSY indicator on the hard disk unit will light and the disk volumes will be erased. The wiping process takes just a few seconds.

PRECAUTION!

After formatting a cartridge disk, it can be used as an external storage device for S950 data. However, the formatting and wiping features will clear all stored data.

Saving Floppy Data to the Hard Disk Unit

Step 1:

Insert the floppy disk with the data you wish to transfer into the S950 disk drive. Press the DISK key to enter PAGE01 in the DISK mode and move the arrow to "Slct, create Floppy" using the ARROW/CURSOR key.

Step 2:

Enter PAGE02 in the DISK mode using the PAGE DOWN key, move the arrow to "Clear mem & load disk" using the ARROW/CURSOR key, and press the PARAMETER 1 key. This will load the contents of the floppy disk into the internal memory of the S950.

Step 3:

When loading is finished, you have to "create" a volume by registering a name for the data that has been loaded into the S950 memory, before transferring it to the hard disk unit.

Return to PAGE01 in the DISK mode using the PAGE UP key, move the arrow to "Slct, create Floppy" using the ARROW/CURSOR key, and press the LETTER key.

Input a name for the data using the CONTROL knob and create a volume by pressing the ENT key.

Example of a volume named "DATA1" is created out of the loaded data:

```
+-----+
|>01 VOLUME *Slct,create Floppy   S900|
|*SCSI #0 *Hdrive1 *Rename Floppy  76%|
+-----+
+-----+
|*01 VOLUME >Slct,create DATA1   V1|
|*SCSI #0 *Hdrive1 *Rename DATA1  76%|
+-----+
```

Any volume you create is automatically given a volume number in numerical order (i.e. V1, V2...).

Volume numbers will be assigned from V1 to V128 on one cartridge disk.

Step 4:

To save the created volume to the hard disk unit, enter PAGE05 in the DISK mode using the PAGE DOWN key and press the ENT key.

The second volume and those that follow should be created and saved in the same manner.

To check on the remaining memory capacity of the hard disk unit, go to PAGE09 in the DISK mode and find the value of "Total free". If the hard disk unit is full, the S950 will display the warning "OOPS! Disk sample space is full" In this case, save data to another cartridge disk, or delete any unnecessary volumes.

Saving Only Samples/Programs to the Hard Disk Unit

Step 1:

Load the floppy data (including samples and programs) into the S950 memory as instructed in step 2 above.

Step 2:

Create a volume as instructed in step 3 above.

Step 3:

Enter PAGE06/07 in the DISK mode and select the desired saving method from "Program only", "Sample and program", "Sample only". Press the ENT key.

Loading a Volume into the S950 from the Hard Disk Unit

Step 1:

Enter PAGE01 in the DISK mode by pressing the DISK key. Consecutively, move the arrow to "Slct, create Floppy" using the ARROW/CURSOR key.

```
+-----+
|*01 VOLUME >Slct,create Floppy   S900|
|*SCSI #0 *Hdrive1 *Rename Floppy  76%|
+-----+
+-----+
|*01 VOLUME >Slct,create DATA1   V1|
|*SCSI #0 *Hdrive1 *Rename DATA1  76%|
+-----+
```

Step 2:

By turning the CONTROL knob to the right, the names and numbers (V1-V128) of the stored volumes will be scrolled on the S950 display.

After finding the desired volume, press the PAGE DOWN key to enter the PAGE02/3/4 and select the loading method from "Program only", "Sample and program", and "Sample only".

Press the ENT key to start loading the data from the hard disk unit.

Deleting a Volume from the Hard Disk Unit

Step 1:

Enter PAGE01 in the DISK mode by pressing the DISK key. Consecutively, move the arrow to "Slct, create Floppy" using the ARROW/CURSOR key.

Step 2:

By turning the CONTROL knob to the right, the names and numbers (V1-V128) of the stored volumes will be scrolled on the S950 display.

After finding the desired volume, move the arrow to "Rename Floppy" using the ARROW/CURSOR key. Press the LETTER key to rename the volume.

Give the volume a new name made up of only spaces using the SPACE key, and press the ENT key. The volume will be deleted from the hard disk unit.

Volume numbers that follow the one deleted will be automatically resequenced in numerical order. (i.e. when deleting V5, old V6 will become new V5, old V7 will become new V6, etc.).

Loading a Volume using the MIDI Program Change

Each volume number (V1-V128) is a match of a MIDI program change number (1-128). You can select and load a desired volume by specifying the corresponding MIDI program change number from an external MIDI master. To do this, enter PAGE11 in the DISK mode.

Example: MIDI Program change number 9

```
MIDI program
change "9"      +-----+  <- Volume 9 (V9) loaded  +-----+
----->| S950 |-----| Hard Disk |
                +-----+                          +-----+
```

This page must be open to enable this function.

Using the CD/DAT Interface Feature

For detailed information about this feature, see "REC MODE" in the S950 Operator's Manual.

Hints on digital sampling

Digital sampling using the IB-109 does not allow to adjust the REC LEVEL (recording level). When an input level to the S950 is low: use the "Digital Audio Boost" feature (in Digital sampling using the IB-109, the MONITOR LEVEL cannot be adjusted either) and raise the peak level to be close the the highest level shown on the level meter in the S950 display.

```
+-----+
| DIGITAL AUDIO BOOST          |
| NO BOOST (1), +6dB (2), +12dB(3) |
+-----+
```

In digital sampling, the "Pre-Trigger" feature will still work when a recording (sampling) is started.

There will be a very short silence at the beginning of the sampled sound. You should adjust the starting point of the playback in PAGE06 in the EDIT SAMPLE mode. If this is not done, when you play the sampled sound, the attack will seem delayed.

Note:

When digital sampling using the IB-109 digital Input, monitored sound will sometimes "jump".

This is not a malfunction and cannot be eliminated because of the hardware configuration. The sampled sound however, will be recorded without any jumps.

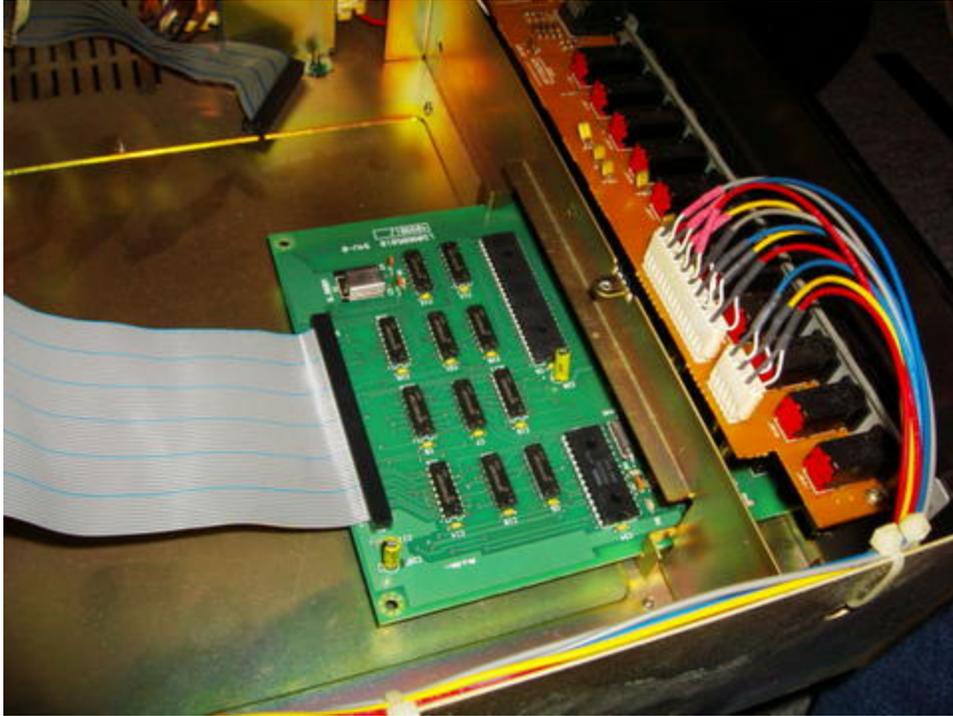
AKAI ELECTRIC CO., LTD. Electronic Musical Instrumental Div.

Source:

<http://akai.brothelowner.com/jules/Help/ib109-manual.html>



IB-109 seen from outside the S-950



IB-109 inside the Akai S-950



IB-109 EEPROMS