# **IB-104**

AES/EBU DIGITAL INTERFACE BOARD for \$1000/\$1000HD

Operator's Manual

# **FORWARD**

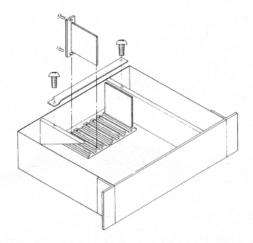
Thank you for purchasing the IB-104. The IB-104 is an AES/EBU digital interface specially built for the AKAI S1000/S1000HD.

By installing the IB-104 in an S1000/S1000HD unit, the S1000/S1000HD can transfer digital signals with other digital equipment which has digital input/output terminals (ABS/EBU standard, coaxial, optical).

# ■THE FOLLOWING INFORMATION IS IMPORTANT

When this unit is to be installed in the S1000/S1000HD, be sure to consult your dealer. Trying to install this unit by yourself can lead to defects and malfunctioning.

# IB-104 Installation



Remove the upper cover.

Insert the IB-104 into the 6th connector, and secure it to the rear panel with two screws.

# **■OPERATION**

The functions of the IB-104 AES/EBU digital interface can be divided into two sections.

## 1. Sample Recording and Sample Transmitting

The new page DIGITAL INTERFACE - Sample Data - can be accessed by pressing [F2] REC 1 [F8] DIGI from the EDIT SAMPLE mode.

# a) Sample Recording

The following options are available on the left half of this page. Please select the desired option with the [CURSOR] and [DATA] knob.

① Selecting the sample recording source : ANALOG or DIGITAL

② Selecting the input terminal : ELECTRICAL or OPTICAL

3 Selecting the reception rate : AUTO, 32.0kHz, 44.1kHz, 48.0kHz

After selecting any of the above DIGITAL, sample recording from digital inputs can be executed from the REC 2 page.

When adjusting meters and making other recording preparation with the [CURSOR] AND [DATA] knob, this page will display a message indicating the status of the digital carrier.

When sample recording with the <code>[Start]</code> parameter of <code>RECORD SET-UP</code> or <code>[F7] GO</code> is started, the sample rate (see the RATE page) will be displayed. If the sample rate is not 44.1kHz, then the tune offset in order to correct the play rate will be displayed.

When the recording [mode] is set to STEREO, two samples will be created, and [-L] and [-R] will be automatically added to the names of the left and right samples.

The digital signals can be monitored with either L and R, or outputs 1 and 2, and the playback rate will be appropriate.

# (Note 1)

A small click sound will be heard before recording is started and the sound will stop momentarily when recording starts; however, there will not be any click in the recording sample.

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#### (Note 2)

The receiving rate will be decided by the rate of the reception data during recording; however, when the rate is other than <code>[AUTO]</code>, the various parameters for monitoring, tune offset, and sample rate will be set back to their sampling rate values.

#### (Note 3)

When the digital carrier is interrupted during recording, the recording will fail and a sample will not be created.

#### b) Sample Transmitting

The following options are available on the right side of this page. Please select the desired option with the [CURSOR] and [DATA] knob.

Data to be transmitted : MONO or STEREO
Type of sample to be transmitted : PULSE, SAWTOOTH, SQUARE, SINE
Sample rate to be transmitted : 44.1kHz or 48.0kHz

## [F7] SEND will execute transmission.

When [mode] is set to MONO, the selected sample will only be transmitted over the L channel, and the R channel data will be zero.

When  $\lceil mode \rfloor$  is set to  $\boxed{STEREO}$  and the selected sample is one of a -L/-R pair, the  $\lceil -L \rfloor$  sample will be sent over the L channel and the  $\lceil -R \rfloor$  sample will be sent over the R channel.

If the sample is not one of a -L/-R pair, the sample will be sent in the same manner as the MONO mode.

## 2. Memory and Hard Disk Backup and Resetting

DAT can be used as a streamer to back up data in memory or on a hard disk. The aforementioned DIGITAL INTERFACE - Sample Data - page for sample recording and sample transmission is used to set the sample recording source to DIGITAL, and the input terminal to ELECTRICAL or OPTICAL.

The new page DIGITAL INTERFACE - back up - is accessed with [F5] HDSK or [F5] BACK from the DISK mode. This page has the following options which can be selected with the [CURSOR] and [DATA] knob.

① Selecting the transmission rate : 44.1kHz or 48.0kHz

② Type of backup : HARD DISK or MEMORY

Backup is executed when [F7] SAVE is selected, and the data is restored when [F8] LOAD is selected.

#### a) Memory Backup

It is possible to change the volume name before saving data.(Use the NAME function.)

During the backup process, the number of [Programs] and [Samples] will be displayed, and DRUM INPUT data and basic MIDI data will also be saved.

Although sample data will be saved using a normal method, special data for programs, key groups and sample headers will be saved using a special method. This eliminates most errors which might occur during restoring. In addition, all data for both channels will be sent; however, only the L channel will be read when restoring.

It takes about 30 seconds to SAVE or LOAD one volume (about the same capacity as one double-sided, high density diskette).

When the backup method is set to MEMORY, hard disk backup will not function. The opposite is also true.

# b) Hard Disk Backup

This is similar to MEMORY backup; the only difference being that the data is all of the volumes on the hard disk will be backed up. The [Programs] and [Samples] in each volume will not be displayed. Therefore, when data is restored, all data starting from the beginning of the first volume will be loaded.

Partial restoration of data is not possible with this function.

In addition, there is a time gap between each of the hard disk data blocks. As a result, it will take about 100 seconds to SAVE or LOAD one volume (about the same capacity as one double-sided, high density diskette).

# PRECAUTION!

AKAI does not guarantee the integrity of data backed up on a streamer. If you want to be absolutely sure that your data is safe, we recommend that you make additional backups on floppy disks.

# [ATTACHMENTS]

Optical fiber cable ·····	
1000/S1000HD upgraded version SYSTEM DISK ······	

\* The digital input/output terminals for the IB-104 are: for ELECTRICAL a 6.8 mm diameter phone jack; for OPTICAL a Tosslink <sup>R</sup>. When an external device is to be connected through the AES/EBU standard or coaxial terminals, separate conversion cables will be necessary.

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