

How to Update Trinity System Software

Note: This updating will erase all Programs, Combis and Sequence data in the Trinity. Be sure to back-up all data before proceeding!

1. Hold down the RESET and ENTER buttons while turning on the Trinity. The display will show "Please insert boot disk".
2. Insert System Boot Disk #1 of the 2.4.1 OS version into the drive.
3. New System Software installation will begin at this point. DO NOT TOUCH KEYBOARD OR INTERRUPT THE POWER WHILE THE SYSTEM IS BEING UPDATED!
4. During installation the following messages will appear:
 - "Now loading IPL"
 - "Now loading a SYSINFO3.KRG file"
 - "WARNING!! Don't touch me."
 - Now erasing ROM"
 - Now loading a V94.000 file"
5. Shortly, you will be prompted with "please change to a No.002 disk" ,"V94.000 file has been successfully loaded".
6. Eject Disk 1 and insert System Boot Disk No. 2 into the drive. "Now loading a V94.001. file" will appear in the display.
7. When the following messages appear, installation has been completed successfully and the Trinity will restart automatically:
 - "Checking the system's check sum"
 - "System load was completed"
8. Reload your Programs, Combis and Sequences and enjoy your new System Software!!

Please give the following pages to your customer – copy them as needed.



New Features in Trinity Operating System 2.4.1

This new version improves compatibility between removable media and Windows operating systems as well as fixed some small bugs in the Sequencer.

Note: It is only applicable for non-V3 versions of Trinity – to get these features for a Trinity V3 please use OS Version 3.1.1.

- 1) This new version adds a command to the Disk Utilities Page Menu, called Repair Boot Sector. With this command you can “fix” media that has been connected to a Windows-based computer and then comes up on the Trinity as UNFORMATTED. This is needed mainly for HDR-TRI-equipped Trinity's – the 2.3 version fixed this issue for non-HDR units.

If you need to connect your drive to your PC, when you bring it back to the Trinity simply go to the Disk Mode, select your drive (which will show up as UNFORMATTED) and then go to the Upper Right Hand Page Menu and select the Repair Boot Sector command. It will re-write the needed boot sector ID to your drive and your data will magically come back to life!

- 2) This version also fixes a few overall bugs:
 - When exiting the Sequencer mode while on the Pattern Record (P6) screen, upon returning to the sequencer mode, an error occurred when pattern record/play was used; it would refer to the track event. This has been fixed.
 - After recording a Pattern the Trinity did not always correctly receive a Damper Off message, leaving possible "hung" notes. This has been fixed.
 - When using the Copy measure/Get from track functions to move data to a different song location, the data would not transfer to the alternate song correctly. In addition, if said data contained a pattern, the pattern would not be opened properly, causing system hang up in some cases. This has been fixed.
 - Upon selecting a new insert or master effect, some settings for those effects did not default as they should have. One example is Size 2 rotary speaker, for which the Speed switch would set at 9 and should default to 1. This has been fixed.
 - When sending System Exclusive to control delay parameters, values over 8191 were not received correctly. This has been fixed.
 - When the Trinity was connected with SCSI media of a capacity over 4 Gigabytes, it would only see the portion over 4 gigabytes. A 4.3 gig drive would be recognized as .3 gigs, or 300 Mbytes. This has been fixed.

- Formatting and Wiping SyJet media which was originally PC-formatted has been improved.

Features from Trinity Operating System 2.3

This new version adds some important features for users of the PBS-TRI option, users who wish to share data between their Trinity and a PC running Windows 95/98, and adds compatibility with the new Trinity Drum Loops CD-ROM.

Note: This new O.S. is not for use in V3 version Trinity keyboards. These fixes are already included in O.S. Version 3.0, which supports the MOSS-TRI board. This O.S. is for all Trinity owners who want these fixes for their Solo-TRI-equipped keyboards.

- 1) This new O.S. fixes an incompatibility with AIFF files exported from Steinberg's WaveLab audio editing program for the PC. Since the Trinity doesn't support loop markers in .WAV files, PC users will want to save their edited data as .AIF rather than .WAV files. Now these exported .AIF files will load in properly.
- 2) A Major fix in this O.S. now allows you to take SCSI media (fixed drives or in certain instances removable media* - Jaz, Zip, SyJet etc.) from your Trinity and connect it to your PC running Windows 95/98 and safely drag files to your computer for back-up storage. Before this O.S., if you did this and then connected the drive back to the Trinity the media would show up as UNFORMATTED. This was a result of "Plug and Play" in Windows rewriting the boot sector of the media, and then the Trinity no longer saw the media as Trinity-compatible. Now, with Version 2.3 this will not happen anymore!

***Important: You cannot do this with any removable media that has been formatted to record audio. Connecting this media will still make the audio partition invisible to your Trinity, breaking your Songs with audio even though you didn't touch them!**

So this does not allow you to back up HDR-TRI-recorded Songs (with audio) by dragging them from Trinity media to your computer. To back-up Songs with Audio you need to do the "Copy With Sound" command from the Disk Menu, Audio Utilities Tab, Upper RH Page Menu (whew!) to another Trinity-format drive, or back it up to DAT via the S/PDIF interface on the HDR-TRI. The files that can be backed up this way are .PCG, .SNG (without audio), and all sample-related files (.KSC, .KMP, .KSF).

- 3) This O.S. provides compatibility with a Trinity-format CD-ROM, like the newly released Trinity Drum Loops set (TRCD – a 2-disc set of drum loops). Note: Not all CD-ROM drives will work with this format, so if the disk comes up as UNFORMATTED you'll have to try another drive. In general you'll have more luck with newer drives rather than drives that are more than 2-3 years old.

If you have a CD-ROM burner you can also make your own CD's of Trinity data. Simply take your drive (preferably removable media, but it can be a fixed drive) and make a SCSI copy of the

device to a CD-ROM disc. Most CD burning applications provide this option for the file type to write. Remember – a CD-ROM holds up to 650 MB of data, so you can only back-up this amount of data from your drive. If your drive is partitioned for audio data (for use with the HDR-TRI option) you can certainly back up your Filer area, but probably won't have room for the complete audio partition side of the drive.

Features from Trinity Operating System 2.2

This new version adds a few significant features for users of the PBS-TRI option:

- The Trinity now supports stereo AIFF and .WAV files. This is very important, as most drum loops, vocal effects and drum samples available are stereo. Stereo files will load in as two separate mono drumsamples, and can then be converted to multisamples for use in regular Trinity programs. Stereo files can be loaded in from floppy disk or via the optional SCSI-TRI interface.

Note: Mixed mode CD-ROMs (those which offer both audio and computer data or those with both AIFF and .WAV files cannot be used with the Trinity. You must use media which is either DOS or native Trinity-formatted).

- This new O.S. fixes an previous incompatibility in AIFF files that are exported from Kurzweil K2000 and K2500 keyboards, so Kurzweil users can now export their samples for use in the Trinity!

This new O.S. is free of charge to all users, and is the recommended Operating System for all Trinity users (it also cleans up the operating system, optimizing performance). We have also created a version 2.2 kit (Part number "TRINITYSYS22K"), for users who want to add recording audio to removable media. You'll need this kit to get the needed chips to update your HDR-TRI board (if needed). This must be performed by an Authorized Korg Service Center or risk voiding warranty coverage. See below for more info.

Features from Trinity version 2.1.2 (upgrade for HDR-TRI)

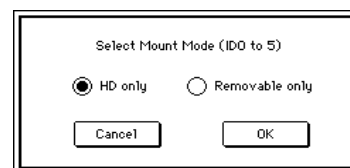
Operating System version 2.1.2 for the Trinity series allows the HDR-TRI option to record and playback directly to and from removable media.

Recording/playback directly to/from removable media requires a removable media drive with an average seek time of 12 ms or less. We recommend the Iomega JAZ® or Syquest Sy-Jet® drives as suitable removable media drives.

The Disk mode P1 tab 4 (Audio Utility) page menu will contain a new item; Select Mount Mode.

This allows you to select a removable media drive set to a SCSI ID number from 0 to 5 as the drive for recording/playback.

When you choose this command, the dialog at right will appear. Use the radio buttons to select the mode.



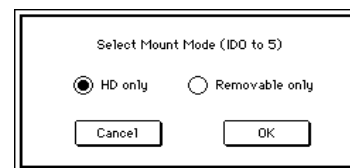
- When “HD only” mode is selected, only hard disks will be detected (as in previous system versions), and removable media drives with SCSI ID numbers 0–5 will not be detected. (When the power is turned on, “HD only” will be selected.)
- When “Removable only” mode is selected, only removable media drives with SCSI ID numbers 0–5 will be detected, and hard disks will not be detected.
- A removable media drive with SCSI ID6 will be detected in both “HD only” mode and “Removable only” mode.
- If the PBS-TRI option is installed and you wish to load Akai S1000/S3000 CD-ROM library data, the SCSI ID of the CD-ROM drive should be set to 6 for “HD only” mode, or to 0–6 for “Removable only” mode.

Recording to removable media

Connect only one removable drive for recording/playback. If you connect multiple drives, the sound ID numbers will coincide, causing a message of “Sound ID conflicted” to appear, and in some cases making it impossible to select drives.

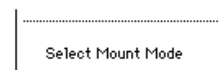
1. Turn off the power of the Trinity and the removable media drive.
2. On the removable media drive, **set the SCSI ID number (0–5)**. For details on ID number settings, refer to the manual for your drive.
3. Connect the SCSI connector of the Trinity to the SCSI connector of the removable media drive.
4. Turn on the power of the removable media drive, and insert the media.
5. Turn on the power of the Trinity, and from the Disk mode P1 tab 4 (Audio Utility) page menu commands, choose “Select Mount Mode.”

The dialog at right will appear.



6. Select “Removable only” and press the OK button.
7. In drive select, choose the removable media drive.

Since the media will not be detected if the drive is not selected, you will be unable to record/playback. Also, if you insert the media after selecting “Removable only,” be sure to select the removable media drive using drive select.



If the media has not been formatted, select the removable media drive and then execute the “Wipe” or “Format” command on the Disk mode P1 tab 3 (Utility) page menu. The minimum filer area that can be specified is 10 Mbytes.

8. Press the [SEQ] key to enter Sequencer mode.

9. From the P1 tab 5 (ATrkRec), tab 6 (MixA1–4) or P2 tab 5 (Atrk1–4) page menu commands, use “Rec HD Select” to select the removable media drive.
10. After changing the settings for the song and checking the external inputs etc., begin recording.
11. Save the song to the removable media drive.

Note: You must save the recorded sound and song files to the same cartridge. If you move files to a different cartridge and attempt to playback, the song will not be able to access the sounds that it uses, and playback will not be correct.

Please pay careful attention to the following points.

- Media with a sound partition can be inserted or removed only when it is selected in Disk mode Drive Select. In Disk mode, if you wish to remove the media and proceed with other operations, be sure that the media has been ejected from the drive before you perform other operations. In Sequencer mode, it will not be possible to insert or remove media.
- If a cartridge with a sound partition is selected by Drive Select, and you remove that media and select another drive or move to Sequencer mode, the audio data within the Trinity will be erased.
- When you execute Select Mount Mode, the audio data inside the Trinity will be erased. Be sure to save important audio data first.

If you have recorded audio to hard disk and wish to use that data on removable media, copy the audio data to the removable media. In brief, the procedure is as follows. Set the SCSI ID of the connected removable media drive to 6. Then for “Select Mount Mode,” select “HD only” and use “Copy with Sound” to copy the audio data from the hard disk to the removable media.

Finally, change the removable media drive’s SCSI ID number to 0–5, and select “Removable only” in step 5 of the above procedure, and you will be able to use the audio data that was copied.

* Before changing the SCSI ID number, you must turn off the power of the SCSI device.

Other “fixes” in Trinity Version 2.1.2

- DISK Mode: Formatting for the Olympus MOS331® and Sony SMO-C301-10® MO (Magneto-optical) drives has been added
- DISK Mode: In the MIDI Data Filer function (Sys. Ex. Recorder), the system may have crashed when receiving large, combined Sys. Ex. messages from an external device (like the Roland JV-1080/XP-50/80 products).

Features from Trinity System 2.0

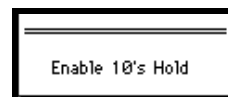
1. Audition the highlighted sound in the Select By Category dialog box

When choosing a program or combination in the Select By Category page menu command of Program Play mode, Combination Play mode or Sequencer mode, you can now audition sounds as you highlight them.

Lock the screen with the safety pin to freely select from the sounds within the chosen category and play the keyboard to hear your selection. Scrolling is no longer necessary since the category menus display all 16 choices at once.

2. 10's Hold function has been added

Enable 10's Hold (check command) has been added to the page menu of Program Play mode and Combination Play mode.



If Enable 10's Hold is checked, the numeric keys and the [▲]/[▼] buttons will function as described below when selecting programs or combinations.

Pressing a numeric key will change the last digit. (The first two digits will not change.) For example, while on program 090, press “6” to move to program 096.

Pressing the [▲]/[▼] buttons will change the first two digits. (The last digit will not change.) For example, press [▲] to move from program 000 to 010 or to move from combination 090 to combination 100.

3. Shortcut when selecting banks

In Program Play mode and Combination Play mode, the program or combination bank can be specified.

By holding down the [BANK] button and pressing the [P1] page button you can select bank A. By holding down the [BANK] button and pressing the [P2] page button you can select bank B. In this same way, you can select any bank A—S by holding down the [BANK] button and pressing a page button [P1]—[P5]. However, the bank will change only once while the [BANK] button is pressed. If you have selected the wrong bank, release the [BANK] button and repeat the process to select the correct bank.

4. Pan OFF added to the insertion effect output section

In P7, Insertion Effect of Program Play mode, Combination Play mode, and Sequencer mode, a setting of **OFF** can now be selected for the Pan parameter of the output section. The available Pan settings will now be OFF, L000–C064–R127.

When Pan is OFF, the sound from the insertion effect will only be sent to the master effect inputs by the Send 1 and Send 2 parameters. The signal from the Insert Effects will not be sent to outputs 1 and 2. An OFF setting can prevent unwanted signals from appearing at OUT 1 and 2.

When Pan is OFF, the sound from the insertion effect will not be output to Pan L and Pan R. (The sound from the insertion effect will be output only to the master effect inputs.)

5. MIDI track Solo function in Sequencer mode

Mute Except Selected Track, **Mute All Tracks** and **Play All Tracks** functions have been added to the tab 1 and 2 pages (Track 1–8/9–16) of P1 in Sequencer mode.

These page menu commands rewrite the Track PLAY/MUTE/REC parameters of all tracks as follows.

Mute Except Selected Track	
Play All Tracks	
Mute All Tracks	
Play All Tracks	

Mute Except Selected Track (Mute All Tracks)

When you select MIDI tracks and choose **Mute Except Selected**

Track, the Track PLAY/MUTE/REC parameter for the selected tracks will be set to PLAY and all others will be switched to MUTE. This acts to solo the currently selected track(s). A track is considered selected if any of its parameters are currently highlighted. If no tracks are selected, this command will appear as Mute All Tracks. Selecting Mute All Tracks will turn off every track.

Play All Tracks

When Play All Tracks is selected, the Track PLAY/MUTE/REC parameter of all MIDI tracks will be set to PLAY. This restores full playback after you have soloed a track or muted all tracks to check your audio tracks.

6. Specification change for the Delete function

If you had attempted to Delete a directory using the page menu's "Delete" command in the Disk mode "P1-3 Utility", the operation could not be completed. Now, the directory and all the files it contains will be deleted.

7. Compatibility with AKAI S3000 format data

This functionality is applicable to Trinity's which have a **PBS–TRI** installed.

Program files and Sample files can be loaded from an Akai S3000 floppy disk.

The procedure for loading Program files and Sample files is the same as described in the PBS–TRI User's Guide p.5 "Loading Akai S1000 format files". Please refer to the directions in the User's Guide to load these files.

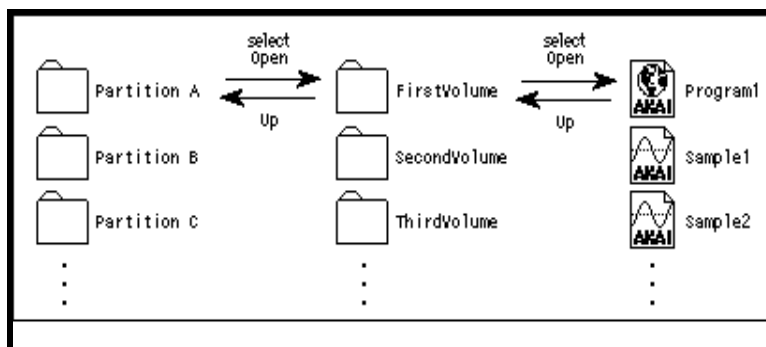
The icons for Program files and Sample files are the same as the Akai S1000 format files.

8. Compatibility with Akai S1000/S3000 CD–ROM libraries

This functionality is applicable to Trinity's which have the **PBS–TRI** and a **SCSI–TRI** or **HDR–TRI** installed.

Program Files and Sample files can be loaded from an Akai S1000/S3000 CD–ROM library.

The CD-ROM is divided into Partitions as shown below, and each partition is divided into Volumes. Program files and Sample files exist inside each volume. The Trinity will recognize partitions and volumes as directories.



Use the following procedure to load a Program file or Sample file from an Akai S1000/S3000 CD-ROM.

1. Set the CD-ROM drive SCSI ID to 6.

The HDR-TRI option requires that any form of removable media, including CD-ROM drives, be set to SCSI ID 6. If you have the SCSI-TRI option instead you can set the removable media freely to any unused SCSI ID#.

2. Use a SCSI cable to connect the SCSI connectors of the Trinity and the CD-ROM drive.
3. Turn on the power of the CD-ROM drive and insert a CD-ROM.
4. Turn on the power of the Trinity.
5. Access the Disk mode tab 1 page (Load), and choose the CD-ROM drive in Drive Select.
6. In the LCD screen, select the partition containing the file that you wish to load, and press the Open button. The volume will be displayed.
7. Select the volume containing the file that you wish to load, and press the Open button. The Program files and Sample files will be displayed.
8. Select the file that you wish to load, and press the Load Selected page menu command. The selected file will be loaded.

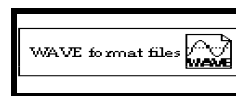
9. Compatibility with WAV files

This functionality is applicable to Trinity's which have a **PBS-TRI** installed.

Data can be loaded from a WAVE format file, which is a PCM data file format widely used by personal computers. Files with an extension of .WAV will be treated as WAVE format files.

The loading procedure is the same as described in the PBS-TRI User's Guide p.7 "Loading AIFF file". Please refer to the User's Guide for the detailed directions to load the file.

The icon for WAVE format files is shown at the right.



Supported chunks

During loading, the Trinity will only reference the Format Chunk and the Data Chunk. All other chunks will be ignored.

The following limitations exist on parameters within the Format Chunk:

- Microsoft PCM format is the only format supported.
- Only 1 channel (mono) is supported.
- Only 16 or fewer bits per sample are supported. If the data is 8 bits or less, it will be loaded as 16 bit data with the lower 8 bits fixed at 0.

10. Free Time display has been added

This functionality is applicable to Trinity's which have the **HDR-TRI** installed.

After the page menu command **Delete Unused Sound** has been executed in Disk mode "P1-4 Audio Utility", the "free time" (remaining time available for recording) had been displayed only if all sounds unused by a .SNG file were actually deleted. However, the "No unused Sounds found" message now displays the free time even if the delete command is not performed.

11. Sequencer mode pause function (implemented in Ver. 1.3.3)

When Step Recording is selected from the page menu in P5 of the Sequencer mode to perform step recording, pressing the [PAUSE] button will light the [PAUSE] button's LED. During this time, recording will not take place. Since the location does not change, it provides a convenient way to audition the sound that you wish to record next.

12. Enable Beep is now backed up (implemented in Ver. 1.3.3)

When the Global mode's Enable Beep setting is checked and the power is turned off, the setting will now be maintained. However, this setting will not be saved as a parameter to floppy disk or transmitted via MIDI.