

Using an external Zip drive (About SCSI)

When the VS4S-1 (sold separately) is installed in the VS-840EX, songs created on the VS-840EX can be saved on an external Zip drive.

This section explains the functions which are added when a SCSI connector is installed. Please read it carefully before using an external Zip drive.

* *It is not possible to use an external Zip drive to record.*

<Added functions>

The following icons are added to Utility.

SCSI icon

SCSI Restart icon

SCSI Shut Down icon

SCSI Initialize icon

840 to SCSI Copy icon

SCSI to 840 Copy icon

SCSI Song Erase icon

SCSI Disk Copy icon

SCSI Song Convert icon

SCSI Drive Select icon

SCSI Archive Copy icon

SCSI Track Import icon

SCSI Track Export icon

About SCSI

"SCSI" stands for "Small Computer System Interface." This is a data transmission method that can transmit large amounts of data. A Zip drive can be connected to the SCSI connector of the VS-840EX.

Before You Use a Zip Drive

Handling the Zip Drive

- A Zip drive is precision devices. If they are connected or used incorrectly, not only may they fail to operate correctly, but the data on the disk can be lost or even the disk drive itself may be damaged. In addition to the explanation in this section, please be sure to read and observe the explanations in the manual for your Zip drive.
- The VS-840EX can use Zip drives which are compatible with the SCSI-2 specification. As a Zip drive for use with the VS-840EX, we recommend the Roland ZIP-EXT-2S Zip drive (sold separately).
- Install the unit on a solid, level surface in an area free from vibration. If the unit is tilted excessively, the Zip drive may malfunction or require service.
- Avoid using the unit immediately after it has been moved to a location with a level of humidity that is greatly different than its former location. Rapid changes in the environment can cause condensation to form inside the Zip drive, which will adversely affect the operation of the Zip drive and/or damage Zip disks. When the unit has been moved, allow it to become accustomed to the new environment (allow a few hours) before operating it.
- To insert a Zip disk, push it gently but firmly into the Zip drive—it will click into place. To remove a Zip disk, press the EJECT button firmly. Do not use excessive force to remove a Zip disk which is lodged in the Zip drive.
- Never attempt to remove a Zip disk from the Zip drive while the Zip drive is operating (the indicator is lit); damage could result to both the Zip disk and the Zip drive.
- Remove any Zip disk from the Zip drive before powering up or down.
- To prevent damage to the Zip disk drive's heads, always try to hold the Zip disk in a level position (not tilted in any direction) while inserting it into the Zip drive. Push it in firmly, but gently. Never use excessive force.
- Do not insert disks other than the specified Zip disks.
- A Zip disk being used for the first time with the VS-840EX must be initialized by the VS-840EX. When a Zip disk is initialized, all data on that disk will be lost. Before using a disk that has been used by another device, make sure that it is OK to erase the data.
- Disks used by the VS-840EX cannot be used by any other device.
- Zip disks contain a plastic disk with a thin coating of magnetic storage medium. Microscopic precision is required to enable storage of large amounts of data on such a small surface area. To preserve their integrity, please observe the following when handling Zip disks:
 - Never touch the magnetic medium inside the Zip disk.
 - Do not use or store Zip disks in dirty or dusty areas.
 - Do not subject Zip disks to temperature extremes (e.g., direct sunlight in an enclosed vehicle). (Storage temperature: -22-51° C, storage humidity: 10-90%)
 - Do not expose Zip disks to strong magnetic fields, such as those generated by loudspeakers.
- The identification label should be firmly affixed to the Zip disk. Should the label come loose while the Zip disk is in the Zip drive, it may be difficult to remove the Zip disk.
- Put the Zip disk back into its case for storage.
- Zip disks do not have a protect tab to prevent data from being erased accidentally. If necessary, use Song Protect to protect your data (page 29).

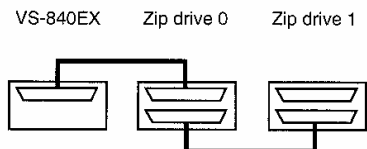
Handling Zip Disks

Connecting all external Zip drive

Up to 2 Zip drives can be connected to the SCSI connector of the VS-840EX. This section will explain how to make the external Zip drive connections, and how to make the necessary settings. Whenever you connect an external Zip drive, be sure to check the following points.

Connectors and cables

SCSI cables are used to connect the external Zip drive as shown below. Since there is no difference between a SCSI input and output, it does not matter which connector you use. This type of connections is referred to as a "SCSI chain" or a "daisy chain."



To connect a Zip drive, use the SCSI cable included with the ZIP-EXT-2S Zip drive (sold separately).

When making connections, observe the following points.

- The SCSI connector of the VS-840EX is a 25 pin D-sub type connector.
- Keep SCSI cables as short as possible, and use only cables which have an impedance ($110 \Omega \pm 10\%$) that is compatible with the SCSI standard, and are completely shield.
- Do not allow the total length of all SCSI cables connecting the chain of disk drives to exceed 6.5 meters.
- Do not connect or disconnect SCSI cables when the power of any device is turned on.

Terminators

The device at each end of a SCSI chain must have a terminator (a terminating resistance). Since the VS-840EX is one end of the SCSI chain, it contains an internal terminator. This means that you will need to use a terminator only for the external Zip drive which will be the other end of the chain. For details on terminator settings, refer to the owner's manual for your Zip drive.

SCSI ID numbers

Each Zip drive is distinguished by its SCSI ID number (0-7). This means that when two drives are connected, you must make settings so that the SCSI ID numbers of the drives do not conflict (coincide). If the SCSI ID numbers conflict, the VS-840EX will not be able to correctly recognize the drives.

The VS-840EX is set to SCSI ID number 7 (fixed). Set the drives you are connected to ID numbers other than 7.

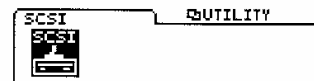
* Set the SCSI ID number of the external Zip drive to either 5 or 6.

Restarting the external Zip drive

Check the disk that was inserted in the disk drive, and make the disk ready for use.

When turning on the power, be sure to first turn on the power of the external Zip drive, and then turn on the power of the VS-840EX.

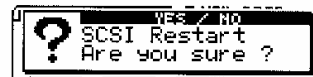
1. If there is a drive that you wish to use, insert a disk into that drive.
If a disk is not inserted, that drive will not be recognized by the VS-840EX.
2. Press [UTILITY].
3. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



4. Use [CURSOR] to select the SCSI Restart icon, and press [ENTER/TAP].



5. A confirmation message of "Are you sure?" will appear, so press [YES] to execute the operation.



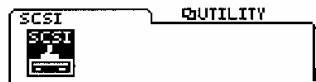
* The drive (disk) will be prepared for use, and this will require a certain length of time.

Shutting down the external Zip drive

When you wish to eject the disk of a Zip drive connected to the SCSI connector or to change disks, you must Shut Down the external drive.

* Unless you perform the Shut Down, it will not be possible to eject the disk from the Zip drive.

1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



3. Use [CURSOR] to select the SCSI Shut Down icon, and press [ENTER/TAP].



4. A confirmation message of "Are you sure?" will appear, so press [YES] to execute the operation.

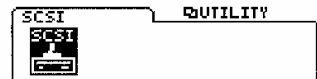


The external drive will be shut down, and the disk will be ejected from the Zip drive. If you wish to change disks, insert the desired disk and then execute the "Restarting the external Zip drive" operation described in the before section.

Initializing the Zip disk

A Zip drive that is being used for the first time by the VS-840EX must be initialized before it can be used. When a disk is initialized, all data that was on that disk will be lost. If you are using a disk which had been used by another device, make sure that it does not contain important data that you wish to keep.

1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



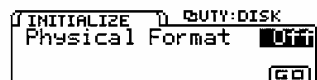
3. Use [CURSOR] to select the SCSI Initialize icon, and press [ENTER/TAP].



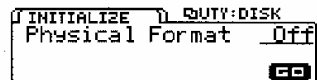
4. This display will indicate "STORE Current ?" If you wish to save the currently selected song (the Current Song), press [YES]. If you do not wish to save it, press [NO].



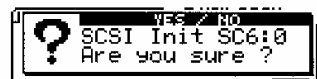
5. Use [CURSOR] to move the cursor to "Physical Format," and use the TIME/ VALUE dial to specify whether or not you wish to physically format the disk.



6. Use [CURSOR] to move the cursor to the "GO" icon, and press [ENTER/TAP].



7. A confirmation message will ask "Are you sure ?," so press [YES] to execute the operation. When initialization ends successfully, you will return to Play mode. If you press [NO], the initialize operation will be halted.



* If you initialize the disk with "Physical Format" turned "On," a certain length of time will be required for initialization to be completed. This is not a malfunction. The progress of the initialization operation will be shown in the display. Do not turn off the power before initialization has ended.

Copying songs from the VS-840EX to the external Zip disk

Here's how songs that were created and saved on the VS-840EX can be copied to the external Zip disk.

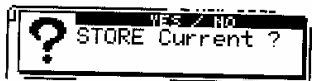
1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



3. Use [CURSOR] to select the 840 to SCSI Copy icon, and press [ENTER/TAP].



4. This display will indicate "STORE Current ?" If you wish to save the currently selected song (the Current Song), press [YES]. If you do not wish to save it, press [NO].

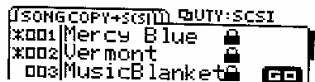


5. Use [CURSOR] to select the song(s) that you wish to copy, and press [ENTER/TAP], and a symbol will be added at the left of the song. Mark each song that you wish to copy.



To remove a mark, use [CURSOR] to select the song from which you wish to remove the mark, and press [ENTER/TAP].

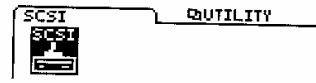
6. Use [CURSOR] to select the "GO" icon, and press [ENTER/TAP] to begin the Copy operation.



Copying songs from the external Zip disk to the VS-840EX

Here's how a song that was saved on an external Zip disk can be copied to the Zip disk of the VS-840EX.

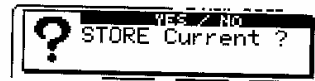
1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



3. Use [CURSOR] to select the SCSI to 840 Copy icon, and press [ENTER/TAP].



4. This display will indicate "STORE Current ?" If you wish to save the currently selected song (the Current Song), press [YES]. If you do not wish to save it, press [NO].

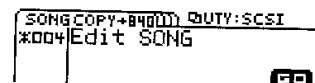


5. Use [CURSOR] to select the song that you wish to copy, and press [ENTER/TAP] to add a mark to the left of the song. Mark each song that you wish to copy.



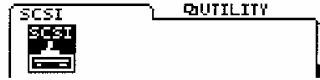
To remove a mark, use [CURSOR] to select the song from which you wish to remove a mark, and press [ENTER/TAP].

6. Use [CURSOR] to move the cursor to the "GO" icon, and press [ENTER/TAP] to begin the Copy operation.



Deleting a song that was saved on an external Zip disk

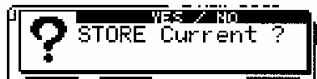
1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



3. Use [CURSOR] to select the SCSI Song Erase icon, and press [ENTER/TAP].



4. This display will indicate "STORE Current ?" If you wish to save the currently selected song (the Current Song), press [YES]. If you do not wish to save it, press [NO].

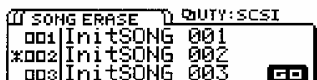


5. Use [CURSOR] to select the song(s) that you wish to delete, and press [ENTER/TAP] to add a mark at the left of the song. Add a mark to each song that you wish to delete.



To remove a mark from a song, use [CURSOR] to select the song from which the mark will be removed, and press [ENTER/TAP].

6. Use [CURSOR] to move the cursor to the "GO" icon, and press [ENTER/TAP].



7. The display will ask "SONG Erase Sure?," so press [YES] to execute the delete operation.



All marked songs will be deleted.

Using an external Zip drive to perform a disk copy

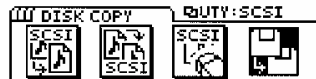
All data on the internal disk of the VS-840EX will be copied to the external Zip disk.

* It is not possible to copy between disks of differing capacity.

1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



3. Use [CURSOR] to select the SCSI Disk Copy icon, and press [ENTER/TAP].



4. This display will indicate "STORE Current ?" If you wish to save the currently selected song (the Current Song), press [YES]. If you do not wish to save it, press [NO].



5. A message of "Are you Sure?" will ask you to confirm the operation. Press [YES] to execute the disk copy.



If you press [NO], the disk copy will be halted.

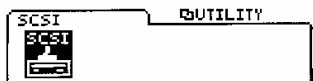
6. When the data has been copied, the display will indicate "Complete!," and you will return to Play mode.

Using an external Zip drive to convert data between VS-840EX/VS-880 formats (Song Convert)

This operation converts data so that it can be exchanged between the VS-840EX and VS-880. Here we will give an example procedure showing how song data created on the VS-880 can be converted for use by the VS-840EX.

- * If you select the SCSI->840 icon, VS-880 song data on the external Zip disk will be converted, and saved on the disk of the VS-840EX. If you select the 840->SCSI icon, VS-840EX data on the VS-840EX disk will be converted, and saved on the external Zip disk.
- * The only data which can be exchanged between the VS-840EX and VS-880 is song data which was recorded with a Recording Mode and Sample Rate that are supported by both devices. (The VS-840EX's recording mode "LV1" corresponds to the VS-880's "LIV.") Only two types of information are converted: the audio data itself, and information which indicates the V-track of that audio data. Other data (system-related settings, mixer-related settings, locate points in the song, etc.) is not compatible.

1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



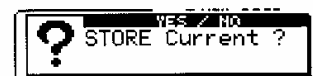
3. Use [CURSOR] to select the SCSI Song Convert icon, and press [ENTER/TAP].



4. The display will indicate "Select Convert Type," so use [CURSOR] to select the Convert Type. For this example, select the SCSI->840 icon, and press [ENTER/TAP].



5. This display will indicate "STORE Current ?" If you wish to save the currently selected song (the Current Song), press [YES]. If you do not wish to save it, press [NO].

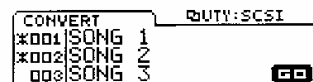


6. A list of songs created on the VS-880 will be displayed. Use [CURSOR] to select a song that you wish to convert and press [ENTER/TAP] to add a mark at the left of the song. In this way, mark each song that you wish to convert.



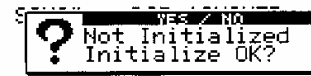
To erase a mark, use [CURSOR] to select the song from which you wish to erase the mark, and press [ENTER/TAP].

7. Use [CURSOR] to move the cursor to the "GO" icon, and press [ENTER/TAP] to begin the convert operation.



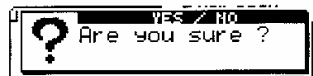
- * In order to convert song data created on the VS-840EX into a form that can be used by the VS-880, you will need a disk that has been initialized on the VS-880.

If you do not have a disk that has been initialized on the VS-880, you can use the following procedure to initialize a disk. If an uninitialized disk is inserted, the following display will appear.



You will be asked whether or not you wish to initialize the disk for use on the VS-880, so execute the following procedure.

1. If you wish to initialize the disk, press [YES]. If you do not wish to initialize the disk, press [NO].
2. If you press [YES] in step 1, you will be asked again "Are you sure ?" If you wish to initialize, press [YES].



- * If initialization is halted, you will return to the condition of step 3. Execute the Shut-down operation to remove the disk, insert the desired disk, and execute the Restart operation.

- * When a disk is initialized, all data on that disk will be lost. Before initializing a disk, make sure that it does not contain any data you wish to keep.

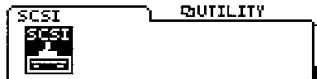
- * The VS-840EX and the VS-880 use different disk formats.

Select the SCSI drive

Select the SCSI drive (SCSI ID number) with which the VS-840EX will exchange data.

* Only one SCSI drive can be selected on the VS-840EX.

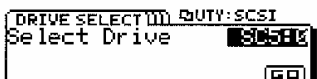
1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



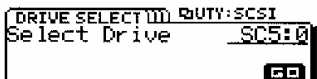
3. Use [CURSOR] to select the SCSI Drive Select icon, and press [ENTER/TAP].



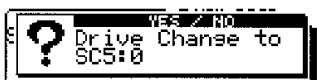
4. Select the SCSI Drive (SCSI ID number). Use [CURSOR] to move the cursor to "Select Drive," and use the TIME/VALUE dial to select the SCSI Drive (SCSI ID number).



5. Use [CURSOR] to move the cursor to the "GO" icon, and press [ENTER/TAP].



6. A message of "Drive Change to" will ask you to confirm the operation. Press [YES] to execute the drive change. If you decide not to change the drive, press [NO].



When the Data Cannot be Saved on a Single Disk (Archives)

Use this method when you are using a removable disk drive and several disks will be required to copy the specified song data.

When song data is copied using this method, the song data will be converted into a data format specifically for saving (archive format). This means that it will not be possible to directly playback the archive type song data copied on the disk. You will need to save the song data into the playable format using the appropriate procedure.

Archived files on VS-880/VS-880EX/VS-1680 are not compatible.

Disk Handling

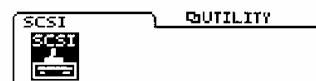
When using this operation to copy song data, the disk will be initialized to hold archive-type song data. This means that this operation can be executed using a disk which has not been initialized by the VS-840EX. However, caution must be used, as this operation of copying data to a disk that already contains song data will result in the loss of the previously saved song data.

Also, a disk containing archive-type song data will be recognized as an uninitialized disk outside of the extract selection of the Archive Copy display.

■ Procedure for Saving on Multiple Disks (Store)

Use this method when using a removable disk drive and two or more disks are required in order to copy the specified song data. SCSI Drive (SCSI ID number) of the target device will be selected from form the "DRIVE SELECT."

1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



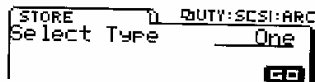
3. Use [CURSOR] to select the SCSI Archive Copy icon, then press [ENTER/TAP].



4. Use [CURSOR] to select the Store icon, then press [ENTER/TAP].

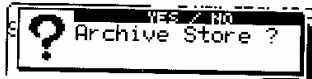


5. Use [CURSOR] to select copy type. Move the cursor to "GO" then press [ENTER/TAP].



If you wish to copy the currently selected song, select "One." To copy all songs from the current drive, select "All."

6. The display will ask "Archive Store ?" If you wish to store the current song, press [YES], If you decide not to store it, press [NO].



7. The display will ask "STORE Current ?" If you wish to store the current song, press [YES], If you decide not to store it, press [NO].



8. The display will request "Insert Disk...," insert a Zip disk into the Zip drive.

9. The display will ask "You'll lose Data?" If you wish to store it, press [YES], If you decide not to store it, press [NO].

* All data stored on the Zip disk will be lost. Do not use a Zip disk that contains song data you wish to keep.

10. If the amount of song data is greater than one Zip disk copy capacity, the disk will be ejected, and the display will request "Insert Disk..." Insert the next disk.

At this time, write the disk numbers on the disk labels so that you will remember the sequence in which they were inserted.

11. If the copy operation involved two or more disks, the display will say "Insert Disk #" (# indicating the disk insertion sequence) at the end. Insert each disk in the correct order.

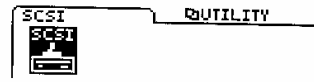
12. When copying is completed, display will indicate "Complete!" Press [DISPLAY] to return to Play mode.

■ Procedure for Loading from Multiple Disks (Extract)

Use this method to use archive-type song data that was saved to a removable disk drive. Use the following procedure to load the song data into the current drive.

SCSI Drive (SCSI ID number) of the target device will be selected from the "DRIVE SELECT."

1. Press [UTILITY].
2. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



3. Use [CURSOR] to select the SCSI Archive Copy icon, then press [ENTER/TAP].

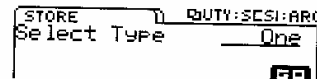


4. Use [CURSOR] to select the Extract icon, then press [ENTER/TAP].

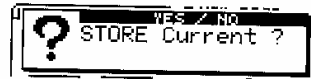


5. Use [CURSOR] to select the song. Move the cursor to "GO" then press [ENTER/TAP].

If you wish to copy the currently selected song, select "One." To copy all songs from the current drive, select "All."



6. The display will ask "STORE Current ?" If you wish to store the current song, press [YES], If you decide not to store it, press [NO].



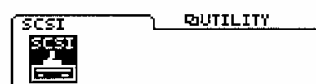
7. If you chose "All" on 5., the display will ask "initialize Internal Zip?" This message is asking you to confirm that you wish to initialize the loading destination drive (the internal Zip disk). If you wish to initialize the drive and then load, press [YES]. If you decide not to initialize, press [NO]. If you press [YES] here, all songs saved on the internal Zip disk will be lost. Normally, you should press [NO]. If the loading destination Zip disk does not have sufficient blank space, you should first make a backup copy of the internal Zip disk or replace with another Zip disk, and then press [YES].

8. When a copy operation involves two or more disks, the disk will be ejected, and the display will request "Insert Disk #" (# is the disk number) Insert the next disk.
9. When the copying is completed, display will indicate "Complete!" Press [DISPLAY] to return to Play mode.

Copying a Performance Data from a Song Saved on a SCSI Device (Track Import)

Copying a performance data from a song saved on a SCSI device to the current song.

1. First select the desired copy destination song as the current song.
2. Press [UTILITY].
3. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].



4. Use [CURSOR] to select the SCSI Track Import icon, then press [ENTER/TAP].



5. The display will ask "STORE Current ?" If you wish to store the current song before the Track Import, press [YES]. If you decide not to store it, and to execute the Track Import, press [NO].

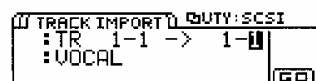
* If you execute Track Import without storing, exchanged portion of the current song will be lost.



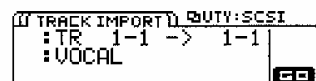
6. Move the cursor to the song containing the source track, then press [ENTER/TAP].



7. Select the source track and the destination track



8. Use [CURSOR] to select "GO" then press [ENTER/TAP]. Track Import will be executed.

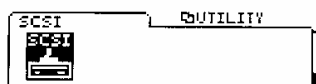


9. When the Track Import is completed successfully, display will indicate "Complete!" Press [DISPLAY] to return to Play mode.

Copying a specified track of a Current Song to a Song Saved (or a New Song) on a SCSI Device (Track Export)

Copying a specified track of a current song to a song saved (or a New Song) on a SCSI device (Track Export).

1. First select the desired copy source song as the current song.
2. Press [UTILITY].
3. Use [CURSOR] to select the SCSI icon, and press [ENTER/TAP].

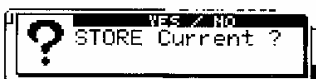


4. Use [CURSOR] to select the SCSI Track Export icon, then press [ENTER/TAP].



5. The display will ask "STORE Current ?" If you wish to store the current song before the Track Export, press [YES]. If you decide not to store it, and to execute the Track Export, press [NO].

* If you execute Track Export without storing, exchanged portion of the current song will be lost.

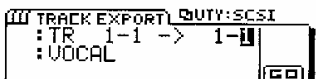


6. Move the cursor to the destination song or "NewSong...", then press [ENTER/TAP].

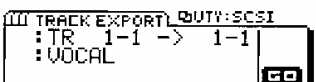


7. Select the source track and the destination track

* Use [CURSOR(♡)] to move the cursor, and you can use the TIME/VALUE dial to select the track name.



8. Use [CURSOR] to select "GO" then press [ENTER/TAP]. Track Export will be executed.



9. When the Track Export is completed successfully, display will indicate "Complete!" Press [DISPLAY] to return to Play mode.

Limitations

You can Import/Export a track from a song which has the same sample rate and the recording mode. If the copy-destination drive with the song does not have sufficient blank space, Track Import/Export can not be executed.

VS4S-1 Specifications

VS4S-1: SCSI Board

Power Supply

Supplied from the VS-840EX

Connector

SCSI Connector (25-pin D-sub type connector)

Dimensions

74.0 (W) x 85.0 (D) x 19.0 (H) mm
2-15/16 (W) x 3-3/8 (H) x 3/4 (D) inches

Weight

200g / 8 oz

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

Important Notes Concerning the SCSI Connector

If a VS4S-1 is installed in the VS-840EX, only these SCSI devices that are listed in the owner's manual can be connected to the SCSI connector.

Be careful not to connect any other devices (such as RS-232C-type devices, parallel-type devices, etc.) even though that have similar-looking connectors.

