

## Chapter 22 Frequently Asked Questions

This chapter will answer some of the most frequently asked questions by VS-1680 owners regarding its operation.

### **1. How Do I Control the Stereo Tracks Independently?**

Tracks 9-16 on the VS-1680 are configured as Stereo Tracks but they can be controlled independently. To do this, the Channel Link function must be turned off. Tracks 9, 11, 13, and 15 can then be controlled from the front panel just as tracks 1-8 are. Tracks 10, 12, 14, and 16 can be controlled by holding [SHIFT] and adjusting the desired front panel control. For example, holding [SHIFT] and moving the 9/10 fader will adjust the level for track 10, but not track 9. The following procedure will guide you through the process of recording a mono signal to track 16.

1. Press Track 15/16 SELECT so "Track Mixer [TR = 15/16]" appears in the display.
2. Use [←], [→], [↑], and [↓] to select "Link" and use the TIME / VALUE dial to select "OFF."
3. Hold [SHIFT] and Track 15/16 STATUS and press the Input SELECT button for the input you wish to record (it will begin to flash).
4. Hold [SHIFT] and press the Track 15/16 STATUS so it is flashing red.
5. Use the appropriate INPUT SENS knob to set the recording level as desired.
6. Press [REC] followed by [PLAY] to begin recording.
7. Press [STOP] when you are finished.
8. Press [PLAY] to hear the results. Hold [SHIFT] and use the Channel 15/16 Fader to adjust the playback volume of track 16 as desired.

*Note: Each time you press the TRACK 15/16 SELECT button when Link is turned "off"; the display will alternate between the Track Mixer for tracks 15 and 16.*

### **2. Why Do I Hear the Inputs All of the Time?**

The "PAN ON/OFF" switch is used to determine whether or not a track or input is sent to the mix bus. This parameter should be checked when you are either hearing a track or input that you don't want to hear or when you are having trouble hearing a track or input that you should be hearing. The default setting for this switch is "ON," even for the inputs. This is why it is possible to hear your inputs even if they are not routed anywhere.

Use the following procedure to adjust the PAN ON/OFF switch:

1. Press the desired INPUT or TRACK SELECT button.
2. Use [←], [→], [↑], and [↓] to highlight the parameter beneath PAN (in the upper right corner of the display).
3. Use the TIME / VALUE dial to select "ON or OFF" as desired. For example. If you are trying to prevent an input from being heard at the mix outputs, you would set this switch to "OFF."
4. Repeat steps 1-3 for any additional tracks or inputs as desired.

### **3. What is the Fader/Mute Button Used For?**

The Fader/Mute button is used to determine whether the faders control the track levels or the input and effect return levels. When the Fader/Mute button is set to "IN," faders 1-8 control the analog input levels, fader 9/10 controls the digital input, fader 11/12 controls the stereo in level, and faders 13-16 control the effect return levels. When the Fader/Mute button is set to "TR," faders 1-16 will control the levels for tracks 1-16 respectively. Use the following procedure to set the faders to control inputs or tracks:

1. Select a song and press [PLAY].
2. Press the FADER/MUTE button so that "IN" is lit.

3. Use the faders to adjust the levels of the inputs and effect returns as desired.
4. Press the FADER/MUTE button so that "TR" is lit.
5. Use the faders to adjust the levels of the tracks as desired.

#### **4. How Do I Burn Audio CDs?**

The VS-1680 allows you to take a project from its beginning stages all the way to a finished CD. What steps need to be taken to produce a finished CD? A general description of the recording process might be as follows:

- \* Recording Basic Tracks
- \* Editing your Tracks
- \* Mixing your Tracks
- \* Mastering your Tracks to a Final Stereo Mix
- \* Preparing your Stereo Mix for CD

This section covers some of the common questions that arise during the CD preparation phase of the recording process. If you haven't already, you will need to mix your songs down to a two track stereo format. You can do this by recording to an external device such as a DAT machine or cassette deck or by "bouncing" your tracks down to a stereo pair within the VS-1680 itself.

#### **How Do I Choose Which Tracks are Burned to the CD?**

CDs are a stereo format. This means that you will always designate two tracks (left and right) to be burned onto the CD-R. Use the following procedure to designate a left and right track for creating a CD.

1. Hold [SHIFT] and press F1 [SONG] and the "Song Menu" screen will be displayed. If it does not, press F6 [EXIT].
2. Press [PAGE] until CD WT appears above F3.
3. Press F3 [CD WT] to display the "CD Write Ready?" screen.
4. Press [YES] and "Store Current?" will be displayed. If you have made any changes to your song that have not been saved, press [YES]; otherwise, press [NO].
5. Press F1 [SelTr] to display the "Select Track" screen.
6. Use the TIME / VALUE dial to select the track (and Virtual Track) that will become the left side of the CD and press F3 [Sel L]. For example, if your stereo mix is recorded to Tracks 15 and 16, you will highlight "15-1: V.T 15-1" and press F3 [Sel L] to designate Track 15 (V-Track 1) as the left track of the CD.
7. Use the TIME / VALUE dial to select the track (and Virtual Track) that will become the right side of the CD and press F4 [Sel R].
8. Press F1 [Back] and the tracks you selected will be displayed under "L-Ch Source Track" and "R-Ch Source Track." You can now continue with the CD Write procedure on page 121 of the VS-1680 Owner's Manual.

#### **How Do I Set CD Markers?**

When writing multiple songs to the CD at once, it is important that CD markers are created at the beginning of each song. Otherwise, your audio will be combined into one long song on the CD. The VS-1680 automatically creates the first CD marker at 00h00m00s00f. You will need to create CD markers for any additional songs. Use the following procedure to create CD markers:

1. Locate the VS-1680 to the point where the audio for your second song begins.
2. Hold [PLAY(DISPLAY)] and press [TAP].
3. Locate the VS-1680 to the beginning of the third song.
4. Hold [PLAY(DISPLAY)] and press [TAP].
5. Continue this procedure for any additional songs.

*Note: CD standards require a song to be at least four seconds in length. If you try to set a CD marker within four seconds of another CD marker, the VS-1680 will respond with a "Can't Set Marker" message.*

*Tip: The Scrub and Preview functions can be very helpful in locating the exact beginning of your songs. Use the PREVIEW TO command to make sure that the current time is right before the audio begins. Also, some CD players will cut off the beginning of your song if it is too close to the CD marker. If you set your CD markers around .5 second (15 frames) before your song actually begins, it should index correctly on most CD players.*

### **Why Does my CD Sound Different than the VS-1680?**

If the songs on the CD you make sounds drastically different than they do when played on the VS-1680, remember that mixer settings such as fader level, effects, and EQ do not translate to the CD. Use the following procedure to listen to your song as it will be recorded to the CD:

1. Solo the tracks that you have selected as the left and right CD tracks.
2. Press [FADER/MUTE] so "TR" is lit and set the faders for the selected tracks to 0dB (the bold line approximately two-thirds of the way up).
3. Press the TRACK SELECT button for the track selected as the "L-Ch Source Track" so that the "Track Mixer" screen appears in the display.
4. Use [←], [→], [↑], and [↓] to highlight the "Link" parameter and use the TIME / VALUE dial to select "On."
5. Use [←], [→], [↑], and [↓] to highlight "Pan" parameter (under the pan knob icon) and use the TIME / VALUE dial to select "0."
6. Use [←], [→], [↑], and [↓] to highlight the "EQ Sw" parameter and use the TIME / VALUE dial to select "Off."
7. Use [←], [→], [↑], and [↓] to highlight the "EFX 1" parameter and use the TIME / VALUE dial to select "Off." Do the same for EFX 2, 3, and 4.
8. Use [←], [→], [↑], and [↓] to highlight the "EFX Ins" parameter and press [YES]. Use the TIME / VALUE dial to select "Off" for EFX 1. Do the same for EFX 2, 3, and 4.
9. Use [←], [→], [↑], and [↓] to highlight the "ATT" parameter and use the TIME / VALUE dial to select "0dB."
10. Press [AUTOMIX] so it is not lit.
11. Press the TRACK STATUS button for the track selected as the "L-Ch Source Track" until it is in Play mode (green) and set its fader to 0dB. Bring the remaining channel faders all the way down.
12. Set the master fader to 0dB. Reset your song to the beginning and press [PLAY] to hear your song as it will sound on the CD.

### **5. How Do I Restore the Mixer Parameters to the Factory Settings?**

The VS-1680 gives you the ability to revert all your mixer and system parameters back to their original factory settings. This is convenient if you want to reset the mixer and system settings to their original values without having to adjust each parameter manually. This is also a good function for troubleshooting when you having difficulties that appear to be mixer related. Use the following procedure to initialize the VS-1680 mixer and system parameters:

1. Hold [SHIFT] and press F5 [SYSTEM] and the "System Menu" page should be displayed. If it is not, press F6 [EXIT].
2. Press [PAGE] so that INIT appears in the display above F1.
3. Press F1 and "Init Mix/Sys Prm Sure?" will be displayed.
4. Press [YES] and "Initializing...Please Wait" will be displayed.
5. Press [PLAY(DISPLAY)] to return to the main play screen.

### **6. How Do I Create a Tempo Map?**

The VS-1680 allows you to create a tempo map that controls tempo and meter changes throughout your song. This is very convenient when you are integrating the VS-1680 with a MIDI sequencer. Use the following procedure to create a Tempo Map.

1. Hold [SHIFT] and press F5 [SYSTEM] and "System Menu" page should be displayed. If it is not, press F6 [EXIT].
2. Press F6 [SYNC]. If "SYNC" does not appear above F6, press [PAGE] followed by F6. The "Sync/Tempo" page should be displayed.
3. Press F3 [Tmap] to display the "Tempo Map" screen.
4. Use [↓] to move the cursor to the current tempo setting (e.g. q = 120) and use the TIME / VALUE dial to select the desired starting tempo for your song.

*Note: Tempo Map #1 must always start at measure one.*

5. Use [↓] to move the cursor to the beat setting (e.g. 4/4) and use the TIME / VALUE dial to select the desired time signature.
6. Press F2 [NEW].
7. Use [←], [→], [↑], and [↓] to highlight the tempo setting and the TIME / VALUE dial to select the new tempo.
8. Use [↓] to move the cursor to the measure setting and use the TIME / VALUE dial to select the measure where you want the new tempo to begin.
9. Use [↓] to move the cursor to the beat setting (e.g. 4/4) and use the TIME / VALUE dial to select the desired time signature.
10. Repeat steps 6-9 for any additional tempo and/or time signature changes as desired.

#### **Why Doesn't it Change the Audio?**

The Tempo Map can alter the tempo and meter of MIDI sequences. It can not, however, do the same for audio recorded on the 1680. For this reason, it is important to create your Tempo Map *before* you begin recording any acoustic instruments whenever possible and to record while listening to the metronome. It is only possible to alter the playback speed of recorded audio by using the Vari Pitch and/or Time Compression/Expansion functions.

### **7. How Do I Use AutoMix?**

The AutoMix function of the VS-1680 allows you to perfect your final mix before you commit to a master DAT tape or CD. Instead of manually "riding" the faders while you are recording to your master tape, AutoMix allows you to record mixer changes such as level, pan, effects type, etc. You can even automate the mixer settings for the inputs. This is helpful when you have synchronized a keyboard or drum machine and you want to mix it in with the audio tracks without actually recording it. There are three main types of AutoMix available on the VS-1680: real-time, snapshot, and gradation.

#### **Real-time**

Real-time AutoMix allows you to record fader movements as you make them. This is very convenient for perfecting your track mixes before you record them down to two tracks. Use the following procedure to create a real-time AutoMix:

1. Press [AUTOMIX] so it is lit.
2. Hold [AUTOMIX] and press the INPUT and/or TRACK SELECT buttons for any inputs or tracks that you want to automate so that they are flashing.
3. Reset your song to the beginning and adjust the faders as desired for the start of the song.
4. Hold [SCENE] and press [REC] to enable real-time AutoMix mode.
5. Press [PLAY] and adjust the faders as desired.
6. Press [STOP] when you are finished. Reset your song to the beginning and press [PLAY] to hear the results.

## Snapshot

Snapshot automation allows you to recall settings such as fader levels, effect send levels, effect types, and panning at a specific point in time. This is useful, for instance, when you want to change effects during your song. Use the following procedure to create a snapshot:

1. Press [AUTOMIX] so it is lit.
2. Reset your song to the beginning and adjust the settings as desired for the beginning of your song.
3. Hold [SCENE] and press [TAP] to create a snapshot of your initial settings.
4. Advance the VS-1680 to the point in time where you want these settings to change and adjust them as desired. Then, hold [SCENE] and press [TAP].
5. Repeat step #4 to create additional snapshots as desired.
6. Reset your song to the beginning and press [PLAY] to hear the results.

## Gradation

Gradation allows you to designate two snapshots and have the VS-1680 automatically crossfade the faders and panning between those two points to create a smooth transition. This is a very handy tool for creating fades. Use the following procedure to create a fade out using gradation:

1. Press [AUTOMIX] so it is lit.
2. Advance your song to the point in time where you want the fade out to begin and adjust the fader levels (including the master fader) as desired.
3. Hold [SCENE] and press [TAP].
4. Advance your song to the point in time where the fade out should end and pull the master fader all the way down.
5. Hold [SCENE] and press [TAP].
6. Hold [SCENE] and press PREVIOUS. "Gradation Marker #000 - #001?" appears in the display.
7. Press [YES] and the VS-1680 will create a fade out between those marker points.
8. Reset your song to a point before the first marker and press [PLAY] to hear the fade out.

## **8. How Do I Create a User Template in EZ Routing?**

The User section within EZ Routing can be a huge time saver. It can greatly simplify the set up process for recording or mixing configurations that are frequently used. These user programmable routing configurations allow you to set up the VS-1680 exactly the way you need, step by step, for a particular task. Then, when you need to perform that same task in the future, you just select that User template and your custom setup will be recalled automatically. The following example will show you how to create a User routing template for recording inputs 1-8 to tracks 1-8 with a compressor effect inserted on each input.

1. Press [EZ ROUTING] so it is lit.
2. Press [PAGE] so that "INPUT" appears in the display above F2.
3. Press [F2(INPUT)] to display the Input Mixer Settings.
4. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to set the "Send" for inputs 1-8 to tracks 1-8. For example, the "Send" for input 1 would appear as "1/-."
5. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to set EFX 1 to "INL" for input 1 and "INR" for input 2.
6. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to set EFX 2 to "INL" for input 3 and "INR" for input 4.
7. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to set EFX 3 to "INL" for input 5 and "INR" for input 6.
8. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to set EFX 4 to "INL" for input 7 and "INR" for input 8.

9. Press [F3(TRACK)] to display the Track Routing screen.
10. Use [↵], [⇨], [⇧], and [⇩] and the TIME / VALUE dial to set the Send for tracks 1-8 to "MIX."
11. Use [↵], [⇨], [⇧], and [⇩] and the TIME / VALUE dial to set the Status for tracks 1-8 to "REC."
12. Press [F4(EFX)] to display the Effect Settings screen.
13. Use [↵], [⇨], [⇧], and [⇩] and the TIME / VALUE dial to select "P096 Dual Comp/Lim" for Effects 1-4.
14. Press F6 [Save] and the Routing Save screen will appear in the display.
15. Use [↵], [⇨], [⇧], and [⇩] and the TIME / VALUE dial to enter a name for this User Template (e.g. "8 Ins w/comp").
16. Press [F5(Write)] and your template will be saved.
17. Press [PLAY(DISPLAY)] to return to the Playlist display.

Use the following procedure to recall your User Template:

1. Press [EZ ROUTING] so it is lit.
2. Use the TIME / VALUE dial to highlight your User Template.
3. Press [PAGE] so that "EXEC" appears above F4.
4. Press [F4(EXEC)] twice. "Apply this Routing?" will appear in the display.
5. Press [YES] to apply your User Template.

## **9. How Do I Bounce Tracks?**

Bouncing tracks is a common recording technique used to free up additional recording tracks or prepare a song for CD production by combining ("bouncing") audio recorded on multiple tracks to a single track or stereo pair of tracks. Then, new material can be recorded to the original tracks. On the VS-1680, you can record new tracks without recording over the original material by recording on different Virtual Tracks. Plus, because the bouncing is performed digitally, you are not adding noise each time you bounce tracks. Use the following procedure to bounce tracks 1-14 to tracks 15 and 16.

1. Press the TRACK 15/16 SELECT button.
2. Use [↵], [⇨], [⇧], and [⇩] to highlight the "Link" icon and use the TIME / VALUE dial to select "ON."
3. Hold the Track 15/16 STATUS button and press [CLEAR].
4. Hold the Track 15/16 STATUS button and press the Track 1 - 14 SELECT buttons consecutively so that they are flashing.
5. Press the Track 15/16 STATUS button until it is set to source mode (orange). Press the STATUS buttons for tracks 1-14 until they are set to play mode (green).
6. Press [PLAY] and adjust the level and pan settings for tracks 1-14 as desired. Press [STOP] when you are finished.
7. Press the Track 15/16 STATUS button until it is set to record ready mode (flashing red).
8. Reset your song to the beginning and press [REC] followed by [PLAY].
9. Press [STOP] when your song is finished playing. Now, tracks 15 and 16 will contain a stereo mix of tracks 1-14.
10. Reset your song to the beginning, turn off tracks 1-14, and press [PLAY] to hear the results. Make sure that the EQ switch and all effects sends for tracks 15 and 16 are turned off. This will ensure that the "bounced" version of tracks 1-14 sounds the same as the original.

## **10. How Do I Bounce Tracks with Effects?**

If you are using effects, it can be beneficial to include the output of the effects processor when you bounce tracks. This is sometimes referred to as "printing" the effects. By printing the effects you make them a permanent part of the audio. By doing this you can free up the effect processor to be

used on a different track, or to add a different effect on the same track. Use the following procedure to bounce tracks 1-14 to tracks 15 and 16, with effects.

1. Assign tracks 1-14 to any of the available effects processors (1-4) as desired.
2. Hold the Track 15/16 STATUS button and press [CLEAR].
3. Hold the Track 15/16 STATUS button and press the Track 1-14 SELECT buttons consecutively so they are flashing.
4. Hold the Track 15/16 STATUS button and press the EFF RTN button for all of the effects processors being used. For example, to record Effect 1 to tracks 15 and 16, hold the TRACK 15/16 STATUS button and press EFFECT 1/3 RTN.

*Note: If you are using Effects 3 or 4, you will need to hold the Track 15/16 STATUS, [SHIFT], and EFFECT 1/3 RTN or EFFECT 2/4 RTN buttons to assign effects 3 and/or 4 to be recorded on tracks 15 and 16.*

5. Press the Track 15/16 STATUS button until it is set to source mode (orange). Press the STATUS buttons for tracks 1-14 until they are set to play mode (green).
6. Press [PLAY] and adjust the level and pan settings for tracks 1-14 as desired. Press [STOP] when you are finished.
7. Press the Track 15/16 STATUS button until it is set to record ready mode (flashing red).
8. Reset your song to the beginning and press [REC] followed by [PLAY].
9. Press [STOP] when your song is finished playing. Now, tracks 15 and 16 will contain a stereo mix of tracks 1-14 with the effects included.

## **11. Why Can't I Hear My Effects?**

If you have routed a track or input to one of the internal effects processors (using the optional VS8F-2) and are having difficulty hearing the output of the effects processor, the problem can usually be traced to one of three scenarios: Your effects are either inserted on another track or input, the output of the effects processor is routed to a record bus instead of the mix bus, or your master effect return for the effect is set to zero.

If you have inserted an effect on a certain track or input, you cannot use that effects processor on any other track or input. Use the following procedure to ensure Effects 1-4 are not being used as insert effects:

1. Press the Input 1 SELECT button to display the "Input Mixer" screen.
2. Use [←], [→], [↑], and [↓] to highlight the EFX Ins icon and press F6 [PRM.V].
3. Use [←], [→], [↑], and [↓] and TIME / VALUE dial to set the Sw parameter to "OFF" for all inputs.
4. Press the Track 1 SELECT button to display the "Track Mixer" screen.
5. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to set the Sw parameter to "OFF" for all tracks.
6. Press the [EDIT/SOLO] button to display the "Master Block" screen.
7. Use [←], [→], [↑], and [↓] to highlight the EFX Ins icon and press [YES]. Use the TIME / VALUE dial to select "Off" for Effects 1-4.

Routing the outputs of the effects processors to a record bus is common when bouncing tracks. If you do not return the outputs of the effects processors to the mix bus, the effects might not be heard the next time you try and use them. Use the following procedure to ensure the outputs of the effects processors are sent to the mix bus:

1. Hold the Track 1 STATUS button. If the EFFECT 1/3 RTN or EFFECT 2/4 RTN buttons begin to flash, press them so they stop flashing.
2. Repeat this procedure for tracks 2-16.

Another common reason for being unable to hear an effects processor is the master effect return for that effect is set to "0." Use the following procedure to check the master effect returns:

1. Press the [EDIT/SOLO] button to display the "MASTER" screen.
2. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to select the desired return level for EFX 1-4 (100 is the default value).

## **12. How Do I Use the Scrub and Waveform Display Features?**

The Scrub and Waveform Display functions of the VS-1680 are extremely useful when performing track edits such as cut, copy, and erase. The Waveform Display helps you find exact edit points in your audio by providing a graphic representation of a particular audio waveform. The Scrub function allows you to hear that edit point by playing back a loop (with a resolution as fine as 25ms) of your audio. You can control the audio that is being looped by selecting the track you want to hear and using the dial to move the audio back and forth across the now line (the solid line that runs across the middle of the Waveform display). To use the Scrub and Waveform Display functions effectively, it is important that you understand the control parameters used in each function.

### **Setting the Scrub Length**

There are two parameters that can affect the precision in which you can scrub audio in the VS-1680: the Scrub Length and the position of the cursor in the time display. The scrub length controls the size (in milliseconds) of the section of audio that is looped and can set as low as 25ms or as high as 100ms. The default value is 45ms. Use the following procedure to adjust the Scrub Length.

1. Press [STOP] if the VS-1680 is currently in play.
2. Hold [SHIFT] and press [SCRUB] and the "Scrub Length" screen will appear in the display.
3. Use the TIME / VALUE dial to adjust the scrub length as desired.
4. Press [PLAY(DISPLAY)] to return to the play screen.

The position of the cursor in the time display will control the amount of time advanced with each turn of the TIME / VALUE dial. You can set the dial to advance in hour, minute, second, frame, or even subframe increments. You can also set it to advance by measures, beats, or markers. Setting the cursor under the frame portion of the time display will work best for most editing applications. Use the following procedure to adjust the position of the cursor in the time display:

1. Press [PLAY(DISPLAY)] so that the main play screen appears in the display.
2. Hold [SHIFT] and press [↑] until the time portion of the display is selected.
3. Use [←] and [→] to place the cursor under the desired increment for advancing the time display. For example, if you want the VS-1680 to move one frame at a time when the TIME / VALUE dial is turned, the time display would be as follows:  
00h00m00s00f00.

*Note: To advance the time display in subframe increments, set the cursor under the frame portion of the time display turn the TIME / VALUE dial. The counter will move in increments of 10 sub-frames. To advance the time display in single subframe increments, hold [SHIFT] while you turn the TIME / VALUE dial.*

### **What do the X and Y Parameters do?**

The VS-1680 allows you to zoom in and out on both the amplitude (level) and time values of the Waveform display. The default zoom values for amplitude and time are 1 and 16 respectively. Use the following procedure to adjust the zoom controls on the Waveform display:

1. Press [PLAY(DISPLAY)] so that the Playlist display appears.
2. Use [↑] and [↓] to select the track to be viewed in the Waveform display and advance the song to a point where there is audio present on that track.
3. Press [F5(WAVE)] to view the Waveform display.



4. Use [F1(ZOOM+)] and [F2(ZOOM-)] to zoom in and out on the amplitude (level) portion of the display (vertical).
5. Use [F3 (← →)] and [F4 (→ ←)] to zoom in and out on the time portion of the display (horizontal).
6. Press [F5(WAVE)] when you are finished to close the Waveform display.

### **13. How Do I Record a Stereo Signal?**

Recording a stereo signal is nearly identical to recording a mono signal with the exception that you will need to use two inputs and two tracks. The easiest way to record a stereo signal is to link the source (inputs and/or tracks) and the destination tracks. Tracks 9-16 are set up from the factory as stereo linked tracks so, if you are recording to these tracks, all you will need to do is to link the source inputs (or tracks). Use the following procedure to link tracks 3 and 4:

1. Press the Track 3 SELECT button.
2. Use [←], [→], [↑], and [↓] to highlight "Link".
3. Use the TIME / VALUE dial to select "ON."
4. Press [PLAY(DISPLAY)] to return to the Playlist display. You can now use the Track 3 fader to control the volume of tracks 3 and 4.

### **14. How Do I Know How Much Time I Have Left On My Hard Drive and How Big Is My Song?**

While you are recording with the VS-1680, it will be important to know exactly how much recording time is available to you on the current hard drive (or, more accurately, the current partition of that drive). The VS-1680 will allow you to view this information in one of the following forms:

Remaining Time:	The amount of available time shown in minutes and seconds.
Capacity MB:	The amount of available space shown in megabytes.
Capacity %:	The amount of available space shown in percentage.
Capacity Event :	The amount of events available for recording/automix.

Use the following procedure to select the format for showing the amount of available space on the current drive:

1. Hold [SHIFT] and press [F5(SYSTEM)]. The "System Menu" appears in the display. If the System Menu does not appear, press [F6(Exit)].
2. Press [F1(SYSPM)] followed by [F2(Prm 2)].
3. Use [←], [→], [↑], and [↓] to highlight "Remain Display" and use the TIME / VALUE dial to select the desired format (time, megabytes, percentage, or events).
4. Press [PLAY(DISPLAY)] to return to the Playlist display.
5. Hold [SHIFT] and press [PLAY(DISPLAY)] until the name of the current song appears in the display. The amount of space left on the drive will be indicated next to "REMAIN" in the format selected in step #3.

### **How Much Megabytes Does My Song Use?**

In addition to viewing the remaining space on your hard drive, it will also be important to know how many megabytes your songs use. Use the following procedure to view the size of the current song in megabytes:

1. Press [PLAY(DISPLAY)].
2. Hold [SHIFT] and press [PLAY(DISPLAY)] until the name of the current song appears in the display. The size of the current song will be displayed in megabytes next to "Size:" under the song name.

### **15. How Do I Import VS-880 and VS-880EX Songs?**

If you have songs created on a VS-880 or VS-880EX that you would like to edit on the VS-1680, you will need to convert them to the VS-1680's format using the Song Import function. If your VS-880 or VS-880EX backup is not in a playable form (e.g. DAT, CD-R, or on a Zip disk in archive format), you

will need to recover that material on to a VS-1680 formatted drive first. Use the following procedure to recover a VS-880 or VS-880EX DAT backup:

1. Connect the digital output of your DAT machine to the VS-1680's digital input (DIGIN1 for coaxial or DIGIN 2 for optical).
2. Load the DAT tape that contains the desired song and set the tape to playback from the beginning of that song backup.
3. Hold [SHIFT] and press [F6(Utility)] to display the Utility Menu.
4. Press [PAGE] so that "DATRc" appears above F1 (if necessary. Press F1 [DATRc] to display the DAT Recover screen).
5. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to select the appropriate "Digital In Source" (DIGIN 1 for coaxial or DIGIN 2 for optical).
6. Use [←], [→], [↑], and [↓] and the TIME / VALUE dial to select the song to be recovered under "Source Song."

**Warning: If you have any songs on the VS-1680's internal drive that you do not want erased, make sure that "Off" is selected under "Erase All Songs."**

7. Press [F4(Exec)]. "Store Current?" appears in the display. If you have any changes in the current song that have not been saved, press [YES]. Otherwise, press [NO].
8. When "Please Play DAT" appears in the display, start playing your DAT machine.
9. When "Please Stop DAT" appears in the display, stop your DAT machine and press [YES] on the VS-1680.
10. Press [PLAY(DISPLAY)] to return to the Playlist display.

In order to edit a VS-880 or VS-880EX song on the VS-1680, you must use the Song Import function to convert it to a VS-1680 formatted song. Use the following procedure to import a VS-880 or VS-880EX song into the VS-1680.

1. Hold [SHIFT] and press [F1(SONG)]. The "Song Menu" appears in the display. If "Song Menu" does not appear, press [F6(Exit)].
2. Press [PAGE] until "IMPORT" appears in the display above [F4].
3. Press [F4(IMPORT)].
4. Use [←], [→], [↑], and [↓] to highlight the VS-880 or VS-880EX song you wish to convert and press F4 [MARK].
5. Repeat step #3 for any additional VS-880 songs that you wish to convert.
6. Press [F4(EXECUTE)]. A new copy of the selected song(s) will be created in the VS-1680 format. At this point, you can erase the VS-880 version of that song(s) if desired.