

# VS-2480 Version 2.0

# VS-2480CD

## 24BIT/24TRACK

## DIGITAL STUDIO WORKSTATION



Before using this unit, carefully read the sections entitled: "ALWAYS OBSERVE THE FOLLOWING" (Owner's Manual p. 2), "USING THE UNIT SAFELY" (Owner's Manual p. 2), and "IMPORTANT NOTES" (Owner's Manual p. 4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, the User Guide, Owner's Manual, and Appendices should be read in their entirety. These manuals should be saved and kept on hand as a convenient reference.

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# 1—Welcome to Version Two

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The *VS-2480 Version Two Addendum* is a companion to the *VS-2480 Owner's Manual* and describes the features of the Version 2.00 operating system for the VS-2480CD and the VS-2480 24-Track, 24-Bit Digital Studios.

## About the *VS-2480 Version Two Addendum*

Throughout the *Addendum*, we'll refer to both V-Studios as the "VS-2480" to make things simpler. Unless otherwise noted, everything in the *Addendum* applies equally to the VS-2480CD and VS-2480.



Make sure that you've got a current version of the *VS-2480 Owner's Manual*, and keep it handy as you explore the features of Version Two. You can identify a current manual by the numbers in the lower right-hand corner of its back cover. If your manual doesn't say "OS v.1.22" or have a date of "01-11" or later, contact your local Roland distributor. If you bought your VS-2480 in the US, call Roland Customer Service at 323-890-3700, Extension 2289 to obtain a new version of the manual.

Though many of Version Two's new features involve the use of an external VGA display, it also adds new capabilities to the VS-2480 itself. These are described in the *Addendum's* second chapter, "Version Two Enhancements." The remaining chapters discuss Version Two's VGA display-related features—these chapters assume you've connected a color VGA display and configured it for use.

Since most VGA display features are also found on the VS-2480 itself, the *VS-2480 Owner's Manual* already contains descriptions of how they work. When the *Owner's Manual* explains how a VGA feature works, we'll point you to the relevant page or pages. We'll do this in either of two ways:

- When groups of items are presented in lists, their *Owner's Manual* pages will be shown at their right.
- In other cases, we'll use the double-arrow symbol shown here. In this example, we'd be directing you to Page 123.



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## Procedure Descriptions

Most of the VS-2480's operations can be performed from its top panel or the VGA display. You'll often be able to, for example, use a button by pressing it on the VS-2480 or by clicking it with your mouse on the VGA or the VS-2480's LCD. You could also set a level by moving a channel strip fader or by dragging your mouse.



When we refer to the "LCD," we're referring to the VS-2480's own, built-in LCD. To avoid confusion, bear this in mind if your external VGA display is also an LCD.

For the sake of simplicity, certain sections of the *Addendum* describe actions as if you're working the VS-2480's top-panel controls. As you follow these steps, bear in mind that in many cases you can just as easily use your mouse on the VGA or the VS-2480's LCD. The same applies to most of the operations described in the *VS-2480 Owner's Manual*.

## To Get the Most From Version Two

Connect an optional color VGA display to the VS-2480 to take full advantage of Version Two's capabilities. With Version Two, the VS-2480 offers the power and convenience of a computer-based DAW ("digital audio workstation") and dedicated control surface with none of the setup, configuration or maintenance difficulties.



To learn about connecting, setting up and configuring a VGA display and/or ASCII keyboard, see Pages 62 and 64 of the *VS-2480 Owner's Manual*.



If you'd prefer to use your VS-2480 without a VGA display, make sure that the UTILITY menu's OPERATION TARGET parameter is set to LCD. See "Setting the Operation Target" on Page 19.

## VGA Terminology: The Mixers and the Master Block

The VS-2480 contains a powerful 64-channel mixer that has dedicated input, track, Aux send and FX return channels—all of these channels are always active and available. See Page 52 of the *VS-2480 Owner's Manual* for a description of what these channels do.

To help navigate its menus and screens, the VGA display treats the various channel types as if they belong to separate mixers. These are the:

- *Input Mixer*—which contains all 24 of the VS-2480's input channels.
- *Track Mixer*—which contains all 24 of the VS-2480's track channels.
- *FX Return Mixer*—which contains all eight of the stereo FX return channels.

In addition, the eight Aux master channels are grouped together with the MASTER EDIT Aux and Direct bus configuration settings as the "Master Block."

While we use these terms to make getting around onscreen easier, it's important to remember that they're not *really* separate mixers. They're all just sections of the VS-2480's single massive 64-channel mixer. Therefore, viewing one of these "mixers" doesn't de-activate any of the others—it just makes the selected mixer visible.



## 2—Version Two Enhancements

This chapter describes Version Two enhancements that add new features to the VS-2480. These new features can be used from the VS-2480 LCD or a VGA display. Chapter 3 describes choosing the display on which you want to work.

### Phrase Level Control



For an introduction to phrases, see *Owner's Manual* Page 87. To learn about editing phrases, see *Owner's Manual* Chapters 18 and 19.

The new PHRASE PARAMETER phrase editing screen allows you to independently set the level of each phrase on a track, and/or set it to fade in and/or out.

### Using Phrase Parameters

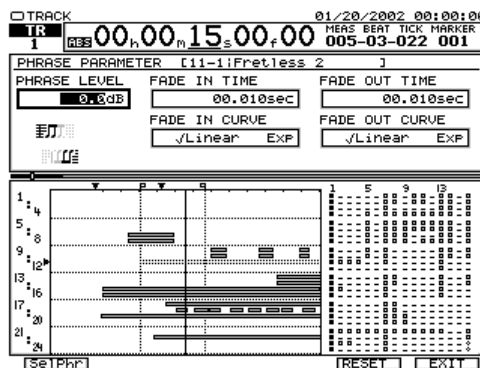
#### *Selecting the Desired Phrase*

1. Press HOME•DISPLAY.
2. Turn the TIME/VALUE dial so that the timeline touches the desired phrase.
3. If PHRASE•REGION•AUTOMIX isn't already green, press it until it lights green.
4. Press TRACK MENU.
5. Press PAGE until "PARAM" is visible above F1.
6. Press F1 (PARAM) to view the PHRASE PARAMETER SelPhr screen. In this screen, you can see the name of each phrase that's touching the timeline.



If the name of desired phrase isn't visible, turn the TIME/VALUE dial to move the timeline until it touches the phrase.

7. Select the desired phrase using the ◀, ▶, ▲ or ▼ buttons, the mouse, or by pressing the phrase's flashing TRACK STATUS button so it solidly lights.
8. Press F1 (Param)—the PHRASE PARAMETER Param screen appears.



The phrase parameters

To select another phrase, press F1 (SelPhr) to return to the phrase selection screen.

#### *Setting a Phrase's Level*

1. Select the desired phrase and display the PHRASE PARAMETER Param screen.
2. To change the level of the phrase, set PHRASE LEVEL to the desired value. A setting of 0.0dB means that the phrase's original level is used. You can cut or boost the phrase's volume from  $-\infty$  to 6 dB.

### Setting Up a Phrase Fade

1. Select the desired phrase and display the PHRASE PARAMETER Param screen as described on Page 9.
2. To set the time it takes for the phrase to:
  - *fade in*—set FADE IN TIME as desired.
  - *fade out*—set FADE OUT TIME as desired.



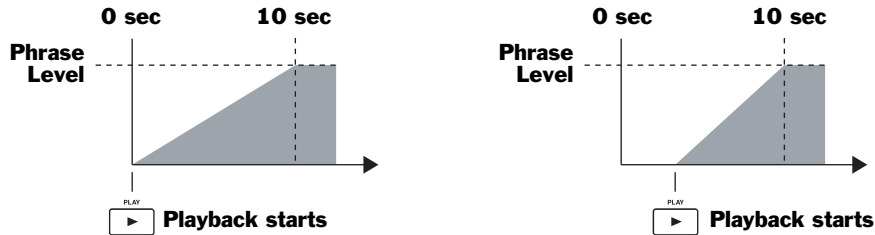
If FADE IN TIME or FADE OUT TIME is set to less than 0.02 seconds, you may hear a short “blip” during playback. If this occurs, lengthen the time setting.

You can set how the phrase’s level changes during a fade by setting the fade curve. You can select:

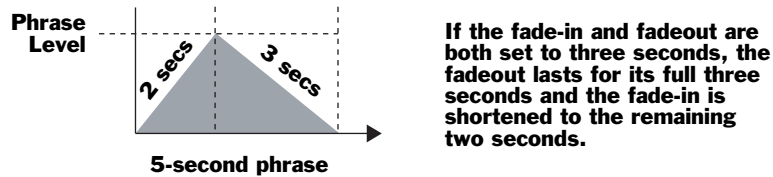
- *Linear*—so that the phrase’s volume changes at the same rate over the course of the fade.
  - *Exp*—so that the phrase’s volume changes exponentially.
3. To set the curve of a:
    - *fade-in*—set FADE IN CURVE to the desired value.
    - *fadeout*—set FADE OUT CURVE to the desired value.

Here are some things to consider as you set up a phrase fade-in or fadeout:

- *If you start playback of a phrase in the middle of a fade-in*—the fade length is shortened so that it still ends at the desired time, resulting in an faster fade-in.

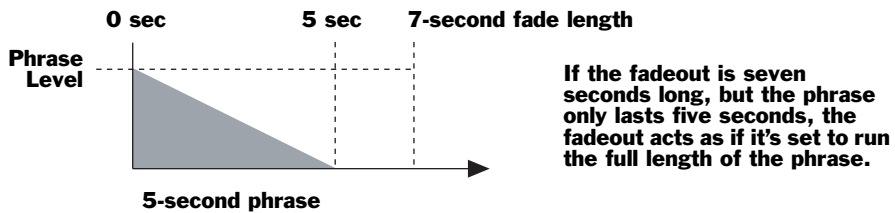


- *If the FADE IN TIME and FADE OUT TIME together are longer than the phrase*—the FADE OUT TIME is given priority and the FADE IN TIME is shortened accordingly.



**If the fade-in and fadeout are both set to three seconds, the fadeout lasts for its full three seconds and the fade-in is shortened to the remaining two seconds.**

- *If the FADE OUT TIME is longer than the phrase*—it’s automatically shortened to equal the actual length of the phrase.



**If the fadeout is seven seconds long, but the phrase only lasts five seconds, the fadeout acts as if it’s set to run the full length of the phrase.**

## Expanded Grid Options

In Version Two, the grid features have been enhanced in track audio editing and phrase sequencing. You can now produce gridlines that represent measures or a variety of new beat values:

- 1/2 notes
- 1/4 notes
- 1/8 notes
- 1/16 notes
- 1/32 notes

GRID	
√Off	
Measure	
J	1/2
J	1/4
J	1/8
f	1/16
k	1/32

You can now snap any edit point to a gridline by setting the new GRID MODE parameter as desired. This parameter can be found among the UTILITY Menu's GLOBAL parameters. To:

- *snap only TO edit points to gridlines*—set GRID MODE to Only TO.
- *snap all edit points to gridlines*—set GRID MODE to ALL EDIT POINT.



As noted on *Owner's Manual* Pages 244 and 245, when you use your mouse to drag audio you want to move or copy, you're actually dragging the TO edit point as well.



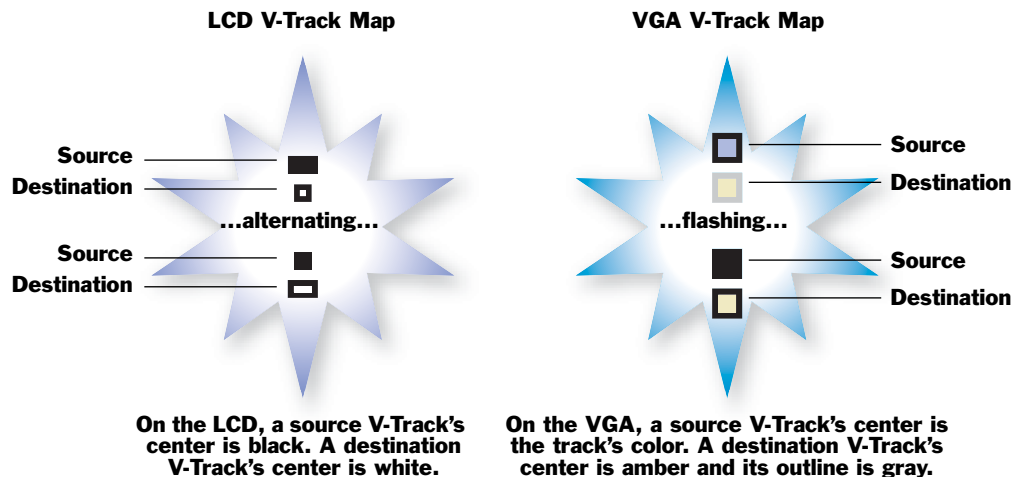
You can temporarily disable the grid feature by holding down CLEAR on the VS-2480 as you drag edit points or audio.

## Selecting Destination V-Tracks

Both the internal LCD and VGA contain V-Track maps in which you can click your mouse to select the desired V-Tracks for playback and editing. To learn about:

- the internal LCD's V-Track map—see *Owner's Manual* Page 123.
- the VGA's V-Track map—see Page 47.

With Version Two you can use the V-Track maps to quickly select destination V-Tracks for audio you're moving or copying. During phrase or region MOVE or COPY operations, the V-Track maps show you the V-Tracks that act as the source of audio being moved or copied, and the currently selected destination V-Tracks.



To change a destination track's V-Track, click the desired V-Track with your mouse.



To change destination tracks—as opposed to V-Tracks—cursor to the desired track in the playlist or click it with your mouse.

## CD Capture

With Version Two, the VS-2480 can capture audio directly from an audio CD into a project that has a sample rate of 44.1kHz, the same sample rate as audio CDs—see *Owner's Manual* Page 96 to learn about project sample rates. You can capture an entire audio selection from a CD or a portion of a selection.



The CD Capture feature requires a CD-RW drive. VS-2480CD owners have a drive built-in. For the VS-2480, an optional Roland-approved CD-RW drive is required.

### How Long a CD Capture Takes

The amount of time it takes for the VS-2480 to capture CD audio depends on the project recording mode:

If the project's recording mode is: CD Capture takes:

CDR	Approximately 40% of the CD track's playing time
M16, M24	Approximately 80% of the CD track's playing time
All other modes	Approximately 150% of the CD track's playing time

## To Capture Audio from an Audio CD

1. Create or load a 44.1kHz project.
2. Insert the desired audio CD into the VS-2480's CD-RW drive.
3. Press CD-RW/MASTERING.
4. Press PAGE until "CDCapt" appears above F1.
5. Press F1 (CDCapt).

The CD CAPTURE screen appears, and the VS-2480 scans the audio CD. When it's finished, the CD TRACK list shows all of the stereo CD tracks on the CD.

CD-RW MASTERING 01/20/2002 00:00:00

CD CAPTURE

DRIVE  
SCSI4 CD-R  
OPS  
CD-R PX-W4220T  
1.02

Disc Info : Finalized  
Total Track: 20  
Total Time : 65m 23s

L-Ch DESTINATION TRACK  
1-1:V.T 1-1

R-Ch DESTINATION TRACK  
2-1:V.T 2-1

CAPTURE TO  
to ZERO

CD TRACK CAPTURE OFFSET  
Start of Track

CD TRACK CAPTURE LENGTH  
Whole 1 Track

CD TRACK

Track 1	4min 31sec
Track 2	2min 17sec
Track 3	4min 27sec
Track 4	2min 55sec
Track 5	3min 10sec
Track 6	2min 42sec
Track 7	4min 29sec
Track 8	3min 34sec
Track 9	3min 57sec
Track 10	1min 57sec
Track 11	1min 36sec
Track 12	3min 14sec
Track 13	2min 34sec
Track 14	3min 19sec
Track 15	3min 36sec

NOW CLEAR EJECT OK CANCEL

This CD TRACK list shows all of the tracks on the CD. You can scroll up or down through the list to view any CD tracks that aren't currently visible.



To eject the CD in the drive, press F3 (EJECT).

6. In the CD TRACK list, press the PREVIOUS or NEXT button or ▼ and ▲ to highlight the CD track you want to capture. Press the PLAY button to audition the selected track if you wish.



To reset the following parameters to their default values, press F2 (CLEAR).

7. Set L-Ch DESTINATION TRACK to select the project track and V-Track on which you want to capture the stereo CD track's left side. As a convenience, the VS-2480

automatically selects the same V-Track on the next-highest track as the destination for its right side.



If you want to burn a new audio CD from the captured audio, select a matching pair of empty V-Tracks on Tracks 23 and 24 as your destination—the VS-2480 can capture the audio directly into CDR mode as described below. If your project uses the M16 or M24 recording mode, select matching V-Tracks on Tracks 15 and 16.

8. If you'd like to select a different right-side destination, set R-Ch DESTINATION TRACK as desired.



If the destination selected in Step 5 already contains CDR-recorded audio, this parameter cannot be manually set.



If your project uses the CDR recording mode, select matching, empty destination V-Tracks. Failure to do so will result in an "Illegal Track Pair!" error message when you attempt to execute the capture.

9. The CAPTURE TO parameter allows you to place the captured audio at the desired time location on the destination V-Tracks. You can place the captured audio:
  - *to Zero*—at project time location 00h00m00s00f.
  - *to Last Phrs:0S*—at the end of the last phrase on the destination V-Tracks.
  - *to Last Phrs:2S*—two seconds after the last phrase on the destination V-Tracks.
  - *to Last Phrs:4S*—four seconds after the last phrase on the destination V-Tracks.
10. Set CD TRACK CAPTURE OFFSET to the time at which you want to begin capturing audio from the selected CD track. If you want to start at the beginning of the CD track, select Start of Track. Otherwise, dial in the distance from the start of the track at which you want the capture to begin.



You can set the CD TRACK CAPTURE OFFSET on the fly as you listen to the selected CD track. Press PLAY to begin playback, and press F1 (NOW) when you reach the moment at which you want to start the capture.

11. The CD TRACK CAPTURE LENGTH parameter sets the amount of audio to be captured from the CD track after the selected CD TRACK CAPTURE OFFSET time. To capture the remainder of the CD track's audio, set the parameter to Whole 1 Track. Otherwise, set it as desired.
12. Press F5 (OK).
13. Read the displayed message regarding copyright, and then press ENTER/YES to proceed.
 

If you selected empty matching V-Tracks on Tracks 23 and 24 in Steps 7 and 8—or on Tracks 15 and 16 in an M16 or M24 project—the VS-2480 can capture the CD audio as CDR-mode mastering tracks that you can burn directly to a new audio CD. If you selected another pair of destination tracks, skip to Step 13.
14. When the VS-2480 displays "Capture to Mastering Tr. In CDR Mode?" press ENTER/YES if you want to capture the audio in CDR mode, or EXIT/NO to capture it using the project's normal recording mode.
15. Read the displayed message about licensing, and press ENTER/YES to proceed. The capture process begins and the display shows "CD Capture..."
16. To exit CD CAPTURE, press F6 (EXIT).

### **To Pause or Cancel an Ongoing CD Capture Operation**

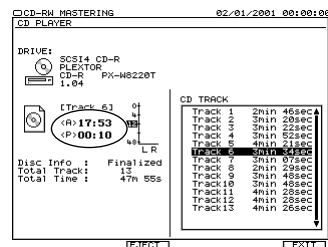
You can pause or cancel a CD Capture operation while it's taking place:

1. Press EXIT/NO—"Abort?" is displayed.
2. Press ENTER/YES to cancel the operation, or EXIT/NO to resume it.

## New CD Player Time Display

To help you locate audio for the CD Capture feature (Page 12), the VS-2480's CD Player (*Owner's Manual* Page 353) now shows the current playback time in two ways:

- <A> ("Absolute" time)—shows the amount of time since the start of the CD.
- <P> ("Program" time)—shows the time since the start of the current track.



## Multiple Project Automixes

With Version Two, each project can store up to nine separate, alternate Automixes, any one of which can be loaded at any time. With multiple Automixes available, you can:

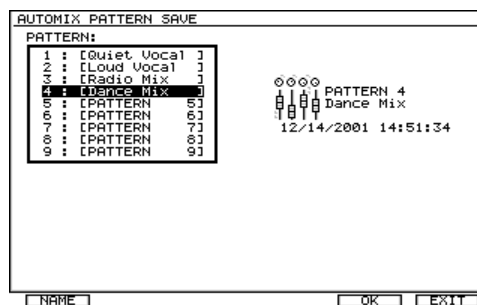
- develop the perfect automated mixdown through multiple versions with the ability to return to an earlier version at any time by simply re-loading it.
- try out several Automix approaches to a project and pick the one you like best.
- Automix the same project in different ways for different uses.

### About F3 (ERASE)

When you erase Automix data in Version Two, you're erasing the currently loaded Automix data. All of the nine saved Automixes remain intact and can still be loaded.

## Saving an Automix

1. Create the Automix—see Chapter 26 of the VS-2480 *Owner's Manual* for details.
2. Hold down SHIFT and press AUTOMIX to display the AUTOMIX screen.
3. Press F4 (SAVE)—the AUTOMIX PATTERN SAVE screen appears. It shows the nine memory locations into which Automixes (or Automix "patterns") can be saved.



4. Highlight the memory location into which you want to save the current Automix.



If you select a location that already contains an Automix, the Automix you're saving replaces the one that's already stored there.

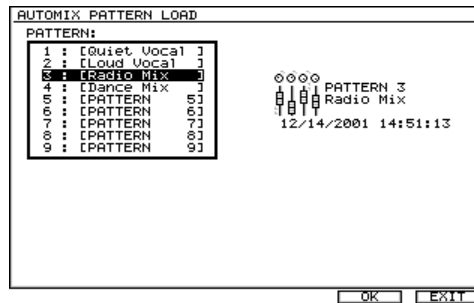
5. Press F5 (OK)—the VS-2480 asks "Save Automix Pattern?"
6. Press ENTER/YES to proceed or EXIT/NO to cancel the save.

### Naming an Automix

To name a saved Automix, highlight it and press F1 (NAME). To learn how to use the VS-2480 naming tools, see Page 73 in the *Owner's Manual*.

## Loading an Automix

1. Hold down SHIFT and press AUTOMIX to display the AUTOMIX screen.
2. Press F3 (LOAD)—the Automix loading screen appears.



3. Highlight the Automix you want to load.
4. Press F5 (OK)—the VS-2480 asks “Load Automix Pattern?”



When you load an Automix, it replaces the currently loaded Automix. If you don't want to lose your current Automix, make sure to save it before loading a different one.

5. Press ENTER/YES to proceed or EXIT/NO to cancel the loading.

## Mouse-Based Phrase Trimming

Version Two allows you to easily and quickly trim the front or back of a track phrase using your mouse—this serves the same purpose as the TRIM IN and TRIM OUT phrase editing operations, though it's much faster. By simply dragging the phrase edge you want to trim, you can change where a phrase begins or ends.

### Using the Mouse To Trim the Front or Back of a Phrase

1. Press HOME•DISPLAY and use the ◀, ▶, ▲ and/or ▼ buttons to set the display's magnification as desired.
2. To prepare to trim:
  - *the front of a phrase*—hold the mouse cursor over the phrase's leading edge until the trim in cursor appears. ←[+ — Trim in
  - *the back of a phrase*—hold the mouse cursor over the phrase's trailing edge until the trim out cursor appears. [+ → — Trim out
3. To trim:
  - *the front of the phrase*—click and drag to the right.
  - *the back of the phrase*—click and drag to the left.
4. Release the mouse button to execute the trim.



You can use the VS-2480's Undo feature to reverse a mouse trimming operation you'd like to do over.



You can drag a phrase's edge as far as the beginning or end of the take on which the phrase is based, and no further.

## UTILITY Menu System Parameter Changes

Two new UTILITY menu System parameters have been added in Version Two:

- *OPERATION TARGET*—selects the VGA or LCD as the main display. See “The Main Display and the Info Display” on Page 19.
- *MOUSE BUTTON SWAP Sw*—reverses the jobs performed by the left and right mouse buttons for left-handed VS-2480 users, as described on Page 16.

The System parameter screens have been slightly reorganized to make room for the new parameters. There are now three System parameter screens:

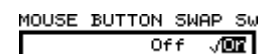
On this System parameter page:	You'll find the following parameters:
Param1	<i>PHANTOM Sw</i> —ANALOG INPUT1 -8; EXT LEVEL METER (MB24)—DISPLAY SECTION, METER POSITION, TIME DISPLAY, METER SCALE
Param2	<i>DRIVE</i> —IDE DRIVE, SCSI SELF ID; <i>VGA</i> —VGA OUT ON/OFF, REFRESH RATE, H.POSITION, V.POSITION; <i>OPERATION TARGET</i>
Param3	<i>PS/2 MOUSE</i> —PS/2 MOUSE ON/OFF; POINTER SPEED, <i>MOUSE BUTTON SWAP Sw</i> ; <i>PS/2 KEYBOARD</i> —PS/2 KEYBOARD ON /OFF, KEYBOARD TYPE

To display the desired System parameter screen:

1. Press UTILITY.
2. PAGE until “SYSTEM” appears above F1.
3. Press F1 (SYSTEM).
4. Press F1 (Param1), F2 (Param2) or F3 (Param3) as desired.

## Left-Handed Mouse Option

Left-handed VS-2480 users can make the use of the mouse more comfortable by switching the roles performed by the two mouse buttons. To do this, navigate to the *MOUSE BUTTON SWAP Sw* parameter on the Param3 screen of the UTILITY menu’s System parameters—as described on the previous page—and set the parameter as desired. When it’s turned:



- *off*—the mouse operates as a right-handed mouse. The left button clicks and the right button displays pop-up menus.
- *on*—the mouse operates as a left-handed mouse. The right button clicks and the left button displays pop-up menus.



If you’re a left-handed mouse user, think of any references to “right-clicking” in the *Addendum* and the *Owner’s Manual* as “left-clicking,” since your left and right mouse buttons are reversed.



## New Shortcuts

A variety of new shortcuts have been added in Version Two.

<i>Hold down:</i>	<i>To:</i>
SHIFT and press UTILITY	toggle between the VGA and LCD as operation targets—see Page 19.
HOME•DISPLAY during power-up	select the LCD as the main display.
An odd-numbered CH EDIT button and press the even-numbered CH EDIT button to its right	link or unlink the two channels by setting their CHLink parameters ( <i>Owner's Manual</i> Page 152).
SHIFT and a TRACK EDIT button	jump to the corresponding phrase or region editing screen

In addition, when the built-in LCD is displaying a CH EDIT Parameter View:

<i>Hold down:</i>	<i>To:</i>
SHIFT and press ▲ or ▼	to view the previous or next parameter's Parameter View screen, respectively.
SHIFT and press ▲ or ▼	to view the currently displayed Parameter View screen for the previous or next channel, respectively.



# 3—Version Two VGA Overview

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## The Main Display and the Info Display

Whenever an external VGA monitor is connected, the VS-2480 provides a main display and an Info Display. The:

- *main display*—is where you work. You can interact with the main display using your mouse, keyboard and the VS-2480's top-panel controls. All messages appear here.
- *Info Display*—is a non-interactive screen that provides helpful supplemental information. Page 21 describes how to determine the contents of the Info Display.

You can select the VGA display or the LCD display as the main display, but not both at the same time. When you select the main display—by setting the OPERATION TARGET parameter—the other display is automatically designated as the Info Display.

### Setting the Operation Target



The VS-2480 displays the currently selected operation target when it powers up.

- You can toggle between the two OPERATION TARGET settings—VGA or LCD—by holding down SHIFT and pressing the UTILITY button. Each time you reset the OPERATION TARGET, the previously selected main display confirms the change.

**The internal LCD shows:**

OPERATION TARGET was changed to VGA.

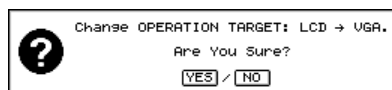
**The external VGA shows:**

OPERATION TARGET was changed to LCD.

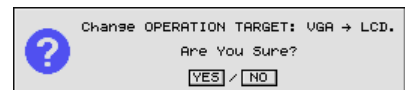
- You can manually set the OPERATION TARGET parameter as described below.

### Manually Setting the OPERATION TARGET Parameter

1. Press UTILITY.
2. If "SYSTEM" isn't visible above F1, press PAGE until it is.
3. Press F1 (SYSTEM).
4. Press F2 (Param2) and locate the OPERATION TARGET parameter.
5. Set OPERATION TARGET to VGA or LCD. On the main display, the VS-2480 asks:



or



6. Press ENTER/YES to proceed, or EXIT/NO to cancel the change.

## About the Main Display

### The LCD as Main Display

When the LCD is designated as the main display, it behaves as described in the *VS-2480 Owner's Manual*, starting on Page 70.

## The VGA as Main Display

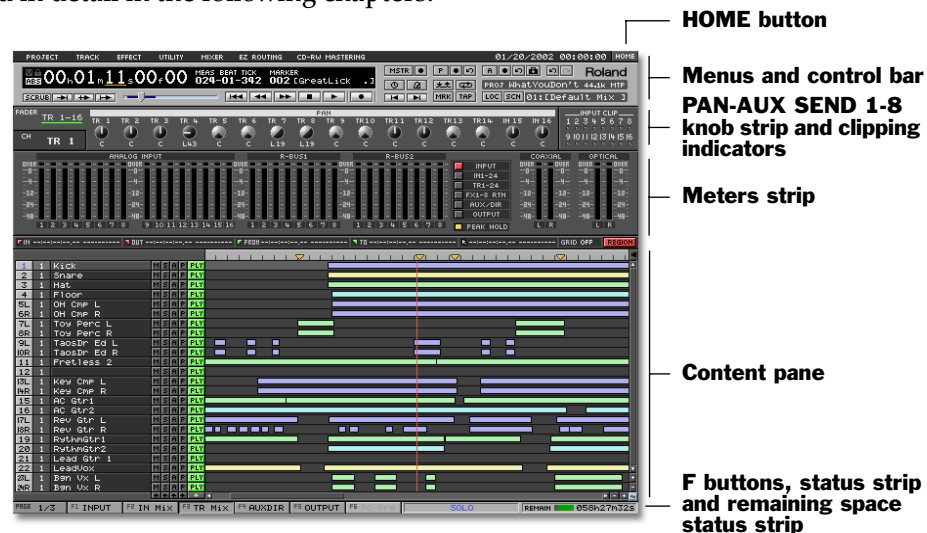
With a connected external VGA display, your mouse and keyboard become your main tools and the VS-2480 acts as a full-featured control surface. Its faders, knobs and buttons provide a great way to physically interact with what's on the VGA display:

- You can select channels and parameters on the VGA with your mouse, and change their settings using the VS-2480's faders or knobs if you wish.
- You can use the VS-2480's transport buttons (*Owner's Manual* Page 177) to operate the hard disk recorder as you view your project on the VGA display.
- You can select audio or other data on the VGA using your mouse, and perform edits instantly by pressing the appropriate button on the VS-2480. You can undo any edit using the top panel's UNDO•REDO button or its onscreen counterparts.
- You can use the VS-2480's LCD as an secondary display on which you can keep important information in view as you work on the VGA.

Of course, there's no single "correct" way to use all of the VS-2480's available tools—odds are you'll intuitively develop the easiest, fastest way to work for your needs.

### Areas of the VGA Main Display

When the VGA acts as the main display, it's comprised of several different areas, described in detail in the following chapters.



On the VGA main display Home screen—shown here—the lower pane contains the project playlist, described in Chapter 5.

Some of these areas are always available and some change, as described later in the *Addendum*:

- *Menus, control bar, F buttons, status strip and remaining space status strip*—are always visible on the VGA. See Chapter 4.
- *PAN/AUX SEND 1-8 knob strip and clipping indicators*—are always visible on the VGA. See Chapter 4.
- *The meters strip*—shows the currently selected level meters. See Chapter 5.
- *Content pane*—the contents of this area change as described in Chapters 5-8.

## The VGA's Main Display Home Screen



Like the LCD, the VGA main display has its own Home screen, shown on the previous page. You can return to the Home screen at any time by clicking the HOME button in the upper right-hand corner of the display (as shown on Page 20), the HOME•DISPLAY button on the VS-2480 or the Home button on your keyboard.

## Button Colors on the VGA Main Display

The VGA contains a wide assortment of on/off switches, presented as clickable buttons. Unless otherwise noted, when a button is switched on, it turns yellow—when it's off, it's gray.

 — Off

 — On

The transport REC button and the Mastering Room, Automix and phrase sequencer Record buttons behave a little differently: they turn red when activated.

 — Off

 — On

## Interaction with the VS-2480's Top-Panel Controls

The VS-2480's top-panel buttons generally interact with the currently selected main display as described in the *VS-2480 Owner's Manual*. When the VGA is selected as the main display, however, there are a few minor differences:

- Press the PROJECT, TRACK, EFFECT or UTILITY MENU button on the VS-2480 to display the corresponding menu on the VGA. To close a menu, press EXIT/NO.
- The FADER buttons—IN 1-16, IN 17-24, TR 1-16, TR 17-24 (*Owner's Manual* Page 137)—choose the channels to which the main display's PAN/AUX SEND 1-8 knob strip is assigned (*Owner's Manual* Page 139). In the VGA's Multi Channel Strip View screen, the FADER buttons can select the channels to be displayed.
- The Home screen's fader/ pan buttons determine what's displayed in the lower part of the screen. Press:
  - *IN F/P*—to display the Input Mixer and Master Block.
  - *TR F/P*—to display the Track Mixer and FX Return Mixer.
  - *MltChv*—to display the Multi Channel Strip View of the currently selected channels.

## Sub-Windows

In some cases, when you click a button on the VGA main display or select a menu item, a window opens that looks just like the corresponding screen on the VS-2480's LCD, with the same F buttons available at the bottom of the window. The contents of the window behave the same way they do on the VS-2480's LCD. You can exit the screen by clicking the box in its upper-left corner or by pressing F6 (EXIT).

## About the Info Display

### What's Shown On the Info Display

You can choose what you'd like to see on the Info Display using the PAGE and F buttons (see *Owner's Manual* Pages 67 and 66). You can press these buttons on the VS-2480 or click them on the VGA display.

#### ***When the VGA is Designated as the Info Display***

See “Controlling What’s On the Info Display” on Page 71 of the *VS-2480 Owner’s Manual*.

#### ***When the LCD is Designated as the Info Display***

To select what appears on the LCD Info Display:

1. Press HOME•DISPLAY.
2. Press PAGE until “IDHome” appears above F1.
3. Press:
  - *F1 (IDHome)*—to view the VGA display’s Home screen (Page 21).
  - *F2 (ID ChV)*—to view the CD EDIT parameters for the currently selected input, track or FX return channel (*Owner’s Manual* Page 150).
  - *IDWave*—to view the Wave Display for the currently selected track (*Owner’s Manual* Page 238).
  - *IDAnlr*—to view the Spectrum Analysis Display (*Owner’s Manual* Page 374).
  - *IDHold*—to lock the current contents of the LCD in place as you change screens on the VGA display.

# 4—VGA Main Display Universal Elements

This chapter describes the areas of the VGA main display that are always visible no matter how the rest of the display changes. These are the:

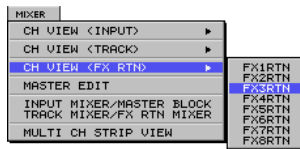
- menus
- PAN/AUX SEND 1-8 knob strip
- F buttons
- remaining space status strip
- control bar
- clipping indicators
- status strip

The illustration on Page 20 shows where these elements are located on the VGA.

## VGA Menus

The menus at the top of the VGA display give you quick mouse access to all of the features found in the VS-2480's onboard menus, and also contain items unique to the VGA main display. To select an item from a menu:

1. Click the desired menu with your mouse to display the menu's contents.
2. Move the cursor over the desired menu item to highlight it in blue and click the item with your mouse.



An arrow to the right of a menu item signifies additional choices presented in a submenu. Hold your mouse cursor over the main menu item, drag rightward and down to select the desired item from the submenu and click your mouse.

To close a menu, click elsewhere on the screen or press EXIT/NO.

## The PROJECT Menu

The PROJECT menu contains an assortment of options that relate to an entire project.

*Menu item:* \_\_\_\_\_ *See Owner's Manual Page:*

NEW	96
RELOAD	(See Addendum Page 24)
NAME	99
PROTECT	99
OPTIMIZE	100
SPLIT	103
EXPORT	109
PROJECT LIST	93
STORE	(See Addendum Page 24)
SHUTDOWN/EJECT	80



Two PROJECT menu items are found only in the VGA display's PROJECT menu:

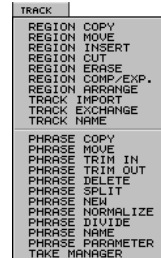
- Select RELOAD to re-load the current project. This is a quick way get rid of any actions you've performed since you last loaded the project.
- Select STORE to save everything you've done to the current project since it was last saved or stored. This is the same thing as holding down SHIFT and pressing ZERO•STORE on the VS-2480 itself, as described on *Owner's Manual* Page 93.

## The TRACK Menu

The TRACK menu provides access to phrase, region, take and whole-track editing operations.



To learn more about what takes, phrases and tracks are, see *Owner's Manual* Page 86. To learn about phrase and region editing, see *Owner's Manual* Chapter 18.

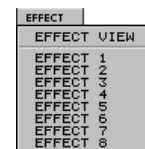


Menu item:	See Owner's Manual Page:
REGION COPY	263
REGION MOVE	265
REGION CUT	266
REGION ERASE	267
REGION COMP/EXP.	267
REGION ARRANGE	270
TRACK IMPORT	269
TRACK EXCHANGE	270
TRACK NAME	272
PHRASE COPY	255
PHRASE MOVE	257
PHRASE TRIM IN	257
PHRASE TRIM OUT	258
PHRASE DELETE	258
PHRASE SPLIT	258
PHRASE NEW	259
PHRASE NORMALIZE	260
PHRASE DIVIDE	260
PHRASE NAME	261
TAKE MANAGER	262

## The EFFECT Menu

The EFFECT menu provides quick access to two types of effect screen:

- *EFFECT VIEW*—This screen presents a menu of your effect processors, and provides basic information about each, as described on *Owner's Manual* Page 220.
- *EFFECT 1-8*—display the Algorithm View screen for each processor (see *Owner's Manual* Page 221).







The EFFECT menu shows the available effect processors in your VS-2480, which depends on how many optional VS8F-2 effect expansion boards are installed. When the VS-2480 is shipped from the factory, Effects 1 and 2 are available—with three optional boards installed, all eight effect processors are available.

## The UTILITY Menu

This menu provides access to the many parameters and features of the VS-2480's onboard UTILITY menu. The first six menu items display groups of UTILITY menu parameter pages.

<i>Menu item:</i>	<i>See Owner's Manual Page:</i>
SYSTEM PARAMETER	360
GLOBAL PARAMETER	362
PROJECT PARAMETER	366
PLAY/REC PARAMETER	367
MIDI PARAMETER	299
SYNC PARAMETER	307
TEMPO MAP	309, 312
METRONOME	369
AUTO PUNCH/LOOP	193, 182
MARKER	190
LOCATOR	186
SCENE	145
V.FADER	141, 300
SURROUND	321
GEN/OSC	372
ANALYZER	(See Addendum Page 26)
R-BUS CONFIG	377
AUTOMIX SETUP	362
AUTOMIX EDIT	(See Addendum Page 83)
PHRASE SEQ EDIT	276
DATE/TIME	65
PARAMETER INIT	376

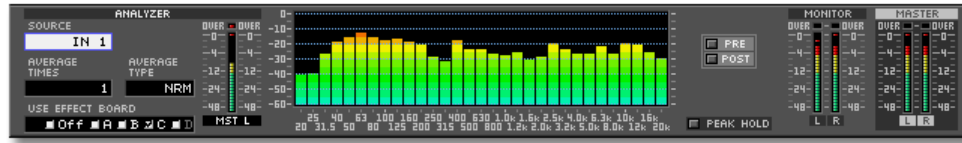
UTILITY
SYSTEM PARAMETER
GLOBAL PARAMETER
PROJECT PARAMETER
PLAY/REC PARAMETER
MIDI PARAMETER
SYNC PARAMETER
TEMPO MAP
METRONOME
AUTO PUNCH/LOOP
MARKER
LOCATOR
SCENE
V. FADER
SURROUND
GEN/OSC
ANALYZER
R-BUS CONFIG
AUTOMIX SETUP
AUTOMIX EDIT
PHRASE SEQ EDIT
DATE/TIME
PARAMETER INIT



In Version Two, the System parameter screens have been expanded—see Page 16.

## The Analyzer

When you select ANALYZER from the UTILITY menu, the VS-2480's spectrum analyzer replaces the left side of the VGA's meters strip. The analyzer features the same parameters as those found on the internal LCD's ANALYZER screen (*Owner's Manual* Page 374), and is operated the same way.



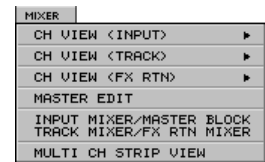
If you'd like to keep the spectrum analyzer in view as you work on the VGA, you can display it on the VS-2480's LCD, locking it in place. See "When the LCD is Designated as the Info Display" on Page 22.



When you perform a PROJECT menu operation, load a scene or EZ Routing template, or change an effect patch via MIDI or using Automix, the analyzer's USE EFFECT BOARD parameter is automatically turned off.

## MIXER Menu

The MIXER menu allows you to display any of the VS-2480's 64 mixer channels. You can do so in a variety of ways. To view:

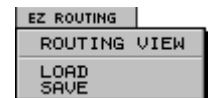


- all of the parameters of a single:
  - *input channel*—select it from the CHVIEW (INPUT) submenu.
  - *track channel*—select it from the CHVIEW (TRACK) submenu.
  - *FX return channel*—select it from the CHVIEW (FX RTN) submenu.
- *the Aux and Direct bus configuration parameters*—select MASTER EDIT.
- *all of the input channels and MASTER EDIT parameters*—select INPUT MIXER/MASTER BLOCK.
- *all of the track channels and FX returns*—select TRACK MIXER/FX RTN MIXER.
- *a detailed view of the currently selected set of channels*—select MULTI CH STRIPVIEW.

For more information regarding the MIXER menu views, see Chapter 7, starting on Page 63.

## EZROUTING Menu

In the EZ ROUTING menu, select:



- *ROUTING VIEW*—to display the EZ ROUTINGVIEW screen in which you can route signals by dragging the desired connectors with your mouse. You can also turn phantom power on and off and activate digital inputs. This screen is described in detail in the *Addendum's* Chapter 8 starting on Page 79.
- *LOAD*—to display the EZ ROUTING TEMPLATE LOAD screen, described on *Owner's Manual* Page 297.
- *SAVE*—to display the EZ ROUTING TEMPLATE SAVE screen, described on *Owner's Manual* Page 296.

## CD-RW MASTERING Menu



The CD-RW MASTERING menu provides access to the operations associated with the VS-2480's top-panel CD-RW/MASTERING button.

Menu item:	See Owner's Manual Page:
MASTERING ROOM	(See below)
CD-R WRITE	350
CD PLAYER	353
CD CAPTURE	(See Addendum Page 12)
WAVE IMPORT	354
TRACK EXPORT	356
PHRASE EXPORT	357

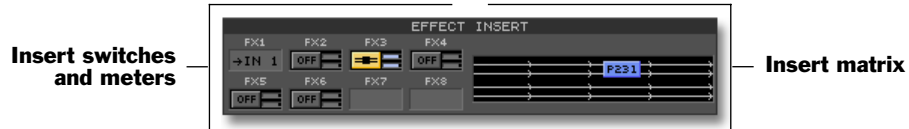
### The Mastering Room

When you select MASTERING ROOM from the CD-RWMASTERING menu, the Mastering Room (*Owner's Manual Page 343*) replaces the meters strip.



**EFFECT INSERT controls**

Use the EFFECT INSERT matrix to insert effects on the MASTER bus.



- In this illustration:**
- **FX 1** is already inserted on Input Channel 1, as its switch shows.
  - only two optional VS8F-2 boards are installed, so Effects 7 and 8 are unavailable.

- To activate an insert effect—click its switch so that it turns yellow and a blue box showing its currently selected effect patch appears in the insert matrix. The matrix shows how signal flows from one inserted effect processor to the next.

You'll want to use one of the Mastering Tool Kit (MTK) effect patches. Select an odd-numbered processor since each powerful MTK patch requires an odd-numbered processor as well as its even-numbered partner.

If a processor is unavailable because it's already in use as an insert effect elsewhere, its switch shows the name of the channel on which it's inserted, as shown above.

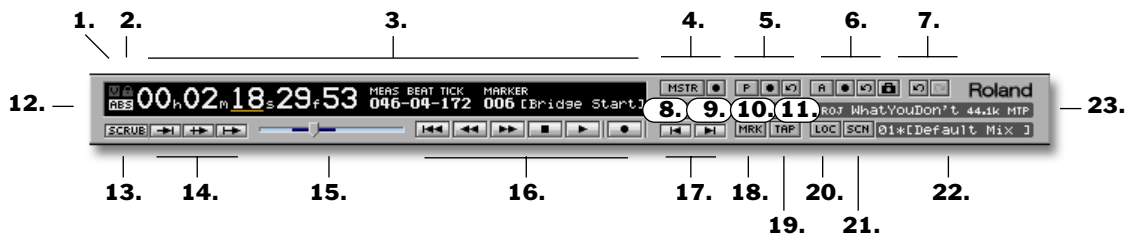
If an even-numbered processor is being used by an MTK effect, it can't be selected a separate insert effect.

- To adjust the send to or return from an insert effect—drag its blue insert send or return slider, respectively, up or down to set the send or return level as desired.
- To select a new effect patch or edit the current patch—click on the effect's blue box in the matrix to display the processor's Algorithm View screen (*Owner's Manual Page 221*).



## VGA Control Bar

The VGA main display's control bar provides a wide assortment of important tools.



- |                                  |                         |
|----------------------------------|-------------------------|
| 1. VARI PITCH indicator          | 13. SCRUB               |
| 2. Write-protect indicator       | 14. PREVIEW buttons     |
| 3. Current Time Location display | 15. Position bar        |
| 4. Mastering Controls            | 16. Transport buttons   |
| 5. Phrase sequencer controls     | 17. PREVIOUS/NEXT       |
| 6. Automix controls              | 18. MARKER              |
| 7. UNDO/REDO                     | 19. TAP                 |
| 8. EXT SYNC                      | 20. LOCATOR (LOC)       |
| 9. Metronome                     | 21. SCENE (SCN)         |
| 10. A.PUNCH                      | 22. Scene name/number   |
| 11. LOOP                         | 23. Project information |
| 12. ABS/REL Indicator            |                         |

### 1. VARI PITCH Indicator



When the VARI PITCH parameter is turned on, the VARI PITCH indicator lights.



182

### 2. Write-Protect Indicator



When the current project is write-protected, the Write-Protect indicator lights.



99

### 3. Current Time Location Display



The Current Time Location display shows the current position of the timeline in time code—hours/minutes/seconds/frames/subframes—and in measures, beats and ticks. It also shows the most recent marker and the marker's name or—if it hasn't been named—its time location.



126



You can navigate a project using the Current Time Location display, as described on *Owner's Manual* Page 126.


## 4. Mastering Controls

MASTERING ROOM —  — Master Tracks Record

Click MASTERING ROOM to turn the Mastering Room on or off. When it's on, click Master Tracks Record to start recording mastering tracks.



## 5. Phrase Sequencer Controls

Phrase Sequencer On/Off —  — Phrase Sequencer Undo/Redo  
 |  
 Phrase Sequencer Record

Click:

- *Phrase Sequencer On/Off*—to turn the phrase sequencer on or off.
- *Phrase Sequencer Record*—to start or stop sequencing.
- *Phrase Sequencer Undo/Redo*—to undo or redo the last phrase sequencer action.



The phrase sequencer can be activated only when at least one track's phrase pad is turned on—see *Owner's Manual* Page 274.

## 6. Automix Controls

AUTOMIX —  — SNAPSHOT  
 Automix Record —  — Automix Undo/Redo

Click:

- *AUTOMIX*—to turn the Automix feature on or off.
- *Automix Record*—to start or stop recording Automix data.
- *SNAPSHOT*—to take a snapshot of your mixer settings at the timeline's current mixer location.
- *Automix Undo/Redo*—to undo or redo your most recent Automix action.



## 7. UNDO/REDO

UNDO —  — REDO

Click UNDO to reverse your last recording or editing action. If the REDO light on the VS-2480 is lit, click REDO to restore your latest undone action.



## 8. EXT SYNC



Click EXT SYNC so it lights to synchronize the VS-2480 to an external device according to the current UTILITY menu Sync parameter settings.



## 9. Metronome

 — Off  
 — INT  
 — MIDI

Click the Metronome button to turn the VS-2480's metronome on or off by changing the setting of the METRONOME OUT parameter. The parameter can be set to Off, INT (yellow) or MIDI (blue).



## 10. A.PUNCH



Click A.PUNCH to display the AUTO PUNCH/LOOP window in which you can set punch in and -out points. If punch points have been set, click this button to turn on the VS-2480's Auto Punch feature.



Punch-in and -out points appear above the Home screen's playlist as red arrows. When Auto Punch is turned on, a red bar connects the two points. See Page 44.

## 11. LOOP



Click LOOP to display the AUTO PUNCH/LOOP window in which you can set loop start and end points. If the loop points have been set, click this button to turn on looped playback of the VS-2480's hard disk recorder.



Loop start and end points appear above the Home screen's playlist as blue arrows. When looping is turned on, a blue loop box connects the two points. See Page 44.

## 12. ABS/REL Indicator



The Current Time Location display can show absolute project time (ABS), or can shift the time to correspond to an external device to which the VS-2480 is being synchronized (REL).



## 13. SCRUB



Click SCRUB to repeatedly audition a tiny fragment of audio at the timeline's current location in order to pinpoint a recorded event.



## 14. PREVIEW Buttons



When you're trying to locate the precise time at which an audio event occurs, click the appropriate PREVIEW button to listen to audio just before and/or after the current position of the timeline.



You can also use these buttons as PROJECT TOP and PROJECT END buttons. To jump to the top of the project, hold down SHIFT and click PREVIEW TO. To jump to the end of the project, hold down SHIFT and click PREVIEW FROM.

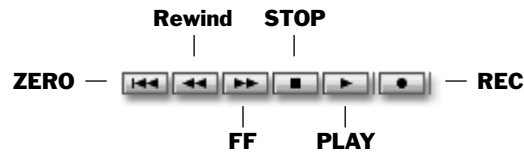
## 15. Position Bar



Click and drag the position bar's handle to move to any location in a project. The position of the handle shows you where you are in a project.



## 16. Transport Buttons



Rewind and FF can move the timeline in increments as small as one second.

Click:

- *ZERO*—to return the timeline to the start of the project.
- *Rewind*—to move the timeline quickly back through the project.
- *FF*—to move the timeline quickly forward through the project.
- *STOP*—to halt playback of the project.
- *PLAY*—to begin playback from the timeline's current location.
- *REC*—to begin recording.



## 17. PREVIOUS/NEXT



Click PREVIOUS or NEXT to move the timeline backward to the most recent phrase or marker, or forward to the next one, respectively.



## 18. MARKER (MRK)



Click MARKER to display the Locate to Marker window when you want to move the timeline to the desired marker, or want to clear a marker.



Your project must contain at least one marker before you open the Locate to Marker window.

## 19. TAP



Click TAP to place a new marker at the timeline's current position.



## 20. LOCATOR (LOC)



Click LOCATOR to open the LOCATE window in which you can name, clear, create, move or jump to locators.



## 21. SCENE (SCN)



Click SCENE to open the SCENE window in which you can name, store, recall and configure scenes.



## 22. Scene Name/Number



This display shows the number—and if it's been named—the name of the last-recalled scene.



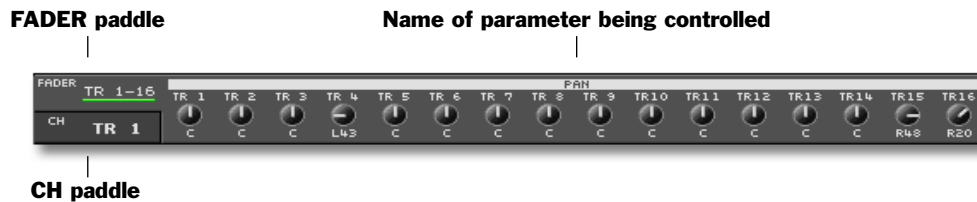
## 23. Project Information



This readout shows the name of the current project, its sample rate and its recording mode.



## PAN/AUX SEND 1-8 Knob Strip



In this illustration, the knobs in the PAN/AUX SEND 1-8 knob strip are controlling panning. The white strip above the knobs always shows the parameter they're currently controlling.

The PAN/AUX SEND 1-8 strip—just like its knob counterparts on the VS-2480—allows you to quickly:

- Adjust the PAN parameter for the currently selected group of channels—see *Owner's Manual* Page 139.
- Adjust dynamics processing and EQ settings for the currently selected channel—see *Owner's Manual* Page 139.
- Adjust the send levels from the currently selected group of channels to any Aux bus—see *Owner's Manual* Page 140.
- Adjust any other channel parameter of your choice—see *Owner's Manual* Page 140.

To “turn” a knob, click and drag up or down to raise or lower, respectively, its setting.

The strip can perform one of the above tasks at a time. To configure the strip for:

- *panning*—click the FADER paddle (see above) so the pan knobs are displayed, as shown in the illustration above. When odd/even channels are linked, they appear as silver knobs. Turning either knob turns both—the black part of each knob graphically indicates the amount by which the channels' original pan settings have been shifted leftward or rightward.



In this illustration, linked Tracks 5/6 haven't been shifted and Tracks 7/8 have been.

- *dynamics and EQ*—click the CH paddle (see above) so the dynamics and EQ knobs appear.





- *Aux send levels*—press the KNOB FADER ASSIGN/AUX SEND 1-8 button on the VS-2480 and press the Aux bus’s number on the keypad.



- *a parameter of your choice*—press the KNOB FADER ASSIGN/AUX SEND 1-8 button on the VS-2480 and press 9 on the keypad.



## The VGA Input Clipping Indicators

The VGA main display’s input clipping indicators light when an input channel’s analog input signal is too loud. The INPUT PEAK LEVEL parameter sets the level at which they light—see *Owner’s Manual* 362.



## VGA F Buttons



The F buttons beneath the VGA main display’s content pane (Page 21) mirror the current behavior of the F buttons beneath the VS-2480’s internal LCD, as does its PAGE button. You can click the VGA’s F buttons or the LCD’s at any time with the same results.



PAGE shows the number of screens associated with the current display.



You can move from page to page by pressing ▼ and ▲.



If you prefer, press F1-F6 on a connected ASCII keyboard instead of clicking with your mouse or pressing the VS-2480’s physical F buttons. Use Tab as your PAGE button.



## Status Strip



The status strip contains flashing indicators that signal the activation of certain features and modes that might not otherwise be visually obvious.

*When:*

*The status display flashes:*

one or more channels are soloed

“SOLO” in blue

one or more channels are muted

“MUTE” in yellow

Mastering Room playback is turned on

“MASTERING PLAY” in green

Mastering Room recording is turned on

“MASTERING REC” in red

phrase sequencer recording is turned on

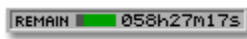
“PHRASE SEQ REC” in red

Automix recording is turned on

“AUTOMIX REC” in red

## VGA Remaining Space Status Strip

Remaining space gauge



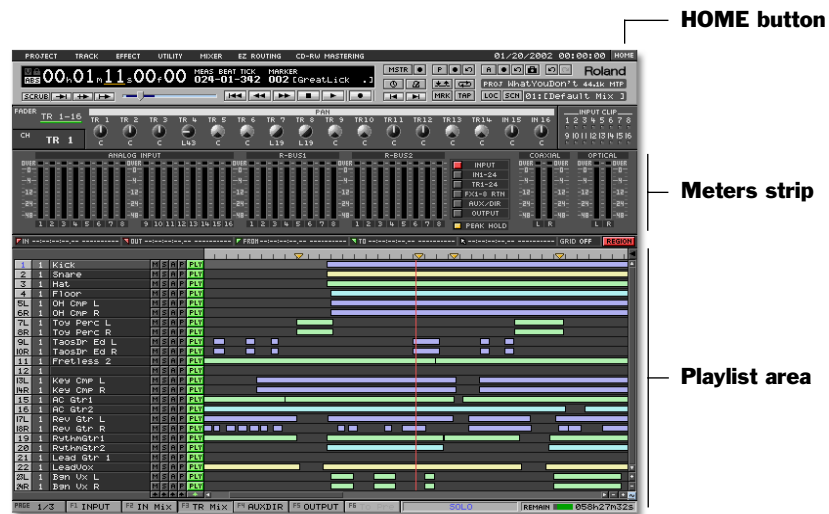
Remaining space readout

The VGA Remaining Space strip shows you how much free hard disk space remains on your internal hard drive. The gauge graphically shows the remaining space in bright green. You can select how the readout shows the amount of free space left by setting the REMAIN DISPLAY TYPE parameter.



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# 5—VGA Main Display Home Screen

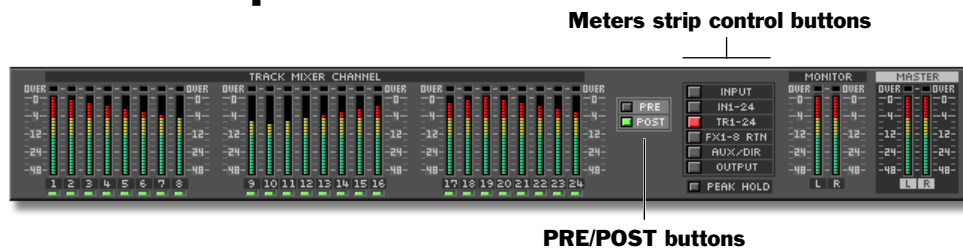


The VGA main display's Home screen provides the basic starting point for VGA-based VS-2480 operations. In addition to the universal elements described in the previous chapter, the Home screen contains a selected set of meters that allow you to keep an eye on various volume levels, and a project playlist in which you can perform a variety of tasks, including the editing of track phrases and regions. This chapter describes how the meters strip and the playlist areas work.

As we mentioned earlier, you can display the VGA Home screen in any of three ways:

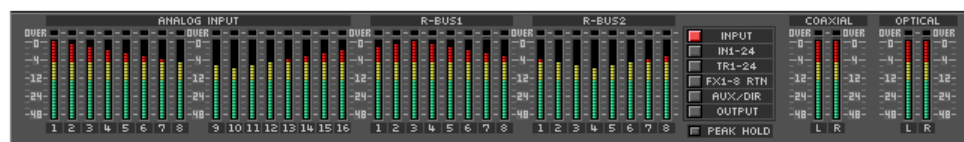
- click the HOME button in the upper right-hand corner of the VGA display.
- press the HOME•DISPLAY button on the VS-2480.
- press the Home key on a connected ACSII keyboard.

## The Meters Strip

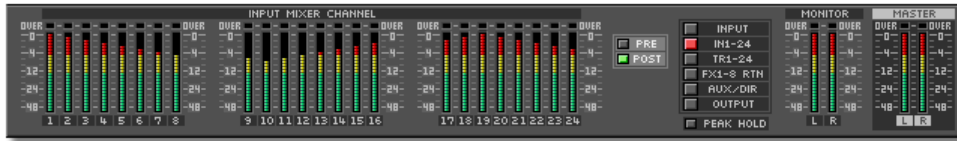


The VGA main display meters strip provides a variety of meters that allow you to view:

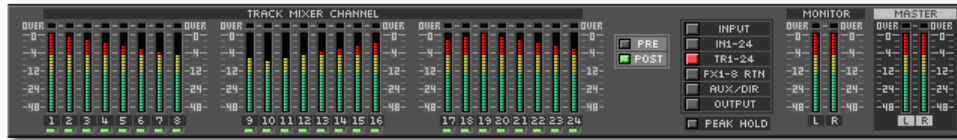
- *input levels*—signals coming into the VS-2480's input jacks and connectors.



- *input channel levels*—signals as they come into or exit the 24 input channels.

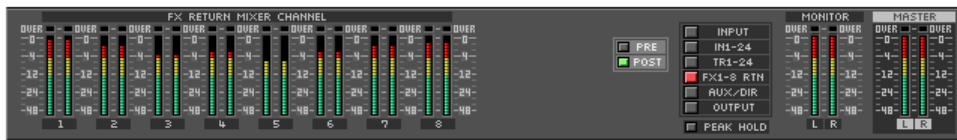


- *track channel levels*—signals as they come into or exit the 24 track channels.



**TRACK STATUS** buttons—see below

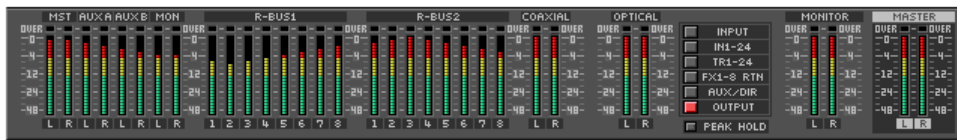
- *fx return channel levels*—signals as they exit the VS-2480’s internal effect processors.



- *Aux and Direct bus levels*—the eight Aux and eight Direct busses.



- *output levels*—signals as they exit the VS-2480’s output jacks and connectors.



The number of active FX return channels depends on how many VS8F-2 effect expansion boards are installed in your VS-2480. See *Owner’s Manual* Page 54.

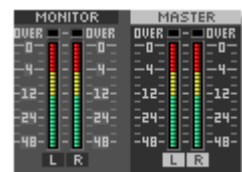
### Track Channel Meters **TRACK STATUS** Buttons

You can click the small button beneath a track channel meter to set the corresponding hard disk recorder track’s status—the button acts just like a TRACK STATUS button on the VS-2480, described on *Owner’s Manual* Page 178.



### The **MONITOR** and **MASTER** Meters

The stereo MONITOR and MASTER bus output levels are displayed at the right of the meters strip except when the input meters are visible.



## Working with the Meters Strip

### Reading a Meter

Each meter in the meter strip contains a vertical stack of segments that light to show the corresponding signal's level—the higher the stack, the louder the signal. The segments are color-coded to help you see at a glance how loud your signal is. If a signal exceeds 0dB, the meter's OVER indicator lights to show you that the signal's too loud.

OVER  
indicator

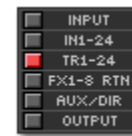


**Red**—indicates that the signal is approaching 0dB.  
**Yellow**—warns that you're nearing the red area.  
**Green**—shows that signal is present.

### Selecting the Desired Meters

The strip provides a set of meters for each of the signal types listed above. You can select the meters you want to display in either of two ways. You can use the:

- *meters strip control buttons*—Click:
  - *INPUT*—to display input signal levels.
  - *IN 1-24*—to display input channel levels.
  - *TR 1-24*—to display track channel levels.
  - *FX1-8 RTN*—to display internal effect return levels.
  - *AUX/DIR*—to display Aux bus and Direct bus levels.
  - *OUTPUT*—to display output levels.
- *PAGE and F buttons on the VGA or on the VS-2480*—Press PAGE until “INPUT” appears above F1 and press:
  - *INPUT*—to display input signal levels.
  - *IN MIX*—to display input channel levels
  - *TR MIX*—to display track channel levels
  - *AUXDIR*—to display Aux bus and Direct bus levels.
  - *OUTPUT*—to display output levels.



The TR 1-24 button is red to indicate that the track channel meters are being displayed.



To display FX return levels using the F buttons, press PAGE until “FX RTN” appears above F5 and then press F5 (FX RTN).



The meters strip on the VGA operates in much the same way as the LCD meters strip. See *Owner's Manual* Page 124 for additional info.

### Pre and Post

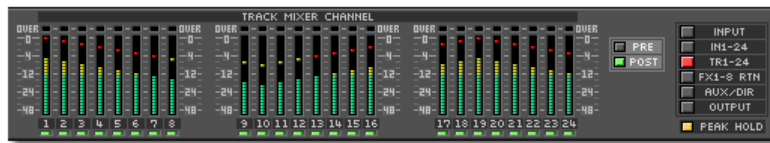
You can select pre or post metering when you're viewing anything other than input and output signals. (To learn about pre and post metering, see the note on *Owner's Manual* Page 125.)

Select the desired type of metering by:

- clicking the meters strip's PRE or POST button.
- use the PAGE and F buttons on the VGA or VS-2480:
  1. Press PAGE until “INPUT” appears above F1.
  2. Click or press:
    - *F6 (To Pre)*—to select pre metering.
    - *F6 (To Pst)*—to select post metering.



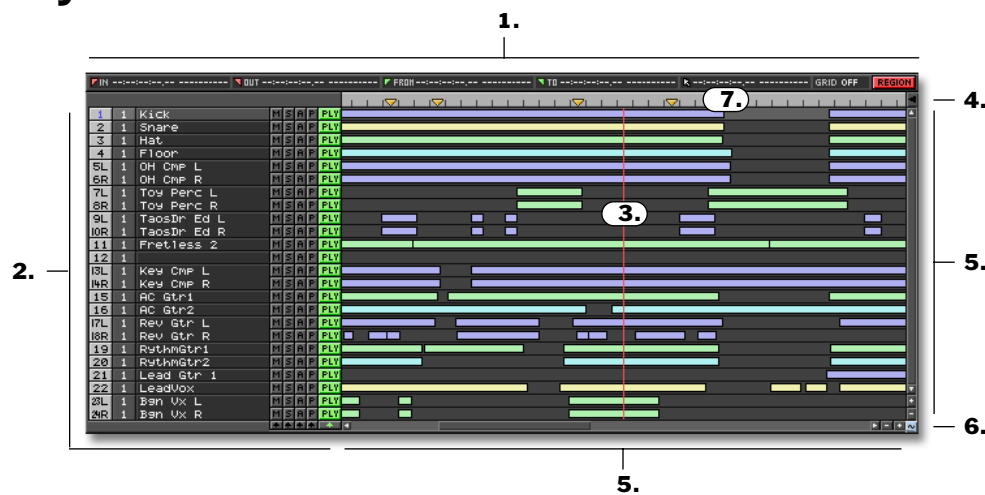
### The PEAK HOLD Button



PEAK HOLD button

Click the PEAK HOLD button so that it lights yellow to make your signals' loudest levels "stick" in their meters until you release them. The Peak Hold feature helps ensure that you don't miss any unexpected level peaks should you look away from the meters. To "un-stick" the meters, click the PEAK HOLD button again to unlight it.

### The Playlist Area



- |                                  |                                |
|----------------------------------|--------------------------------|
| 1. Edit control strip            | 5. Navigation and zoom buttons |
| 2. Track controls                | 6. WAVE DISPLAY button         |
| 3. Timeline                      | 7. Measure bar                 |
| 4. Playlist control panel switch |                                |

The VGA's Home screen contains a project playlist that performs the same tasks as the internal LCD's playlist, and more. You can view your project's tracks, navigate the project, place markers and edit track audio with your mouse in the VGA playlist. In addition, you can mute and solo any track, set its Automix and phrase sequencer status, and adjust important track channel CH EDIT parameters. You can also select V-Tracks and store and recall locators and scenes right from the playlist.

To learn about:

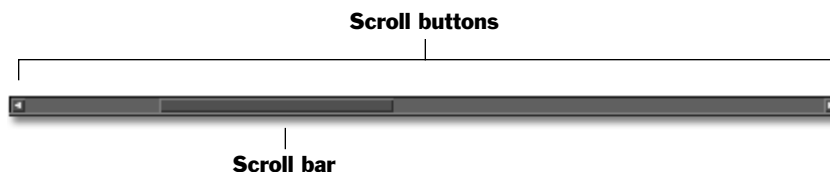
See Owner's Manual Page:

the project playlist	122
markers	188
editing track audio	235
Automix	325
the phrase sequencer	273
CH EDIT parameters	149
locators	185
scenes	144

## Operating the VGA Playlist

### Getting Around

You can move through a project using the VGA playlist's horizontal scroll bar and buttons, located at the bottom edge of the playlist.

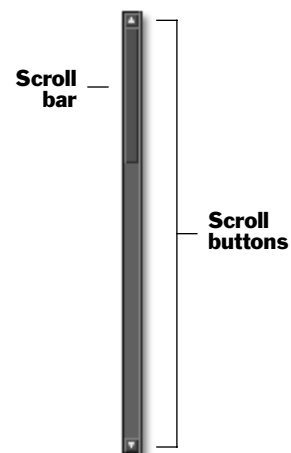


To move quickly through the project, drag the scroll bar in the desired direction—the size of the scroll bar indicates how much of the project is currently visible. To move backward by small increments, click the left scroll button. To move slowly forward, click the right scroll button.



You can also use the VS-2480's standard navigation tools—the TIME/VALUE dial and current time location display as well as locators, markers, and so on. (Project markers are shown as gold downward-pointing triangles above the tracks in the playlist, as shown on Page 44.)

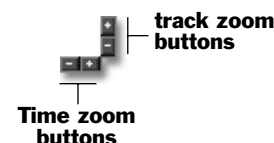
Use the playlist's vertical scroll bar and buttons along its righthand edge to move up or down through the project's tracks. To move quickly to a different set of tracks, drag the scroll bar in the desired direction—the size of the scroll bar indicates how many of the project's tracks are currently visible. To move by smaller increments up or down through the tracks, click the desired vertical scroll button.



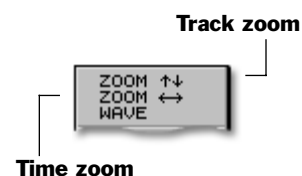
### Zooming

The VGA playlist's zoom buttons allow you to increase or decrease the magnification of the project's tracks. The:

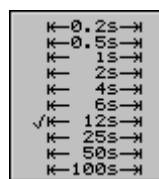
- *time zoom buttons*—determine how much of the project is displayed. Zoom in to view a smaller area more closely, or out to view more of the project.
- *track zoom buttons*—determine how many tracks are displayed. To show fewer tracks in greater detail, zoom in. To show more tracks, zoom out.



Another way to zoom is to right-click on the playlist and select the desired ZOOM item from the Edit Pop-Up menu (*Owner's Manual* Page 241). When you do, a window appears in which you can select the desired magnification.



Track zoom



Time zoom



You can also zoom in or out by holding down SHIFT and using the ◀, ▶, ▲ or ▼ buttons on the VS-2480, as described on *Owner's Manual* Page 123.

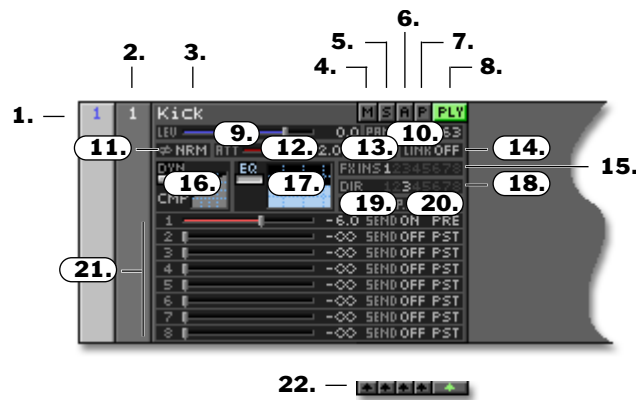
As you zoom in with the track zoom buttons, more onscreen space is available for each track. As a result:

- additional track controls appear as space allows.
- when you zoom in so that only four or two tracks are visible, the VGA shows each phrase's waveform for editing purposes (see *Owner's Manual* Page 238).



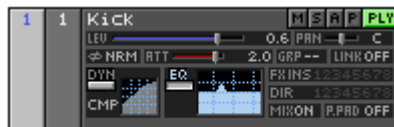
The VS-2480 generates editing waveforms when its transport is stopped—as a project plays, these waveforms move across the timeline. When the transport stops again, the VS-2480 refreshes the playlist with new editing waveforms as necessary.

### VGA Playlist Track Controls



1. Track number/CH VIEW button	12. ATT slider
2. V-Track selector	13. GROUP selector
3. Track name	14. LINK switch
4. MUTE button	15. FX Ins selector
5. SOLO button	16. DYNAMICS switch
6. AUTOMIX STATUS button	17. EQ switch
7. PHRASE SEQ STATUS button	18. DIR 1-8 selector
8. TRACK STATUS button	19. MIX button
9. FADER slider	20. P.PAD button
10. PAN slider	21. Aux send controls
11. PHASE button	22. Status toggles

Each track in the playlist contains a track control area in which you can access the corresponding track channel's important CH EDIT parameters without leaving the playlist. This makes it easy to quickly perform mix-related adjustments as you work with track audio. As you zoom in on the tracks—see Page 39—the number of available controls changes as space allows. The illustration above shows the controls that are available when you're zoomed in to a two-track view).



With four tracks displayed



With eight tracks displayed



With 12 tracks displayed



With 16 or 24 tracks displayed



Most of the track controls are VGA versions of the standard CH EDIT track channel parameters described in *Owner's Manual* Chapter 11—a few parameters have been combined to save onscreen space. Each track's TRACK STATUS, AUTOMIX STATUS and PHRASE SEQ STATUS buttons can also be found among the track controls.

### 1. Track Number/CH VIEW Button

You can click the track's number to display its CHVIEW screen—see Page 51.

### 2. V-Track Selector

The V-Track selector performs the same job as the CH EDIT V-Trk parameter. It shows the number of the track's currently active V-Track—click on the number to display a pop-up menu from which you can select a different V-Track. The menu shows each V-Track's name and indicates with symbols the presence or absence of recorded data on each V-Track, and shows whether the V-Track is currently selected.



The currently selected V-Track is checkmarked.

- — Selected, contains audio
- — Selected, contains no audio
- — Contains no audio, not selected
- — Contains audio, not selected



An asterisk to its right indicates that a V-Track uses the CD-R recording mode.



To learn about V-Tracks, see *Owner's Manual* Page 87.

### 3. Track Name

### 4. MUTE (M) Button



Click MUTE—so that it turns yellow—to silence the track's audio. To un-mute the track, click MUTE again.



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You can quickly un-mute all of your muted tracks by clicking the Mute status toggle button. See Page 44.

### 5. SOLO (S) Button



Click SOLO so that it turns blue to isolate the track by silencing all un-soloed tracks. To un-solo the track, click SOLO again.



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You can quickly un-solo all of your soloed tracks by clicking the Solo status toggle button. See Page 44.

### 6. AUTOMIX STATUS (A) Button



When Automix is turned on, you can set the status of the track's corresponding Automix track by repeatedly clicking the AUTOMIX STATUS button.



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You can simultaneously set the Automix status of all of your Automix tracks by repeatedly clicking the Automix status toggle button. See Page 44.

### 7. PHRASE SEQ STATUS (P) Button



When the phrase sequencer is turned on and the track's phrase pad is turned on, you can set its phrase sequencer track status by repeatedly clicking the PHRASE SEQ STATUS button.



You can simultaneously set the phrase sequencer status of all of your tracks by repeatedly clicking the Phrase Sequencer status toggle button. See Page 44.

### 8. TRACK STATUS Button



Click a TRACK STATUS button repeatedly to set its track's status—this is the same as pressing the corresponding physical TRACK STATUS button on the VS-2480.



### 9. FADER (LEV) Slider



Drag the FADER slider to set the track channel's CH EDIT FADER parameter—this serves the same purpose as moving the channel's physical fader. The readout to the right of the slider shows the track channel's output level in dB.



### 10. PAN Slider



Adjust the track channel's stereo position by dragging the PAN slider as desired—the current pan position is shown to the right of the slider. When you move the slider, you're adjusting the track channel's CH EDIT PAN parameter value.



### 11. PHASE Button



Click "NRM" or "INV" in the PHASE button to reverse the phase polarity of the track channel's signal.



### 12. ATT Slider



Set the ATT slider to adjust the level of the signal coming from the hard disk recorder into the track channel. The signal's level is shown to the right of the slider.



### 13. GROUP (GRP) Selector



To assign the track channel to a fader group, click to the right of "GRP" and select the desired fader group from the pop-up menu.



### 14. LINK Switch



LINK combines the CH EDIT ChLink and F.LINK parameters. Click to the right of "LINK" and select the desired type of linking from the pop-up menu or turn off linking.



## 15. FX Ins Selector

## 16. DYNAMICS (DYN) Switch and Overview



Turn on the track channel's dynamics processor by clicking the DYN switch. The current dynamics shape is shown graphically next to the switch—when the switch is on, the shape becomes blue.



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You set up a channel's dynamics processing by drawing the desired shape with your mouse in the CHVIEW screen as described on Page 57.

## 17. EQ Switch and Overview



Turn on the track channel's EQ by clicking the EQ switch. The current EQ curve appears to the right of the switch—when the switch is on, the curve turns blue.



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You can set up a channel's EQ by drawing the desired curve with your mouse in the CHVIEW screen, as described on Page 57.

## 18. DIR (DIRECT) 1-8 Selector



To assign the track channel to a Direct bus, click the desired Direct bus's number so it lights.



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## 19. MIX Button



Turn MIX on to send the track channel's signal into the MASTER bus, the main stereo mix. Turn it off to remove it from the mix.



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## 20. P.PAD Switch



P.PAD combines the CH EDIT PhrPAD and PlyMod parameters. Click to the right of P.PAD to select the desired type of phrase pad playback method or turn the track channel's phrase pad off.



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## 21. AUX Send Controls



The AUX send controls include the following parameters:

- *Send level*—drag a slider to set the track channel's Aux send level to the corresponding Aux bus (See *Owner's Manual* Page 152). The send level appears to the right of the slider in dB. When Aux busses are linked, the even-numbered bus's send control is replaced by a panning handle, described on Page 67.
- *Send status*—turns the Aux send to each bus on or off. See *Owner's Manual* Page 152.
- *Pre/post switch*—sets the pre or post configuration of each Aux bus. See *Owner's Manual* Page 153.



When you change an Aux bus's pre/post setting, you're setting the pre/post configuration of the Aux bus for any channel that's using it, as described on *Owner's Manual* Page 153.

The color of each Aux bus's slider provides helpful information at a glance. When a slider's:

- *blue*—the send is turned on and the bus is set to Post.
- *red*—the send is turned on and the bus is set to Pre.
- *gray*—the send is turned off.



When odd/even Aux busses are linked, the even-numbered bus's slider is replaced by a panning handle, as described on Page 67.

## 22. Status Toggles

Beneath the track control areas are five status toggle buttons. You can click each button to toggle the setting of the entire column of buttons directly above it.

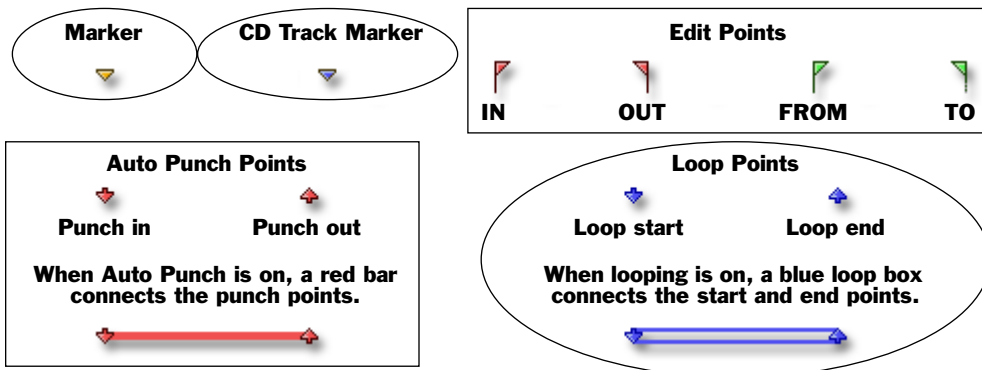


MUTE status toggle      TRACK STATUS toggle  
 SOLO status toggle      PHRASE SEQ STATUS toggle  
**AUTOMIX STATUS**

Click this status toggle:	To:
MUTE	un-mute all currently muted tracks.
SOLO	un-solo all currently soloed tracks.
AUTOMIX STATUS	set the status of all Automix tracks to the same value.
PHRASE SEQ STATUS	set the phrase sequencer status of all phrase sequencer tracks to the same value.
TRACK STATUS	set the TRACK STATUS of all tracks to the same value.

## The Playlist's Measure Bar

Just above the playlist is a gray strip called the "measure bar" (Page 38). The lines in the bar show the project measures as defined by the project tempo map (*Owner's Manual* Page 312). The time bar also contains markers, CD track markers, edit point flags, punch points and loop points.



You can place any of these items at the desired locations using onscreen tools. To learn how to place:

- *markers*—see Page 31.
- *edit points*—see Page 46.
- *Auto Punch points*—see Page 30
- *loop points*—see Page 30.

You can:

- *reposition an object in the measure bar*—by positioning the mouse cursor over the object until it turns into a pointing finger, and then dragging to the desired new location.
- *clear an object in the measure bar*—holding down CLEAR on the VS-2480, positioning the mouse cursor over the object until it turns into a pointing finger, and then clicking the object.

### The Measure Bar Pop-Up Menu

Use the measure bar pop-up menu to quickly place:

- edit points
- Auto Punch IN or OUT points
- loop FROM or TO points
- markers
- CD track markers

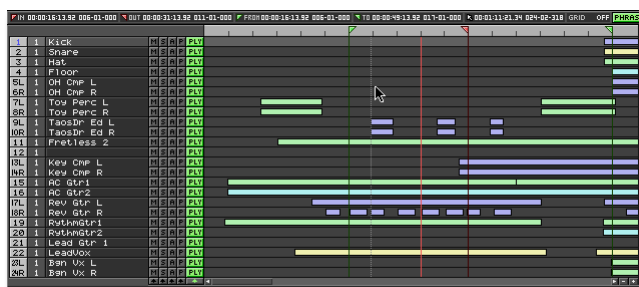
IN	OUT
FROM	TO
AUTO PUNCH IN	
AUTO PUNCH OUT	
LOOP FROM	LOOP TO
MARKER	
CD TR MARKER	Clr ALL MARKER

Right-click in the measure bar at the desired time location and select the object you want from the measure bar pop-up menu.



To delete all markers and CD track markers from a project, select Clr All MARKER from the measure bar pop-up menu.

## Editing VGA Playlist Track Audio



Position line    Timeline

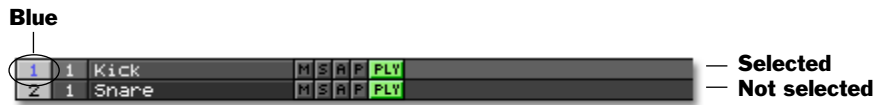
Editing track audio on the VGA main display is very much like editing with your mouse on the VS-2480's internal LCD. To learn about editing audio with your mouse, see *Owner's Manual* Page 241.

The ways in which editing on the VGA differs from editing on the LCD are:

- All edits performed using your mouse on the VGA occur instantly, without dialog windows, to make editing fast. You can, of course, undo or redo any edit.
- The SELECT PHRASE (*Owner's Manual* Page 243) and SELECT TRACK (*Owner's Manual* Page 244) pop-up menus are available only on the LCD.

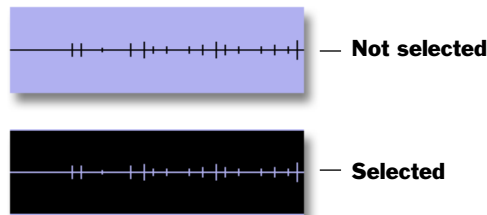
### Selecting Tracks on the VGA

To select a track on the VGA main display, click anywhere on the track in the playlist. When a track is selected, its background changes to a lighter shade of gray and its number turns blue.



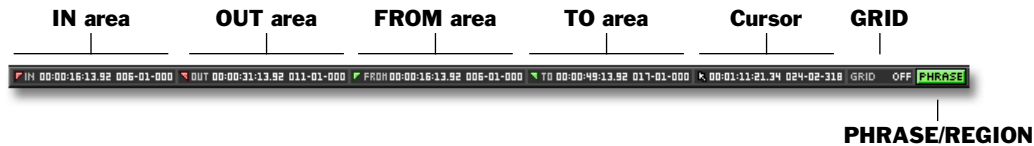
### Selecting Phrases and Regions on the VGA

The VS-2480 automatically assigns an alternating pattern of colors to the phrases in the playlist to make them easy to distinguish from one another. When a phrase or region is selected, it turns black and is outlined in its original color. Its editing waveform changes from black to the original color of the phrase.



### The Edit Control Strip

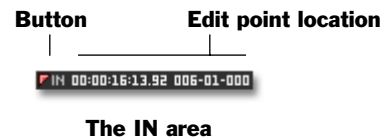
Above the playlist you'll find the edit control strip, which contains basic editing tools.



#### IN, OUT, FROM and TO Areas

The IN, OUT, FROM and TWO areas allow you to set edit points (*Owner's Manual* Page 236), locate to them and clear them. Each has a colored triangular button that matches its playlist flag and a readout showing the edit point's current position. To:

- *Place an edit point*—move the timeline to the desired location and click the edit point's button.
- *Change an edit point's location*—move the timeline to the desired location and click the edit point's button.
- *Move the timeline to an edit point*—hold down SHIFT on the VS-2480 and click the edit point's onscreen button.
- *Clear an edit point*—hold down CLEAR on the VS-2480 and click the edit point's onscreen button.



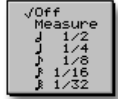
You can re-configure the behavior of the edit point buttons by setting the EDIT POINT Sw TYPE parameter, as described on *Owner's Manual* Page 247.

*Cursor*

The cursor readout shows the current location of the mouse cursor to help you make edits precisely. The readout shows its position in time code and measures and beats.

*GRID*

Click GRID to display a pop-up menu from which you can activate the desired editing grid (*Owner's Manual Page 245*).



*REGION/PHRASE Button*



Click the REGION/PHRASE button to select the desired type of track audio editing.



## The VGA Playlist Control Panel

Click the Playlist Control button located at the upper right just above the playlist to open the playlist control panel. To close the playlist control panel, click the Playlist Control button again.



You can also show or hide the playlist control panel by holding down SHIFT on the VS-2480 and pressing its HOME•DISPLAY button.

The V.Track control panel pane allows you to activate any V-Track by clicking on it.



**Each track's 16 V-Tracks are arranged in a horizontal row. A symbol shows each V-Track's status.**

- Selected, contains audio
- Selected, no audio
- Not selected, no audio
- Not selected, has audio

**Any V-Track that's selected for editing flashes. Destination V-Tracks also flash, outlined in gray. See Page 11 for details.**

Click the control panel's LOC/SCN tab to display the LOC/SCN (Locator/Scene) pane.

Select locator banks with these buttons.

Perform locator actions by clicking these buttons

Select scene banks with these buttons.

Perform scene actions by clicking these buttons



In the LOC/SCN pane, you can quickly store, recall and clear locators and scenes right from the playlist.

Use the upper half of the pane for locator operations. To:

- *change locator banks*—click the desired bank’s number.
- *store a locator*—move the timeline to the desired location and click the number of an unused locator position.
- *recall a locator*—click the locator’s number.
- *clear a locator*—hold down CLEAR on the VS-2480 and click the locator’s number.

Use the lower half of the pane for scene operations. To:

- *change scene banks*—click the desired bank’s number.
- *store a scene*—set up your mixer settings as desired and click the number of an unused scene position.
- *recall a scene*—click the scene’s number.
- *clear a scene*—hold down CLEAR on the VS-2480 and click the scene’s number.



To name a locator or scene—or perform other locator/scene operations—click the LOC or SCN buttons (Page 31), respectively.

## The VGA Wave Display



Click the WAVE DISPLAY button in the lower right-hand corner of the playlist to open the wave display.



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The VGA wave display allows you to view a single track’s audio with the maximum amount of detail for precision editing operations.



The currently selected track’s number appears at the left of the wave display. To view other tracks, drag the vertical scroll bar up and down or click the desired vertical scroll button. To move through the project, drag the horizontal scroll bar or click the horizontal scroll buttons.

You can zoom in or out by clicking the wave display’s zoom buttons. To zoom:

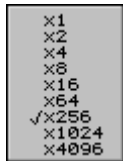
- *vertically*—click the desired amplitude zoom button.
- *horizontally*—click the desired time zoom button.



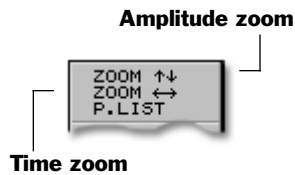
You can also select the desired amplitude or time zoom value from the Edit Pop-Up menu that appears when you right-click in the wave display.



**Amplitude zoom**



**Time zoom**



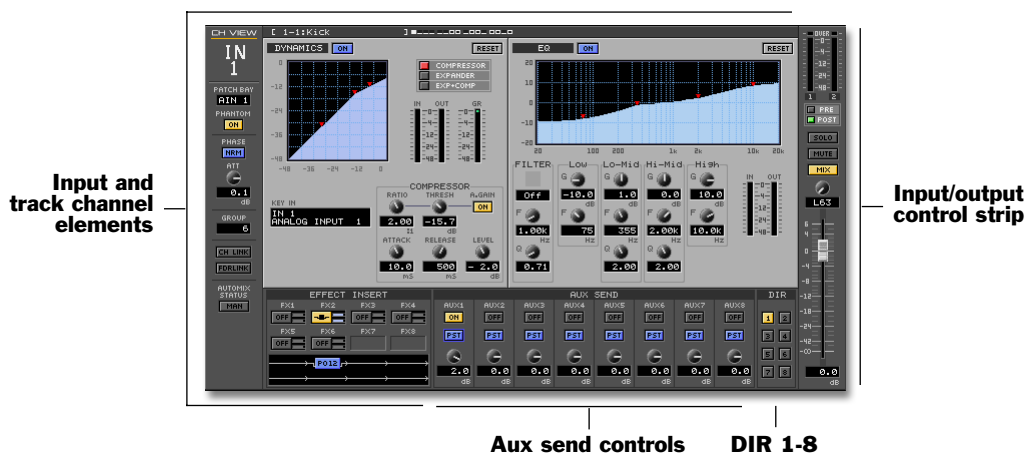
The time zoom is measured in samples.

To close the wave display, click the WAVE DISPLAY button again.



# 6—VGA Main Display CH VIEW Screens

You can control the signal flowing through any input, track or FX return channel on its VGA main display CHVIEW screen.



This illustration shows an input channel's CH VIEW screen. The track channel and FX return channel CH VIEW screens look slightly different.

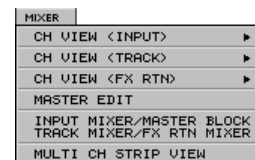


To learn about the input and track channel CH EDIT parameters, see *Owner's Manual* Chapter 11. The FX return channels' CH EDIT parameters are described in *Owner's Manual* Chapter 17.

## Displaying CH EDIT Parameters on the VGA

You can display the desired CHVIEW screen by selecting it from the MIXER menu. To view the CHVIEW screen for:

- *an input channel*—select the desired input channel from the CHVIEW (INPUT) submenu.
- *a track channel*—select the desired track channel from the CHVIEW (TRACK) submenu.
- *an FX return channel*—select the desired FX return channel from the CHVIEW (FX RTN) submenu.



You can also:

- press the desired channel's CH EDIT button on the VS-2480 (see *Owner's Manual* Page 138).
- view a track channel's CHVIEW screen by clicking its track number in the VGA main display's Home screen.

## Universal CH VIEW Elements

The CHVIEW screens for input, track and FX return channels differ slightly, though they contain some common elements. The following section describes those elements.

## Input/Output Control Strip

The input/output control strip appears on the right side of all of the VGA CHVIEW screens. This strip presents parameters that allow you to control the output of the channel strip, and meter its input or output. The following section describes how the strip works with a single unlinked channel. Page 53 discusses how the strip works with linked channels.

### Meters and PRE/POST Buttons

The meters allow you to view the level of signal coming into or going out of the channel. The PRE and POST buttons determine the signal level to be displayed. To view the level of signal:

- *coming into the channel*—click PRE.
- *going out of the channel*—click POST.

The CHVIEW meters are presented in pairs. With input and track channels, you can see the levels for the odd/even pair of channels to which the currently selected channel belongs—there’s a number beneath each meter to show the channel signal it represents. With the stereo FX return channels, the two meters show the left- and right-side signal levels.

### SOLO Button



To isolate the channel’s signal by silencing all un-soloed channels, click SOLO so it lights. To un-solo the channel, click SOLO again.

### MUTE Button



To silence the channel’s signal, click MUTE so it lights. To un-mute it, click the button again.

### MIX Button



Click MIX so it lights to send the track channel’s signal into the MASTER bus, the main stereo mix. Turn it off to remove the signal from the mix.

### PAN/BAL Knob



Set the stereo placement of the channel’s output in the MASTER stereo mix by dragging its PAN knob—or BAL knob in an FX return channel—up or down.

### FADER

Drag the fader up or down to set the channel’s output level—this serves the same purpose as moving its physical fader. The readout beneath the fader shows the channel’s output level in dB.



➤ 154, 229

➤ 142

➤ 142

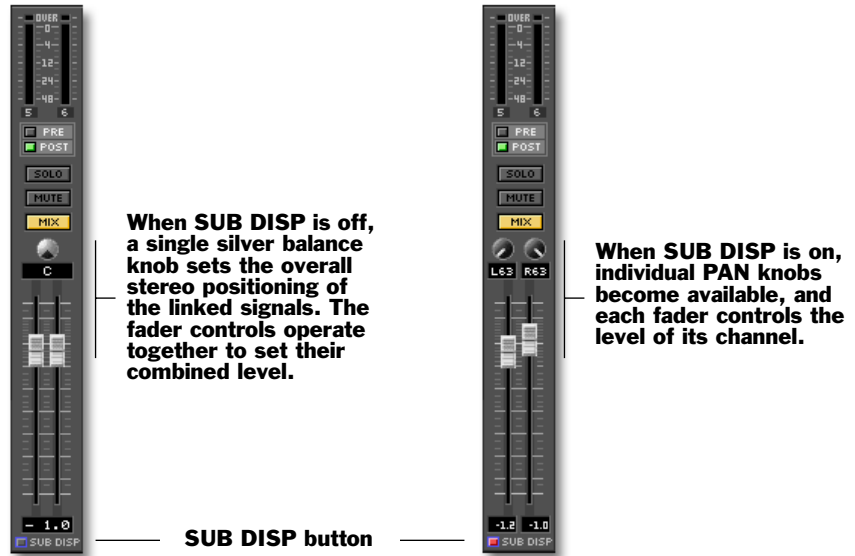
➤ 154, 230

➤ 156, 229

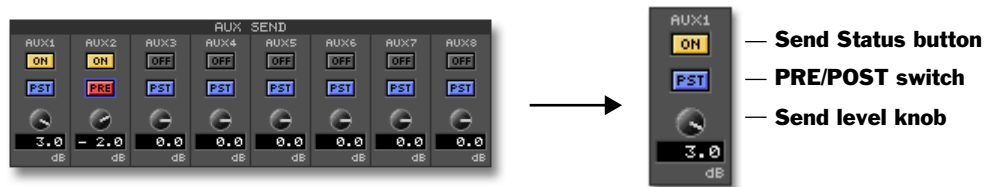
➤ 154, 230

### The Input/Output Strip in Linked Channels

When channels are linked, a special SUB DISP (“SUB DISPLAY”) button becomes available at the bottom of the strip. You can control the two channels together or set each channel’s panning and level individually by clicking SUB DISP so it lights.



### AUX Send Controls



The CHVIEW screens contain AUX send controls with which you can send the signal from any input, track or FX return channel to any of the VS-2480’s eight Aux busses. To:

- *turn on the send to an Aux bus*—click the bus’s Send Status button so it lights.
- *set an Aux send level*—drag the Aux bus’s Send Level knob up or down as desired.
- *change the pre/post configuration of an Aux bus*—click the PRE/POST switch repeatedly to select PRE or POST.



When you change an Aux bus’s pre/post setting, you’re changing its setting for any channel that’s using it, as described on *Owner’s Manual* Page 153.

### DIR (DIRECT) 1-8 Selector



To assign an channel’s signal to one of the eight Direct busses, click the desired bus’s button in the DIR 1-8 selector.



## Channel-Specific Parameter Strips

At the left side of each CHVIEW screen is a strip that contains parameters specific to the selected type of channel.

### Input Channel Parameter Strip

#### 1. Channel Name

#### 2. PATCH BAY Selector



Click PATCH BAY to reveal a menu from which you can select the source of the channel's input signal.



Inputs are always assignable in pairs, with odd-numbered inputs being assignable to odd-numbered input channels, and so on.

#### 3. PHANTOM Switch



Click PHANTOM—so it's lit—to turn on the corresponding XLR input jack's phantom power.



#### 4. PHASE Button



Click PHASE—so it's lit—to reverse the phase polarity of the channel's signal.



#### 5. ATT Knob



To adjust the level of the input signal coming into the input channel, drag the ATT knob up or down as desired—the readout beneath the knob shows the current amount of attenuation.



#### 6. GROUP Selector



To assign the input channel to a fader group, click GROUP and select the desired fader group from the pop-up menu.



#### 7. CH LINK Button



To link the channel to its odd/even partner so that any changes made to one channel affect both, click CH LINK to turn it on.



#### 8. FDRLINK Button



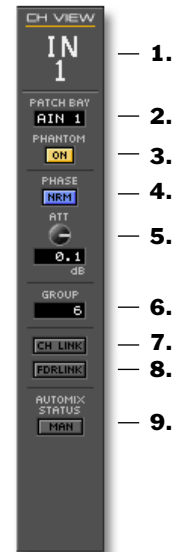
Click FDRLINK—so it's lit—to link the current channel's fader to its odd/even partner so their levels can be set by moving either fader while their other parameters remain independently controllable.



#### 9. AUTOMIX STATUS Button



Click the AUTOMIX STATUS button to set the channel's status when Automix is turned on.



## Track Channel Parameter Strip

### 1. Channel Name

### 2. STATUS Button



Click STATUS repeatedly to set the status of the corresponding hard disk recorder track. This is the same as clicking the track channel's TRACK STATUS button on the VS-2480.



### 3. V.TRACK Selector



To select a different V-Track, click V.TRACK and select the desired V-Track from the pop-up menu, described on Page 41.



### 4. PHASE Button



Click PHASE—so it's lit—to reverse the phase polarity of the channel's signal.



### 5. ATT Knob



To adjust the level of the signal coming into the track channel from the hard disk recorder, drag the ATT knob up or down as desired—the readout beneath the knob shows the current amount of attenuation.



### 6. GROUP Selector



To assign the track channel to a fader group, click GROUP and select the desired fader group from the pop-up menu.



### 7. CH LINK Button



To link the channel to its odd/even partner so that any changes made to one channel affect both, click CH LINK to turn it on.



### 8. FDRLINK Button



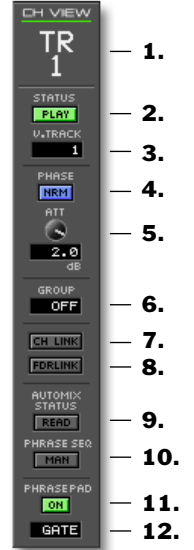
Click FDRLINK—so it's lit—to link the current channel's fader to its odd/even partner so their levels can be set by moving either fader while their other parameters remain independently controllable.



### 9. AUTOMIX STATUS Button



Click the AUTOMIX STATUS button repeatedly to set the channel's status as desired when Automix mode is on.



### 10. PHRASE SEQ Status Button



Click the PHRASE SEQ status button repeatedly to set the channel's phrase sequencer status as desired when Phrase Sequence mode is activated.



### 9. PHRASE PAD Button



Click PHRASE PAD—so it's lit—to turn on the channel's phrase pad.



### 9. PlyMod Selector



Click PlyMod and select the desired phrase pad play mode from the pop-up menu.



## FX Return Channel Parameter Strip

### 1. Channel Name

### 2. ASSIGN Selector



As shipped from the factory, each Aux bus is routed to the input of its same-numbered effect processor. To route a different Aux bus or a Direct bus to the FX return channel's processor, click ASSIGN and select the desired bus from the pop-up menu.



You can also do this by dragging the routing nodes in the LOOP FX ASSIGN area of the screen, described on Page 61.

### 3. GROUP Selector



To assign the channel to a fader group, click GROUP and select the desired group from the pop-up menu.



### 4. MONO Switch



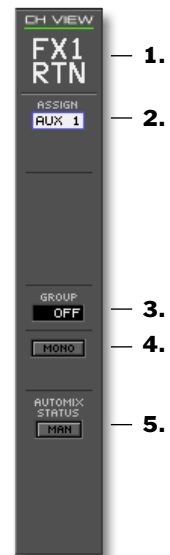
By default, the output of an effect processor is stereo. To collapse its left and right sides to a mono signal, click MONO so it lights.



### 5. AUTOMIX STATUS Button



Click the AUTOMIX STATUS button repeatedly to set the channel's status as desired when Automix mode is on.





# Input and Track Channel CH VIEW Elements

## Track/V-Track Info

Track and V-Track info for a standard input or track channel



The symbols in the V-Track area are described on Page 41.

Track and V-Track info for linked input or track channel

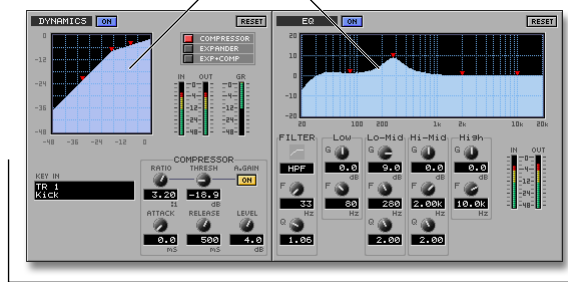
At the top edge of an input and track channel CHVIEW screen is information about the corresponding hard disk recorder track and its V-Tracks. If you're working with:

- an *input channel*—the screen shows information regarding the same-numbered hard disk recorder track.
- a *track channel*—the screen shows information about its corresponding track.

If the channel is linked, you'll see track info for both of the corresponding tracks.

## Dynamics and EQ Controls

Interactive graphic displays



For an introduction to dynamics processing, see *Owner's Manual* Page 157.

For an introduction to EQ, see *Owner's Manual* Page 162.

Parameters

Each input and track channel CHVIEW screen contains a dynamics processor and EQ that can be set up by dragging your mouse in a graphic display, or manually.

### Dynamics

1. Dynamics ON/OFF button  
 2. Compressor/Expander/EXP+COMP selector  
 3. Graphic display  
 4. Compressor parameters  
 5. Expander parameters

**Compressor parameters:** KEY IN: TR 1 Kick, RATIO: 3.20, THRESH: -18.9, A.GAIN: ON, ATTACK: 0.0, RELEASE: 500, LEVEL: 4.0

**Expander parameters:** KEY IN: TR 1 Kick, RATIO: 2.00, THRESH: -40.0, A.GAIN: ON, ATTACK: 0.0, RELEASE: 500, LEVEL: 4.0

**EXP+COMP parameters:** KEY IN: TR 1 Kick, RATIO: 3.20, THRESH: -18.9, A.GAIN: ON, ATTACK: 0.0, RELEASE: 500, LEVEL: 4.0

Type-specific parameters

### 1. DYNAMICS On/Off Button

Turn the dynamics processor on or off by clicking this button—when it's blue, the processor is turned on.



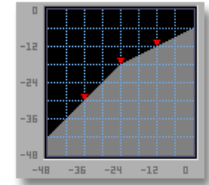
### 2. RESET Button

Click RESET to return the dynamics processor to its factory default settings.



### 3. Interactive Dynamics Display

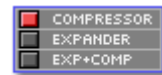
The interactive dynamics display lets you draw the shape of your processing. Click and drag on any of the red triangles to set the corresponding dynamics parameter.



*Owner's Manual* Page 161 explains how to understand what you see in the graphic dynamics display.

### 4. Dynamics Type Selector

Click the desired button to select the type of dynamics processing you want to use.



### 5. IN/OUT/GR Meters

These meters show, respectively, the signal coming into the processor, going out of it, and the amount of dynamics processing being applied.

#### Type-Specific Parameters

The type-specific parameters change according to the type of dynamics processing you select. These parameters are described in *Owner's Manual* Chapter 11.

##### Compressor Parameters

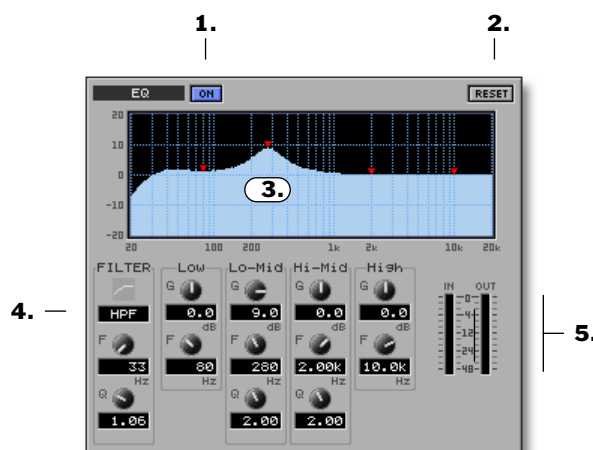
Parameter:	See Owner's Manual Page:
KEY IN	160
RATIO	158
THRESHOLD	159
ATTACK	160
RELEASE	160
A.GAIN	160
LEVEL	160

##### Expander Parameters

Parameter:	See Owner's Manual Page:
KEY IN	160
RATIO	158
THRESHOLD	159
ATTACK	160
RELEASE	160

*Expander+Compressor Parameters*

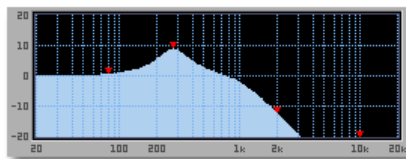
<i>Parameter:</i>	<i>See Owner's Manual Page:</i>
EXPANDER RATIO	158
EXPANDER THRESHOLD	159
EXPANDER ATTACK	160
EXPANDER RELEASE	160
COMPRESSOR RATIO	158
COMPRESSOR THRESHOLD	159
COMPRESSOR ATTACK	160
COMPRESSOR RELEASE	160
COMPRESSOR A.GAIN	160
COMPRESSOR LEVEL	160

**EQ****1. EQ On/Off Button**

Turn the channel EQ on or off by clicking this button—when it's blue, the EQ is on.

**2. RESET Button**

Click RESET to return the EQ parameters to their factory default settings.

**3. Interactive EQ Display**

Draw the desired EQ curve by clicking and dragging on any of the red triangles to set the corresponding EQ band.

### 4. Filter Selector

The channel filter can be configured to remove selected frequencies from the channel’s signal in four different modes—it can also be turned off altogether.

The icon above the selector shows the current filter mode.



To learn about filters, see *Owner’s Manual* Page 163.

### 5. EQ Meters

The EQ meters show the level the signal as it comes into the channel EQ and as it leaves it.

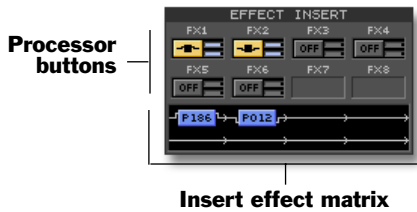
### EQ Parameters

The CHVIEW EQ parameters are described on *Owner’s Manual* Page 165.

### Filter Parameters

The CHVIEW filter parameters are described on *Owner’s Manual* Page 164.

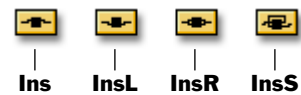
## EFFECT INSERT Controls



Each available effect processor has its own processor button—in this illustration, only two optional VS8F-2 effect expansion boards have been installed, so Effects 7 and 8 aren’t available.

Each input and track channel CHVIEW screen contains an EFFECT INSERT matrix in which you can insert an available effect processor—or the left or right side of a processor—into the channel’s signal flow. The insert effect matrix shows each effect inserted on the channel, as well as the signal flowing from one insert effect to the next. The number of each processor’s currently selected patch is shown in the matrix as well.

To insert an effect on a channel, click the desired processor button repeatedly to select the type of insert routing you want to use. To learn how each of the available routings works, see *Owner’s Manual* Page 217.



If a processor is already inserted elsewhere, its processor button displays where it’s being used.

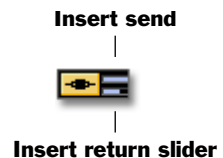


This effect processor’s already being used by Track Channel 1.

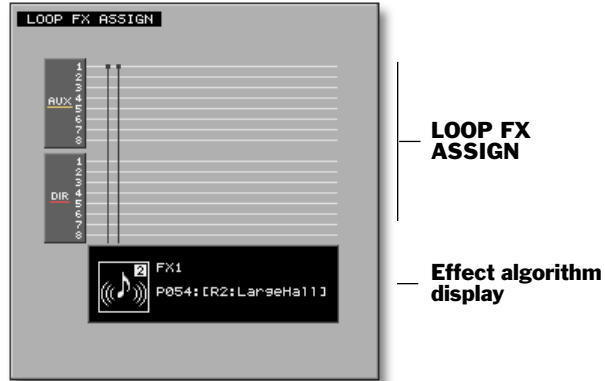
To select or edit an insert effect for a processor, click the effect in the insert effect matrix—the processor’s Algorithm View screen appears on which you can select a new patch or edit the current patch.



You can adjust the send and return levels to the inserted effect by dragging the blue insert send and return sliders—located to the right of the processor button—up and/or down.

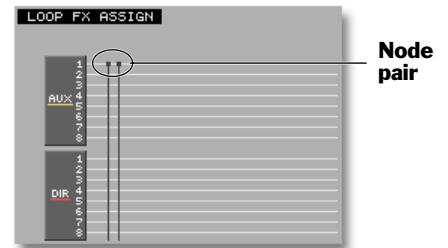


## FX Return Channel CH VIEW Elements

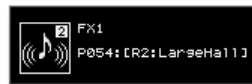


### LOOP FX ASSIGN

You can drag the pair of LOOP FX ASSIGN nodes up or down with your mouse to route the desired Aux bus or Direct bus to the effect processor associated with the selected FX return channel. (See *Owner's Manual* Page 210.)



### Effect Algorithm Display



The effect algorithm display shows the effect patch being used by the effect processor associated with the selected FX return channel. Click anywhere on the effect algorithm display to view the processor's Algorithm View screen on which you can select a different patch or edit the current patch.



# 7—Mixer Views

You can select any of the following views from the MIXER menu (Page 26):

- *Input Mixer/Master Block*—all of the input channels and the MASTER EDIT parameters containing all of the Aux and Direct bus settings.
- *Track Mixer/FX Return Mixer*—all of the track channels and FX return channels.
- *Multi-Channel Strip View*—a detailed view of the set of channels currently controlled by the VS-2480’s 16 physical channel strips (*Owner’s Manual* Pages 137 and 300).

## Shared Elements

The Input Mixer/Master Block and Track Mixer/FX Return Mixer views share some elements that we’ll describe before proceeding with descriptions of the two views.

### Shared MASTER Fader Strip

The MASTER fader strip—located at the right edge of the screen—controls the stereo MASTER bus (*Owner’s Manual* Page 142.)

#### 1. MON (MONITOR) Balance Knob



Drag the MON (for “MONITOR”) balance knob up or down to shift the MONITOR bus output leftward or rightward, respectively.

#### 2. MON Level Knob (Info Only)



The MON (for “MONITOR”) knob shows the level of the MONITOR bus. This level can be adjusted only using the VS-2480’s MONITOR knob.

#### 3. AUTOMIX STATUS (A) Button



Click the AUTOMIX STATUS button to set the MASTER fader’s Automix status when Automix is turned on.



#### 4. MASTER Bus Balance



Drag the MASTER balance knob up or down to shift the MASTER bus output leftward or rightward, respectively.

#### 5. MASTER Bus Fader

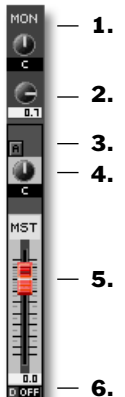
Drag the MASTER bus fader up or down to set the level of the MASTER bus—this is the same as moving the VS-2480’s physical MASTER fader. The current MASTER bus level is shown beneath the fader.



#### 6. DITHER (D) Button



To activate output dithering, click and hold the DITHER button, and select the desired dithering bit depth.



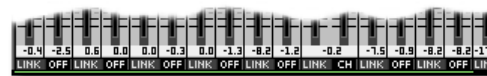
## FADER Select Indicator

On the VGA, a colored line appears beneath the set of channels currently assigned to the VS-2480's physical channel strips selected by pressing the corresponding FADER button on the VS-2480 (*Owner's Manual* Page 137), or by clicking the virtual FADER buttons in the Multi-Channels Strip view's MASTER fader strip (Page 70). This allows you to tell at a glance if the channel strips you're viewing on the VGA are currently being controlled by the 16 physical channel strips.

When a set of input channels or the Aux master channels are selected with the FADER buttons, the underline is amber. When track or FX return channels are selected, the underline is green.



Amber indicator for input and Aux master channels



Green indicator for track and FX return channels

## Aux Send Sliders

In the Input Mixer/Master Block, Track Mixer/FX Return Mixer and Multi-Channel views, input, track and FX return channels all sport Aux send sliders. These sliders allow you to send the desired amount of a channel's signal to any of the eight Aux busses, and show you at a glance each send level. To set an Aux send level, click and drag its slider with your mouse to the desired position.

A slider's color provides information about its Aux send.

When a slider is:

- *blue*—the Aux send is on and set to Post.
- *red*—the Aux send is on and set to Pre.
- *gray*—the Aux send is turned off.
- *black*—the send is turned all the way down.



You can change the Aux bus's pre/post setting:

- on any channel's VGA CHVIEW screen (Page 53).
- in the Input Mixer/Master Block view (described on Page 65).
- in the MASTER EDIT window available in the VGA main display's MIXER menu (Page 26).
- in the track controls area in the playlist (Page 40).

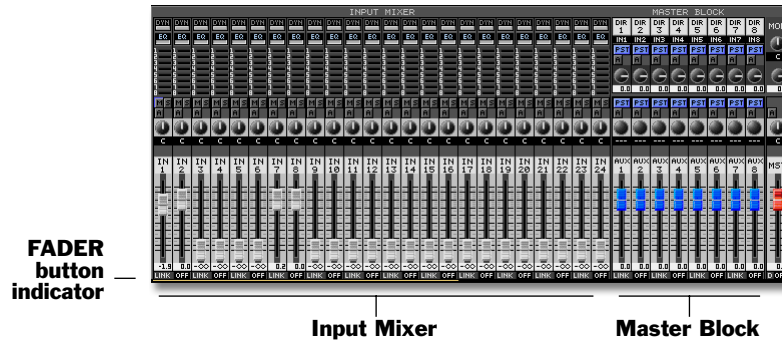


When an odd/even pair of Aux busses is linked, the slider for the even bus is replaced by a panning handle, as described on Page 67.



# Input Mixer/Master Block View

Select INPUT MIXER/MASTER BLOCK from the MIXER menu to view all of the VS-2480's 24 input channel strips and MASTER BLOCK settings at once on the VGA.



## Input Channel Strips

### 1. DYNAMICS (DYN) On/Off



Click this button to turn the channel's dynamics processor on—so the button's lit—or off. See Page 57.

### 2. EQ On/Off



To turn the channel's EQ on or off, click this button. When it's lit, the EQ's on. See Page 57.

### 3. AUX Send Sliders



Set the amount of the channel's signal sent to an Aux bus by adjusting the corresponding AUX send slider. With linked Aux busses, a panning handle replaces the even-numbered Aux bus's slider (Page 67).

### 4. MUTE (M) Button



To mute the channel, click this button so it's lit. To un-mute the channel, click the button again.

### 5. SOLO (S) Button

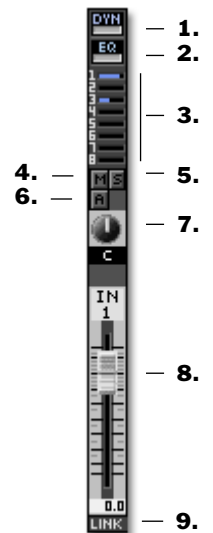


To solo the channel, click the SOLO button to light it. To un-solo the channel, click the button again.

### 6. AUTOMIX STATUS (A) Button



When Automix is turned on, repeatedly click the AUTOMIX STATUS button to set the channel's Automix status.



### 7. PAN Knob



Set the stereo position of the channel in the main MASTER bus mix by dragging the PAN knob up or down as desired.



### 8. Channel Fader

The position of the channel fader sets the level of signal coming out of the channel. Moving it is the same as moving the channel's physical fader on the VS-2480. The channel's level is displayed below the fader.



### 9. LINK Switch



LINK combines the CH EDIT ChLink and F.LINK parameters. Click to the right of "LINK" and select the desired type of linking from the pop-up menu, or turn off linking. The LINK switch occupies the combined lower edge of both of the channels it controls.



## Master Block Strips

The Master Block strips contain Direct bus parameters (*Owner's Manual* Page 208) and Aux bus controls (*Owner's Manual* Page 205).

### Direct Bus Parameters

#### 1. Source

Click Source and choose the signal you want to assign to the Direct bus.

#### 2. Pre/Post Switch

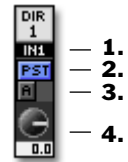
This sets the Direct bus to receive a channel's signal before or after the channel fader.

#### 3. AUTOMIX STATUS (A) Button

When Automix is on, repeatedly click this button to set the Direct bus' Automix status.

#### 4. Final Level Knob

Drag this knob up or down to set the final level of the Direct bus.



### Aux Bus Parameters

#### 1. PRE/POST Switch

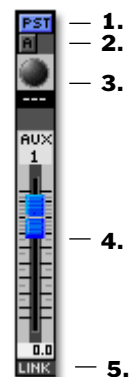
Click the PRE/PST switch to configure the Aux bus to accept channel signals from before or after the channel faders.

#### 2. AUTOMIX STATUS (A) Button

When Automix is on, repeatedly click the AUTOMIX STATUS button to set the Aux bus's Automix status.

#### 3. Linked Aux Bus Balance

When an odd/even pair of aux busses is linked, this knob become active (see below) and allows you to set the relative levels of the linked busses.

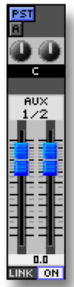


4. *Aux Bus Master Level*

Drag this knob up or down to set the master level of the Aux bus.

5. *LINK*

To link or un-link odd/even Aux bus pairs, click the LINK button so it lights. When two Aux busses are linked, their appearance changes onscreen to reflect their combined operation as shown to the right. Their Aux send sliders in the various channel views and the track controls also change—the odd-numbered slider sets the send level, and the even-numbered slider becomes a panning handle that allows you to pan signals between the two linked busses.



Mixer view

Track controls



## Track Mixer/FX Return Mixer View

Select TRACK MIXER/FX RTN MIXER from the MIXER menu to view all of the VS-2480's 24 track channel and eight FX return channel strips at once on the VGA.



### Track Channel Strips

**1. DYNAMICS (DYN) On/Off**

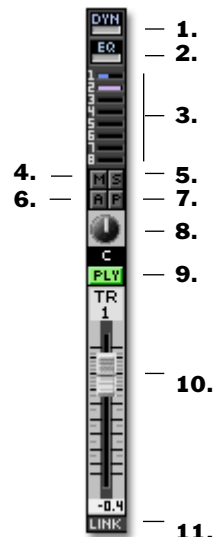


Click this button to turn the channel's dynamics processor on—when the button's lit—or off. See Page 57.

**2. EQ On/Off**



To turn the channel's EQ on or off, click this button. When it's lit, the EQ's on. See Page 57.



### 3. AUX Send Sliders



Set the amount of the channel's signal sent to an Aux bus by adjusting the corresponding AUX send slider. With linked Aux busses, a panning handle replaces the even-numbered Aux bus's slider (Page 67).



### 4. MUTE (M) Button



To mute the channel, click this button so it's lit. To un-mute the channel, click the button again.



### 5. SOLO (S) Button



To solo the channel, click the SOLO button to light it. To un-solo the channel, click the button again.



### 6. AUTOMIX STATUS (A) Button



When Automix is turned on, repeatedly click the AUTOMIX STATUS button to set the channel's Automix status.



### 7. PHRASE SEQ STATUS (P) Button



When the phrase sequencer is turned on, repeatedly click the PHRASE SEQ STATUS button to set the track channel's phrase sequencer status.



### 8. PAN Knob



Set the stereo position of the channel in the main MASTER bus mix by dragging the PAN knob up or down as desired.



### 9. TRACK STATUS Button



Repeatedly click the TRACK STATUS button to set status of the corresponding hard disk recorder track. This is the same thing as pressing the track's TRACK STATUS button on the VS-2480.



### 10. Channel Fader

The position of the channel fader sets the level of signal coming out of the channel. Moving the onscreen fader is the same as moving the channel's physical fader on the VS-2480.



### 11. LINK Switch



LINK combines the CH EDIT ChLink and F.LINK parameters. Click to the right of "LINK" and select the desired type of linking from the pop-up menu, or turn off linking. The LINK switch occupies the combined lower edge of both of the channels it controls.



## FX Return Channel Strips

### 1. ASSIGN Button



To designate an Aux bus as the send assigned to the channel's effect processor, click this button and select the desired bus from the pop-up menu.



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### 2. Algorithm View Button



This button shows the name of the channel's processor and its currently selected effect patch. Click the button to display the Algorithm View screen from which you can select a new patch or edit the current patch.



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### 3. AUX Send Sliders



Set the amount of the channel's signal sent to an Aux bus by adjusting the corresponding AUX send slider. With linked Aux busses, a panning handle replaces the even-numbered Aux bus's slider (Page 67).



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### 4. MUTE (M) Button



To mute the channel, click this button so it's lit. To un-mute the channel, click the button again.



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### 5. SOLO (S) Button



To solo the channel, click the SOLO button to light it. To un-solo the channel, click the button again.



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### 6. AUTOMIX STATUS (A) Button



When Automix is turned on, repeatedly click the AUTOMIX STATUS button to set the channel's Automix status.



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### 7. BAL (Balance) Knob



Set the stereo position of the channel in the main MASTER bus mix by dragging the BAL knob up or down as desired.



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### 8. Channel Fader

The position of the channel fader sets the level of signal coming out of the channel. Moving the onscreen fader is the same as moving the channel's physical fader on the VS-2480.



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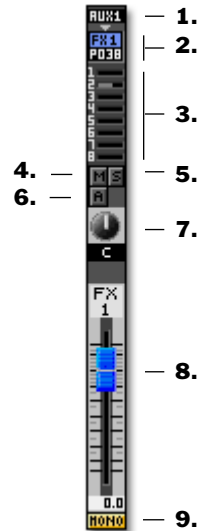
### 9. MONO Switch



Click this button—so it lights—to collapse the effect processor's stereo output to a mono signal.



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## Multi-Channel Strip Views

The multi-channel strip views show a detailed view of the set of 16 channels currently selected with the FADER buttons. To view the desired set of multi-channel strips, click the desired FADER button, described below.



There are five onscreen multi-channel strip view FADER buttons, one more than on the VS-2480's top panel. The fifth button is the V.FDR button—on the VS-2480, the V.FADER channels are selected by holding down SHIFT and pressing TR 17-24•FX RTN.

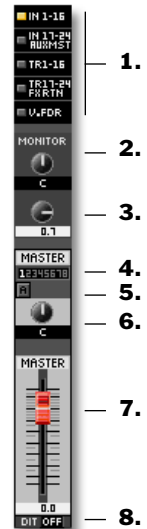
### The Multi-Channel View MASTER Strip

All of the multi-channel views share a common MASTER strip. This section describes what you'll find in this strip.

#### 1. FADER/V.FDR buttons



These buttons perform the same job as the VS-2480's top-panel FADER buttons and the V.FADER button. To view a set of 16 channel strips, click the corresponding button. To view the V.FADERS, click V.FDR.



#### 2. MON (MONITOR) Balance Knob



Drag the MON (for "MONITOR") balance knob up or down to shift the MONITOR bus output leftward or rightward, respectively.

#### 3. MON (MONITOR) Level Knob (Info Only)



The MON (for "MONITOR") knob shows the level of the MONITOR bus. This level can be adjusted only using the VS-2480's MONITOR knob.

#### 4. MASTER Bus Effect Insert



To insert an effect processor on the MASTER bus, click its number—the MASTER EFFECT INSERT screen appears.



#### 5. AUTOMIX STATUS Button



Click the AUTOMIX STATUS button to set the MASTER fader's Automix status when Automix is turned on.



#### 6. MASTER Bus Balance Knob



Drag the MASTER bus balance knob up or down to shift the MASTER bus output right or left, respectively.

### 7. MASTER Bus Fader

Drag the MASTER bus fader up or down to set the level of the MASTER bus—this is the same thing as moving the physical MASTER fader on the VS-2480. The current MASTER bus level is shown beneath the fader.



### 8. DITHER

To activate output dithering, click and hold the DITHER button and select the desired dithering bit depth.



## Multi-Channel View Input Channels

### 1. Input Signal Selector

Click the input signal selector to select the desired input signal for the channel. Odd-numbered inputs can be assigned to odd-numbered input channels, and even-numbered inputs to even-numbered input channels.



### 2. PHASE (INV) Button

Click the PHASE button so it lights to reverse the phase polarity of the input channel's signal.



### 3. ATT Knob

The ATT knob sets the level of the signal coming into the channel as shown to the left of the knob.



### 4. DYNAMICS (DYN) Switch and Overview

Turn on the channel's dynamics processor by clicking the DYN switch so it lights. The selected type of dynamics processor is shown beneath the switch along with the current dynamics curve.



### 5. EQ Switch and Overview

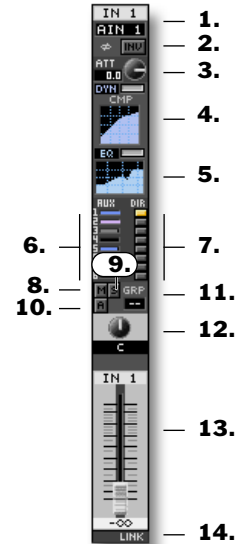
Turn on the channel's EQ by clicking the EQ switch so that it lights. The current EQ curve appears below the switch.



### 6. AUX Send Sliders



Set the amount of the channel's signal sent to an Aux bus by adjusting the corresponding AUX send slider. With linked Aux busses, a panning handle replaces the even-numbered Aux bus's slider (Page 67).



**7. DIR (DIRECT) 1-8 Selector**



To route the channel's signal to a Direct bus, click the desired bus's number.



**8. MUTE (M) Button**



To mute the channel, click this button so it's lit. To un-mute the channel, click the button again.



**9. SOLO (S) Button**



To solo the channel, click the SOLO button to light it. To un-solo the channel, click the button again.



**10. AUTOMIX STATUS (A) Button**



When Automix is turned on, repeatedly click the AUTOMIX STATUS button to set the channel's Automix status.



**11. GRP (GROUP) Selector**



To assign the channel to a fader group, click beneath "GRP" and select the desired fader group from the pop-up menu.



**12. PAN Knob**



Set the stereo position of the channel in the main MASTER bus mix by dragging the PAN knob up or down as desired.



**13. Channel Fader**

The position of the fader sets the level of signal coming out of the channel. Moving the onscreen fader is the same as moving the channel's physical fader on the VS-2480.



**14. LINK Switch**



LINK combines the CH EDIT ChLink and F.LINK parameters. Click to the right of "LINK" and select the desired type of linking from the pop-up menu, or turn off linking. The LINK switch occupies the combined lower edge of both of the channels it controls.



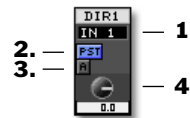


## Multi-Channel View Aux and Direct Bus Channels

### Direct Bus Parameters

#### 1. Source

Click Source and choose the signal you want to assign to the Direct bus.



#### 2. Pre/Post Switch

This sets the Direct bus to receive a channel's signal before or after the channel fader.

#### 3. AUTOMIX STATUS (A) Button

When Automix is on, repeatedly click this button to set the Direct bus' Automix status.

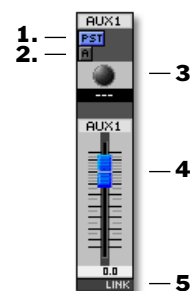
#### 4. Final Level Knob

Drag this knob to set the final level of the Direct bus.

### Aux Bus Parameters

#### 1. PRE/POST Switch

Click the PRE/PST switch to configure the Aux bus to accept channel signals from before or after the channel faders.



#### 2. AUTOMIX STATUS (A) Button

When Automix is on, repeatedly click the AUTOMIX STATUS button to set the Aux bus's Automix status.

#### 3. Linked Aux Bus Balance

When an odd/even pair of aux busses is linked, this knob becomes active (see below) and allows you to set the left/right balance of the pair of busses.

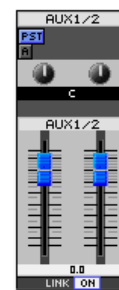
#### 4. Aux Bus Master Level

Drag this knob to set the master level of the Aux bus.

#### 5. LINK

To link or un-link odd/even Aux bus pairs, click the LINK button so it lights. When two Aux busses are linked, their appearance changes onscreen to reflect their combined operation.

In the VGA, linked Aux busses change the way in which their Aux send sliders are shown in the various channel views and the track controls, as explained on Page 67.



## Multi-Channel View Track Channels

### 1. V-Track Selector



Click the V-Track signal selector to assign the desired V-Track to the track channel.



### 2. PHASE (INV) Button



Click the PHASE button so it lights to reverse the phase polarity of the input channel's signal.



### 3. ATT Knob



Drag the ATT slider to adjust the level of the signal coming into the channel. The signal's level is shown to the left of the knob.



### 4. DYNAMICS (DYN) Switch and Overview



Turn on the channel's dynamics processor by clicking the DYN switch so it lights. The currently selected type of dynamics processor is shown beneath the switch along with the current dynamics curve.



### 5. EQ Switch and Overview



Turn on the channel's EQ by clicking the EQ switch so it lights. The current EQ curve appears below the switch.



### 6. AUX Send Sliders



Set the amount of the channel's signal sent to an Aux bus by adjusting the corresponding AUX send slider. With linked Aux busses, a panning handle replaces the even-numbered Aux bus's slider (Page 67).



### 7. DIR (DIRECT) 1-8 Buttons



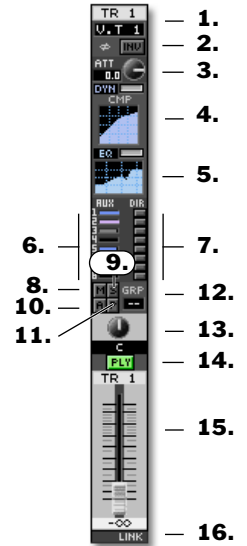
To route the channel's signal to a Direct bus, click the desired bus's number.



### 8. MUTE (M) Button



To mute the channel, click this button so it's lit. To un-mute the channel, click the button again.



### 9. SOLO (S) Button



To solo the channel, click the SOLO button to light it. To un-solo the channel, click the button again.



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### 10. AUTOMIX STATUS (A) Button



When Automix is turned on, repeatedly click the AUTOMIX STATUS button to set the channel's Automix status.



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### 11. PHRASE SEQ STATUS Button



When the phrase sequencer is activated and the track's phrase pad is turned on, you can set its phrase sequencer track status by repeatedly clicking the PHRASE SEQ STATUS button.



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### 12. GRP (GROUP) Selector



To assign the channel to a fader group, click beneath "GRP" and select the desired fader group from the pop-up menu.



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### 13. PAN Knob



Set the stereo position of the channel in the main MASTER bus mix by dragging the PAN knob up or down as desired.



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### 14. TRACK STATUS Button



Click a TRACK STATUS button repeatedly to set its track's status—this is the same as pressing the corresponding physical TRACK STATUS button on the VS-2480.



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### 15. Channel Fader

The position of the channel fader sets the level of signal coming out of the channel. Moving the onscreen fader is the same as moving the channel's physical fader on the VS-2480.



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### 16. LINK Switch



LINK combines the CH EDIT ChLink and F.LINK parameters. Click to the right of "LINK" and select the desired type of linking from the pop-up menu, or turn off linking. The LINK switch occupies the combined lower edge of both of the channels it controls.



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## Multi-Channel View FX Return Channels

### 1. ASSIGN Selector



You can click the ASSIGN selector and choose the Aux bus that'll carry signals to the FX return channel's effect processor.



### 2. EFFECT Algorithm Display



The EFFECT algorithm display shows the corresponding effect processor's currently selected effect algorithm. Click the display to open the Algorithm View screen from which you can select a different effect patch, or edit the current patch.



### 3. AUX Send Sliders



Set the amount of the channel's signal sent to an Aux bus by adjusting the corresponding AUX send slider. With linked Aux busses, a panning handle replaces the even-numbered Aux bus's slider (Page 67).



### 4. DIR (DIRECT) 1-8 Selector



To route the channel's signal to a Direct bus, click the desired bus's number.



### 5. MUTE (M) Button



To mute the channel, click this button so it's lit. To un-mute the channel, click the button again.



### 6. SOLO (S) Button



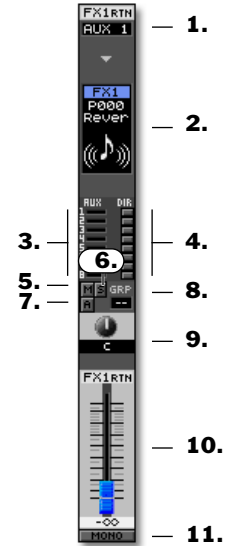
To solo the channel, click the SOLO button to light it. To un-solo the channel, click the button again.



### 8. GRP (GROUP) Selector



To assign the channel to a fader group, click beneath "GRP" and select the desired fader group from the pop-up menu.



## 9. BAL (Balance) Knob



Set the stereo position of the channel in the main MASTER bus mix by dragging the BAL knob up or down as desired.



## 10. Channel Fader

The position of the channel fader sets the level of signal coming out of the channel. Moving the onscreen fader is the same as moving the channel's physical fader on the VS-2480.



## 11. MONO Switch



Click the MONO switch to collapse the corresponding effect processor's stereo output to a mono signal.



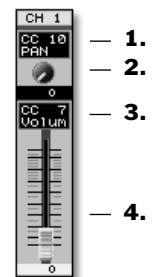
## Multi-Channel View V.FADER Channels

In V.FADER mode, each channel strip's PAN/AUX SEND 1-8 knob and channel fader can transmit MIDI Control Change values on the corresponding MIDI channel. The V.FADER feature is described on *Owner's Manual* Page 300.

### 1. Knob Control Change Selector



The knob Control Change selector shows the MIDI Control Change whose values are transmitted from the VS-2480 when the channel's PAN/AUX SEND 1-8 knob is turned. Click the selector and drag up or down to select a different Control Change.



### 2. PAN AUX SEND 1-8 Knob

Drag the onscreen knob up or down—or turn the corresponding physical knob on the VS-2480—to transmit the selected Control Change value.

### 3. Channel Fader Control Change Selector



The channel fader Control Change selector shows the MIDI Control Change whose values are transmitted from the VS-2480 when the channel's fader is moved. Click the selector and drag up or down to select a different Control Change.

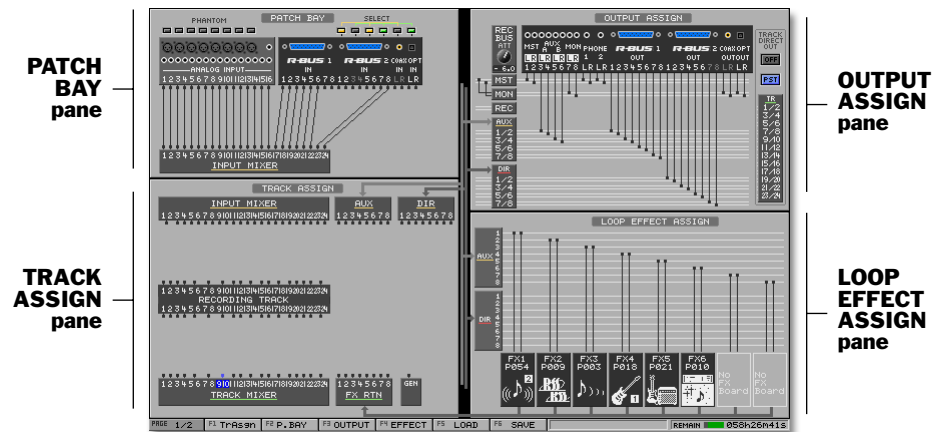
### 4. Channel Fader

Drag the onscreen fader up or down—or move the corresponding physical fader on the VS-2480—to transmit the selected Control Change value.



# 8—VGA Main Display EZ ROUTING Screen

The VGA main display displays all four of the VS-2480's EZ ROUTING screens at the same time to make all of your routing simple to perform.



To display the EZ ROUTING screens, press EZ ROUTING on the VS-2480 or select ROUTING VIEW from the EZ ROUTING menu (Page 26).

On the VGA main display, the VS-2480's top-panel analog inputs and rear-panel inputs and outputs look just like their physical counterparts on the VS-2480 itself, making it easy to visualize the input and output connections you're making.

The F buttons beneath the EZ ROUTING screen are the same as those found on the VS-2480's internal LCD EZ ROUTING screens.

The LOAD and SAVE features behave as described in *Owner's Manual* Chapter 23.

## Making Connections

Routing on the VGA operates on the same principles as routing on the VS-2480's internal LCD. To learn about routing, see *Owner's Manual* Page 231.

You can route signals on the VGA by:

- selecting the desired connection node with the ◀, ▶, ▲ or ▼ buttons and turning the TIME/VALUE dial to make the desired connection.
- dragging the desired connections into place using your mouse.

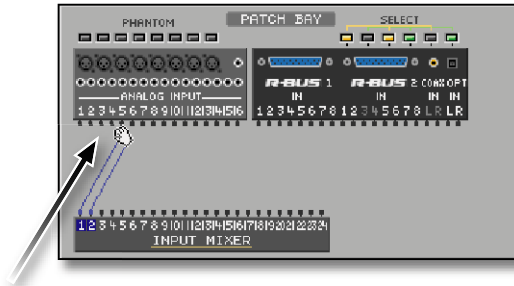
## Routing on the VGA Using a Mouse

To perform routing your mouse, position the mouse cursor over the desired connection point until it turns into a pointing finger and then drag your mouse to the desired destination.



### Input to Input Channel Mouse Routing

Input signal to input channel routing occurs in the EZ ROUTING PATCH BAY pane.



To make a new connection:

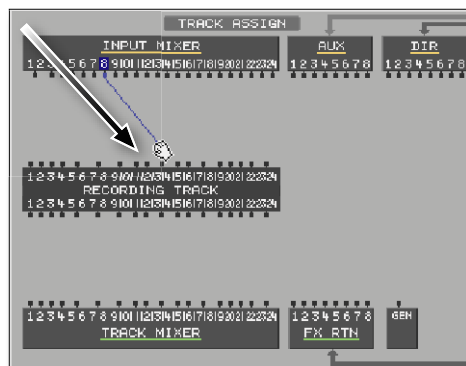
1. Position the mouse cursor over the desired input channel pair until the cursor changes to a pointing finger.
2. Click and drag the mouse to the desired pair of input jacks or connectors—a virtual cable appears onscreen to show the connection you’re making, as shown above.

To change or delete an existing connection:

1. Position the mouse cursor over the desired input channel pair until the cursor changes to a pointing finger and click once.
2. Position the mouse cursor over the desired input jack or connector pair until the cursor changes to a pointing finger.
3. Click and drag the mouse left or right to select a new input channel pair or all the way to the left to delete the connection.

### Routing Signals to a Recording Track Using a Mouse

The procedures for routing a signal from an input channel, track channel, FX return channel, Aux bus, Direct bus or generator (*Owner’s Manual Page 372*) to a recording tracks are the same, and take place in the TRACK ASSIGN EZ ROUTING pane.



To make a new connection:

1. Position the mouse cursor over the connection node you want to route to the track.
2. Click and drag the mouse to the desired recording track—a virtual cable appears onscreen to show the connection you’re making.



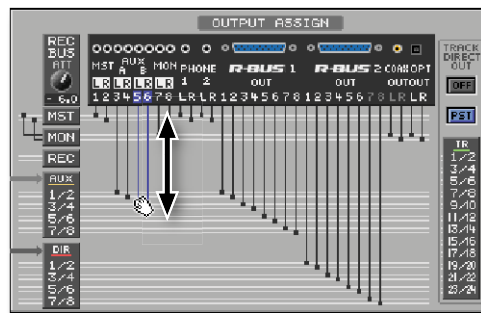
To change or delete an existing connection:

1. Position the mouse cursor over the desired recording track until the cursor changes to a pointing finger.
2. Click and drag the mouse left or right to select a new track or all the way left to delete the connection.

### **Routing Signals to Outputs Using a Mouse**

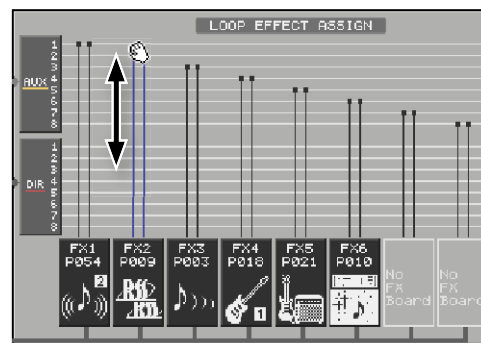
You can route any busses or tracks to the desired output jacks or connectors in the OUTPUT ASSIGN pane using the same principles described on *Owner's Manual* Page 287. To route tracks to output jacks, click the TRACK DIRECT OUT button (*Owner's Manual* Page 289) so it lights and click the PRE/PST button to set it as desired.

To make or break a connection in the OUTPUT ASSIGN pane, position the mouse cursor over the desired connection node and drag upward or downward as desired.



### **Routing Busses to Internal Effect Using a Mouse**

In the LOOP EFFECT ASSIGN pane, you can route any Aux bus or Direct bus to the desired internal effect processor (*Owner's Manual* Page 210). To do this, position the mouse cursor over the desired bus's node and drag upward or downward as desired.



## Other Onscreen EZ ROUTING Tools

### Phantom Power Switches

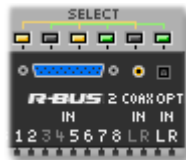


You can turn on phantom power (*Owner's Manual* Page 130) to any of the XLR input jacks by clicking its button in the PATCH BAY pane so the button lights. To turn off phantom power, click the button again so its light goes out.

### Activating Digital Inputs

The VS-2480 can receive up to 16 digital input signals at a time. The R-BUS 1 connections are always active. You can activate the desired R-BUS 2 connections—and/or the desired coaxial and/or optical digital inputs—as described on *Owner's Manual* Page 131.

On the VGA, every possible combination is represented by a digital input selector button in the PATCH BAY pane. Each currently selected digital connection turns white to show that it's activated and available for use.



In this illustration, you can see that R-BUS 2 Inputs 1, 2, 5, 6, 7 and 8 and the optical digital inputs are active.

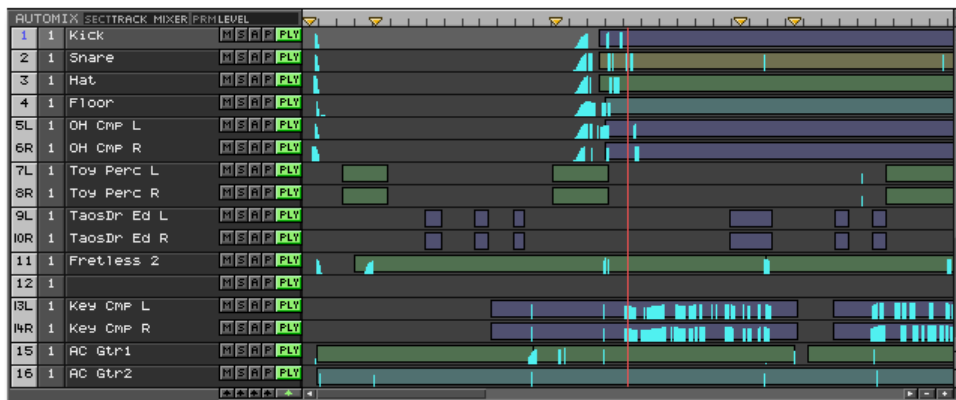
### Recording Bus Attenuation

The REC BUS ATT knob in the OUTPUT ASSIGN pane allows you to adjust the overall recording level to all tracks at once, as described on *Owner's Manual* Page 201. This can be helpful when bouncing, and should otherwise be set to -6.0dB.



## 9—VGA Main Display Automix Editing

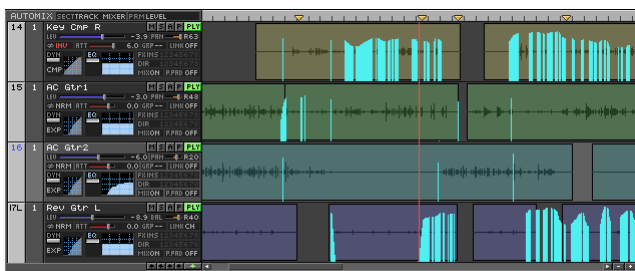
The VGA main display provides its own Automix editing screen in which you can refine recorded Automix data, create new data or delete data while viewing the corresponding track audio waveforms. To display the Automix editing screen, select AUTOMIX EDIT from the onscreen UTILITIES menu.



### Editing Automix Data on the VGA

The VGA Automix editing screen's operation and tools are essentially the same as those found in the internal LCD's AUTOMIX EDIT window, described on *Owner's Manual* Page 331. As on the LCD, Automix editing is a lot like track audio region editing. The MICRO EDIT screen (*Owner's Manual* Page 332) provide more detailed Automix data editing capabilities.

When you're editing track channel Automix tracks, you can view the corresponding track audio by zooming in to display four or two tracks.



To learn about recording Automix data, see *Owner's Manual* Chapter 26, starting on Page 325.



Version Two allows you to record up to nine separate Automixes in each project, as described on Page 14.

## Targeting Automix Tracks and Data for Editing

The Automix editing screen's F1 (TARGET) button opens up the TARGET SELECT window (*Owner's Manual* Page 332). In this window, you can select to display and edit:

- *the desired type of Automix tracks*—You can view input channel, track channel, FX return channel, effect processor, MASTER bus, Aux bus or Direct bus Automix tracks.
- *the desired type of Automix data*—You can display and edit the Automix data for any of the selected Automix track's automatable parameters.

The VGA's Automix editing screen gives you a faster way to get to and select the desired editing target Automix tracks and data: the SECT and PRM buttons, located just above the displayed tracks' names.



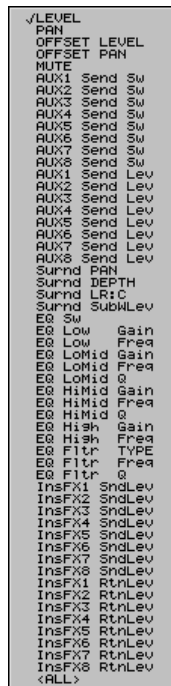
To display and edit:

- *the desired type of Automix tracks*—click the SECT button and choose the desired set of Automix tracks from the pop-up menu.
- *the desired type of Automix data*—click the PRM button to choose the type of Automix data you want to edit. The menu shows all of the parameters that can be automated for the selected type of Automix track.

SECT pop-up menu



PRM pop-up menu for track channel Automix tracks



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# Notes

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