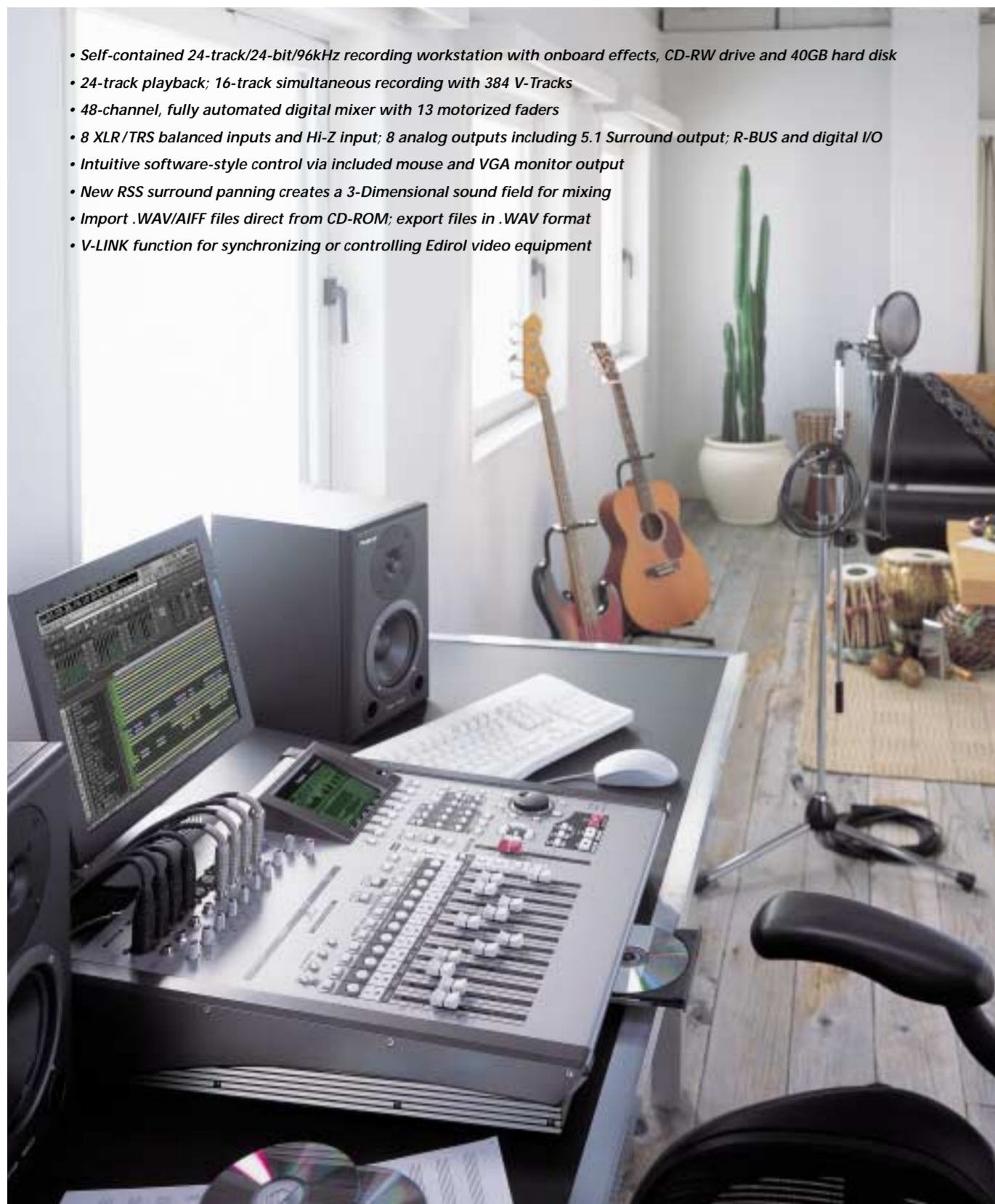


Put 24 Tracks to Work for You.



The VS-2400CD Digital Studio Workstation brings professional 24-track recording and CD burning to a new low price, while adding impressive new features like RSS[®] surround panning and V-LINK video control.

- Self-contained 24-track/24-bit/96kHz recording workstation with onboard effects, CD-RW drive and 40GB hard disk
- 24-track playback, 16-track simultaneous recording with 384 V-Tracks
- 48-channel, fully automated digital mixer with 13 motorized faders
- 8 XLR/TRS balanced inputs and Hi-Z input, 8 analog outputs including 5.1 Surround output, R-BUS and digital I/O
- Intuitive software-style control via included mouse and VGA monitor output
- New RSS surround panning creates a 3-Dimensional sound field for mixing
- Import .WAV/AIFF files direct from CD-ROM, export files in .WAV format
- V-LINK function for synchronizing or controlling Ediol video equipment



Specifications																																																			
Tracks	24 V Tracks: 384 (16 V Tracks per each Track)																																																		
Sample Rate	96,000/24,000/12,000/6,000 Hz * Adaptive range with 16-bit resolution 16.00 kHz - 96.00 kHz (at 96 kHz) 16.00 kHz - 30.00 kHz (at 48 kHz)																																																		
Recording Mode	Mastering 24-bit (M24) Multitrack Pro (MTP) CD Writing (CDW) Mastering 16-bit (M16) Multitrack 1 (MT1) Multitrack 2 (MT2) Live 1 (LV1) Live 2 (LV2)																																																		
Maximum Simultaneous Recording / Playback Tracks	• Sample Rate 48/96/192 kHz 16-tr: Rec / 16-tr: Play (M24, M16, CDW) 8-tr: Rec / 8-tr: Play (M24, M16, CDW) • Sample Rate 96/192 kHz 8-tr: Rec / 12-tr: Play (MT1, MT2, LV1, LV2) • Sampling rate of the song data is the number of tracks which can be simultaneously recorded or played back for that rate																																																		
Maximum Unlabeled Capacity	40 Gbytes, 10 G Bytes (Capacity) x 4 (Partitions)																																																		
Recording Time (at 192 kHz Partition, conversion in 1 track, unit: minutes)	<table border="1"> <tr> <th>Mode</th> <th>16-tr</th> <th>8-tr</th> <th>4-tr</th> <th>2-tr</th> </tr> <tr> <td>M24</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>M16</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>MTP</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>CDW</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>M16</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>MT1</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>MT2</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>LV1</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> <tr> <td>LV2</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> <td>1:00</td> </tr> </table>	Mode	16-tr	8-tr	4-tr	2-tr	M24	1:00	1:00	1:00	1:00	M16	1:00	1:00	1:00	1:00	MTP	1:00	1:00	1:00	1:00	CDW	1:00	1:00	1:00	1:00	M16	1:00	1:00	1:00	1:00	MT1	1:00	1:00	1:00	1:00	MT2	1:00	1:00	1:00	1:00	LV1	1:00	1:00	1:00	1:00	LV2	1:00	1:00	1:00	1:00
Mode	16-tr	8-tr	4-tr	2-tr																																															
M24	1:00	1:00	1:00	1:00																																															
M16	1:00	1:00	1:00	1:00																																															
MTP	1:00	1:00	1:00	1:00																																															
CDW	1:00	1:00	1:00	1:00																																															
M16	1:00	1:00	1:00	1:00																																															
MT1	1:00	1:00	1:00	1:00																																															
MT2	1:00	1:00	1:00	1:00																																															
LV1	1:00	1:00	1:00	1:00																																															
LV2	1:00	1:00	1:00	1:00																																															
Frequency Response	96.0 kHz: 20 Hz - 40 kHz (+0 dB/-2 dB) 48.0 kHz: 20 Hz - 40 kHz (+0 dB/-2 dB) 24.0 kHz: 20 Hz - 20 kHz (+0 dB/-2 dB) 12.0 kHz: 20 Hz - 10 kHz (+0 dB/-2 dB)																																																		
Projects	200 projects in each partition																																																		
Marker	1000 per project																																																		
Locator	100 (10 x 10 banks) per project																																																		
Scene	100 (10 x 10 banks) per project																																																		
Undo/Redo	999 Undo / 1 Redo																																																		
Nominal Input Level (variable)	Input 1-8: -50 ~ +14 dBu maximum $\pm 20\text{dB}$ balance maximum $\pm 20\text{dB}$ (unbalanced) Output (R-2): -50 ~ +14 dBu (maximum $\pm 20\text{dB}$)																																																		
Input Impedance	Input 1-8: 10 k Ω (balanced) Output (R-2): 1 M Ω																																																		
Nominal Output Level	Master Out: +4 dBu (balanced) AUX 1 (L, R): +4 dBu (balanced) AUX 2 (L, R): +4 dBu (balanced) Monitor Out: -4 dBu (balanced)																																																		
Output Impedance	Master Out: 600 Ω AUX 1 (L, R): 10 k Ω or greater AUX 2 (L, R): 10 k Ω or greater Monitor Out: 600 Ω																																																		
Recommended Load Impedance	Master Out: 10 k Ω or greater AUX 1 (L, R): 10 k Ω or greater AUX 2 (L, R): 10 k Ω or greater Monitor Out: 10 k Ω or greater Phones: 8 - 600 Ω																																																		
EQ	4-band (2 shelving + 2 peaking) * Useful simultaneously up to 16ch in both Input Mixer and Track Mixer (at 48kHz or 96kHz) * Useful simultaneously up to 16ch in both Input Mixer and Track Mixer (at 96kHz or above)																																																		
Dynamics Processor	Compressor, Expander * Useful simultaneously up to 16ch in both Input Mixer and Track Mixer (at 48kHz or 96kHz) * Useful simultaneously up to 16ch in both Input Mixer and Track Mixer (at 96kHz or above)																																																		
Effects	Maximum 4 effects (One pre-installed + One more optional VSF-2)																																																		
Display	Digital LCD, Custom, Optical (conforms to EC60958)																																																		
Interface	VGA Out, 19-pin mini-D-sub																																																		
Head Disk Drive	40GB																																																		
CD-RW Drive	Recording Speed: 24x (min.) Recording Speed: Record (CD-R) 4x correspond Re-Write (CD-RW) 4x correspond																																																		
Connectors	MIDI Connectors (5-pin DIN) Input Jack 1-8 (ALR type (balanced, phantom power)) Input Jack 9-16 (4-line phone type (TRS balanced)) Digital In Connectors (Coaxial type, Optical type) Digital Out Connectors (Coaxial type, Optical type) Foot Switch Jack (4-line phone type) PS/2 Mouse Connector (5-pin mini-DIN) PS/2 Keyboard Connector (5-pin mini-DIN) VGA Out Connector (15-pin mini-DIN) R-BUS Connector (25-pin D-sub) Master Out Jack L/R (4-line phone type, TRS balanced) Monitor Out Jack L/R (4-line phone type, TRS balanced) AUX 1 (L, R) Jack L/R (4-line phone type, TRS balanced) AUX 2 (L, R) Jack L/R (4-line phone type, TRS balanced) Headphones Jack (Stereo, 4-line phone type)																																																		
Power Supply	AC117 V, AC230 V or AC240 V																																																		
Power Consumption	60 W																																																		
Dimensions	480 (W) x 481 (D) x 138 (H) mm 18-1/16 (W) x 18-1/16 (D) x 5-3/8 (H) inches																																																		
Weight	10.5 kg 23 lbs 3 oz																																																		
Accessories	Quick Start Manual, English Appendices R-BUS Equipment Connection and Setting Guide 2 CD-ROM CD-R disc PS/2 Mouse Short Cut Seal AC Cord (BXW0-7759)ms																																																		

Preset Effect Patch List																							
No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name	No.	Patch Name
001	Reverb	002	Reverb	003	Reverb	004	Reverb	005	Reverb	006	Reverb	007	Reverb	008	Reverb	009	Reverb	010	Reverb	011	Reverb	012	Reverb

Options

OPTIONAL HARDWARE EXPANSION

- DS-90A DS-50A
- DS-90B DS-50B
- VE-7000
- DR-20
- MMP-2
- RFC-1
- RBC-1
- RBC-3
- M1000
- VSBF-2
- CF-2
- FS-SU

24 TR / 96 kHz / 24-bit DIGITAL STUDIO WORKSTATION VS-2480

LOSM R-BUS

The flagship VS-2480CD offers several enhancements for professional users like 16 analog inputs, 17 motorized faders, SMPTE sync and more.

Roland Corporation U.S.
5100 S. Eastern Avenue P.O. BOX 910921
Los Angeles, CA 90009-0921
Phone: (323) 993-3700 Fax: (323) 890-3701
Visit us online at www.RolandUS.com

All specifications and appearances are subject to change. All trademarks are the property of their respective companies.

Printed in Japan, Jan. '03 RAM-3079 C-4 ERM-LPR-0E



24 TR / 96 kHz / 24-bit DIGITAL STUDIO WORKSTATION VS-2400CD



Digital Studio Workstation

24-bit/96kHz recording 24-track audio recorder 48-channel digital mixer

24 TR / 96 kHz / 24-bit DIGITAL STUDIO WORKSTATION VS-2400CD

R-BUS LOSM V-LINK COSM R-BUS

Intuitive drag-and-drop editing Onboard effects Built-in CD-RW & 40GB HD drive

VS-2400CD

Professional Digital Recording

24 Tracks of Recording Heaven
Frustrated with the limited capabilities of a 16-track digital recorder? Then it's time to step up to full 24-track recording. Think about it. With 24 tracks, you'll have room for individually mixed drums and plenty of vocals. And with 384 Virtual Tracks, there's always room to try new ideas.

Pristine 24-bit/96kHz Sound Quality
How does the VS-2400CD sound? In a word, phenomenal—thanks to its true 24-bit AD converters. These top-quality converters capture all the warmth of your inputs and provide better headroom for recording. And if you want the absolute finest sound quality, the VS-2400CD even supports recording at 96kHz.*

Internal CD-RW and 40GB Hard Drive
Easy CD Burning: With a low-profile CD burner built-in, the VS-2400CD has everything needed to take your song from idea to completion. Just mix down to an open pair of tracks and burn a CD!

.WAV/AIFF Compatibility: The VS-2400CD's internal CD-RW drive can also be used to import .WAV and AIFF files directly from CD. You can even export audio in .WAV format and burn it to disc.

Recording Mode	Sample Rate
M24/M16/CDW	48/96/192 kHz
MTP/MT1/MT2/LV1/LV2	16-tr recording, 16-tr playback 8-tr recording, 8-tr playback
	16-tr recording, 24-tr playback 8-tr recording, 12-tr playback

WITH VGA DISPLAY
Channel View
Here you can access individual channel parameters—including EQ curves, compressor settings, effects and more—with point-and-click ease.



A Fluid and Intuitive OS

Superb Editing Functions
For editing, the VS-2400CD offers several non-destructive commands like copy, cut, paste and move. These functions give you the power, for example, to create the ultimate vocal or to even copy a drum loop. Helpful markers and locators let you move around quickly, while multiple Undo commands make accidents a thing of the past.

Mouse-Based Editing on the LCD
The VS-2400CD's large LCD screen makes navigation simple with helpful icons and graphics. Using the supplied mouse, you can copy or move phrases using familiar "drag-and-drop" commands—just like software. An optional ASCII keyboard can also be connected for simplified data entry.

Go Direct To Your PC
By installing an optional RFC-1 R-BUS card in your Mac or PC, you can transfer up to eight channels of 2-way audio between the computer and your VS-2400CD—all in pristine 24-bit digital quality. Now the V-Studio is more expandable than ever!

VGA Output for Software-Style Control
Get the big picture by connecting an optional VGA monitor. Combined with the mouse and optional keyboard, this system makes working with the VS-2400CD feel just like software (see screenshots for details).

- Track Mixer**: With the Track Mixer screen, you can use the mouse to edit track levels, panning, and more for all 24 tracks simultaneously.
- Playlist**: This screen provides a global view of your arrangement, plus drag-and-drop editing of audio regions using the mouse.
- Waveform Editing**: This screen provides the ability to edit waveforms graphically with the mouse—just like software.
- EZ Routing**: Take the mystery out of routing signal! Simply drag a "virtual" audio cable from source to destination in this helpful screen.

Solid Mixing Capabilities

A Full-Featured Digital Mixer
Impressive 48-Channel/20-Bus Design: More than just a recorder, the VS-2400CD is a full-blown 48-channel digital mixer. These channels consist of the 16-channel Input mixer, 24-channel Track mixer and eight effect returns. A variety of busses, including eight direct paths, eight aux busses, and stereo main and monitor busses, let you route signal anywhere.

Expandable I/O via R-BUS: Thanks to its R-BUS interface, the VS-2400CD can be expanded with up to eight channels of analog or digital I/O. Use R-BUS to connect an additional VS-2400CD, VS-2480CD or even Roland's Si-24 Studio Interface—adding another eight analog input channels.

Premium Analog Components: A digital mixer can only sound as good as its analog components. That's why Roland used the same premium circuits found on the flagship VS-2480CD. These carefully selected components have been praised for their warm sound, so you get nothing but the best.

Automated Mixing at Your Fingertips
13 Motorized Faders: If you've ever had to work on multiple projects at once, you know the importance of motorized faders. Imagine being able to press a button and watch as your entire mix is instantly recalled! These faders also come in handy when moving between the VS-2400CD's input mixer, Track mixer and effect returns.

Create and Store Multiple Automixes: Professional engineers will tell you that automation is key to good mixing. Fortunately, the VS-2400CD lets you create multiple automixes for controlling important mixing parameters like track level, panning, effects sends and more.

New RSS Surround Panning: The VS-2400CD is the first V-Studio to feature RSS surround panning. Using this function, you can position a sound anywhere in a 360 degree field simply by turning a knob. The result is a surround sound mix using conventional 2-way speakers (5.1 mixing is also available).

WITH VGA DISPLAY
Spectrum Analyzer
Use the Spectrum Analyzer to tune your mix to room acoustics, or to instantly view the frequency content.



Pro-Quality Effects and V-LINK

A Powerhouse of Expandable Effects
2 Stereo Effects Standard: The VS-2400CD includes one of Roland's highly acclaimed VSF-2 Effects Expansion Boards right out of the box. This powerful card provides up to two stereo or four mono effects.

36 Killer Algorithms: With 36 algorithms from the Roland and BOSS archives, the VS-2400CD can handle just about every type of processing you need—from smooth reverb and chorus to delay, flanger and Lo-Fi. There's even a 19-band vocoder and COSM[®] Amp Modeling.

Mic Modeling Optimized for AKG C3000B: Roland's COSM Mic Modeling has earned accolades for its ability to model the characteristics of several vintage and high-end microphones. Now you can take advantage of this technology using one of the most popular mics around—the AKG C3000B.

Onboard Mastering Tools: Finish your mix with the VS-2400CD's unique Mastering Tool Kit. This special effect combines algorithms like multi-band compression, a limiter, enhancer and more to give your mixes that "radio-ready" sound.

Simplified Audio/Video Integration
Roland's V-LINK gives musicians an easy way to integrate video and music. Simply connect an Ediol DV-77P Digital Video Workstation (sold separately), and you can trigger video clips by creating MIDI events in the VS-2400CD's Automix function, or even use the V-Fader function to control video parameters like color balance and brightness.

VSBF-2
COSM
AGK C3000B
EDIROL DV-77P
V-LINK