



VS-840 Digital Studio Workstation

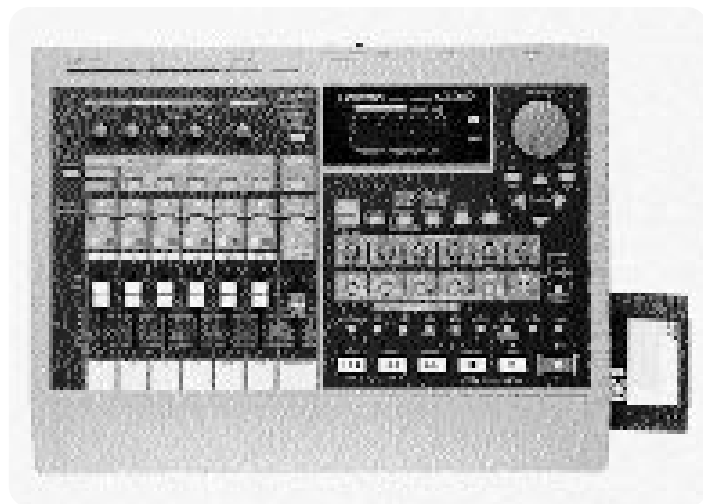
THE REVOLUTION CONTINUES: ROLAND INTRODUCES AFFORDABLE NEW VS-840 DIGITAL STUDIO WORKSTATION!

-- Compact New Table-Top Workstation Gives Musicians Eight Tracks of Digital Recording, Mixing and Effects Processing at an Unbelievably Low Price --

LOS ANGELES, September 26th, 1997 — Once again breaking the digital recording price/performance barrier, Roland introduces the VS-840 Digital Studio Workstation. With the VS-840, the major advantages of Roland's best-selling VS-880 workstation—fully digital recording, mixing and editing, 64 "Virtual Tracks" for trying different solos and ideas without losing original takes, built-in studio-quality effects and more—have made their way into an extremely friendly, ultra-affordable new table-top workstation.

The VS-840 is in many ways a "little brother" to the VS-880, bringing Roland VS hard disk recording technology to the "under \$1,400" home recording market most commonly associated with MiniDisc™ recorders and high-end multi-track cassette units. Yet with its eight tracks of digital audio, comprehensive, non-destructive digital editing, 12-channel digital mixing, 999 levels of Undo, built-in stereo effects processing, removable storage and optional SCSI port, the VS-840's capabilities far surpass any MiniDisc or hard disk audio recorder in its price range.

Designed with the musician in mind, the VS-840 features tape-style transport controls (Rec., Play, Fwd., Rew., Pause), dedicated track faders, straightforward Track Cue/Panning knobs, assignable Locate buttons and an enhanced high-resolution LCD. Connections to the VS-840 are made via five 1/4-inch audio inputs (one of which is a dedicated guitar input), stereo RCA-type Master Outputs, two RCA-type Auxiliary Sends, MIDI Inputs and Outputs, and coaxial/optical Digital Outputs. The -840 can record up to four tracks of audio simultaneously and play back up to eight of its 64 "Virtual Tracks" at any given time. During mixdown, users can configure the VS-840 as a 12-channel digital mixer, simultaneously mixing eight onboard tracks and four external audio inputs.



Further distinguishing itself from other digital recording products in its price range, the VS-840 records its 64 Virtual Tracks of audio, effects settings and mixing information to 100MB Zip™ disks. These low-cost disks—widely available through computer resellers and electronic musical instrument dealers—allow VS-840 owners to store between 37 and 75 minutes of music on each disk (depending on recording mode and sample rate), as well as collaborate with other VS-840 users worldwide. Because all audio recording is non-linear, recording time is always maximized, (eliminating wasted space on "unused" sections of tracks, etc.).

Another distinguishing feature of the VS-840 is its built-in stereo multi-effects processor. This processor features 25 high-quality multi-effects algorithms borrowed from the acclaimed VS8F-1 Effects Expansion board for the VS-880, including reverbs, delays, flanging, chorus, vocal and guitar multi-effects, cool "lo-fi" and vocoder features and several proprietary 3-D RSS sound processing algorithms. Of special note are the variety of stunning COSM-based guitar preamp models, which allow guitarists to plug directly into the VS-840's dedicated Guitar Input and record killer guitar sounds direct to disk. As is common in project studio recording, these effects can be individually selected and "printed" per track during the tracking process, freeing up the effects processor during mixdown.

Eliminating much of the learning curve associated with sophisticated digital recording gear, the VS-840 is rounded out with an innovative EZ Routing feature which guides users through all basic recording, mixing and effects processing functions with simple “yes” or “no” questions. In this manner, those with little or no previous digital recording experience can be performing sophisticated track bouncing, effects routing, mixing and more in no time.

For those unfamiliar with Roland’s popular VS recording technology, following is a glossary of distinguishing features, as well as other features unique to the VS-840. These capabilities easily make the VS-840 the most powerful digital audio recorder in its class, signifying the arrival of powerful and affordable digital recording for musicians worldwide.

64 Virtual Tracks

Each of the VS recorders’ eight Primary tracks contains seven additional “Virtual Tracks,” giving users the ability to record multiple guitar solos, instrumentation ideas, arrangements, and even bounce tracks without losing the originals. That’s a total of 64 tracks of digital recording from which they can choose any eight tracks at mixdown—or even edit or mix together different Virtual and Primary Tracks during mixdown to get that perfect take.

New Display (VS-840)

The bright LCD has been enhanced and angled for easy viewing of all VS-840 operations. New display software lets users view audio in several different ways, providing precise level indication and data display for copying and pasting audio, looping drum patterns, etc.

EZ Routing

With the VS-840’s all-digital mixing, editing and effects processing comes some incredible power and creative freedom. But these awesome features may be mind-boggling at first. That’s why the VS-840 includes a new EZ Routing function, which walks users step-by-step through basic operations including recording, mixing, track bouncing, and effects routing.

Removable ZIP™ Storage Media

The VS-840 records onto removable 100MB ZIP disks, letting users save and re-load songs and collaborate with friends. One ZIP disk can hold between 37 and 75 minutes of VS audio depending upon the recording mode—all for about the price of a S-VHS tape!

Familiar Tape-Style Controls & Helpful Markers and Locators

The VS-840 features straightforward Play, Record, Stop, Fwd, Rew and Pause buttons—just like a cassette multi-track. But on the VS-840, these are random-access controls, so users don’t have to wait around for tape to rewind. Plus it’s got helpful Markers, Locators, Auto Punch In/Out and Loop Record buttons.

Faders & Multi-Function Track Cue Knobs

Seven faders control playback and mixing levels for 64 Virtual Tracks of digital audio. Multi-function Track Cue knobs let users monitor recorded tracks, set pan and auxiliary send levels, etc. In mixing mode, the VS-840 can function as a fully-digital 12-channel mixer, mixing 8 internal and 4 external audio tracks simultaneously.

Built-In Effects

What studio would be complete without great-sounding digital effects? VS-840 onboard effects include high-quality Roland reverb, delay, chorus, and compression algorithms as well as vocal multi-effects and Composite Object Sound Modeling (COSM)-based guitar amp simulations for recording guitar parts “direct.”

Non-Destructive Audio Editing

Imagine being able to record a guitar part, erase it, change your mind and instantly “re-do” it or move it to another place in a song. All of this would be pretty difficult or even impossible to do on tape or MiniDisc™-based digital recording systems. On the VS-840, however, it’s a snap. And with 999 levels of Undo, users can try tons of different ideas and arrangements without worrying about losing that “perfect” take.

Inputs/Outputs & Special Guitar Input

The VS-840 Input section features five 1/4” audio inputs (one is a dedicated guitar input) and two RCA-type inputs. Its Output section features four RCA-type outputs (Master L/R, Aux L/R), coaxial and optical digital output, and a headphone output. MIDI In and Out provide for MTC output, MIDI clock output and MMC input and output.

Optional SCSI Port

The VS-840’s optional SCSI port allows users to archive songs to a wide variety of SCSI devices including hard disk drives and removable media drives.

Specifications

- Tracks

Track: 8 V-Track: 64 (8 V-Tracks per each Track)

* Up to 4 tracks can be recorded simultaneously, and up to 8 tracks can be played back simultaneously.

- Maximum Useful Capacity

Zip Disk: 100 M bytes

- Internal Memory

Songs: 200 (each disk)

- Equalizer

HI, MID, LOW

- Recording Mode

Multitrack 1 (MT1)

Multitrack 2 (M12)

Live (LV1)

Live (LV2)

- Signal Processing

AD Conversion: 20 bit 64 times oversampling

DA Conversion: 20 bit, 128 times oversampling

Internal Processing: 24 bit (mixer section)

- Sample Rate

44.1 kHz, 32.0 kHz

- Frequency Response

Sample Rate

44.1 kHz: 20 Hz to 21.0 kHz (+1/-1.5 dB)

32.0 kHz: 20 Hz to 15.5 kHz (+1/-1.5 dB)

- Total Harmonic Distortion

0.08% or less (INPUT SENS = -10 dBm, 1 kHz at nominal output level, recording mode: MT1)

- Recording Time (at 100 M bytes, 1 track)

Recording mode	Sample rate	
	44.1 kHz	32.0 kHz
MT1	37 minutes	52 minutes
MT2	50 minutes	69 minutes
LV1	60 minutes	83 minutes
LV2	75 minutes	104 minutes

* The above listed recording times are approximate. Times may be slightly shorter depending on the number of songs that were created.

- Nominal Input Level (Variable)

INPUT Jack 1 (Guitar (Hi-Z) type): -50 to +4 dBm

INPUT Jack 1 to 4 (° inch phone type): -50 to +4 dBm

INPUT Jack 3 to 4 (RCA phono type): -50 to +4 dBm

- Input Impedance

INPUT Jack 1 (Guitar (Hi-Z) type): 1 MΩ

INPUT Jack to 4 (° inch phone type): 20 kΩ

INPUT Jack 3 to 4 (RCA phono type): 20 kΩ

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

- Nominal Output Level

MON/AUX Jack: -10 dBm

MASTER OUT Jack: -10 dBm

- Output Impedance

MON/AUX Jack: 1.6 kΩ

MASTER OUT Jack: 1.6 Ω

PHONES Jack: 100 Ω

- Recommended Load Impedance

MON/AUX jack: 20 kΩ or less

MASTER OUT Jack: 20 kΩ or greater

PHONES Jack: 8~50 Ω

- Residual Noise Level

MON/AUX Jack: -91 dBm or less

MASTER OUT Jack: -91 dBm or less

(input terminated with 1kW, INPUT SENS: +4 dBm, IHF-A, type,)

- Interface

DIGITAL OUT: Coaxial (conforms to S/P DIF)

Optical type (EIAJ CP-1201)

- Display

69.0 x 25.0 mm (LCD)

- Connectors

MIDI Connectors (IN/OUT)

DIGITAL OUT Connectors (Coaxial type, Optical type)

FOOT SWITCH Jack (° inch phone type)

PHONES Jack (Stereo ° inch phone type)

INPUT Jack 1 (Guitar (Hi-Z) type)

INPUT Jack 1 to 4 (° inch phone type)

INPUT Jack 3 to 4 (RCA Phono Type)

MON/AUX Jack A, B (RCA Phono type)

MASTER OUT Jack L, R (RCA Phono type)

- Power Supply

AC 117 V, AC 230 V, AC 240 V

- Power Consumption

20 W

- Dimensions

410 (W) x 307(D) x 88 (H)mm

16-3 / 16(W)x12-1 / 8 (D) x 3-1 / 2 (H) inches

- Weight

4.5 kg

9lb 15 oz

- Accessories

Power cable

Owner's Manual

Quick Start

Demo Disk

- Options

VS-840 SCSI Board (VS4S-1)

0dBm=0.775V rms

Roland®
VS-840EX
DIGITAL STUDIO
WORKSTATION

It's a Fact...

The VS-840EX is a complete, all-in-one digital studio. It is an 8-track, non-destructive hard disk recorder and editor with the ability to cut, copy and move tracks. Each song contains 64 Virtual Tracks, 8 scenes, 1000 markers, and 999 levels of Undo. Other features include:

- 64 Virtual Tracks for recording multiple takes and trying different ideas
- 12-channel digital mixer with 8 channels of EQ
- Onboard stereo digital multi-effects processor includes reverb, delay, chorus, COSM guitar amp modeling
- Built-in MIDI TIME CODE (MTC), MIDI Machine Control and MIDI Clock capabilities
- Compatible with VS-880, VS-880EX, and VS-1680 Digital Studio Workstations
- Dedicated guitar input

New VS-840EX Features

- Records all audio and mix information on low-cost, removable 250MB or 100MB Zip® disks providing up to 257 track minutes of recording time on each disk
- EZ Routing function simplifies the recording and mixdown process with simple “yes/no” questions. A new enhancement to EZ Routing called “Quick Record” allows you to set up for recording in seconds.
- New chromatic guitar/bass tuner built-in
- New effects algorithms include bass guitar simulation, acoustic guitar simulation, 10-band graphic EQ, and COSM microphone modeling
- Enhanced SCSI options allowing backup to larger SCSI hard drives and track import/export features (optional VS4S-1 SCSI Expansion board required)
- VS-840-UP1 software/hardware upgrade available for current VS-840 owners, including new larger capacity 250MB Zip® drive installation and software upgrade for all new features and effects (available through authorized Roland service centers—professional installation required)

TurboStart

Loading the Demo Song

1. Press UTILITY and use the CURSOR buttons to highlight the SONG icon. Press ENTER.
2. Use the CURSOR buttons to highlight the SELECT icon and press ENTER.
3. Use the CURSOR buttons to highlight “One Time Ride.”
4. Press ENTER to display “Select SONG Sure?”
5. Press ENTER to display “Store Current?” Press NO to load the demo song.

Note: If “One Time Ride” is already selected, “Re-Load Current?” will be displayed in Step 4. Press ENTER and the demo song will begin loading.

Mixing the Demo Song

1. Press SCENE—its indicator will light. Press LOCATOR 1 and pull the MASTER fader all the way down.
2. Press ZERO followed by PLAY.
3. Slowly raise the MASTER fader to 0db. Use the TRACK faders to adjust the track levels.

Playing the Virtual Tracks of the Demo Song

Refer to the “One Time Ride” Track Sheet (included with the unit) for a list of the available Virtual Tracks. This example will access the Virtual Tracks on Channel 2.

1. Press STOP.
2. Hold SHIFT and press TRACK STATUS 2.
3. Use the TIME/VALUE dial to select V-TRACK 2.
4. Press ZERO followed by PLAY to hear a different guitar part for the intro.
5. Press STOP when you're finished.

Changing the EQ Settings

Use the following procedure to adjust the EQ settings of the drums:

1. Press ZERO, then PLAY. Pull down all faders except for 7/8 and move the 7/8 fader to 0dB.
2. Press EQ in the Channel Parameter section.
3. Press RIGHT CURSOR to select Channel 7/8.
4. Use the TIME/VALUE dial to turn the EQ on.
5. Use the CURSOR buttons and TIME/VALUE dial to adjust the EQ settings as desired.
6. When you're finished, press STOP and move all the faders to 0dB.

Using the Internal Effects Processor

The VS-840EX has a built-in effects processor that contains over 250 different effects presets. Use the following procedure to listen to some of the guitar effects:

1. Hold SHIFT and press TRACK STATUS 2.
2. Use the TIME/VALUE dial to select V-TRACK 4.
3. Press ZERO followed by PLAY—you can hear a dry guitar part. Press STOP.
4. Press EFFECT and use the DOWN CURSOR and TIME/VALUE dial to select CH 2 Insert.
5. Press RIGHT CURSOR to highlight TYPE and turn TIME/VALUE to select Guitar Multi 1.
6. Press RIGHT CURSOR to highlight PATCH and turn the TIME/VALUE dial to select A-80 ROCK LEAD. Press ENTER.
7. Press ZERO, then PLAY to listen to the effect.
8. Use the TIME/VALUE dial to select different effect patches and press ENTER to load each selected effect.

EZ Routing—Quick Record

EZ Routing guides beginning users through basic recording procedures such as recording, track bouncing, and mix down. The new Quick Record option is a fast, efficient way of routing your signal for recording. For this example, we will use the Quick Record option to record a guitar on Track 3 from Input 1.

1. Connect your guitar to the GUITAR (Hi-Z) input on the VS-840EX. Turn the INPUT SENS 1 knob to about 12 o'clock (straight up).
2. Press EZ ROUTING.
3. Use the CURSOR buttons to highlight the QUICK REC icon and press ENTER. "Select Input" will be displayed.
4. Press the CHANNEL PARAMETER SELECT button on Channel 1. "Select Tr" will be displayed.
5. Press the TRACK STATUS button for Track 3. Press DISPLAY. The VS-840EX is now set up to record Input 1 on Track 3.

Note: *This song is write-protected and will not go into record mode.*



VS-840EX Digital Studio Workstation

Expanded Recording Time, New Effects, EZ Operation!

With the new VS-840EX Digital Studio Workstation, Roland's most affordable VS-Series digital recording workstation gets some major new features. These enhancements include powerful new effects, easier operation, a new guitar tuner and 2.5 times the recording capacity per Zip™ disk, courtesy of a new internal Zip™250 drive! Better yet, all these new features—including the powerful new drive—are also available to current VS-840 owners through a convenient hardware/software upgrade.

- Self-contained 8-track digital recording workstation with built-in digital mixing, stereo effects processing and 250MB Zip™ drive
- New Zip™250 drive offers 2.5 times the digital recording capability of previous model per each removable 250MB Zip™ disk
- Onboard effects include new Mic Simulation, Acoustic and Bass Guitar Simulation, and Bass Multi-Effects, plus studio reverb, delay, chorus, COSM guitar amp simulation and more
- Dedicated Guitar input with new chromatic guitar/bass tuner built-in
- Enhanced EZ Routing function simplifies recording and mixing process with simple "yes/no" questions and new Quick Recording mode
- Highly efficient digital recording/editing environment with enhanced Song Optimize functions and expanded SCSI options
- New "EX" features available to current VS-840 owners via convenient VS-840-UP1 hardware/software upgrade*
*Professional installation required.



* Product pictured is a prototype model. Actual product appearance may be subject to change.

Roland's Most Affordable VS Workstation Becomes Even More Powerful!

When Roland introduced the original VS-840 Digital Studio Workstation last year, songwriters, guitarists and home recordists the world over were amazed at how much digital recording power Roland had squeezed into a compact, super-affordable table-top workstation. Here was a genuine VS studio—capable of professional 8-track digital recording, digital mixing, editing and effects processing using low-cost, removable Zip™ disks—for a surprisingly affordable price. This year, with the enhanced VS-840EX model, Roland's most affordable workstation takes a big leap forward...

Recording Time (with 250MB Zip™ Disk)*

Recording mode	Sample rate	
	44.1 kHz	32.0 kHz
MT1	92 min.	125 min.
MT2	125 min.	170 min.
LV1	150 min.	205 min.
LV2	187 min.	257 min.

* Time figures quoted are total track minutes available (shared between all tracks being used). Recording time is always maximized.



■ VS-840EX rear panel

Expanded Recording Time

The VS-840EX incorporates a new internal Zip™250 drive to give users 2.5 times the recording time of the original VS-840 on each 250MB disk. This translates into about 125 total track minutes in the default MT-2 recording mode, and 187 and 257 total track minutes in LV-1 and LV-2 recording modes, respectively, per each Zip™250 disk (see chart below). Additional time-increasing features include an enhanced Song Optimize function which automatically removes any erased sections of recorded phrases from the disk, instantly freeing up additional time for new recording data.

New Effects & Built-In Guitar Tuner

The effects section of the VS-840EX not only includes all the great effects of the original VS-840—like reverbs, delays, chorus, multi-effects patches and killer COSM guitar amp simulations—but now also offers even more effects choices, including: a Mic Simulator, which can turn the sound of an inexpensive, all-purpose dynamic mic into that of a mega-dollar studio condenser mic or a variety of esoteric dynamic mics; new guitar effects, including an Acoustic Guitar Simulator, a Bass Guitar Simulator, and bass multi-effects algorithms; and a new 10-band graphic EQ. The VS-840EX, which sports a dedicated guitar-level input, now even includes a helpful onboard chromatic guitar and bass tuner, eliminating the hassle of unplugging for tune-ups.

Enhanced SCSI Capabilities

While the original VS-840 could back up projects to Zip™ drive using the optional VS4S-1 SCSI Expansion Board, the new VS-840EX can use this same board to back up to a variety of other SCSI equipped storage devices, including SCSI-2-compatible hard drives.* The VS4S-1 is user-installable into the VS-840EX, making connectivity that much easier.

Songs created on the VS-840 and stored on a 100MB Zip disk cannot be edited directly by the VS-840EX. However, users can connect a VS-840EX with an optional SCSI expansion board to an external 100MB Zip drive or external hard drive, from which they can copy the original VS-840 song to the VS-840EX's internal Zip250 drive, permitting full editing.

Additionally, the VS-840EX permits Track Import/Export to and from a connected SCSI drive, in effect creating another storage area for tracks. The Track Import function even allows bringing in a track from another song (a vocal, for example), so long as the sample rate and recording mode used on both songs are the same. Archive Copy onto an external SCSI removable media drive with less disk capacity is now also possible. An Track Sheet function lets users know what's on every track at any given time.

*SCSI-2 compatible drives with 512 bytes/sector only. Maximum managed capacity per drive is 1000MB. Backup to external SCSI drive requires the optional VS4S-1 SCSI Expansion Board. This board is user-installable into the new VS-840EX, but requires professional installation in the original VS-840 or a VS-840 that has been upgraded with "EX" features.

Easier Operation

Taking the original VS-840's intuitive operation to a new level, the VS-840EX offers new EZ Routing features which allow routing parameter input via Channel Status buttons, a new "Quick Recording" mode which makes basic recording very simple by reducing the number of parameters, as well as the ability to switch between the Time and Bar display when specifying edit points. A new Sync Edit utility even helps users sync their acoustic tracks to MIDI.

Convenient Upgrade for Original VS-840 Owners

Original VS-840 owners wishing to upgrade to EX model features—including the new Zip™250 drive—can do so via the VS-840-UP1 hardware/software upgrade package available through an authorized Roland service center. Professional installation is required.

Zip™ Media Compatibility between VS-840 and 840EX

	VS-840EX	VS-840
Playback from 250MB Zip disk	Yes	No
Record on 250MB Zip disk	Yes	No
Playback from 100MB Zip disk	Yes	Yes
Record on 100MB Zip disk	No	Yes

Specifications

<Digital Recorder>

- **Number of Tracks** 64 (8 tracks x 8 V-tracks); 8 tracks max. simultaneous playback; 4 tracks max. simultaneous recording.
- **Max. Usable Disk Capacity** 250 MB
- **Recording Mode** Multitrack 1 (MT1), Multitrack 2 (MT2), Live 1 (LV1), Live 2 (LV2)
- **Sample Rate** 44.1 kHz, 32.0 kHz, Sample rate can be adjusted between 24.05 kHz to 50.46 kHz by using vari-pitch function.
- **Synchronization** Master: MIDI Time Code, MIDI Machine Control, Song Position Pointer + MIDI Clock (SYNC Track Mode, Tempo Map)
- **Slave** MIDI Machine Control
- **Interface for Storage Medium** Internal 250MB Zip™ Drive

<Digital Mixer>

- **Channel 8** (12 at Mixdown Mode)
- **Equalizer** 3-band EQ x 8

<Common>

- **Signal Processing** Internal: 24-bit (mixer section), AD Conversion: 20-bit 64 times oversampling,
- **DA Conversion** 20-bit 128 times oversampling
- **Sample Rate** 44.1 kHz, 32.0 kHz
- **Frequency Response** Sample Rate 44.1 kHz: 20 Hz to 21.0 kHz (+1/-1.5 dB) 32.0 kHz: 20 Hz to 15.5 kHz (+1/-1.5 dB)
- **Total Harmonic Distortion** 0.08 % or less (Input Sens = -10 dBu, 1 kHz at nominal output level, recording mode: MT1)
- **Nominal Input Level** - 50 to + 4 dBu
- **Input Impedance** INPUT 1 (Guitar(Hi-Z)type): 1 MΩ, INPUT 1 to 4 (1/4" phone type): 20 kΩ, INPUT 3 to 4 (RCA type): 20 kΩ
- **Nominal Output Level** Monitor/AUX: -10 dBu, Master Out: -10 dBu
- **Output Impedance** Monitor/AUX: 1.6 kΩ, Master Out: 1.6 kΩ, Phones: 100 Ω
- **Recommended Load** Impedance Monitor/AUX: 20kΩ or greater, Master Out: 20kΩ or greater, Phones: 8 to 50Ω
- **Residual Noise Level** Monitor/AUX: -91 dBu or less, Master Out: -91 dBu or less (input terminated with 1 kΩ, Input Sens: +4 dBu, IHF-A, typ.)
- **Effects** Algorithms: 32, Preset Patches:250, User Patches: 200
- **Display** 69 x 25 mm Custom backlit graphic LCD
- **Connectors** Digital Outputs (S/P DIF Coaxial, Optical), Analog Inputs (1/4" x 5, RCA x 2), Monitor/AUX Outputs (RCA x 2), Master Outputs (RCA x 2) , MIDI (IN, OUT), Phones (Stereo 1/4"), Footswitch
- **Power Supply** AC117V/230V/240V
- **Power Consumption** 20W
- **Dimensions** 410 (W) x 307 (D) x 88 (H) mm (16-3/16" x 12-1/8" x 3-1/2")
- **Weight** 4.5 kg (9 lbs. 15 oz.)
- **Accessory** Demo Disk
- **Options** VS4S-1 VS-840 SCSI Board for data backup on external Zip™ drive and hard drive

*The specifications are subject to change.



VS-840GX Digital Studio Workstation

New Features, Enhanced Flexibility, More Fun.

COSM



With the VS-840GX Digital Studio Workstation, Roland breaks the price/performance barrier in 8-track digital workstations by adding more of the features that guitarists, songwriters and home recordists want—like twice the amount of Virtual Tracks, new COSM Speaker Modeling technology, .WAV file conversion, and new JamTracks.

- 8-track digital studio workstation with internal Zip®250 drive
- 128 Virtual Tracks—twice that of the VS-840EX
- COSM Speaker Modeling simulates a variety of popular reference speakers
- PC compatible; converts audio to .WAV file format
- Additional Zip disk featuring JamTracks for playing along and composing

A Super-Studio that Sacrifices Nothing

The VS-840GX V-Studio continues in the tradition of the VS-840EX by offering eight tracks of superb digital recording via an internal Zip®250 drive. It also offers all the great onboard effects that the VS-840EX has become known for, including studio-quality reverbs, delays, chorus and multi's—plus COSM Guitar and Bass amp models, a Bass Simulator and more. But this affordable studio offers an even greater workspace than the VS-840EX, doubling the amount of Virtual Tracks to 128 using separate A and B banks. So there's even more room to store ideas and takes without sacrificing earlier recordings.

COSM Speaker Modeling, JamTracks, and More

A new COSM Speaker Modeling algorithm lets you reference your mix across a range of popular speakers using the Roland DS-90A 24-bit Digital Reference Monitors. And with the VS-840GX's new .WAV conversion function, you can easily transfer your tracks to a PC for creating CD's or MP3 files*. To get you started, the VS-840GX includes a separate JamTracks disk with pre-recorded backing tracks in nine musical styles; just hit the Play button and start jamming.

*Requires installation of optional VS4S-1 SCSI port for transferring .WAV files to an external Zip drive for use with PC.

VS-840GX Specifications

- **Tracks** Tracks: 8, V-Tracks: 128 (8 Tracks x 8 V-Tracks x 2 Banks) * Up to 4 tracks can be recorded simultaneously, and up to 8 tracks can be played back simultaneously.
- **Max. Useful Capacity** Zip Disk: 250 MB • **Internal Memory** Songs: Max. of 200 (each disk) * The number of songs varies depending on factors such as recording mode and length.
- **Equalizer** HI, MID, LOW • **Recording Mode** Multitrack 1 (MT1), Multitrack 2 (MT2), Live 1 (LV1), Live 2 (LV2) • **Signal Processing** AD Conversion: 20-bit, 64 times oversampling, DA Conversion: 20-bit, 128 times oversampling, Internal Processing: 24-bit (mixer section) • **Sample Rate** 44.1 kHz, 32.0 kHz • **Frequency Response** Sample Rate 44.1 kHz: 20 Hz to 21.0 kHz (+1/-1.5 dB), 32.0 kHz: 20 Hz to 15.5 kHz (+1/-1.5 dB) • **Total Harmonic Distortion** 0.08 % or less (INPUT SENS = -10 dBm, 1 kHz at nominal output level, recording mode: MT1) • **Nominal Input Level (Variable)** INPUT 1 (Guitar (Hi-Z)): -50 to +4 dBm, INPUT 1 to 4 (1/4" phone): -50 to +4 dBm, INPUT 3 to 4 (RCA phono): -50 to +4 dBm • **Input Impedance** INPUT 1 (Guitar (Hi-Z)): 1 M Ω , INPUT 1 to 4 (1/4" phone): 20 k Ω , INPUT 3 to 4 (RCA phono): 20 k Ω • **Nominal Output Level** MON/AUX: -10 dBm, MASTER OUT: -10 dBm • **Output Impedance** MON/AUX: 1.6 k Ω , MASTER OUT: 1.6 k Ω , PHONES: 100 Ω
- **Recommended Load Impedance** MON/AUX: 20 k Ω or greater, MASTER OUT: 20 k Ω or greater, PHONES: 8 to 50 Ω
- **Residual Noise Level** MON/AUX: -91 dBm or less, MASTER OUT: -91 dBm or less (input terminated with 1 k Ω , INPUT SENS: +4 dBm, IHF-A, typ.) • **Interface** DIGITAL OUT: Coaxial (conforms to S/PDIF), Optical type • **Display** 69.0 x 25.0 mm (Backlit LCD) • **Connectors** MIDI (IN, OUT), DIGITAL OUT (Coaxial, Optical), FOOT SWITCH (1/4" phone), PHONES (Stereo 1/4" phone), INPUT 1 (Guitar (Hi-Z) 1/4" phone), INPUT 1 to 4 (1/4" phone), INPUT 3 to 4 (RCA phono), MON/AUX A, B (RCA phono), MASTER OUT L, R (RCA phono) • **Dimensions** 410 (W) x 307 (D) x 88 (H) mm / 16-3/16" x 12-1/8" x 3-1/2" • **Weight** 4.5 kg/9 lbs. 15 oz.
- **Options** SCSI Board VS4S-1 (0 dBm=0.775 Vrms)

**The specifications are subject to change.*



VS-840GX Rear Panel

VS-840 Synchronization

The VS-840's built-in synchronization capabilities allow you to integrate the VS-840 with other recording and/or MIDI devices in your studio. For example, you can synchronize the VS-840 with another recording device, such as the VS-880, to gain more recording tracks. You can also synchronize the VS-840 with your MIDI sequencer, enabling you to record non MIDI instruments such as acoustic guitar or vocals along with your MIDI sequences. The purpose of this document is to demonstrate the synchronization capabilities of the VS-840. First, we will provide definitions of some of the common terms related to synchronizing recording devices. Next, we will show you how to synchronize the VS-840 with the VS-880. Then, we will show you how to setup the VS-840 to synchronize with a drum machine. Finally, we will show how to setup the VS-840 to synchronize with a computer sequencer.

I. Common Terms

The following is a list of terms you might encounter regarding the VS-840 and synchronization:

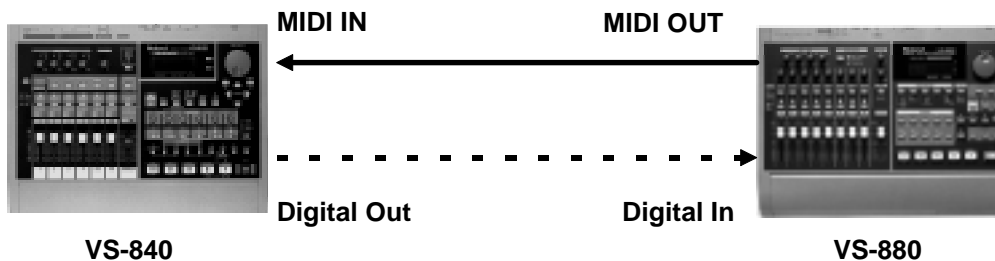
Digital Clock	Digital Clock is a timing reference on digital recording devices that is generated from an internal quartz crystal oscillator. It is used to provide timing stability during the recording process. Whenever a signal is recorded digitally between two devices, the clock signal from the source device is used for the timing reference. This ensures that there will be no timing irregularities during the recording process.
MIDI Clock	MIDI Clock is a stream of digital timing pulses that provides information about the current tempo of a song or sequence. It is commonly used with hardware sequencers and drum machines. While it is commonly used by many devices today, it is not precise enough to control a hard disk recorder like the VS-840. However, the VS-840 can generate MIDI Clock to control other devices. MIDI Clock works in conjunction with other MIDI messages including Start, Stop, Continue, and Song Position Pointer.
MIDI Machine Control (MMC)	MIDI Machine Control consists of controller messages sent from one device to another via MIDI to start recording, playing, and arming tracks for recording. This communication data does not contain any timing information.
MIDI Time Code (MTC)	MIDI Time Code is a synchronization signal that is digitally sent through MIDI for synchronization of absolute time between audio devices. Similar to SMPTE, MTC can have different frame rates for synchronization. MTC can be converted to SMPTE time code by using a device such as the Video Syncman by MIDIMan. See SMPTE for more details.
SMPTE	SMPTE is an acronym for Society of Motion Picture and Television Engineers. It also refers to a common standard for measurement of intermodulation distortion (IM), and for a standard reference code for identification of frames of film or videotape; SMPTE code is also used for synchronization of two or more audio tape recorders. See SMPTE Time Code for more details.
SMPTE Time Code	A synchronization code developed for video designed for frame edge lockup of multiple video and audio devices. SMPTE is calculated in Hours:Minutes:Seconds:Frames. There are several different types of SMPTE frame rates, i.e.: 30 frames per second, 29.97 fps non-drop, 29.97 fps drop, 25 fps (European standard), and 24 fps (used for film). The VS-840 supports all types of MTC which corresponds to all types of SMPTE. You will need to use the MIDIMAN 'Video Syncman' unit to interface between a SMPTE source and the VS-840. The VS-840 will also resolve (exactly lock to) the frame edge of the SMPTE or MTC. This means that the lock will not drift or go out of sync even if the song or project is very long.

II. Syncing the VS-840 with the VS-880 Using MIDI Machine Control and Digital Clock

Use the following procedure to synchronize the VS-840 with the VS-880. The VS-880 will be the master device using MIDI Machine Control (MMC) and Digital Clock.

Setup

- 1) Connect the MIDI OUT jack of the VS-880 to the MIDI IN jack of the VS-840.
- 2) Connect the coaxial digital output of the VS-840 to the digital input of the VS-880.



NOTE: Make sure that both the VS-840 and the VS-880 are powered on and that the current song's sampling rate (48kHz, 44.1kHz, or 32kHz) is the same on both units. If you are unsure what the current song's sampling rate is set to, press PLAY/DISPLAY on the VS-880 to access the Play screen (if necessary). Then, hold SHIFT and press SONG. The sampling rate will be displayed under "SYNC MODE." On the VS-840, press DISPLAY to return to the main screen (if necessary). The sampling rate will be displayed under "SONG #." The sampling rate is linked to the song. If the sampling rates do not match, you will need to create a new song on either the VS-840 or the VS-880 with a sampling rate that matches the other unit.

VS-880 Settings

- 1) Press SELECT so that INPUT>TRACK is lit.
- 2) Press SYSTEM until "SYS MIDI PRM?" is displayed. Press YES/ENTER.
- 3) Press PARAMETER RIGHT until "MIDI Thru" is displayed. Use the TIME/VALUE dial to select "MIDI Thru = Out."
- 4) Press PARAMETER RIGHT until "SysEx Tx" is displayed. Use the TIME/VALUE dial to select "SysEx Tx = On."
- 5) Press PARAMETER RIGHT until "MMC" is displayed. Use the TIME/VALUE dial to select "MMC = MASTER."
- 6) Press PARAMETER RIGHT until "CtrLocal" is displayed. Use the TIME/VALUE dial to select "CtrLocal = On."
- 7) Press PARAMETER RIGHT until "CtrType" is displayed. Use the TIME/VALUE dial to select "CtrType = Off."
- 8) Press SYSTEM until "Sync/Tempo PRM?" is displayed. Press YES/ENTER and "Syn:Source" will be displayed.
- 9) Use the TIME/VALUE dial to select "Syn:Source = INT."
- 10) Press SYSTEM until "System PRM?" is displayed. Press YES/ENTER and "SYS Master Clk" will be displayed.
- 11) Use the TIME/VALUE dial to select "SYS Master Clk = DIGITL."

VS-840 Settings

- 1) Press UTILITY and use the CURSOR LEFT / RIGHT buttons to highlight the MIDI icon. Press YES/ENTER.
- 2) Press the CURSOR DOWN button and use the TIME/VALUE dial to select "SLAVE."

Routing the Audio Signal

- 1) Set the MASTER fader on the VS-840 to 0db (approximately two-thirds of the way up).
- 2) Press EDIT/SOLO on the VS-880 (above the master fader) until "MST StereoIn =" is displayed.
- 3) Use the TIME/VALUE dial to select "Digital."
- 4) Press PARAMETER RIGHT so that "MST STIn Level =" is displayed. Use the TIME/VALUE dial to adjust the overall level of the VS-840 as desired.
- 5) Press PARAMETER RIGHT so that "MST StIn Bal =" is displayed. Use the TIME/VALUE dial to select "0."

When you press PLAY on the VS-880, both units will start playing. The VS-880's mix output will contain audio from both units.

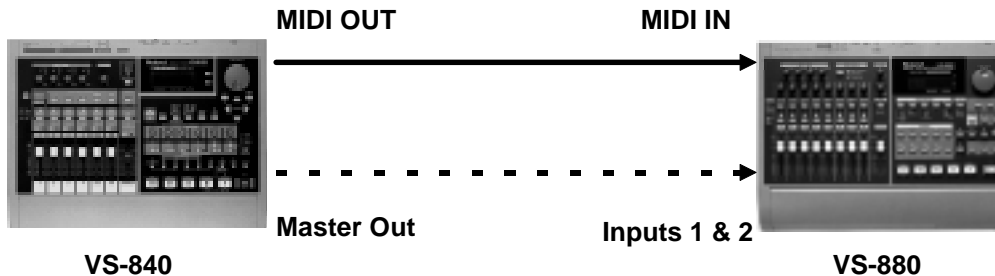
III. Syncing the VS-840 with the VS-880 Using MIDI Time Code

Use the following procedure to synchronize the VS-840 with the VS-880. The VS-840 will be the master device using MIDI Time Code.

Setup

- 1) Connect the MIDI OUT jack of the VS-840 to the MIDI IN jack of the VS-880.
- 2) Connect the left master output of the VS-840 to Input 1 (input B section) of the VS-880.
- 3) Connect the right master output of the VS-840 to Input 2 (input B section) of the VS-880.

NOTE: If you have any cables connected to Inputs 1 or 2 in the Input A section of the VS-880, you will need to disconnect them.



VS-880 Settings

- 1) Press SELECT so that INPUT>TRACK is lit.
- 2) Press SYSTEM until "Sync/Tempo PRM ?" is displayed and press YES/ENTER.
- 3) Use the TIME/VALUE dial to select "Syn:Source = EXT."
- 4) Press PARAMETER RIGHT three times so that "Syn:MTC Type" is displayed. Use the TIME/VALUE dial to select "30" (if necessary).
- 5) Press SYSTEM until "MIDI PRM ?" is displayed and press YES/ENTER.
- 6) Press PARAMETER RIGHT until "SysEx Rx =" is displayed. Use the TIME/VALUE dial to select "ON."
- 7) Press PARAMETER RIGHT until "MMC =" is displayed. Use the TIME/VALUE dial to select "SLAVE."

VS-840 Settings

- 1) Press UTILITY and use the CURSOR LEFT / RIGHT buttons to highlight the MIDI icon. Press YES/ENTER.
- 2) Press the CURSOR DOWN button and use the TIME/VALUE dial to select "MASTER."
- 3) Press UTILITY and use the CURSOR RIGHT button to highlight the SYNC / TEMPO icon.
- 4) Press YES/ENTER and use the TIME/VALUE dial to select "MTC."
- 5) Press the CURSOR DOWN button and use the TIME/VALUE dial to select "30" (if necessary).
- 6) Press DISPLAY to return to the main screen.

Routing the Audio Signal

- 1) Set the MASTER fader on the VS-840 to 0db (approximately two-thirds of the way up).
- 2) Set the INPUT SENS 1 and 2 knobs to "-10" (straight up).
- 3) Press EDIT/SOLO on the VS-880 (above the master fader) until "MST StereoIn =" is displayed.
- 4) Use the TIME/VALUE dial to select "Digital."
- 5) Press PARAMETER RIGHT so that "MST STIn Level =" is displayed. Use the TIME/VALUE dial to adjust the overall level of the VS-840 as desired.
- 6) Press PARAMETER RIGHT so that "MST StIn Bal =" is displayed. Use the TIME/VALUE dial to select "0."

When you press PLAY on the VS-880, both units will start playing. The VS-880's mix output will contain audio from both units.

Synchronizing with a Drum Machine (MIDI Clock)

The VS-840 can be synchronized with most drum machines using MIDI Clock messages. The VS-840 will need to be the master device. Use the following procedure to synchronize the VS-840 with a drum machine:

Setup

- 1) Connect the MIDI OUT jack of the VS-840 to the MIDI IN jack of your drum machine.
- 2) Connect the audio output(s) of your drum machine to the input section of the VS-840 or to an external mixer and/or amplifier.



Settings

- 1) Press UTILITY.
- 2) Use the CURSOR LEFT / RIGHT buttons to highlight the SYNC / TEMPO icon and press YES/ENTER.
- 3) Use the TIME/VALUE dial to select "MIDI CLOCK."
- 4) Set your drum machine to synchronize to MIDI Clock messages and press PLAY on the VS-840. Your drum machine should start playing in sync with the VS-840.

Routing the Audio Signal

If you are sending the audio output of your drum machine to the inputs 1 and 2 of the VS-840, use the following procedure to route the drum machine output to the master output of the VS-840:

- 1) Press MODE so that SELECT is lit.
- 2) Press the SELECT buttons for channels 1 and 2 so they are set to SOURCE (orange).
- 3) Press MONITOR SEL so that TR CUE + MASTER is lit.
- 4) Set the INPUT SENS 1 and 2 knobs to the 12 o'clock position (straight up).
- 5) Press PAN and use the CURSOR LEFT / RIGHT buttons to highlight the Channel 1 pan icon.
- 6) Use the TIME / VALUE dial to select "L63."
- 7) Press the CURSOR RIGHT button and use the TIME / VALUE dial to select "R63" for channel 2.
- 8) Use the channel 1 and 2 faders to adjust the level of the drum machine as desired.

Creating a Tempo Map

The VS-840 has a Tempo Map function that allows you to determine the tempo for its internal metronome or external MIDI devices. The Tempo Map lets you specify changes in the tempo (in beats per minute) and/or the time signature for each measure of your song. Use the following procedure to create a Tempo Map:

- 1) Press UTILITY and use the CURSOR LEFT / RIGHT buttons to highlight the SYNC / TEMPO icon. Press YES / ENTER.
- 2) Use the CURSOR DOWN button to highlight "TEMPO [ENTER] HERE!" and press YES / ENTER.
- 3) Use the CURSOR buttons to highlight "120.0" and the TIME / VALUE dial to adjust the tempo as desired.
- 4) Use the CURSOR LEFT button to highlight "4/4" and the TIME / VALUE dial to adjust the time signature as desired. If your song does not contain any additional tempo and/or time signature changes, skip to step #10.
- 5) Use the CURSOR buttons to highlight "<NEW>" for Tempo Map number 2.
- 6) Use the TIME / VALUE dial to select the desired tempo.
- 7) Press CURSOR LEFT and use the TIME / VALUE dial to select the desired time signature.
- 8) Press CURSOR LEFT and use the TIME / VALUE dial to select the measure where the tempo change will occur.
- 9) Repeat steps 5-8 to create any additional tempo changes if desired.
- 10) Press DISPLAY to return to the main screen.

Using the Sync Track

The VS-840 contains a Sync Track function that allows you to record MIDI Clock messages from an external device and then send those same messages out on playback. This is extremely useful if you have created a song on your sequencer or drum machine that contains numerous tempo and/or time signature changes and you want to synchronize it with the VS-840. Use the following procedure to create a Sync Track:

- 1) Press UTILITY and use the CURSOR LEFT / RIGHT buttons to highlight the SYNC / TEMPO icon. Press YES/ENTER.
- 2) Use the CURSOR DOWN button to highlight "SYNC REC" and press YES / ENTER. "Wait for Start" will be displayed.

Using the Sync Track (continued)

- 1) Start playing your sequencer or drum machine.
- 2) Stop playback on your sequencer / drum machine when the song is finished playing.
- 3) Use the CURSOR UP button to highlight "Gen" and use the TIME / VALUE dial to select "Sync TRACK."
- 4) Press PLAY / DISPLAY to return to the main Play screen.
- 5) Make sure that your sequencer / drum machine is in external sync mode and press PLAY on the VS-840. Your sequencer / drum machine should begin playing back in sync with the VS-840 using the same tempo changes that you originally programmed.

Synchronizing with a Computer (MTC)

The VS-840 can be synchronized with most computer-based sequencing programs by using MIDI Time Code (MTC). The VS-840 will need to be the master device. Use the following procedure to synchronize the VS-840 with a computer-based sequencer:

Setup

- 1) Connect the MIDI OUT jack of the VS-840 to the MIDI IN jack on your MIDI interface.
- 2) Connect the audio output of your MIDI sound module(s), keyboard, and/or sound card to the input section of the VS-840 or to an external mixer and/or amplifier.

Settings for the VS-840

- 1) Press UTILITY.
- 2) Use the CURSOR LEFT / RIGHT buttons to highlight the SYNC / TEMPO icon and press YES/ENTER.
- 3) Use the TIME/VALUE dial to select "MTC."
- 4) Press the CURSOR DOWN button and use the TIME/VALUE dial to select "30" (if necessary).

Routing the Audio Signal

If you are sending the audio output of your sound card/module to the input section of the VS-840, use the following procedure to route the sound card/module output to the master output of the VS-840:

- 1) Press MODE so that SELECT is lit.
- 2) Press the SELECT buttons for channels 1 and 2 so they are set to SOURCE (orange).
- 3) Press MONITOR SEL so that TR CUE + MASTER is lit.
- 4) Set the INPUT SENS 1 and 2 knobs to the 12 o'clock position (straight up).
- 5) Press PAN and use the CURSOR LEFT / RIGHT buttons to highlight the Channel 1 pan icon.
- 6) Use the TIME / VALUE dial to select "L63."
- 7) Press the CURSOR RIGHT button and use the TIME / VALUE dial to select "R63" for channel 2.
- 8) Use the channel 1 and 2 faders to adjust the level of the sound card/module as desired.

Settings for your Computer

- 1) Set your sequencing software to sync to external MIDI Time Code.
- 2) Set the MTC frame rate on your sequencing software to "30."
- 3) Press PLAY on your sequencing software to enter play standby mode (not necessary on all sequencers).
- 4) Press PLAY on the VS-840 and your sequencing software should begin playing back in sync.

We hope that this document has provided you with a better understanding of the procedures required to synchronize the VS-840 to external devices. These capabilities should allow you use the VS-840 and your other recording devices to their fullest potential.

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Supplemental Notes

Updating the VS-840 with SMFs

June 23rd, 1999 SN113 v1.0



The VS-840 can be user-updated to add new features and to install the latest version available from Roland Corporation. The updated software is provided as eight Standard MIDI Files on floppy disks formatted for either IBM-compatible or Macintosh computers.

The tools required are:

- MIDI sequencer (software or hardware) that can load Standard MIDI Files and transmit System Exclusive data.
- MIDI cable
- VS-840
- VS-840 System Software update disk(s)

Update Procedure

- 1) Connect the MIDI OUT port of the sequencer to the MIDI IN port of the VS-840.
- 2) Hold down MODE, INPUT, and ENTER while powering on the VS-840. The message "Receive MID-EX?" will be displayed.
- 3) Press YES. The message "Now Waiting..." will be displayed.
- 4) Load the first Standard MIDI File (VS840000.mid) into your sequencer.
- 5) Play all Standard MIDI Files: "VS840000. mid" to "VS840007.mid" in order. After all SMF's have been played "Version Up?" will be displayed.
- 6) Press YES and the message "UserArea Update?" will be displayed.
- 7) Press YES and the message "END!!! Please POWER OFF/ON" will be displayed.
- 7) Restart the VS-840 (power off and then on again).

Troubleshooting Information

If you have problems with these files, you can order new update disks directly from Roland. Please call Customer Service at 323-890-3700 ext. 2289 and request one of the following:

Zip® Disk update - Part # SU-31
SMF (PC) update - Part # SU-36
SMF (Mac) update - Part # SU-37

You can also download these files from our Website (www.rolandus.com).

Computer Troubleshooting Tips

If you have problems updating your unit with a computer, the first place to look is your MIDI/interface setup. A MIDI Interface is used to connect MIDI devices to your computer. The setup procedure for your MIDI interface will vary depending on the type of interface and computer you are using. On the Macintosh, MIDI interfaces are usually connected to the printer, modem, or USB port(s). The interface is then controlled by either the sequencing software itself or by one of three programs: Apple MIDI Manager, OMS (Opcode), or FreeMIDI (Mark of the Unicorn). On Windows based computers, MIDI interfaces are usually connected to the serial port, parallel port, USB port, or directly to a sound card. Each interface will probably have its own software drivers that must be installed and configured for the interface to operate correctly.

If you are having trouble getting your MIDI Interface to work properly, there are a number of common troubleshooting techniques you can use to determine where the problem lies. On the Macintosh, most setup problems are the result of conflicting extensions in your system folder. Try disabling any extensions that are not absolutely necessary for the program to run and restart your computer. On Windows based computers, most setup problems are the result of conflicting IRQ and/or Port Address settings. Make sure that each of the devices connected to your computer is set to its own IRQ and Port Address and that the corresponding software driver(s) reflects those settings. Defective or incorrectly connected MIDI cables are another common problem encountered when configuring a MIDI sequencing setup.

Troubleshooting Information (cont.)

Hardware sequencers (such as the MC-80 and XP-50/60/80) are very reliable for transferring system exclusive MIDI data. We have successfully updated the VS-840 with the following computer-based MIDI sequencing programs; Vision (Opcode), Performer (MOTU), Cubase (Steinberg), and Logic (Emagic). Some sequencers do not send system exclusive messages that are embedded in a Standard MIDI File properly. These programs will not work for this purpose. If you do not have access to a sequencer package, Roland has two SMF Updater applications available. You can order part number SX-30 (PC) or SX-31 (Mac) from our Customer Service department for free, or download them from the Miscellaneous Downloads section of our Website (www.rolandus.com). You will need a MIDI interface attached to your computer to use these programs.

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Custom Effects Settings

THE NOW FAMOUS A66 COMPRESSION PATCH

Description: Useful compression patch for boosting soft signals

The essence is to use the compressor with a really long attack and a short release. This lets the transients through without choking the mix, but really boosts those soft levels. The short release helps the attenuation stop quickly, getting rid of any necking. This works on a variety of program material, and it almost always improves the burn factor if you plug a CD into the VS and route it through. It feels good to know that you can take professionally mastered CDs done at expensive studios, route them through a low cost compressor/FX unit and come out with something that sounds better than what came in.

NS: OFF

COMP: ON

THRESH: -20 db (adjust to taste)

LEVEL: adjust to taste

ATTACK: 90

RELEASE: 5

RATIO: 4:1

ENH: ON

FREQ: 1.3 KHz

SENS: 5

MIXBAL: 20

EQ: ON

Lows & mids are untouched

Cut about 2 dB at ~6KHz.

Submitted By: Jack Hobson-Dupont (With Thanks to Jan Pekau)

Stereo Mixdown Compressor

Description: Insert this patch across the Master Buss for mixdown to dat. Adds heaps of punch to any mix. A good smooth mixdown compressor without any "squashing" effect. Adjust the compressor level to suit your own mix, however 3dB seems to be a good all round make up gain setting.

PatchData: A96 - Dual Comp/Lim

CLA:Comp/Lim=On
CLA:Detect=A
CLA:Level=3dB
CLA:Thrsh=-15
CLA:Attack=100
CLA:Release=0
CLA:Ratio=1.5:1
NSA:NoiseSup=Off
CLB:Comp/Lim=On
CLB:Detect=B
CLB:Level=3dB
CLB:Thrsh=-15
CLB:Attack=100
CLB:Release=0
CLB:Ratio=1.5:1
NSB:NoiseSup=Off

Submitted by: Dave Dwyer

Nice Bass Effect

Posted on VS-Planet by Leonard

Adjust Stereo Multi Effect as follows:

COMPRESSOR:

Effect On/Off = on
Detector in = link
Effect type = Comp
Threshold = 40
Ratio = 4:1
Attack = 20
Release = 100
Tone = 0
Level = 60

NOISE SUPPRESSOR:

NS on/off = on
Detector in = link
Thresh = 90
Release = 50

ENHANCER:

Effect on/off = on
Detector in = link
Sens = 65
Frequency = 1.0k
Mix Level = 50
Low Mix Level = 50
Level = 100

EQUALIZER:

Effect on/off = on
Low Gain = +1
Low-Mid Gain = +4
Low-Mid Freq = 200
Low-Mid Q = 0.5
High-Mid Gain = +2
High-Mid Freq = 2.0k
High-Mid Q = 1.0
High Gain = +5
Level = 0