JUPITER

JUPITER-80 Version 2 / JUPITER-50

Roland

Better Life with Music

JUPITER-4
1978 — Roland's first polyphonic analog synthesizer (4 voices). The 4VCO sound in unison mode is superb, and it also has a user patch-memory function built in.

JUPITER-8
1981 — A deluxe 8-voice polyphonic analog synthesizer with 64 memory locations. Its smorgasbord of features, including key split, patch preset, and auto arpeggio, earned this synth global praise and legendary status.

JUPITER-6
1983 — Scaling down the JUPITER-8 to 6-voice polyphony, coupled with creative tweaking by Roland's engineers, allowed the JUPITER-6 to hit the market at half the price of its big brother. It also made news with its MIDI terminal and highly stable oscillator.

JUPITER

The "JUPITER" name has become synonymous with innovation and state-of-the-art design that's built for the future.

Since the game-changing debut of JUPITER-4 in 1978, all synthesizers anointed with the "JUPITER" badge have symbolized the state of the art, and have ushered in new creative possibilities as Roland's flagship synths. Today, the flagship JUPITER-80 has evolved into Version 2, while the JUPITER-50, represents the expressive sound of the JUPITER-80 in a more lightweight and affordable package. Both of these new-generation instruments mark new milestones in the JUPITER lineage.

JUPITER-50

JUPITER-80 Version 2

Behavior Modeling Technology

Not only physical modeling of the instruments, Roland takes it a step further by modeling the instrument's distinctive behavior that responds to how the performer plays, resulting in true-to-life, expressive sounds in realtime.

SuperNATURAL

SuperNATURAL

Taking advantage of Behavior Modeling technology, SuperNATURAL is Roland's exclusive sound set that achieves a new level of realism and expression that were difficult to realize with previous sound generators.

The JUPITER-80 and -50 are powered by SuperNATURAL, offering mind-bending synthesis and surreal sound as well as natural, true acoustic tones that reproduce the playing expressions unique to acoustic instruments.

New Possibilities with
Live Sets and Registrations

Live Sets are made by overlaying up to four SuperNATURAL tones to achieve fat and heavy sounds with unique expression. Live Sets that are mapped to the upper and lower registrations in JUPITER-80, and the upper registration in JUPITER-50, can be saved as "Registrations." You can retrieve these registrations instantly for handy access during live performance.

SuperNATURAL sound — ultimate expression and authenticity

Enhanced SuperNATURAL Synthesizer Tones *SuperNATURAL*

Authentic synth sounds — from classic vintage analog to modern digital

To faithfully recreate the unique sound of analog synths, we've meticulously analyzed the behavior of oscillators, filters, and envelopes that are unique to analog synths. In the new JUPITER series, a single synth tone comprises three OSC, FILTER, AMP, and LFO chains, which give you absolutely powerful synthesis control over a single tone. You also have access to ring modulation, WAVE shapes for creating complex tones, and the popular UNISON mode, which lets you overlay up to eight waves per OSC to create thick and fat analog synth tones.

■ More than 350 types of PCM digital-synth waveform patterns are onboard, plus a coveted collection of analog waveforms that harkens back to classic vintage synths.

Seven types of analog waveforms provide the DNA of vintage synthesizers.

〰	SAW
⊓	SQUARE
⊓⊔	PULSE/PWM
⋀	TRIANGLE
∿	SINE
▦	NOISE
⋀⋀	SUPER SAW

PCM waveform patterns let you recreate contemporary digital synth sounds.

JP-8 Saw	Unison Sync+	Heaven Wave	FM Super Bs
MG Saw 1	X-Mod Wave 7	DigiSpectrum	Metal Vox 3+
GR-300 Saw	FeedbackWave	Syn Vox 2	Wave Table
P5 Saw	SubOSC Wave3	SBF Lead 1	JLOrg1 Fst L	Strings 5 L
JP-8 Pls 05	JD Fat Saw	FM EP 4	Tp Section
Sync Sweep	VP-330 Choir	Atmosphere	Dist Gtr 2	Orch. Hit
		Solid Bass	Scratch 6

Three new vintage-inspired LPF onboard

The filter section, which is a key to creating expressive synth tones, now comes with three new types of vintage-inspired LPF (low-pass filter), bringing the total to four types of filters to chose from. These filters allow you to create sounds that are reminiscent of vintage analog synthesizers.

■ **Emulates the filter behavior of an analog synthesizer**
The LPF plays an important role in shaping the tone. It can be used to cut elements from the sound, and can also be used to emphasize elements around the cutoff frequency with resonance. When you control the resonance in an analog synth, the cutoff frequency fluctuates, and signal levels below the cutoff frequency are affected as well. The entire filter changes organically as if it's alive. These changes occur due to the behavior of the analog circuits and the components used, such as resistors and condensers, which make up the unique sound of an analog synth.
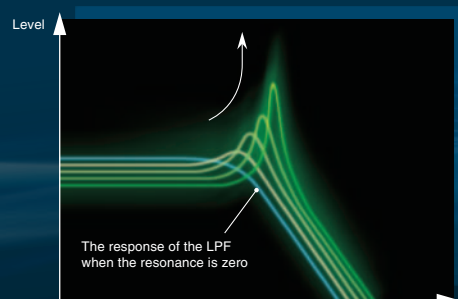
The response of the LPF when the resonance is zero

■ Image: LPF actions of the JUPITER-80/-50.

■ **Four types of LPFs with unique behavior**
The JUPITER-80 and -50 feature four types of LPFs. Each filter behaves differently, even if their cutoff and resonance parameters are the same. The LPF is personalized by its parameter settings and real-time control cutoff frequency and resonance.
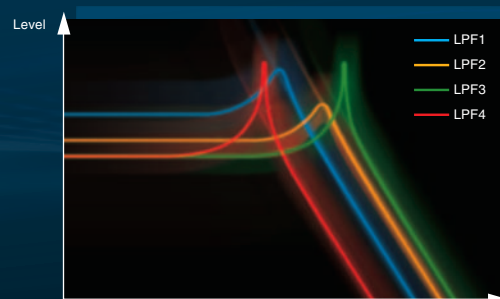
LPF1
LPF2
LPF3
LPF4

■ Image: Filter actions of LPF-1, -2, -3, -4.

■ **Emulates the envelope behavior of an analog synthesizer**
In an analog synth, the electric charge/discharge rate of the envelope rises and falls in a slightly curved line. The JUPITER-80 and -50 faithfully reproduce this attribute for all of its envelopes, including the oscillator, filter, and amplifier. By using this envelope to control the four LPF types, the resulting sound has an incredibly smooth analog feel.
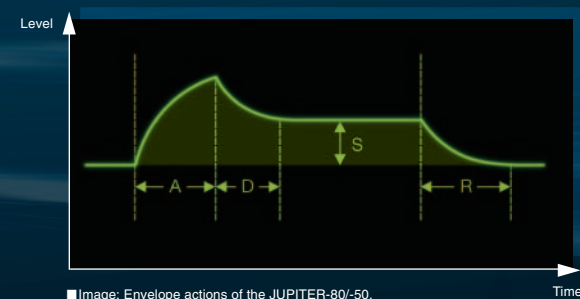
A — D — S — R

■ Image: Envelope actions of the JUPITER-80/-50.

## SuperNATURAL Acoustic Tones *SuperNATURAL*

Reproducing acoustic instruments with SuperNATURAL

When you play the JUPITER-80/-50, you'll immediately be amazed at the quality and realism of its rich SuperNATURAL acoustic sounds, and how naturally and organically they respond and evolve in response to your touch and phrasing. You can enhance the performance characteristics with expressive controllers such as pitch-bend/modulation lever, assignable buttons (S1 and S2), and D-Beam Control.

■ **Examples of SuperNATURAL acoustic tones:**
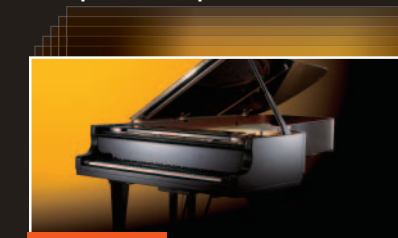
Piano sounds...
Grand-piano sounds exhibit natural decay and seamless tonal changes in response your touch. You can adjust a variety of parameters, such as Stereo Width and Hammer Noise.
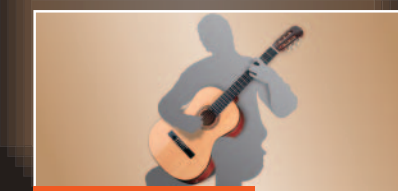
String sounds...
Pitches transition naturally from note to note when playing tied legato-style melody lines. Effortlessly realize portamento, pizzicato, and other articulations unique to string instruments – no special playing technique required.

Brass sounds...
The JUPITER faithfully reproduces the dynamic tonal changes unique to brass instruments – including the transitions of harmonic overtones with a dramatic raise in pitch and the half-valve sound when playing trills.

Acoustic-guitar sounds...
Reproduce chord fingerings, strumming, and melody performances of steel- and nylon-string guitars naturally and easily – right from your keyboard.

JUPITER is designed from the ground up for live performance, with intuitive operation and instant access to any function on stage.

JUPITER

Color-coded buttons
Live Sets, which are made by overlaying up to four SuperNATURAL tones, can be mapped to the upper and lower registrations in JUPITER-80, and the upper registration in JUPITER-50. These tones can then be selected instantly by pressing any of the color-coded buttons.

Registration Play screen
The Registration Play screen lets you quickly select your tones during live performances. This screen gives you a view of eight registrations (one bank) at a glance, and lets you access your desired sound directly through intuitive actions on the touch panel.

USB memory port
The built-in USB memory-based audio player/recorder lets you play and control backing tracks directly onboard. Additionally, the JUPITER-80 and -50 are capable of importing and exporting tone data between each other via USB.

Computer integration with SONAR
These models now support a special "Control Surface Plug-in" that features ACT (Active Controller Technology). This lets you control SONAR, as well as its plug-in effects and synths directly, from JUPITER.
*The software is included with JUPITER-50; web download is available for JUPITER-80.

Part Balance sliders
Both JUPITERs are equipped with Part Balance sliders that let you quickly set volume levels for each part (four parts on JUPITER-80, three on the JUPITER-50). The JUPITER-80's sliders, which have companion LED meter displays, let you accurately control your tones even under dark stage lighting conditions.

Diverse range of live controllers
Deliver dynamic live performances with the expressive front-panel controllers, including the pitch-bend/modulation lever, assignable buttons (S1 and S2), and invisible D-Beam.

Registration buttons
Optimally positioned Registration buttons let you instantly switch between different combinations of the four Parts — including Upper and Lower Live Set stacks of SuperNATURAL sounds.
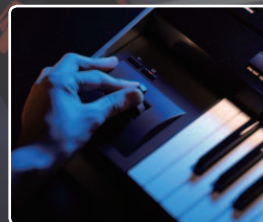
Exceptionally expressive keyboard
The 76-key semi-weighted keyboard provides first-class playability, giving you full control over the subtle nuances of the JUPITER's amazing tones. The JUPITER-80 is also equipped with an aftertouch-sensitive keyboard.
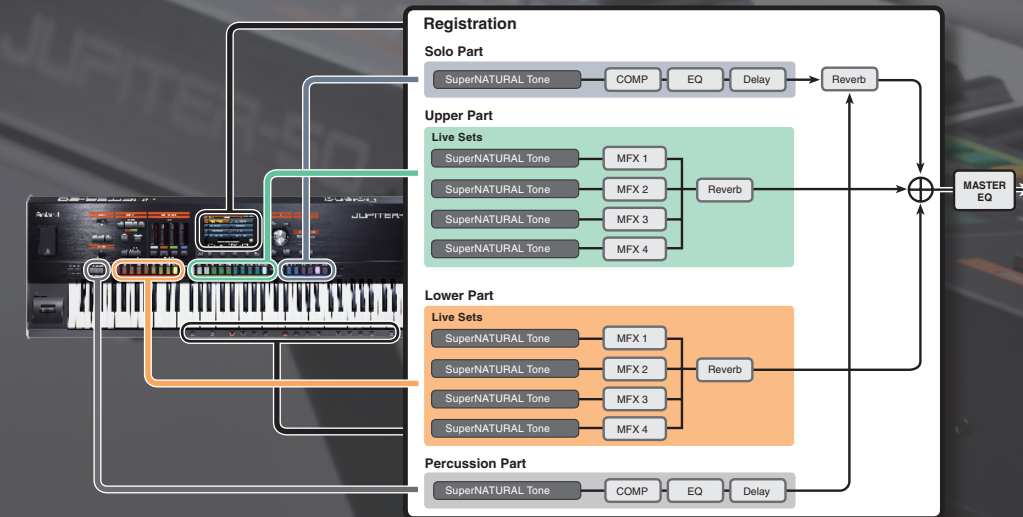
Extensive foot-control features
Multiple foot pedal functions (CTRL 1, CTRL 2, and HOLD) give you additional control over a variety of expressive performance parameters in real time.

Manual button and Registrations
The Manual button is very useful for easily and quickly selecting tones, as well as combining different tones. You can save settings for individual parts to Registrations, which you can instantly retrieve during live performances.

Cutoff and Resonance knobs
Dedicated knobs are provided for filter cutoff and resonance. Use resonance to emphasize frequencies near the cutoff frequency, giving your sounds edge and emphasis. Explore the many creative possibilities these hands-on controls provide.

Control synth tones on your iPad®
You can control SuperNATURAL synth-tone parameters, including the new vintage-inspired filters, from the comfort of your large iPad display.
*Visit the Roland website for more information and system requirements for the "JP Synth Editor" app.
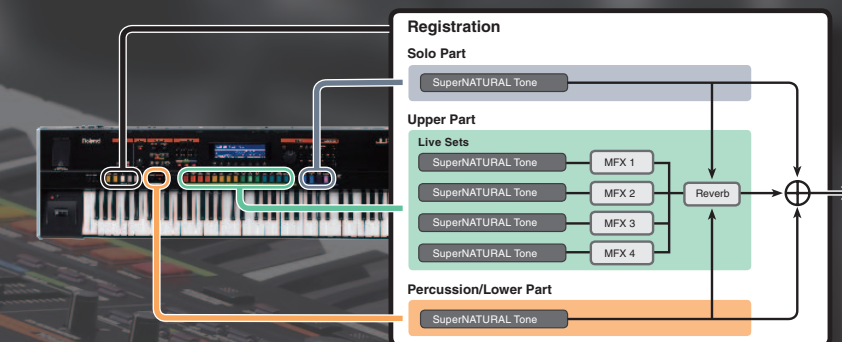
JUPITER-80 Version 2 configuration
The JUPITER-80's sound engine consists of four parts: solo, upper, lower, and percussion. You can create "Live Sets" by overlaying up to four SuperNATURAL tones, and then registering them to upper or lower parts. And by layering two Live Sets, you can easily create fat, densely stacked tones. You can save combinations of tones and other part settings as "Registrations" for instant retrieval.

Registration

Solo Part: SuperNATURAL Tone — COMP — EQ — Delay — Reverb

Upper Part — Live Sets:
- SuperNATURAL Tone — MFX 1
- SuperNATURAL Tone — MFX 2 — Reverb
- SuperNATURAL Tone — MFX 3
- SuperNATURAL Tone — MFX 4

Lower Part — Live Sets:
- SuperNATURAL Tone — MFX 1
- SuperNATURAL Tone — MFX 2 — Reverb
- SuperNATURAL Tone — MFX 3
- SuperNATURAL Tone — MFX 4

Percussion Part: SuperNATURAL Tone — COMP — EQ — Delay

MASTER EQ
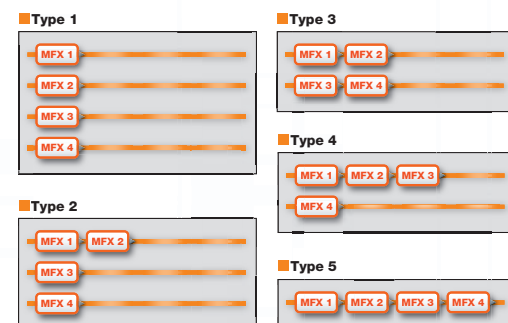
JUPITER-50 configuration
The JUPITER-50's sound engine consists of three parts: solo, upper, and percussion/lower. You can select Live Sets that are comprised of up to four SuperNATURAL upper-part tones. You can save combinations of tones and other part settings as "Registrations" for instant retrieval.

Registration

Solo Part: SuperNATURAL Tone

Upper Part — Live Sets:
- SuperNATURAL Tone — MFX 1
- SuperNATURAL Tone — MFX 2 — Reverb
- SuperNATURAL Tone — MFX 3
- SuperNATURAL Tone — MFX 4

Percussion/Lower Part: SuperNATURAL Tone

Five types of multi-effect structures

You can freely change the MFX (multi-effect) structure of Live Sets on the JUPITER-80 Version 2 as well as the JUPITER-50. With five types of structures onboard, these synths provide extremely powerful and flexible sound-creation capabilities.

Type 1: MFX 1, MFX 2, MFX 3, MFX 4

Type 2: MFX 1 — MFX 2, MFX 3, MFX 4

Type 3: MFX 1 — MFX 2, MFX 3 — MFX 4

Type 4: MFX 1 — MFX 2 — MFX 3, MFX 4

Type 5: MFX 1 — MFX 2 — MFX 3 — MFX 4

	JUPITER-80 Version 2	JUPITER-50
Tones	SuperNATURAL Acoustic Tones, SuperNATURAL Synth Tones	
Maximum Polyphony	256	128
Registrations	256	128
Live Sets	2,560	
Parts	4	3
Keyboard	76 keys (with velocity and channel aftertouch)	76 keys (with velocity)
Display	Graphic Color LCD 800 x 480 dots (touch screen)	240 x 64 dots graphic LCD (with backlit)
Digital Audio Out	COAXIAL	No
Power Supply	AC	AC adaptor (DC 9 V)
Dimensions	mm: 1,231 (W) × 440 (D) × 140 (H) inches: 48-1/2 (W) x 17-5/16 (D) x 5-1/2(H)	mm: 1,268 (W) × 361 (D) × 117 (H) inches: 49-15/16 (W) x 14-1/4 (D) x 4-5/8 (H)
Weight	17.7 kg, 39 lbs. 1 oz.	11.0 kg, 24 lbs. 5 oz.

JUPITER-80 Version 2

SuperNATURAL | VISUAL CONTROL | V-LINK | COSM | D-BEAM | USB AUDIO | USB MEMORY | SONAR LE (for Windows)
For more details, visit Roland home page.

JUPITER-50

SuperNATURAL | VISUAL CONTROL | V-LINK | COSM | D-BEAM | USB AUDIO | USB MEMORY | SONAR LE (for Windows)
For more details, visit Roland home page.

■ The JUPITER-50's chassis is compact lightweight. A custom-fitted CB-76RL carrying case (sold separately) is ideal for casual transport.

■ JUPITER-80 Version 2 Specifications

Keyboard Section	■**Keyboard** 76 keys (with velocity and channel aftertouch)
Sound Generator Section	■**Maximum Polyphony** 256 voices (varies according to the sound generator load) ■**Parts** 4 parts (Upper, Lower, Solo, Percussion) ■**Registrations** 256 (including pre-loaded registrations) ■**Live Sets** 2,560 (including pre-loaded Live Sets) ■**Effects** [for Live Set (Upper/Lower Part)] Multi-Effects (MFX): 4 units, 76 types per each Upper/Lower (total: 8 units), Reverb: 1 unit, 5 types per each Upper/Lower (total: 2 units) [for Solo part/Percussion part] Compressor + Equalizer + Delay: 1 set per each Solo/Percussion (total: 2 sets), Reverb: 1 unit, 5 types [Master Effects] 4-Band Equalizer: 1 unit
USB Memory Song Player/ Recorder Section	■**Tracks** 1 stereo track ■**Playable File Format** Audio File: WAV, AIFF, MP3 ■**Recording File Format** Audio File: WAV (44.1 kHz, 16-bit Linear, stereo) ■**Effects** 4-Band Equalizer: 1 unit ■**External Memory** USB Flash Memory (sold separately) *Use USB Flash Memory sold by Roland. We cannot guarantee operation if other products are used.
Connectors	MAIN OUT jacks (L, R) (XLR type), MAIN OUT jacks (L/MONO, R) (1/4" TRS phone type), SUB OUT jacks (L, R) (1/4" phone type), AUDIO IN jack (Stereo miniature phone type), DIGITAL AUDIO OUT jack (COAXIAL), FOOT PEDAL jacks (CTRL 1, CTRL 2, HOLD), MIDI Connectors (IN, OUT, THRU), USB COMPUTER port (Audio/MIDI), USB Memory port, PHONES jack (stereo 1/4" phone type), AC IN jack
Dimensions/Weight	■**Dimensions** 1,231 (W) x 440 (D) x 140 (H) mm (48-1/2" x 17-5/16" x 5-1/2") ■**Weight** 17.7 kg (39 lbs. 1 oz.)
Other	■**Arpeggiator** Preset: 128 styles, User: 128 styles ■**Harmony Intelligence** 17 types ■**Controllers** D-Beam controller, Pitch Bend/Modulation lever, Assignable buttons (S1, S2), Assignable knobs (E1--E4), PART LEVEL sliders (PERC, LOWER, UPPER, SOLO) ■**Display** Graphic Color LCD 800 x 480 dots (touch screen) ■**Power Consumption** 25 W ■**Accessories** Owner's manual, CD-ROM (USB Audio/MIDI driver), DVD-ROM (SONAR LE), USB MEMORY Protector, Power Cord

■ JUPITER-50 Specifications

Keyboard Section	■**Keyboard** 76 keys (with velocity)
Sound Generator Section	■**Maximum Polyphony** 128 voices (varies according to the sound generator load) ■**Parts** 3 parts (Upper, Solo, Percussion/Lower) ■**Registrations** 128 (including pre-loaded registrations) ■**Live Sets** 2,560 (including pre-loaded Live Sets) ■**Effects** Multi-Effects (MFX): 4 units, 76 types Reverb: 1 unit, 5 types *Multi-Effects can be used only with a Live Set.
USB Memory Song Player/ Recorder Section	■**Tracks** 1 stereo track ■**Playable File Format** Audio File: WAV, AIFF, MP3 ■**Recording File Format** Audio File: WAV (44.1 kHz, 16-bit Linear, stereo) ■**External Memory** USB Flash Memory (sold separately) *Use USB Flash Memory sold by Roland. We cannot guarantee operation if other products are used.
Connectors	MAIN OUT jacks (L/MONO, R) (1/4" TRS phone type), SUB OUT jacks (L, R) (1/4" phone type), AUDIO IN jack (Stereo miniature phone type), FOOT PEDAL jacks (CTRL 1, CTRL 2, HOLD), MIDI Connectors (IN, OUT), USB COMPUTER port (Audio/MIDI), USB Memory port, PHONES jack (stereo 1/4" phone type), DC IN jack
Dimensions/Weight	■**Dimensions** 1,268 (W) x 361 (D) x 117 (H) mm (49-15/16" x 14-1/4" x 4-5/8") ■**Weight** 11.0 kg (24 lbs. 5 oz.)
Other	■**Arpeggiator** Preset: 128 styles, User: 16 styles ■**Harmony Intelligence** 17 types ■**Controllers** D-Beam controller, Pitch Bend/Modulation lever, Assignable buttons (S1, S2), Assignable knobs (CUTOFF/C1, RESONANCE/C2), PART LEVEL sliders (PERC/LOWER, UPPER, SOLO) ■**Display** 240 x 64 dots graphic LCD (with backlit) ■**Power Supply** AC Adaptor ■**Current draw** 800 mA ■**Accessories** Owner's manual, CD-ROM (USB Audio/MIDI driver), DVD-ROM (SONAR LE), USB MEMORY Protector, AC Adaptor, Power Cord (for AC Adaptor)
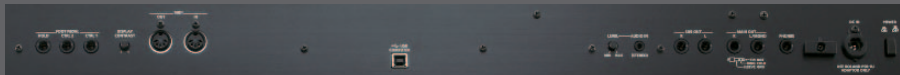
Options

CB-76RL
Carrying Bag
`JUPITER-50`

KS-J8
Keyboard Stand
`JUPITER-80`

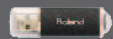**KS-G8**
Keyboard Stand
`JUPITER-80` `JUPITER-50`

KS-18Z
Keyboard Stand
`JUPITER-80` `JUPITER-50`
When using the KS-18Z, ensure that the height of the unit is one meter or lower.

DP-2
Pedal Switch

M-UF2G
2GB USB Flash Memory

EV-5
Expression Pedal

DP-10
Damper Pedal

FS-5U ▣BOSS
Footswitch (momentary type)

RH-300
Stereo Headphones

COSM

Once a musical instrument generates sound vibrations, it reaches the human ear through various mediating objects, each of which significantly affects the sound. The material and configuration of the instrument, the electric/magnetic amplifying system, the air and the reverberation of the room all affect the final sound. Sound modeling, the latest DSP technology, "virtually" reconstructs these objects. Roland's breakthrough Composite Object Sound Modeling (COSM) uses the advantages of multiple modeling methods and succeeds in accurately emulating existing sounds, as well as producing sounds that have never before been created.

MIDI VISUAL CONTROL

MIDI Visual Control is an internationally-used recommended practice that was added to the MIDI specification so that visual expression could be linked with musical performance. Video equipment that is compatible with MIDI Visual Control can be connected to electronic musical instruments via MIDI in order to control video equipment in tandem with a performance.

V-LINK

Using V-LINK, musicians can "play" video from their electronic instrument — or even control a live video camera — when used with Roland's video products. With V-LINK, musicians have a powerful interface for realtime audio and video integration.

⧀Roland
WE DESIGN THE FUTURE

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