Roland

WE DESIGN THE FUTURE

JUPITER-8

ELECTRONIC MUSICAL INSTRUMENTS

MC-8 MICROCOMPOSER
A new concept of control for a new era in electronic music composition.

This innovative, microprocessor-based unit lets any musician use computer wizardry to create synthesizer compositions, even if he knows nothing about computers. Music can be programmed mathematically on the integral ten-key keyboard, directly from a synthesizer. The MC-8 can control up to 8 synthesizers at the same time and program sequences as digital signals which are recorded on audio cassette tapes.
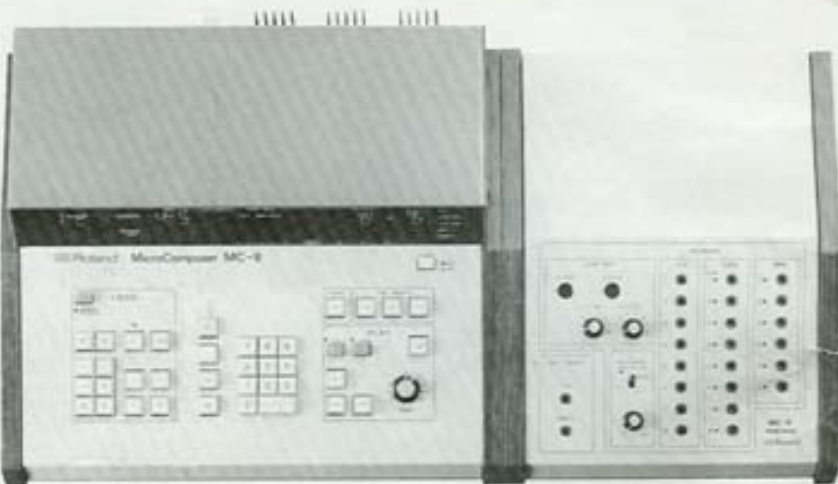

CV OUTPUTS
• 8 independent CV outputs; assignable to any Gate channel output in any combination • Pitch control sensitivity: 1V/oct. • Voltage range: 0 to +10.58V in 1/12V steps (128 steps) • Pitch range: more than 10 octaves • CV1 portamento control: manual or programmable • CV1 portamento time: 0 to approx 3 seconds

GATE OUTPUTS
• 8 independent gate outputs; switchable to minus gate • Gate voltage, gate on: +15V (no load) • Gate voltage, gate off: 0V • Output impedance: 4.7kΩ • Current sink (minus gate only): 2ma

MULTIPLEX OUTPUTS
• 8 bits, plus one bit for CV 1 portamento on/off control Program assignable to any Gate output channel • Pulse voltage, pulse on: +15V (no load) • Pulse voltage, pulse

off: 0V • Output impedance: 4.7kΩ • The multiplex output can be used for control of percussion voices or for controlling synthesizer switching functions, etc.

EXTERNAL INPUTS
• CV sensitivity: 1V/oct. • CV voltage range: 0 to +10.58V in 1/12V steps (128 steps) • CV input impedance: 100kΩ • Gate pulse input, nominal: +15V (switchable to minus gate) • Gate pulse, minimum: +5V • Gate input impedance: 100kΩ

MEMORY CAPACITY
• Capacity: 16 kilobytes
In terms of music, capacity will depend on programming. For a single voice line program, capacity is over 5,200 notes. If more than one CV is assigned to a given gate channel, more notes are possible. For example, with four part harmony (four CV outputs assigned to one gate output), more than 10,600 pitches (over 2,600 chords) are possible.

3

SYSTEM-700 TOTAL STUDIO SYSTEM

A complete studio system you can build piece-by-piece.

The system-700 is the first full-fledged synthesizer built by Roland and features the latest electronic circuitry and musical technology.
All function controls are grouped on easy-to-operate panels.
All 47 modules have extremely high levels of reliability and durability, and the entire system is compatible with other professional audio equipment.

BLOCK 1 (Main Console)
• Dimensions: 840(W) × 560(H) × 300(D)mm (33.1˝ × 22.1˝ × 11.8˝) • Weight: 35kg (77 lbs.)

BLOCK 2 (Keyboard Controller)
• Dimensions: 1070(W) × 120(H) × 250(D)mm (42.1˝ × 4.7˝ × 9.8˝) • Weight: 11kg (24.2 lbs.)

BLOCK 3 (Analog Sequencer)
• Dimensions: 840(W) × 350(H) × 300(D)mm (33.1˝ × 13.8˝ × 11.8˝) • Weight: 17kg (37.4 lbs.)

BLOCK 4 (VCO Bank)
• Dimensions: 440(W) × 560(H) × 300(D)mm (17.3˝ × 22.1˝ × 11.8˝) • Weight: 17kg (37.4 lbs.)
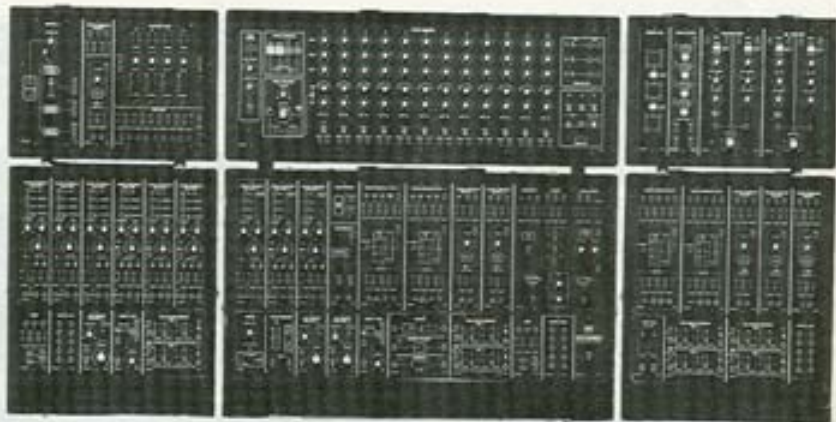
BLOCK 5 (VCF/VCA Bank)
• Dimensions: 440(W) × 560(H) × 300(D)mm (17.3˝ × 22.1˝ × 11.8˝) • Weight: 16kg (35.2 lbs.)

BLOCK 6 (Interface/Mixer)
• Dimensions: 440(W) × 350(H) × 300(D)mm (17.3˝ × 13.8˝ × 11.8˝) • Weight: 10kg (22 lbs.)

BLOCK 7 (2ch Phase Shifter/2ch Audio Delay)
• Dimensions: 440(W) × 350(H) × 300(D)mm (17.3˝ × 13.8˝ × 11.8˝) • Weight: 10kg (22 lbs.)

MAIN CONSOLE SYSTEM

Consists of main console and keyboard and offers more than enough versatility for live performances.

CPE-800 COMPU EDITOR

A revolutionary new concept in automatic fader control.

The Roland Compu-Editor CPE-800 offers you a new concept of automatic fader control. Advanced digital design provides a simple efficient operating system. Roland's CPE-800, interfaced with your conventional mixing console, gives you an automated computer mixing board. Random access memory is used to memorize the data of the fader's motion. The CPE-800 has fifteen channels. The motion of fifteen faders is converted into digital data by an AD (analog to digital) converter. A data set consisting of the (run length encoding) fader data, channel No. and current time is stored in the memory. **Piecewise Linear Approximation** technology is applied for reducing the memory usage. The long sequential data stored in memory can be accessed instantly by the Microprocessor. Editing or updating operations can be easily done, on any part of the entire process of any channel.

REAR PANEL

SMPTE TIME CODE SYNCHRONI-ZATION—By using SMPTE TIME CODE, fading motion data corresponding to the tape position can be accessed immediately. Synchronization is immediate from any position on the tape.

PARALLEL OPERATION—By sharing SMPTE TIME CODE, two or more CPE-800's can be operated simultaneously.

EASY UPDATING—When updating, previously stored fader positions can be compared with the new fader positions by the fader comparating indicator. By equalizing both levels, discrepancies between preceding and updating fader levels can be avoided.

SCENE MODE—One shot sequence can be initiated by a manual trigger at each starting point of chained sequences. This mode is useful for stage lighting control and very important to live musical performances.

DATA STORAGE—The data stored in memory can be dumped to open reel or cassette tape and easily re-entered.

GRAPHIC DISPLAY OUTPUTS— CPE-800 has graphic display outputs which are connected to a conventional oscilloscope. All of the fader motions are displayed on the oscilloscope.

CPE-800
• Number of channels: 15
OUTPUT:
• Output level: 10 (volts) D.C. Control Lines MAX • Resolution: 39dB/STEP, from −36dBm = 2.7dB/STEP from +9dBm to −36dBm approx. • Output impedance: 1kΩ • Response: 100 ms
SYNCHRO MODES:
• SMPTE code: Read/WRITE • Internal clock: 0 to 100 hours • Scene: 600 Scenes if memory consupmtion permits MAX 100 hours • Sampling time: 30 ms • Recording time: MAX 100 hours. This varies with amount of fader motion to memorize • Date save: Open reel or high quality cassette • Dimenions: 686(W) × 115(H) × 350(D)mm (27.0″ × 4.5″ × 13.8″) • Data storage onboard: 32k bytes • Weight: 12.5kg (27.5 lbs.)

VCA-800

VCA-800
• Number of Channels: 15
INPUT:
• Impedance: 50kΩ Unbalanced • Level: +4dBm, 0dBm = 0.775V, RMS MAX +24dBm
OUTPUT:
• Impedance: 600Ω Unbalanced • Level: +4dBm, MAX +24dBm • Frequency response: 15Hz up to 30kHz 1dB • Noise: −98dBm IHF • Crosstalk: 80dB at 10kHz • THD 0.01% 4dBm INP, 4dBm OUT • Control voltage: 0 to 10 VDC • Gain control range: −∞ up to +9dB
RESPONSE:
• Fade in: 10 ms • Fade out: 100 ms • Dimensions: 480(W) × 180(H) × 305(D)mm (18.9″ × 7.1″ × 12.0″) • Weight: 11.0kg (24.2 lbs.)

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SYSTEM 100M MODULE TYPE SYNTHESIZER

Create the electronic music system you need with Roland's compact modular System 100M.

Different modules can be combined in various way to create a system to meet any need or budget.
The wide assortment of controls and jacks give this system extreme versatility while consistently stable performance is assured by its sophisticated basic functions, surperb reliability and outstanding durability.

191J *13.590*
5 MODULE SYSTEM RACK
- Dimensions: 558(W) × 314(H) × 192(D)mm
(22.0″ × 12.4″ × 7.7″) • Weight: 6.9kg (15.2 lbs.)

190 *9.890*
3 MODULE SYSTEM RACK
- Dimensions: 349(W) × 314(H) × 192(D)mm
(13.7″ × 12.4″ × 7.7″) • Weight: 5.6kg (12.3 lbs.)

181 *18.300*
49-KEY KEYBOARD CONTROLLER
- Dimensions: 850(W) × 95(H) × 235(D)mm
(33.5″ × 3.7″ × 9.3″) • Weight: 6.5kg (14.3 lbs.)

180 *14.160*
MODULE SYSTEM RACK
- Dimensions: 600(W) × 95(H) × 235(D)mm
(23.6″ × 3.7″ × 9.3″) • Weight: 4.7kg (9.7 lbs.)

Modules with packed features and free combination.

110 *13.950*
VCO-VCE-VCA

This single module contains the three main synthesizer elements, and when combined with a Model 140 module, provides all that is needed for the production of one synthesizer voice. It includes a VCO, VCF and VCA.

112 *14.660*
2 VCO

This module consists of two independent VCO's in one package with expanded features. Both VCO's have three separate variable control inputs, strong and weak sync modes for phase locking, and simultaneous manual and external control of pulse width.

121 *12.520*
2 VCF

Two independent voltage controlled low pass filters in one package with a 3-channel mixer. Each VCF has a switchable fixed high pass filter for controlling the high pass function or selecting one of three cutoff points.

130 *11.450*
2 VCA

Two independent VCA's in one package, each with a selector switch for linear or exponential control response. This expands the range of the 110 module's VCA.

131 *11.450*
OUTPUT
MIXER+STANDARD
OSC+PHONES AMP

This unit mixes System 100M outputs (including VCA output signals) and feeds them to other audio equipment. It is 4-input 3-output (stereo + monaural) module equipped with a standard oscillation circuit with a separate level control (200Hz/400Hz/880Hz).
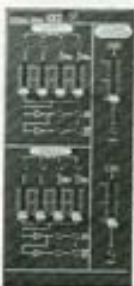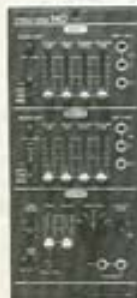
132 *10.370*
DUAL CV/AUDIO MIXER &
VOLTAGE PROCESSOR

This module consists of two mixers having four inputs, normal and opposite outputs, and a voltage processor that supplies DC voltage. Control and audio signals can be mixed together.

*Dimensions of all System 100M's modules are identical.
Dimensions: 104(W) × 230(H) × 199(D)mm (4.1" × 9.1" × 7.8") •Weight: 1.6kg (3.52 lbs.) •Accessory: 30cm 8P DIN Cord

SYSTEM 100M

Create unlimited textures and new combinations with the
compact modular System 100M.

140 *11.800*
2ENV-LFO

Two envelope generators and
an LFO are incorporated in
this package. This module
and the 110 module provide
the minimum basic elements
necessary to produce a
single synthesizer voice.

150 *11.800*
RING-NOISE S/H LFO

This module incorporates a
ring modulator for metallic
clanging sounds, sample &
hold for control voltage
patterns, noise generator for
sound effects, and LFO. With
this unit alone, a variety of
sounds can be created.

172 *13.950*
**PHASE SHIFTER/AUDIO
DELAY/GATE DELAY/LFO**
This module includes four
functions: 5-step phase
shifter, audio delay (512-step
BBD with 0.3ms—7ms delay
time), gate delay (doubles as
a pulse shaper) and LFO
(0.04Hz—10Hz range for
superb ensemble or stereo
effects).

182 *13.200*
ANALOG SEQUENCER

The 182 module has a
sequence function of 2
channels and 8 steps (16
steps in series). Additional
modules can be added to
increase the number of steps
in multiples of 16. A voltage
register sets control voltage
for each step, and tempo is
variable from 7 sec. to 1/30
sec.

*Dimensions of all System 100M's modules are identical.
Dimensions: 104(W) × 230(H) × 199(D)mm (4.1˝ × 9.1˝ × 7.8˝) •Weight: 1.6kg (3.52 lbs.) •Accessory: 30cm 8P DIN Cord

SYSTEM 100 SYSTEM SYNTHESIZER

The economical system synthesizer for serious musicians.

Starting with the Synthesizer 101, with its 37-key keyboard and full range of standard synthesizer elements, build your own complete synthesizer studio by adding the Expander 102, Mixer 103, Sequencer 104 and Monitor Speaker 109. When used in conjunction with an external tape deck, the System 100 lets you do multi-track recording and a professional mixing right in your own home!

SYNTHESIZER 101
• Dimensions: 610(W) × 145(H) × 355(D)mm (24.0″ × 5.7″ × 14.0″) • Weight: 9kg (19.8 lbs.)
EXPANDER 102
• Dimensions: 610(W) × 305(H) × 155(D)mm (24.0″ × 12.0″ × 6.1″) • Weight: 7.5kg (16.5 lbs.)
MIXER 103
• Dimensions: 280(W) × 145(H) × 355(D)mm (11.0″ × 5.7″ × 14.0″) • Weight: 6.5kg (14.3 lbs.)

SEQUENCER 104
• Dimensions: 280(W) × 145(H) × 355(D)mm (11.0″ × 5.7″ × 14.0″) • Weight: 5kg (11 lbs.)

MONITOR SPEAKER 109
• Dimensions: 280(W) × 305(H) × 155(D)mm (11.0″ × 12.0″ × 6.1″) • Weight: 3kg (6.6 lbs.)

RSS
ROLAND STUDIO SYSTEM

Roland Studio System ... the smart, economical way to studio-quality sound.
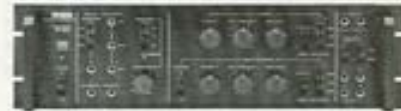
RV-800 STEREO REVERB

• Weight: 8.9kg (19.6 lbs.)

GE-810 GRAPHIC EQUALIZER

• Weight: 7.25kg (16.0 lbs.)

PH-830 STEREO RHASER

• Weight: 7.5kg (16.5 lbs.)

All three share the following identical specifications.
• Dimensions: 480(W) × 136(H) × 342(D)mm (19.0″ × 5.4″ × 13.5″) • Accessory: Connection Cord

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JUPITER-8 POLYPHONIC SYNTHESIZER

Presenting the ultimate in performance-oriented polyphonic synthesizers.

The Roland Jupiter-8 has the sound sophistication of a modular synthesizer in the most practical, performance-oriented polyphonic synthesizer ever conceived. The JP-8 is an 8 voice, 16 oscillator poly synth with 64 user-programmable memories and an advanced 5 octave keyboard which may be split into two poly synths with different patches, used in Dual mode for layering two patches for each key, or played as a whole with up to 8 fully independent notes from the same patch.

Designed for Performance:
The key to the JP-8's unsurpassed performance ability is an advanced computer-assigned keyboard which allows more flexibility and control than ever before.

The five octave keyboard has 61 keys, C to C, that can be grouped into three different Key modes: Whole, Dual and Split. In Whole Mode it operates as a single keyboard with up to 8 totally independent notes from the same patch. Select Dual Mode to lay two voices with their own patches from any four keys for thick "section" sounds or sounds never before possible.

Split Mode divides the keyboard into two polyphonic synths, (three octaves at the upper end, two at the lower end) each with its own programmed sound and set of 4 independent voices. The Jupiter-8 programmer even allows the programming of 8 different Patch Present pairs so that a split keyboard with predetermined programs for each end may be called up at the touch of a button. This unique Split feature with its Patch Preset programs lets the JP-8 fulfill the function of many pairs of separate yet fully flexible instruments from one keyboard, a distinct advantage in flexibility, portability and economy.

The Jupiter-8 keyboard computer also provides a unique Arpeggio section, allowing the sequencing of automatic arpeggios live off the notes played, shifting harmony as the keys change in a way no present sequencer ever will. The JP-8 will arpeggiate over the bottom of a split keyboard which leaves the top end free for polyphonic chord, solo or effect work.

Arpeggios will play octoves off one note, or follow the notes in the order they are played when more notes are held. The Arpeggio changes as notes are changed over one of four ranges, with any patch and at any speed. Arpeggios can move either Up, Down, Up and Down, or at random among the notes held for a Sample and Hold effect that does not destroy the harmony. The speed of the Arpeggio is internally controlled by a Rate slider, and can also be controlled by an external clock signal from a device such as a Roland CompuRhythm.

Extensive Programmer Seciton:
Another key to the almost limitless flexibility of the Jupiter-8 is its large programmer section. Every synthesizer function including volume is user-programmable into any one of 64 memories or 8 pairs of Patch Presents, more complete programming and more programs than any other instrument. Programs are easily selected by punching in the actual program number on switches numbered 1 to 8, and are displayed on large, bright LED numbers that show the programs selected for both ends of the keyboard at a glance.

Synthesizer Control Functions:
The heart of the Jupiter-8 and the source of its impressive sound is its 8 synthesizer systems...true, full function synthesizers with many improvements, simplifications and innovations that other synthesizers don't offer.
The JP-8's simple layout flows logically left to right in a single bank of controls

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so that visual information is available from knobs and grouped sliders at a glance. The synthesizers contain the following:

An LFO containing sine, square, sawtooth and random S&H waveshapes, a rate control with LED rate indicators for the programs at both ends if a split keyboard is used, and adjustable delay, with additional controls available in the bender section.

Two VCO's provide triangle, sawtooth, square, waves, sine and noise waveforms. The broadest range of VCO controls are available, including Cross Modulation, syncronizing, LFO and/or ADSR Modulation, and Pulse Width Manually, LFO or ADSR controlled for the ultimate in pitch and tone color control.

• Keyboard: 61 keys, 5 octaves, c scale
• Dimensions: 1063(W) × 120(H) × 485(D)mm (41.9" × 4.73" × 19.1") • Weight: 21.5kg (47.3 lbs.)

JUPITER-4 COMPUPHONIC SYNTHESIZER

Four-voices, computer memory and everything else you need for on-stage excitement.

The Jupiter-4 is another prime example of Roland's imaginative approach to electronic music. This advanced instrument is equipped with four independent synthesizer modules which are interlocked with a programmable memory. This allows musicians to prepatch up to eight different synthesized sounds for later recall at the touch of a button. In addition, there are 10 presets, including the most frequently used sounds.

To protect memory contents when the power is turned off, there is a backup NiCad battery circuit. Other sophisticated features include an arpeggio selector for automatic selection of arpeggios up to four octaves above the reference key and a modifier section for additional sound variations.
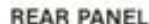

REAR PANEL
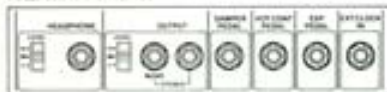
- Keyboard: 49 keys, 4 octaves, C scale
- Synthesizer Modules • VCO: VCO Range (16′, 8′, 4′) • Waveforms (⌁, ⎍, ⎍) • Pulsewidth (50%, 40%, 20%, 10%) and Pulsewidth LFO Depth • PWM Mode Switch (Manual/LFO) • LFO Modulation • Sub Oscillator (1 oct. down) • Noise Generator: ON/OFF Switch • VCF: HPF Cutoff (40Hz—5kHz) • LPF Cutoff (20Hz—20kHz) • LPF Resonance (0 ~ Self Oscillation) • KYBD Follow (0%, 40%, 70%, 100%) • LFO Modulation • ENV Modulation • ENV Polarity (⌂, ⌄) • VCA: VCA Out Level 1/Overload Indicator • LFO: Waveforms (⌁, ⎍, ⌁, ⌁) 1/LFO Rate (0.1Hz—80Hz or more) 1/LFO Rate Indicator • Envelope Generator for VCF and VCA 2: Attack Time, Decay Time, Sustain Level, Release Time

- Preset Select Switch (Bass, String, Funky Clavi, Piano, Voice, Trombone, Sax, Trumpet, Synth, The Force) • Compu Memory: Select Switch 8/Manual Switch • Protection Switch • Memory Write Switch • Write Indicator 2 (Back up battery built in) • Arpeggio & Key Assign: Arpeggio Selector (UP, DOWN, UP & DOWN, RANDOM) • Key Assign Mode Selector (UNISON I, UNISON II, POLY I, POLY II) • Dimensions: 946(W) × 179(H) × 410(D)mm (37.3″ × 7.1″ × 16.2″) • Weight: 19kg (41.8 lbs.) • Accessories: 2.5m Connection Cord × 2

- **Options:** KS-20 Stand, TB-4 Case, MR-5 Music Rest, FV-20 Foot Volume, DP-2 Pedal Switch

PROMARS COMPUPHONIC SYNTHESIZER

The two-VCO synthesizer you program yourself.

With PROMARS, you have expanded versatility and convenience for live performances along with a sound wide enough for studio work.

This rugged, portable synthesizer is equipped with two VCOs, which can be used separately or in combination with one another. The built-in memory allows performers to pre-patch up to eight different sounds for use with the ten presets. Other great features which have made this compact instrument so popular with busy pros include an external control input, delay/bend control section, fast operation and human-engineered design.

REAR PANEL

• Keyboard: 37 keys, 3 octaves, F-F • VCO (×2): VCO Range (16´, 8´, 4´), Waveform (◺ , ⊓ , ⊔), Pulse Width (50%, 40% 20%, 10%) and LFO Pulse Width Depth, PWM Mode Switch (Manual/LFO), LFO Modulation, Sub Oscillator (1 octave down) • Noise Generator: ON/OFF Switch • VCF: HPF Cutoff (40Hz—5kHz), LPF Cutoff (20Hz—20kHz), LPF Resonance (0-self oscillation), Keyboard Follow (0%, 40%, 70%, 100%), LFO Modulation, Envelope Modulation, Envelope Normal/Invert Switch (⌢ , ⌣) • VCA: VCA Output Level, Overload Indicator • LFO: Waveform (⌁ , ⊓ , ◺ , ⊿), LFO Rate (0.1Hz—more than 80Hz), LFO Rate Indicator • Envelope

Generator (1 each for VCF, VCA): Attack Time, Decay Time, Sustain Level, Release Time • Delay/Bend Section: LFO Bend Rate, LFO Bend Normal/Wide Switch, Delay Time (0—10 sec) • Preset Sound Selector (× 10): Bass, Strings, Funky clav., Piano, Voice, Trombone, Sax, Trumpet, Synth I, Synth II • Compu-memory: Selector × 8, Manual Switch, Memory Protection Switch, Memory Write Switch • Dimensions: 765(W) × 162(H) × 402(D)mm (30.1˝ × 6.4˝ ×15.8˝) • Weight: 14 kg (30.8 lbs.) • Accessory: 2.5m Connection Cord

• Options: KS-1 Stand, CB-8 Case, MR-5 Music Rest, FV-20 Foot Volume

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SH-2 SYNTHESIZER
The stage synthesizer with studio features.

VCO-1 adds a sub-oscillator to its sine wave output for far greater range from the dual VCO configuration. A bender lever independently controls VCO-2 for free variation of pitch between the VCO elements. There's also a delayed vibrato for more natural sound and autobend for making strings, pipes and voices come alive. A 1V/octabe voltage-to-pitch ratio is standard.

• Keyboard: 37 keys, 3 octaves
• Dimensions: 670(W) × 100(H) × 305(D)mm (26.4˝ × 3.9˝ × 12.0˝) • Weight: 6.9kg (15.2 lbs.) • Accessory: 2.5m Connection Cord

• Options
KS-1 Stand, CB-09 Case, SC-2 Carrying Bag, FV-20 Foot Volume

SH-09 SYNTHESIZER
The compact synthesizer with a sub oscillator for more on-stage excitement.

With its improved VCO and VCF, the SH-09 provides exceptionally stable pitch and tone color. A modulator, combined with the sample/hold function, allows pinpoint generation of random sounds. The addition of the sub oscillator expands the range even further. An envelope follower is provided to synchronize the SH-09 with electric guitars or other keyboards.

• Keyboard: 32 keys, 2-1/2 octaves
• Dimensions: 605(W) × 100(H) × 305(D)mm (23.8˝ × 3.9˝ × 12.0˝) • Weight: 6.1kg (13.4 lbs.) • Accessory: 2.5m Connection Cord

• Options
KS-1 Stand, CB-09 Case, SC-2 Carrying Bag, FV-20 Foot Volume

CSQ-600 DIGITAL SEQUENCER

Simultaneous memorization of steps and rhythm for automatic synthesizer passages during live performances.

With its integrated microcomputer, the CSQ-600 can stores a maximum of 600 steps and rhythms. Sequences are directly loaded from the keyboard, and both scales (CV) or rhythms (GATE) can be added separately. To protect the memory, a battery backup function is provided. Four different memories allow continuous or random loading and playback and the CSQ-600 can be used with the Compurhythm CR-78. Several CSQ-600s can be used together for an ever greater range.

In addition, loaded sequence data can be played at any tempo and easily transposed to other key and steps can be checked one-by-one. Other features include a repeat function for arpeggio and bass patterns, external gate signals or pedal switch (DP-2) control, portamento, and built-in metronome.

REAR PANEL

• Maximum Storage Capacity: 600 notes (or 150 notes per channel) • Dimensions: 450(W) × 95(H) × 305(D)mm (17.7″ × 3.7″ × 12.0″) • Weight: 3.9kg (8.6 lbs.)
• Accessories: 1.5m Dual Patch Cord (×2)

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CSQ-100 DIGITAL SEQUENCER

Developed from the famous MC-8 MicroComposer, the CSQ-100 can expand the range of any synthesizer.

The CSQ-100 Digital Sequencer with its microprocessor element stores up to 168 notes. Synthesizer played sequences can be loaded directly, and pitch can be loaded either separately at a constant time value or with variable time values added afterwards.

Stored sequences can be played back at any desired tempo by varying the TEMPO control and can transposed to any key with a keyboard. A quick transpose function together with the REPEAT switch efficiently improves the effectiveness of arpeggios or bass runs, etc. External jacks allow remote starting via a foot pedal or external gate voltage. It is also possible to play the sequence a single step at a time. CV and GATE are automatically switched to the synthesizer without the need for patch cord changes when not using the sequencer functions.

REAR PANEL

• Maximum Storage Capacity: 168 notes (or 84 notes per channel) • Dimensions: 345(W) × 95(H) × 305(D)mm (13.6" × 3.7" × 12.0") • Weight: 2.7kg (5.94 lbs.) • Accessories: 1.5m Dual Patch Cord (×2)

17

Roland offers a variety of synthesizers.

SH-1

Multi-function synthesizer with sub oscillator and auto-bender.
- Dimensions: 610(W) × 135(H) × 370(D)mm (24.0″ × 5.3″ × 14.6″)
- Weight: 6.4kg (14.1 lbs.) •Accessory: 2.5m Connection Cord

SH-5

Combo type synthesizer with 2 VCO's, multiple filters, envelope generator, ring modulator, and manual lever bender.
- Dimensions: 890(W) × 282(H) × 376(D)mm (35.0″ × 11.1″ × 14.8″)
- Weight: 22kg (48.4 lbs.) with Case

SH-2000

Preset type synthesizer any keyboard player can find fun to play. Ideal for use with an electronic organ. 30 different presets.
- Dimensions: 866(W) × 134(H) × 269(D)mm (34.1″ × 5.3″ × 10.6″)
- Weight: 11kg (24.2 lbs.)

SH-7

Two-note type synthesizer with 2 vco's capable of single-note and two-note chord performance.
- Dimensions: 870(W) × 190(H) × 400(D)mm (34.3″ × 7.5″ × 15.7″)
- Weight: 15.5kg (34.1 lbs.) •Accessory: 2.5m Connection Cord

SH-3A

Synthesizer with systematized control arrangement for fast setting of desired sounds.
- Dimensions: 1005(W) × 141(H) × 324(D)mm (39.6″ × 5.6″ × 12.8″)
- Weight: 14.5kg (31.9 lbs.)

SH-1000

Set your own synthesized sounds or select one of ten popular instrument presets including piano, violin, flute and trumpet.
- Dimensions: 866(W) × 145(H) × 265(D)mm (34.1″ × 5.7″ × 10.5″)
- Weight: 12kg (26.4 lbs.)

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VP-330 VOCODER PLUS

Vocoder Plus... It expands your musical dimensions three ways.

The Human Voice section in both melody and harmony enunciates consonates far more clearly than earlier vocoders.

The upper half of the keyboard contains female 4' and male 8' voice tablets. There is also a pedal-controlled hold function to load voices picked up by a microphone and a pitch shift function to express subtle nuances.

REAR PANEL

• Keyboard: 49 keys, 4 octaves, C scale • STRINGS SECTION, Tone Tablets: Upper Strings 4', Lower Strings 4', Control Knob: Attack Time, Tone • Release Control: Strings, Human Voice, Vocoder • HUMAN VOICE SECTION, Tone Tablets: Female 4', Male 8' Upper, Male 4', Male 8' Lower; Control Tablets: Ensemble ON/OFF; Control Knob: Attack Time • VOCODER SECTION, Tone Tablets: Upper 8', Lower 8'; Control Tablets: Ensemble ON/OFF; Control Knob: Tone, Microphone Gain (dB) • VIBRATO for HUMAN VOICE and VOCODER, Control Knob: Depth, Rate, Delay Time

• BALANCE, Volume Control: Strings, Human Voice, Direct Mic. • Ext. Synth. Volume • Phones Volume • Master Volume • Pitch Shift Control: Pitch Slider, Pitch Set, Time, Pitch Mode Switch (Auto-Off/Ext-Manual) • CONNECTION JACKS, Input Jacks: Mic. Std, Mic. Cannon, Ext. Synth; Output Jacks: Stereo or Mono Level Select: Vocoder Hold Control, Pitch Shift Control, Phones Output Jack • Dimensions: 905(W) × 145(H) × 370(D)mm (35.6″ × 5.7″ × 14.6″) • Weight: 14kg (30.8 lbs.) • Accessories: 2.5m Connection Cord × 2/Pedal Switch (DP-2) Music Rest

• Options
KS-10 Stand, CB-5/TB-5 Case, DR-200 Mic, ST-100 Mic Stand

RS-09 ORGAN/STRINGS

Roland RS-09 Organ Strings. It's in a class by itself.

Organ and strings are combined in one package, which can be played together or separately at a touch of a tablet. A full set of sliding controls allows fast, easy mixing of 8', 4', 2' and 1' notes, while a 2-channel stereo output provides a wider-ranging stereo ensemble effect. Polyphonic synthesizer sounds can be obtained when the RS-09 used with an SH-09.

• Keyboard: 44 key, 3-1/2 octave • Strings section: Strings Tablet (8', 4'), Ensemble ON/OFF Switch, Attack Time • Organ Section: Mixing Volume (8', 4', 2', 1') Organ ON/OFF Tablet, Tone Switch, Ensemble ON/OFF Switch • Dimensions: 676(W) × 102(H) × 306(D)mm (26.6" × 4.0" × 12.1") • Weight: 7.3kg (16.1 lbs.) • Accessory: 2.5m Connection Cord × 2

• Options
KS-1 Stand, CB-09 Case, SC-2

RS-505 PARAPHONIC STRINGS

The new instrument that gives you the range of a symphony orchestra.

The keyboard instrument allows you to create new synthesizer sounds by chords to provide the interesting mix of synthesized and string sounds. Equipped with pitch shift function for free pitch transposition and 49-key, 4-octave keyboard which can be expanded to six octaves at the touch of a tablet.

• Keyboard: 49 keys, 4 octaves, C scale • Dimensions: 905(W) × 145(H) × 370(D)mm (35.6" × 5.7" × 14.6") • Weight: 14kg (30.8


lbs.) • Accessories: 2.5m Connection Cord/Pedal Switch (DP-2) Music Rest

• Options KS-10 Stand, CB-5/TB-5 Case, FV-20 Foot Volume

20

SA-09 SATURN

SA-09 Saturn. Another great new musical hybrid from the masters at Roland.

This new hybrid keyboard can be used as either an organ (envelope ⊓) or a piano (envelope ⅃), or to create your own original sounds. Equipped with a footage mixer, four tone selectors, and a chorus modulator, this polyphonic instrument is another first-of-its-kind from Roland.

With the footage mixer, it's easy to combine sound sources and modify tones with the sliding controls. The tone color can be further modified by the pushbutton-controlled selectors.

For an even more dramatic sound, the organ and percussive envelopes are interlocked with the sustain slider. And for more movement, the chorus modulator has a stereo output. The SA-09 can also be connected to the SH-09 or other compatible Roland synthesizers.

•Keyboard: 44 keys, 3-1/2 octaves •Sound Source: Footage Mixer; 8', 4', 2', 1', Tone Filter; I, II, III, IV •Envelope: Organ/Percussive •Accent: ON/OFF •Sustain: ON/OFF, Time •Modulator: Mode; OFF, I, II, Chorus/Vibrato •Tone Control •Volume •Transpose: 1 oct. Down •Dimensions 676(W) × 102(H) × 306(D)mm (26.6" × 4.0" × 12.0") •Weight: 6kg (13.2 lbs.) •Accessory: 2.5m Connection Cord.

REAR PANEL

SIP-300 GUITAR PREAMPLIFIER *13.950*

Guitar preamplifier for even more versatility.

The SIP-300 can be split into separate components for more flexibility in custom tailoring sounds. This unit contains a special Overdrive section which allows high harmonic distortion at relatively low volumes. This effect, along with the tremendous overall performance, is a result of the use of the latest discrete circuits in place of conventional ICs. The SIP-300 also features a flexible tone contouring section, Hi-Cut and Low-Cut filters,

Master Volume Control, Balanced and Unbalanced Outputs and two External Effects Loops.

• Dimensions: 482(W) × 92(H) × 247(D)mm (19.0″ × 3.6″ × 9.7″) • Weight: 4.0kg (8.8 lbs.)

REAR PANEL

SIP-301 BASS GUITAR PREAMPLIFIER *16.200*

Bass guitar preamplifier with full control section.

The Pre-Amp has two inputs for either HI Gain or LO Gain input signals. The inputs feed into a compression circuit to add depth and punch.
The tone contouring section of the Pre-Amp operates over those fundamental and harmonic frequencies produced by the bass guitar. Three individual frequency controls (Bass, Middle, and Treble) can each be boosted to provide increased attenuation.
In addition, two Effects Send/Return

Loops allow the addition of signal processing devices either before or after the tone controls.

• Dimensions: 482(W) × 92(H) × 247(D)mm (19.0″ × 3.6″ × 9.7″) • Weight: 4.1kg (9.02 lbs.)

REAR PANEL

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SPA-240 POWER AMPLIFIER 32.500

240W of superb clarity.

The SPA-240 is the most powerful amplifier in the Roland Rack series. This stereo unit, with tremendous fidelity and an expanded frequency range is rated at 240W per channel at 8 ohms. It is equipped with input attenuators to set the level of the channels and balanced and unbalanced inputs. Built to stand up to the roughest abuse on the road, this unit represents one of today's best values in component amplifiers.

- Dimensions: 482(W) × 92(H) × 442(D)mm (19.0" × 3.6" × 17.4") • Weight: 14kg (30.8 lbs.)

REAR PANEL
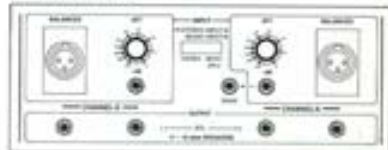
SPA-120 POWER AMPLIFIER 18.200

120W of all the sound you need.

The SPA-120 is a smaller version of the SPA-240, rated at 120 watts per channel and sharing the same great fidelity and ruggedness. This unit has balanced and unbalanced inputs, separate input attenuators for each channel and all the reliability that has made Roland a favorite with hard-traveling musicians. It can operate in both stereo or monaural modes depending on need.

- Dimensions: 482(W) × 92(H) × 265(D)mm (19.0" × 3.6" × 10.4") • Weight: 7.5kg (16.5 lbs.)

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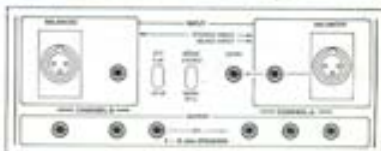
SPV-355 P/V SYNTHESIZER *36.500*

## P/V synthesizer specifically designed for use with guitars.

The SPV-355 is an advanced Pitch-to-Voltage Converter with a built-in synthesizer. With it, vocals, guitar sounds, woodwind sounds and so on, are converted into voltages which are then used to control the synthesizer. In other words, it allows any audio signal to take the place of the keyboard for synthesizing sounds. The synthesizer section of the innovative unit is equipped with two independent VCOs, a VCF, VCA and all other standard

synthesizer features.

•Dimensions: 482(W) × 92(H) × 350(D)mm (19.0″ × 3.6″ × 13.8″) •Weight: 5.7kg (12.5 lbs.) •Accessories: 2.5m Connection Cord × 2, Pedal Switch (DP-2)

REAR PANEL
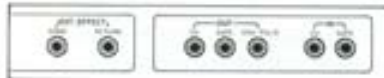
SVC-350 VOCODER *41.400*

Vocoder with advanced filtering system.

The SVC-350 is the first true vocoder priced within the range of the average musician. This unit has voice character analysis filters, all of which are active, which are used to shape the carrier (musical instrument) signal. One of the filters, with an extremely high slew rate, is used to respond to hard consonants, a feature seldom found on even the most expensive vocoders.
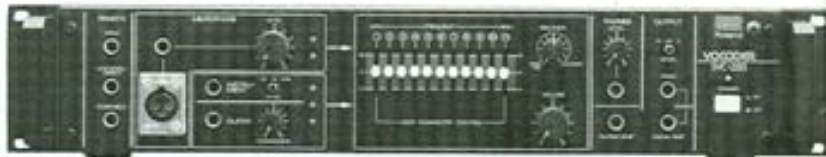
•Dimensions: 482(W) × 92(H) × 350(D)mm (19.0″ × 3.6″ × 13.8″) •Weight: 5.8kg (12.8 lbs.) •Accessories: 2.5m Connection Cord × 2, Foot Switch (FS-2)

# SBF-325 STEREO FLANGER *22.800*

Stereo flanger offers an expanded effect range.

The Roland Stereo Flanger is a versatile time delay device that will produce a wide variety of effects ranging from classic flanging to chorus and doubling effects. A second delay channel permits the device to be run in stereo which considerably increases the intensity of an already intense effect. Inverting the phase of either delay channel is easy. It has four effect modes—three of which are used in flanging, the other being used for chorus and doubling effects.

•Dimensions: 482(W) × 92(H) × 247(D)mm
(19.0″ × 3.6″ × 9.7″) •Weight: 4.5kg (9.9 lbs.)

REAR PANEL
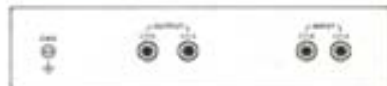
SDD-320 DIMENSION D *23.200*

Dimension D changes spatial response four ways.

The Dimension D is a specially designed chorus effect for the spatial control of sound. The device will accept either a stereo or a mono signal input. Mono inputs are converted into a sound which fills the entire stereo field, an extremely vivid effect which gives the impression of a metamorphosis of space.
The Roland Dimension Decoder provides four different dimensional modes for four distinct psychoacoustic results. The device provides both balanced and

unbalanced inputs and outputs and an LED array constantly displays output level.

•Dimensions: 482(W) × 92(H) × 247(D)mm
(19.0″ × 3.6″ × 9.7″) •Weight: 4kg (8.8 lbs.)

REAR PANEL

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SPH-323 STEREO PHASER 20.950

Stereo phaser for versatile phase effects.

With its great S/N ratio and low distortion level, the SPH-323 is perfect for public address applications. This advanced unit is equipped with balanced and unbalanced inputs, guitar input and a remotely controlled depth circuit for creating wah effects. Equally at home on the stage or in the studio, the SPH features individually controlled LFO's and a special external input for a broader phasing effect. In addition, it has a switchable 8/4 stereo phase shift to
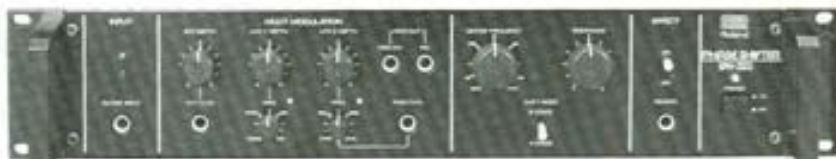
control center frequency and resonance.

• Dimensions: 482(W) × 92(H) × 240(D)mm (19.0″ × 3.6″ × 9.4″) • Weight: 4.2kg (9.24 lbs.)

SMX-880 LINE MIXER 19.950

A studio quality line mixer you can take anywhere.

This advanced line mixer features extremely low distortion over all 8-channels, each of which is equipped with attenuation switches. Lightweight, easy to use and with professional-level specifications, the SMX-880 is equally at home on the road or in the studio. This unit can be stacked to expand its range and has a full selection of different input and output jacks.

• Dimensions: 482(W) × 92(H) × 350(D)mm (19.0″ × 3.6″ × 13.8″) • Weight: 4.8kg (10.6 lbs.)

SRE-555 CHORUS ECO 49.850

19" rack type chorus echo with more effects and balance-in/out [XLR] control.

This unit can be mounted on standard 19" racks. Tape replacement is easy. Just remove two screws at the sides of the front panel. Provided with balanced (XLR) and unbalanced (standard) input and output jacks. Dual outputs for a wider-spreading sound. Integrated noise reduction circuitry for a higher S/N ratio and clearer echo. Equipped with LED bar display and sound-on-sound feature for extended delays.

• Input Level/Impedance: Input 1 (XLR); +4dBm/30kΩ, Input 2 (1/4" Phone Jack); 0dBm/47kΩ, −25dBm/220kΩ, −50dBm/6.6kΩ
• Output Level/Load Impedance: Output (XLR); +4dBm/over than 600Ω, Output A, B (1/4" Phone Jack): 0dBm, −25dBm, −50dBm/over than 5kΩ (0dB = 0.775V)
• Dimensions: 480(W) × 180(H) × 445(D)mm (18.9" × 7.1" × 17.5") • Weight: 15.7kg (34.54 lbs.)

RE-501 ECHO CHANBER *44.620*

The professional echo chamber with balanced in/out (XLR) and dual outputs.

This advanced echo chamber can give any room concert hall acoustics with its superior performances, total controllability and ultra-sophisticated circuitry. Yet despite its expanded range of functions, it's easier to control than many less-sophisticated units. Special features include advanced LED metering, independent chorus section, variable time delay and adjustable echo repeat rate.

• Dimensions: 418(W) × 190(H) × 330(D) mm (16.5˝ × 7.5˝ × 13.0˝) • Weight: 10.5kg (23.1 lbs.) • Accessories: Connection Cord × 2, Endless Tape (RT-1L), Cleaner

RE-301 ECHO CHAMBER

RE-201 ECHO CHAMBER *33.480*

RE-150 ECHO CHAMBER *26.130*

DC-30 ANALOG ECHO

Analog chorus/echo for an exciting new range of effects and superior tonal quality.

Roland's revolutionary DC-30 is a completely solid-state unit to provide tremendous reliability and an expanded effect range. Since there are no tapes to replace, maintenance is minimal. And the sound is out of this world. The DC-30 can be used with the finest home stereo equipment, yet is rugged enough for use on the road.

• Dimensions: 386(W) × 123(H) × 206(D)mm (15.2″ × 4.9″ × 8.1″) • Weight: 3.7kg (8.2 lbs.)
• Accessories: Connection Cord (2.5m)

DC-20 ANALOG ECHO

• Dimensions: 340(W) × 95(H) × 291(D)mm (13.4″ × 3.7″ × 11.5″) • Weight: 2.8kg (6.2 lbs.)
• Accessory: Connection Cord (2.5m)

TR-808 RHYTHM COMPOSER
Advanced rhythm machine with integrated memory.

The Roland TR-808 is a revolutionary computer-controlled rhythm machine which offers up to 768 measures of programming at a time. In addition, this unit offers more percussive variations and more effects than virtually any other unit on the market. With it, you can visualize patterns and real time processing, program complete stores and do just about everthing else a rhythm machine should do with more accuracy and less trouble.

• Number of rhythms: Basic; A/B × 12, Intro/Fill-in; A/B × 4 • Rhythm and track: 64 measures × 12 tracks (768 measures by using 12-tracks) • Auto fill-in: Manual/Auto at every 2, 4, 8, 12 and 16 measures • Measure divisions: 32 steps can be selected at maximum as desired • Sound sources: Bass drum, Snare drum, Low, Mid, Hi Tom/Conga, Rimshot/Claves, Handclap/Maracas, Cow bell, Cymbal, Open hihat, Closed hihat, Accent • Dimensions: 508(W) × 85(H) × 305(D)mm (20.0" × 3.4" × 12.0") • Weight: 5kg (11 lbs.)


REAR PANEL

CR-78 COMPURHYTHM

Deluxe rhythm with 64 presets and a programmable microcomputer to create your own beats.

With the exciting new CR-78, you're only limited by your own imagination. This dramatically different rhythm machine has its own programmable micro-computer which lets you memorize any rhythm you arrange for recall at the touch of a button. In addition, you have 34 different preset rhythms, including 16 for rock and disco. And if this wasn't enough, it has a system of fast operating controls providing 11 different variations, fade-in, fade-out, tempo, accent, and 14 different instrument voices. Other features include trigger out for synchronizing synthesizers or sequencers, remote control, and a handsome wood cabinet.

•Rhythms: Rock 1 A/B, Rock 2 A/B Rock 3 A/B, Rock 4 A/B, Rock 5 A/B, Rock 6 A/B, Disco 1 A/B, Disco 2 A/B, Bossanova A/B, Samba A/B, Mambo, Chacha, Beguine, Rhumba, Waltz A/B, Shuffle A/B, Slow Rock A/B Swing A/B, Fox Trot, Tango Control Rhythm; A/B •Voices: Bass Drum, Snare Drum, Rim Shot, Hi-hat, Cymbal, Maracas, Claves, Cow Bell, High Bongo, Low, Bongo, Low Conga, Metal Beat, Tambourine, Guiro •Dimensions 300(W) × 205(H) × 265(D)mm (11.8″ × 8.1″ × 10.4″) •Weight: 4.8kg (10.6 lbs.) •Cabinet Finish: Printed Plywood Finish •Accessory: Connection Cord (2.5m with pin-plug adaptor), Memory Write Switch (TS-1)
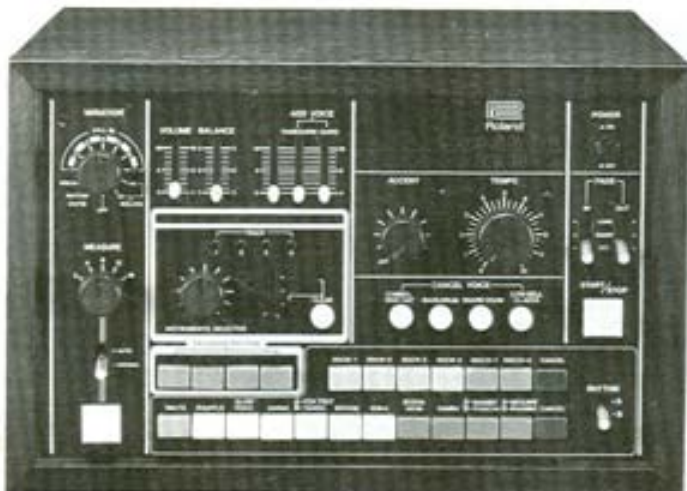
WS-1
SWITCH
FOR CR-78

CR-68 COMPURHYTHM
Good enough to polish the edge of any performance.

This advanced rhythm machine shares all of the CR-78's sophisticated electronics, only the programmable microcomputer and fade-in/fade-out features are lacking. Still, with its complete selection of patterns, modes and controls, it offers more than almost any other comparable unit.

• Rhythms: Rock 1-4, Disco 1, 2, Waltz, Shuffle, Slow Rock, Swing, Fox Trot, Tango, Boogie, Enka (a genre in Japanese music), Bossanova, Samba, Mambo, Chacha, Beguine, Rhumba • Voices: Bass Drum, Snare Drum, Rim Shot, Hi-hat, Cymbal, Maracas, Claves, Cow Bell, High Bongo, Low Bongo, Low Conga
• Dimensions: 260(W) × 180(H) × 275(D)mm (10.2″ × 7.1″ × 10.8″) • Weight: 4.5kg (9.9 lbs.)
• Accessory: 2.5m Cord

TR-66 RHYTHM ARRANGE
The compact rhythm maker with more beats

• The "Arranger", an automatic rhythm unit providing a wide variation of rhythm patterns.
• Twenty-seven rhythms are available in all: eighteen rhythms, including six rock rhythms with the Variation Selector Controls and nine rhythms with the Rhythm Selector Push-buttons.
• The wide range Tempo and Balance controls produce subtle variations of rhythms.
• Construction is surprisingly compact. Ideal for enhancing performances of combos, solo guitar, for mixing and recording, as well as for solo electronic organ performances.

• Dimensions: 230(W) × 162(H) × 267(D)mm (9.1″ × 6.4″ × 10.5″) • Weight: 4kg (8.8 lbs.)
• Accessory: 2.5m Cord.

Roland