Roland

SUPER JX

POLYPHONIC SYNTHESIZER JX-10

ELECTRONIC MUSICAL INSTRUMENTS

Roland Technology—for Tomorrow's Music

Roland's electronic musical instruments have always been the pace-setters on the world music scene, offering new dimensions in both sound creation and musical expression. Such innovative instruments were made possible by Roland's constantly progressing technology.

The latest result of Roland's digital technology is S/A (Structured/Adaptive) synthesis. S/A synthesis is revolutionary in its ability to reproduce the sound of the acoustic piano over the entire note range at all volumes more faithfully and more realistically than ever before.

In the near future, Roland's PCM recording technology that produced the fully digital sound sources of the popular TR-series rhythm composers will result in a unique new Roland sampling keyboard.

Roland's analog/digital hybrid technology has been applied to create one of the most advanced synthesizers on today's music scene—the SUPER JX. Combining the advantages of analog and digital technologies, the SUPER JX can produce either percussive, clear "digital" sounds or deep, broad "analog" sounds.

Beyond Imagination

The Synthesizer for Professionals

To realize the musical images of professional musicians, a synthesizer must be perfect in every detail. The SUPER JX completely satisfies all professional demands. The SUPER JX features sophisticated synthesizer circuitry, extensive programmable functions, flexible output, full MIDI implementation, and many other attractive features which allow the user to explore new dimensions not only in sound synthesis, but also in playing technique and sound amplification.

By dramatically expanding the synthesizer's scope of expression, the SUPER JX offers unlimited creative possibilities in all music situations, from performing to recording.

Keyboard, Oscillators, and Envelope Generators

The SUPER JX has a 76-key keyboard. Any sound—string, brass, or woodwind—can be played over the 76-key range. Because the lower and upper parts can be overlapped, the SUPER JX offers a wider note range than other splitable 76-key keyboards even when the keyboard is in the Split mode. The keyboard is velocity- and pressure-sensitive, and the keys are weighted, so the player can expressively control the sound using his own unique keyboard techniques.

The SUPER JX is a 12-voice polyphonic synthesizer using two DCOs and two Envelope Generators to produce each voice. (Twenty-four DCOs and 24 Envelope Generators are provided.) The SUPER JX produces more impressive and realistic sound than other synthesizers due to Roland's unique dynamics-responsive DCO mixing control via the envelope generator and other modulations including cross-modulation and DCO syncing. In the frequently used Dual mode, 4 DCOs are activated by a single key layering one sound over another.

100-Tone Memory

The SUPER JX offers 50 preset tones and can store another 50 programmable tones. All 100 tones can be accessed instantly. The 50 preset tones include extremely percussive, metallic sounds normally obtained only from digital synthesis. Distinctive cross-modulated sounds, and Roland's popular orchestral instrument sounds are also provided. Each preset tone is singularly beautiful. Yet an even more impressive sound can be produced by layering two preset tones in the Dual mode.

Extensive parameters are provided to freely create programmable tones. For instance, the dual DCOs can be mixed, synced, or cross-modulated. And several parameters can be dynamically controlled. Any parameter can be selected and its value can be determined using a single α-Dial. It is also possible to adjust several parameters simultaneously by connecting an optional PG-800 Programmer to the SUPER JX.

■Preset Tone Chart

	0	1	2	3	4	5	6	7	8	9
50		PIANO 1	E.GRAND 1	PIANO 3	CELLO SECT	ARCO STRNG	LOW STRINGS	HI STRINGS	BEE-THREE	ORGAN 1
60	CALIOPE	PIPE ORGAN	DRYST.DRUM	MUSIC BOX	WINDCHIMES	E.BASS	SYNTH BASS	SOUNDTRACK	HOLLOW PAD	FLUTE 1
70	FRETNOT 1	BIG OL PAD	STABBRASS 2	POLYSYNTH 2	GOWESTBRS 2	GOWESTBRS 1	POLY BRASS	GAMELANET	CELESTE 2	AGOGO BELL
80	SYNDULCIMR	GUITARCLAV	PERKPIANO	PIANO 4	SYNC LEAD	SEQ* 1	RECORDERS	BRIGHT BOW	STRINGS 1	STRINGS 2
90	CHOIR	MAYS WIND	MARIMBA	METALLET	SYNTHBELL 2	XMAS BELLS	VIBES	CHURCHBELL	BES BELL	KALIMBA 2
100	GOWESTVOX									

Tone Parameters

DCO SECTION

Selects the octave range of DCO-1.

Selects the octave range of DCO-2.

Selects the waveform of DCO-1.

Selects the waveform of DCO-2.

Sets the pitch of DCO-1 in halftone steps (+12 to −12).

Sets the pitch of DCO-2 in halftone steps (+12 to −12).

Sets the LFO modulation depth of DCO-1 (00 to 99).

Sets the LFO modulation depth of DCO-2 (00 to 99).

Sets the envelope modulation depth of DCO-1 (00 to 99).

Sets the envelope modulation depth of DCO-2 (00 to 99).

Cross-modulates DCO-2 by DCO-1 to produce sound with complex harmonic series.

Syncs and cross-modulates DCO-2 by DCO-1. The pitch of the cross-modulated sound can thus be controlled from the keyboard.

Syncs DCO-2 by DCO-1. The two DCOs then send the signal to the mixer section.

Lets DCO-1 and 2 individually send the signal to the mixer section.

Sets the pitch of DCO-2 in one-cent steps (±50 cents).

Selects the velocity sensitivity curve which in turn controls the envelope modulation of the DCO pitch (off, 1, 2, 3).

ENV-1 ∧
ENV-1 ∨
ENV-2 ∧
ENV-2 ∨
Sets the envelope polarity and selects which of two ENVs controls the pitch of the DCO.

MIXER SECTION

Sets the level of DCO-1 (00 to 99).

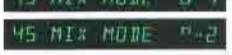
Sets the level of DCO-2 (00 to 99).

The level of DCO-2 can be modulated by the envelope generator. This parameter determines the depth of modulation (00 to 99).

Selects the velocity sensitivity curve which in turn controls the envelope modulation of the DCO-2 level (off, 1, 2, 3).

ENV-1 ∧
ENV-1 ∨
ENV-2 ∧
ENV-2 ∨
Sets the envelope polarity and selects which of two ENVs controls the level of DCO-2.

VCF SECTION



Sets the cutoff frequency of the high-pass filter (0, 1, 2, 3).

Sets the cutoff point of the VCF (00 to 99).

Sets the level of the resonance (00 to 99).

Sets the LFO modulation depth of the cutoff point (00 to 99).

Sets the envelope modulation depth of the cutoff point (00 to 99).

Sets the level of the key follow (00 to 99).

Selects the velocity sensitivity curve which in turn controls the envelope modulation of the cutoff point (off, 1, 2, 3).

ENV-1 ∧
ENV-1 ∨
ENV-2 ∧
ENV-2 ∨
Sets the envelope polarity and selects which of two ENVs controls the cutoff point.

VCA/CHORUS SECTION

Sets the volume (00 to 99).

ENV-2 ∧
Selects which of the ENV-2 or the gate signal controls the VCA.

GATE ⊓

Selects the velocity sensitivity curve which in turn controls the VCA (off, 1, 2, 3).

Controls the chorus effect (off, 1, 2).

LFO SECTION

∿ (Sine Wave)
⊓ (Square Wave)
Random
Selects the waveform of the LFO.

Sets the time of the LFO delay (00 to 99).

Sets the LFO rate (00 to 99).

ENV SECTION

Sets the attack time of ENV-1 (00 to 99).

Sets the attack time of ENV-2 (00 to 99).

Sets the decay time of ENV-1 (00 to 99).

Sets the decay time of ENV-2 (00 to 99).

Sets the sustain level of ENV-1 (00 to 99).

Sets the sustain level of ENV-2 (00 to 99).

Sets the release time of ENV-1 (00 to 99).

Sets the release time of ENV-2 (00 to 99).

Sets the key follow level of ENV-1 (off, 1, 2, 3).

Sets the key follow level of ENV-2 (off, 1, 2, 3).

SUPER JX POLYP

The Patch Memory Function

What essentially makes the SUPER JX different from other synthesizers is the patch memory function. There are 40 patch memory factors to set a variety of functions such as the key mode, split point, and MIDI functions. One setting of the 40 patch memory factors can be stored as the patch memory. The SUPER JX can store 64 patch memories. With a variety of playing capabilities and completely new layering methods, the patch memory function allows the SUPER JX to suit every musician's need and any playing style.

Patch Memory Factors

`11 UPPER/LOWER BALANCE 93`

Sets the volume balance between the upper and lower tones (00 to 99).

`12 DUAL DETUNE +09 CENT`

Sets the amount of the detuning between the upper and lower tones (−50 to +50).

`15 PORTAMENTO TIME 10`

Sets the portamento time (00 to 99).

`17 KEY MODE UP WHOLE`

The entire keyboard controls the tone assigned to the upper part.

`17 KEY MODE LO WHOLE`

The entire keyboard controls the tone assigned to the lower part.

`17 KEY MODE DUAL`

The entire keyboard simultaneously controls both the upper and lower tones.

`17 KEY MODE SPLIT`

The upper part of the keyboard controls the upper tone and the lower part controls the lower tone.

`18 TOTAL VOLUME 90`

Sets the total volume of each patch memory (00 to 99).

`21 AFTER TOUCH VIB 28`

Sets the depth of the after-touch vibrato effect (00 to 99).

`22 AFTER TOUCH BRI 33`

Sets the amount of the after-touch brilliance control (00 to 99).

`23 AFTER TOUCH VOL 40`

Sets the amount of the after-touch volume control (00 to 99).

`31 UPPER TONE 18`

Assigns a tone to the upper part (1 to 100).

`41 LOWER TONE 21`

Assigns a tone to the lower part (1 to 100).

`32 UP CHROMATIC SHIFT +04`

Shifts the pitch of the upper tone in halftone steps (−24 to +24).

`42 LO CHROMATIC SHIFT -12`

Shifts the pitch of the lower tone in halftone steps (−24 to +24).

`33 UPPER KEY ASSIGN POLY 1`
`43 LOWER KEY ASSIGN POLY 1`

Assigns one voice module to each key pressed (6 voices for the upper part and 6 voices for the lower part).

`33 UPPER KEY ASSIGN POLY 2`
`43 LOWER KEY ASSIGN POLY 2`

Assigns one voice module to each key pressed, yet assigns the voice module currently producing the tone to the other key pressing even when the other voice modules are left unused. The set release can be applied only to the last note or the notes released together. This mode is mainly used to produce portamento effect (6 voices for the upper part and 6 voices for the lower part).

`33 UPPER KEY ASSIGN UNISON1`
`43 LOWER KEY ASSIGN UNISON1`

Assigns two voice modules to each key pressed (3 voices for the upper part and 3 voices for the lower part).

`33 UPPER KEY ASSIGN UNISON2`
`43 LOWER KEY ASSIGN UNISON2`

Assigns two voice modules to each key pressed, but one of the voice modules is one octave lower than the other (3 voices for the upper part and 3 voices for the lower part).

`33 UPPER KEY ASSIGN MONO 1`
`43 LOWER KEY ASSIGN MONO 1`

Assigns one voice module to each of the upper and lower parts of the keyboard (1 voice for the upper part and 1 voice for the lower part).

`33 UPPER KEY ASSIGN MONO 2`
`43 LOWER KEY ASSIGN MONO 2`

Assigns six voice modules to each of the upper and lower parts of the keyboard (1 voice for the upper part and 1 voice for the lower part).

`34 UPPER UNISON DETUNE +10`
`44 LOWER UNISON DETUNE -14`

When the key assign is set to the Unison 1 or Unison 2, the pitch of the two voice modules can be detuned. This factor sets the amount of the detuning (−50 to +50).

`35 UPPER HOLD ON`

Determines whether or not the hold function is applied to the upper part by pressing the pedal switch (on or off).

`45 LOWER HOLD ON`

Determines whether or not the hold function is applied to the lower part by pressing the pedal switch (on or off).

`37 UPPER PORTAMENTO ON`

Sets the on or off status of the portamento effect of the upper part.

`47 LOWER PORTAMENTO OFF`

Sets the on or off status of the portamento effect of the lower part.

New Keyboard Split Function

The Super JX keyboard allows you to split and set the lowest notes of the upper part and the highest notes of the lower part individually. These splits can even be overlapped.

Split Point Setting (programmable in a patch memory)

`13 UPPER SPLIT POINT C4`

Sets the lowest note of the upper part (E1 to G7).

`14 LOWER SPLIT POINT B3`

Sets the highest note of the lower part (E1 to G7).

SPLIT POINT

When you wish to split the keyboard by only one split point, the key pressed in the Quick Edit mode will be the lowest note of the upper part.

UPPER SPLIT POINT — LOWER SPLIT POINT

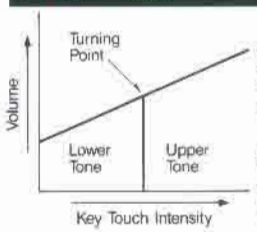
Both the upper and lower tones can be produced by the keys within the area where the lower and the upper parts ovelap.

Two New Touch-Responsive Methods to Control Sound

The SUPER JX also offers two special operation modes—Touch Voice and Cross-Fade—that allow two different tones to be changed, mixed or balanced by the key touch. This allows even more expressive synthesizer playing.

Touch Voice (programmable in a patch memory)

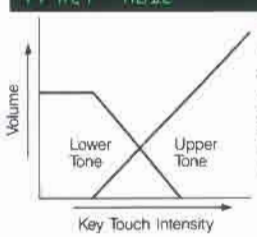
`17 KEY MODE T-VOICE`



Two different tones can be changed by key touch: a stronger key touch produces the upper tone and a weaker one produces the lower tone. The value set for the patch memory factor 13 (Upper Split Point) is also used to determine how hard you have to press the key to change the tones. The higher the value, the stronger you have to play.

Cross-Fade (programmable in a patch memory)

`17 KEY MODE X-FADE`



The volume balance between two different tones can be controlled by key touch. A weak key touch produces only the lower tone. As the key touch becomes stronger, the lower tone will fade out and the higher tone will become louder.

HONIC SYNTHESIZER JX-10

The Chase Play Function

The SUPER JX offers a brand-new Chase Play function in the Dual Mode. When this function is engaged, the tone assigned to the lower part is delayed while the tone assigned to the upper part is produced in real-time as the keys are pressed. A variety of delay effects can be obtained.

Four programmable factors are provided to create the desired "Chase Play" effect. There are four output jacks (two for the lower part and two for the upper). The Chase Play effect can be further enhanced by using a mixer and effect devices to individually process the signals from these outputs.

Chase Play Factors
(programmable in a patch memory)

S1 CHASE PLAY LEVEL 50

Sets the volume of the delayed tone (00 to 99).

S2 CHASE PLAY MODE U-L-U-

The upper and lower tones are produced alternately.

S2 CHASE PLAY MODE U-L-L-

The upper tone is produced first then the lower tone is produced repeatedly.

S2 CHASE PLAY MODE U-L

The upper tone is produced first then the lower tone is produced only one time.

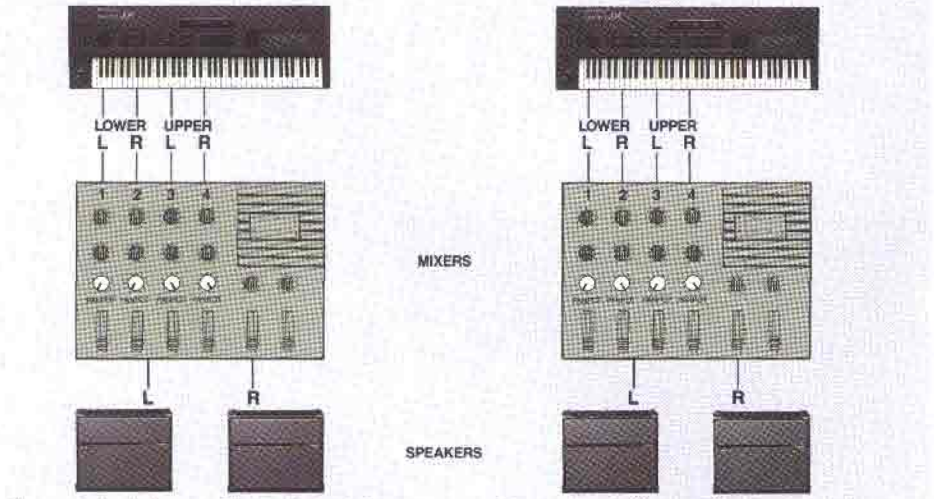
S3 CHASE PLAY TIME 23

Sets the time between the tones (01 to 99).

S4 CHASE PLAY SWITCH ON

Sets on or off status of the Chase Play function.

Typical Mixer Usages for the Chase Play Function



The sound signals from the Lower L and Lower R jacks are mixed by the mixer and come from this speaker.

The sound signals from the Upper L and Upper R jacks are mixed by the mixer and come from this speaker.

The sound signals from the Upper L and Lower L jacks are mixed by the mixer and come from this speaker.

The sound signals from the Upper R and Lower R jacks are mixed by the mixer and come from this speaker.

REAR PANEL

External Data Storage using Mem

In addition to the SUPER JX's internal memory of 100 tones and 64 patch memories, 50 programmable tones and 64 patch memories can be stored in one M-64C memory cartridge. The cartridge memory or the internal memory can be instantly selected. The M-64C can also be used to store the sequencer data.

The M-64C can also be purchased separately. You can form your own data library of the SUPER JX.

Performance-Oriented Real-Time

The SUPER JX also features a built-in sequencer. The sequencer data is written in the SUPER JX by real-time loading then stored in memory cartridge. Roughly 400 notes can be stored in the supplied M-16C and about 1,600 notes in the supplied M-64C. (The M-64C can't simultaneously store the sequencer data and the tone and patch memory data.)

The tempo of the playback is adjustable between 40 and 200 beats per minute. It is also possible to change the patch memory during the playback. In addition, the Repeat function allows one sequence to be played back as many times as desired.

Programmable Bender

Because it allows the player to spontaneously control the sound, the bender is one of the essential controls on the synthesizer. The SUPER JX incorporates an easy-to-use lever-type bender.

Four bending range intervals (major second, minor third, major third, and perfect fifth) can be set in real-time using a sliding switch or pre-programmed in the patch memory. In addition to the bender range setting, the patch memory can store the on or off status of the bender for the upper and lower parts of the keyboard. The bender can thus be applied either to the upper or the lower part or to both of them as desired.

The bender lever has one more function. By pressing the bender lever forward, the vibrato effect can be added to any sound.

Three Function-Assignable Contro

For greater flexibility, the SUPER JX has three function-assignable controls—two sliding controls (C1 and C2) located beside the Master Volume control plus the pedal switch connected to the Control Assign jack on the rear panel. The player can assign the following functions to these controls to match the SUPER JX to his own playing style.

Functions Assignable to the C1 and C2

C1 ASSIGN 11 U/L BAL 60

C2 ASSIGN 11 U/L BAL 60

Controls the volume balance between the upper and lower tones.

C1 ASSIGN 15 PORTA. TIME 00

C2 ASSIGN 15 PORTA. TIME 00

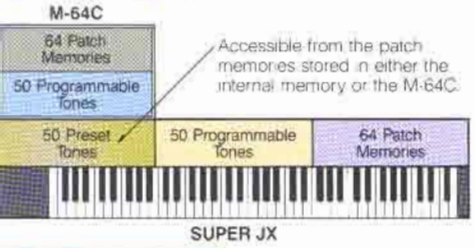
Controls the portamento time.

C1 ASSIGN 18 TOTAL VOL 99

C2 ASSIGN 18 TOTAL VOL 99

Controls the total volume. The maximum level is determined by the Master Volume control.

ry Cartridges



In the Internal Memory

There are 64 patch memories which can access 50 preset tones and 50 programmable tones stored in the internal memory.

In the M-64C

There are 64 patch memories which can access 50 preset tones and 50 programmable tones stored in the M-64C.

equencer

The clock signals of the built-in sequencer can be output as MIDI timing clock messages through the MIDI Out connector. Other MIDI-compatible rhythm units, such as Roland's TR Rhythm Composers, can thus be synchronized with the built-in sequencer.

Sequencer Parameters

```
SEQUENCER  REPEAT      ON
```

Sets on or off of the repeat function.

```
SEQUENCER  TEMPO  100
```

Sets the tempo of the sequencer (40 to 200).

Bender Factors (programmable in a patch memory)

```
16 BENDER RANGE        2
```

Sets the bending range (2: major second, 3: minor third, 4: major third, 7: perfect fifth).

```
38 UPPER BENDER        ON
```

Determines whether the bender controls the upper part or not.

```
48 LOWER BENDER        OFF
```

Determines whether the bender controls the lower part or not.

```
36 UPPER LFO MOD DEPTH  15
```

Sets the depth of the bender-controlled vibrato effect to be applied to the upper part (00 to 99).

```
46 LOWER LFO MOD DEPTH  86
```

Sets the depth of the bender-controlled vibrato effect to be applied to the lower part (00 to 99).

s

```
C1 ASSIGN 65 UP MIDIVOL  00
C2 ASSIGN 65 UP MIDIVOL  00
C1 ASSIGN 66 LO MIDIVOL  00
C2 ASSIGN 66 LO MIDIVOL  00
```

Transmits the MIDI volume messages on the upper and lower MIDI channels respectively.

Functions Assignable to the Pedal Switch Connected to the Control Assign Jack

```
PS ASSIGN PATCH  SHIFT
```

Shifts the patch memories successively.

```
PS ASSIGN PORTAMENTO
```

Turns the portamento effect on and off.

```
PS ASSIGN CHASE  PLAY
```

Turns the Chase Play function on and off.

```
PS ASSIGN UPPER  HOLD
PS ASSIGN LOWER  HOLD
```

Turns the hold function of the upper or lower part on and off.

A Perfect MIDI Mother Keyboard

The SUPER JX can also function as one of the most advanced MIDI keyboard controllers to completely control even the most complicated MIDI set-ups. A variety of MIDI functions can be programmed in the patch memory or controlled in real-time.

MIDI Functions Programmable in a Patch Memory

```
61 UP MIDI CH SEND     OFF
```

Sets the MIDI transmitted channel of the upper part (off, 1 to 16).

```
62 LO MIDI CH SEND     OFF
```

Sets the MIDI transmitted channel of the lower part (off, 1 to 16).

```
63 UP PROG CHANGE SEND  OFF
```

Sets the program change number transmitted on the upper MIDI channel (off, 1 to 128).

```
64 LO PROG CHANGE SEND   2
```

Sets the program change number transmitted on the lower MIDI channel (off, 1 to 128).

```
65 UP VOLUME  SEND      01
```

Sets the value of the MIDI volume message transmitted on the upper MIDI channel (off, 00 to 99).

```
66 LO VOLUME  SEND      10
```

Sets the value of the MIDI volume message transmitted on the lower MIDI channel (off, 00 to 99).

```
67 MIDI SEND KEY MODE UPPER
```

The MIDI messages are transmitted on the upper MIDI channel.

```
67 MIDI SEND KEY MODE LOWER
```

The MIDI messages are transmitted on the lower MIDI channel.

```
67 MIDI SEND KEY MODE SPLIT
```

The MIDI messages for the notes lower than the MIDI split point set by factor 68 (see below) are transmitted on the lower MIDI channel and the MIDI messages for the notes higher than the MIDI split point are transmitted on the upper MIDI channel.

```
67 MIDI SEND KEY MODE LAYER
```

The MIDI messages are transmitted on both the lower and upper MIDI channels simultaneously.

```
67 MIDI SEND KEY MODE   OFF
```

The MIDI messages are transmitted according to the key mode set for the SUPER JX keyboard.

```
68 MIDI SEND SPLIT      4C
```

Sets the split point for the MIDI Key Mode (E1 to G7).

MIDI Functions Controllable in Real-Time

```
20 UPPER CHANNEL        1
```

Sets the upper MIDI channel (1 to 16).

```
30 LOWER CHANNEL        2
```

Sets the lower MIDI channel (1 to 16).

```
10 PATCH MEMORY CH      5
```

Sets the MIDI channel on which the SUPER JX receives and transmits the program change messages to change its patch memories (off, 1 to 16).

Easy-to-Read Display

The SUPER JX features a large 32-digit fluorescent display. The display can indicate a variety of information including the name of the tone (up to 10 characters), the name of the patch memory (up to 18 characters), the tone parameters, the patch memory factors, and the setting of the MIDI functions. You can select the information to be displayed even while you play the SUPER JX.

For Tomorrow's Professional Musicians

Offering a wealth of superb functions and sounds, the SUPER JX meets the most severe demands of today's musicians. Visit your nearest Roland dealer soon and hear the difference for yourself.

```
21 UPPER PROG CHANGE    ON
```

Determines whether or not the SUPER JX receives and transmits the program change messages on the upper MIDI channel.

```
31 LOWER PROG CHANGE    ON
```

Determines whether or not the SUPER JX receives and transmits the program change messages on the lower MIDI channel.

```
22 UPPER AFTER TOUCH    ON
```

Determines whether or not the SUPER JX receives and transmits after-touch messages on the upper MIDI channel.

```
32 LOWER AFTER TOUCH    ON
```

Determines whether or not the SUPER JX receives and transmits after-touch messages on the lower MIDI channel.

```
24 UPPER BENDER         OFF
```

Determines whether or not the SUPER JX receives and transmits bender messages on the upper MIDI channel.

```
34 LOWER BENDER         ON
```

Determines whether or not the SUPER JX receives and transmits bender messages on the lower MIDI channel.

```
25 UPPER MODULATION     ON
```

Determines whether or not the SUPER JX receives and transmits modulation messages on the upper MIDI channel.

```
35 LOWER MODULATION     ON
```

Determines whether or not the SUPER JX receives and transmits modulation messages on the lower MIDI channel.

```
26 UPPER PORTAMENTO     ON
```

Determines whether or not the SUPER JX receives and transmits portamento messages on the upper MIDI channel.

```
36 LOWER PORTAMENTO     OFF
```

Determines whether or not the SUPER JX receives and transmits portamento messages on the lower MIDI channel.

```
27 UPPER HOLD           ON
```

Determines whether or not the SUPER JX receives and transmits hold messages on the upper MIDI channel.

```
37 LOWER HOLD           ON
```

Determines whether or not the SUPER JX receives and transmits hold messages on the lower MIDI channel.

```
28 UPPER MIDI VOLUME    ON
```

Determines whether or not the SUPER JX receives and transmits volume messages on the upper MIDI channel.

```
38 LOWER MIDI VOLUME    ON
```

Determines whether or not the SUPER JX receives and transmits volume messages on the lower MIDI channel.

```
11 SYSTEM EXCLUSIVE     OFF
```

Determines whether or not the SUPER JX receives and transmits system exclusive messages.

```
23 UPPER LOCAL          ON
```

Turns the local function on and off for the upper part.

```
33 LOWER LOCAL          ON
```

Turns the local function on and off for the lower part.

Usual Indication

```
I-H3 STRING/HORN X-FADE  80    1
```

- Patch Memory Name
- Patch Memory Number
- Patch Memory Bank
- Shows the memory used (I: internal, C: cartridge)
- Upper Tone Number
- Lower Tone Number

Tone Name Indication

```
I-H3 80  STRINGS 1 01 HORN2
```

- Lower Tone Number
- Lower Tone Name
- Upper Tone Name
- Upper Tone Number

Split Point Indication

```
I-H3 SPLIT L0-38   UP-4E   M-4E
```

- The highest note of the lower part
- The lowest note of the upper part
- Split point for MIDI operation

MIDI Channel Indication

```
I-H3 MIDI RCV 1: 1 SND 1: 1
```

- Lower MIDI Received Channel
- Upper MIDI Received Channel
- Upper MIDI Transmitted Channel
- Lower MIDI Transmitted Channel

SPECIFICATIONS

- Keyboard: 76 keys
- Memory: Patch Memory (64 Patch Memories in the Internal Memory, 64 Patch Memories in the M-64C Memory Cartridge), Preset Tone (50 Tones), Programmable Tone (50 Tones in the Internal Memory, 50 Tones in the M-64C Memory Cartridge), Sequencer Data (Approx. 400 notes in the M-16C Memory Cartridge, Approx. 1600 notes in the M-64C Memory Cartridge)
- Edit: Patch Memory Factors, Tone Parameters, MIDI Functions, Name, Master Tune
- Touch Pads: Numerical Keys (0 to 9, Enter), Patch Memory Select (A to H, 1 to 8), Chase Play (On/Off, Function, Time), Sequencer (Function, Start/Stop, Rec), Control Assign (Pedal Switch, C1, C2), Key Mode (Whole, Dual, Split), Edit (Patch, Tone, MIDI, Parameter Value, Name), Function Display, Recall, Upper/Lower Select (also used to move cursor), Copy, Write, Master Tune
- Controls: Bender Lever, Control Assign (C1, C2), After-Touch Sensitivity, Master Volume, α-Dial
- Switches: Bend Range Select, Voice Memory Select
- Display: 32-Digit Fluorescent Display
- Memory Cartridge Slot: 1 (accepts either the M-16C or the M-64C)
- Rear Panel: Jacks (Mix Output, Parallel Output × 4, Headphones, Pedal Hold, Control Assign), Connectors (MIDI In, MIDI Out, MIDI Thru, Programmer In), Switches (Output Level, Memory Protect, Power)
- Dimensions: 1,186(W) × 375(D) × 101(H) mm (46-11/16" × 14-3/4" × 4")
- Weight: 14 kg (30 lb. 14 oz.)
- Accessories: Connection Cord × 2, M-16C Memory Cartridge, M-64C Memory Cartridge, Edit Map, Music Rest
- Option: TB-10 Carrying Case

*Specifications and appearance subject to change without notice.

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Roland