



## SOUND GENERATOR

Piano Sound

Piano Sound: SuperNATURAL Piano Modeling

Max. Polyphony

Piano: Limitless (solo playing using "Concert Piano, Ballad Piano, Mellow Piano, and Bright Piano" tones)

Other: 384

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Tones

Piano: 15 tones  
E.Piano: 16 tones  
Strings: 11 tones  
Organ: 15 tones  
Pad: 15 tones  
Other: 278 tones (including 8 drum sets, 1 SFX set)

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## KEYBOARD

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Keyboard

PHA-50 Keyboard: Wood and Plastic Hybrid Structure, with Escapement and Ebony/Ivory Feel (88 keys)

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Touch Sensitivity

Key Touch: 100 types, fixed touch  
Hammer Response

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Keyboard Modes

Whole  
Dual  
Split (split point adjustable)

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## SPEAKER SYSTEM

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Speakers

Speakers: 8 x 12 cm (3-3/16 x 4-3/4 inches) x 2 (with speaker box)  
Dome Tweeters: 2.5 cm (1 inches) x 2

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## HEADPHONES

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Headphones

capable of Headphones 3D Ambience

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## TUNING, VOICING

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Master Tuning

415.3–466.2 Hz (adjustable in increments of 0.1 Hz)

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Temperament

10 types (Equal, Just Major, Just Minor, Pythagorean, Kirnberger I, Kirnberger II, Kirnberger III, Meantone, Werckmeister, Arabic), selectable temperament key

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Effects

Ambience  
Equalizer (3-band digital equalizer)  
Only for organ tones:  
Rotary Speaker Effect  
Only for E.Piano tones:  
Modulation Speed

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Piano Designer (Only for "Concert Piano, Ballad Piano, Mellow Piano, and Bright Piano" tones)

Lid  
Key Off Noise  
Hammer Noise  
Duplex Scale  
Full Scale String Resonance  
Damper Resonance  
Key Off Resonance  
Cabinet Resonance  
Soundboard Type

Damper Noise  
Single Note Tuning  
Single Note Volume  
Single Note Character

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Rated Power Output

25 W x 2  
5 W x 2

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Volume Level (SPL)

107 dB (This value was measured according to the method that is based on Roland's technical standard.)

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## **BLUETOOTH**

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Bluetooth

Audio: Bluetooth Ver. 3.0 (Supports SCMS-T content protection)  
MIDI, Turning music sheet: Bluetooth Ver. 4.0

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## **MIC**

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Effects

Compressor  
Doubling  
Echo

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Controls

Mic Gain knob  
Mic Volume slider

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## DATA PLAYBACK

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Playable Software

Standard MIDI Files (Format 0, 1)  
Audio File (WAV, 44.1 kHz, 16-bit linear format, MP3, 44.1kHz, 64kbps–320kbps,  
require USB Flash Memory)

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Internal Songs

Total 10 songs

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## RECORDER

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Recordable Software

Standard MIDI Files (Format 0, Approx. 70,000 notes memory)  
Audio File (WAV, 44.1 kHz, 16-bit linear format, require USB Flash Memory)

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## CONVENIENT FUNCTIONS

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Convenient Functions

Metronome (adjustable Tempo/Beat/Down beat/Pattern/Volume/Tone)  
Transpose (Keyboard/Song: in semitones)  
Registration (30 registrations, capable of pedal shift)  
Registration Set  
Tone Demo  
Auto Off

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## OTHER

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### Display

Graphic LCD 132 x 32 dots

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### Controls

Volume slider  
Equalizer sliders (Low/Mid/High)  
Part sliders (Lower/Upper)  
Song Vol. slider  
Speaker switch

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### Connectors

DC In jack  
Pedal (Damper/R, Sostenuto/C \*1, Soft/L \*1) jacks: TRS 1/4-inch phone type  
Input jacks: Stereo miniature phone type  
Output (L/Mono, R) jacks: 1/4-inch phone type  
Mic Input jack: 1/4-inch phone type  
MIDI (Out/In) connectors  
USB Computer port: USB B type  
USB Memory port: USB A type  
Phones jack x 2: Stereo miniature phone type, Stereo 1/4-inch phone type  
\*1: Assignable

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### Power Supply

AC adaptor

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### Power Consumption

12 W

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### Accessories

Owner's Manual  
Leaflet "USING THE UNIT SAFELY"  
AC adaptor  
Power cord  
Music rest  
Damper pedal (DP-10; capable of continuous detection)

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Option (sold separately)

Dedicated stand: KSC-90  
Dedicated pedal board: KPD-90  
Keyboard stand: KS-G8B, KS-18Z, KS-12  
Pedal unit: RPU-3  
Damper pedal: DP series  
Pedal switch: DP-2 (\*2)  
Expression pedal: EV-5  
USB Flash Memory

*\*2 Cannot use for Damper/R.*

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## **SIZE (DETACHED MUSIC REST)**

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Width 1,340 mm  
52-13/16 inches

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Depth 390 mm  
15-3/8 inches

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Height 136 mm  
5-3/8 inches

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## **SIZE (FP-90 WITH KSC-90 AND MUSIC REST)**

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Width 1,340 mm  
52-13/16 inches

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Depth

418 mm  
16-1/2 inches

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Height

932 mm  
36-3/4 inches

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### **WEIGHT (FP-90 WITH MUSIC REST)**

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Weight

23.6 kg  
52 lbs. 1 oz.

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### **WEIGHT (FP-90 WITH KSC-90, KPD-90, AND MUSIC REST)**

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Weight

37.8 kg  
83 lbs. 6 oz.

