

An Infinite Variety of S



KAWAI Synthesizer-100F

Controls & Functions

- ① **Volume**
Located at the lower left corner of the panel, this easy-view slider provides quick access while playing.
- ② **Portamento**
Time (length) is adjusted by the slider, while mode settings A, B and C provide different portamento effects.
- ③ **ENV I, II (Envelope Generators)**
Two independent envelope generators give separate control of VCF and VCA.
- ④ **ENV Motion Selector (KYBD TRIG/LFO TRIG)**
This switch lets you choose whether to use the keyboard or the LFO to control the envelope generator start time.
- ⑤ **LFO (Low Frequency Oscillator)**
This oscillator covers an extremely wide frequency range: 0.3 Hz to 50 Hz. Its selector switch provides a choice of three different waveforms: \sim , \wedge and \square .
- ⑥ **VCO (Voltage Controlled Oscillator)**
This selector covers six octaves, from 64' to 2',

and has a special Low position for easier operation in the low-frequency range. A Tune slider is also incorporated; its continuous $\frac{1}{2}$ -octave adjustment lets you tune the 100F to any other instrument.

- ⑦ **VCO Waveform Detector**
Use it to select either \sim or \square waveform types.
- ⑧ **Delay Vibrato**
VCO frequency is controlled by the LFO and ENV. There is also an independent control for Delay Vibrato, to provide a variety of deep, natural vibrato effects.
- ⑨ **Sound Source Selector (Audio/VCO/Noise)**
This switch selects the sound source for the VCF, not only from the VCO but also with positions for white noise and external signal.
- ⑩ **VCF (Voltage Controlled Filter)**
This low pass filter operates over an extremely wide range of 16 Hz to 32 kHz. Using it, the Peak Controller can be adjusted to stress one segment of the overtones. When the slider is set to 10, the VCF oscillates to create a sine wave (\sim), with frequency controlled by the

keyboard.

- ⑪ **VCF Control/Selector**
This combination of controls and selector can be used to make the LFO and ENV signals work on the VCF; the VCF can also be modulated by the VCO waveform to create a totally new tone. To obtain a wow effect using the expression pedal, set the selector to EXP.P.CV.; then, when the pedal is depressed a powerful wow effect will be created as the cut-off frequency rises.
- ⑫ **VCA (Voltage Controlled Amplifier)**
The VCA changes the volume according to the ENV signal; by increasing the Gain Control the volume gradually increases. If a key is pressed at this time, the tone is maintained. The selector works according to the signal set at ENV.II. When the switch is set to KYBD the signal is switched on and off according to the preset envelope.
- ⑬ **HPF (High Pass Filter)**
This control will pass only frequencies above the level set, resulting in a hard, sharp tone quality.

ound at Your Fingertips!

Incorporating some of the world's most advanced electronic circuitry, the Kawai 100F Synthesizer offers playing ease never before seen. In spite of its compact size, which lets you place it anywhere, it offers full functions and controls.

Create Your Own Sounds Starting Today

Experiment with new sounds in your own room. Play in combination with other instruments. Create fresh effects just like a sound studio — the 100F offers versatility for every musical situation.

Combine Synthesizers for New & Startling Effects

Connect two, or even three 100F units to combine the unique sounds and effects — there are special connectors for this technique. Combine tones, or tonal waveforms and noise: the possibilities are infinite.



Kawai Synthesizer 100F Features

True Synthesizer Sound from large-model type VCO, VCF and VCA

- The VCO, the synthesizer's oscillator sound source, has a wide frequency range. It is designed to permit six octave changes, from 64' to 2', using the range selector. The low range, in particular, is a wide 0.3 Hz to 1 kHz.
- The VCF is the synthesizer's filter section. It lets you vary the tone quality in many ways. Comprised of low pass filters, it completely covers the range from 16 Hz to 32 kHz for complete freedom in creating different types of sounds.
- The VCA section is the amplifier. It controls the rise and decay times of the tones — another dimension in tone coloring.

Delicate tonal Shadings thanks to dual envelope generators

The 100F synthesizer incorporates two envelope generators. ENV I controls the VCO and VCA sections, while ENV II controls the VCO-VCA combination. All corresponding controls are rationally laid out for easy operation, and the addition of Attack and Decay controllers provides an extra dimension of creative versatility.

Delay Vibrato for more realistic instruments effects

This control can be used to have a vibrato which begins after a time delay once the key is pressed. The effect is particularly impressive when recreating string sounds such as Violin and Cello.

Flute-type realism from special Portamento controls

Portamento provides step-free gliding from one note to the next. With the mode selector the player can select various delicate portamento shadings for just-right effect.

Easy-to-create percussive sounds, thanks to newly developed trigger system



Expression Pedal

The foot pedal can be used to control both volume and tone color for easier playing (optional).



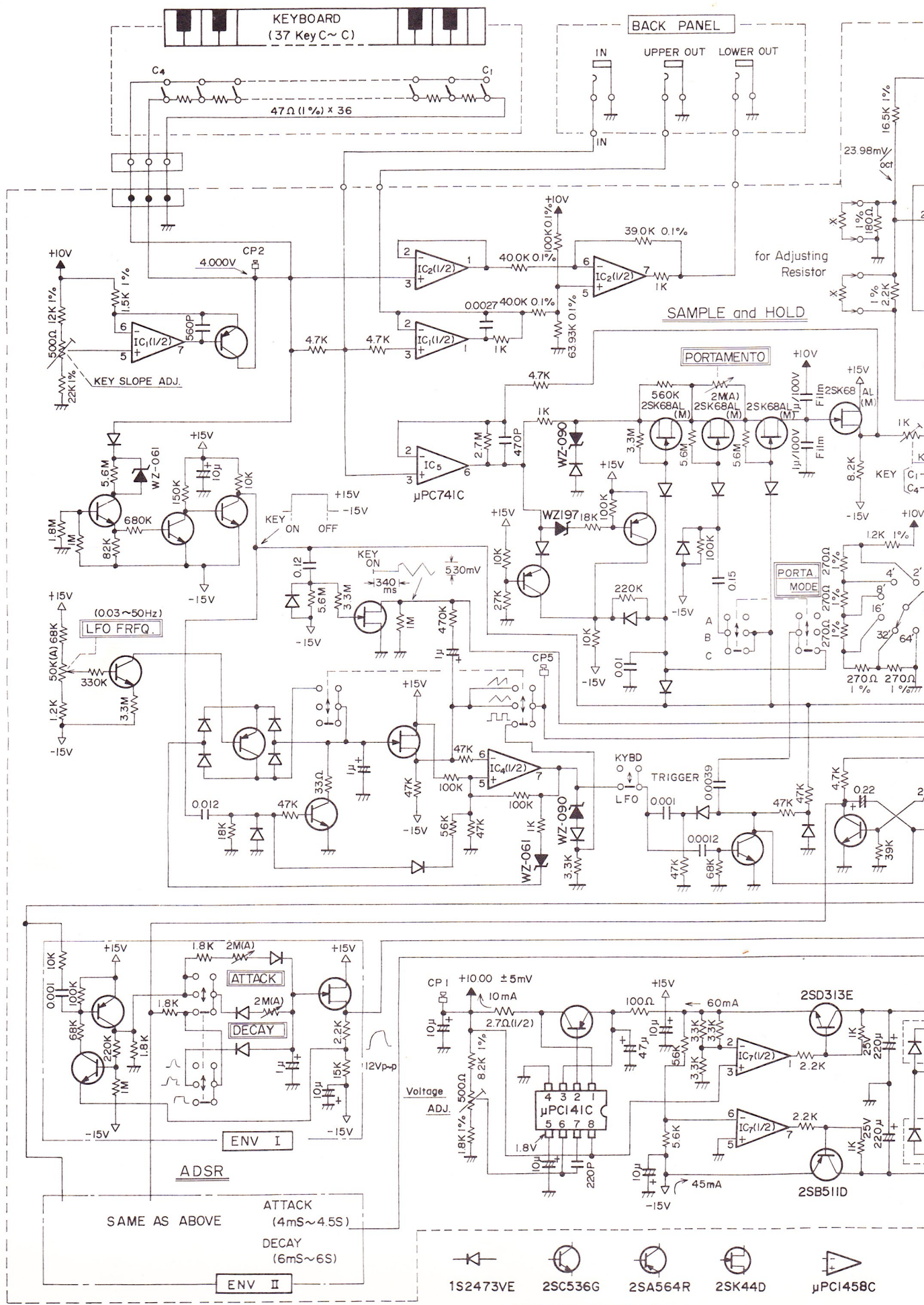
Registration Boards

Create your favorite tone combinations on these registration boards, then use them for quick tone setting and expanded range of expression.



Kawai Synthesizer 100F Specifications

- **Keyboard** / 37 keys
- **Sound Sources** / VCO / Range: Low, 64', 32', 16', 8', 4', 2' / Tuning Control: Tune / Waveform Selector: ∞ \square / VCO Controller: Delay Vib., LFO, ENV I / ENV II / Noise: Audio Input, VCO, Noise
- **Tone Color** / VCF / Controller: Cut-off, Peak / VCF Control Selector: ∞ / \square / EXP.P.CV, LFO, ENV I / HPF / Controller: Cut-off
- **Volume** / VCA / Controller: Gain / Control Selector: KYBD / ENV II / Attenuator: Volume
- **Envelope Generators** / ENV I / Envelope Selectors: \wedge / \wedge / \wedge / Envelope Controller: Attack, Decay / ENV II / Envelope Selectors: \wedge / \wedge / \wedge / Envelope Controller: Attack, Decay / Envelope Trigger Selector: KYBD TRIG, LFO TRIG
- **LFO** / Frequency Controller / Waveform Selector: ∞ , ∞ , \square
- **Portamento** / Mode Selector: A, B, C / Portamento Controller
- **Rear Panel** / Audio Jacks: Audio In, High Output, Low Output / Synthesizer / Control Jacks: In, Upper Out, Lower Out / Expression Pedal Jack: Exp. Pedal
- **Others** / Power Switch, Pilot Lamp
- **Dimensions (WxDxH) & Weight**: 54.5 x 34.5 x 15 cm, 6.7 kg
- **Rated Frequency**: 50/60 Hz
- **Power Consumption**: 6W



KEYBOARD
(37 Key C~C)

BACK PANEL

47Ω (1%) x 36

IN UPPER OUT LOWER OUT

+10V

KEY SLOPE ADJ.

SAMPLE and HOLD

PORTAMENTO

LFO FRFQ.

PORTA MODE

ADSR

SAME AS ABOVE ATTACK (4mS~4.5S) DECAY (6mS~6S)

ENV II

1S2473VE

2SC536G

2SA564R

2SK44D

μPCI458C

(SPECIFIED OTHERWISE)

