

UNIVOX

MINI-KORG SYNTHESIZER

SERVICE MANUAL



MINI-KORG SYNTHESIZER OPERATING PROCEDURE

1. Connect AC line cord (found inside recessed compartment on rear of unit, figure 1) to local voltage 50/60Hz outlet.
2. Connect audio cable (shielded-type) from jack marked "Output", to input of your amplifier. Utilize jack marked "H" for high impedance use ($100K \Omega$) or jack marked "Low" for low impedance ($5K \Omega$) shown in figure 1.

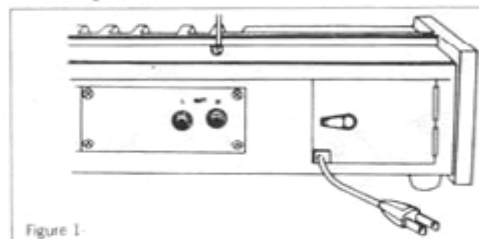


Figure 1.

3. Switch on/off control to "On" position. If pilot lamp fails to light, check fuse found in rear compartment, figure 1 and replace *With identical rating only.*
4. Install enclosed Music Rack as shown in figure 2.



Figure 2.

5. Adjust pitch-control slide for tuning figure 10.
To adjust Pitch, set Attack-Perussion slides (figure 5) to "8", and all "Instant Set Tabs" (figure 8) to OFF position.
6. Follow the control descriptions listed next for a better understanding of the versatility of your new MINI-KORG SYNTHESIZER.
7. Unit is equipped with 2 rear adjustable legs for tilting.

Precautions:

- Be certain that power switch is turned OFF whenever plugging in or unplugging the AC connector cord.
- If fuse should need replacing, make sure that you replace with *identical* value.
- Protect the unit from excessive heat, humidity, and vibrations.

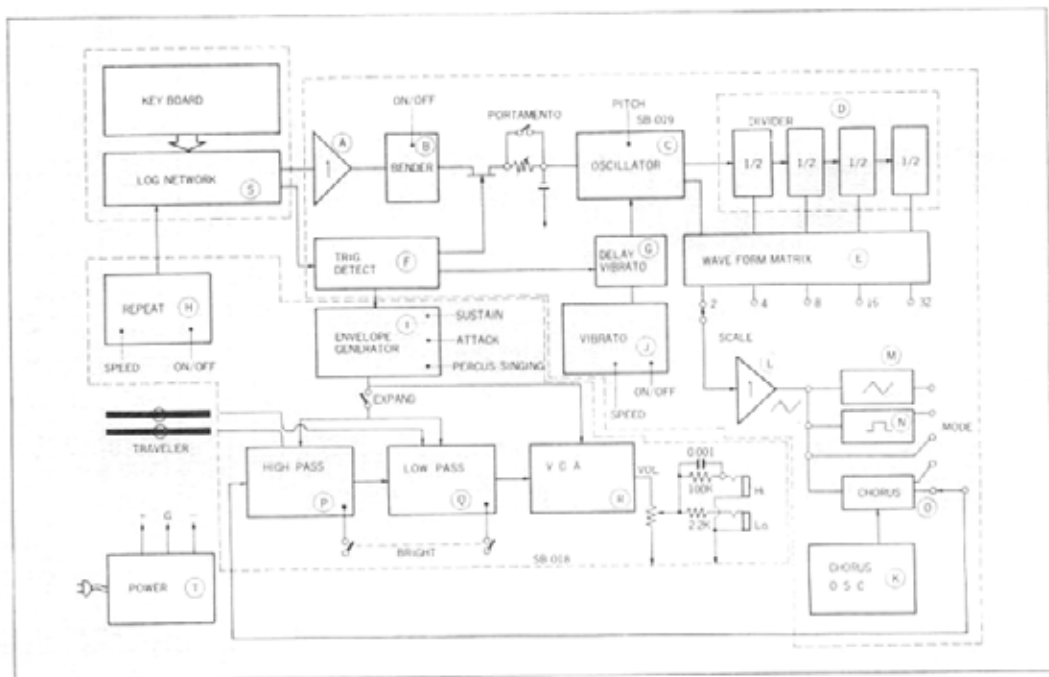
Unicord.

a Division of Gulf + Western Manufacturing Company
89 Frost Street, Westbury, N.Y. 11590

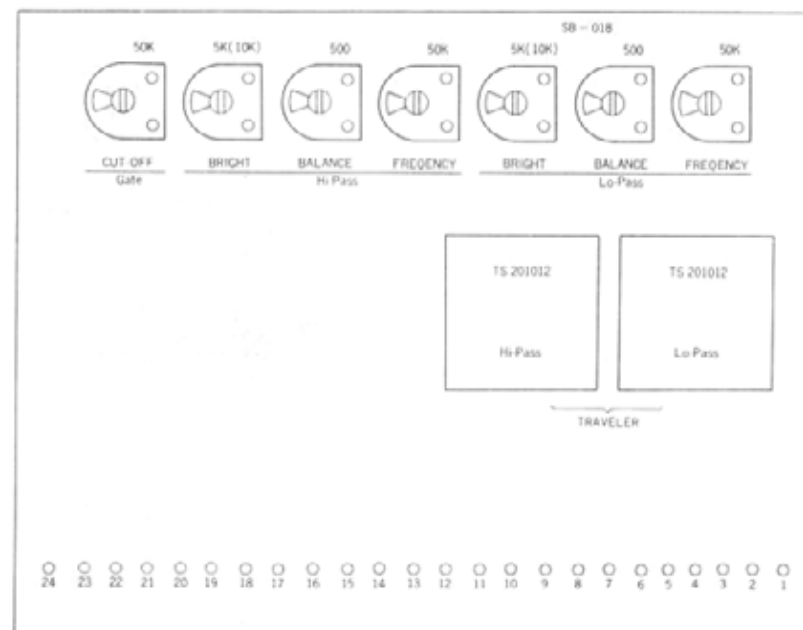
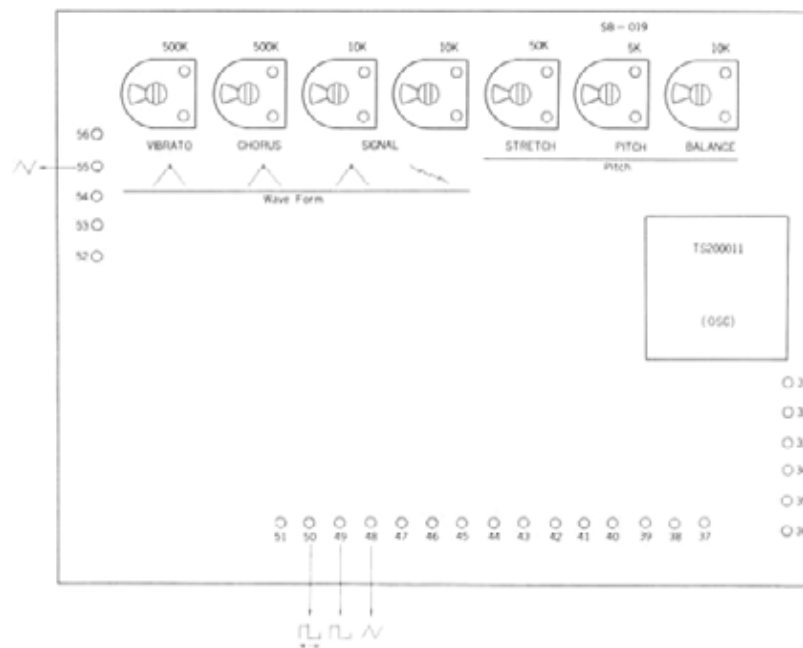
SPECIFICATIONS

- **Key board** Scale 37 keys 3 Octaves
- **Scale** 32' 16' 8' 4' 2' 7 Octaves
- **Wave form** Triangular Wave Square Wave
Sawtooth Wave Chorus I Chorus II
- **Effect Switch** Expand, Bright, Sustain, Bender, Repeat
Vibrato, Delay Vibrato, Portamento
- **Slide Control** Volume, Traveler, Attack-Slow, Percussion-Singing
Repeat, Vibrato-Speed, Vibrato-Depth
Portamento Pitch
- **Dimensions** Length: 29.3in. Width: 11.0in. Height: 4.3in.
- **Weight** 19.8lbs.
- **Accessories** Music Rack, Connection Cord
- **Power Supply** 117V 50/60Hz
- **Power Consumption** 15W
- **Others** Power Switch, Pilot Lamp, Output Jack (High 100K Ω Low 5K Ω)
- **Options** Case, Stand, Expression Pedal (2 channels)

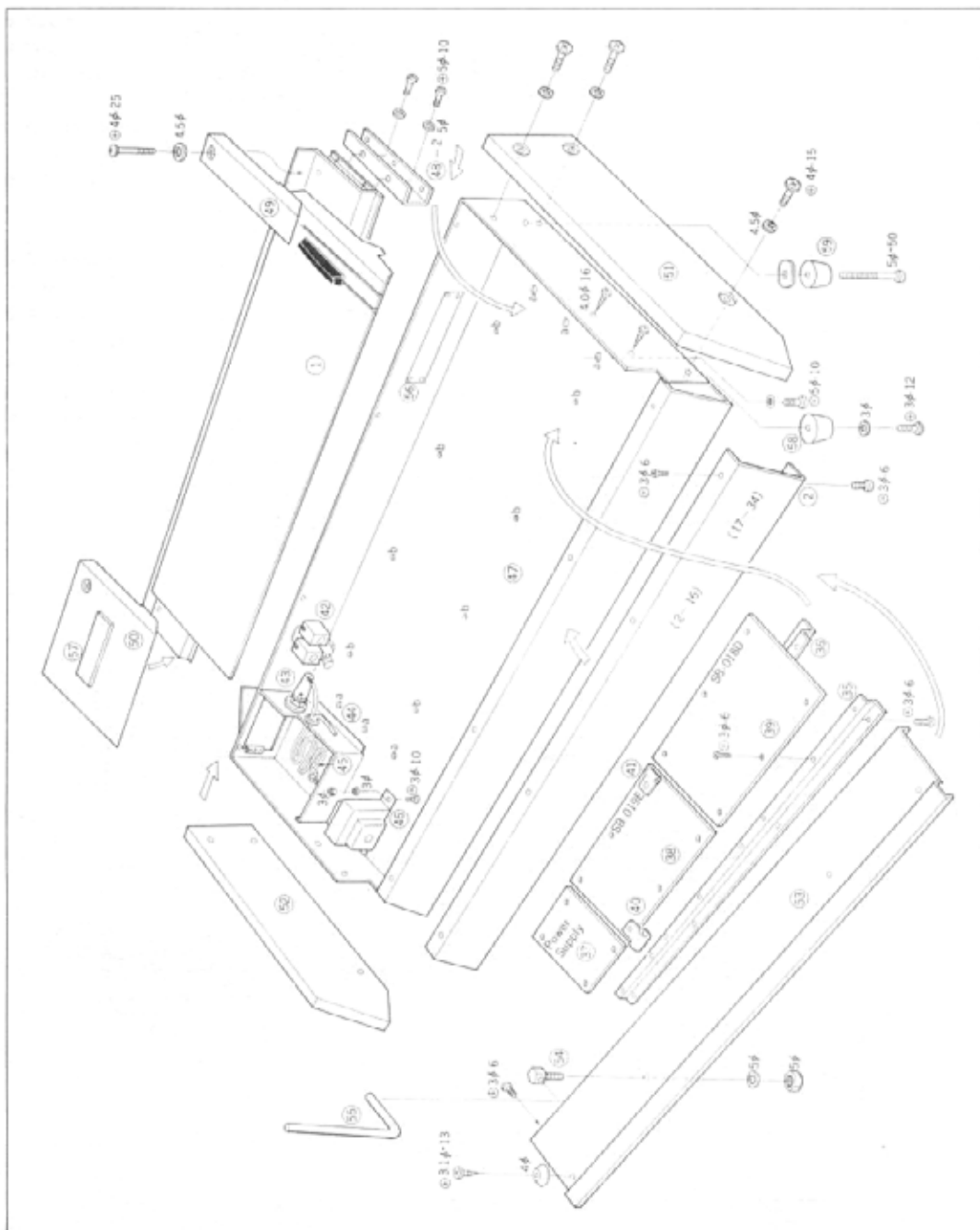
BLOCK DIAGRAM



PARTS DISTRIBUTION



MECHANICAL PARTS DIAGRAM



MINI KORG 700S ADJUSTMENT PROCEDURE

COORDINAL ADJUSTMENT

1. VOLTAGE ADJUSTMENT

SETTING: Power Source Line: Oscilloscope

- a. DC - VEE - 10V Green Line
+ VCC + 20V Orange Line

- b. Ripple Check
Make the value of oscilloscope lower than 10mV, setting at AC range.

MAIN PART

2. PITCH ADJUSTMENT

SETTING: PITCH KNOB: CENTER

SCALE: 8'

MODE: \square

OUT: WT-10A

KEYBOARD

C1		C2		C3		C4
----	--	----	--	----	--	----

- a. Press C4 and adjust with (SB-019) 5KVR to make the pitch 0 cent.
- b. Press C2 and adjust with (SB-019) 50KVR to make the pitch 0 cent.
- c. Press C1 and adjust with (SB-019) 10KVR to make the pitch 0 cent.
- d. Repeat a, b, c operations to make all pitch 0 cent.

3. TRAVELLER ADJUST

SETTING: SCALE: 32'

MODE: 1

BRIGHT: ON

OCT: OSCILLO

- a. LOW PASS Q ADJUSTMENT
Set Traveller H:MAX, L:MAX and the range of oscilloscope 0.1 usec, then adjust with 50KVR Frequency to make one wave cycle 1 cm.
- b. HIGH PASS Q ADJUSTMENT
Set Traveller H:6, L:6 and adjust with (SB-018) 50KHigh Pass Frequency to make the area of wave cycle largest.

c. LOW PASS CUT OFF ADJUSTMENT

Traveller H:6, L:0. Adjust with 5K Low Pass Bright to make 5 wave cycles.

d. HIGH PASS CUT OFF ADJUSTMENT

Traveller H:MAX L:6. Connect the oscilloscope with SB-018 HP Check, and adjust at range 0.1V 5m Sec with 5K High Pass Bright to make 4 wave cycles.

4. VCA GATE ADJUSTMENT

SETTING SCALE: 2'
SUSTAIN: ON
ATTACK: 0
SINGING: 10

Press the key and adjust with 50K Gate Cut Off to avoid the sound to remain.

*Refer to the Parts Distribution in the service manual, regarding all the Adjustment VR.

EFFECT PART

1. PITCH ADJUSTMENT

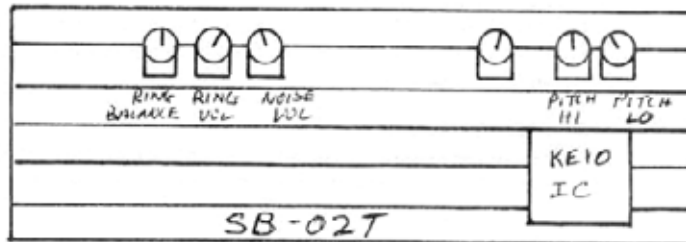
SETTING: EFFECT: ON
BALANCE: 0
PITCH: 4
SELECT: DUET
OUT: WT-10A

- Press C4 and adjust with 50K Hi Pitch to make the pitch 0 cent.
- Press C1 and adjust with 10K Lo Pitch to make the pitch 0 cent.
- Repeat the a and b operations several times.

2. RING MODULATION ADJUSTMENT

SELECTOR: MODULATOR 3

Adjust with 10K Ring Balance to make every pitch out of tune.



MINI KORG 700S (K-2) PARTS LIST

Parts NO.	Description	Parts NO.	Description
Fixed Carbonfilm Resistors 1/4W 5%		Disctype Ceramic Capacitors	
120-02101	100Ω	135-16470	47PF
-02102	1KΩ	Tantalum Electrolytic Capacitors	
-02392	3.9KΩ	143-16471	16V M .47μF
-02472	4.7KΩ	-16332	16V K 3.3μF
-02822	8.2KΩ	-16103	16V M 10μF
-02103	10KΩ	Aluminum Electrolytic Capacitors	
-02153	15KΩ	140-50101	A50V 1MF
-02223	22KΩ	-25102	A25V 10MF
-02333	33KΩ	Transistors	
-02473	47KΩ	110-05003	2SA564S
-02683	68KΩ	-05001	2SC828S
-02823	82KΩ	-05002	2SC644S
-02104	100KΩ	FET	
-02224	220KΩ	110-04001	2SK-30Y(0)
-02474	470KΩ	Silicon Diode	
-02105	1MΩ	170-1004	1S-1555
Fixed Resistors 1/4W 5%		IC	
123-02225	2.2MΩ	112-01001	TS-200011
-02106	10MΩ	Printed Circuit Boards	
Semifixed Resistors		181-01004	SB-027
160-05502	B. 5KΩ	Variable Resistors	
160-05103	B. 10KΩ	251-02103	30mm B 10KΩ
-05503	B. 50KΩ	251-02104	30mm B100KΩ
-05504	B-500KΩ	Paddle Switches	
Polyester Film Capacitors 50V		221-01004	SP-2012
130-01102	.001μF	221-01005	SP-2022
130-01103	.01μF	Rotary Switches	
-01473	.047μF	223-01246	ESR-246 K20Z
Polystyrene Film Capacitors		Lugboard	
137-01202	2000PF	233-01104	1L4P
137-01802	8000PF		

