

KAWAI ORGANS

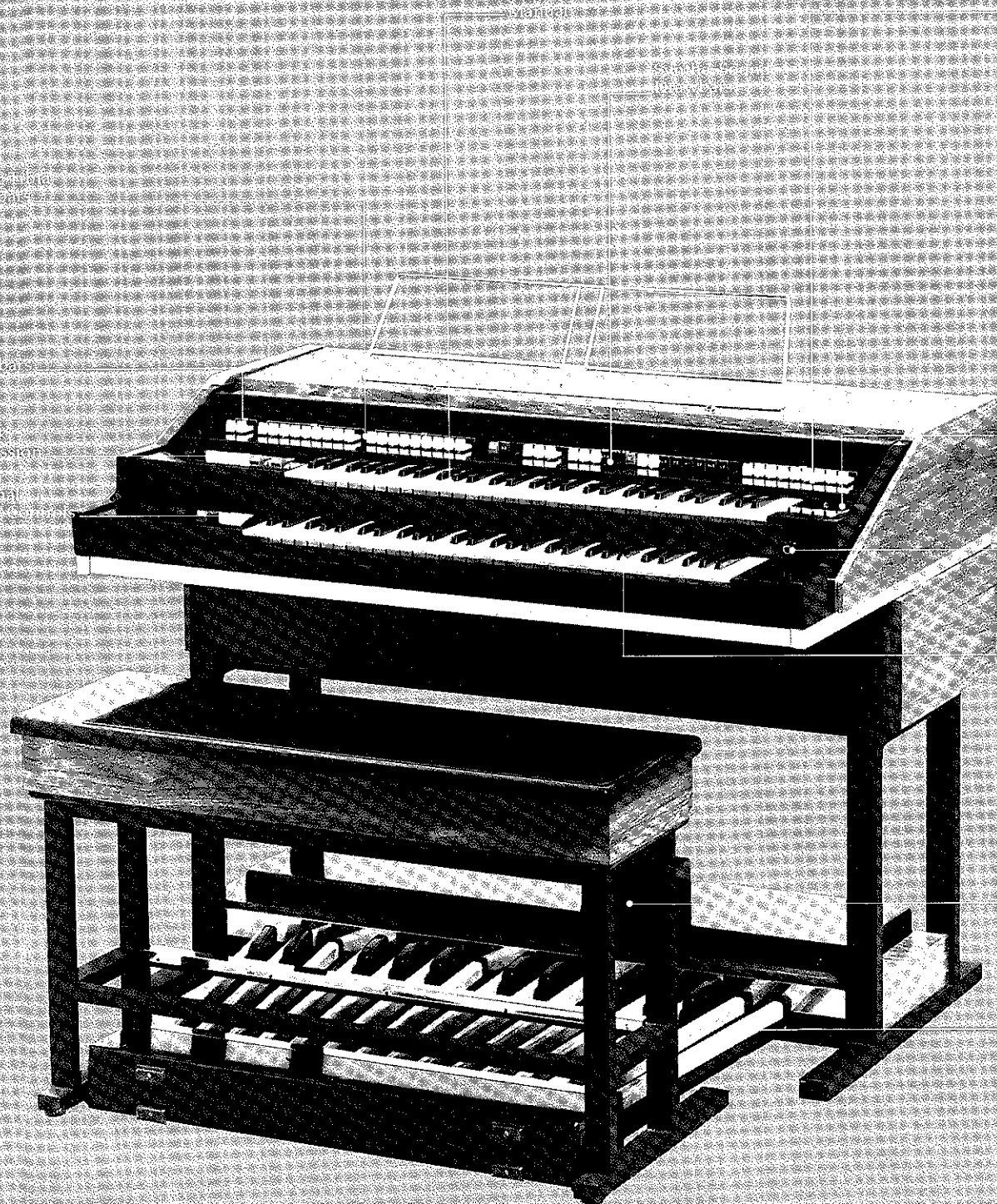
KAWAI Electronic Organ

T-3 Owners Manual



Issued: January 1977

T-3



Manual Drawbars Four Families Of Tone

Your Kawai T-3 is equipped with Tibia drawbars, some of the most flexible and musically useful controls ever devised. There are two groups of nine tibia drawbars for the upper manual and one group of nine for the lower manual. Each group controls pitches from 16' to 1' in 9 degrees of loudness and off.

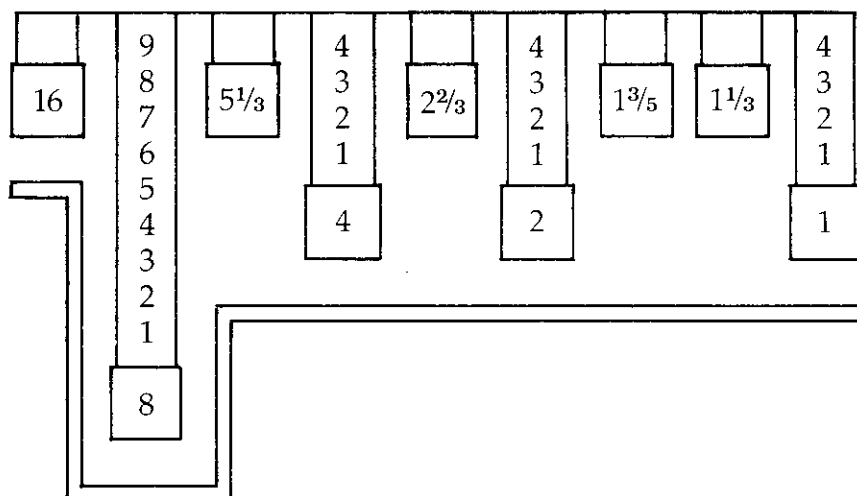
The four traditional families of organ voices—flutes (also called tibias), reeds, strings, and diapasons—can be registered on drawbars by grouping them into patterns. Numbers on the drawbars permits an easy recording of favorite registrations.

A rocker tab
bars is to be



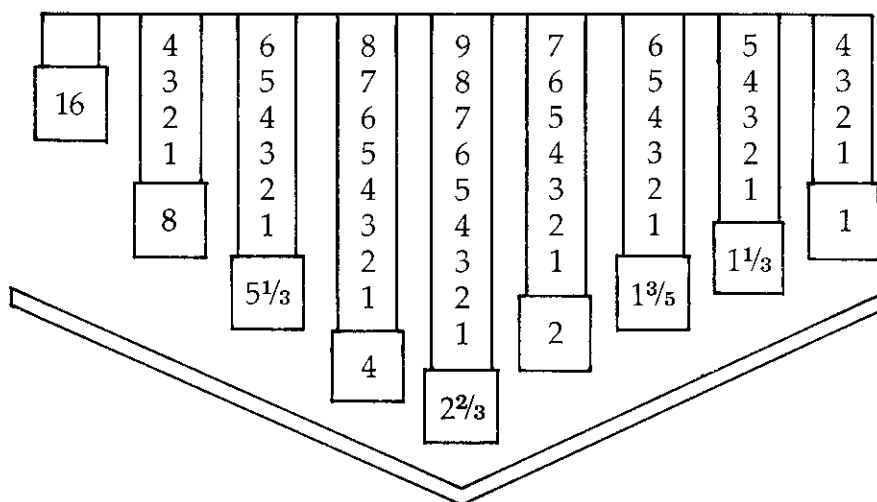
selects which group of upper draw-
played.

A typical flute (tibia) registration pattern:



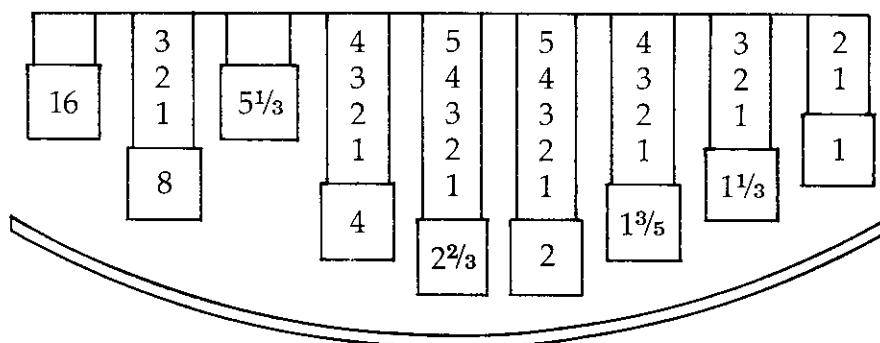
This registration number is 090 404 004. When a drawbar is off or not used, it is identified by a 0.

A typical reed registration pattern:



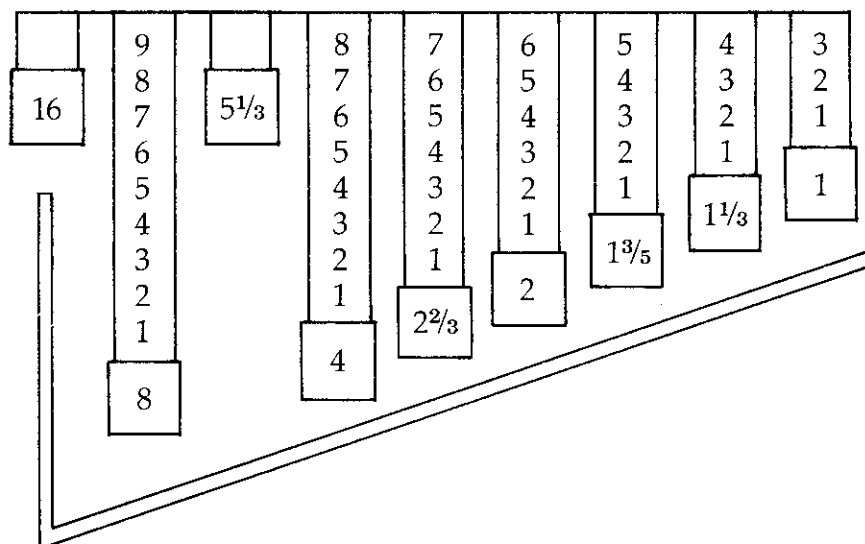
The registration number is 046 897 654.

A typical string registration pattern:



The registration number is 030 455 432.

A typical diapason pattern:



The registration number is 090 876 543.

Some useful solo drawbar registrations:

1. Clarinet 8'	080 080 840
2. French Horn 8'	080 740 000
3. Oboe 8'	040 685 300
4. Trumpet 8'	060 888 654
5. Cello 8'	040 545 440
6. Open Diapason 8'	050 642 200
7. Tibia 8'	080 300 000
8. Trombone 16'	888 800 000
9. Flute 4'	000 800 000
10. Jazz solo	888 000 000
11. Pop Solo	088 800 880

Some useful ensemble drawbar registrations:

1. Theater Organ 16'	680 088 000
2. Full Tibias 16'	680 807 006
3. Tibias 8' and 2'	080 408 004
4. Full Theater Brass 16'	786 878 667
5. Dulciana 8'	040 432 000
6. Vox 8' and Tibia 4'	020 500 234
7. String Accomp. 8'	060 554 322
8. Full Accomp. 8'	070 656 311
9. Bombarde 16'	874 767 666

Pedal Drawbars

Two drawbars controlling tibia voices at 16' and 8' provide the tonalities for the pedal division.

Pedal Effect

The pedal effect tabs add a sustain effect to the pedal tones: Sustain I adds a short sustain effect.

Sustain II adds a medium sustain effect.

When both sustain tabs are depressed at the same time, a long sustain effect may be obtained. Used in conjunction with the 8' pedal drawbar, sustain I or II creates an authentic string bass effect.

Upper Drawbar Attack Percussion

Attack percussions, available at 4 pitches, 5 $\frac{1}{3}$ ', 4', 2 $\frac{2}{3}$ ', 2' — may be added to either group of upper drawbars by a group selector tab or played alone by registering the group of certain bell-like upper manual drawbar registrations of 888 000 000 or 800 000 000, the more popular contemporary jazz, rock and soul tones are heard. The attack percussions are "touch-responsive" and may be sounded selectively by playing detached before the desired next attack effect.



The **attack forte** tab increases the sound level of the registered attack pitches.

The **attack long** tab increases the length of decay of the registered attack pitches.

Leslie And Other Tone Equipment

The Kawai T-3 is designed to be used with the model 147 Leslie tone cabinet. All tones of the T-3 console are amplified through the 2 speed Leslie. Additionally, an ensemble rocker tab permits the player to optionally channel the all-harmonic Synthe-sound voices through an additional stationary guitar-type amplifier and speaker for a more dramatic stereo separation of tonal divisions.



Reverberation

Three degrees of reverberation are available via two reverb rocker tabs which may be used individually or in combination.

Synthe-Sound

This division of the Kawai T-3, played alone on the upper manual or with voices from the tibia channel, features three tonal sections. All voices and effects are controlled by drawbars from the off position (in), to maximum volume (9) for balancing flexibility and each voice speaks polyphonically:

Instrumental Percussion: include piano, harpischord and marimba with sustain and repeat rate controls.

Orchestral Solo Voices: include saxophone, trumpet, violin, and a phase shifter which may be played alone or in conjunction with other synthe-sounds for contemporary and novelty effects.

Synthesizer: This most desirable contemporary electronic music feature allows the player a wide range of creativity for building his own traditional instrumental tones as well as novel "way-out" effects. All functions are controlled by drawbars as follows:

V	Volume Balance
16	16' input signal
8	8' input signal
LF	Low pass filter
PE	Resonance peak
AT	Attack
DE	Delay
SUS	Sustain level
LE	Filter level

Some Typical T-3 Synthesizer Registrations

Effect	Drawbars							
	V	16	8	LF	PE	AT	DE	SUS
Trumpet	9	0	9	5	7	1	3	0
Saxophone	9	9	0	7	7	3	2	5
Wow Trumpet	9	0	9	5	7	1	1	0
French Horn	9	9	0	5	5	3	7	1

The player should experiment broadly with the many combinations available in the Kawai T-3 Synthe-sound division in order to find those solo effects and combinations which best portray his musical personality.

Other Features:

Tuning Control: A rotary control on the right of the front strip between manuals permits the raising or lowering of the pitch of the entire organ by \pm 60 cents with no change in relative tuning.

Power Switch and Key Lock: The power switch is activated by a key lock permitting the option of locking the power in the off position. A pilot light indicates when the power is on.

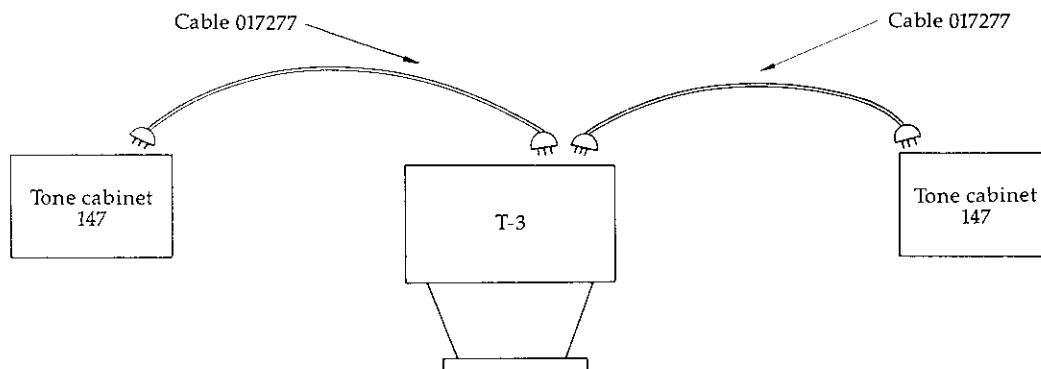
Input Jack: Two phone jack inputs are located under the keyboard for adding an external instrument such as: rhythm unit, synthesizer, electronic piano, etc., which will be channeled to the same speaker as the synthe-sound.

Tone Cabinet Connections:

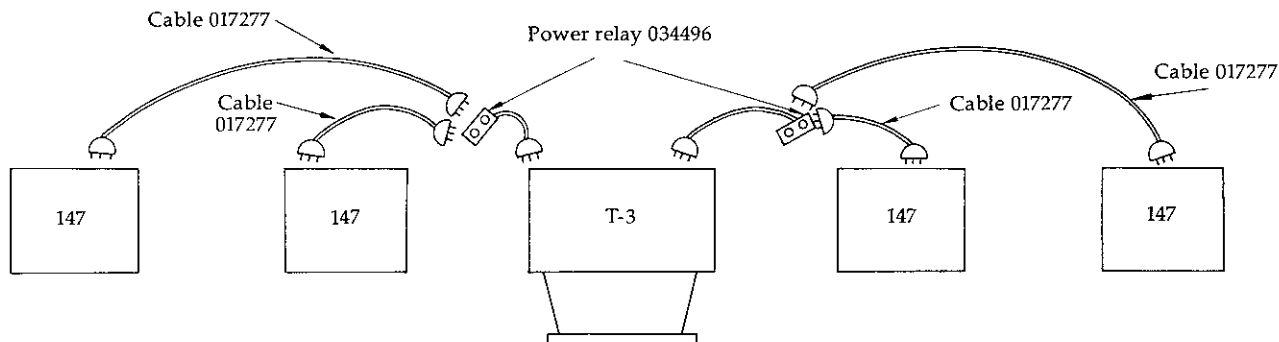
The Model T-3 electronic organ is designed to be played through the Leslie Model 147 tone cabinet. Although the organ may be played with a single tone cabinet, two units are recommended for better tonal dispersion. Two sockets are provided at the base of the organ and standard 6 pin Leslie Cables (017277) can be used to connect the organ and the tone cabinets.

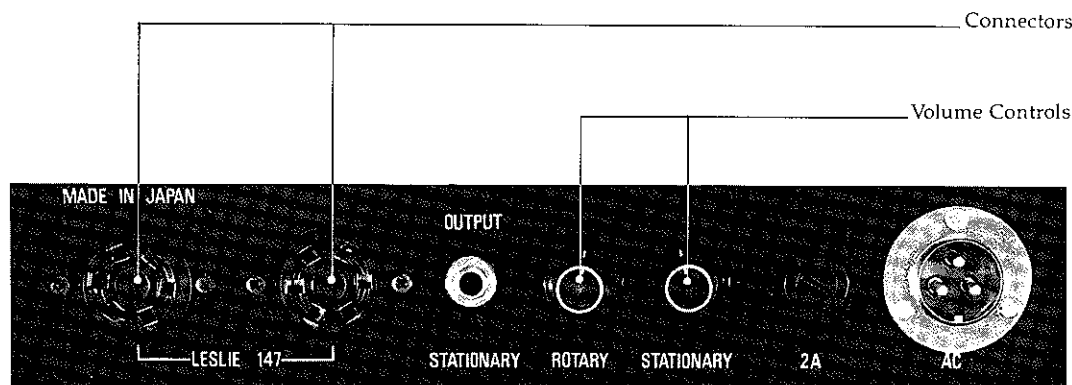
When additional speaker cabinets are to be used, the connections should be made as illustrated below, using the power relay (034496).

An optional amplifier and speaker can be connected to channel the synthe-sound voices (using ensemble tab), and an output jack (phone type) is also at the same location.



When additional speaker cabinets are used in a concert, the connections should be made as illustrated below, using the power relay.





Level Adjustment

The T-3 output panel contains 2–6 pin sockets for connecting Leslie 147 tone cabinets, and the output level is adjusted by the rotary level control to the right end of panel. There is also a phone jack output for optional synthe-sound amplification and its level is adjusted by stationary level control next to the phone jack. The usual procedure for

level adjustment is to set the rotary level control (and stationary level control if used) at their mid point (12 o'clock) and then adjust the output level of each speaker by its own volume control. Final balancing may be obtained by adjusting the output level controls.

MODEL T-3 SPECIFICATIONS

• Keyboards

Upper Manual	61 Keys
Lower Manual	61 Keys
Pedals	25 Keys

• Upper Drawbars

*Upper I—Tibia Drawbars

16', 8', 5 1/3', 4', 2 2/3', 2', 1 3/5', 1 1/3', 1'

*Upper II—Tibia Drawbars

16', 8', 5 1/3', 4', 2 2/3', 2', 1 3/5', 1 1/3', 1'

*Synthe—Sound

SUS	Sustain
RS	Repeat rate (for Marimba, phase shifter)
PI	Piano
HA	Harpsichord
MR	Marimba
SAX	Saxophone
TR	Trumpet
VI	Violin
PS	Phase Shifter
V	Volume Balance
16	16' Input Signal
8	8' Input Signal
LF	Low Pass Filter
PE	Resonance Peak
AT	Attack
DE	Decay
SUS	Sustain Level
LE	Filter Level

• Lower Drawbars—Tibia Drawbars

16', 8', 5 1/3', 4', 2 2/3', 2', 1 3/5', 1 1/3', 1'

• Pedal Drawbars—Tibia Drawbars

16', 8'

• Upper Drawbar Attack Percussion

Attack 5 1/3'
Attack 4'
Attack 2 2/3'
Attack 2'
Attack Long
Attack Forte
Upper I/Upper II

• Upper Drawbar Preset

Upper I/Upper II

• Tremolo (Leslie®)

Leslie Slow
Leslie Fast

• Ensemble

• Pedal Sustain

Sustain I
Sustain II

• Reverb

Reverb I
Reverb II

• Others

Tuning (\pm 60 Cent)
Expression Pedal
Power Switch
Pilot Lamp/Input Jack (x2)

