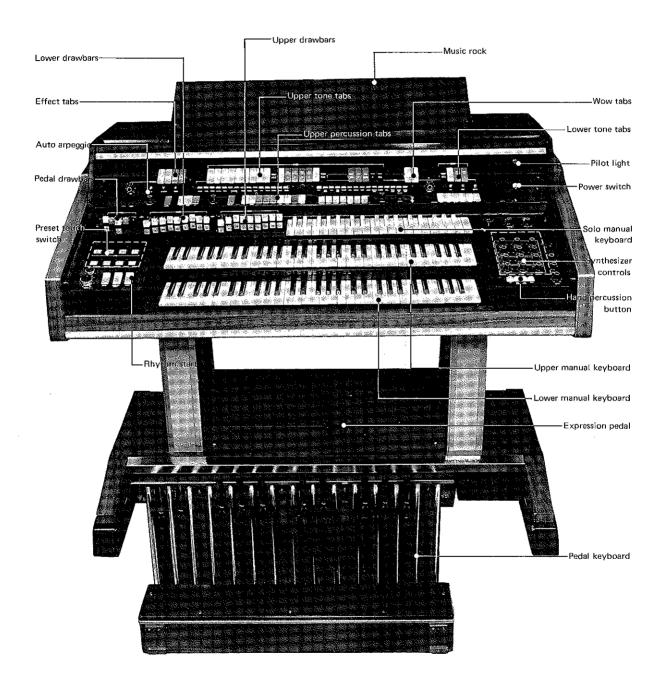
# Kawai Electronic Organs

INSTRUCTION T-5



# T-5



# **KEYBOARDS**

Upper Manual:

61 keys

Lower Manual:

61 keys

Pedals:

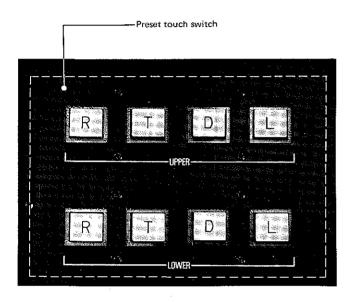
25 keys

Solo Manual:

37 keys

(for synthesizer)

# PRESET TOUCH SWITCH



Four preset touch switches are provided on the left-hand side panel for both the upper and lower manual keyboards. Keep in mind the function of these preset touch switches, as they are very important in playing the organ.

The touch switch operates at a touch of the finger tips. The switch is lighted when engaged.

#### **UPPER PRESET SWITCH**

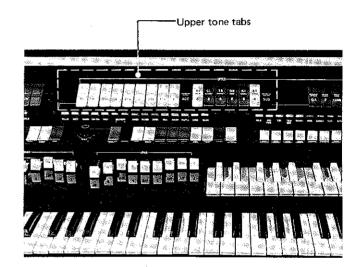
- Pressing this switch turns on the manual voices on the upper manual tabs. Press this switch when using the upper manual tone tabs.
- Pressing this switch turns on the upper drawbars and percussion voices. Press this switch when using the upper manual drawbars and percussion.
- T: Pressing this switch turns on the preset tibia chorus.
- R: Pressing on this switch turns on the preset reed chorus.

#### LOWER PRESET SWITCH

- Pressing this switch turns on the voices controlled by the lower tabs, drawbars.
- D: Pressing this switch turns on the lower drawbars.
- T: Pressing this switch turns on preset tibia chorus.
- R: Pressing this switch turns on preset reed chorus.

Note: When the main switch is on, the preset touch switches, upper D and lower D: also are on.

# **UPPER TONE LEVERS (TABS)**



The organ is provided with 15 upper tone levers. Put on the upper preset switch when using any of the levers (tabs). The voices obtained by using the upper tone levers are divided into tibia tones and orchestral tones.

#### TIBIA

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

#### **ORCHESTRAL**

Violin	8′
Clarinet	8'
Trumpet	8'
Oboe	8′
Kinura	8′
String	4′

\* The following effect levers can vary the orchestral tones.

Orchestra Accent: With this tab depressed, orchestral tones can be increased in volume and accentuated.

**Orchestra Sustain:** With this tab depressed, a sustain effect is given to orchestral tones. The sustain time is predetermined and invariable.

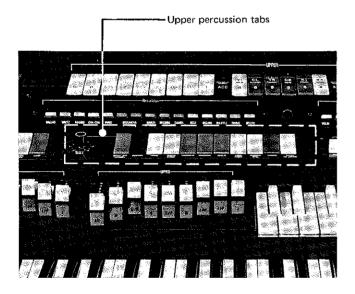
#### UPPER DRAWBARS

Nine upper drawbars ranging from 16' to 1' are provided to enable an infinite number of sounds to be produced. Set the upper preset switch (D) to use any of the upper drawbars.

The tones are of the tibia range.

**Drawbar:** 16', 8', 5–1/3', 4', 2–2/3', 2', 1–3/5', 1–1/3', 1'

# **UPPER PERCUSSIONS**



The upper percussion tablets are located on the left side of the center row. The musical instrument tones indicated on the various tablets can be obtained by pressing the tablet of the particular sound or sound combination desired. These percussion voices are arranged to be used with the drawbars, and so the upper preset switch D should be on when using percussion voices.

Eight percussion voices are available, as given below:

Piano

Banjo

Harpsichord

Glockenspiel

Mandolin

Marimba

Vibraphone

Chimes

The effects available for these percussion voices are as follows:

Drawbar Cancel: When this tablet is on, only the percussion voices are produced with the drawbar tones canceled. This effect works only on the upper keyboard.

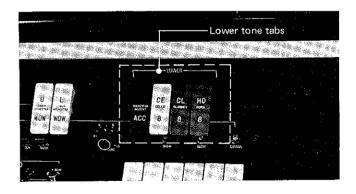
**Sustain:** With this tablet on, the percussion voices other than the vibraphone, glockenspiel and chime are produced with sustain effect.

The vibraphone, glockenspiel and chime voices are sustained irrespective of the position of the sustain tablet.

Upper to Lower: When this tablet is on, percussion voices are available with the lower keyboard through the effect of the coupler. In this case, while the lower preset switches may be set in any position, the upper preset switch DI must be turned on.

Repeat Speed: The tones of the banjo, mandolin and marimba are repeat percussion voices. The repeating rate can be adjusted by this repeat speed knob. The repeat percussion uses a synchro repeat system that begins the moment a key is depressed.

# LOWER TONE LEVERS



Three tones can be obtained by using the lower tone levers. The levers may be used together with the drawbars. When using them, put on the lower preset switch  $\square$ .

The tones — cello 8', clarinet 8' and horn 8' — belong to the orchestral tone group, for which the following effect lever is provided:

Orchestra Accent: This increases the volume of the orchestral tones and accents them.

#### LOWER DRAWBARS

There are nine lower drawbars, ranging from 16' to 1'. The lower preset switch (D) should be put on when any drawbars are used. These drawbars may be used together with the orchestral tones by putting on the lower preset switch (D).

### PEDAL DRAWBARS

The pedal drawbars are used to set the pedal tones, offering the following five tones:

Tibia 16'

Tibia 8'

String 16

String 8'

Bass guitar\*

\* The bass guitar tone is a percussive sound.

#### PEDAL EFFECT

The pedal effect tablets are used to give a sustain effect to the pedal tones. The sustain length can be selected by the following tablets:

**Sustain:** A short sustain effect can be obtained by pressing this tablet.

**Sustain Long:** A medium-length sustain effect can be obtained by pressing this tablet.

\* With these two tablets on at the same time, a long sustaining effect can be obtained. In other words, the organ affords the choice of three sustain effects.

# **EFFECT**

#### **ATTACK**

Despite the title, "Attack", this effect has sound in itself. This attack sound varies in strength and length and can be played with other tones (tone levers and drawbars) to lend a fast positive attack to the upper manual.

**Drawbar Attack:** When this lever is on, a fast attack is obtained with the upper preset switch property put on. This is used along with the drawbar. With this lever in the off position, an attack sound is obtained when the upper preset switch is put on.

Attack Forte: A strong attack sound can be obtained by pressing this lever.

**Decay Long:** With this lever on, the attack sound slowing diminishes.

Attack 4': Pressing this lever provides a 4' or second harmonic attack sound.

Attack 2-2/3': Pressing this lever provides a 2-2/3' or third harmonic attack sound.

Note: Attack sounds are available in two kinds, 4' and 2-2/3'. Both levers should be turned off when the attack effects are not required. The attack sounds belong to the tibia group. The attack sounds can be used when the upper preset switch 

or 
or 
is on.

#### WOW

In this electronic organ, "wow" effect is provided in combination with the expression pedal. The "wow" effect changes as the pedal is depressed, and "wow" sound can be obtained only by putting on the "wow" lever.

**Upper Orchestra Wow:** With this lever put on, "wow" sounds can be obtained for notes of the upper keyboard.

Lower Orchestra Wow: With this lever put on, the lower keyboard notes will be played with a "wow" effect

#### **REVERB**

Several degrees of reverb are abailable.

Reverb 1: A slight reverb effect can be obtained with this tablet.

Reverb II: A deep reverb effect can be obtained with this tablet.

Note: A deeper reverb effect is provided when the tablets I and II are put on at the same time.

Thus, three kinds of reverb effects can be obtained.

#### LESLIE

This electronic organ is designed exclusively to go with the Leslie Model 710 tone cabinet. Two tone cabinets are normally required. The organ is built to produce the tibia tones from the rotary (Leslie) channel and the other tones (orchestral tones) from the stationary channel.

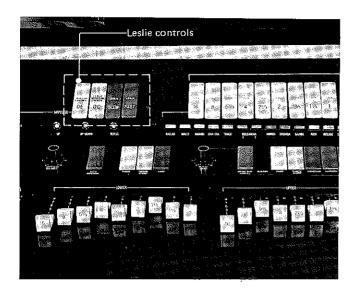
**Slow:** A slowly rotating Leslie effect (chorus) can be obtained with this lever on.

Fast: A fast rotating Leslie effect (tremolo) can be obtained with this lever on.

Leslie Orchestra Chorus: When this lever is put on, not only the tibia tones but also the orchestral tones are played with Leslie effects.

Orchestra Ensemble: A string ensemble effect can be obtained by using this lever. This effect is useful only for the orchestral tones.

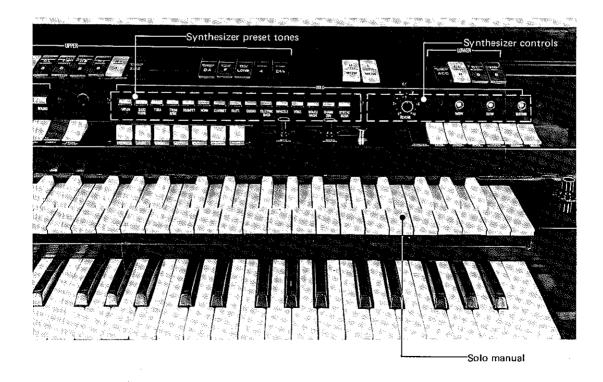
Note: The Leslie orchestra chorus and orchestra ensemble effects act on the tones produced by the tone levers. The preset switch \(\Bigcap\) should be turned on when using the above effect.



# **SOLO MANUAL**

The solo manual keyboard is to be used solely for producing the tones of the built-in synthesizer. The synthesizer affords synthesized tones as well as 14 preset

tones. The synthetic tones are monophonic lone note at a time, and the highest tone sounds when two or more keys are fingered simultaneously.



#### PRESET TONES

Violin

Saxophone

Tuba

Trombone

Trumpet

Horn

Clarinet

Flute

Guitar

Electric bass

Whistle

Voice

Shakuhachi

Shamisen

#### SYNTHETIC TONES

A variety of tone can be synthesized, for which a group of controllers are provided.

#### Controller

The controllers are divided into two groups: one group provides control over the entire synthesizer (preset tones and synthetic tone) and the other controls only the synthetic tones

#### \* Controller for entire synthesizer

- Wow: It gives a "wow" effect to the synthesizer tones.
   Its effect can be varied by depressing the expression pedal in various degrees.
- Glow: This produces an effect like the flatted attack in playing a flute. The effect can be delayed.
- Sustain: This keeps sound going even after the key is released. However, this effect differs a little from the manual and pedal keyboard sustain keys. The attenuation curve is determined by the envelope of the loudness control. Use of the control with the electric bass and guitar makes performance very authentic.
- Reverb Volume: This controller is used to give reverb effect to the synthesizer tones. Turn it clockwise for greater reverberation and counterclockwise for less reverberation. Reverberation is off when the control is turned to the left-most position.
- Solo Volume: This provides control of the synthesizer volume (solo keyboard). Sound increases as it is turned clockwise.
- Tuner Block: The controls related to the pitch of the solo keyboard are gathered in this block.

**Slope:** This is used to determine the scale between octaves. It permits 1 octave (12 keys) to be tuned with the standard scale or to be converted into a detuned scale.

Tune: This is provided to change the pitch of the entire solo keyboard. The pitch can be tuned higher or lower with this knob.

Glide: This is used to determine the glide time of a portamento. Turning the knob clockwise increases the glide time (time required for frequency shifting from one note to the next). The glide time is reduced to zero for normal playing when the knob is turned fully counterclockwise. Such instruments as trombone will give an even better performance if played with a touch of glide.

# \* Controller for synthesizer (synthetic tones) only

The controllers described below should be used with the preset switch of the solo keyboard set to the synthesizer.

 Range: This is a six-position rotary switch to determine the footage of the solo keyboard (4', 8', 16', 32'). Set the switch to the desired footage.

**Noise:** With the rotary switch set to this position, the tone becomes a white noise, which may be utilized to produce the sound of wind or waves.

**OFF:** The tone sources are canceled when the switch is in this position. This position is used when the oscillation sound of the VCF (filter control) described later is used as a sound source, for example to create special effects requiring unstable pitch.

 Filter Control Block: The controllers related to the tones of the synthesizer are grouped in this part. The tone of a musical instrument rarely retains a constant sound from the beginning to the end of its sounding; it usually fluctuates irregularly. This filter control block changes the tone colors after notes have started to sound (keys have been pressed).

Low Pass: This determines the passing frequency of the filter. Sound becomes harder as the knob is turned clockwise and softer as it moves counterclockwise. This is sometimes called a cutoff.

Emphasis: This produces a resonant point with the frequency determined by the low pass and decides the degree of emphasizing harmonics. This is also known as a peak. The peak lowers and the harmonics decrease as the knob is turned counterclockwise, and the peak grows stronger when the knob is turned clockwise. Oscillation is caused by intensifying the peak, and an oscillation tone determined by the balance of the low pass and emphasis settings is obtained regardless of tones. This can be applied to the creation of special effect sounds.

Decay [ ] - ]: Contrary to the attack knob, this determines the fall of a tone. The tone turns into decay after its rise time set by the attack knob. The decay grows slower as the knob is turned clockwise and faster as it is turned counterclockwise.

Sustain [ ]: The sustain knob is used to make the tone remain constant after its decay has started. The remaining volume increases as the knob is turned further clockwise, and the tone at the end of the attack is maintained regardless of the decay setting when it is turned fully clockwise. The tone changes according to the decay determined by the decay knob when it is turned fully counterclockwise. The slow attack tones of a reed organ and an accordion can be created by turning this knob fully clockwise.

Level: This knob controls the intensity of the variations set by the attack, decay and sustain knobs, thereby deciding to what degree these effects should be applied to the tone. Variations in sound can be obtained by turning the knob clockwise, and it becomes less varied by turning counterclockwise. With the knob\_turned fully counterclockwise, a tone determined by the low pass and emphasis settings is obtained, one which is free from the attack, decay and sustain effects.

 Loudness Control Block: The controls related to the volume of the synthesizer are arranged in this area.
 Elements of sound are not always uniform from beginning to end, and the characteristics of various instruments and tones are consistent with the manner in which sounds increase and diminish.

Attack[ \_\_\_ > \_\_\_]: This determines the attack of a sound by changing the volume after a key has been depressed. Turning the knob counterclockwise causes a quicker rise. The sound of such instruments as a piano, etc. should be palyed with the knob turned fully counterclockwise so that they rise the fastest. Turning the knob clockwise results in a slower attack, which is effective for creating the tones of a wind instrument and strings.

Decay [ ] : This determines the attenuation of sound. Turn the knob to the right for slower decay, which is effective for creating the decay sounds of a guitar and piano. Turn the knob to the left for faster decay. This helps authenticate the sounds of the wind instruments, such as a tuba, French horn, etc.

Sustain [ \_\_\_\_]: Though the title is the same as those of the upper manual and pedal keyboards, the effect differs from them slightly. This is used to define how long the tone lasts after the decay, as in the filter control. The remaining sound increases and the decay effect lessens as the knob is turned clockwise. The knob should be turned fully clockwise when the continuous sounds of an electronic organ are required. The remaining sound lessens as the knob is turned counterclockwise. Turn the knob counterclockwise to use the damping curve of decaying sounds like those of a piano.

Vibrato Block: The controllers related to the frequency modulation of the synthesizer are grouped in this area. In short, vibrato effects are produced by these controls. Unlike the electronic organ, a variety of vibrato effects can be obtained.

Depth: This control defines the depth of vibrato. Tur the knob to the right for deeper vibrato and to the lef for less vibrato. No vibrato is produced when the kno is turned to the far left. While the electronic orga usually provides vibrato as deep as 20 cents, th synthesizer can afford extremely deep vibrato, exceed ing 1 octave.

**Speed:** This determines the frequency of vibrato. Th knob should be turned clockwise for faster speed and counterclockwise for slower speed. Unlike the electronic organ, the synthesizer offers a wide range of speed changes.

Wave form: The electronic organ employs a sine wave as the modulated wave for vibrato, and the synthesize uses various wave forms. This wave form controller has a four-position switch, thereby enabling selective use of four wave forms to suit the music.

Saw tooth wave [ /// ]: The frequency repeats gradual rises and abrupt drops, resulting in a serrated wave form.

**Square wave** [ JTTT]: This changes as if two frequencies were repeated alternately. An interesting effect can be created by selecting this difference skillfully.

Sine Wave [ ]: The frequency changes as mildly as that of the electronic organ.

Delay Vibrato [ \_\_\_\_\_ ]: This is the sine wave vibrato provided with delay effect. This is effective for creating the sounds of the string and wind instruments.

#### RHYTHMER

#### RHYTHM

Ballad

Waltz

Mambo

Tango

Cha-Cha

Bossa Noval I

March

Bossa Nova II

Rhumba

Samba

Beguine

Shuffle

Swing

Bolero

Rock Variation 1 – 4

Swing Variation 1 — 4

Swing 2 - 4 Beat Select

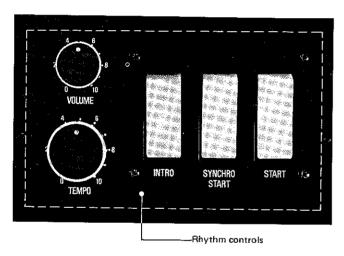
#### RHYTHM CONTROL

Rhythm Start: A rhythm is produced by using this tablet.

Rhythm Break: With this tab turned on, rhythm is interlocked with the pedal and lower manual keyboards. The first rhythm beat starts at the same time that a key or pedal is depressed, and it stops when a depressed key is released.

Intro: With this tablet turned on, an introduction is provided before the rhythm starts. When using the tablet, it should be put on before the "rhythm start" tablet is set.

Note: Of the above three tablets, the "rhythm start" tablet has first priority; therefore, the other two tablets will remain inoperative if the "rhythm start" tablet is turned on first. As already stated, the "intro" tablet should be set before the "rhythm start" tablet is put on or rhythm with an introduction will not sound. When using the "break" tablet, the tablet alone should be turned on.



Rhythm Volume: This controls the volume of the rhythmer. The volume increases as the knob is turned to the right and decreases as it is turned to the left.

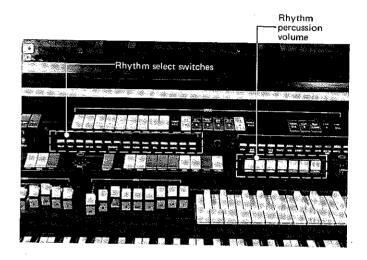
**Tempo:** This knob is used to adjust the rhythm tempo. The tempo quickens as the knob turned to the right and slows down as it is turned to the left.

Tone: The rhythm tone quality can be adjusted by this slide control. The drum tones become stronger when the lever is pulled toward the player, and the cymbals tone becomes stronger when the lever is pushed in farther. A balanced tone will result with the lever set at the midway point.

Bass Drum Volume Low Conga Volume High Conga Volume Claves Volume Cabasa Volume Guiro Volume As the above slide controls are pulled toward the player, the respective tones are stressed more. They weaken as the controls are pushed in farther, and no tones will be produced if set to the innermost position, allowing free control of each instruments volume. These controls should be set in the middle position for normal playing conditions.

#### TEMPO LAMP

With the rhythmer turned on, this lamp flashes with the first beats, enabling visual recognition of the rhythm.



# HAND PERCUSSION BUTTON

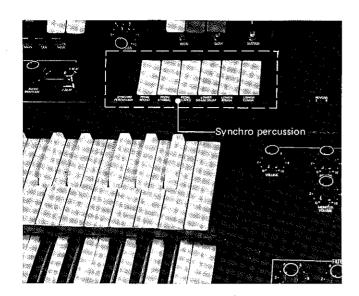
The effect sounds of the respective indicators can be obtained by pushing these buttons. Each volume can be adjusted by the rhythm volume knob. This electronic organ has the following four percussion buttons:

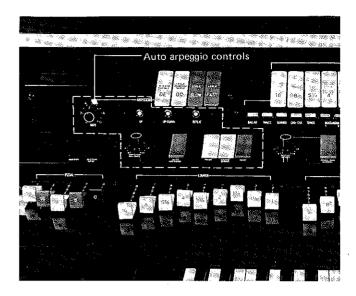
Tap Roll Drum High Conga Siren

#### SYNCHRO PERCUSSION

The synchro percussion produces the percussion sounds in conjunction with the pedal keyboard and lower manaul keyboard.

**Synchro Percussion:** This tablet is used to turn on and off the synchro percussion. The synchro percussion will not operate unless the tablet is on.





# **Pedal Keyboard**

Pedal Brush

Pedal Cymbal

Pedal Claves

With these tablets on, the respective sounds are produced in conjunction with the pedal keyboard.

#### Lower Manual Keyboard

Lower Snare Drum

Lower Brush

Lower Conga

With these tablets on, the respective sounds are produced in conjunction with the lower manual keyboard.

#### AUTO ARPEGGIO

The auto arpeggio is the function by which a splendid arpeggio performance can be obtained automatically in the tones of depressed keys simply by holding down the keys played on the lower keyboard.

Auto arpeggio: Used to turn on and off the auto arpeggio function. Note that auto arpeggio will not be played when the tablet is not set to the ON position even if some of the arpeggio voice tablets and pattern buttons are turned on.

#### Voice

The tones of the piano, harpsichord and harp are predetermined exclusively for the auto arpeggio. Use them as desired. However, note that auto arpeggio will not sound if any of these voice tablets is not set to the ON position.

#### Pattern

Three auto arpeggio patterns are available as described below and may be used as desired.

Up: With this button pushed, an arpeggio rises from a low key to a high key. The arpeggio stops when the hand is released from the keyboard and starts again with the first low key when lower manual keys are depressed once more.

**Up-Down:** Pushing this button produces an arpeggio which rises from a low key to a high key and returns to

Repeat: With this button pushed, an arpeggio repeatedly sounds from a low key to a high key and vice versa until the lower manual keys are released.

Note: The auto arpeggio operates only while the lower manual key is being depressed, and comes to a stop when the hand is released. It starts from the first bass of the keys played when depressed again.

#### Control

Rate: Arpeggio speed is adjusted by turning this knob. The speed increases and decreases respectively when the knob is turned clockwise and counterclockwise.

Arpeggio Balance: The knob controls the arpeggio volume. The volume increases and decreases respectively with the clockwise and counterclockwise turning of the knob.

# **OTHERS**

**Total Volume:** This controls the total volume of the organ.

Microphone Reverb: This is used to adjust the reveberation desired in the microphone channel (used in speaking or singing). Reverb increases and decreases respectively with the clockwise and counterclockwise turning of the knob. No reverb effect sounds when the knob is turned fully counterclockwise.

**Microphone Volume:** This is used to adjust the volume of a microphone. Sound volume increases and decreases respectively when the knob is turned clockwise and counterclockwise.

Monitor volume: The knob is provided to adjust the sound volume of the monitor speaker housed in the organ console.

**Expression pedal:** Depressing and releasing the pedal permits playing with more expression.

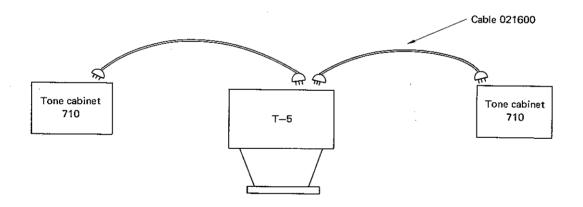
Power Switch: The organ is actuated by turning on this switch.

Pilot Lamp: This lamp lights up when the organ is turned on.

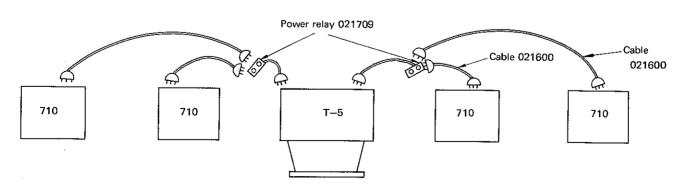
# CONNECTION WITH TONE CABINET

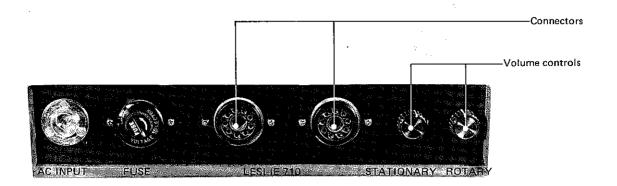
The Model T-5 electronic organ has but one small monitor speaker built in the console; therefore, the organ cannot be played with the self-contained speaker alone. The Leslie Model 710 is the standard tone cabinet specifically designed for the T-5. Although the organ may

be played with single tone cabinet, two units are the minimum required to fully project an orchestral ensemble. An exclusive connecting cable (021600) should be used to connect the organ and the tone cabinets.



When additional speaker cabinets are used in a concert, the connections should be made as illustrated below, using the power relay (021709).





# LEVEL ADJUSTMENT

The T-5 produces its output through two channels, the rotary channel and the stationary channel. The output level of each channel can be adjusted by a volome control fitted with the Leslie 710. The standard volume level is

obtained with the control in the neutral position. Adjust it according to the hall condition and locations of the tone cabinets. Also, adjust the controls to balance the volume properly between the two channels.

# MODEL T-5 SPECIFICATIONS

	Keyboards	Ummar Orahantus Maria
	Upper Manual 61 keys	Upper Orchestra Wow Lower Orchestra Wow
	Lower Manual 61 keys	Orchestra Ensemble
	Pedals 25 keys	Reverb I
	Solo Manual 37 keys	Reverb II
•	Upper Manual Voices	Tremolo (Leslie)
	Tibia 16', 8', 5–1/3', 4', 2–2/3'	Leslie Fast
	2', 1-3/5', 1-1/3', 1' Violin 8'	Leslie Slow
	Clarinet 8'	Leslie Orchestra Chorus
	Trumpet 8'	Orchestra Ensemble
	Oboe 8'	<ul> <li>Automatic Rhythm (Rhythmer)</li> <li>* Rhythm Selectors</li> </ul>
	Kinura 8'	Ballad, Waltz, Mambo, Tango
	String 4'	Cha-cha, Bossa Nova I, March
	Orchestra Sustain	Bossa Nova 2, Rhumba, Samba
_	Orchestra Accent	Rock, Beguine, Shuffle, Swing
•	Upper Manual Drawbars Tibia 16' 8' 5-1/3' 4' 2-2/3'	Bolero, Rock Variation
	Tibia 16', 8', 5-1/3', 4', 2-2/3' 2', 1-3/5', 1-1/3', 1'	Swing Variation, 2–4 Beat select
•	Upper Manual Percussion Voices	miny unit Controls
•	Piano, Banjo, Harpsichord	Rhythm Start, Rhythm Break
	Glockenspiel, Mandolin	Intro, Rhythm Volume, Tempo Tone
	Marimba, Chimes, Vibraphone	Bass Drum Volume
	Drawbars Cancel	Claves Volume
	Sustain	Guiro Volume
_	Upper to Lower (Coupler)	Low Conga Volume
•	Upper Manual Preset Lever Switches	High Conga Volume
	Drawbars	Cabasa Volume
	Tibia Chorus	<ul> <li>Tempo Indicator Lamp</li> <li>Hand Percussion Buttons</li> </ul>
	Reed Chorus	High Conga
•	Lower Manual Voices	Roll Drum
	Cello 8' Clarinet 8'	Тар
	Clarinet 8' Horn 8'	Siren
	Orchestra Accent	Synchro Percussion
•	Lower Manual Drawbars	On/Off Pedal Brush
	Tibia 16', 8', 5–1/3', 4', 2–2/3'	Pedal Cymbal
	2', 1-3/5', 1-1/3', 1'	Pedal Claves
•	Lower Manual Preset	Lower Snare Drum
	Lever Switches and Drawbars Drawbars	Lower Brush
	Tibia Chorus	Lower Conga
	Reed Chorus	Automatic Arpeggio  * Voices
•	Pedal Drawbars	Piano
	Tibia 16', 8'	Harpsichord
	Bass Guitar String 16', 8'	Harp
	String 16', 8' Pedal Controls	* Controls
_	Pedal Sustain on/off	Rate Up
	Pedal Sustain long/short	Up-Down
•	Solo Manual Voices	Repeat
	* Preset Voices	Arpeggio Balance (Volume)
	Violin, Saxophone, Tuba Trombone, Trumpet, Horn	Others
	Clarinet, Flute, Guitar	Microphone Reverb
	Electric Bass, Whistle	Microphone Volume Total Volume
	Voice, Shakuhachi (bamboo flute)	Expression Pedal
	Shamisen, Synthesizer * Controls	Power Switch
	Controls	Pilot Lamp
	Wow , Glow , Sustain Reverb Volume, Solo Volume	
	Filter Control (Low pass, Emphasis, Attack	Monitor Volume
	Decay, Sustain, Level)	Monitor Speaker (1–8" x 6")
	Loudness Control (Attack, Decay, Sustain)	Monitor Amp. 10 watts r.m.s. Dimensions
	Vibrato (Depth, Speed, Waveform)	Width 140 cm
	Tuner (Slope, Tune, Glide)	Height 117 cm
	Range (32', 16', 8', 4', Noise, off) Effects	Depth 130 cm
-	Upper Attack Forte	Weight 207 I
	Upper Decay Long	Console 297 kg Bench 29 kg
	Upper Attack 4'	Finish 29 kg
	Upper Attack 2–2/3'	Rose wood and Black polish
	Upper Drawbar Attack	·