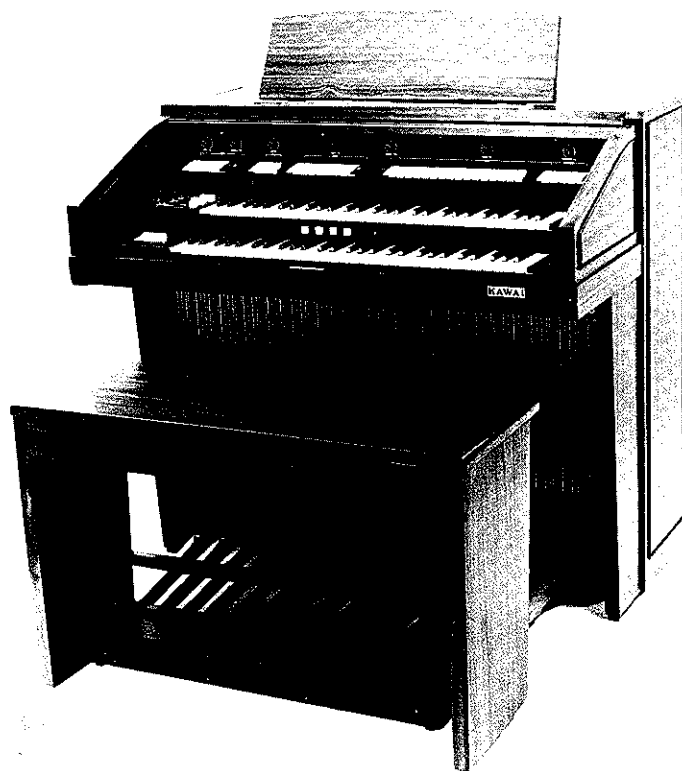
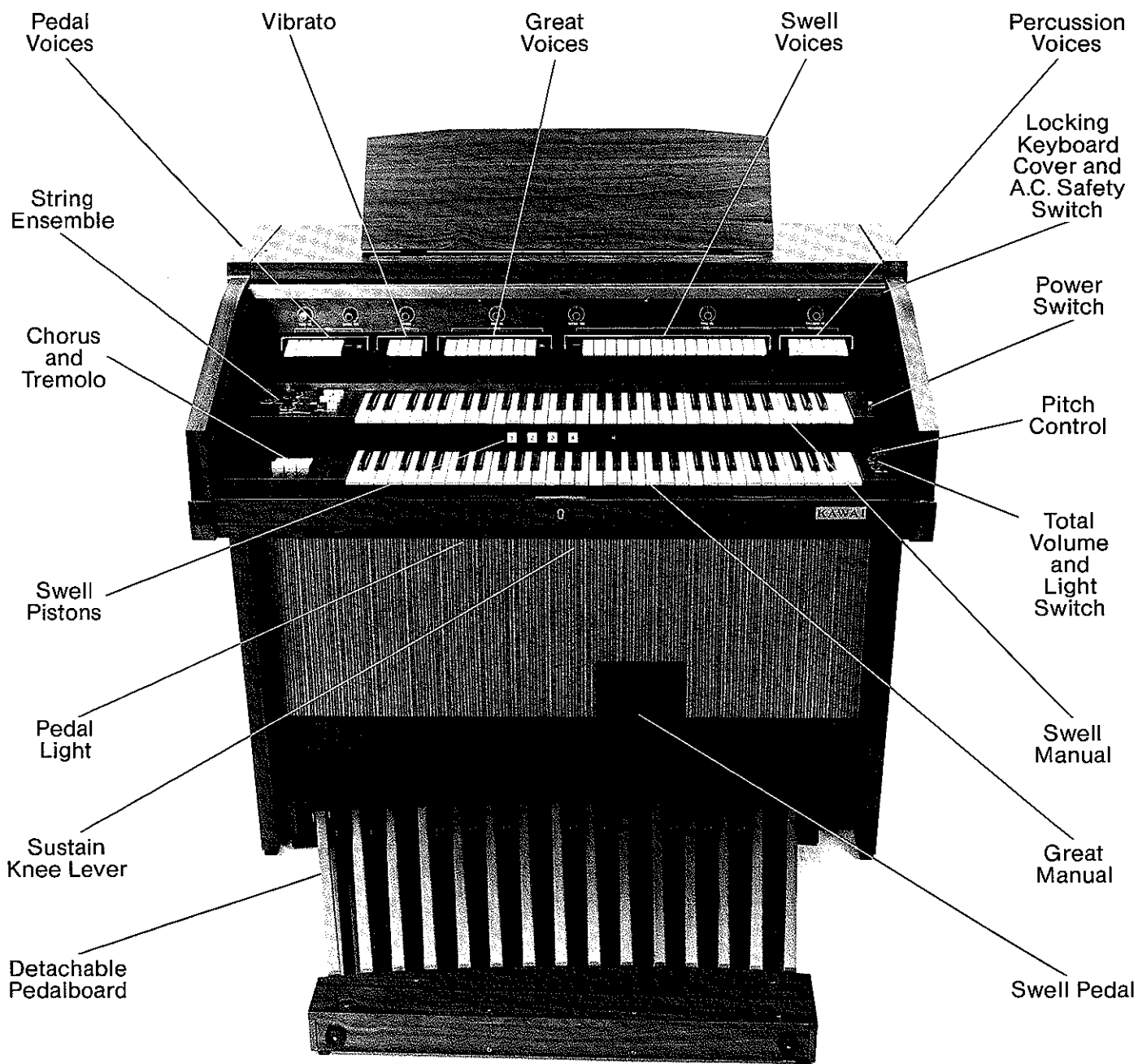


# Kawai Electronic Organs

C-600  
Owner's Manual



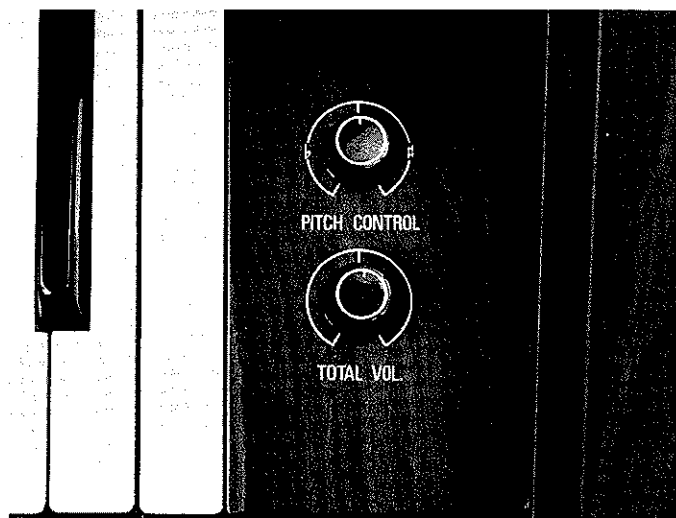


## INTRODUCTION TO THE KAWAI C-600

The Kawai C-600 is a complete organ, providing tonal resources for playing all styles of church and sacred music. It is equally at home as a solo instrument or for accompanying choir and supporting congregational singing. Its tonal specifications include all four families of organ tones, a complete family of solo percussions, pistons for facilitating registration changes, and couplers for tonally expanding its complement of 33 stops.

Featuring the latest in state-of-the-art space-age electronics, the Kawai C-600 will provide years of trouble-free service and lasting musical satisfaction.

## OPERATION



A single illuminated power switch in the cheek block to the right of the Swell (upper) manual activates all the electronic resources of the C-600. In the cheek block to the right of the Great (lower) manual are two controls which may be adjusted to the organists' taste.

A rotary *total volume* dial allows the player to control the maximum tonal volume of the entire organ while still permitting full dynamic expression from the swell pedal. Pulling the *total volume* switch up (↑) turns on the cove lamps to illuminate the stop rail.

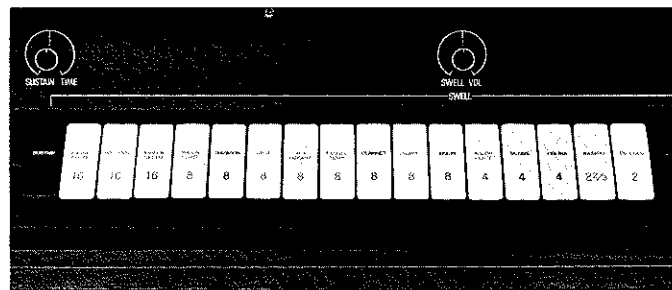
The switch for the lamp illuminating the pedal board is situated under the lower manual in the lamp assembly. The pedal lamp may not be turned on when the organ is off. However, if the pedal lamp switch is left on, the lamp will come on whenever the organ is turned on.

Closing the locking keyboard cover automatically turns off all power to the lights and organ generator preventing unnecessary power consumption and electricity costs which otherwise could result from forgetting to turn off the organ.

A *pitch control* permits the raising or lowering of the pitch of the entire organ approximately one-half step (70 cents) when tuning the organ to other instruments may be required. A detent and indicator line identify the position for concert (A-440) pitch.

## ORGAN DIVISIONS

### THE SWELL



The Swell organ is played from the upper manual and consists of sixteen stops at five pitches: 16', 8', 4', 2 $\frac{3}{4}$ ', 2'.

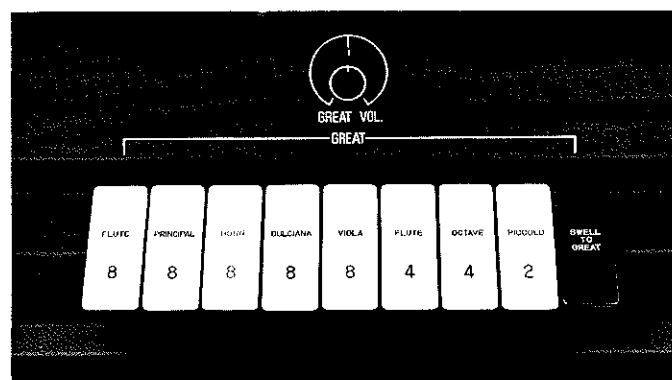
The four tonal families are:

Flute:	Major Flute	16'
	Major Flute	8'
	Major Flute	4'
	Nazard	2 $\frac{3}{4}$ '
	Piccolo	2'
Reed:	Bassoon	16'
	Oboe	8'
	Vox Humana	8'
	Flugel Horn	8'
	Clarinet	8'
String:	Trumpet	8'
	Violoncello	16'
	Violin	8'
Diapason:	Violina	4'
	Diapason	8'
	Octave	4'

Depressing the *sustain* tab introduces a sustained effect (sound after key release) on any of the swell voices. A rotary *sustain time* control determines the length of time before the voice fades to silence. A wide variety of special and orchestral effects is available by combining sustain with the swell voices (see section on Registration).

A Swell volume control is available for balancing all voices in the Swell Division with those in other divisions.

### THE GREAT



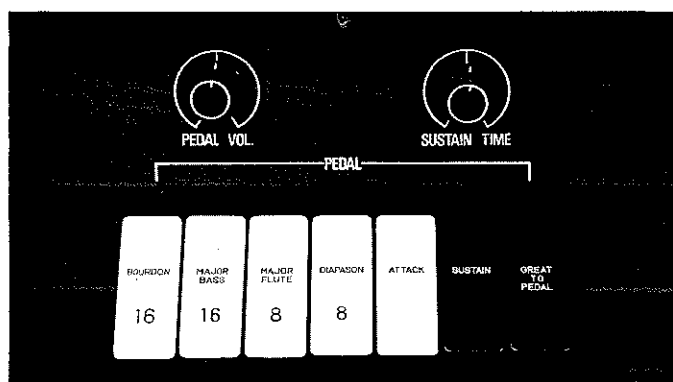
The Great Organ is played from the lower manual and consists of eight stops at three pitches: 8', 4', 2'.

The four tonal families are:

Flute:	Flute	8'
	Flute	4'
	Piccolo	2'
Reed:	Horn	8'
	Viola	8'
String:	Dulciana	8'
	Octave	4'
Diapason:	Principal	8'
	Octave	4'

A *Swell-to-Great* coupler allows the voices from the Swell Division to be coupled (or added) to the lower manual, thus expanding the tonal ensemble. A *Great* volume control permits balancing the division to the rest of the organ.

## THE PEDALS



The *Pedal Organ* consists of four speaking stops and two functional controls and a coupler. The speaking stops are:

Bourdon	16' (flute)
Major Bass	16' (diapason)
Major Flute	8' (flute)
Diapason	8' (diapason)

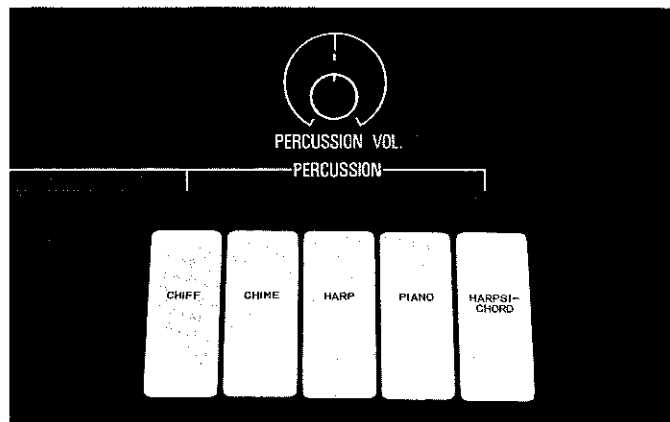
An *attack* tab introduces a prompt response to the pedal voices and should be used to emphasize rhythmic pedal lines.

A *sustain* tab introduces a sustained effect (sound after release). The length of time before the voice fades to silence is determined by the rotary *sustain time* control.

The *Great-to-Pedal* coupler allows the voices from the Great Division to be coupled (added) to those of the Pedal. It is especially useful in playing hymns, insuring a proper tonal balance between the Great and Pedals. The *Pedal* volume control permits the player to balance the pedal division to the rest of the organ.

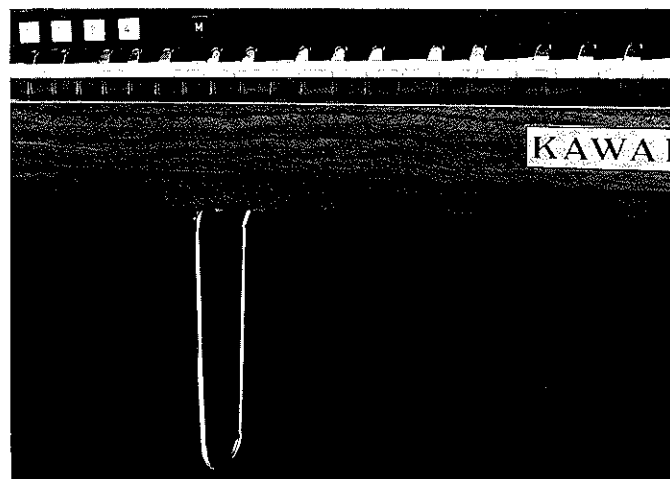
## THE PERCUSSIONS

The Kawai C-600 percussion family offers the traditional *harp* and *chimes* as well as *piano*, *harpsichord*, and *chiff*.



The *chiff* is an effect tab which is used in conjunction with the *swell* voices to simulate the pipe organ's sound of air entering a pipe as it speaks. The *chiff* is especially useful in playing contrapuntal music of the Classic period.

The remaining percussion voices are solo stops, also played from the Swell, which, when depressed, automatically cancel any registered Swell voices and facilitate contrasting changes in registration. The *chimes* play over the traditional 25 note range indicated by a bracket above the Swell manual.

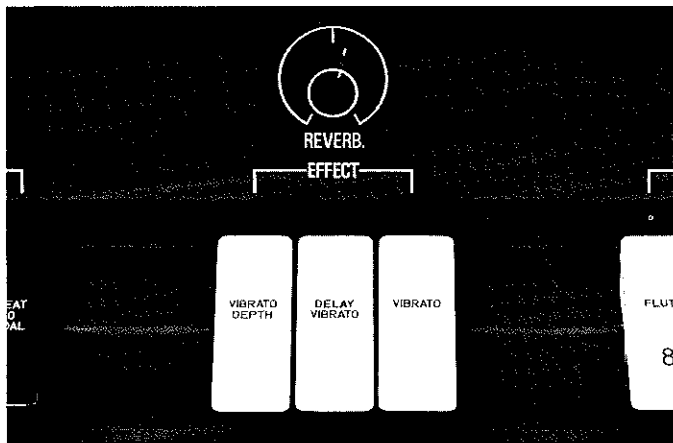


Beneath the Great (lower) manual is hinged a knee lever which is secured by a spring clamp when not in use. Pull the lever down into the vertical position and place to the outside of the right knee. Pressing the knee lever to the right will introduce *sustain* to the *chime*, *harp*, *piano*, and *harpsichord*. Sustain time is determined by the setting of the *sustain time* rotary control directly above the Swell *sustain* tab.

The knee lever turns on *sustain* in the same manner as the Swell *sustain* tab but facilitates the selective application of sustain to those voices, e.g. *piano*, which may require it while both hands are on the manuals.

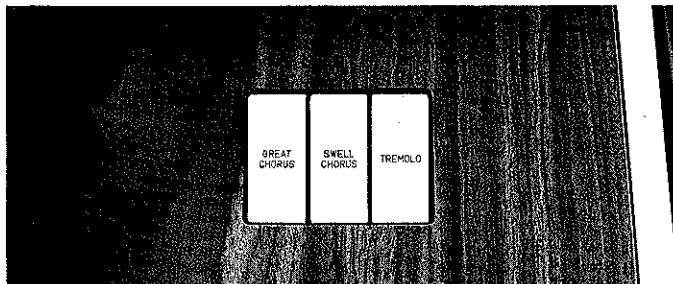
All percussions will couple to the Great and add to the Great voices when the Swell-to-Great coupler is depressed. A *percussion volume* control permits balancing the percussion voices with other organ divisions.

## REVERBERATION



Electromagnetic reverberation is provided in the Kawai C-600 to compensate in environments where acoustics may be deadened as a result of draperies, carpeting, pew cushions, or acoustic tile ceilings. Located above the stop rail on the control panel, the *reverberation* rotary control increases the amount of reverberation when turned clockwise, and decreases reverberation to off when turned counter-clockwise.

## ANIMATION



To provide maximum orchestral authenticity and performance versatility, two systems of animation are provided.

A *vibrato* imparts a warm pulsating pitch modulation, particularly enhancing reeds and strings. A *vibrato depth* tab increases the pitch fluctuation, more musically appropriate to flute voices. The *delay vibrato* withholds the introduction of *vibrato* for a fraction of a second, duplicating the performance of a string or wind instrument player.

There is also a *tremolo*, a rich tonal motion effect available in two speeds and off, and selective by manual, particularly effective for ensemble choruses.

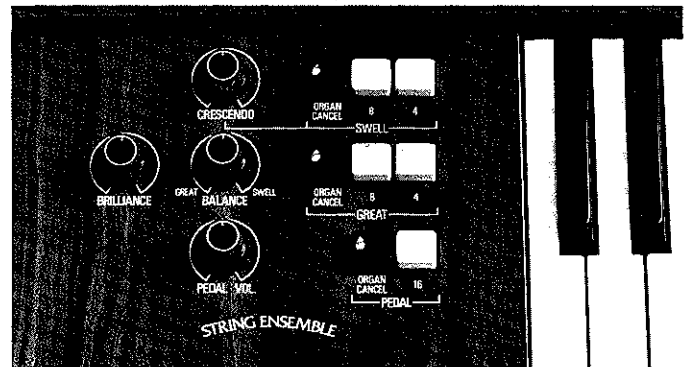
When all tabs are off (↑), all stops speak without animation.

When either *Great Chorus* or *Swell Chorus* tabs are depressed (↓) and the *Tremolo* tab is in the off (↑) position, playing on the corresponding Great or Swell manuals will produce a random "chorus" effect, much like a pipe organ ensemble.

With the *Great Chorus* or *Swell Chorus* tabs de-

pressed (↓) and the *Tremolo* tab in the on (↓) position, playing on the corresponding Great or Swell manuals will produce a full "theatrical" tremolo, suitable for gospel and folk music.

## STRING ENSEMBLE



In the cheek block to the left of the Swell (upper) manual are the controls for the *string ensemble*, a multi-rank effect which re-creates the ensemble of a string orchestra. The *string ensemble* is available on the Swell and Great at 8' and 4', and on the Pedals at 16'. The string ensemble voices are independent of all other organ voices.

The *string ensemble* may be played alone or added to voices registered from the stop rail. Together with a full organ registration, the *string ensemble* lends a realism of full pipe organ majesty to any auditorium, chapel, or sanctuary.

Turn on the *string ensemble* by pressing any pitch selector button (in). Turn off the *string ensemble* by pressing the pitch selector button again (out).

When organ voices are registered, they may be cancelled by pressing the *organ cancel* button for the appropriate manual or pedalboard. Then only the registered *string ensemble* will sound. Pressing the *organ cancel* button again will reintroduce the organ speaking stops.

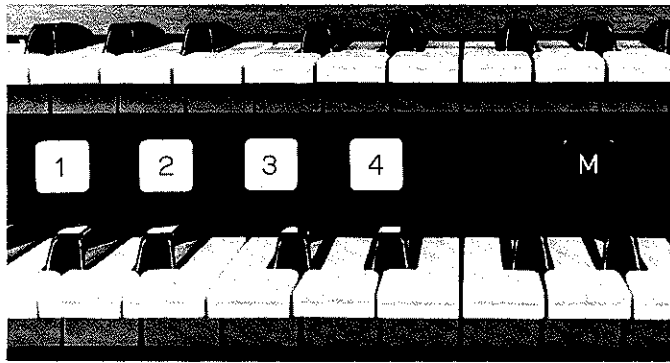
A *pedal volume* dial permits balancing the pedal *string ensemble* with other organ divisions.

A *Swell Volume/Great Volume* dial permits balancing between the Swell and Great string ensembles. When turned to the left, the Swell string ensemble increases and the Great string ensemble decreases. When turned to the right the Great string ensemble increases and the Swell string ensemble decreases.

A *crescendo* control modifies the "attack" or response of the Swell string ensemble. When the *crescendo* control is turned to the left, the *string ensemble* speaks promptly as upper keys are depressed. Turning the *crescendo* dial to the right creates a slower or "bowed" response resulting in a tonal rising or "crescendo" of the strings to full volume.

An overall *brilliance* control adds or rolls off the high frequencies of the *string ensemble* providing a voicing facility at the player's fingertips to compensate for room acoustics and personal voicing tastes.

## PISTONS



To enable the player to make instant solo registration changes without taking the hands from the manuals, the Kawai C-600 is equipped with four thumb pistons for pre-setting registrations on the Swell. Using computer memory circuitry, the pistons are of the hold-and-set type, each of which may be pre-programmed with a Swell division registration and recalled as long as the organ is on.

To pre-set any piston:

1. Press any one of the four pistons. It will light up indicating "on."
2. Depress the tab or tabs on the Swell to be pre-set. Note that small red indicator lights appear above the registered tabs.
3. Press the red *memory* **M** button to the right of piston **4**. The lighted piston is now pre-set.
4. Press the lighted piston again. Its lamp will go out indicating "off."
5. Each time the piston is pressed after pre-setting, it will "remember" the registration and turn on the Swell indicator lights above the stops programmed.

Repeat the above steps for pre-setting the remaining pistons.

To clear any piston:

1. Turn off all Swell tabs.
2. Press the piston to be cleared.
3. Press memory **M**.
4. Press piston to turn off. Piston is now clear and ready to be re-programmed.

*Note:* Memory is cancelled when organ power is turned off. All pistons are then automatically cleared and must be pre-set after organ power is turned on.

Suggested Pre-Set Registrations for Service Playing:

- 1 Diapason Chorus
- 2 String Chorus
- 3 Reed Chorus
- 4 Full Organ

(see section on Registration)

## KAWAI SPEAKER SYSTEM

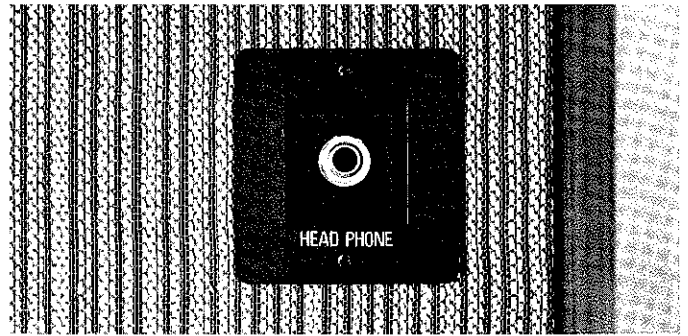
The Kawai C-600 has a two channel speaker system. The voices of the organ are automatically programmed to pass through the correct system.

Each of the two 30-watt amplifiers drives two 10" speakers and two 2½" tweeters.

Contact your Kawai dealer for recommendations regarding external speakers if the size of the room being served requires additional amplification.

## ADDITIONAL KAWAI FEATURES

### HEADPHONE JACK



The headphone jack is located under the right side of the lower keyboard in the upper right corner of the speaker grille. Plugging in a headphone set automatically silences the organ speakers so the organist can practice or play in complete privacy.

### AC CONVENIENCE OUTLET

An AC convenience outlet (maximum wattage 300) has been provided on the back of the organ. When using a cassette tape recorder or a music rack lamp, plug it into this outlet. The convenience outlet can be used even though the organ is turned off.

### HOW TO CARE FOR YOUR KAWAI ORGAN

Here are some general rules to follow:

1. Always plug the Kawai C-600 into a standard Volt AC line. Plugging into a DC outlet could cause damage.
2. To remove any greasiness from the cabinetry, keys, or pedals, use a damp cloth and a little mild soap. Be sure to wipe dry with a soft cloth.

# SUGGESTED REGISTRATIONS

## CONGREGATIONAL SINGING

1. Diapason Chorus  
Swell: Diapason 8', Octave 4'  
Great: Principal 8', Octave 4', Swell-to-Great  
Pedal: Bourdon 16', Major Bass 16', Diapason 8'  
Great-to-Pedal  
Great Chorus  
Swell Chorus
2. Diapason and Flute Chorus  
Swell: Major Flute 8', Diapason 8', Major Flute 4'  
Octave 4', Nazard 2½', Piccolo 2'  
Great: Flute 8', Principal 8', Flute 4', Octave 4',  
Piccolo 2', Swell-to-Great  
Pedal: Bourdon 16', Major Bass 16', Diapason 8',  
Great-to-Pedal  
Great Chorus  
Swell Chorus
3. Full Organ  
Swell: Major Flute 8', Diapason 8', Oboe 8',  
Flugelhorn 8', Trumpet 8', Major Flute 4',  
Octave 4', Nazard 2½', Piccolo 2'  
Great: Flute 8', Principal 8', Horn 8', Flute 4', Octave 4',  
Piccolo 2', Swell-to-Great  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
Diapason 8', Great-to-Pedal  
Great Chorus  
Swell Chorus  
Optional: 1) Add Swell Major Flute 16' and Bassoon  
16' and play one octave higher (8<sup>va</sup>). 2) Add String  
Ensemble—Swell 8' and 4', Great 8' and 4', and Pedal  
16'—for *tutti*.

## CLASSIC

1. Swell: Major Flute 16', Nazard 2½', Chiff  
Great: Flute 8', Piccolo 2'  
Pedal: Bourdon 16', Major Bass 16'
2. Swell: Major Flute 8', Piccolo 2', Chiff (optional)  
Great: Principal 8', Piccolo 2'  
Pedal: Bourdon 16', Major Bass 16', Great-to-Pedal  
Great Chorus  
Swell Chorus

## GOSPEL

1. Swell: Major Flute 16', Major Flute 8', Major Flute 4',  
Piccolo 2'  
Great: Flute 8', Flute 4'  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
Attack, Sustain  
Great Chorus  
Swell Chorus  
Tremolo
2. Swell: Major Flute 8', Major Flute 4'  
Great: Flute 8'  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
Attack, Sustain  
Great Chorus  
Swell Chorus  
Tremolo
3. Swell: String Ensemble 8', String Ensemble 4'  
Great: Flute 8', Principal 8', Flute 4', Octave 4',  
Piccolo 2', Swell-to-Great, String Ensemble 8',  
String Ensemble 4'  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
Sustain, String Ensemble 16'  
Great Chorus  
Swell Chorus

Tremolo

**Play Both Hands on Great.**

## PERCUSSION

1. Chime Solo  
Swell: Chime  
Great: String Ensemble 8', String Ensemble 4'  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
Sustain
  2. Piano Solo  
Swell: Piano  
Great: Flute 8', Flute 4'  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8'  
Great Chorus  
Swell Chorus  
Tremolo
  3. Harpsichord and Organ  
Swell: Harpsichord  
Great: String Ensemble 8', String Ensemble 4',  
Swell to Great  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
String Ensemble 16'
- Play Both Hands on Great.**
4. Piano and Strings  
Swell: Piano, Sustain (Q)  
Great: String Ensemble 8', String Ensemble 4',  
Swell-to-Great  
Pedal: Bourdon 16', Major Bass 16', Major Flute 8',  
Diapason 8', Sustain

**Play Both Hands on Great.**

(For an Ensemble of Piano, Organ, and Strings, Add  
Great Flutes 8' and 4', Great Chorus, and Tremolo.)

## SPECIAL EFFECTS WITH SWELL SUSTAIN

1. Celesta  
Swell: Flute 4', Sustain ⊖
2. Music Box  
Swell: Piccolo 2', Sustain Q
3. Orchestral Bells  
Swell: Flute 8', Piccolo 2', Sustain Q
4. Glockenspiel  
Swell: Major Flute 16', Piccolo 2', Sustain ⊕
5. Double Harpsichord  
Swell: Violoncello 16', Violin 8', Violina 4', Sustain ⊖
6. Clavicemballo  
Swell: Flugelhorn 8', Major Flute 4', Sustain ⊕

## CALLS TO WORSHIP AND CHORAL RESPONSES

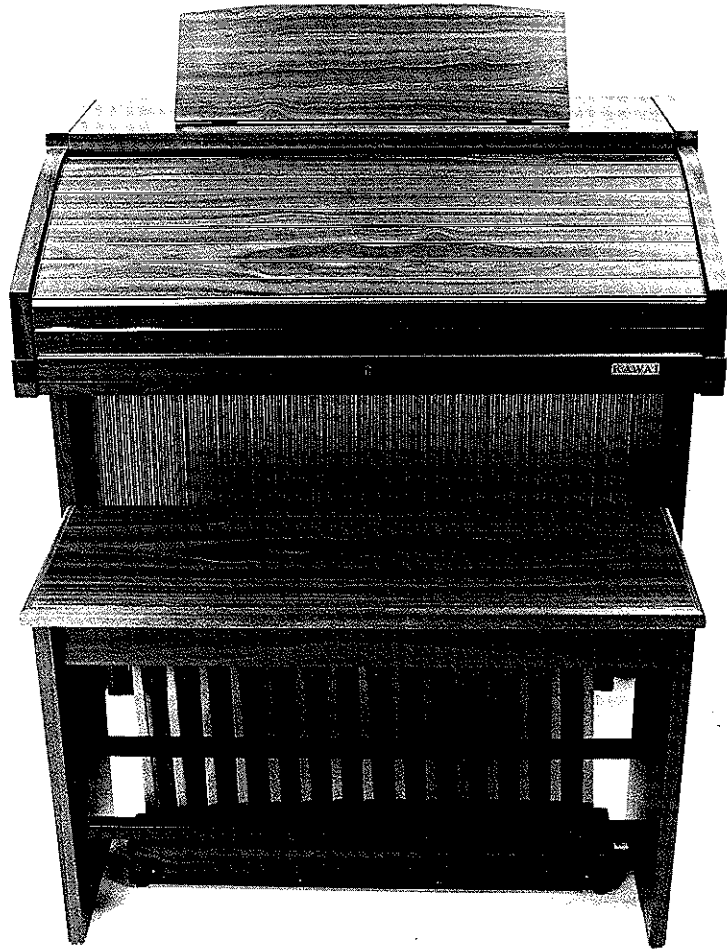
1. Great: String Ensemble 8', String Ensemble 4'  
Pedal: Bourdon 16', Major Bass 16',  
String Ensemble 16', Great-to-Pedal
2. Swell: String Ensemble 8', String Ensemble 4'  
Great: Flute 8', Flute 4', Swell-to-Great,  
String Ensemble 8', String Ensemble 4',  
Pedal: Bourdon 16', Major Bass 16',  
String Ensemble 16', Great-to-Pedal

Great Chorus

## SOME USEFUL CHORUSES FOR SWELL PISTONS

- 1 Diapason Chorus: Diapason 8', Octave 4'
- 2 String Chorus: Violoncello 16', Violin 8', Violina 4'
- 3 Reed Chorus: Bassoon 16', Oboe 8', Vox Humana 8',  
Flugelhorn 8', Trumpet 8'
- 4 Full Swell: Major Flute 16' (optional),  
Bassoon 16' (optional), Major Flute 8', Diapason 8',  
Oboe 8', Flugelhorn 8', Trumpet 8', Major Flute 4',  
Octave 4', Nazard 2½', Piccolo 2'

**Set Volume, Divisional Balancers, and Reverberation  
to taste.**



**KAWAI**

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