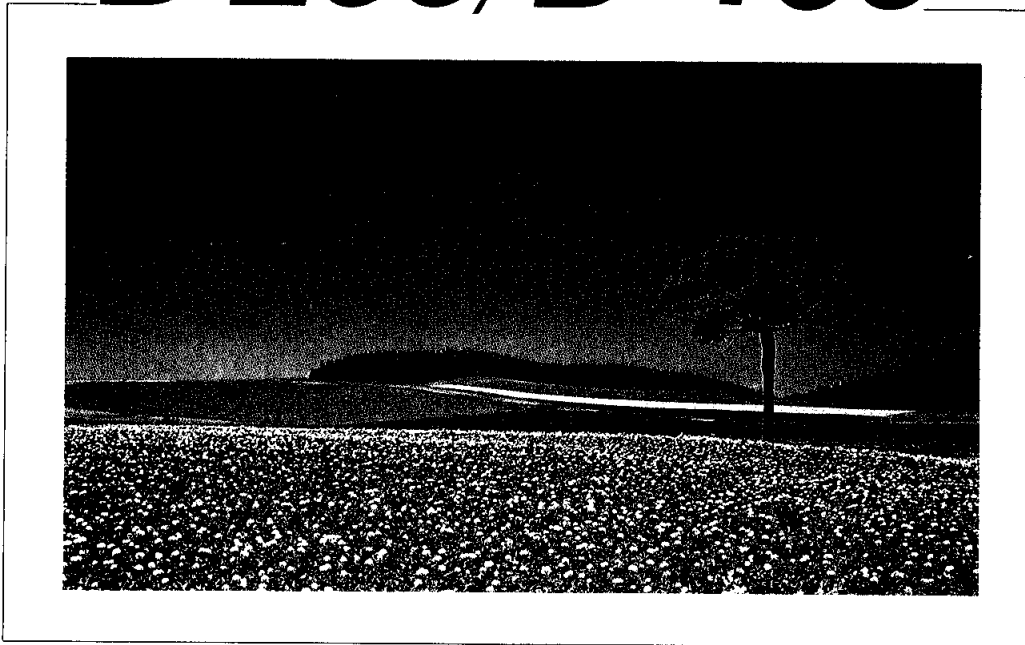


**YAMAHA ELECTONE®**

# ***B-205/B-405***



MAKING THE MOST OF YOUR ELECTONE  
BEDIENUNGSANLEITUNG FÜR DIE YAMAHA ELECTONE ORGELN  
COMMENT OBTENIR LES MEILLEURS RESULTATS AVEC VOTRE ELECTONE  
¡ DISFRUTE AL MAXIMO SU ELECTONE !

**B-205**

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Pedal Keyboard Tone Levers PAGE(9)

Lower Keyboard Tone Levers PAGE(9)

Vibrato PAGE(10)

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## B-405

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- Check for correct power voltage. Consult your Yamaha serviceman regarding any changes.  
As to the British-Standard model, information is provided in 'Specifications' on the last page.
- Schließen Sie Ihre Electone immer an den richtigen Netzanschluß an.
- Assurez-vous d'utiliser la source énergétique appropriée; consultez le préposé à l'entretien YAMAHA pour toute modification.
- Revise si el voltaje de potencia es el correcto. Consulte su agente de servicio con relación a cualquier cambio.

Welcome to Yamaha's wonderful world of music!  
Congratulations! With your purchase of a Yamaha Electone you have acquired the most advanced electronic organ available today. In the B-205, B-405 Electone, Yamaha has combined the superb craftsmanship it has acquired over many years of making fine musical instruments with the latest developments in modern electronic technology. We are confident that you will be particularly pleased with the unique "Living Sound" and "Rich Ambience" that Yamaha's original digital electronic technology has made

possible. We also believe that the wide variety of easy-to-play features incorporated in your Electone will provide you with endless satisfaction and musical pleasure. So that you can make maximum use of these many remarkable features, we suggest that you familiarize yourself with their positioning and operation by reading this manual carefully before starting to play. In this way, you should be able to derive maximum enjoyment from the instrument in the shortest possible time.

Willkommen in YAMAHA's wunderbarer welt der Musik.  
Wir gratulieren! Mit dem Kauf der Yamaha Electone haben Sie eine der modernsten und leistungsfähigsten elektronischen Orgeln erworben. Die beiden Electone Modelle B-205 und B-405 sind das Produkt jahrelanger handwerklicher Erfahrungen auf dem Gebiet des Musikinstrumentenbaus kombiniert mit neuesten Entwicklungen der Elektronik.

Wir sind überzeugt, daß Sie vom lebendigen Klang und dessen verblüffender Fäumlicher Tiefenwirkung der erst durch die richtungsweisende YAMAHA Technologie auf dem Gebiet der Digital-Elektronik möglich wurde, begeistert sein werden. Außerdem glauben wir, daß Sie die vielseitige Ausstattung, die vor allem dazu dient, das

Orgelspiel noch einfacher zu machen, zu schätzen wissen und Ihnen die Electone über lange Jahre viel Freude und Entspannung mit Musik bereitet.

Um die zahllosen Vorzüge, die Ihnen diese Orgel bietet, voll nutzen zu können, sollten Sie die Bedienungsanleitung sehr sorgfältig lesen und die darin anhaltenen Anweisungen genau befolgen. Zunächst jedoch müssen Sie sich mit der Aufstellung der Orgel und den Funktionen der verschiedenen Bedienungselemente vertraut machen, bevor Sie mit dem Spielen beginnen. Auf diese Weise lernen Sie ebenfalls spielend die besonderen technischen Merkmale und Eigenschaften Ihrer Yamaha Electone Orgel in kürzester Zeit kennen.

Découvrez, avec Yamaha, un merveilleux monde musical!  
Toutes nos félicitations! Vous possédez désormais l'orgue électronique le plus évolué qui existe aujourd'hui, c'est-à-dire votre nouvel Electone Yamaha. Dans les Electone B-205 et B-405, Yamaha a concrétisé toutes les connaissances de ses spécialistes et artisans qui, depuis des années, réalisent de superbes instruments de musique regroupant les découvertes et développements les plus récents en matière de technologie électronique de pointe. Nous sommes certains que la reproduction très fidèle des diverses tonalités et la merveilleuse ambiance musicale rendues possibles par la technologie électronique numérique originale créée par Yamaha, vous plairont tout parti-

culièrement. Nous pensons, par ailleurs, pouvoir affirmer que le grand éventail de caractéristiques facilitant le jeu que vous offre votre Electone vous garantira des heures de satisfaction et de plaisir musical.

Pour vous permettre d'utiliser au maximum ces caractéristiques aussi nombreuses que diverses, nous vous suggérons de vous familiariser avec leur position et leur mode de fonctionnement en lisant attentivement ce manuel avant de commencer à jouer. De cette manière, vous pourrez obtenir de votre Electone, en très peu de temps, d'excellents résultats.

¡Bienvenido al maravilloso mundo de la música de Yamaha!  
¡Felicidades! ¡Enhorabuena! Al comprar un Electone de Yamaha usted ha adquirido el más avanzado órgano electrónico que existe hoy en día. En el Electone B-205 y B-405, Yamaha ha combinado su excelente artesanía, adquirida durante los largos años que ha estado dedicado a la manufactura de instrumentos musicales de alta calidad, con los últimos avances de la tecnología electrónica moderna. Estamos seguros que a usted le agrada en particular el "sonido vivo", el "sonoro ambiente" que produce la original tecnología electrónica digital de

Yamaha. También creemos que la amplia variedad de características que tiene su Electone, y que son fáciles de tocar, le proporcionarán satisfacciones y un placer musical sin límites.

Con el objeto de que usted pueda usar al máximo estas numerosas y excelentes características, le sugerimos que se familiarice primero con sus posiciones y su operación leyendo este manual cuidadosamente antes de empezar a tocarlo. De esta manera, podrá disfrutar al máximo este instrumento, en el menor tiempo posible.

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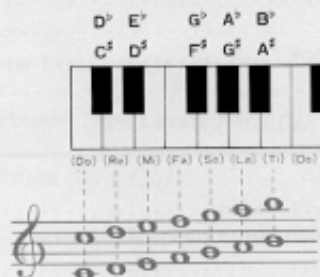
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# PART I: Before Starting to Play

## Some Fundamentals of Music

Let us first look at the relationship between the conventional musical staff notation and the keys on the actual keyboard.

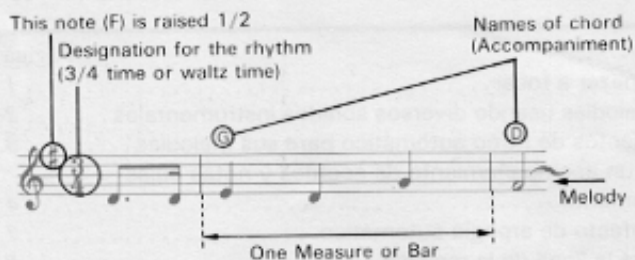


Next familiarize yourself with the notation for the length values of the notes and the rests.

Symbol	Value in terms of quarter notes	
○	Whole note	♩ + ♩ + ♩ + ♩
⌒	Dotted half note	♩ + ♩ + ♩
⌒	Half note	♩ + ♩
⌒	Dotted quarter note	♩ + ♪
⌒	Quarter note	♩
♩	Dotted eighth note	♩ + ♪ (♩♪ = ♩)
♩	Eighth note	♩ (♩♩ = ♩)
♩	Sixteenth note	♩ (♩♩♩♩ = ♩)

Symbol	Rest values in terms of quarter rests	
⌒	Full rest	⌒ + ⌒ + ⌒ + ⌒
⌒	Dotted half rest	⌒ + ⌒ + ⌒
⌒	Half rest	⌒ + ⌒
⌒	Dotted quarter rest	⌒ + ♪
⌒	Quarter rest	⌒
⌒	Dotted eighth rest	♪ + ♪ (♪♪ = ⌒)
⌒	Eighth rest	♪ (♪♪ = ⌒)
⌒	Sixteenth rest	♪ (♪♪♪♪ = ⌒)

Now that you have a basic understanding of the relative values of the notes and rests, let's look at a segment of an actual score.



"Little Brown Jug"



## Preliminary Settings for Sound Production

First of all, make sure that the plug is firmly inserted in the electrical outlet and then:

- 1) Turn the Power Switch to the "ON" position.  
The power indicator lamp will light up.



- 2) Turn the Master Volume knob clockwise.  
This knob controls the volume for the entire instrument. The further you turn it clockwise, the greater the volume.



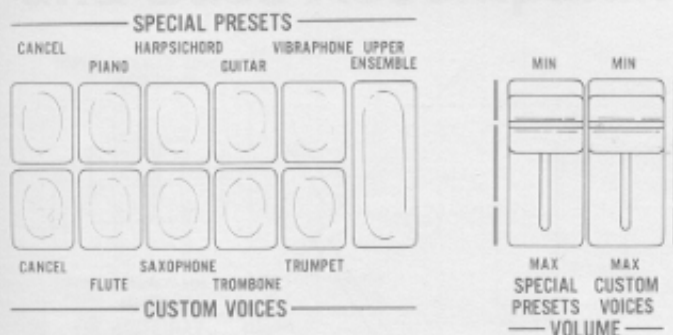
- 3) Depress the Expression Pedal.  
This pedal enables you to change the volume level while you are playing without taking your hands from the keyboards.



- 4) Select the desired Voice functions.  
(Refer to pages 2 and 9 for instructions on setting these controls.)



# PART II: Playing Melodies Using Various Instrumental Sounds



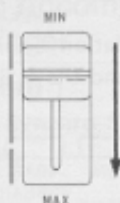
(Illustration B-405)

## Special Presets

By pressing one of the voice selector buttons in the Special Preset switch bank, you can program the Electone to play with the sound quality and timbre of a variety of instruments. Let's use one of these instrumental voices to play a melody on the upper keyboard.

★ Please turn all other buttons and levers OFF.

- 1) Depress one of the four voice selector buttons (B-205: four switches) in the Special Presets switch bank.
- 2) Set the Special Presets Volume control to Max.



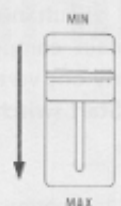
- 3) Pressing the keys of the upper keyboard will now produce the sound of the instrument you have selected.

★ Practice playing the melody on the previous page in a variety of different voices.

## Custom Voices (B-405 only)

Like the Special Presets, the Custom Voices consist of an array of voices which can duplicate the sounds of a variety of instruments. Since the tone qualities and volumes of the voices in this array vary minutely, they produce a very realistic and natural sound.

- 1) Depress one of the four voice selector buttons in the Custom Voices switch bank.
- 2) Slide the Custom Voices Volume control lever to Max.



- 3) Pressing the keys of the upper keyboard will now produce the sound of the instrument you have chosen.

★ Practice using the following melody.

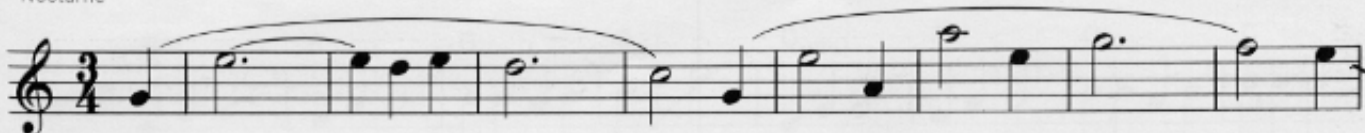
### ■ Upper Ensemble (B-405 only)

This function blends the sounds produced by the Special Presets and/or the Custom Voices with the sounds generated by the upper tone levers.

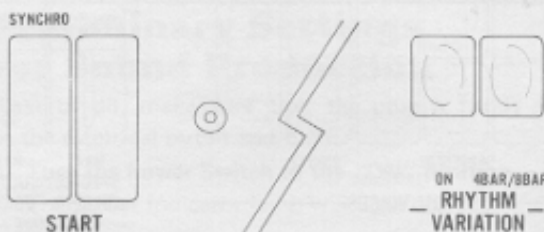
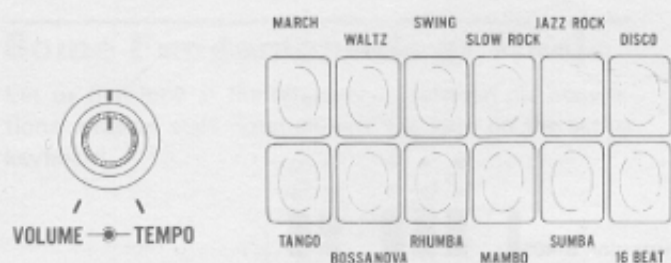
If you press this button together with both the Special Presets and the Custom Voices buttons, you will be able to mix the sound produced by the three different tone generating groups as you wish.

★ When the Special Presets are in use and one or more of the tone levers and the Ensemble function are activated, the sound generated by the Special Presets will be that of the Rekeyed Mode.

"Nocturne"



# PART III: Automatic Rhythm Accompaniments for Your Melodies



## Auto Rhythm

This function automatically provides the clear, crisp rhythms of percussion instruments like cymbals, drums, bongos and the like. Why not add a little rhythmic background to your performance?

- 1) Choose one of the 12 rhythm selector buttons and depress it.

You can also combine rhythms to achieve interesting and varied effects by pushing several buttons in any horizontal combination simultaneously. (However, it is not possible to obtain compound rhythms by pressing both buttons in any one vertical combination.)

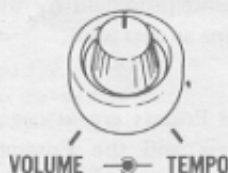
- 2) Depress either one of the Start switches.



If you press the Start switch on the right the rhythm accompaniment will begin immediately.

If you press the Synchro Start switch on the left, the rhythmic accompaniment will cut in as soon as you depress either a key on the lower keyboard or one of the pedals.

- 3) The rhythm is regulated by a combination of the Tempo and Volume knobs.



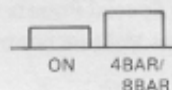
**TEMPO knob:** (outer control knob) The further this is turned clockwise, the faster the tempo of the rhythm.

**VOLUME knob:** (Inner control knob) Turn this clockwise to increase the volume.

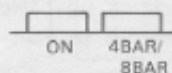
### Rhythm Variation

This function allows you to introduce a preselected one-bar rhythmic variation into the music every four or eight bars. Since the rhythms change at natural breaks in the musical phrasing, it provides an excellent way to enliven the music.

If you depress the ON button only, the new Rhythm Variation pattern will be introduced every four bars.



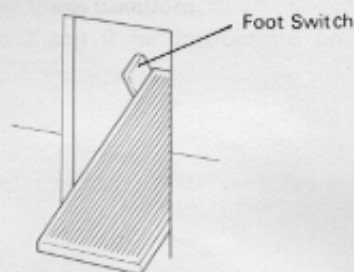
To introduce the variation every eight bars you must depress both the ON and the 4 Bar/8 Bar buttons simultaneously.



★ Now, you can play the melodies shown on page 1 and 2 using your favorite rhythm.

### Foot Switch (Rhythm stop)

You can use the foot switch (located at the rear left of the Expression pedal) to stop the rhythm accompaniment whenever you wish without taking your hands from the keyboards.





# PART IV: Automatic Chord and Bass Accompaniment

NORMAL SINGLE CONSTANT  
FINGER CHORD



FINGERED  
CHORD

CUSTOM  
A-B-C

MEMORY

Fun Blocks

## Auto Bass/Chord (Fun Blocks)

This function allows the introduction of lower keyboard chords and pedal bass notes into the rhythm accompaniment. You can thus play a wide variety of chords and bass notes automatically, determining the combination by selecting one of the function switches: Single Finger Chord, Fingered Chord, or Custom A-B-C. For added convenience and flexibility your Electone is also equipped with one more automatic function — Memory.

## Automatic Chord Accompaniment with the Touch of a Finger

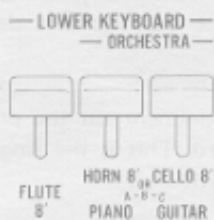
### [Single Finger Chord]

1) Press the Start or Synchro Start switch in the Auto Rhythm switch bank.



Depress the desired rhythm selector button and set the Tempo and Volume knobs.

2) Adjust the lower tone levers to the desired settings.



When the Auto Bass/Chord switch is on, the Horn 8' and Cello 8' voices of the lower tone levers generate the tones of the instruments indicated in the lower line (Piano, Guitar) and automatically produce a chord rhythm that matches the pattern produced by the Auto Rhythm section. The Flute tones will be constant.

3) Set the pedal tone levers.



4) Depress the green Single Finger Chord button.



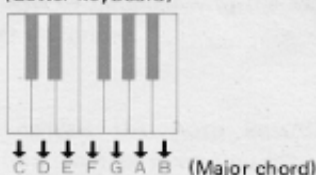
5) Now if you hold down one of the keys on the lower keyboard you will automatically introduce the chord and bass note into the established rhythm.



The chord produced at this time is the major chord whose fundamental is the note corresponding to the key played on the lower keyboard. Thus to produce a C major chord, just press the C key, press the F key to produce an F major chord and so forth.

Relation between key position on lower key board and the generated chord.

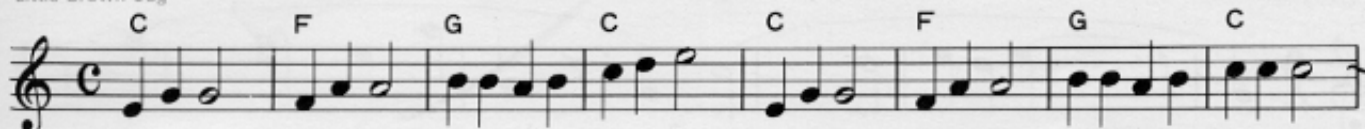
(Lower keyboard)



The bass note that is generated is also determined by the key played on the lower keyboard and will alternate with the chord automatically.

★ Try using this automatic program function while playing the selection given below. Play on the upper keyboard while you supply the accompaniment by simply pressing the key on the lower keyboard that corresponds to the fundamental of the chord you want.

"Little Brown Jug"



NORMAL SINGLE CONSTANT  
FINGER CHORD

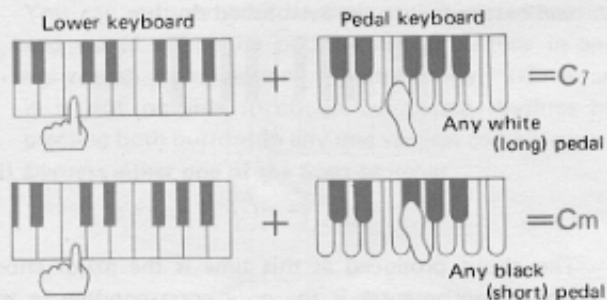


FINGERED  
CHORD A-B-C

A<sub>40</sub> B<sub>45</sub> C<sub>50</sub> Fun Blocks

### ■ Producing Minor and Seventh Chords

In addition to major chords, you can also use the Single Finger Chord function to produce automatic accompaniment with minor or seventh chords. To produce a seventh chord simply tread on any of the white (long) pedals on the pedalboard while holding down the appropriate key on the lower keyboard at the same time. To produce a minor chord, depress one of the black (short) pedals instead.



If you depress both a black and a white pedal while holding down a key on the lower keyboard the result will be a minor seventh chord.

★ Let's practice using this function while playing the melody below.

## Producing an Automatic Chord Accompaniment by Fingering an Entire Chord

### [Fingered Chord]

- 1) Turn on the Start or Synchro Start switch in the Auto Rhythm switch bank.  
Depress the desired rhythm selector button and set the Tempo and Volume knobs.
- 2) Adjust the lower tone levers to the desired settings.
- 3) Adjust the pedal tone levers to the desired settings.
- 4) Depress the red Fingered Chord button.

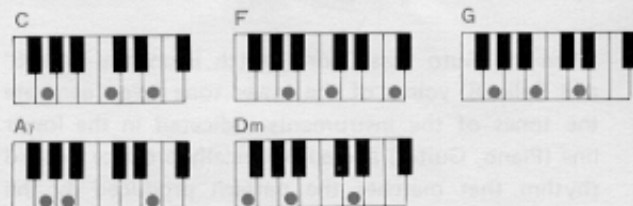


- 5) Finger and hold down a chord on the lower keyboard.



This automatically generates the chord and bass note in an alternating pattern matching the rhythm selected. The chord produced is the one fingered on the lower keyboard and the bass note is determined by this chord.

★ Play the accompaniment on the previous page using the fingered chord. This is the finger positioning for the lower keyboard:



## Automatic Accompaniment Using Both Lower Keyboard and Pedals

### [Custom A-B-C]

- 1) Turn on the Start on Synchro Start switch in the Auto Rhythm switch bank.

Depress the desired rhythm selector button and set the Tempo and Volume knobs.

- 2) Adjust the lower tone levers to the desired settings.
- 3) Adjust the pedal tone levers to the desired settings.
- 4) Switch on the white Custom A-B-C button.



- 5) Depress the pedals while holding down the chord on the lower keyboard.

The chord part of the automatic accompaniment will be the sound generated by the lower keyboard, while the bass note shall be based on the note depressed on the keyboard. In other words, the lower keyboard and the pedals will each generate a separate automatic accompaniment, thus enhancing your performance.

### ■ Memory



This function allows you to store the automatic rhythm accompaniment you have selected in a memory bank. If you press the Memory button together with the Single Finger Chord, the Fingered Chord or the Custom A-B-C button, the automatic rhythm accompaniment will continue even if you should remove your hand from the lower keyboard. (With the Custom A-B-C program the bass note selected for pedal accompaniment will also be retained in the memory.) Using this Memory function you have only to touch the lower keyboard to effect a chord change. A welcome convenience indeed!

### ■ Constant

This switch is used to disengage the automatic accompaniment from the Auto Rhythm pattern. When the Constant button and the Single Finger or Fingered Chord button are pressed together, the automatic accompaniment will no longer match the Auto Rhythm pattern. Instead, the chord and the bass note will be produced continuously, as if the respective keys were being held down. This function can also be coupled with the Memory function to allow greater flexibility.

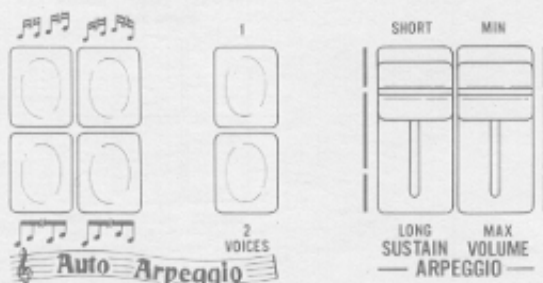
### ■ Normal

This control cancels the Auto Bass/Chord program. When the Normal control is on you may play the lower keyboard and the pedals to provide any normal accompaniment you may desire without introducing automatic patterns. When the Auto Rhythm is on and the Memory button is depressed together with the Normal button, the last sound you played on the lower keyboard will be emitted continuously even if you take your hand off.

- ★ If you do not employ the Auto Rhythm, the Auto Bass/Chord program will not function.



# PART V: Using the Automatic Arpeggio Effect



## Auto Arpeggio

This function enables you to automatically produce a brilliant arpeggio in time with the Auto Rhythm by simply depressing the keys on the lower keyboard. This function can be used to great advantage in enhancing your performance by adding a decorative ripple effect to the accompaniment.

- 1) Switch on the Synchro Start button in the Auto Rhythm switch bank, choose the appropriate Rhythm Selector and adjust the Tempo and Volume knobs to your liking.



Because the Auto Arpeggio works in conjunction with the Auto Rhythm function, make certain that you set the latter into the operating mode when you want to utilize the automatic arpeggio effect.

- 2) Select one of the four available patterns by pressing the appropriate selector button.



- 3) Switch on the desired voice selector button.

These buttons determine the register of the Auto Arpeggio with #2 being one octave higher than #1. By turning on both switches at the same time, you can generate two voices simultaneously. Since these voice buttons also function as activating and deactivating switches, be sure that both are in the OFF position when the Auto Arpeggio effect is not wanted.

- 4) Set the Volume control.

The more the slide is moved towards MAX the louder the arpeggio effect will be.

- 5) Hold down a key on the lower keyboard.

This will automatically produce an arpeggio based on the notes you have selected. Holding down a chord rather than a single note will generate a flowing broken chord sound.

The arpeggio pattern will change to match the rhythm even if you change to a different tempo.

### ■ Sustain

By using the Sustain lever you can produce a sustained arpeggio. Moving the lever toward LONG will increase the sustain effect and prolong the arpeggio.

### ■ Auto Arpeggio + Auto Bass/Chord

[With the Single Finger Chord function on]: simply play a note on the lower keyboard to generate an arpeggio together with the automatic chord and bass accompaniment. The arpeggio effect will follow the same pattern as a chord would when played on the lower keyboard; in the same way you can change the arpeggio to that of a seventh or minor chord by simply depressing one of the pedals together with one of the keys. You can also use the Fingered Chord and the Custom ABC together.

[Arpeggio + Memory]: When the Memory function is activated along with the Arpeggio, the arpeggio effect will continue even when you take your hand from the lower keyboard.

- ★ Now try playing the tune on the previous page with the Auto Arpeggio ON.

# PART VI: Harmonies to the Melody Line

and Innovative Sounds



## Melody on Chord (B-405 only)

This function automatically generates harmonies for each note of the melody played on the upper keyboard. Since the chord selected on the lower keyboard is superimposed on the melody, you can enjoy the luxury of a rich and full melody line with harmonies even though you only play a single note at a time on the upper keyboard.

### 1) Set the upper and lower tone levers. (Refer to pg. 9)

The sounds to harmonize with the melody played on the upper keyboard should be determined by the upper tone levers.

- ★ The Custom Voices cannot be used to generate chords with the Melody On Chord function.
- ★ When the Special Presets are in use and one or more of the tone levers and the Ensemble function are activated, the Melody On Chord will not operate.

### 2) Switch on either Mode 1 or Mode 2.



These switches control the operation of the Melody On Chord function.

**Mode 1 (Open harmony):** when you select this mode, harmonies are added in the lower registers some way from the notes played on the upper keyboard, so that the melody and the harmony sound as if they are slightly separated.

**Mode 2 (Closed harmony):** in this mode, the harmonies are added in higher registers than in Mode 1 and the melody sounds almost as if it is being played in chords.

### 3) Play the melody on the upper keyboard and the chord on the lower.



When this is done the chord played on the lower keyboard will be produced with the melody in the voice selected for the upper keyboard. The Melody On Chord function ceases to operate when you stop holding down the keys on either the upper or the lower keyboard.

### ■ Volume Soft



The Volume Soft button further reduces the sound generated by the Melody On Chord, which is normally quieter than the sound produced by the upper keyboard anyway.

### ■ Cancel



This button disengages the Melody On Chord function.