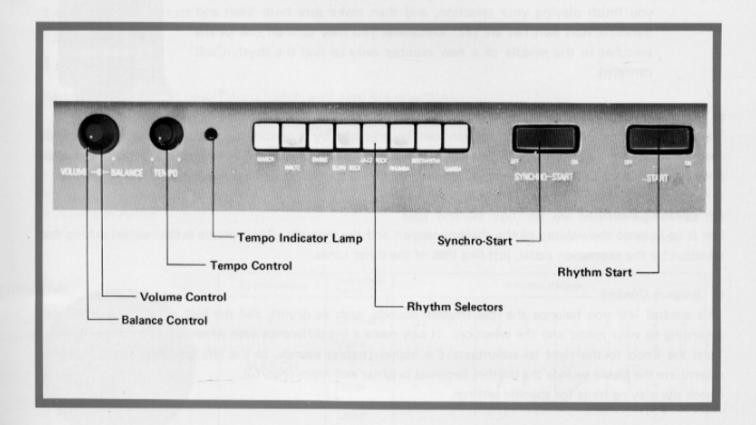
Auto Rhythm Section

This section provides eight catchy rhythms, each one called forth by a simple button.

In addition to a combined volume and balance knob, tempo control and tempo indicator light, there are two other switches: ordinary Start and the exclusive Yamaha Synchro-Start which begins the rhythm accompaniment on the first beat of a measure when the first lower manual or pedal note is struck. A foot switch fitted on the expression pedal lets you cut and restart the rhythm at any point during play.



How to use the Auto Rhythm

Normal Start

For instant rhythm at the beginning of a selection. Push the rhythm selector desired, get the beat set in your mind by watching the indicator lamp, when set Synchro-Start switch on and then turn the Start switch on.

Synchro-Start

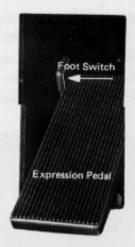
Select the rhythm, switch on the Synchro-Start and begin to play once you have the beat established. The rhythm will begin as soon as you strike a lower manual or pedal note. This switch permits you to lead in with a rhythm-free melody at first if so desired.

Rhythm Stop (Foot Switch)

This switch is located in the expression pedal housing to the left of the pedal. Once the rhythm is on, push this switch once to instantly stop it, once again to restart. It lets you stop and restart the rhythm in the middle of a selection without using your hand.

Note:

After the foot switch has been used, be sure it is reset to normal after you finish playing your selection, and then make sure both Start and Synchro-Start switches are off. Otherwise you may turn on one of the switches in the middle of a new number only to find the rhythm still canceled.



Tempo Control

The tempo of the Auto Rhythm section can be adjusted by a continuous control knob. This is best accomplished by turning on the Synchro-Start switch. Although no sound will be produced, the indicator lamp will flash each quarter note, letting you visually check the tempo while you adjust.

Volume Control

Use it to balance the volume of the rhythm section and the manuals. This volume is then varied during the selection by the expression pedal, just like that of the other tones.

Balance Control

This control lets you balance the low rhythm sounds, such as drums, and the high sounds (i.e. cymbals) according to your mood and the selection. It can make a big difference even when using the same rhythm. Turn the knob to the right to accentuate the higher (treble) sounds, to the left for lower (bass). If you accentuate the treble sounds the rhythm becomes brighter and more cheerful. Check the playing hints for specific settings.



Various Rhythms and Their Use.

Each auto rhythm beat includes some or all of the following sounds: long and short cymbals, bass drum, snare drum, rim shot, high and low conga, high bongo.

Successful timing of the rhythm and use of the proper beat for each selection will add to your musical pleasure. The creative variations employing auto rhythms are virtually endless, so wide experimentation is recommended. The examples given below are only to help you get started. They are divided according to the eight different beats.

1. March

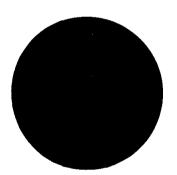
Basically a 2/2 beat, it nevertheless blends well with 4/4 selections.

Examples:

- March Theme from Bridge on the River Kwai
- · Clarinet Polka
- I Could Have Danced All Night
- American Patrol
- You Are My Sunshine

Balance Adjustment

If the snare drum sound on the second and fourth beat bothers you, set the balance higher (to the right) to brighten the overall rhythm sounds.



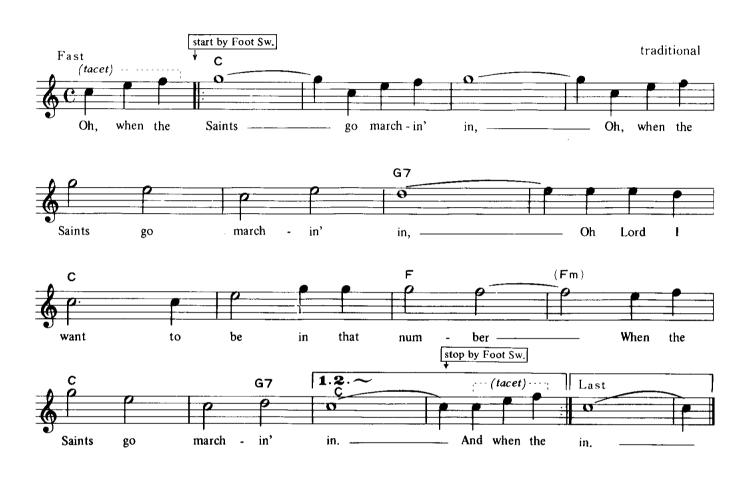
| Rhythm Name | Instrument Name | Rhythm Pattern | | | | | | |
|-------------|--------------------|----------------|---|-----|----|-----|-----|--|
| | Cymbal 1 | ١ | 1 |] | \$ | |] ; | |
| MADOU | Snare Drum (H) | * | J | 1 | J | 1 1 | 1 1 | |
| MARCH | Bass Drum | J | ż | ا ا | * | 1 1 | 1 1 | |
| | Tempo Lamp | \circ | | | | | | |

Starting Rhythm with the Foot Switch

Although the foot switch is mainly for stopping and then restarting the rhythm, you can turn on the rhythm with either start switch, then shut it off with the foot switch before beginning to play. This way, when you are ready for the rhythm you can switch it on with your foot.



WHEN THE SAINTS GO MARCHIN' IN





2. Waltz

Ideal for any 3/4 selection.

Examples:

- 13 Jours en France
- I Really Don't Want to Know
- L'Eau Vive
- Moon River
- Theme from The Godfather



| Rhythm Name | Instrument Name | | | Rhyth | m Pattern | <u>-</u> | |
|-------------|--------------------|---|---|-------|-----------|----------|---|
| | Cymbal 1 | ا | ķ | ż | | į | ż |
| WALTZ | Cymbal 2 | ż | ا | J | 1 | ١ | J |
| | Bass Drum | J | 1 | ż | ا | ż | ż |
| | Tempo Lamp | 0 | | | 0 | | |
| | | | | | | | |





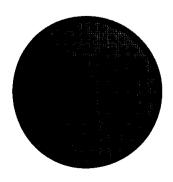
3. Swing

This beat is ideal for 4/4 tunes: light and bouncy melodies or slow ballads.

Mixed with the March rhythm the addition of the bass drum accent will help build dramatic feeling from the middle of the song (i.e., in refrains).



- Satin Doll
- Petite Fleur
- Memories of You
- Twilight Time
- Michele
- Raindrops Keep Fallin' On My Head



| Rhythm Name | Instrument Name | | | | Rhythm | Pattern | | | |
|-------------|--------------------|---|----------|---|--------|---------|---|---|---|
| | Cymbal 1 | ١ | <u> </u> | ا | į | | * | J | ż |
| | Cymbal 2 | ķ | J | ż | ŗ | 1 | Ţ | ż | J |
| SWING | Snare Drum (H) | ż | ١ | ż | ٦ | 1 | ا | ż | J |
| | Bass Drum | ا | 3 | ١ | ž | ا ا | ž | ١ | 1 |
| | Tempo Lamp | 0 | | | | | | | |

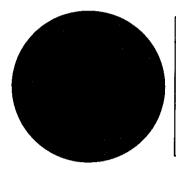
4. Slow Rock

Best for 4/4 or 12/8 songs with triplet rhythms (i.e., rock ballads).

Mix this beat with Waltz for a fuller, rhythm.

Examples:

- La Novia
- Only You
- The House of the Rising Sun
- You Don't Have to Say You Love Me



| Rhythm Name | Instrument Name | Rhythm Pattern |
|-------------|---|---|
| SLOW ROCK | Cymbal 2 Snare Drum (H) Bass Drum | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ |





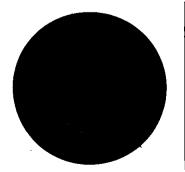
5. Jazz Rock

Suited to any 4/4 rock number.

Mixed with Swing, this beat produces an interesting Jazz Rock variation. Combined with Samba it becomes a Latin Rock. Use it together with Rhumba or Bossanova for a cha-cha mambo type rhythm.

Examples:

- Hey Jude
- Love Story



| Rhythm Name | Instrument Name | | | | Rhythm | Patterr | 1 | | |
|-------------|--------------------|---|-----|------------|--------|----------|------|---|-----|
| | Cymbal 2 | J | J | Л | J | Л | U | Л | U |
| | Cymbal 1 | L | j | ا | ا | ا | J | j | J |
| JAZZ ROCK | Snare Drum (H) | ż | j | į | ١ | <u> </u> | j | 1 | 1 |
| | Bass Drum | J | ٦,٢ | J - | ٦, | | ٦, ١ | J | ٦,٢ |

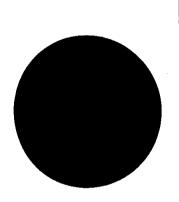
6. Rhumba

Use this beat with any 4/4 Latin selection.

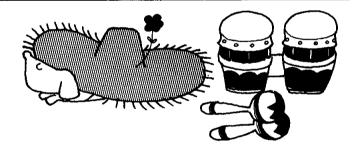
The balance control is particularly important here. If it is turned completely to the right the beat is very much like a beguine. Turn all the way to the left and the bongos are accentuated for a stronger rhumba flavor. Experiment by combining this rhythm with Samba, Bossanova and Jazz Rock.

Examples:

- Tea for Two (cha cha cha)
- Cerezo Rosa
- Patricia
- Solamente Una Vez
- Begin the Beguine
- Estrellita



| Rhythm Name | Instrument Name | | | | Rhythm | Pattern | | | |
|-------------|--------------------|------------|------|---|--------|---------|------------|---|---|
| | Cymbal 2 | Л | Л | Л | Л | ת | Л | Л | Л |
| | Cymbal 1 | ,) | ż | 1 | ż | 7 5 | ķ | ż | ķ |
| DI II IADA | High Bongo | J | ٠, ٦ | 3 | J | * | ا | ا | * |
| RHUMBA | High Claves | * | ¥ | ķ | Л | 1 | * | ż | Л |
| | Low Claves | J | ٦,٥ | J | ż | Л | ,) | J | 1 |
| | Bass Drum | J | ķ | J | J | | ż | J | ١ |



7. Bossanova

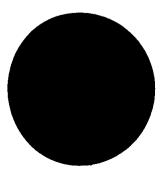
For any bossanova number in 4/4 time.

The balance control lets you adjust for a bossarock, or cool beat by reducing the drums.

Combines well with rock and Latin rhythms, such as Samba and Jazz Rock.

Examples:

- The Girl from Ipanema
- Summer Samba
- Fly Me to the Moon
- And I Love Her
- More



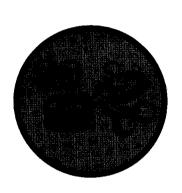
| Rhythm Name | Instrument Name | Rhythm Pattern | | | | | | | | |
|-------------|--------------------|----------------|------|---|----|---|----|------|----|--|
| | Cymbal 2 | Л | Л | Л | Л | 1 | Л | Л | Л | |
| BOSSANOVA | Cymbal 1 | ١ | ٦, | ż | J | 1 | J | , , | ķ | |
| | High Bongo | j | ٦, ٦ | ţ | ١ | 1 | J | ٦, ٢ | ţ | |
| | Bass Drum | J | ٦, | J | ٦, | | ٦, | J | ٦, | |

8. Samba

Good with 4/4 or 2/2 time Latin numbers. This is the original rhythm from which the bossanova was born, so any bossanova type song can be played with a slow Samba beat for a lightly different feeling.

Examples:

- Cumana
- Brazil
- Tico Tico
- Love Me Tonight
- Girl I'm Gonna Get You



| Rhythm Name | Instrument Name | | | | Rhythm | Pattern | | | |
|-------------|--------------------|---|------|---|--------|---------|------------|---|---|
| | Cymbal 2 | Л | Л | Л | Л | 1 | Л | Л | Л |
| | Cymbal 1 | J | ķ | J | \$ |] | ż | J | 1 |
| CAMDA | High Bongo | J | J | ķ | ٦,٢ | ٦,٦ | ر ہ | ż | 1 |
| SAMBA | High Claves | J | 1 | ķ | Л | ١ | 1 | ż | Л |
| | Low Claves | 1 | ٦, ٢ | J | 2 | 1 | ٦,٨ | J | ķ |
| | Bass Drum | J | ķ | J | 1 | | \$ | J | * |

Auto Rhythm Solo

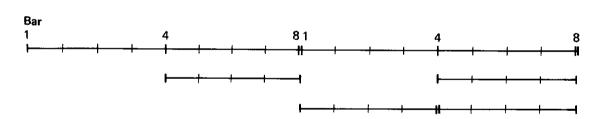
This is especially effective with a samba, but can be enjoyed as a break in any number. Make your own mixture of the first six beats on the left side for an interesting or unusual rhythm pattern. The trick here is to always use the rhythm in two-bar units.

Examples:

Samba

Rhumba

Bossanova

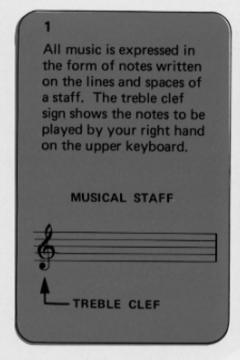


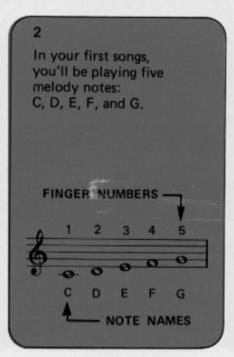


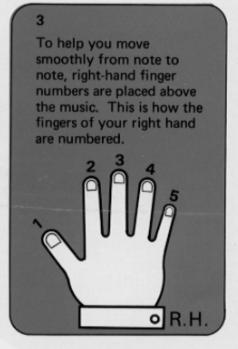
PLAYING THE YAMAHA ELECTONE



Let's Learn to Read Music

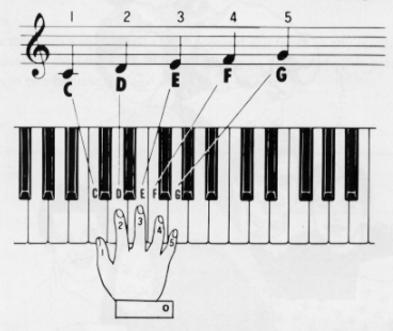






Easy Steps to Playing the Right-Hand Melody

The notes written on a musical score correspond to the keys as shown in this diagram:

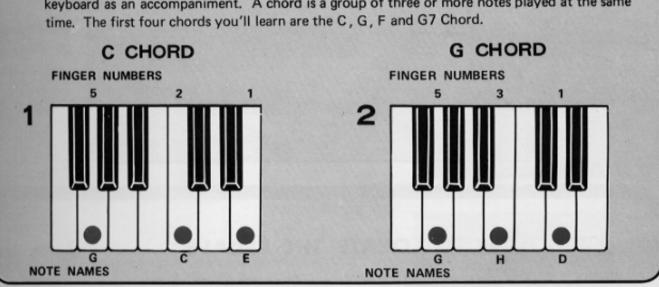


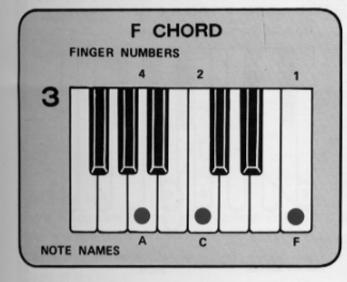
Follow the fingering the above notes.

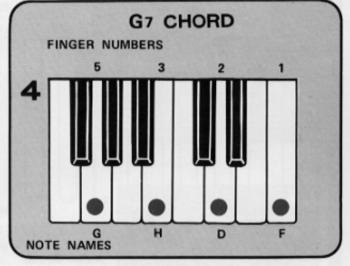


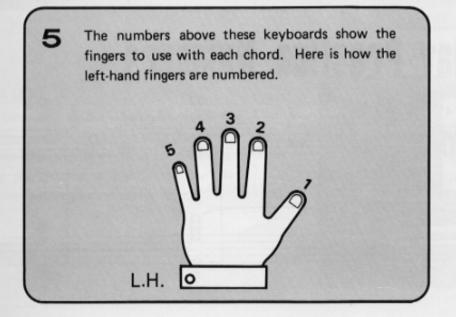
Let's Play Accompaniment

To add an interesting background to the melody, play left-hand chords on the lower keyboard as an accompaniment. A chord is a group of three or more notes played at the same





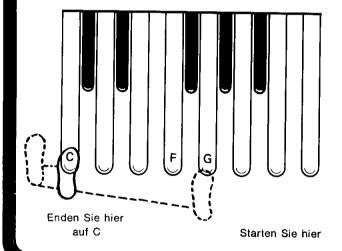




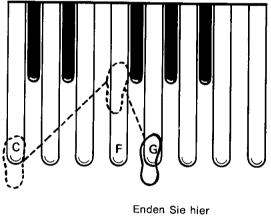
The pedal notes add fullness to your songs. You should accompany each chord with a matching pedal. Play the C pedal with the C chord, and the G pedal with the G chord. Play these two chords and pedals several times, and your chord changing skill will improve rapidly.

HERE'S HOW TO LOCATE THE PEDALS

To locate C pedal, swing your leg to the left past all pedals and return to the first pedal which is C.



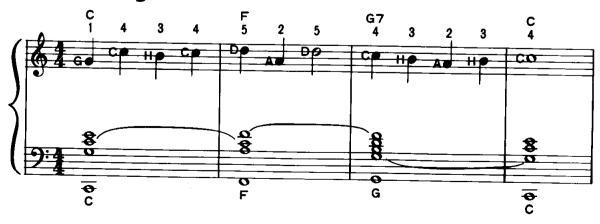
To locate G pedal, swing your leg toward center of pedals and lightly touch the first black pedal in the group of three. Then pass in front of the black pedal to G.



Starten Sie hier

inden Sie hier auf G

Let's Play Practice Numbers



To Fully Enjoy Your Electone

Other Controls

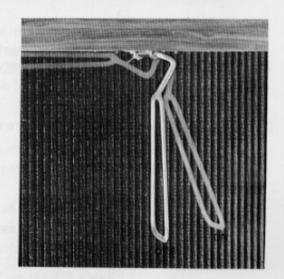
Master Volume:

Determine the maximum volume obtainable by depressing the expression pedal.



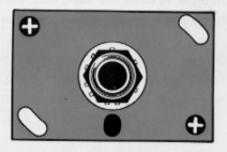
Knee Lever:

This lever is operated with the right knee for instantaneous implementation or stop of the reverb effect preset by the reverb control and selector, allowing passageby-passage or even phrase-by-phrase reverbration effect precision.



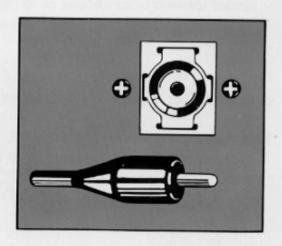
Headphone Jack

Plug a headphone set (optional accessory) into the jack under the keyboard and you can play with the volume as high as you like without disturbing anyone, even in the middle of the night.



External Input Jack (EXT IN)

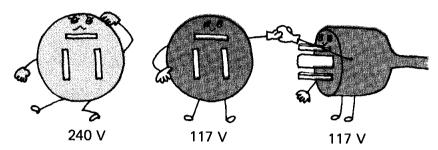
Can be used to feed any sound source through the Electone Natural Sound speaker: radio, record player or tape recorder. Since the volume of these sound sources is not affected by the expression pedal, you can play along on the Electone with any other performance.



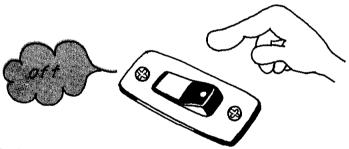
Care of Your Electone.

In general you should treat your Electone with the same care you would give any fine musical instrument. However, the following points are suggested to assure optimum enjoyment.

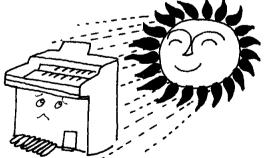
Be sure to use your Electone only on the correct voltage.
 If any changes are required, please consult your Yamaha Electone service agent.



- If any trouble develops, contact your service agent.Never touch the circuits or the internal elements of the Electone yourself.
- 3. When you have finished playing, be sure to turn off the power switch.



- In order to clean the keys, tabs, etc., use a damp cloth.Never apply organic solvents such as alcohol, for they will damage the materials.
- 5. Do not expose the Electone cabinet to the direct rays of the sun. This can bleach the finish and lead to separation along the joints. It is also best to choose a location free of humidity and currents of heated air.

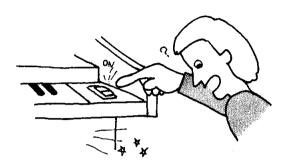


- 6. Be careful not to strike or scratch the cabinet with a hard object.
- 7. In opening and closing the fallboard, grasp the front lip with both hands and slide it gently in its groove. Never attempt to raise the fallboard directly upwards. Do not place heavy objects on it.

Do Not Be Alarmed If....

1. A note should sound the instant you turn on the switch.

This merely indicates normal operation consequent to a surge of electricity in the main amplifier.



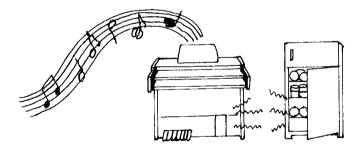
2. Only one note is produced even when two pedals are depressed simultaneously.
In order to achieve tonal clarity, the Electone is designed so that a note is electronically supressed the instant the next note is struck. If two pedals are struck simultaneously, only the higher one sounds.

3. Occasional unpleasant static occurs.

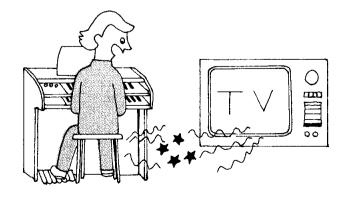
In the majority of such cases, the cause can be traced to the turning on or off of refrigerators, washing machines, electric pumps or other household appliances. Electrical fault in a neighboring outdoor neon sign may also be to blame.

When the cause is a home appliance, connect the Electone to an outlet as far as possible away from the offending appliance. This phenomenon, although annoying, poses no danger to the Electone circuitry.

If the cause is a fault in a neon or fluorescent lighting fixture, it should be repaired. When the cause is unknown, or in case of doubt, contact your Yamaha dealer.



4. The Electone can at times reproduces radio or TV sound signals.
This can occur when there is a powerful radio or TV transmitter, or an amateur radio operator located in the vicinity. If the situation is distracting, contact your Yamaha dealer.



5. Sound rattling (sympathetic vibration) occurs.

All materials have critical resonance frequencies at which they vibrate. Since the Electone produces continuous tones, it is only normal that some will cause windows, shelves, etc. to rattle.

6. Pedal notes sound too high, and upper manual notes too low.

This feeling may be especially strong for players who switch from the piano, because of the difference in tonal construction. Each piano note is a combination of complicated harmonics, and can be heard only in its interaction with the surroundings. But Electone harmonics are only multiples of the integral (base) tone, and so the instrument cannot be tuned in the same way as a piano. The same is true of other organs, pipe and reed types.

7. Brilliance does not function with Flute sounds.

In order to reduce multiple harmonics in the high range, special resistors and condensers are used. They unfortunately limit the Brilliance effect for flute and wood sounds, as well as pedal tones. Brilliance really shines for strings, oboe and brass, where the harmonics are desired and therefore left untouched.

8. There is a bit of noise when the rotary speaker is switched on.

This too is a mechanical noise stemming from the spinning speaker. Special mountings help keep this sound at an absolute minimum.

Specifications_

KEYBOARDS Upper Manual 44 kevs f ~ c4 $(3\frac{2}{3})$ octaves) Lower Manual 44 keys F ~ c3 $(3\frac{2}{3}')$ octaves) **Pedals** 13 keys C₁ ~ C (1 octave) ■ TONE LEVERS Upper Manual Flute 16' **Trombone** 16' Flute 8 Oboe 8' 8 String Flute 4'

String

Flute

Wood

Horn

Cello

Wood

Cello

Bass

4'

8'

8'

8'

4'

4'

16'

23

| | | В | ass | 8′ |
|--------------|---------------|------|--------|-----|
| UPPER | PRESET | TONE | SELECT | ORS |

Combination $1 \sim 3$ Accordion, Piano, Vibraphone, Banjo, Cancel

■ EFFECT LEVERS

Lower Manual

Pedals

Vibrato
Percussive 4' (Upper)
Percussive 2¾' (Upper)
Percussive Length (Upper)
Repeat Speed (Upper)
Pedal Sustain

■ EFFECT CONTROLS

Brilliance Reverb Reverb Balance (Upper/Lower) Manual Balance

TREMOLO SELECTORS

Voice (Main/Tremolo) Tremolo

Chorus

AUTO RHYTHM SECTION

Rhythm Selectors

March

Jazz Rock

Waltz

Rhumba

Swing

Bossanova

Samba

Slow Rock

Rhythm Controls Rhythm Start

Synchro-Start

Rhythm Stop (Foot Switch)

Tempo Volume Tone Balance

Tempo Indicator Lamp

OTHER CONTROLS

Master Volume Expression Pedal Foot Switch

Tremolo Speed Control

Knee Lever Power Switch Pilot Lamp

■ OTHER FITTINGS

Headphone Jack External Input Jack Roll-top Fallboard Music Rest

Matching Bench with Music Storage Space

NATURAL SOUND SPEAKERS

Main: JA-5101 59 x 48 cm

(23¼ x 14½")

Tremolo: JA-1701 16 x 23 cm

(6½ x 9")

Electro-control 2-speed

CIRCUITRY

Solid State (Incl. ICs and FETs)
Main Amplifier: OCL System
Output Power: 30 Watts (RMS)
Power Consumption: 120 Watts

Power Source: 100/110/117/125/220/

240V AC, 50/60Hz

DIMENSIONS

Width: 111cm (43")
Depth: 56cm (22")
Height: 90cm (35")

■ WEIGHT

65 kg (143 lbs.)

■ FINISH

American Walnut Grain

Specifications subject to change without notice.

SINCE 1887 YAMAHA
NIPPON GAKKI CO., LTD. HAMAMASTU, JAPAN