YAMAHA MR-1 Owner's Guide

featuring





YAMAHA MR-1 Owner's Guide

WELCOME TO THE MUSICAL WORLD OF YAMAHA

We are delighted to have you as a member of an ever-increasing group of proud Yamaha MR-1 owners. We are confident that your purchase of the MR-1 will mark the beginning of a lifelong partnership of musical creativity, relaxation, and pleasure.

NOTE: This guide contains information **vital** to the proper installation, operation, and maintenance of your Yamaha MR-1; please read it carefully in order to become familiar with the many features available to you. While every effort has been made to provide an instrument that is both versatile and easy to play, it is only through study and experimentation that you will be able to use your new MR-1 to its fullest potential.

Service charges incurred due to a lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are **not covered** by the manufacturer's warranty. Please study this guide **carefully** before requesting service.

Contents

- 2 GETTING ACQUAINTED WITH YOUR MR-1 PLAYCARD SYSTEM
- 5 Stop Auto Play Sing Along
- 6 MEĽODY PLAYING Free Tempo
- 7 Melody Cancel
- 8 CHORD PLAYING Chord Lesson
- 9 Chord Cancel
- 10 MELODY PLAYING AND CHORD PLAYING LEARNING THROUGH REPETITION Phrase Repeat
- **12 INSTRUMENT SEQUENCER**
- 14 PRESET BALANCE CANCEL
- 15 TRANSPOSER
- **16** ORCHESTRA SECTION
- 17 Sustain
- **18** SOLO SECTION
- 19 Sustain Celeste
- 20 SOLO AND ORCHESTRA

- 21 STEREO SYMPHONIC
- 22 RHYTHM
- 23 Fill In
- 24 AUTO BASS CHORD Normal Single Finger Chord
- 26 Fingered Chord Chord Name Display
- 27 Memory
- 28 AUTO BASS CHORD AND THE AUTO RHYTHM UNIT Variation
 PLAYING MELODY BACKED BY AUTOMATIC ACCOMPANIMENT
- **29** AUTO ARPEGGIO
- 30 ADDITIONAL INFORMATION Accessory Jacks
 - Playcard Library
- 31 ELECTROMAGNETIC INTERFERENCE
- **32** FCC CERTIFICATION
- 33 INSTALLATION
- **34** MAINTENANCE
- **35** SPECIFICATIONS
- **36 WARRANTY**



GETTING ACQUAINTED WITH YOUR MR-1

We know that you're eager to get started! But before you do, please read the INSTALLATION and MAINTENANCE sections of this guide, found on pages 33 and 34.

* * *

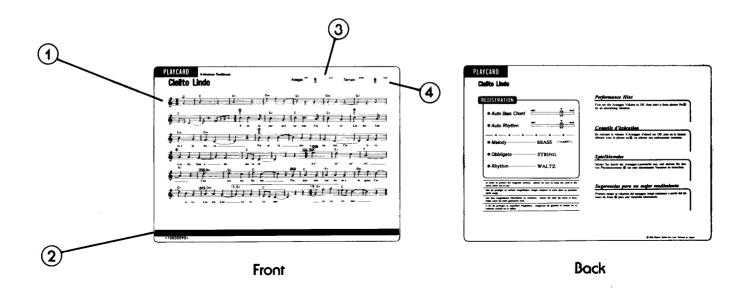
Now that you've read the Installation and Maintenance sections, let's begin.

PLAYCARD SYSTEM

Among the many features of the MR-1, the PLAYCARD SYSTEM must rank as the single most exciting. This feature alone allows you to use your MR-1 in a variety of ways:

- 1) Listen to the PLAYCARD SYSTEM as it performs your favorite selection (AUTO PLAY).
- 2) Sing or play along with the PLAYCARD performance at its preset speed or at your own pace (FREE TEMPO).
- 3) Learn/Practice the components (both Melody and Chords) of any selection or parts(s) of a selection (PHRASE REPEAT) either separately or together at your own pace.

The following section explains the various features of the MR-1 PLAYCARD SYSTEM. First of all, let's get acquainted with a PLAYCARD and its different features:



The front side of each PLAYCARD contains 4 main components:

1) MUSIC SCORE

This includes:

- A) Melody and Lyrics (if applicable)
- B) Chord Symbols
- C) Introductory Musical Phrase (if applicable) (Small Notes)
- D) Phrase Number Indications

2) MAGNETIC STRIP

This contains all of the musical data including:

- A) Melody
- B) Obbligato (Countermelody)
- C) Auto Bass Chord Accompaniment (including chords and Bass Line)
- D) Rhythm Selection, Tempo, and Volume, including Fill-in.
- E) Arpeggio Volume
- F) Voice Selection and Volume for Melody and Obbligato.
- 3) Volume Setting for Arpeggio Section*
- 4) Tempo Setting for Rhythm*

The back side of each PLAYCARD comprises the REGISTRATION section (which shows the instruments and rhythm included on the magnetic strip as well as approximate volumes for the Auto Bass Chord and Rhythm Sections) and some suggestions for performance (PERFORMANCE HINT).

In order to make your MR-1 as easy to operate as possible, all of the settings have been programmed onto the MAGNETIC STRIP, so there is no need for you to make any adjustments.

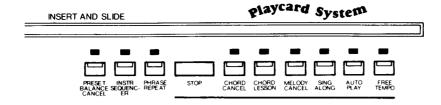
^{*}On some PLAYCARDS, this is printed on the back side.

Now that you understand the basic information, let's begin to make some music. Follow the simple step-by-step procedure outlined below:

- 1) Select your favorite song from among the 12 PLAYCARDS included with your MR-1 and remove it from its protective envelope. Be careful not to let your fingers touch the magnetic strip.
- 2) Place the PLAYCARD in its groove so that the leading edge of the PLAYCARD lines up with the arrow designating the insertion position.
- 3) Slide the PLAYCARD firmly along the groove (past the instrument's reading head), in one action, from right to left, until it reaches the end of the groove. The reading head of the MR-1 (located inside the groove) is now reading all of the data contained on the magnetic strip and storing it in its memory.
- 4) When the Reading Head has read the information on the magnetic strip correctly, the last MELODY LAMP on the right of the keyboard will light up for a few seconds. The optimum time for sliding the PLAYCARD across the groove is one to two seconds. If this operation is performed either too fast or too slow, the reading head cannot read the musical data, and the designated MELODY LAMP will not illuminate. If this happens, repeat the procedure. Try this operation several times to familiarize yourself with the correct speed.
- 5) After the MELODY LAMP has illuminated (confirming that the data have been received), that lamp will go out and the AUTO PLAY light will illuminate and performance of the PLAYCARD data will automatically begin.
 - The suggested Melody and Obbligato instruments have been programmed onto the PLAYCARD's magnetic strip. (To find out what they are, please look at the back side of the PLAYCARD). If you wish, however, you can change them at any time during a performance simply by depressing the buttons you prefer.
 - The selection of RHYTHM has been programmed onto the PLAYCARD's magnetic strip, as well. This can also be changed. Note, however, that the WALTZ and JAZZ WALTZ rhythms should only be used for songs with a 3/4 time signature. Similarly, the remaining rhythms should not be used for songs with a 3/4 time signature.
 - During the performance of the PLAYCARD data, the MELODY LAMPS and CHORD LAMPS (located above each of the keys) will illuminate to show you those notes that are being played by the PLAYCARD system. The RED LAMPS correspond to the WHITE keys, while the ORANGE LAMPS correspond to the BLACK keys.
- 6) To stop the music at any time, press the STOP button.

Once a PLAYCARD has been inserted in the groove properly, the information from the magnetic strip is stored in memory until either:

- 1) another PLAYCARD is inserted; or
- 2) the power is turned off (this erases the memory).



Now let's examine each of the PLAYCARD modes, one by one:

Stop

This button is used to stop the PLAYCARD performance at any time.

Auto Play

Once a PLAYCARD is correctly inserted into the groove, the MR-1 will automatically perform the selection. When the PLAYCARD music has finished or has been interrupted by depressing the STOP button, and you wish to play it again, simply depress the AUTO PLAY button and the music will be played from the beginning.

NOTE: Once the MR-1 has read the PLAYCARD data, you can remove the PLAYCARD from the groove and, for safety's sake, return it to its protective envelope. The MR-1 will retain that data in Memory until a different PLAYCARD is inserted or the power is turned off.

Sing Along

This feature is exactly the same as AUTO PLAY except that the volume of the melody is reduced. That is particularly effective when you want to sing the song (with the PLAYCARD music in the background) but don't want to eliminate the melody entirely.

MELODY PLAYING

Several of the PLAYCARD modes enable you to play or learn the melody portion of the PLAYCARD data independently of the chords. Those features that deal specifically with the melody are discussed below:

Free Tempo

The FREE TEMPO feature allows you to learn melodies **at your own pace.** With it, there is no need to search hurriedly for the correct keys to keep up with the accompaniment. **The MR-1** will **WAIT FOR YOU!**

The following example will assist you in operating the FREE TEMPO feature:

- 1) After correctly inserting a PLAYCARD into the groove, depress the FREE TEMPO button.
 - The introductory music phrase (indicated by the small notes at the beginning of the PLAYCARD MUSIC SCORE) will begin.
- 2) After the introductory musical phrase, the MELODY LAMP corresponding to the first note of the melody (larger notes on the PLAYCARD MUSIC SCORE) will illuminate.
 - The MR-1 will **WAIT FOR YOU** to play the correct melody notes (indicated by the MELODY LAMPS). As you speed up or slow down your melody playing, the accompaniment will stay right with you. Because the MR-1 waits for you (when you can't find the next note to play or when you make a mistake) you can learn the correct melody at your own pace.

Melody Cancel

Once you've learned the melody by using FREE TEMPO, and you feel comfortable with it, you may want to try to play the melody, from start to finish, **at a constant speed.** Or, if you already know the melody, the MELODY CANCEL feature performs the PLAYCARD data (like AUTO PLAY) except that the MELODY portion is excluded. By following the sequence of MELODY LAMPS, you can play the MELODY and the MR-1 will automatically provide the rest of the accompaniment.

NOTE: If the tempo is too fast, slow it down by using the RHYTHM TEMPO control, so that you can practice comfortably.

When either the FREE TEMPO or the MELODY CANCEL mode is in use, the Melody and the Obbligato will be played by the instruments programmed on the magnetic strip. However, you can change these at any time by depressing the buttons you prefer.

In addition, the song will use the Rhythm that was programmed on the magnetic strip. While this can also be changed manually, be sure that neither WALTZ nor JAZZ WALTZ is used on any selection with a 4/4 time signature.

CHORD PLAYING

Several of the PLAYCARD modes enable you to play or learn the chord (harmony) portion of the PLAYCARD data independently of the Melody. Those features which deal specifically with the chords are discussed below:

Chord Lesson

The CHORD LESSON feature is similar to FREE TEMPO except that, instead of learning melodies at your own pace, this feature allows you to learn chords. With it, there is no need to search hurriedly for the correct keys to keep up with the melody. **The MR-1 will WAIT FOR YOU.**

The following example will assist you in operating the CHORD LESSON feature:

- 1) After correctly inserting a PLAYCARD into the groove depress the CHORD LESSON button.
- 2) The CHORD LAMPS corresonding to the first chord in the music score will illuminate, showing you the correct notes to form that chord.

The MR-1 will **WAIT FOR YOU** to play the correct keys for the chord and will then continue to play (at a constant speed) until a different chord is indicated on the Music Score. When the MR-1 encounters that new chord, it will stop and wait for you to press the correct keys (indicated by the lamps) for this new chord. Because the MR-1 waits for you (when you can't find the correct notes for the chord or when you make a mistake) you can learn the correct chords at your own pace.

Chord Cancel

Once you've learned the chords by using the CHORD LESSON, and you feel comfortable with them, you may want to try to play the chords, from start to finish, **at a constant speed.** Or, if you already know how to play the chords, the CHORD CANCEL feature performs the PLAYCARD data (like AUTO PLAY) except that the Chord (harmony) portion is excluded (The bass, however, **is** provided.).

By following the CHORD LAMPS, you can play the CHORDS, and the MR-1 will automatically provide the Melody and the rest of the background accompaniment.

NOTE: If the tempo is too fast, slow it down by using the RHYTHM TEMPO control, so that you can practice comfortably.

MELODY PLAYING AND CHORD PLAYING

After you have learned to play the Melody and Chord portions of the PLAYCARD data independent of each other, at your own pace (by using FREE TEMPO and CHORD LESSON), you then learned to play them independently at a constant speed (by using MELODY CANCEL and CHORD CANCEL).

Having accomplished this task, it is time to put them both together and play the entire selection by yourself with both hands at a constant speed. You can accomplish this by simultaneously depressing the MELODY CANCEL and CHORD CANCEL buttons.

When you do this, the PLAYCARD data will be automatically performed (like AUTO PLAY) except that the MELODY **and** CHORD portions will be excluded. Only the RHYTHM, OBBLIGATO, and the BASS and ARPEGGIO will be provided. The MELODY and CHORD LAMPS will illuminate to show you the correct notes for the melody and chords.

NOTE: If the tempo is too fast, slow it down by using the RHYTHM TEMPO control, so that you can practice comfortably.

LEARNING THROUGH REPETITION

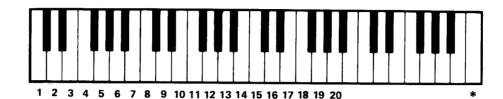
The best way to learn anything is through constant repetition, and music is no exception. We at YAMAHA realize that and have included a convenient feature in your MR-1 for this purpose.

Phrase Repeat

As discussed previously (on page 3) each of the PLAYCARDS has Phrase Number Indications. These are provided as reference points to enable you to select which phrase(s) you wish to concentrate on practicing.

The following example will assist you in the operation of the PHRASE REPEAT function:

- 1) By studying the PLAYCARD, determine which phrase or phrases you wish to repeat.
- 2) As the illustration below indicates, the 20 keys to the extreme left of the MR-1 have numbers written below them.



- 3) After correctly inserting a PLAYCARD into the groove, depress and hold the PHRASE REPEAT button. While holding this button, depress the keys (one at a time) corresponding to the first and last numbers of the phrases that you wish to repeat. These phrases will remain in Memory until a new phrase is programmed, a new PLAYCARD is inserted or the PHRASE REPEAT lamp is turned off.
 - For example, if you wish to repeat phrase 3 through phrase 8, press key #3 and then key #8 while holding the PHRASE REPEAT button.
- 4) When you wish to repeat the entire selection, press the farthest key to the right (designated by an "*") while holding the PHRASE REPEAT button. In this case, the Introductory Musical Phrase will not be played when the selection repeats.
- 5) Now, determine how you would like to repeat those phrases, and depress the appropriate button (AUTO PLAY, SING ALONG, MELODY CANCEL, CHORD CANCEL, CHORD LESSON*, or FREE TEMPO*). The play will automatically begin according to this selection.

To cancel the PHRASE REPEAT function, first stop the play (by using the STOP button) and then depress the PHRASE REPEAT button (until the lamp goes out).

^{*}CHORD LESSON and FREE TEMPO require you to play the first chord or melody note, respectively, in order to start the play.

INSTRUMENT SEQUENCER

As previously discussed, the instruments which play the Melody and Obbligato are already programmed onto the magnetic strip and will automatically be obtained by correctly inserting the PLAYCARD into its groove.

We have also mentioned that these voices can be manually changed during the PLAYCARD performance. While all of this is helpful, a professional composer would use different instruments at certain points to provide variety and would change them from time to time (at new phrases) to heighten the interest.

While playing the keys, however, it would be extremely difficult to change the sounds, phrase by phrase. In fact, it would require an extra set of hands. YAMAHA has anticipated this need, and provides an INSTRUMENT SEQUENCER, which will accomplish this task for you, enabling you to determine and program (prior to performance) your preferred instruments (instead of those preset on the PLAYCARD), phrase by phrase.

You should first understand one basic concept: Your MR-1 uses the SOLO section for Melody Playing and the ORCHESTRA section for Obbligato Playing.

The following example will assist you in understanding how this valuable feature operates:

1) After a PLAYCARD has been correctly inserted into the groove, depress **and hold** the INSTRUMENT SEQUENCER button while programming your preferred instruments.

DO NOT RELEASE THIS BUTTON UNTIL YOU'VE FINISHED PROGRAMMING YOUR PREFERENCE. ONCE RELEASED, DEPRESSING IT AGAIN WILL CANCEL ALL TONES THAT YOU HAVE SET.

2) Select the instruments you wish to use. Remember: the Solo Section plays the Melody, the Orchestra Section plays the Obbligato. It may be helpful to write down your "orchestration" on paper prior to programming, rather than thinking and searching while holding the INSTRUMENT SEQUENCER button. For example:

Phrase #1: Melody: Vibes (SOLO)
Obbligato: Clarinet (ORCHESTRA)

Phrase #3: Melody: Piano (SOLO)
Obbligato: Jazz Flute (ORCHESTRA)

Etc.

- 3) While holding the INSTRUMENT SEQUENCER button, select and depress the SOLO and ORCHESTRA instruments you wish to use and then depress the Key corresponding to the phrase where you wish these instruments to be used. These instruments will be used from this phrase and in subsequent phrases, unless additional changes are made. If you wish to change the voices at several phrases, continue in this manner until complete. Remember not to release the INSTRUMENT SEQUENCER button until you have finished programming.
- 4) When programming is complete, release the INSTRUMENT SEEQUENCER button. To begin playing your new orchestration, depress one of the following buttons: AUTO PLAY, SING ALONG FREE TEMPO*, MELODY CANCEL, CHORD CANCEL, or CHORD LESSON*.

When you wish to return to the instruments programmed by the magnetic strip (stop the play first), depress the INSTRUMENT SEQUENCER button until the lamp goes out. Turning off the power or inserting another PLAYCARD will also erase the instrument sequence you have programmed (along with all other information in memory).

*CHORD LESSON and FREE TEMPO require you to play the first chord or melody note, respectively, in order to start the play.

PRESET BALANCE CANCEL

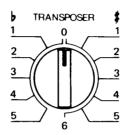
In addition to selecting the instruments to play the Melody and Obbligato, the magnetic strip also contains the information for the relative volumes of these sections, as well as for the tempo of the Rhythm. To make your MR-1 as easy to operate as possible, this information will be automatically selected without you having to manipulate the Volume or Tempo controls (except Master Volume), regardless of the positions of these controls.

The PRESET BALANCE feature allows you to manually override this preset balance (and tempo) by using the appropriate sliding levers. If a Volume control lever or Tempo control lever is moved during the PLAYCARD performance, the PRESET BALANCE CANCEL lamp will light up and the balance will be shifted from the preset setting to the setting on the control panel, as far as the portion governed by the levers which have been moved is concerned.

The following example will assist you in understanding how this feature operates:

- 1) Before inserting a PLAYCARD into the groove, set all Volume and Tempo levers in the MIN position (all the way toward you).
- 2) Insert a PLAYCARD.
- 3) Notice, after the PLAYCARD has begun playing, that the volumes and tempo do not sound "minimal;" they sound at the levels preset by the magnetic strip, not at those indicated by the control levers.
- 4) While the PLAYCARD is playing, move any Volume or Tempo lever (except Master Volume); notice that the PRESET BALANCE CANCEL LAMP illuminates, and that the lever you have moved now controls its function, while the other functions remain at their preset levels.
- 5) To return all functions to their preset levels, press the PRESET BALANCE CANCEL button, so that the lamp goes out.

TRANSPOSER

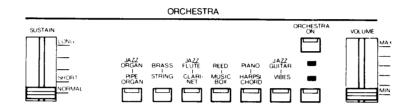


By using the TRANSPOSER you can adjust the pitch of the MR-1 to suit either a singing voice (so **anyone** can sing along as you play) or an instrument (such as a Bb trumpet, clarinet, or saxophone). Turn the dial clockwise to raise the pitch up to 1/2 octave (in increments of six half steps), and counterclockwise to lower the pitch up to 1/2 octave (in increments of five half steps).

NOTE: This TRANSPOSER changes the sound only, and does not affect the CHORD NAME DISPLAY, which always displays chord names based on the keys pressed.

As you have seen from the preceding pages, the PLAYCARD SYSTEM offers many exciting features for musical enjoyment and learning. But your Yamaha Music Reading Keyboard (MR-1) is also a fine musical instrument apart from the PLAYCARD SYSTEM. Let's examine the other features it has to offer.

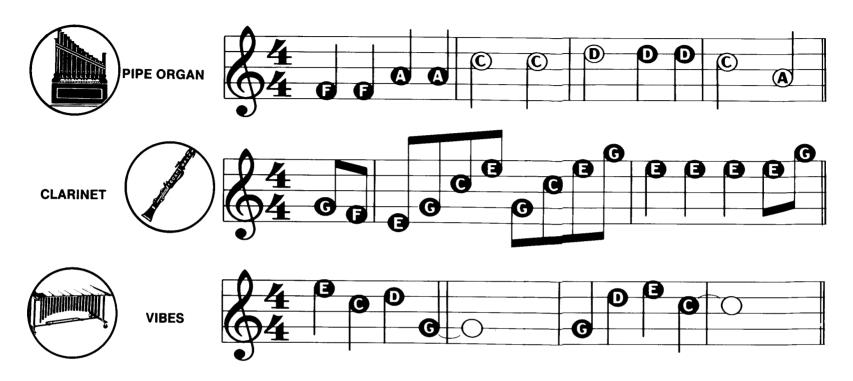
ORCHESTRA SECTION



The ORCHESTRA SECTION of your MR-1 (green buttons) comprises twelve instrumental sounds. The following example was designed to assist you in becoming familiar with the operation of this section:

- 1) Turn on the ORCHESTRA section by depressing the ORCHESTRA ON button. Be sure that the SOLO section is off. If the SOLO ON button is up, the section is off; if down, it is on.
 - (NOTE: So that you can always play the keyboard of your MR-1, the ORCHESTRA section is always on when the SOLO section is off regardless of the position of the ORCHESTRA ON button.)
- 2) Move the sliding Volume control for this section away from you.
- 3) Select and depress one of the twelve instruments found in the ORCHESTRA section. When the orange Row Selector button is up, you can obtain voices in the top row. When it is down, you can obtain voices in the bottom row.
- 4) Depress the NORMAL button in the AUTO BASS CHORD (ABC) section (extreme upper left corner of the control panel). This cancels the ABC modes (discussed on pages 24-26) and enables all 49 keys of your MR-1 to produce the sound you selected in step #3.

5) Depress any key and you will hear that sound. To appreciate the tremendous versatility of your MR-1 try playing the following melodies, changing the ORCHESTRA voice each time to suit the music.



- When two or more selectors are depressed simultaneously, the voice farthest to the right will have priority.
- When no selector is depressed, the JAZZ ORGAN voice will be automatically provided.

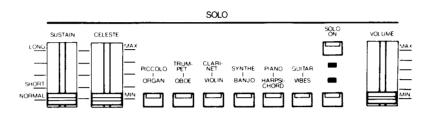
Sustain

The ORCHESTRA section also features a variable SUSTAIN control which allows a gradual fadeout of sound after the keys have been released. It can be used with any voice in the ORCHESTRA section.

The NORMAL position provides each instrumental sound with its own preset amount of sustain, appropriate for realistic duplication of the sound of the actual instrument. The path of the lever between the words SHORT and LONG allows you to override the preset sustain and vary the length from short to long.

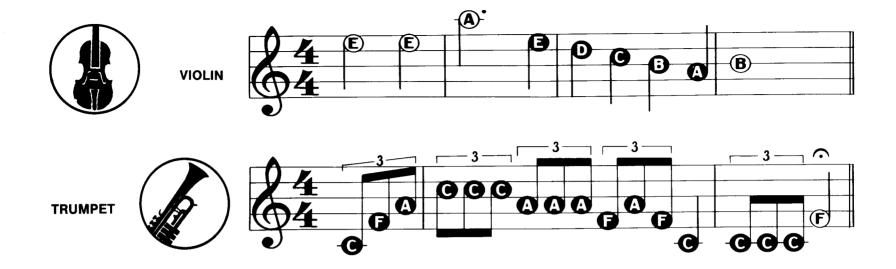
SOLO SECTION

In addition to, and independent of, the ORCHESTRA voices described previously, you will also find a SOLO section (located directly below the ORCHESTRA section). This section is MONOPHONIC, meaning that only one note at a time can be played. If more than one note is depressed, the SOLO voice will automatically play the highest note (farthest to the right).



The SOLO section (white buttons) also comprises twelve instrumental sounds. Please try the following example to assist you in becoming familiar with the operation of this section:

- 1) Turn on the SOLO section by depressing the SOLO ON button. Be sure that the ORCHESTRA section is off. If the ORCHESTRA ON button is up, the section is off; if down, it is on.
- 2) Move the sliding Volume control for this section away from you.
- 3) Select and depress one of the twelve instruments found in the SOLO section. When the orange Row Selector button is up, you can obtain voices in the top row. When it is down, you can obtain voices in the bottom row.
- 4) Depress the NORMAL button in the ABC section (extreme upper left corner of the control panel). This cancels the ABC modes (discussed on pages 24-26) and enables the entire 49-note keyboard of the MR-1 to produce your selected sound.
- 5) Depress any key and you will hear the sound you selected in step #3. To appreciate the tremendous versatility of your MR-1, take this opportunity to try the following melodies, changing the SOLO VOICE each time to suit the music. Be sure you listen to the remaining ten sounds.



- When two or more selectors are depressed simultaneously, the voice farthest to the right will have priority.
- When no selector is depressed, the PICCOLO voice will be automatically provided.

Sustain

The SOLO section also features a variable SUSTAIN control which allows a gradual fadeout of sound after the keys have been released. It can be used with any voice in the SOLO section.

The NORMAL position provides each instrumental sound with its own preset amount of sustain, appropriate for realistic duplication of the sound of the actual instrument. The path of the lever between the SHORT and LONG allows you to override the preset sustain and vary the length from short to long.

Celeste

This feature enhances SOLO voices by giving the impression that more than one of the selected instruments is playing the same musical passage. When more than one instrument plays a passage, no two of them are exactly in tune with each other; this results in a warm undulation of the sound. This effect is achieved with the CELESTE control. As you move the control from the MIN position to the MAX position, the texture of the sound "thickens," until, at MAX, the effect of a full ensemble is produced.

SOLO AND ORCHESTRA

While the SOLO and ORCHESTRA sections are fantastic by themselves, the results are even more amazing when they are combined.

To combine them, try this simple procedure:

- 1) Be sure the ORCHESTRA ON and SOLO ON buttons are both in the down position.
- 2) Select and depress one instrument from each of these two groups. Some examples are listed below, however, these are only **suggestions**.

SOLO	<u>&</u>	ORCHESTRA
Trumpet	ક	Brass
Violin	&	Strings
Guitar	ક	Jazz Organ

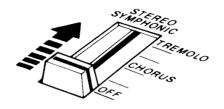
Remember, when the orange Row Selector button is in the up position, you can obtain voices in the top row. When this selector is down, you can obtain voices in the bottom row.

- 3) Adjust the respective volume controls until you obtain your desired balance. For example, ORCHESTRA volume may be at MAX while the SOLO VOLUME is at the 3/4 position.
- 4) Depress the NORMAL button in the ABC section (extreme upper left corner of the control panel). This cancels the ABC modes (discussed on pages 24-26) and enables all 49 keys of your MR-1 to produce the sound you selected in step #2.
- 5) Play more than one note on the keyboard. You will now hear the mixture of both sounds selected in step #2, with the SOLO voice playing the highest (furthest to the right) note. If the balance between these instruments is not to your liking, take this opportunity to re-adjust the respective volume controls.

NOTE: The most suitable VIBRATO setting **for each individual voice** (when appropriate) has been preset for you at our factory and will be produced automatically when a voice is selected.

When a SOLO voice is combined with an ORCHESTRA voice, a slight wavering ("beating" or "pulsing") sound may be heard. This is caused by the slight differences in the amounts of vibrato included in each of those two sounds — a natural occurrence, not a malfunction.

STEREO SYMPHONIC



The Stereo Symphonic function produces an orchestra-like presence of sound by separating the sound stereophonically to the speakers.

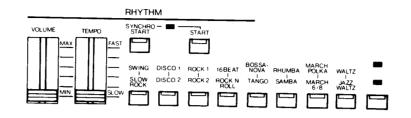
When the STEREO SYMPHONIC control is set to the OFF position, no stereophonic effect will be produced.

As you slide the lever, the sound will be separated to the left and right; at the CHORUS position the sound will be expanded and have a majestic effect; at the TREMOLO position the sound will swell and have an effect as if obtained by rotary speakers.

The voices are separated into three distinct groups, as shown in the figure, when the STEREO SYMPHONIC control is set between the positions OFF and CHORUS.

Orchestra Chord Arpeggio Bass Rhythm Solo

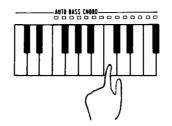
RHYTHM



The Automatic Rhythm Unit of your MR-1 provides a variety of authentic percussion (drum) sounds. These sounds are combined in 16 basic rhythm patterns.

Take a few moments to try the following example:

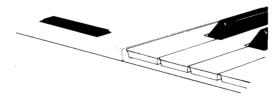
- Select and depress a RHYTHM. When the orange Row Selector Button is in the up position, you can obtain the Rhythms in the top row. When in the down position, you can obtain Rhythms in the bottom row.
 - When two or more rhythm selectors are depressed simultaneously, the RHYTHM farthest to the right will have priority.
 - When no selector is depressed, the SWING rhythm will automatically be provided.
- 2) Depress the START selector and the rhythm you selected in step #1 will begin on the first beat, continuing until the START selector is again depressed, stopping the rhythm. Between the SYNCHRO START and START buttons you will find the TEMPO light, which will flash at the first beat (downbeat) of each measure, acting as a visual metronome. This enables you to confirm the rhythm tempo when playing a melody. If you wish the RHYTHM to start at the same time as you do, SYNCHRO START will enable that effect. When the SYNCHRO START selector is depressed the rhythm will wait for you to depress a key in the section labeled AUTO BASS CHORD (printed above keys). At this time the TEMPO light will flash indicating the exact tempo visually (flashing every beat) until you depress a key in the designated section. Then the TEMPO light will flash on the downbeat of every measure. Once a key in the designated section is pressed, the rhythm will start from the first beat and continue until it is shut off by pressing the SYNCHRO START selector again.



- 3) Move the variable sliding VOLUME control away from you to increase the VOLUME of the rhythm.
- **4)** Adjust the variable tempo control until you obtain your desired speed. Moving this sliding control away from you increases the speed of the rhythm (makes it faster).

Fill In

During a live performance a drummer will occasionally change from the basic pattern and add a short "drum solo" or "fill-in". A fill-in is automatically provided when you depress the FILL IN bar.



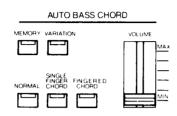
Once activated, the fill-in will begin immediately, providing up to one full measure of this fill-in pattern. The fill-in will continue until the end of that measure and will automatically return to the original rhythm at the start of the next measure. Should you desire a longer fill-in, hold the FILL IN bar.

• When a fill-in is in use, since it is a drum solo, **all** other functions are temporarily stopped for the duration of the drum solo.

NOTE: All rhythms are interchangeable, although the WALTZ and JAZZ WALTZ rhythms should only be used for songs with a 3/4 time signature. Similarly, the remaining rhythms should **not** be used for songs with a 3/4 time signature.

AUTO BASS CHORD

With a minimum of effort on your part, a comprehensive bass and chord accompaniment can be obtained by using the AUTO BASS CHORD section. There are two different playing modes (or levels) — Single Finger Chord and Fingered Chord — making the ABC system fun to play, easy to use, and a built-in "teacher feature".



Following is a description of the various modes. Take a few moments to read this information to increase your familiarity with this important feature.

Normal

The NORMAL selector cancels all modes of the ABC system. When depressed, the entire keyboard of your MR-1 can be used to play the ORCHESTRA and SOLO voices you have selected. For example, the keyboard could easily become a 49-note piano.

Single Finger Chord

SINGLE FINGER CHORD is the fastest and easiest mode of play in the AUTO BASS CHORD section. When in use you can obtain a total of 48 different **chords and bass notes** by pressing one, two, or three notes in the ABC section of the keyboard as follows:

1) MAJOR CHORDS

By depressing only **one** key, a major chord (whose root, or fundamental, is the key played) will result. Therefore, if you pressed a "C" you are hearing a "C major chord." If you want an "F major chord," you need only press the "F" note.

2) MINOR CHORDS

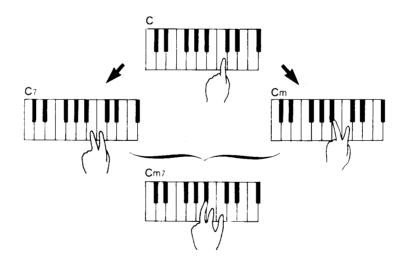
A minor chord can be obtained by simultaneously pressing the key corresponding to the root and any black key to the left of it.

3) SEVENTH CHORDS

By pressing the key corresponding to the root and any white key to the left of it, you can obtain a SEVENTH chord (also known as a DOMINANT SEVENTH CHORD).

4) MINOR SEVENTH CHORDS

Three notes are required to produce a MINOR SEVENTH CHORD in the SINGLE FINGER mode. Simultaneously press the key corresponding to the root, any black (minor) **and** any white (seventh) key to the left of it.



In addition, when using SINGLE FINGER CHORD:

The proper bass note will be automatically provided based on the note played in the ABC section of the keyboard.

Fingered Chord

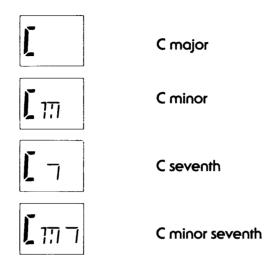
This feature produces a similar accompaniment to the one you experienced with SINGLE FINGER CHORD. However, it allows you to participate a little more, as you continue along in your musical growth. It is also a good feature for someone who has previous keyboard experience, such as with the piano.

Instead of merely depressing a root note (and additional note[s] to determine chord "type" as in Single Finger Chord), FINGERED CHORD permits you to form the chord yourself (by playing the proper 3 or 4 notes). It will then determine what chord you are playing and will automatically select and play the corresponding bass note.

With FINGERED CHORD you can obtain a variety of other chords besides the 48 basic chords available in the Single Finger mode. These additional chords include: minor seventh with a flatted fifth (half diminished), augmented, diminished, and major seventh. In all, 96 FINGERED CHORDS are available.

Chord Name Display

The CHORD NAME DISPLAY window is a liquid crystal display, similar to those found on calculators. It shows the names of the chords played by a PLAYCARD, as well as the names of those you play, either as SINGLE FINGER CHORDs or as FINGERED CHORDs. This is especially helpful in learning chord names. Following are illustrations of typical chord names as the display shows them, along with the written-out names of the chords.



NOTE: While each black key can be called either of two names, the MR-1 CHORD NAME DISPLAY uses Db, Eb, F‡, Ab and Bb (instead of C‡, D‡, Gb, G‡ and A‡).

The CHORD NAME DISPLAY flashes when the notes played do not form a chord.

Memory

This function is convenient when you change chords, in that it allows the bass pattern and strumming chords to continue to play after you lift your fingers from the keys. If you prefer to hold down chords, and Memory is on, you must completely lift your fingers from the keys, or the chords will not change correctly.

AUTO BASS CHORD AND THE AUTO RHYTHM UNIT

When the Auto Bass Chord feature is used without the RHYTHM, you will obtain a continuous chord and bass sound, similar to that produced by a "chord organ". When either of the ABC modes is used with the AUTO RHYTHM Unit, the resulting accompaniment is automatically synchronized (in tempo) with the rhythm. Instead of a continuous sound, the bass and chord accompaniment become "animated" in a rhythmic style that complements the rest of the rhythmic accompaniment.

The following example will illustrate this point.

- 1) Select a rhythm, adjust the tempo and rhythm volume.
- 2) Select and depress either SINGLE FINGER or FINGERED chord. Using the ABC's independent VOLUME control, adjust the volume of the accompaniment to suit your taste.

Now, once the Auto Rhythm Unit is activated, and a note in the ABC section is held, you will hear an automatic accompaniment (both drums and instrumental) synchronized with the Rhythm Unit.

Variation

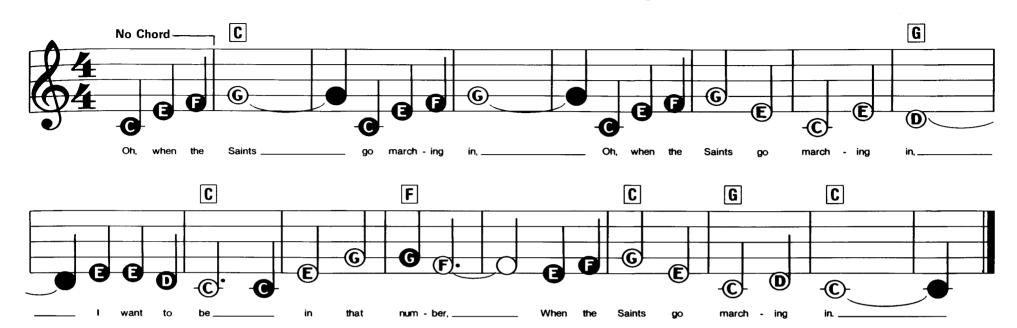
This selector permits an alternative bass line and chord accompaniment pattern. Different patterns are provided for each of the rhythms patterns.

PLAYING A MELODY BACKED BY AUTOMATIC ACCOMPANIMENT

To play "When The Saints Go Marching In" in the SINGLE FINGER CHORD mode, observe the following steps:

- 1) Set the registration.
 For best results, try JAZZ ORGAN (Orchestra Section) together with the SWING rhythm.
- 2) Practice the chords C, F, and G, using the SINGLE FINGER CHORD mode.
- 3) Now add the melody and there you go!

When The Saints Go Marching In



AUTO ARPEGGIO

This Volume Selector allows you to add automatic arpeggios (a series of notes derived from a chord, in which one note at a time is played, in succession, from the lowest note to the highest) providing a sparkling background accompaniment.

Due to technological advancement, what once took many hours of practice to be able to execute can now be easily accomplished by moving the variable volume slider away from you.

 The arpeggio operates in synchronization with the Rhythm, so you must activate the rhythm in order to hear the arpeggio. In addition, the speed of the arpeggio can be governed by the Rhythm Tempo control.

Use the Volume lever to adjust the amount of arpeggio added to the music; in the MIN position, the arpeggios are silent.

AUTO ARPEGGIO requires that either SINGLE FINGER CHORD or FINGERED CHORD be on. The arpeggios result from the chords played in the AUTO BASS CHORD section of the keyboard.

ADDITIONAL INFORMATION

Accessory Jacks

STEREO HEADPHONE JACK

This jack is used for connecting the Stereo headphones. When the headphones are connected, no sound will be produced from the speakers. This allows you the freedom to enjoy playing your MR-1 at any time without disturbing others.

AUX. OUT LEFT-RIGHT JACKS

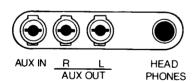
These jacks are used to connect an amplifier or tone cabinet when more volume is needed for your performance. Also, by connecting one of these jacks with the Line In jack of a tape deck, you can record music produced by the MR-1. When you want to record in stereo, both the LEFT jack and the RIGHT jack must be connected.

AUX. IN JACK

Using this jack you can play the output of your tape deck or record player through the speakers of the MR-1.

PITCH CONTROL

The pitch for the entire instrument can be altered with the PITCH CONTROL knob. Turning the knob to the right raises the pitch, and turning it to the left lowers the pitch.





WARNING: If you connect any accessory other than head-phones to your MR-1 while the instrument is on, you could damage the MR-1, the accessory, or both. Turn both pieces of equipment off when connecting them. The manufacturer's warranty does not cover damage caused by improper connection of accessories.

Playcard Library

The Playcards supplied with your MR-1 were chosen to demonstrate the variety of music available. You can purchase additional Playcards from your Yamaha dealer, in styles ranging from popular (including songs by artists such as ABBA and Paul McCartney) to standards to classics. New Playcards will be released from time to time, so check with your dealer frequently to enjoy the full range of music in the Playcard Library. If your dealer does not stock Playcards, he can provide you with a Yamaha address from which you can order them directly.

ELECTROMAGNETIC INTERFERENCE

"Interference" can be a two-way street: something you are operating can interfere with something of someone else's, or something someone else is operating can interfere with something of yours. And it is also possible that two or more of your own electronic (electric) devices may interfere with each other. Your MR-1 electronic keyboard has been designed to minimize all of these possibilities, and it meets all applicable standards worldwide.

Electromagnetic interference with your MR-1 electronic keyboard can manifest itself in a variety of ways. You may hear speech, music, "beeps", static, or buzzing noises. Your Yamaha MR-1 electronic keyboard is designed to reject RF (radiofrequency) signals that are many times the levels found in any normal environment. If, however, you are near a high-power transmitter, some interference may still occur.

If this should happen, try to identify the radio or TV station and record the time of day that the interference occurs. Station identification is essential in order that the offending frequencies can be established and the authorized (legal) operating power level of the transmitter causing the interference can be verified. If the interference continues, follow the suggestions provided on page 32.

If the interference is in the form of occasional buzzing or static, it usually can be traced to some household appliance being turned on or off. The offending appliance can even be outside your own residence. This kind of interference usually occurs only during a certain time or times of the day. Noises of this type rarely originate in the MR-1 itself. If the condition continues, call your local authorized Yamaha dealer for assistance.

Electrical storms (lightning) and disturbances of main power lines can also cause static. Generally speaking, problems generated by these two sources will also occur in your other audio or video equipment. In addition, lightning can be destructive; the following special warning applies both to the MR-1 and to virtually all electronic products.

IMPORTANT NOTICE

Modern electronic products (computers, video games, electronic organs, etc.) contain components that, under normal conditions, greatly extend the service-free life of the products they make up. This is especially true considering the large number of parts that these components replace. These components, called "integrated circuits," are subject to destruction by high-voltage discharges, however, such as lightning striking nearby. This can occur even if the unit is turned off. THEREFORE, WHEN ELECTRICAL STORMS ARE FORECAST, IT IS BEST TO UNPLUG ANY ELECTRONIC DEVICE NOT IN USE.

FCC CERTIFICATION

While the following statements are provided to comply with FCC Regulations in the United States, the corrective measures listed are applicable worldwide.

Your Yamaha MR-1 electronic keyboard uses frequencies that appear in the radio frequency range, and if installed in the immediate proximity of some types of audio or video devices within three meters (approximately ten feet), interference may occur.

The Yamaha MR-1 electronic keyboard has been typetested and found to comply with the specifications set for a class B computer in accordance with those specifications listed in sub-part J, Part 15, of the FCC rules. These rules are designed to provide a reasonable measure of protection against such interference. However, this does not guarantee that interference will not occur.

If your MR-1 should be suspected of causing interference with other electronic devices, verification can be made by turning your MR-1 off and on. If the interference continues when your MR-1 is off, the MR-1 is not the source of the interference. If your MR-1 does appear to be the source of the interference, you should try to correct the situation by using one or more of the following measures:

- Relocate either the MR-1 or the electronic device that is being affected by the interference.
- Use power outlets for the MR-1 and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install AC line filters.
- In the case of radio or TV interference, relocate the antenna, or, if the antenna lead-in is 300 OHM ribbon lead, change the lead-in to coaxial cable.

If these corrective measures do not produce satisfactory results, please see an authorized Yamaha MR-1 Electronic Keyboard dealer for suggestions or corrective measures. If you cannot locate an authorized Yamaha MR-1 dealer in your general area, please contact the Service Division, Yamaha International, 6600 Orangethorpe Avenue, Buena Park, CA 90620, U.S.A.

If for any reason you should need additional information relating to radio or TV interference, you may find a booklet prepared by the Federal Communications Commission helpful: "How To Identify And Resolve Radio-TV Interference Problems." This booklet, Stock #004-000-00345-4, is available from the U.S. Government Printing Office, Washington, D.C. 20402.

INSTALLATION

Your new MR-1 Electronic Keyboard does not require professional installation or routine maintenance. It is important, however, that you be aware of the following:

- Do not allow your MR-1 or its bench to rest on or be installed over power cords of any type; an electrical shock or a fire could result.
- Do not place objects on your MR-1 power cord or place it in a position where anyone could trip over, walk on, or roll anything over it. An improper installation of this type creates the possibility of personal injury or fire.
- Your MR-1 has been manufactured specifically for the main supply voltages used in your area. If you should move, or if any doubt should exist regarding the voltage of your power supply, please consult your local authorized MR-1 Electronic Keyboard dealer for instructions.
- If the instrument does not work when it is turned on, check to see that it is plugged in and that there is power to the outlet. If the outlet is live but the instrument still does not work, unplug it and call your Yamaha dealer.
- Your MR-1 should not be installed in a position that exposes
 the cabinet to direct sunlight or air currents having high
 levels of humidity or heat. Such environments can cause
 oxidation of electrical contacts, separation of case joints,
 and problems with the finish of the cabinet.

- Do not set vinyl items (headsets, vinyl doilies, etc.) on the finished surfaces of your MR-1 Electronic Keyboard or use a polyvinyl material to cover the unit for any extended period of time. A reaction may occur between the chemicals in the finish and those in the polyvinyl products, marring the finish permanently.
- The key cover was not designed to support any substantial weight. Do not place anything on the key cover, and do not permit anyone to sit, lean, or climb on it. The key cover may have a brown paper protective cover, which can be removed by carefully pulling it off. Do this by hand; do not use sharp instruments, tools, or chemicals of any kind.
- The MR-1 has been tested and found to comply with all applicable regulations. If it is installed too near other electronic devices, however, some form of interference may occur. See page 31 for additional information.
- All materials have critical resonance frequencies at which they vibrate. The continuous tones of the MR-1 will naturally cause other objects (windows, objects on shelves, etc.) to vibrate. Move the instrument whenever such a difficulty occurs.

MAINTENANCE

MR-1

- This product has been tested and approved by independent safety testing laboratories in order that you may be sure that, when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. Do not modify this unit or commission others to do so unless specifically authorized by the manufacturer. Product performance and safety standards may be diminished and all warrranties will become invalid.
- Your MR-1 electronic keyboard contains no user-serviceable components. Refer all service to qualified service technicians only.
- Always turn the MR-1 off when you are not playing it. A pilot light has been provided to remind you when it is on.
- If the bench wobbles or is unsteady, check to make sure nothing is broken. Do not use it until it is fixed. The bench was made to be sat upon, and should not be used for any other purpose.
- When cleaning the instrument, follow these guidelines:
 - Do not use chemically harsh (alcohol, paint thinner, etc.) or abrasive cleaners on any portion of your MR-1 Electronic Keyboard.
- 2) When cleaning the keys and control panels of your MR-1, please use a soft, absorbent cloth that has been dampened with a mild solution of liquid soap and lukewarm water. If you use spray dispensers, do not spray directly on or toward the keys or control panels; spray the cleaning cloth to be used, then gently wipe the surfaces to be cleaned. When cleaning the keys, wipe in the direction of the length of the key. A second wiping (polishing) of the areas cleaned, using a soft, dry cloth, will restore much of the original luster, and your MR-1 will maintain its "like new" look for many years to come.
- 3) Clean the key cover and music rest with a soft, damp cloth. **Do not** use window or mirror cleaners that contain ammonia; a surface film will result. Use a soft, dry cloth to polish the cover after you have wiped it clean and **before** it is completely dry for best results. Use only those cleaners specifically intended for plastic or Plexiglas.

- 4) Clean the cabinet and bench of your MR-1 electronic keyboard with a slightly dampened cloth containing a mild soap.
- 5) Clean the reading head occasionally by sliding the head cleaning card (included) along the Playcard groove several times.
- **6)** Keep the Playcard groove free of dust and other foreign matter, or damage to the head may occur.

PLAYCARDS

- Handle the Playcards carefully so that the magnetic strips do not become damaged in any way, and be sure that you insert them correctly.
- Don't place Playcards on the speaker, since the speaker's magnet may affect the recorded data. For the same reason, do not put the Playcards near a TV, amplifier, or other device producing a magnetic field.
- Do not touch the magnetic strip.
- If water or alcohol is spilled on a Playcard, wipe it off immediately and allow the Playcard to dry before using it.
- Clean the Playcards with a soft cloth when they become dirty.
- Never put cleaning agents such as thinner or benzine on the magnetic strip.
- Avoid placing the Playcards in excessively humid or hot places.
- Do not leave the Playcards in direct sunlight.
- When you aren't using the Playcards, keep them in their protective envelopes.

SPECIFICATIONS

Keyboard	49 Keys (C ₁ —C ₅)
Playcard Section	Free Tempo, Auto Play, Sing Along, Melody Cancel, Chord Lesson, Chord Cancel, Stop, Phrase Repeat, Instrument Sequencer, Preset Balance Cancel, Melody Lamps, Chord Lamps
Solo Section	Piccolo, Organ, Trumpet, Oboe, Clarinet, Violin, Synthe, Banjo, Piano, Harpsichord, Guitar, Vibes, Solo On, Volume
Orchestra Section	Jazz Organ, Pipe Organ, Brass, String, Jazz Flute, Clarinet, Reed, Music Box, Piano, Harpsichord, Jazz Guitar, Vibes, Orchestra On, Volume
Effects	Stereo Symphonic (Off/Chorus/Tremolo) Solo: Sustain, Celeste Orchestra: Sustain
Rhythm Section	Swing, Slow Rock, Disco 1, Disco 2, Rock 1, Rock 2, 16 Beat, Rock'n'Roll, Bossanova, Tango, Rhumba, Samba, March/Polka, March 6/8, Waltz, Jazz Waltz, Fill In, Start, Synchro Start, Tempo, Tempo Light, Volume

p		
Auto Bass Chord Section	Normal, Single Finger Chord, Fingered Chord, Memory, Variation, Volume	
Arpeggio	Volume	
Transposer	1/2 octave high and low	
Pitch Control	±50 cents	
Other Equipment	Chord Name Display, Expression Pedal, Power Switch, Power-on Light, Master Volume, Key Cover	
Auxiliary Jacks	Stereo Headphones, Aux Out (L & R), Aux In	
Amplifier	15W (8Ω)×2	
Speakers	20cm (8")×2	
Dimensions (W×D×H)	37½"×15¾"×32¼"	
Weight	35kg (77 lbs.)	
Finish	Simulated rosewood with black accents	
Accessories Included	Bench, 12 Playcards, 1 head cleaning card	

Specifications are subject to change without notice. Parts shown in the illustrations may differ depending on the electrical specifications.

WARRANTY

Warranties vary from one marketing area to another and are, therefore, provided as separate documents and not as a part of the Owner's Guide. You should have received warranty information from your dealer when you purchased your instrument. If you did not receive this information, or if you have any questions relating to warranty or service policies, please see your dealer. Should you still have questions, please write:

Yamaha International Corporation Service Division P.O. Box 6600 Buena Park, CA 90620



YAMAHA INTERNATIONAL CORP. 6600 Orangethorpe Ave. Buena Park, CA 90620

Published by

HAL LEONARD PUBLISHING CORPORATION