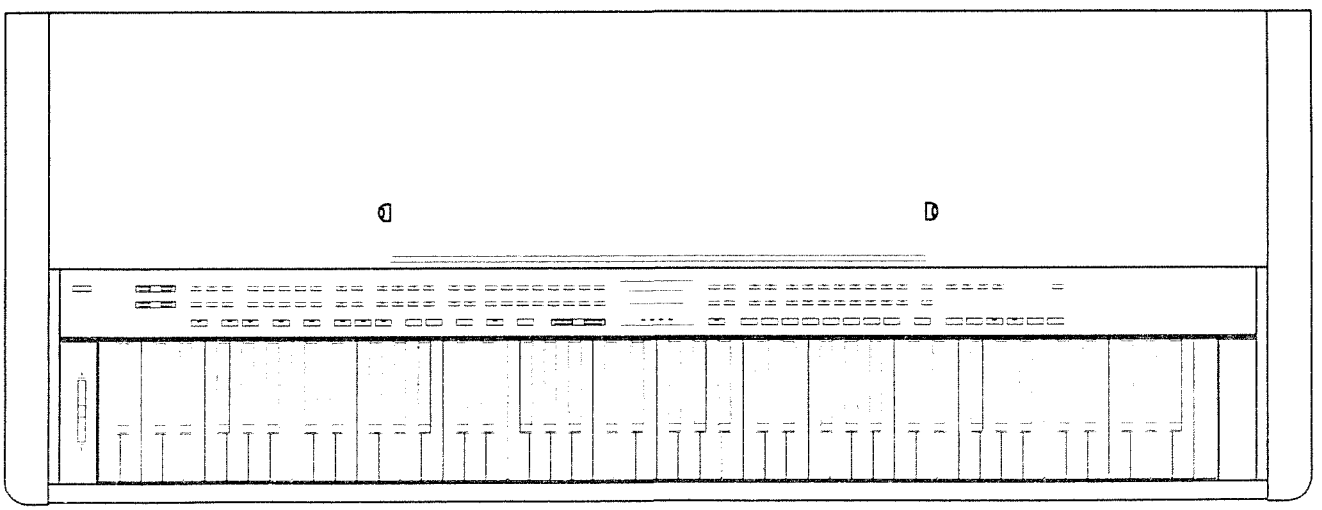
Roland

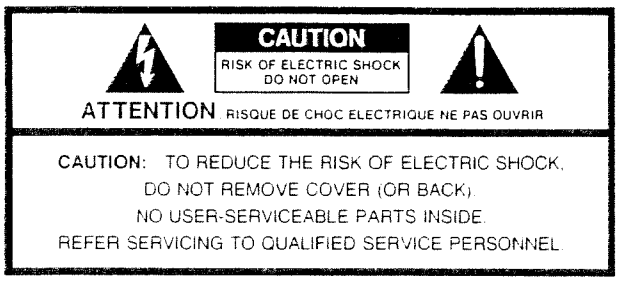
GENERAL MIDI

DIGITAL INTELLIGENT PIANO

KR-3500

OWNER'S MANUAL





The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. Avoid using the product where it may be affected by dust.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Do not tread on the power-supply cord.
11. Do not pull the cord but hold the plug when unplugging.
12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the product; or
    C. The product has been exposed to rain; or
    D. The product does not appear to operate normally or exhibits a marked change in performance; or
    E. The product has been dropped, or the enclosure damaged.
15. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

SAVE THESE INSTRUCTIONS

For the U.K.

WARNING: THIS APPARATUS MUST BE EARTHED

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
GREEN-AND-YELLOW: EARTH. BLUE: NEUTRAL. BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

The product which is equipped with a THREE WIRE GROUNDING TYPE AC PLUG must be grounded.

INTRODUCTION

Thank you, and congratulations on your choice of the Roland KR-3500.
The KR-3500 is a keyboard instrument which is based on the same digital piano technology for which Roland has been renowned ever since it developed the world's first electronic piano. Moreover, thanks to its Arranger feature, which can create positively amazing automatic accompaniment, it represents a truly new concept in electronic keyboard instruments.

The keyboard is excellent in terms of comfort and responsiveness, features which are especially valuable during long sessions. It truly represents the successful culmination of efforts toward duplicating the feel of an acoustic piano. The keyboard is also ready for any type of solo performance, responding to a wide variety of nuances and dynamics.
In addition, the Arranger feature will allow you to become a one-person-band, thanks to automatic accompaniment employing a collection of Music Styles, which represent music from all over the world. Also included is a Composer section, which not only provides four tracks for recording and playback of the music you play.
The KR-3500 thus combines a full range of advanced features with an operational ease that was designed from a piano player's point of view. It is sure to please everyone, from those starting their first lessons, to seasoned professionals.

In order to enjoy reliable performance for many years to come, please take the time to read this manual in its entirety.

FEATURES

● Provides Realistic Instrument Sounds
With 40 different types of high quality, authentic sounds, the instrument can fit in readily with any genre of music. Additionally, using the Tone Expansion Mode, the number of sounds put at your fingertips can be increased to 128. Moreover, a selection of sounds other than instrument sounds can also be played from the keyboard, including 61 percussive sounds, and 46 special effects sounds (laughing voices, applause, sirens, etc.).
The ordering and the settings for all of the instrument sounds can, of course, be set to conform to the GS Format.

● Music Styles : Music from Around the World
The instrument provides a collection of 32 Music Styles, containing the essential elements of a wide range of musical styles from around the world, including ethnic music as well as the hottest new popular styles. (To ensure that these styles are authentic, they were produced in the country or region where the style originates, whenever feasible.) Moreover, by employing the Music Style Expansion Mode, you can select from 64 Music Styles. (Of these, there are 8 which are beautifully simple, and work very well as backing for piano pieces.)
Additionally, simply by inserting optionally available Music Style Cards or Music Style Super Cards, you can further your potential for playing almost any type of music imaginable.

● Equipped with an "Arranger" for the Best in Automatic Accompaniment
The Arranger feature automatically produces the appropriate musical accompaniment based on the selected Music Style and specified chord progression. Alternate patterns for an accompaniment can be easily obtained by pressing the Intro, Ending, Fill-In, or Break pattern buttons. Moreover, the result obtained will change depending on the chord progression that has been played, so with a little imagination, a single Music Style can provide a great deal of variety.

● The Arranger Accommodates Traditional Piano Playing Styles

The automatic accompaniment that has been provided by other keyboards divided the keyboard into a melody (upper) section, and an accompaniment (lower) section. All chords could only be played in the accompaniment section. The Arranger on the KR-3500, however, no longer requires that the keyboard be divided in such a manner, and chords can be selected from anywhere on the keyboard. It thus allows for performances which conform more closely to the traditional playing style of the piano.

● Leading Bass Feature Accommodates Inverted Chords

Using the Leading Bass Feature, the lowest note of an inverted chord can be recognized as the bass note by the Arranger when playing chords for automatic accompaniment.

● "User Programs" Provide One-touch Recall of Panel Settings

Once you store a collection of settings for sounds, Music Styles, or how the Arranger is to be used, they can be instantly recalled simply by pressing a button. Up to five such User Programs can be stored.

● The Composer Provides for Recording and Playback

The onboard Composer is a full-featured, 4 track music sequencer, and you can store your performance data on Memory Cards.

In addition to the basic features of recording and playback of music you play, it also allows you to use the Arranger to first record an accompaniment part, and then have that played back while you play the melody. The results you can obtain are much like what is obtained when using a multi-track recorder.

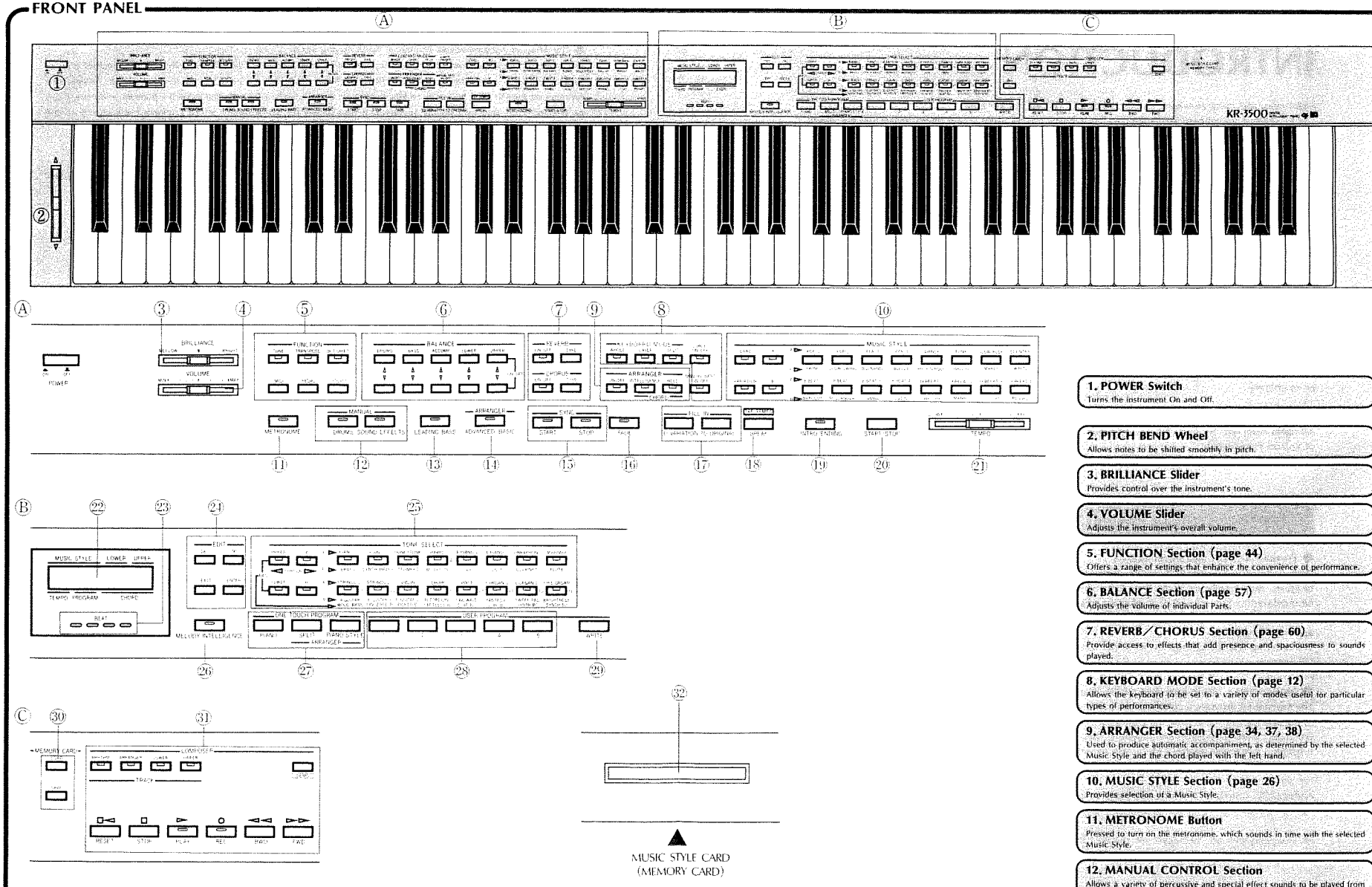
Concerning the KR-3500's sound source

GENERAL MIDI

The sound source in this unit conforms to the General MIDI System specifications (General MIDI System Level 1).

The sound source in this unit conforms to Roland GS format.

FRONT PANEL



1. POWER Switch
Turns the instrument On and Off.

2. PITCH BEND Wheel
Allows notes to be shifted smoothly in pitch.

3. BRILLIANCE Slider
Provides control over the instrument's tone.

4. VOLUME Slider
Adjusts the instrument's overall volume.

5. FUNCTION Section (page 44)
Offers a range of settings that enhance the convenience of performance.

6. BALANCE Section (page 57)
Adjusts the volume of individual Parts.

7. REVERB/CHORUS Section (page 60)
Provide access to effects that add presence and spaciousness to sounds played.

8. KEYBOARD MODE Section (page 12)
Allows the keyboard to be set to a variety of modes useful for particular types of performances.

9. ARRANGER Section (page 34, 37, 38)
Used to produce automatic accompaniment, as determined by the selected Music Style and the chord played with the left hand.

10. MUSIC STYLE Section (page 26)
Provides selection of a Music Style.

11. METRONOME Button
Pressed to turn on the metronome, which sounds in time with the selected Music Style.

12. MANUAL CONTROL Section
Allows a variety of percussive and special effect sounds to be played from the keyboard.

13. LEADING BASS Button (page 39)
Allows the lowest note of the chord currently played to be used as the bass note.

14. ARRANGER Button (page 35)
Provides selection between a relatively simple performance (BASIC) and one more complicated (ADVANCED).

15. SYNC START / STOP Section (page 29)
Allows Music Styles to be started or stopped from the keyboard.

16. FADE Button (page 30)
Used to produce fade-ins and fade-outs.

17. FILL IN Section (page 36)
Allows exciting fill-ins to be added to a performance.

18. BREAK Button (page 37)
Allows a break to be inserted into a performance.

19. INTRO / ENDING Button (page 29)
Allows intros and endings to be inserted into a performance.

20. START / STOP Button (page 29)
Used to start or stop a performance.

21. TEMPO Slider (page 32)
Provides adjustment of the tempo of playback or recording.

22. Display
Provides display of a range of useful information.

23. Beat Indicator (page 34)
The four indicators show which beat of the measure is being played at the moment.

24. EDIT
Employed to make settings for a wide range of features.

25. TONE SELECT Section (page 16)
Provides for selection of the Tones for the Upper, Lower, and Manual Bass Parts.

26. MELODY INTELLIGENCE Button (page 41)
Allows a harmony part to be added to the melody played.

27. ONE TOUCH PROGRAM (page 21)
Allows for instantaneous selection of a desired setup, regardless of what mode you are in.

28. USER PROGRAM (page 68)
Provides for storage of 5 separate collections of panel settings.

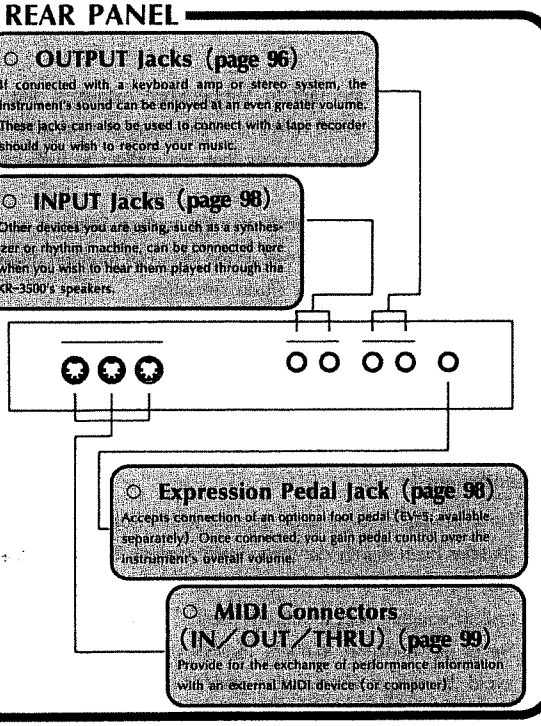
29. WRITE Button
Used to save/load User Programs.

30. MEMORY CARD Section (page 72).
Memory Card which stores recorded performance data and / or user program data is inserted and read here.

31. COMPOSER Section (page 72)
Provides for the recording, and playback of performance data.

32. MUSIC STYLE CARD (MEMORY CARD) Slot (page 28)
Insert an optional Music Style card (TN-5C series) or the Music Style Super Card (MSL-15). This will greatly expand the number of Music Styles you can choose from. You can also store your performance data by inserting an optional Memory Card (M-256 E).

REAR PANEL



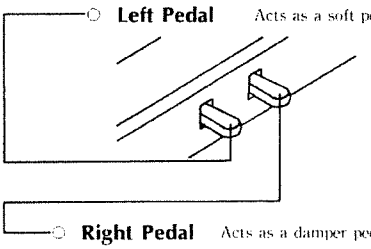
○ OUTPUT Jacks (page 96)
If connected with a keyboard amp or stereo system, the instrument's sound can be enjoyed at an even greater volume. These jacks can also be used to connect with a tape recorder should you wish to record your music.

○ INPUT Jacks (page 98)
Other devices you are using, such as a synthesizer or rhythm machine, can be connected here when you wish to hear them played through the KR-3500's speakers.

○ Expression Pedal Jack (page 98)
Accepts connection of an optional foot pedal (EV-5; available separately). Once connected, you gain pedal control over the instrument's overall volume.

○ MIDI Connectors (IN/OUT/THRU) (page 99)
Provide for the exchange of performance information with an external MIDI device (or computer).

PEDALS



○ **Left Pedal** Acts as a soft pedal.

○ **Right Pedal** Acts as a damper pedal.

*The Left Pedal can also be used for other types of control. (Pedal ☞ page 48).

Important Notes

In addition to the items listed under Safety Precautions inside the front cover, please read and adhere to the following :

Power Supply

- When making any connections with other devices, always turn off the power to all equipment first;this will help prevent damage or malfunction.
  Do not use this unit on the same power circuit with any device that will generate line noise, such as a motor or variable lighting system.
- Avoid damaging the power cord; do not step on it, place heavy objects on it etc.

Placement

- Do not subject the unit to temperature extremes (eg. direct sunlight in an enclosed vehicle). Avoid using or storing the unit in dusty or humid areas or areas that are subject to high vibration levels.
- Make sure the instrument rests on a flat surface. Setting it on a tilted or uneven surface may result in the keys not function properly or the cover not opening or closin smoothly.
- Using the unit power amplifiets (or other equipment containing large transformers) may induce hum.
- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth (or one that has been slightly dampened with water). To remove stubborn dirt, use a mild neutral detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the risk of discoloration and/or deformation.

Additional Precautions

- Protect the unit from strong impact.
- Do not allow objects or liquids of any kind to penetrate the unit. In the event of such an occurrence, discontinue use immediately. Contact qualified service personnel as soon as possible.
- Before using the unit in a foreign country, consult with qualified service personnel.
- Should a malfunction occur (or if you suspect there is a problem) discontinue use immediately. Contact qualified service personnel as soon as possible.
- Never strike or apply strong pressure to the display.

Memory Backup

- Please be aware that the contents of memory may at times be lost when the unit is sent for repairs or when by some chance a malfunction has occurred. Important data should be stored on a Memory Card. During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may be impossible to restore the data.

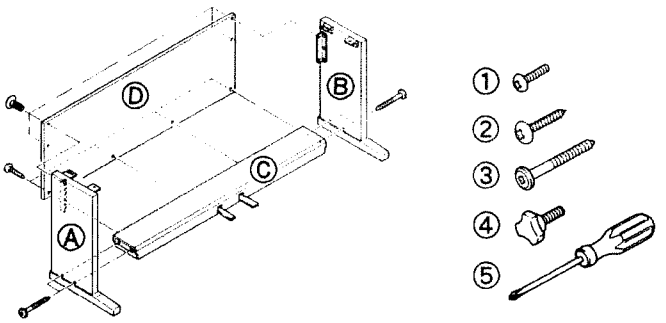
How to assemble the piano stand KRS-3500

■Check the parts

◎ Before you begin assembly, check that you have all the parts.

Ⓐ Side board (left) 1
Ⓑ Side board (right) 1
Ⓒ Pedal board 1
Ⓓ Rear board 1

① Short screws (M4 × 15 mm) 4
② Tip-pointed screws (4 × 25 mm) 4
③ Long screws (M6 × 70 mm) 4
④ Knob bolts 4
⑤ Philips screwdriver 1

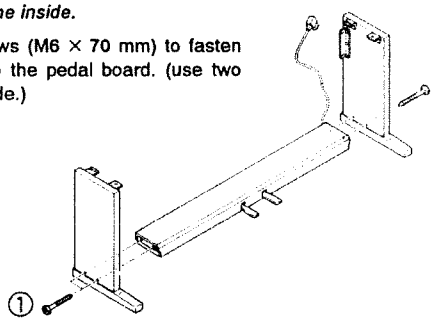


■Assembly procedure

1 Attach the side boards (left and right) to the pedal board.

(Note) Extend the pedal cable out from the pedal board.
(Note) Be sure that the side boards are oriented correctly: the metal fittings are on the inside.

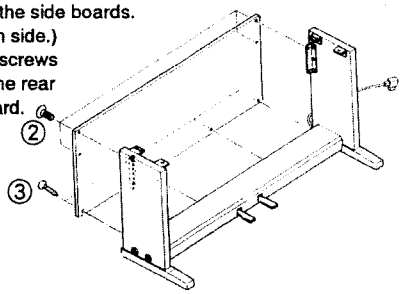
① Use the long screws (M6 × 70 mm) to fasten the side boards to the pedal board. (use two screws for each side.)



2 Attach the rear board.

(Note) The grain side should face the front, and the other side (black) the back.

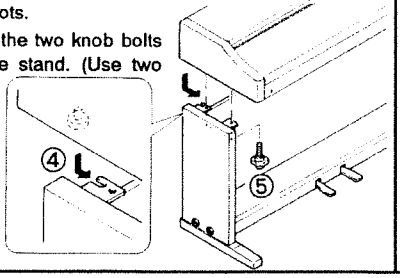
② Use the short screws (M4 × 15 mm) to attach the rear board to the side boards. (use two screws for each side.)
③ Use the four tip-pointed screws (4 × 25 mm) to fasten the rear board and the pedal board.



3 Attach the piano to the stand.

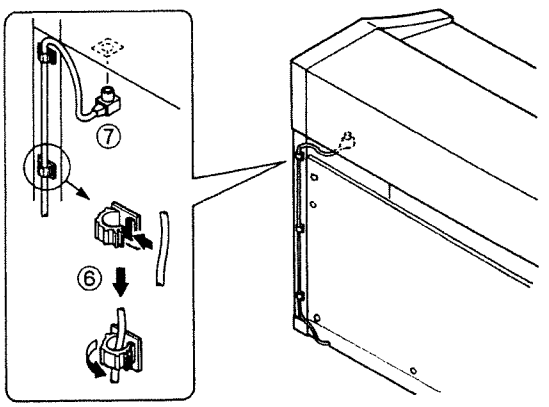
(Note) When placing the piano on the stand, be careful not to pinch your fingers. (Avoid holding the ends of the piano.)

④ Align the screws (one on each side) located on the bottom of the piano with the slots in the metal fittings on the sideboards. Slide the piano so the screws slide into the slots.
⑤ Lift up the piano and use the two knob bolts to fasten the piano to the stand. (Use two knob bolts for each side.)



4 Fasten the pedal cable with the cable clamps, and plug in the power cable and pedal cable.

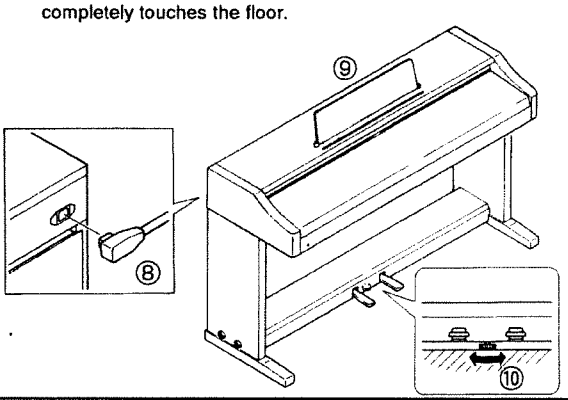
⑥ Fasten the pedal cable using the cable clamps (three locations) on the right side of the stand.
⑦ Plug the pedal cable into the receptacle on the right side of the bottom of the piano. (Be careful with the orientation of the receptacle.)



5 Plug in the power cable and adjust the adjuster

(Note) When placing the piano in its location, be sure not to pinch the power cable underneath the piano.
(Note) If the piano is placed on carpeting, rotate the adjuster so that it extends to secure the stand.

⑧ Plug the power cable into the receptacle on the left side of the back of the piano.
⑨ Attach the music rest to piano.
⑩ When you finish placing the piano, rotate the adjuster until it completely touches the floor.



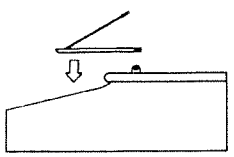
SETUP

Make sure that you have the instrument fixed securely to the stand. Place the instrument on a solid, level surface.

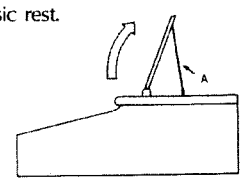
Music Rest

A music rest is included in the cardboard box your instrument came in. It should be attached as shown in the illustration.

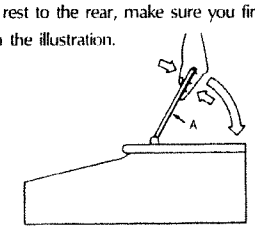
① While holding the music rest horizontally, slide it into the holder.



② Raise the music rest.

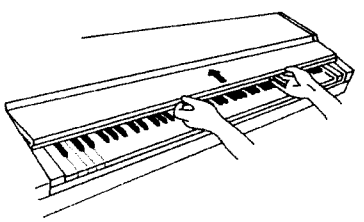


♪When tilting the rest to the rear, make sure you firmly grasp A and the rest as shown in the illustration.



Concerning the Cover

To open the cover, hold it with both hands and slide it to the rear.



♪Be careful not to get your fingers caught when opening or closing the cover. To close the cover, slowly pull it forward until it stops. Raise it briefly, and then gently lower it into place. Adult supervision may be necessary whenever small children are using the instrument.

♪Never close the cover while you have sheet music or anything else lying on the keyboard.

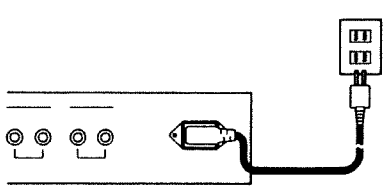
Transporting the Instrument

First, remove the music stand and disconnect the power cord. Then retract the stand adjuster. Two people can then carefully move the instrument.

Connecting the Power Cord

① Check to make sure that the POWER switch on the panel's left side is OFF.

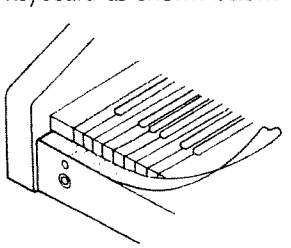
② Connect the supplied power cord to a household power outlet.



♪Use only the power cord that is supplied with the unit. Whenever the instrument is not going to be played for an extended period of time, disconnect the power cord from the outlet.

Affixing the Labels to the Keyboard

Find the set of keyboard labels which are taped to the inside of the unit's cardboard container.
Remove the protective backing from the labels and affix them to the keyboard as shown below.



♪Affix the sticker so it is aligned with the Keyboard's left edge. Be sure to attach the sticker securely.

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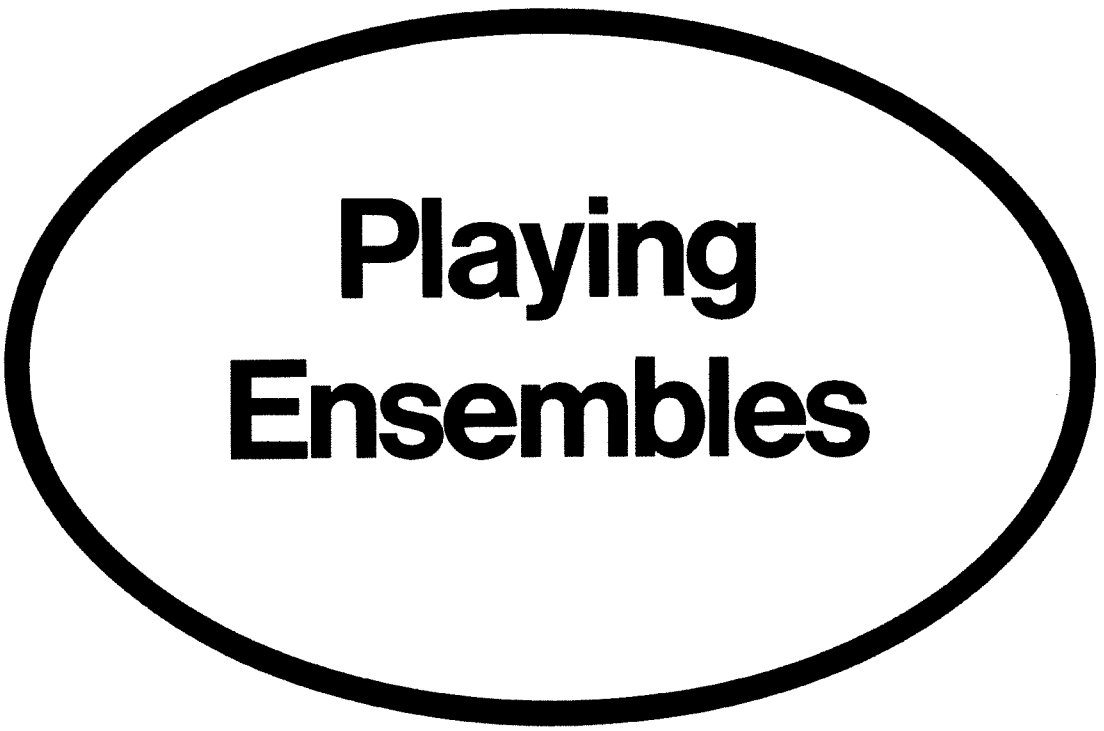
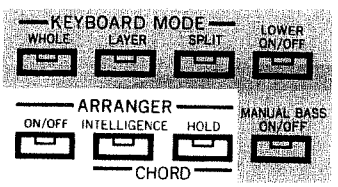


1. Changing the Keyboard Mode

Even though the KR-3500 has only one keyboard, it is capable of providing a number of Parts which play separately. The Keyboard Mode is a function which allows you to determine which Tones are to be assigned to particular Parts, and how they are to be played from the keyboard.

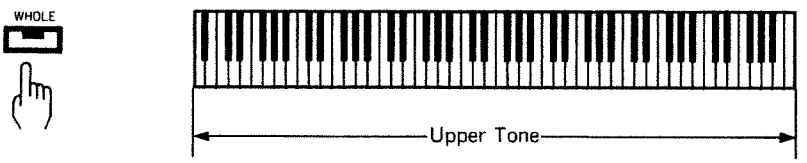
The Keyboard Mode is selected using the 5 buttons in the Keyboard Mode Section. With each press of a button it is either turned on or off, and its indicator lights or goes out accordingly.

Concerning the method used for changing Tones, refer to "2. Selecting Tones" (☞ page 16).



a. Whole

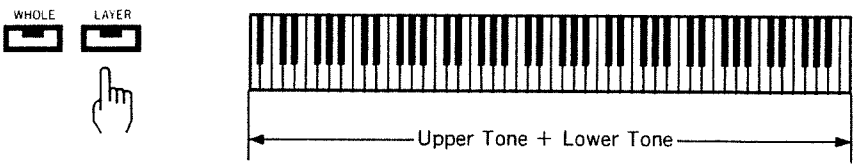
After pressing [WHOLE] and confirming that its indicator is lit, you will be able to use the whole keyboard to play the sound (Upper Tone) that has been specified for the Upper Part. The Whole mode is the mode that is normally available after the power has been turned on.



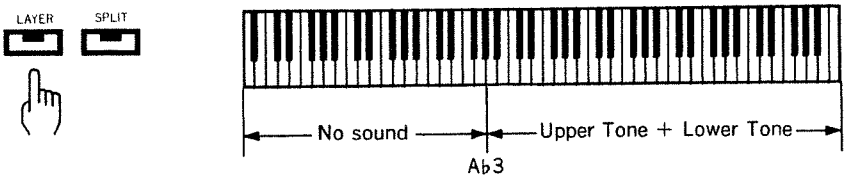
b. Layer

When you press [LAYER] (its indicator will light), the indicator for [LOWER] will also automatically light. Thereafter, the keyboard will layer that which has been specified for the Upper Part (Upper Tone) along with that which has been specified for the Lower Part (Lower Tone) and both will be sounded.

When the indicator on [WHOLE] is lit.

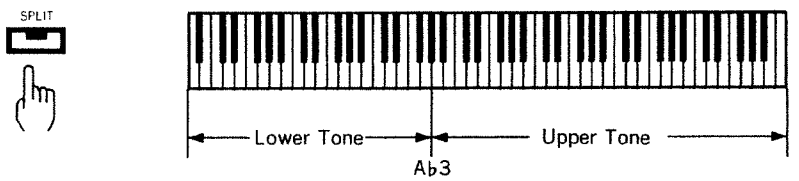


When the indicator on [SPLIT] is lit.

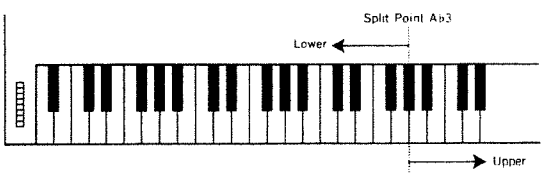


c. Split

When you press [SPLIT] (its indicator will light), the indicator for [LOWER] will also automatically light. Thereafter, you will be able to play separate sounds in the keyboard's Upper and Lower ranges.



"Lower" refers to the keyboard's lower range zone, whereas "Upper" refers to the higher zone. The particular key which is at the boundary between these two zones is referred to as the "Split Point." (The key acting as the Split Point sounds as part of the Lower zone.)

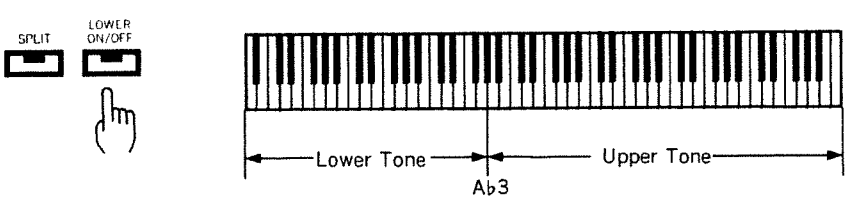


The Upper section will sound using the Upper Tone. The Lower section will sound using the Lower Tone, Manual Bass Tone, or both.

The following four choices as to what the Lower section will play are available :

○ Sound the Lower Tone

With the indicator on [SPLIT] already on, press [LOWER] and confirm that its indicator is lit.



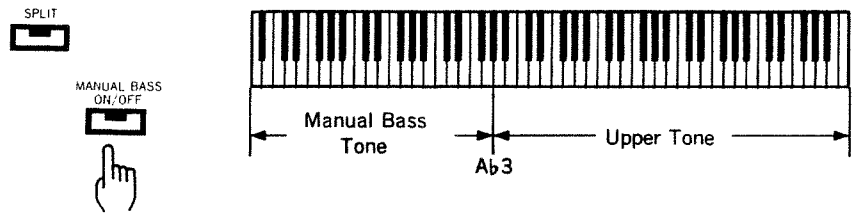
When you press [LOWER] to turn off the light when the [SPLIT] indicator is lit, the [LOWER] indicator will not be illuminated ever if [SPLIT] is pressed again. If this happens, press [LOWER] again to turn on the light.

While in this state, if you turn the Arranger ON, and start a Music Style, the Lower Tone will sound except during the Intro and Ending.

While in this state, if you turn the Arranger ON, and start a Music Style, the indicator on [MANUAL BASS] goes out automatically, and the Manual Bass Tone will not sound while the Style is playing. (It can be played again once the Style has finished, however.)

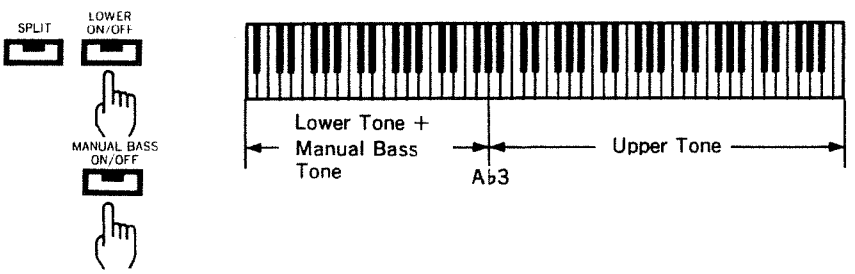
○ Sound the Manual Bass Tone

With the indicator on [SPLIT] already on, press [MANUAL BASS] and confirm that its indicator is lit.



○ Sound both the Lower Tone and the Manual Bass Tone

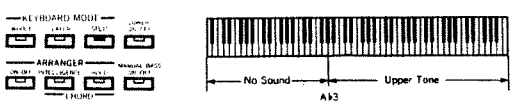
With the indicator on [SPLIT] already on, press both [LOWER] and [MANUAL BASS] and confirm that their indicators are lit.
Thereafter, all chords played in the Lower section will sound using the Lower Tone, with the root of such chords using the Manual Bass Tone.



The Manual Bass Tone can only be sounded when the Arranger is OFF. Once you start an Arranger rhythm, the indicator on [MANUAL BASS] goes out automatically, and the Manual Bass Tone no longer sounds (☞ page 25).

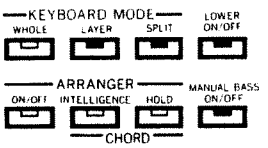
If you wish, you can press [LEADING BASS] (the indicator will light). The lowest note of chords played in the Lower section will now sound using the Manual Bass Tone. (☞ P. 39)

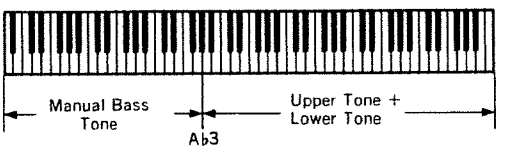
If the indicators on both [LOWER] and [MANUAL BASS] are dark while in the Split mode, no sound will be produced when you play in the Lower section.



d. Split + Layer

You will be able to perform impressive ensembles that use 3 sounds at once, if you press these four buttons : [LAYER], [SPLIT], [LOWER], and [MANUAL BASS]. (Note : All four indicators must be lit.)

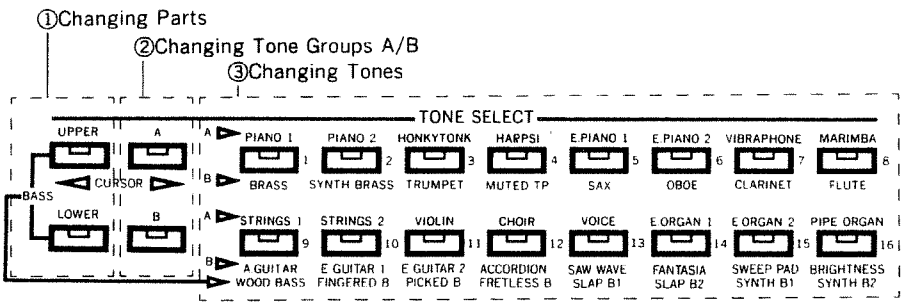




When you play in the Upper section, both Upper and Lower Tones are layered and will sound together. What you play in the Lower section will be sounded using the Manual Bass Tone.

2. Selecting Tones

The Tones for Upper / Lower / Manual Bass are selected using the buttons in the Tone Select Section.



Tone changes can also be made while a Style is playing, or while Manual Drums or Manual Sound Effects are played.

a. Upper Tone

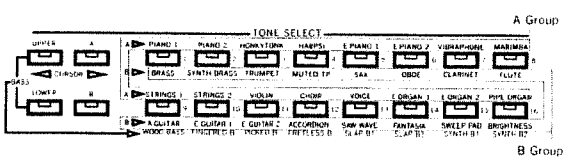
Any sound from among the 32 different sounds available for the Upper Tone (16 buttons x 2 groups) can be selected.

Operation

From the Master Screen :

① Press [UPPER] and confirm that its indicator is lit.

② Select the Tone Group.
With [A] pressed, and its indicator lit, you can select from the A Group Tones; those printed above the Tone Select Buttons. With [B] pressed, and its indicator lit, you can select from the B Group Tones; those printed below the Tone Select Buttons.



③ Press the Tone Select Button corresponding to the Tone you wish to use. The indicator on the button you have pressed will light, and the name of the selected Tone will appear in the display.

▲ The Tone Select Button that is fourth from the right on the upper row has been pressed, and E. Piano 1 has thus been selected for the Upper Tone.

b. Lower Tone

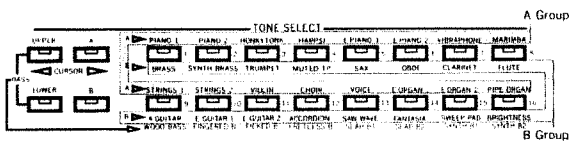
Any sound from among the 32 different sounds available for the Lower Tone (16 buttons x 2 groups) can be selected.

Operation

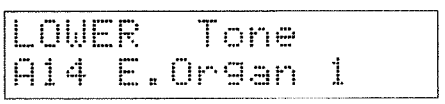
From the Master Screen :

① Press [LOWER] and confirm that its indicator is lit.

② Select the Tone Group.
With [A] pressed, and its indicator lit, you can select from the A Group Tones; those printed above the Tone Select Buttons. With [B] pressed, and its indicator lit, you can select from the B Group Tones; those printed below the Tone Select Buttons.



③ Press the Tone Select Button corresponding to the Tone you wish to use. The indicator on the button you have pressed will light, and the name of the selected Tone will appear in the display.



▲ The Tone Select Button that is third from the right on the lower row has been pressed, and E. Organ 1 has thus been selected for the Lower Tone.

Although the Tone Select Buttons consist of two rows, each having 8 buttons, only the buttons in the lower row are available for making the selection of the Manual Bass Tone. The names of the Bass Tones (Bass Group) appear below the names for the B Group.

c. Manual Bass Tone

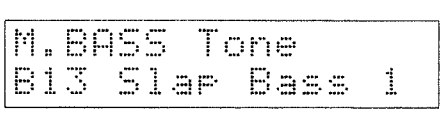
Any sound from among the 8 different sounds available for the Manual Bass Tone can be selected.

Operation

From the Master Screen :

① Press [UPPER] and [LOWER] simultaneously, and confirm that their indicators are lit.

② Press the Tone Select Button corresponding to the Tone you wish to use. The indicator on the button you have pressed will light, and the name of the selected Tone will appear in the display.



▲ The Tone Select Button that is fourth from the right on the lower row has been pressed, and Slap Bass 1 has thus been selected for the Manual Bass Tone.

When the power is turned on, the following default selections for Tones will be in effect :
Upper···A01 Piano 1
Lower···A09 Strings 1
Manual Bass···B09 Wood Bass

Tone List

A Group
A01 Piano 1
A02 Piano 2
A03 Honky-tonk piano
A04 Harpsichord
A05 E.Piano 1
A06 E.Piano 2
A07 Vibraphone
A08 Marimba
A09 Strings 1
A10 Strings 2
A11 Violin
A12 Choir
A13 Voice
A14 E.Organ 1
A15 E.Organ 2
A16 Pipe Organ

B Group
B01 Brass
B02 Synth Brass
B03 Trumpet
B04 Muted TP.
B05 Sax
B06 Oboe
B07 Clarinet
B08 Flute
B09 A.Guitar
B10 E.Guitar 1
B11 E.Guitar 2
B12 Accordion
B13 Saw Wave
B14 Fantasia
B15 Sweep Pad
B16 Brightness

Bass Group
B09 Wood Bass
B10 Fingered Bass
B11 Picked Bass
B12 Fretless Bass
B13 Slap Bass 1
B14 Slap Bass 2
B15 Synth Bass 1
B16 Synth Bass 2

3. Concerning Chords

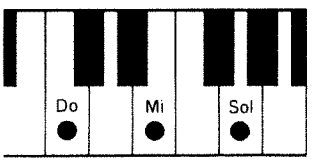
The Arranger on the KR-3500 uses the chords you play to create accompaniment which is suitable for the Music Style selected at the time. The following explains some of the fundamentals concerning use of chords.

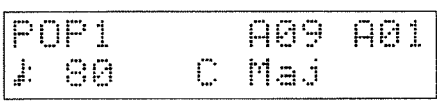
a. The Root and Other Constituent Notes

After turning the [ARRANGER] ON, if you play "Do", "Mi", "Sol" in the Lower section of the keyboard, the display will show the information shown below. (Turning [ARRANGER] On/Off, ☞ page 34)

With the Arranger ON, the name of whatever chord has been played in the Lower section will be shown in the display. Chords can thus be confirmed by both sight and sound.

C Major

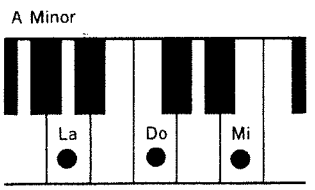


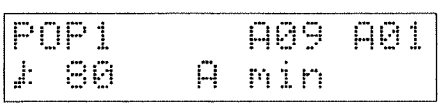


This tells you that the "Do", "Mi", "Sol" keys that were played formed a C Major chord.

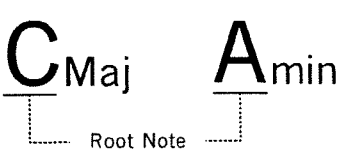
Next, try playing "La", "Do", "Mi", The display should then show the following :

A Minor





You thus know that you played an A minor chord.

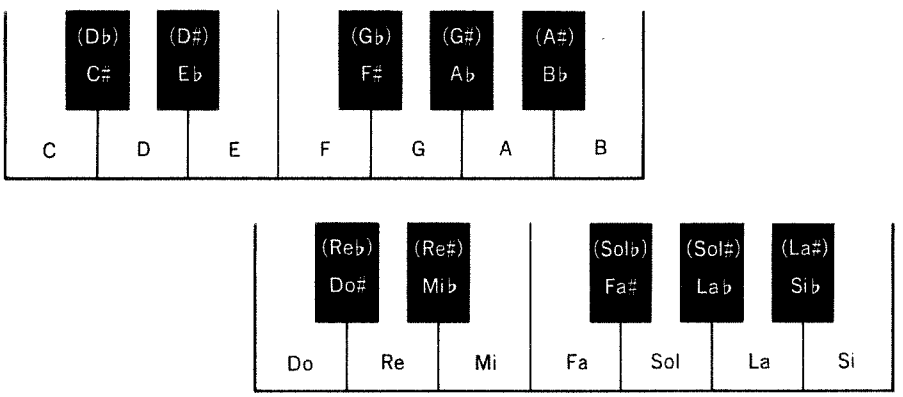


○ Root Note···The root is the note which is the main tone (tonic) of the chord, and is the note which gives the chord its name; a capital letter from C-B (some have a # or ♭).
For example, in a C Major chord, the root is the note C (Do); and in an A minor chord, it is the note A (La).

○ Constituent Notes···These are the notes of which the chord is composed. In a C Major chord, they are the notes "Do", "Mi", and "Sol"; and in an A minor chord, they are the notes "La", "Do", and "Mi".

b. Reading Note Names

There are 12 root notes (including white and black keys) for chords, which range from "Do" to "Si" All of these are represented with a letter, sometimes having a # or ♭. The root notes are as follows :

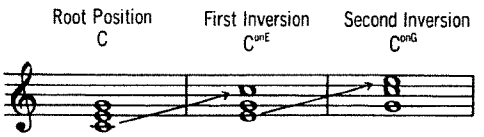


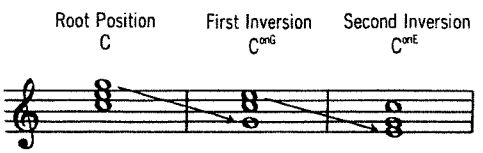
Some of the more common chords that the KR-3500 recognizes are listed below. (It of course is capable of recognizing many more than this)

Chord Name (When C is the root)	Indicated on KR-3500
C Major	C Maj
C minor	C min
C seventh	C 7
C Major seventh	C Maj7
C minor seventh	C min7
C minor seventh flat five	C m7 ♭5
C suspended four	C sus4
C suspended seventh (C seventh sus four)	C 7sus
C Augmented	C Aug
C diminished	C dim
C Augmented seventh	C Aug7
C sixth	C 6

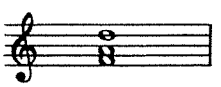
c. Chord Inversions

The notes of a chord can also be positioned (voiced) in a different manner. A chord that is played with its root note on the bottom is said to be in "root position". When any constituent note other than the root is placed at the bottom, the chord is then called an "inversion."





Chord inversions are indicated as follows :



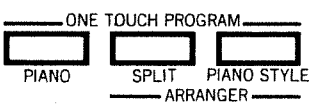
···would thus be Dm on F, or Dm/F

By changing a chord's voicing, you obtain a different sound. Depending on where a chord is located within a piece, you may want to selectively employ inversions in order to create more interesting music.

> Employing the Leading Bass feature (☞ P. 39), the bottom note of an inversion can be taken as the bass note.

4. One-Touch Program

Simply by pressing a One-Touch Program button, you can immediately switch the instrument's panel settings to the corresponding playing mode, regardless of the status the instrument was in at that time.
The following three playing modes are available as presets.



If you make changes in a One-touch Program setting, the functions assigned to the pedals will also change. (Pedal Switch ☞ page 48)

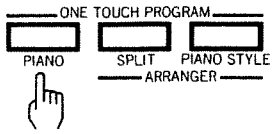
Whenever you feel that the flashing of the Beat indicator is distracting, such as when performing solo, you can turn it off simply by sliding the TEMPO slider to its left extreme. (Beat Indicator ☞ page 34)

The metronome feature (See Quick Start ☞ P. 20) comes in handy for lessons and practice.

In the Music Style Expansion mode, if you hold down [SPLIT ARRANGER] or [PIANO STYLE ARRANGER] for more than one second, the optimum Music Style setting will not be selected.

a. Piano Mode

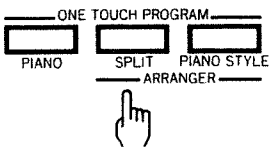
Press [PIANO] when you wish to play the instrument as an 88-key acoustic piano. You can also change the acoustic piano sound to something else and still play using all the keys. Note, however, that the Arranger cannot be used while in the Piano Mode.



Continue pressing [PIANO] for more than 1 second, and you will be able to play the entire keyboard with the acoustic piano sound and call up a group of settings (such as Upper part balance, effect settings etc.) that is best suited for the acoustic piano performance.

b. Split Arranger Mode

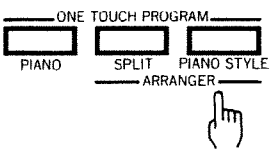
To prepare the instrument for automatic accompaniment (performance of Styles), simply press [SPLIT ARRANGER]. When playing Styles in the Split Arranger Mode, the keyboard is divided into two zones. The chords are then played in the Lower section, while the melody is played in the Upper section.



Continue pressing [SPLIT ARRANGER] for more than 1 second, and you will be able to call up a group of settings that is best suited to the selected Music Style. Such settings include not only those concerned with the play of Styles, splitting of the keyboard, and selection of chords in the Lower zone, but also those determining the sound that will be played with the right hand, the balance between the Parts, and settings for Effects.

c. Piano Style Arranger Mode

To prepare the instrument for performance of Styles which allow chords to be played anywhere on the keyboard, press [PIANO STYLE ARRANGER]. When in the Piano Style Arranger Mode, chords can be detected no matter which keys on the keyboard are pressed. As a result, you can obtain an accompaniment pattern that matches what is played, even while playing in a traditional piano style.



Continue pressing [PIANO STYLE ARRANGER] for more than 1 second, and you will be able to call up a group of settings that is best suited for the selected Music Style. Such settings include not only those concerned with the performance of Styles while allowing selection of chords from any position on the keyboard, but also those determining the balance between the Parts, and settings for Effects.

2

Having Fun with Various Styles of Music

1. What are Music Styles?

Music can be played in different styles. While attending a concert or listening to a record, you may have thought to yourself, "That sound has a bossanova-like quality", or, "That sound has a reggae-like quality".
You think like this because the rhythm, the tempo, the instruments played, the melody and the phrases all come together to create the quality you recognize.
A Music Style is what is obtained when the elements that are typically associated with a certain genre of music are broken down and put back together. The KR-3500 features 32 different styles of music (or 64 in the expanded mode).

Music Style
- Rhythm
- Tempo that fits the rhythm
- Selection of instruments that fit the rhythm
- Arrangement that fits the rhythm

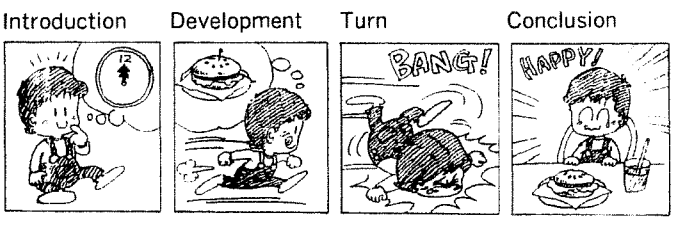
The number of musical styles available can be increased using the Music Style Card (TN-SC Series : optional) or the Music Style Super Card (MSL-15 : optional).

A Music Style consists of four playing patterns : Original, Variation, Intro and Ending. For each style, there is a choice between Basic (simple arrangement) and Advanced (more sophisticated arrangement). This means that a total of 8 accompaniment patterns are available for each musical style. In addition, a major, minor, seventh, or any other chord selected, will change the arrangement for the accompaniment pattern, resulting in subtler variations in expression to match the flow of the music. And when the two types of fill-ins used in between measures in the accompaniment pattern, breaks, and other special accompaniments are brought into play, the number of ways in which the accompaniment patterns produced from each musical style can be combined is enormous.

Select an accompaniment pattern for a Music Style using the corresponding button on the panel during the performance.

A Point of Advice

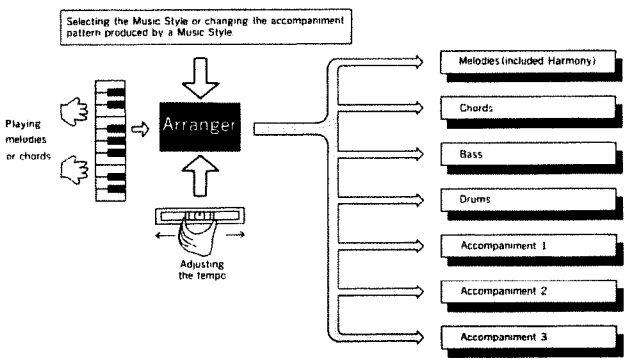
The Original, Variation, Intro and Ending of each musical style can perhaps be better understood using the analogy of story-telling with its four phases : its beginning, development, turns and its conclusion. The simplest composition is produced when music is played in the sequence below. (Although the composition of real music is more complex, this unit with its 4 x 2 accompaniment pattern combinations can handle virtually any type of music.) When a specific kind of music is to be played in its own style, it will sound best if the player considers its inherent flow extending from its introduction to its conclusion.



2. What is the Arranger?

To use the KR-3500 to have fun playing a particular style of music, turn on the Arranger function to select the Music Style.
The Arranger instantly turns the music being played into an accompaniment which sounds like the kind of music intended. It does this by adding drums, bass, backing (and other elements to the basic information on the accompaniment pattern of the selected Music Style) and the chords played on the keyboard, and by arranging all these elements together. Changing the accompaniment pattern or chord produces a change in the performance in real-time. It is also possible to change the arrangement totally by selecting a different Music Style.

Melody Intelligence function
When the Melody Intelligence function is turned ON, the Arranger automatically adds the harmony to suit the chord played. (☞ P. 41)



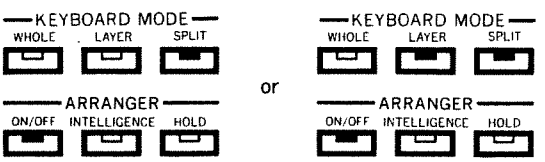
3. What is Style Play?

Style play refers to the automatic accompaniment produced by the Arranger function. The accompaniment will also change depending on the Music Style selected or the chord played. This means that you can have fun with various kinds of variations.

There are two types of style play. These are dependent upon the range of the keyboard in which the Arranger can detect chords.

○ Chord detection in the Lower zone (Split Arranger mode)

This can be used by turning the Arranger ON (☞P. 34) and setting either "Split" or "Split + Layer" as the keyboard mode (☞P. 12).

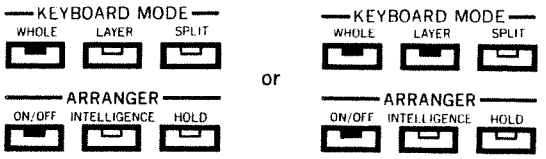


The keyboard is split into the Upper and the Lower zones. Chords are recognized when they are played in the Lower zone of the keyboard.

> The Split Arranger mode is activated by pressing the [SPLIT ARRANGER] Programming button. (☞P. 22)

○ Detection of chords anywhere on the keyboard (Piano Style Arranger mode)

You can employ this method by turning the Arranger ON and selecting either "Whole" or "Layer" as the keyboard mode (☞P. 12).



Chords are recognized no matter where on the keyboard they are played.

> The Piano Style Arranger status is established instantly by pressing the (PIANO STYLE ARRANGER) Programming button. (☞P. 22)

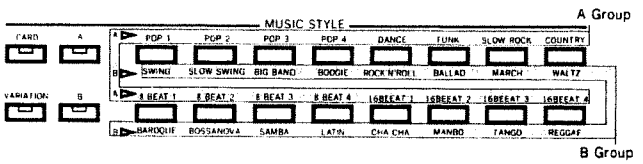
> In either case, the Arranger shows the name of the chord on the display.

4. Selecting a Music Style

Aside from the 32 Music Styles featured by the main unit, the Music Styles on optional Music Style Cards (read-only memory cards) can be added to a performance.

a. Selecting Music Styles from the Main Unit

When Music Style indicator "A" is lit, the Music Styles marked above the Music Style selector buttons can be selected. Press (B) (the indicator lights) to select the Music Styles marked below the buttons.



MUSIC STYLE LIST

GROUP A
A01 POP 1
A02 POP 2
A03 POP 3
A04 POP 4
A05 DANCE
A06 FUNK2
A07 SL ROCK2 (Slow Rock 2)
A08 COUNTRY
A09 8BEAT1
A10 8BEAT2
A11 8BEAT3
A12 8BEAT4
A13 16BEAT1
A14 16BEAT2
A15 16BEAT3
A16 16BEAT4

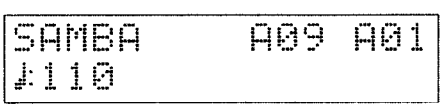
GROUP B
B01 SWING2
B02 SLSWING1 (Slow Swing 1)
B03 BIG BAND
B04 BOOGIE
B05 ROCK'N' ROLL
B06 BALLAD2
B07 MARCH
B08 WALTZ
B09 BAROQUE
B10 BOSSA (Bossanova)
B11 SAMBA
B12 LATIN
B13 CHACHA
B14 MAMBO
B15 TANGO
B16 REGGAE

Example) Selecting the "Samba" style.

Operation

From the Master Screen :

① If indicator "A" is lit, press [B] (the indicator will flash).
② Press [SAMBA] (which is the third Music Style selector button from the left on the bottom row).

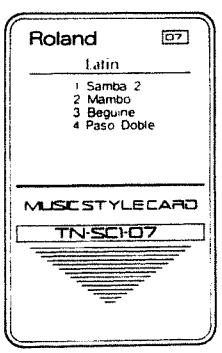


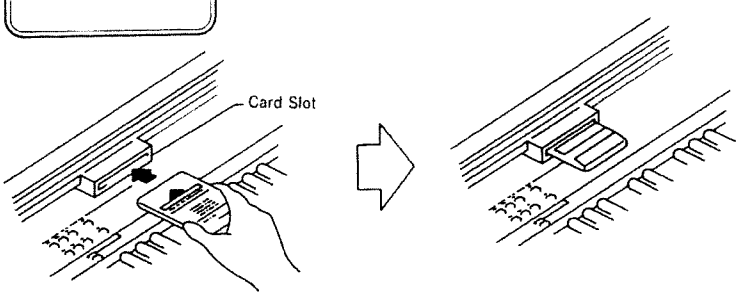
b. Selecting Music Styles from a Music Style Card

Music can be played in one of the styles contained on the card by following the same procedure used to select a Music Style from the main unit.

Operation

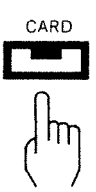
① Insert the Music Style Card into the card slot.





Make sure the card is faced properly, then insert it in the correct direction.

② Press [CARD].



③ Select one of the Music Styles stored on the card.
When one of the buttons is pressed, the name of the corresponding Music Style (and its preset tempo) will appear on the screen.

If Music Style button [1] is pressed, the first Music Style is selected. Similarly, if Music Style button [2] is pressed, the second Music Style is selected, and if button [3] is pressed, the third Music Style is selected.

> To switch to the Music Styles provided by the main unit with the Music Style Card still inserted in the slot, first press Music Style select button [A] or [B], and then press the button of the Music Style desired.

5. Starting and Stopping the Music Styles

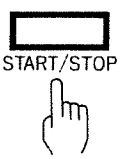
Once the Arranger has been turned ON, you can enjoy the automatic accompaniment (in the style) produced by the Arranger. With the Arranger turned OFF, the rhythm alone can be produced, allowing you to use the unit as a rhythm machine. (Refer to page 34 for further details on the Arranger.)

a. Starting

Music Styles can be started in one of four ways. Select the method which fits the music being played.

○ **Press [START/STOP].**

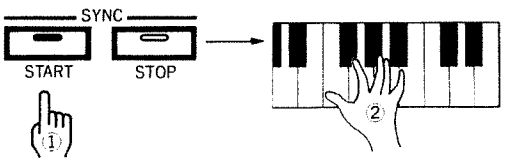
The selected Music Style starts as soon as this button is pressed.



○ **Press [SYNC START].**

In the Split mode, the style starts as soon as one of the keys in the Lower range is pressed. When Split is not being used, it starts as soon as any key is pressed.

Some Music Styles do not contain rhythm patterns. If you select one of these styles and start it, no rhythm sounds will be heard.



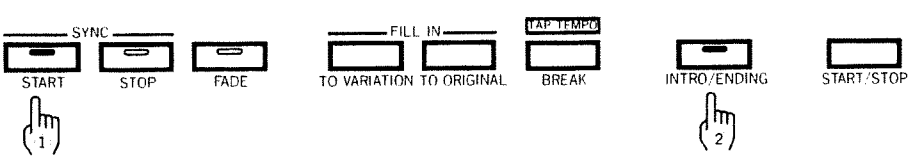
○ **Press [INTRO/ENDING].**

The selected Music Style starts with an introduction which suits the style.

The length of the Intro differs depending on the Music Style selected. (☞ P. 126)

○ **Press [SYNC START] and then [INTRO/ENDING]. (The [SYNC START] indicator will now be flashing.)**

In the Split status, the selected style starts when one of the keys in the Lower range is pressed. When the Split status is OFF, it starts as soon as any key is pressed.



b. Stopping

There are three ways to stop a Music Style that is playing.

The length of the Ending will vary depending on the Music Style (☞ P. 126).

○ **Press [START/STOP].**
The Music Style stops as soon as this button is pressed.

○ **Press [INTRO/ENDING].**
When this button is pressed, an Ending phrase suited to the Music Style is played first, and then the style stops.

○ **Press [SYNC STOP].**
The Music Style will stop when you release the keys on the keyboard.

6. Fade-In / Fade-Out of Music Styles

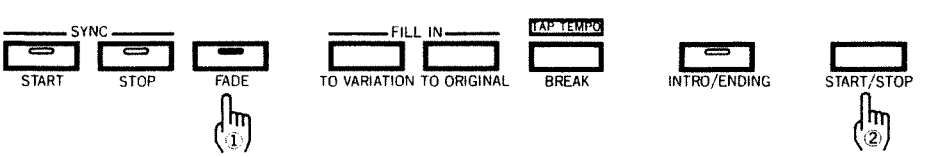
Fade-in refers to a feature whereby the volume will gradually increase from "0" to a preset level.
Conversely, Fade-out is a feature that gradually reduces the volume from the set level to "0".

> During a Fade-in, the indicator on [FADE] will be lit. It goes out when the Fade-in is completed. Similarly, during a Fade-out, the indicator on [FADE] will be lit, and will be flashing when the Fade-out is completed.

a. Fade-In

A Fade-in can be applied to a Music Style in any of the following four ways.

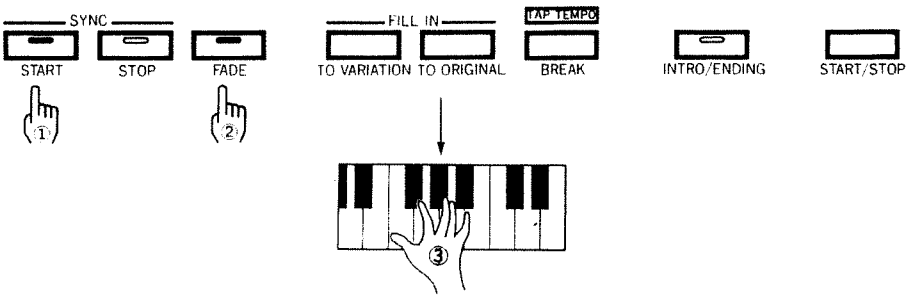
○ **Press [FADE] and then [START/STOP].**
Once you press [FADE] the indicator on [FADE] will begin flashing, and when you press [START/STOP] it will light continuously.
At the moment you press [START/STOP], the Music Style will begin fading-in.



○ **Press [SYNC START] and then [FADE].**

Once you press [FADE] the indicator on [FADE] will begin flashing, and when you press a key on the keyboard, it will light continuously.

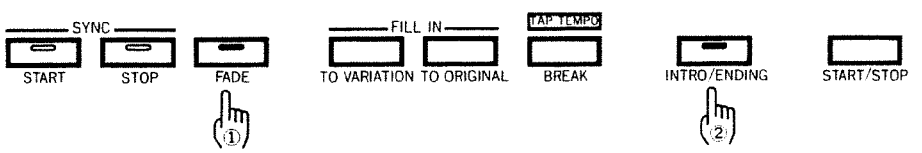
When in the Split mode, the Music Style will begin fading-in the moment you press a key in the Lower zone. If in the Whole mode, this occurs the moment you press a key anywhere on the keyboard.



○ **Press [FADE] and then [INTRO/ENDING].**

(Once you press [FADE] its indicator will begin flashing, and when you press [INTRO/ENDING] it will light continuously.)

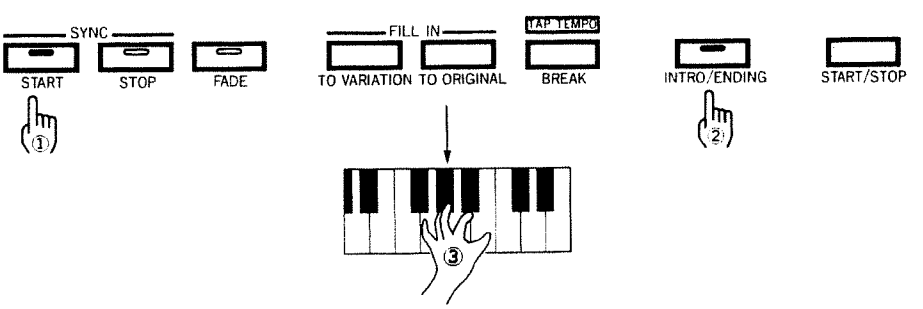
At the moment you press [INTRO/ENDING], an Intro suitable for the selected Music Style will begin fading -in.



○ **Press [SYNC START], then [INTRO/ENDING], and then [FADE].**

(Once you press [FADE] its indicator will begin flashing, and when you press a key on the keyboard, it will light continuously.)

When in the Split mode, an Intro suitable for the selected Music Style will begin fading-in the moment you press a key in the Lower zone. If in the Whole mode, this occurs the moment you press a key anywhere on the keyboard.

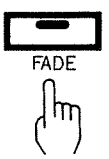


b. Fade-Out

Just as a Music Style can begin with a fade-in, it can also end with a fade-out.

Operation

① Press [FADE].
The moment you press the button, the sound will begin fading out. When the indicator on [FADE] starts flashing, press [START/STOP].



After a Fade-out has been completed, and the volume is "0," the Music Style will actually still be playing as long as the indicator on [FADE] is still flashing. You need to stop it by pressing [START/STOP].

7. Adjusting the Tempo

In the KR-3500, each Music Style has been given a tempo setting that is considered to be the most suitable. (This is referred to as the "preset tempo.") However, if you need to, you can adjust the tempo of the Music Style. There are three ways to do this.

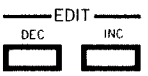
a. Tempo slider

Slide the Tempo slider to the right to increase the tempo.

The tempo is indicated at the bottom left of the display as the number of beats per minute (example: ♩ : 120). The number shown indicates the number of quarter notes played per minute. Any tempo can be selected across a range of ♩ : 30 to 240 beats per minute. If the piece to be played has a specific tempo, the tempo can be set on the display prior to play. You'll find this to be a very convenient feature.

b. INC / DEC

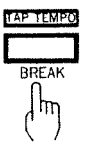
Each time [INC] is pressed, the tempo is increased by one step (one beat per minute); conversely, each time [DEC] is pressed, it is reduced by one step. If either button is kept depressed, the tempo will change continuously.



If both [INC] and [DEC] are pressed at the same time, the tempo returns to the preset value.

c. Tapping Tempo

If the [TAP TEMPO] button is tapped at the desired tempo after the Music Style has stopped, the beat indicator will flash at the same speed as the key was tapped. The tempo display will automatically change to the setting made by the tap tempo.

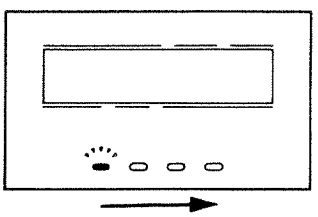


The tap tempo can be set only when the Music Style is stopped. If [TAP TEMPO] is pressed while a Music Style is being played, it functions as the Break button, serving to temporarily discontinue play in the Music Style. (☞P. 37)

Even when the Music Style is changed during play, play can still be continued in the original tempo. This function enables interesting arrangements to be created as the sound is suddenly switched from rock to baroque, for instance.

d. Beat Indicator

Once a Music Style has started, the Beat indicator will run from left to right at the set tempo.



When the Music Style is stopped, only the red indicator will flash at the speed of the set tempo.

In the case of 4/4 (quadruple time measure), the red indicator will flash on the first beat (downbeat) and the green indicators will flash on the second, third and fourth beats (upbeat). This pattern is repeated until the rhythm is stopped. With 3/4 (triple time), no indicator will flash on the fourth beat. The player can thus determine where each measure begins simply by monitoring the flashing of the red indicator : this makes it easy to gauge the timing for a fill-in, for example. (Refer to page 36 for further details on fill-ins.)

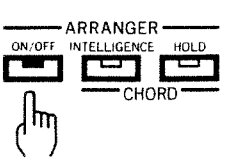
8. Arranger ON/OFF

The Arranger must be ON for music to be played in different styles. When a Music Style is started with the Arranger turned ON, automatic accompaniment is provided in real-time on the basis of the selected Music Style and the chords played.

Operation

If a Music Style is started with the Arranger turned OFF, only the rhythm will be played.

① Select a Music Style. (☞P. 26)
② Set the keyboard mode (☞P. 12) and Tone to be used. (☞P. 16)
③ Press [ON/OFF] on the Arranger (the indicator will light).



④ Start the Music Style.
Refer to page 29 for the ways to start a Music Style.

⑤ Play chords in the appropriate range of the keyboard.

⑥ Stop the Music Style.
Refer to page 30 for the ways to stop a Music Style.

9. Types of Arrangements

The type of arrangement to be produced by the Arranger is selected by operating the Arranger button ([ADVANCED/BASIC]) and Variation button ([VARIATION]). These two buttons yield four possible combinations.

- **When both the [ADVANCED/BASIC] and [VARIATION] button indicators are OFF :** Basic (simple), Original
- **When the [ADVANCED/BASIC] indicator is OFF and the [VARIATION] indicator is ON :** Basic (simple), Variation
- **When the [ADVANCED/BASIC] indicator is ON and the [VARIATION] indicator is OFF :** Advanced (somewhat sophisticated), Original
- **When both the [ADVANCED/BASIC] and [VARIATION] indicators are ON :** Advanced (somewhat sophisticated), Variation

Each time a button, whether Arranger or Variation, is pressed, its indicator turns ON or OFF.

a. Arranger Button (Basic & Advanced)

This button selects the arrangement type between Basic and Advanced.

Basic (OFF) ····· Simple arrangement
Advanced (ON) ····· Sophisticated arrangement

When the power is switched ON, Advanced is automatically selected.

When the [ADVANCED/BASIC] indicator is ON, the Advanced arrangement is selected; when it is OFF, the Basic arrangement is selected. Each time this button is pressed, Advanced and Basic are selected alternately.

b. Variation Button (Original & Variation)

Original and Variation choices are available for each Music Style.
One example where Variations can be used effectively is in the bridge sections of a piece (where the music builds up).

Original (OFF) ····· Basic pattern
Variation (ON) ····· Variation pattern

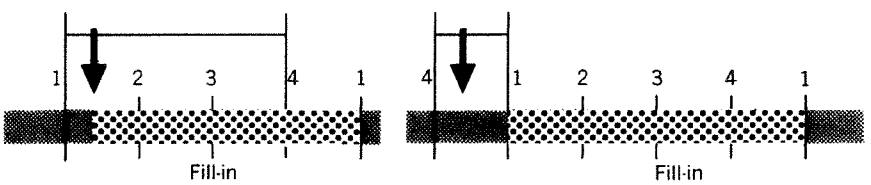
Selection between Original and Variation can also be made using the fill-ins described in the next paragraph.

When the [VARIATION] indicator is ON, Variation is selected; conversely, when it is OFF, Original is selected. Each time the button is pressed, Variation and Original are selected alternately.

10. Fill-Ins

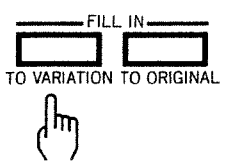
A Fill-in refers to an irregular phrase, such as the "rat-a-tat" or "parum-pum-pum" of drums, that might be inserted between measures.
The [TO VARIATION] and [TO ORIGINAL] buttons are provided for Fill-ins, and the composition moves to either the Variation or Original pattern, depending on which button was pressed.

If one of the Fill-in buttons is pressed between the first and third beats (between the first and Second beats in 3/4) the Fill-in will occur in the remaining section of the measure. If it is pressed on the fourth beat (third beat with 3/4), the Fill-in will start from the first beat of the next measure.



a. Fill-In to Variation

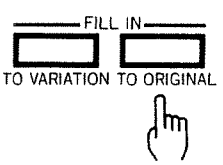
If the [TO VARIATION] Fill-in button is pressed, the performance continues with the Variation in Basic or Advanced arrangement after the Fill-in has been played.



At this point, the [VARIATION] indicator lights and the Variation mode is set ON. If it was ON from the start, the performance continues with Variation after the Fill-in.

b. Fill-In to Original

If the [TO ORIGINAL] Fill-in button is pressed, the performance continues with Original in the Basic or Advanced arrangement after the Fill-in has been played.

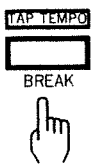


At this point, the [VARIATION] indicator goes OFF and the Variation mode is set OFF. If it was OFF from the start, the performance continues with Original after the Fill-in.

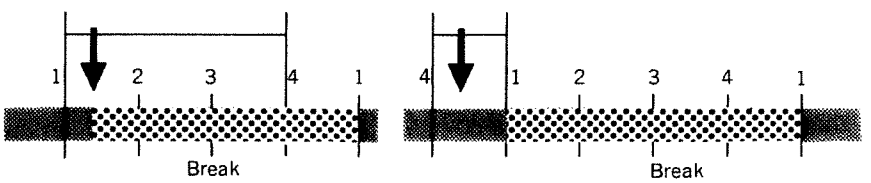
11. Breaks

Pressing (BREAK) while playing in a particular musical style results in a 1-measure break (the performance has stopped).

While the Music Style has stopped, (BREAK) functions as the Tap Tempo button (☞P. 33).



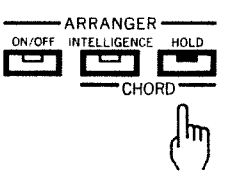
If the Break button is pressed between the first and third beats (between the first and second beats in 3/4), the break will occur in the remaining section of the measure. If it is pressed on the fourth beat (third beat with 3/4), the break will start from the first beat of the next measure.



12. Chord Hold

If the keys are released with the Chord Hold function OFF while a Music Style is being played, only the rhythm will be heard.

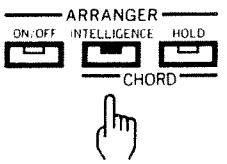
If Chord Hold is set to ON while a Music Style is playing, the last chord played will be held until the next notes are played. This function comes in handy, for instance, when switching a Music Style midway during play.



With play of the Style stopped, split the keyboard, and turn Chord Hold ON. Thereafter, whatever you play in the Lower zone will be sustained until something new is played. Note that if the Manual Bass Tone has been sounded at the same time, it will be sustained as well. (However, the Manual Bass Tone cannot be sustained by itself.)

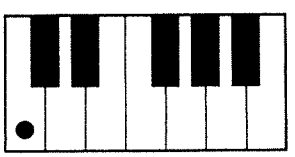
13. Chord Intelligence

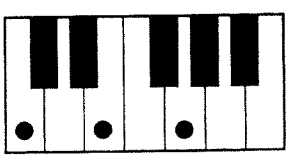
Different chords can be played with only a few fingers when using the Chord Intelligence function.



○ Major (□ Maj)·····Press the key of the chord root.

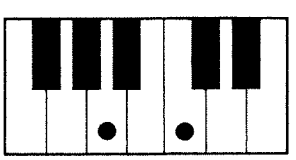
Example) C Maj

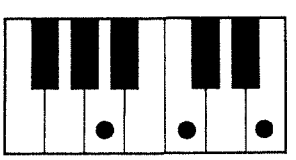

Chord Intelligence:ON


Chord Intelligence:OFF

○ Minor (□ min)·····Press the keys of the root and flat third.

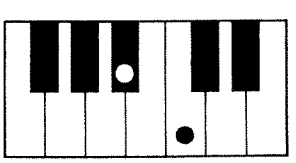
Example) A min

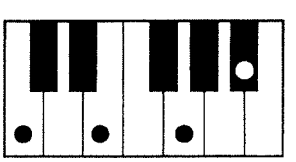

Chord Intelligence:ON


Chord Intelligence:OFF

○ Seventh (□ 7)·····Press the keys of the root and the note which is two half steps lower.

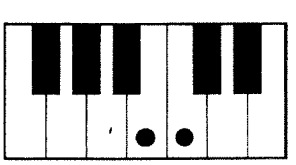
Example) C 7

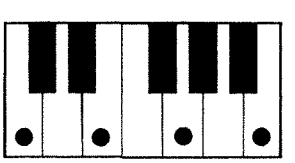

Chord Intelligence:ON


Chord Intelligence:OFF

○ Major Seventh (□ Maj7)·····Press the keys of the root and the note which is a half step lower.

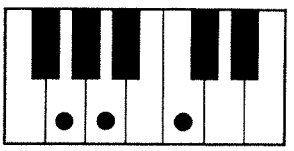
Example) C Maj7


Chord Intelligence:ON

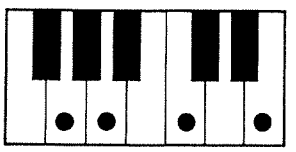

Chord Intelligence:OFF

○ Minor Seventh (□ min7)·····Press the keys of the root, flat third and the note which is two half steps below the root.

Example) A min7



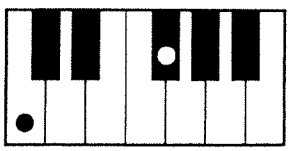
Chord Intelligence:ON



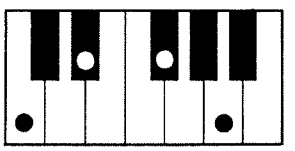
Chord Intelligence:OFF

○ Diminished (□ dim) ··· Press the keys of the root and the note which is six half steps above it (flat the fifth above the root).

Example) C dim



Chord Intelligence:ON



Chord Intelligence:OFF

The Chord Intelligence function cannot be set to ON either while the [WHOLE] indicator of the Keyboard Mode is ON or while the Piano Style Arranger Mode is ON.

14. Leading Bass

When [LEADING BASS] is pressed (and its indicator is turned ON), the lowest note of an inverted chord (played while a Music Style is being played) is recognized by the Arranger as the bass tone. (In other words, the lowest note in the chord actually played is played as the bass tone, regardless of the root of that chord.)

The Leading Bass function is valid for the Manual Bass even when the Arranger is OFF.

To turn the Leading Bass function OFF, press [LEADING BASS] again.

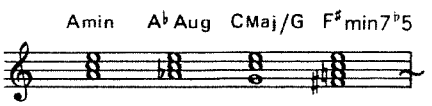
Inverted chords :

The upper-case letter preceding the chord name is called the "root" and it indicates the lowest tone in the chord. (Example : In A minor, "A" is the root.)

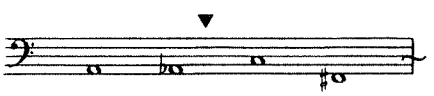
A chord which has this root as the lowest tone (and the other component tones above it) is called a "root position chord," and a chord which has a tone other than its root as the lowest tone is called an "inverted chord." (Example : In A minor, "A/C/E" (La/Do/Mi) is a root position chord while "C/E/A" (Do/Mi/La) and "E/A/C" (Mi/La/Do) are inverted chords.)

If during chord play, you use a chord that is an inverted version of the chord being played, the sound of that chord will change, and the way in which the chords are linked will sometimes sound more beautiful.

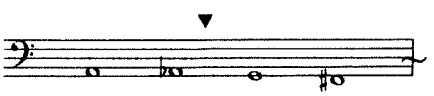
If its Leading Bass function is used, the KR-3500 is capable of using the lowest tone in the inverted chord as the bass tone. This means that the sound can be varied even with the same chord.



When Leading Bass is OFF :

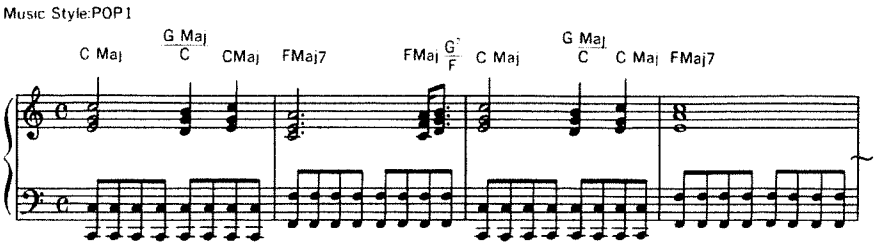


When Leading Bass is ON :



While the Leading Bass function is on, the bass pattern will vary when the root position chord is selected. When the inverted version of the same chord is then selected, however, only the lowest tone (and the tones that are one or more octaves higher or lower) are played using the same note distribution. This is done to prevent a bass tone that the player does not intend to play from being sounded.

A chord can be played anywhere on the keyboard when using the Piano Style Arranger. Using this function, and combining it with the Leading Bass function, you can play the chords with your right hand and move the bass line with the left, thereby achieving a greater degree of sophistication in what you are playing.

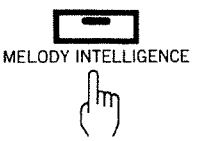


15. Melody Intelligence

When the Melody Intelligence function is used, you can use your right hand to add the harmony best suited to the melody played.

Operation

① Press [MELODY INTELLIGENCE], and confirm that its indicator is lit.

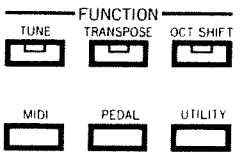


To turn the Melody Intelligence function OFF, press [MELODY INTELLIGENCE] again.

3

Enhancing Your Playing Technique

1. Function Settings



Some functions can be set beforehand to make playing easier. These functions are listed below.

- ○ Master Tune : For adjusting the overall pitch of the instrument.
- ○ Transpose : For transposing (shifting) keys to accommodate different players or singers.
- ○ Octave Shift : For shifting the Upper, Lower or Manual Bass Tone interval by one or two octaves.
- ○ MIDI : For having more fun in new musical directions using other electronic instruments connected by MIDI. This need not be set when only this unit is used to create music.
- ○ Pedal switches : For using your feet to control any of the 14 functions assignable to the pedals.
- ○ Utility : For setting any of the 6 functions listed below :
  - •Pitch Bend Range : For setting the maximum amount of pitch change for each Part.
  - •Repeat Note : For adding a rhythmic pattern to Tones played in a Style Play.
  - •Keyboard Sensitivity : For setting the depth at which the keys on the keyboard respond.
  - •LCD Contrast : For adjusting the display contrast.
  - •Metronome Level : For adjusting the metronome volume.
  - •GS Mode : For arranging the KR-3500 sound source so it conforms to the GS format.

Press [EXIT] to return to the Master Screen after having set the function. Even if [EXIT] is not pressed, operation will automatically return to this screen in a short while (4 or 5 seconds). If the display has returned to the Master Screen during operations, perform the procedure again from the start.

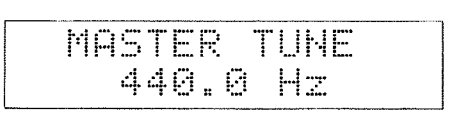
a. Master Tune

This allows the overall pitch of the instrument to be changed. You can therefore tune your KR-3500 to match the pitch of virtually any other instrument. The setting range of this function extends from 415.3 Hz to 466. 2 Hz, and changes can be made in 0.1 Hz increments.

Operation

From the Master Screen :

① Press [TUNE] to display the Master Tune operation screen.

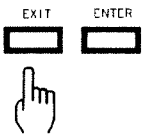


At the factory, the pitch of A4 (La) is set to 440.0 Hz.

When [INC] and [DEC] are pressed together with the Master Tune operation screen displayed, the pitch will instantly return to the factory default setting of 440.0 Hz.

② Adjust the pitch. To raise the pitch, press [INC]; to lower it, press [DEC].

③ After the pitch has been adjusted, press [EXIT] to return to the Master Screen.



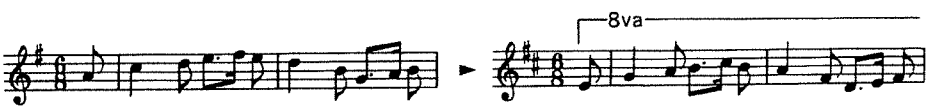
The [TUNE] indicator lights when the Master Tune setting is not 440.0 Hz.

The Master Tune setting is retained in this unit's memory even after the power has been turned off.

b. Transpose

This function can be used when providing accompaniment to transpose the music from the key actually played to match the range of the singer.

Using this function, music can be played using a familiar fingering on the keyboard, but sounding with different pitches.
For instance, when the function is set to G....

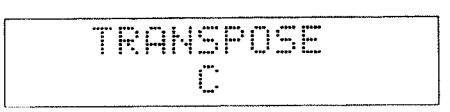


When this is played... This will actually sound...

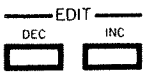
Operation

From the Master Screen :

① Press [TRANSPOSE] to display the Transpose operation screen.

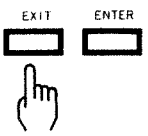


② Decide on the key to which the music is to be transposed. Each time [INC] is pressed, the key is raised by a half step; each time [DEC] is pressed, it is lowered by a half step, and a maximum of one octave is possible.



When a particular key on the keyboard is pressed down while [TRANSPOSE] is depressed, the key can be transposed instantly to the pressed key.

③ After the key has been adjusted, press [EXIT] to return to the Master Screen.



When [INC] and [DEC] are pressed together with the Transpose operation screen displayed, the key will return to the factory default setting of C (Do).

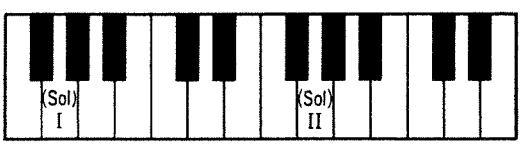
The [TRANSPOSE] indicator lights when Transpose is set to a key other than C.

When the power is turned on, C (Do) will automatically be selected.

c. Octave Shift

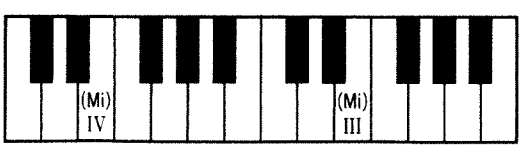
"Octave shifting" refers to raising or lowering the notes being played by one or two octaves. It is used to set the Upper, Lower or Manual Bass Tone interval to a level in keeping with the Part.

When notes are raised by 1 octave :



When key I is played, the result is a sound produced at the pitch of II.

When notes are lowered by 1 octave :



When key III is played, the result is a sound produced at the pitch of IV.

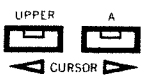
The cursor that is blinking on the screen can be moved by pressing the cursor buttons. Move the cursor to the left input position by pressing [Upper/◀] and to the right input position by pressing [A/▶], and set the new data by selecting the value indicated by the cursor on the KR-3500.

Operation

From the Master Screen :

① Press [OCT SHIFT] to display the Octave Shift operation screen.

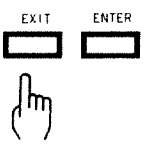
② Use the [Upper/◀] and [A/▶] cursor buttons to move the cursor to the Part (Manual Bass, Lower or Upper) whose Octave Shift value is to be changed.



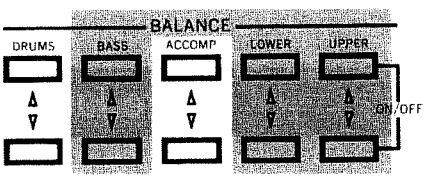
③ Set the amount of Octave Shift. Each time [INC] is pressed, the notes are raised by one octave; each time [DEC] is pressed, they are lowered by one octave. Notes can be raised or lowered by a maximum of two octaves.

Repeat steps ② and ③ to set the shift for the other Parts as well.

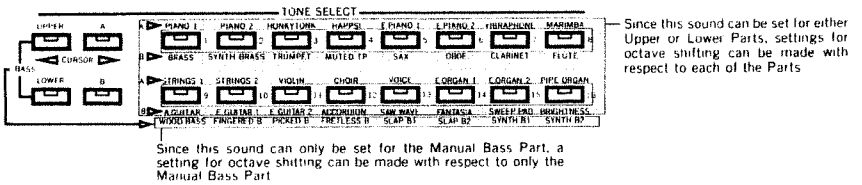
④ After the Octave Shift has been adjusted, press [EXIT] to return to the Master Screen.



The Octave Shift setting for a particular Part can also be changed by pressing the Balance [△] or [▽] button for that Part in the Octave Shift operation screen. When the [△] and [▽] buttons are pressed together, the setting for the Part instantly returns to the factory default setting.



Octave Shift can be set independently for each of the Upper, Lower and Manual Bass Tones. Depending on the Tone concerned, however, Octave Shift may result in extending the sound far beyond the upper limit of the recommended range. This may result in duplicating an octave, producing no sound or duplicating an interval. (The recommended range for each Tone is slightly greater than the actual range which can be played by the corresponding acoustic instrument.)



When the [LAYER] keyboard mode indicator is lit, the sound of the Lower Part Tone is produced in accord with any octave setting that has been made for the Upper Part.
If, for instance, the Upper Part is raised by 2 octaves, the Lower Part Tone will be produced at a pitch that is two octaves higher, regardless of the Octave Shift setting for the Lower Part.

The [OCT SHIFT] indicator lights when Octave Shift has been set (to a value other than 0) for any Parts which can be played.
However, it does not light when Octave Shift for the Lower Part has been set to a value other than 0, but the [LAYER] indicator is lit and Octave Shift for the Upper Part has been set to 0.

This happens because Octave Shift for the Lower Part is automatically set to the Upper Part's Octave Shift setting of 0, due to the fact that the [LAYER] function is ON.

The Octave Shift setting for each Tone is retained in the unit's memory even after the power has been turned off.

d. MIDI

There is no need to make any MIDI settings when you are using only this unit to create music. Refer to page 99 for further details about MIDI.

e. Pedal

One of the 14 functions listed below can be assigned to the left pedal. The right pedal always functions as the damper.

The effect of these nine functions (excluding Sostenuto, Softening, Damper of Lower, Repeat Note ON and Punch In/Out), which can be produced by the left pedals, is the same as when the button in parentheses has been pressed.

Left pedal

- Soft
- Sostenuto
- Repeat Note
  When this function is set, the Repeat Note (☞P. 52) is activated when the pedal is depressed.
- Leading bass ([LEADING BASS])
  When this function is set, it is activated when you depress the pedal.
- Punch In/Out
  Each tap on the pedal can then be used to switch the Composer between recording and playback.
- Arranger start/stop ([START/STOP])
- Composer start/stop ([PLAY], [STOP])
- Intro/Ending ([INTRO/ENDING])
- Fade-in/Fade-out ([FADE])
- Fill-in to Variation ([TO VARIATION])
- Fill-in to Original ([TO ORIGINAL])
- Split ON/OFF ([SPLIT])
- Basic/Advanced Arrangement selection ([BASIC/ADVANCED])
- Damper of Lower
  When this control is set, the Lower Tone can be sustained.

In the Split mode, the Soft control affects both the Lower and Manual Bass Tones.

When the Layer mode has been selected as the keyboard mode, the right pedal damper affects both the Upper and Lower Tones, regardless of the functions assigned to another pedal.

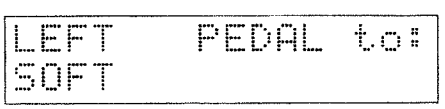
The pedal setting function may change when you switch the GS mode on and off.

Damper control is factory-set to the right pedal, whereas Soft control is set to the left pedal. Default settings will be in effect whenever the power is turned ON.

Operation

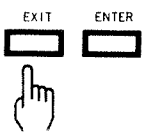
From the Master Screen :

① Press [PEDAL] to display the Pedal Setting screen.



② Select the function to be set using [INC] and [DEC].

③ Press [EXIT] to return to the Master Screen.



When [INC] and [DEC] are pressed at the same time while in the center pedal or left pedal operation screen, the pedal function is returns instantly to the factory default setting.

When the playing mode is changed in the One Touch Program mode, (☞P.21) the left pedal function will also be changed at the same time to settings which are in keeping with the type of music being played.
When [PIANO] is selected :
Soft
When [SPLIT ARRANGER] or [PIANO STYLE ARRANGER] is selected :
Function currently assigned

Damper provided by the right pedal affects only the Upper Part when the keyboard mode is set to Split; at all other times, they affect all the keys. (See page 12 for the keyboard modes.)

f. Pitch Bend Range

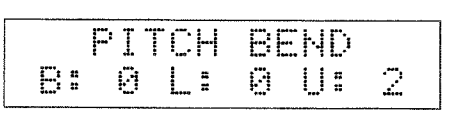
The range is set to 12 (1 octave) for the Manual Drum and Manual Sound Effects and cannot be changed.

The maximum amount of change in the pitch bend effect (Pitch Bend Range) can be set for the Upper, Lower and Manual Bass Parts.

Operation

From the Master Screen :

① Press [UTILITY] several times until the Pitch Bend Range operation screen appears.



② Use the [Upper/◀] and [A/▶] cursor buttons to move the cursor to the Part (Manual Bass, Lower or Upper) whose Pitch Bend setting is to be changed.

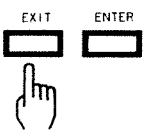
③ Adjust the amount of change. The range increases by a half step (semi tone) each time [INC] is pressed and decreases a half step each time [DEC] is pressed.

The amount of change corresponds to the following settings :

0 = No change
1 = Minor second (One Half step)
2 = Major second (Two Half steps)
3 = Minor third (Three Half steps)
4 = Major third (Four Half steps)
5 = Perfect fourth (Five Half steps)
6 = Augmented fourth (Six Half steps)
7 = Perfect fifth (Seven Half steps)
8 = Augmented fifth (Eight Half steps)
9 = Major sixth (Nine Half steps)
10 = Minor seventh (Ten Half steps)
11 = Major seventh (Eleven Half steps)
12 = One octave (Twelve Half steps)

Repeat steps ② and ③ to set the range for each of the Parts.

④ Upon completion of the adjustments, press [EXIT] to return to the Master Screen.



The Pitch Bend Range of a particular Part can also be set by pressing the [△] and [▽] Balance buttons for that Part on the Pitch Bend Range operation screen. When the [△] and [▽] buttons are pressed at the same time (or when the [INC] and [DEC] buttons are pressed at the same time), the Pitch Bend Range of the Part returns instantly to the factory default setting.

A broad Pitch Bend Range can also be set to achieve a dynamic effect, but control is easier for normal play if the range is set to a value between 1 and 3.

The factory-set range is 2 half steps (major second) for the Upper Part, and 0 for the Lower and Manual Bass Parts. The range returns to the factory default setting each time the power is switched ON.

The Repeat Note can provide play of a chord's notes (one after another) only while a pedal with the Repeat Note function assigned to it is depressed. (See page 48 for further details on the pedal.)

By having two sounds played, you can obtain an effect similar to that produced by twin mallets, or a mandolin. Chords can be played to create arpeggio patterns. You may find that such patterns can be successfully used to create stunning ad-lib pieces, especially if you keep the rate set at a minimal setting. Also, with Manual Drums selected, you can produce drum rolls by pressing a number of keys.

*An arpeggio is a performance technique whereby the notes of a chord are repeated in sequence, rather than having them played simultaneously. (Also sometimes called a "broken" chord.)

g. Repeat Note (Arpeggio)

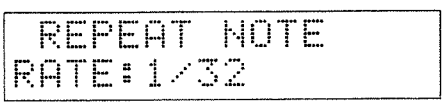
The Repeat Note function can be used to create arpeggios* or play single sounds in rapid succession, depending on the settings (CATE / MODE).

The arpeggio function works with the Upper Part, and the Repeat Note function works for Manual Drums and the Manual Sound Effects Part.

○ RATE

This sets the repeat rate and rhythm. There is a choice of 9 settings : 1/8, 1/8 TRIPLET, 1/8 SWING, 1/16, 1/16 TRIPLET, 1/16 SWING, 1/32, 1/32 TRIPLET and 1/32 SWING. When, for instance, 1/8 is set, 8 sounds are produced in the space of a single bar in the sequence set by MODE.

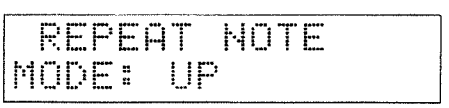
The factory-set mode is 1/32. The rate returns to the factory default setting each time the power is turned ON.



○ MODE

This sets the sequence in which the notes of the chord are to be played. There are three possibilities : UP, DOWN and UP DOWN.

The factory-set default is UP. The mode returns to the factory default setting each time the power is turned ON.



Example)
The following arpeggio effects are produced when a "C" chord (containing Do, Mi and So) is played :
UP : Chord played in sequence of Do → Mi → So → Do → Mi → So.
DOWN : Chord played in sequence of So → Mi → Do → So → Mi → Do.
UP DOWN : Chord played in sequence of Do → Mi → So → Mi → Do → Mi → So.

Operation

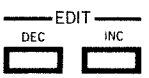
From the Master Screen :

① Press [UTILITY] until the Repeat Note operation screen appears.

```
REPEAT NOTE
RATE: 1/32
```

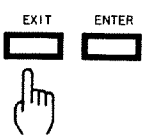
② Use the [Upper/◀] and [A/▶] cursor buttons to move the cursor to the RATE or MODE setting.

③ Change the setting using [INC] and [DEC].



Repeat steps ② and ③ to change the setting to that matching the style of music.

④ Press [EXIT] to return to the Master Screen.



When [INC] and [DEC] are pressed at the same time in the Repeat Note operation screen, the displayed setting returns instantly to the factory default setting.

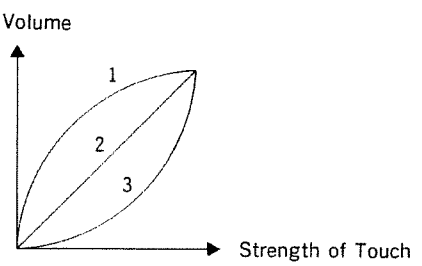
h. Keyboard Sensitivity

The change in the volume and timbre obtained by playing dynamics is selected as one of three levels.

1 (Light) : With this setting, a fortissimo effect is produced with a touch lighter than usual.

2 (Standard) : This is the usual setting and most closely duplicates the response of an acoustic piano.

3 (Heavy) : With this setting, a fortissimo effect requires a touch heavier than usual.



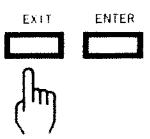
Operation

From the Master Screen :

① Press [UTILITY] until the Keyboard Sensitivity operation screen appears.

② Change the setting using [INC] and [DEC].

③ After the changes have been made, press [EXIT] to return to the Master Screen.



When [INC] and [DEC] are pressed at the same time in the Keyboard Sensitivity operation screen, the level returns instantly to the factory default setting of "2."

"2" is the factory default setting. The level returns to the factory default setting each time the power is turned ON.

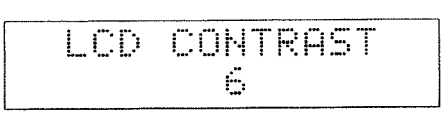
i. Contrast

This enables the display contrast to be adjusted over 10 levels. The display becomes darker as the setting is increased.

Operation

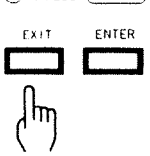
From the Master Screen :

① Press [UTILITY] until the Contrast operation screen appears.



② While monitoring the display, set the Contrast using [INC] and [DEC].

③ Press [EXIT] to return to the Master Screen.



When [INC] and [DEC] are pressed at the same time in the Contrast operation screen, the level returns instantly to the factory default setting of "6."

The Contrast setting will remain stored in the unit's memory even while power is turned off.

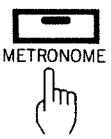
j. Metronome Level

This enables the metronome volume to be adjusted from 0 to 100. The volume increases as the number increases.

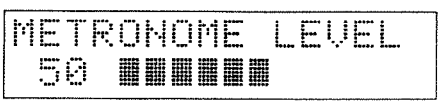
Operation

From the Master Screen :

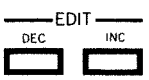
① Press [METRONOME] to start the metronome.



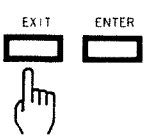
② Press [UTILITY] until the Metronome Level operation screen appears.



③ While monitoring the sound, set the volume to the appropriate level pressing [INC] or [DEC].



④ Press [EXIT] to return to the Master Screen.



When [INC] and [DEC] are pressed at the same time on the Metronome Level operation screen, the volume level returns instantly to the factory default setting of "50."

The Metronome Level setting will remain stored in the unit's memory even while power is turned off.

k. GS Mode

When the GS Mode is set to ON, the sound generator inside the KR-3500 can be made to operate in conformity with the GS format. Besides setting this parameter value to ON using the panel controls, the GS Mode can also be set to ON using reception of the "GS Reset" Exclusive Message.

> The mode can also be set to OFF by turning the unit's power OFF and then back ON again.

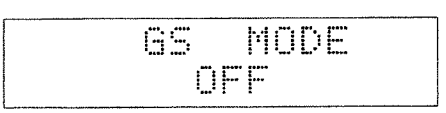
Setting the GS mode to ON changes the settings of the parameters below.

Parameter	**GS Mode setting**
Master Tune	440.0 Hz
Transpose	C
Octave Shift	All 0
Pitch Bend Range	All +2
Part Balance	All 79
Reverberation Type	5 (Hall 2)
Reverberation Part	All ON
Chorus Type	3 (Chorus 3)
Chorus Part	All OFF

Operation

From the Master Screen :

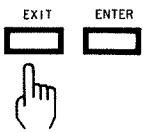
① Press [UTILITY] until the GS Mode operation screen appears.



② Set the mode to ON or OFF using [INC] and [DEC]. When the mode is set to ON, the GS basic setting (or, in other words, the GS mode) is established; when it is set to OFF, the regular playing mode is in effect.

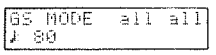
The mode is set to OFF instantly when [INC] and [DEC] are pressed at the same time.

③ Press [EXIT] to return to the Master Screen.



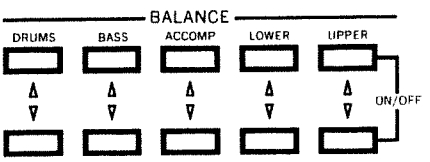
Whenever you start recording, the GS mode will be OFF.

When the ON mode is selected in step ②, the Master Screen changes as follows.



2. Adjusting the Level of Each Part

Using the Balance buttons ([△] and [▽]) in the Balance section, the volume of individual Parts (Part Level) can be adjusted. Volume settings in the range of 0-100 are acceptable.
Additionally, by simultaneously pressing both [△] and [▽] for a particular Part, you can set the ON/OFF of it. If you set to OFF, that Part will be muted (no sound at all will be output).



These two settings (Part Level and Part Switch) for each Part return to the factory default settings each time the power is turned ON.

PART	Part Level	Part Switch
UPPER	100	ON
LOWER	80	ON
ACCOMP	65	ON
A. BASS	65	ON
A. DRUMS	65	ON
M. BASS	80	ON
M. DRUMS	70	ON

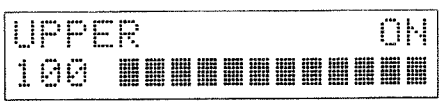
a. Upper Part

○ **Adjusting the Upper part balance (Part Level)**

Operation

From the Master Screen :

① Press one of the Upper buttons (Part Level) ([△] or [▽]) in the Balance section to obtain the screen used to set the Upper Balance.



② To raise the volume, press [△]. To lower it, press [▽].

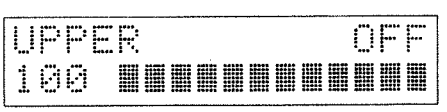
The buttons allow you to make single step changes with each press; or if you hold them down, a continual increase (or decrease) is obtained.

○ **Muting the Upper Part (Part Switch)**

Operation

From the Master Screen :

① Press the Upper buttons [△] and [▽] simultaneously. This instantly mutes the Upper Part without affecting the Balance setting.



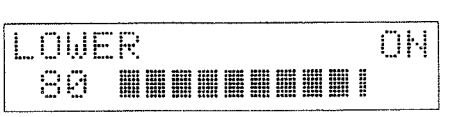
② Press both [△] and [▽] simultaneously, and the Upper Part is no longer muted.

b. Lower Part

Operation

From the Master Screen :

① Press one of the Lower buttons ([△] or [▽]) in the Balance section to obtain the screen used to set the Lower Balance.



Using the Lower buttons ([△] and [▽]), Balance and Mute can be set in the same manner as for the Upper Part.

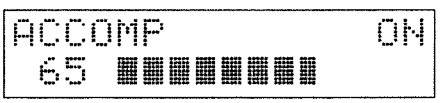
With the indicator on [LOWER] lit, the Lower Part will sound only when the Keyboard is in the Split or Layer condition. However, during the Style Play of Intro / Ending the Lower Part will not sound.

c. Accompaniment Part

Operation

From the Master Screen :

① Press one of the Accompaniment buttons ([△] or [▽]) in the Balance section to obtain the screen used to set the Accompaniment Balance.



Using the Accompaniment buttons ([△] and [▽]), Balance and Mute can be set in the same manner as for the Upper Part.

> The Accompaniment Part will produce sound only while a Style Play is playing.

d. Bass Part

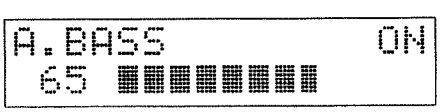
The Bass button can be used to make settings independently for both the Accompaniment Bass and Manual Bass.

Operation

From the Master Screen :

① Select the Bass Part for which the setting is to be changed. With the indicator on [MANUAL BASS] off, the balance for the Accompaniment Bass Part can be adjusted. With the indicator on [MANUAL BASS] lit, the balance for the Manual Bass Part can be adjusted.

② Press one of the Bass buttons ([△] or [▽]) in the Balance section to obtain the screen used to set the Bass Balance.



③ Using the Bass buttons ([△] and [▽]), Balance and Mute can be set in the same manner as for the Upper Part.

e. Drum Part

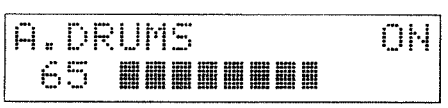
The Drum buttons can be used to set the balance independently for both the Accompaniment Drums and Manual Drums/Manual Sound Effects Parts.

Operation

From the Master Screen :

① Select the Drum Part for which the setting is to be changed.
With the indicators on both [MANUAL DRUMS] and [MANUAL SOUND EFFECTS] off, the balance for the Accompaniment Drums Part can be adjusted. With any one of the indicators lit, whether it be [MANUAL DRUMS] or [MANUAL SOUND EFFECTS], the balance for the Manual Drums / Manual Sound Effects Part can be adjusted.

② Press the appropriate Drum button ([△] or [▽]) in the Balance section to obtain the screen used to set the Drum Balance.



③ Using the Drum buttons ([△] and [▽]), Balance and Mute can be set in the same manner as for the Upper Part.

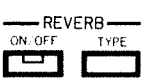
3. Adding Spaciousness to Sounds

Devices that add depth or modulation to a sound are called "effect units". The KR-3500 contains two digital effect units; Reverb and Chorus.

a. Applying Reverberation

Reverberation occurs as a combination of numerous reflected sounds that tend to linger on after the original sound. The KR-3500 provides a selection of Reverb Types so you can obtain just the ambience that you need for your music.

To add reverberation to sounds, turn on the Reverb effect. The effect will be applied to all Parts.

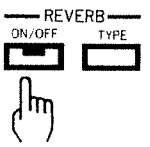


The Reverb setting returns to the factory default setting each time the power is turned ON.

○ Turning Reverb On/Off

Operation

① By pressing [ON/OFF] in the Reverb section, you can turn Reverb on and off.



When the indicator is lit, the effect is on.

○ Selecting the Reverb Type

A selection of 8 Reverb Types is provided, allowing you to obtain exactly the ambience you wish.

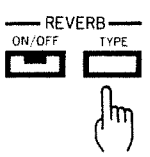
1 = Room 1 : Provides the reverberation of a small room.
2 = Room 2 : Provides the reverberation of a small club.
3 = Room 3 : Provides the reverberation of a very large room.
4 = Hall 1 : Provides the reverberation of a small concert hall.
5 = Hall 2 : Provides the reverberation of a large concert hall.
6 = Plate : Provides a bright, metallic reverberation.
7 = Delay : Provides an echo-type sound.
8 = Pan Delay : A panned delay effect. Notes you play will repeatedly move between the left and right speakers.

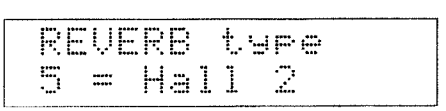
Operation

From the Master Screen :

① Press [TYPE] in the REVERB section to obtain the screen used to select the Reverb Type.

Hall 2 is the factory default preset.

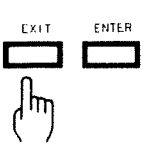




② Use [INC] and [DEC] to select the desired Reverb Type.

To quickly revert to the factory default setting of Hall 2, press both [INC] and [DEC] from the screen used to select the Reverb Type.

③ Press [EXIT] to return to the Master Screen.



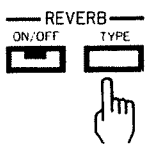
○ Adjusting the Reverb Level for Individual Parts

Follow the procedure below to alter the extent to which Reverb is applied to individual Parts. For example, you could set it so a deep reverberation is applied to the Upper Part, and a shallow reverb is applied to the Lower Part.

Operation

From the Master Screen :

① Press [TYPE] in the Reverb section.



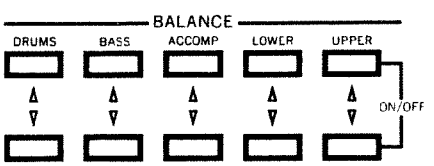
The buttons allow you to make single step changes with each press; or if you hold them down, a continuous increase (or decrease) is obtained.

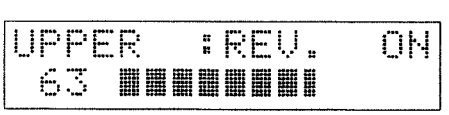
② Press the Balance button ([△] or [▽]) for the Part for which you wish to make the change, and obtain the screen used to set the Reverb Level.

The Drum button can be used to set the Reverb Level independently for both the Accompaniment Drums and Manual Drums / Manual Sound Effects Parts.
With the indicators on both [MANUAL DRUMS] and [MANUAL SOUND EFFECTS] off, the Reverb Level for the Accompaniment Drum Part can be adjusted. With any one of the indicators lit, whether it be [MANUAL DRUMS] or [MANUAL SOUND EFFECTS], the Reverb Level for the Manual Drums / Manual Sound Effects Part can be adjusted.

If Reverb is OFF for all of the Parts, the indicator on [ON / OFF] will not light even if pressed, and reverberation will not be obtained. Note also that even if Reverb is ON for some Part, if the indicator on [ON / OFF] is dark, reverberation will not be obtained for that Part.

The Bass button can be used to set the Reverb Level independently for both the Accompaniment Bass and Manual Bass Parts.
With the indicator on [MANUAL BASS] off, the Reverb Level for the Accompaniment Bass Part can be adjusted. With the indicator on [MANUAL BASS] lit, the Reverb Level for the Manual Bass Part can be adjusted.

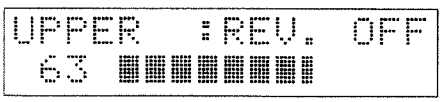




The Part which corresponds to the Balance button you have pressed will be shown in the display.

③ Press [△] to select a deep reverb, and [▽] to select a shallow reverb.

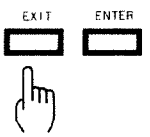
Also, when you wish to have no effect at all, press [△] and [▽] simultaneously. The following will appear in the display, and Reverb will no longer be applied to that Part.



Once again, press [△] and [▽] simultaneously, and Reverb will be applied at the level that appears in the display.

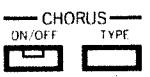
The Reverb that is applied to all Parts will be of the same type. (Reverb Type ☞ page 61)

④ Press [EXIT] to return to the Master Screen.



b. Adding a Feeling of Spaciousness to Sound~ Chorus

The Chorus effect results in sounds that are perceived as being more spacious and "fat". This effect can be applied to these three Parts : Upper / Lower / Manual Bass.



The Chorus setting returns to the factory default setting each time the power is turned ON.

○ Chorus On/Off

The Chorus effect can be controlled independently for each Part (Upper / Lower / Manual Bass).

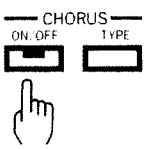
The selection of Tones should be made in the same manner as explained in "Tone Select" (☞ P. 16).

Operation

① Using [UPPER / ◀] and [LOWER] in the Tone Select Section, select the Tone for the Part to which you wish to apply Chorus.

Upper Part : Press [UPPER / ◀], and confirm that its indicator is lit.
Lower Part : Press [LOWER], and confirm that its indicator is lit.
Manual Bass Part : Press [UPPER / ◀] and [LOWER] simultaneously, and confirm that their indicators are lit.

② Press [ON / OFF] in the Chorus section to turn chorus On/Off.



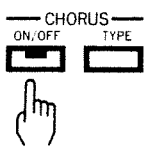
When the indicator is lit, the effect is ON.

Example) Applying Chorus to the Upper Tone.

Operation

① Press [UPPER / ◀] in the Tone Select Section, and confirm that its indicator is lit.

② Press [ON / OFF] in the Chorus Section, and confirm that its indicator is lit.



○ Selecting the Chorus Type

The following four types of Chorus are available :

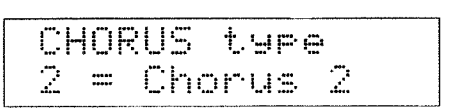
1 = Chorus 1 : slowly fluctuating, shallow Chorus.
2 = Chorus 2 : slowly fluctuating, deep Chorus.
3 = Chorus 3 : rapidly fluctuating, shallow Chorus.
4 = Chorus 4 : rapidly fluctuating, deep Chorus.

Chorus setting "2" is the factory default.

Operation

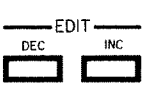
From the Master Screen :

① Press [TYPE] in the Chorus Section to obtain the screen used to set the Chorus Type.

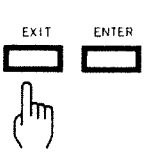


From the Chorus Type setting screen, pressing [INC] and [DEC] simultaneously will Select the factory default Chorus Type; Chorus 2.

② Using [INC] and [DEC] select the Chorus Type you wish.



③ Press [EXIT] to return to the Master Screen.



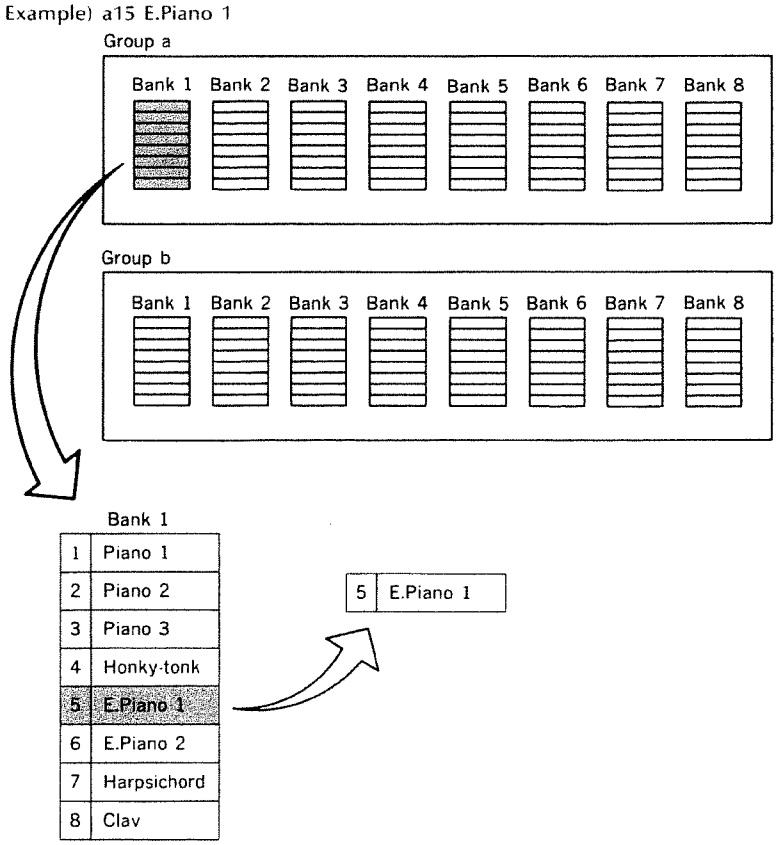
The same chorus effect can be obtained for all parts (Tones) whose Chorus settings are on.

4. Tone Expansion Mode
~ Increasing the Number of Tones You Can Use

Ordinarily, the selection of Tones you have available totals 40 (including Bass sounds). However, once you select the Tone Expansion Mode, 128 different sounds become available.

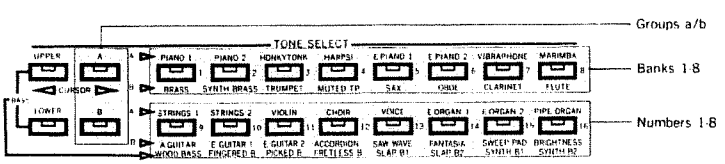
The 128 Extension Tones are organized into 2 Groups; 8 Banks, and 8 Numbers.

Example) a15 E.Piano 1



In the Tone Expansion Mode, the group buttons is used to select Group a and b, the upper row of Tone buttons is used to select from BANKs 1-8, and the lower row is used to select from NUMBERs 1-8.

The Tone number is chosen by using the Bank buttons for the first digit, and the Number buttons for the second digit.



The "Expansion Tone List" (See P. 120) should be referred to when selecting Tones while in the Tone Expansion Mode.

Example) Selecting "b44 Space Voice" for the Upper Tone.

Operation

From the Master Screen :

① In the Tone Select section, press [A] and [B] simultaneously to select the Tone Expansion Mode.

After these buttons are pressed, the display shown below will appear momentarily, and then you are returned to the Master Screen.

```
TONE SELECT MODE
    Expansion
```

② Press [UPPER], and confirm that its indicator is lit.

③ Press [B], and confirm that its indicator is lit.

④ Press Bank button [4].

⑤ Press Number button [4].

The following will appear in the display.

```
UPPER  Tone
b44 Space Voice
```

If you again press [A] and [B] simultaneously, the display shown below will appear momentarily. The unit will exit the Tone Expansion Mode and return to the standard mode.

```
TONE SELECT MODE
     Normal
```

Should the Tone you intend to select be located within the same Group and Bank that the currently selected one is, all you need do is press the appropriate Number button to achieve the change. For example, to switch from "a44 Clean Gt." to "a45 Mute Gt," simply press Number button [5]

Whenever you shift between Tone modes, that is when changing from the standard mode to the Tone Expansion Mode, or vice - versa, the instrument will continue to produce the sound that was selected while in the former mode, until you specifically change it by making a new selection.

5. Music Style Expansion Mode
~Increasing the Music Styles You Can Use

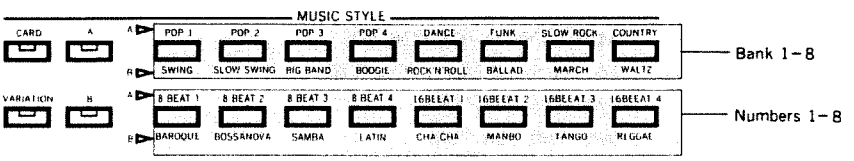
In the standard mode, you have a choice of 32 Music Styles. However, if you set the unit to the Music Style Expansion Mode, you can add another 32, for a total of 64 Music Styles.

The 64 Music Styles are organized into 8 Banks and 8 Numbers.

	Bank 1	Bank 2	Bank 3	Bank 4
1	ROCK 1	8 BEAT 1	BOOGIE	SLSWING 1
2	ROCK 2	8 BEAT 2	ROCK'N	SLSWING 2
3	RAP	8 BEAT 3	TWIST	SWING
4	HOUSE	8 BEAT 4	CHARLEST	FOXTROT
5	DANCE	16 BEAT 1	SL ROCK 1	BIG BAND
6	FUNK 1	16 BEAT 2	SL ROCK 2	SHUFFLE
7	FUNK 2	16 BEAT 3	BALLAD 1	SW WALTZ
8	FUSION	16 BEAT 4	BALLAD 2	DIXIE

	Bank 5	Bank 6	Bank 7	Bank 8
1	BOSSA	SL WALTZ	PDOBLE	POP 1
2	SAMBA	WALTZ	KARS	POP 2
3	LATIN	MARCH	ANADOLU	POP 3
4	SALSA	POLKA	ARAB	POP 4
5	CHACHA	BAROQUE	MALFOUF	POP 5
6	RHUMBA	COUNTRY	KERONCNG	POP 6
7	MAMBO	BEGUINE	TROT	ROCK'N' ROLL
8	TANGO	REGGAE	ENKA	SWING 2

In the Music Style Expansion Mode, the upper row of Style Select buttons is used to select from BANKs 1-8, and the lower row is used to select from NUMBERs 1-8.



Operation

① In the Music Style section, press (A) and (B) simulaneously (both indicators will light). The Music Style Expansion Mode has now been selected.
② Specify the Bank by pressing a Style Select button in the upper row.
③ Specify the Number by pressing a Style Select button in the lower row.

To return to the standard mode, press (A) and (B) simultaneously.

6. Storing a Group of Panel Settings

a. What is a User Program?

The unit's User Programs can also be stored separately on a Memory Card (☞ P. 90).

A group of panel settings (which you have determined as being most suitable for your purposes) can be stored together as a "User Program", and recalled whenever needed. Up to five such User Programs can be stored in the instrument's memory.

Settings for all the functions listed below can be stored within a User Program.

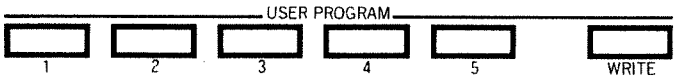
- ○ Tone Select (for Upper, Lower, and Manual Bass Parts)
- ○ Balance (Part level and Part switch settings for each Part)
- ○ Music Style
- ○ Tempo
- ○ Variation (On/Off)
- ○ Arranger (On/Off)
- ○ Arranger Select (BASIC/ADVANCED)
- ○ Keyboard Mode
- ○ Lower (On/Off)
- ○ Manual Bass (On/Off)
- ○ Split Point
- ○ Chord Hold (On/Off)
- ○ Chord Intelligence (On/Off)
- ○ Melody Intelligence (On/Off)
- ○ Reverb (overall On/Off, Type, Level for each Part, On/Off for each Part)
- ○ Chorus (On/Off for each Part, Type)
- ○ Octave Shift (Upper, Lower, Manual Bass)
- ○ Transpose
- ○ Pedal Switch (Setting for Left Pedal)
- ○ Manual Drums (On/Off, Set)
- ○ Manual Sound Effects (On/Off)
- ○ Sync Start (On/Off)
- ○ Sync Stop (On/Off)
- ○ Leading Bass (On/Off)
- ○ Intro (On/Off)
- ○ Pitch Bend Range (Upper, Lower, Manual Bass Parts)
- ○ Repeat Note (Mode, Rate)
- ○ Keyboard Sensitivity

Any data that you have placed in the unit's memory will remain stored for about a month (if the unit's power has been left off.) For this reason, you will need to either periodically turn the unit on, or store a backup of such data on Memory Card (M - 256E : Sold separately) beforehand, if you wish to make sure that it is not lost. (Memory Card ☞ page 81)

For the factory default settings of the five User Programs, refer to User Program (☞ P. 127).

b. Calling up User Programs

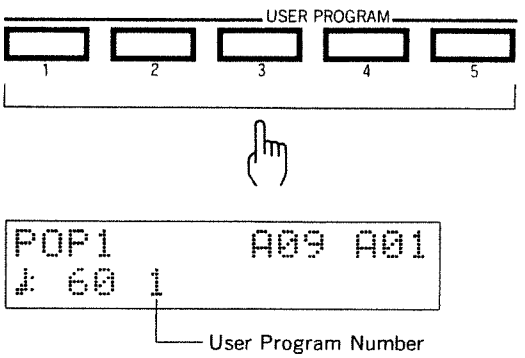
You simply need to press one of the User Program buttons ([1] through [5]) to call up the corresponding Program.



Operation

From the Master Screen :

① Press the desired User Program button ([1] through [5]).



To cancel a User Program, press the same User Program button again. The User Program will now be cancelled and the previous panel settings will return.

c. Storing Panel Settings

Five User Programs are available for storage of panel settings.

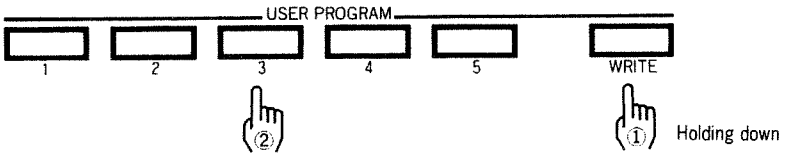
Operation

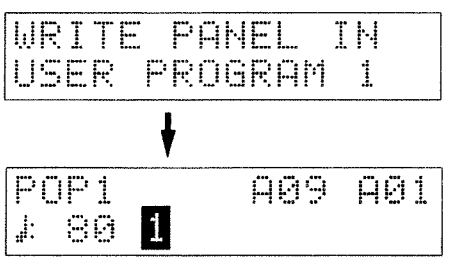
From the Master Screen :

① Make all the relevant panel settings.
② Hold down [WRITE].
The following will appear in the display.

Be aware that any time you store a different set of panel settings to a User Program number, anything previously contained there will be erased. Note also that User Programs that have been altered or written over can be restored to their original factory default settings using the "Factory Setup" procedure explained in the following section. Whenever you have User Programs that you may wish to retain, you should always make a backup of them on Memory Card (☞ P. 90) before storing anything new, or reverting to the factory defaults.

③ While continuing to hold [WRITE], press the target User Program button. Once pressed, the display shown below will appear briefly.





Storage of the User Program will have been completed when the Master Screen appears. The selected User Program number will be shown in the display.

d. Factory Setup

The KR-3500 is equipped with a feature which allows you to restore all of the settings that were originally made at the factory.

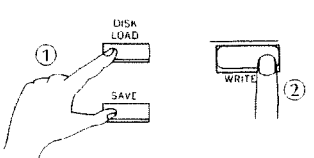
Operation

From the Master Screen :

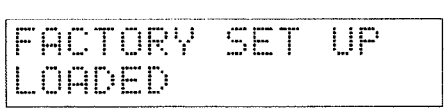
① Check to make sure there is no Memory Card inserted in the Card Slot.

② While holding down both [LOAD] and [SAVE], press [WRITE].

—MEMORY CARD—

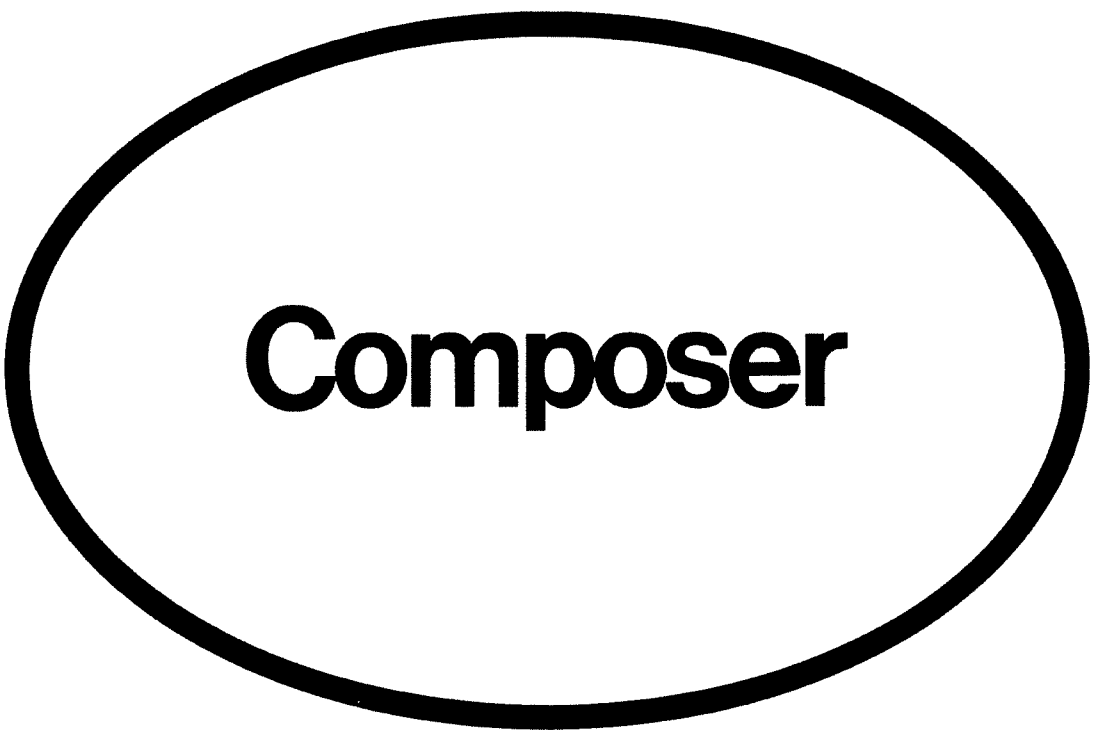


The following will appear in the display :



During step ② above, the following may be shown momentarily in the display. This is normal and does not affect the Factory Setup procedure.

4



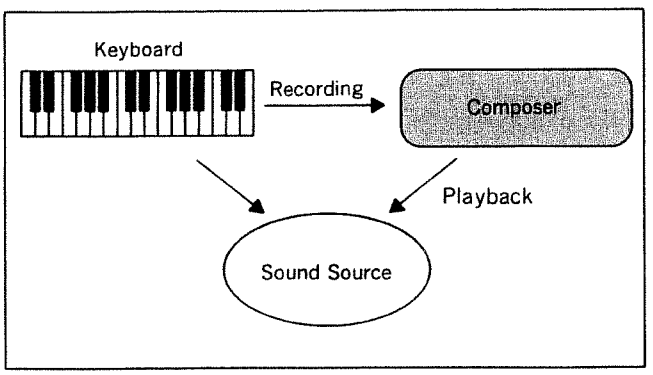
1. Overview

a. What is the Composer?

The Composer is in many ways similar to a tape recorder, since it allows you to record and then play back whatever has been played on the KR-3500. Actually, it's more like a multi-track tape recorder, since you have a number of tracks available (☞P. 75).

The Composer is also essentially a "sequencer", since it provides for the automatic play of the KR-3500's internal sound source in accord with recorded performance data ("sequences").

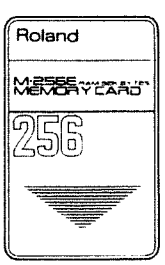
Note that as you play the KR-3500, it's not the sounds themselves that are recorded, but rather the data (in digital form) that describes what occurred during the performance. This data is used afterwards to recreate that performance, just the way it was played originally.



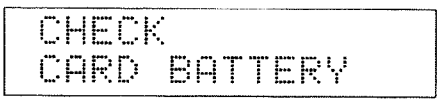
b. Internal Memory and Memory Cards

A tape recorder requires a reel of magnetic tape in order to record or playback a performance. With the Composer, however, the data that is recorded is stored in the KR-3500's internal memory, so recording/playback can be accomplished without the need for media such as tape. This might be sufficient as long as you do not turn off the power, since all data in internal memory will then be lost. However, if you wish to keep your recordings, you must transfer them to a physical storage medium. The KR-3500 uses M-256E Memory Cards for this purpose (hereafter referred to simply as "Cards").

One Song (created using the Composer) and one User Program setting can be stored on a Memory Card.



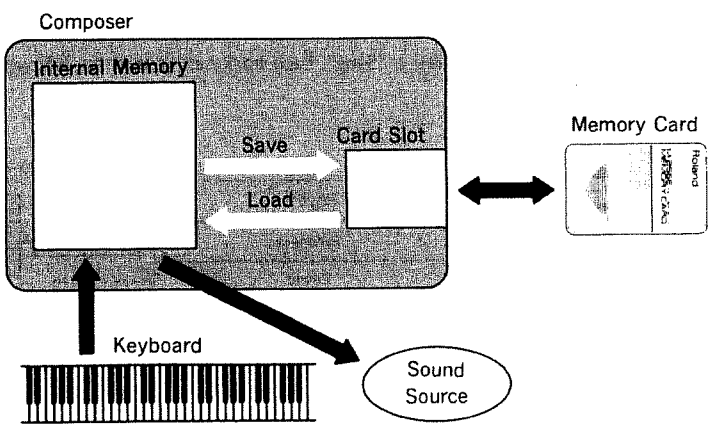
Every Memory Card uses the power from a battery to retain data stored on the Card. If the battery is exhausted, or there is no battery in the Card, the following message will appear :



In order for Memory Cards to function correctly with the KR-3500, proper settings must be made. For details, refer to the Memory Card manual.

c. Card Slot

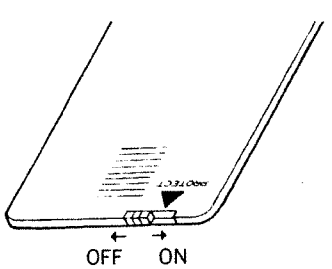
The KR-3500 contains a CARD slot into which Memory Cards can be inserted. Once a Memory Card has been inserted into this slot, data from the Composer's internal memory can be transferred to the Memory Card ("Save"), or data from the Memory Card can be transferred to the KR-3500's internal memory ("Load").



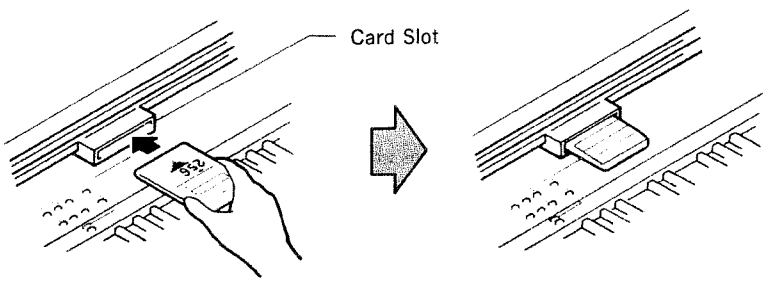
Transferring data from internal memory to a Card does not affect the original data in memory; a copy is simply made.

<Handling Memory Cards>

Memory Cards contain a 'write protect' switch which can protect a card from accidental erasure. It is recommended that the switch be kept in the PROTECT(ON) position and moved only when you wish to save new data onto the card.



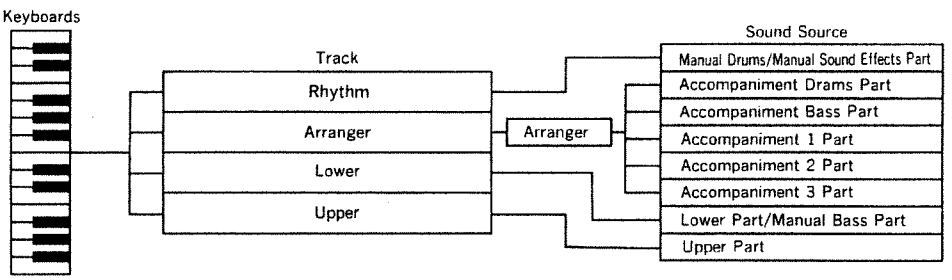
Make sure that the write protect switch is kept in the proper position, then insert it into the CARD slot.



Make sure the card is faced properly, and insert it into the correct direction.

d. Tracks

The Composer provides three Performance tracks and one Rhythm track. An entire set of data recorded in these four tracks is called a "Song". Each track can contain the following data :



○ **RHYTHM Track**

This track records the data you generate by playing any Manual Drums or Manual Sound Effects. Any tempo changes made during the performance will also be recorded.

○ **ARRANGER Track**

This track records data which describes whatever occurs while you operate the Arranger (such as chord detection, as well as the timing of when you start/stop it). If the Music Style is not playing, nothing at all will be recorded on this track.

The following data will be recorded :

- Chord selections (only while the Arranger is ON).
- Changes made in the balance for a Accompaniment Part.
- Choices made for Music Styles, such as for Intro/Ending, Fade, Sync Start/Stop, Break and Fill-in.

○ **LOWER track**

This track records the data you generate by playing the LOWER part and/or the Manual Bass part.

○ **UPPER track**

This track records the data generated while playing the Upper part.

e. Song and Memory Capacity

All the recorded data on these four tracks make up a "Song". The KR-3500 can store one Song (up to 18,000 notes) in its internal memory, and a Memory Card can save one Song (up to 5,000 notes). However, the capacity of internal memory is two times larger than that of a Memory Card, so if the Song data in memory approaches 5,000 notes, the following message will appear :

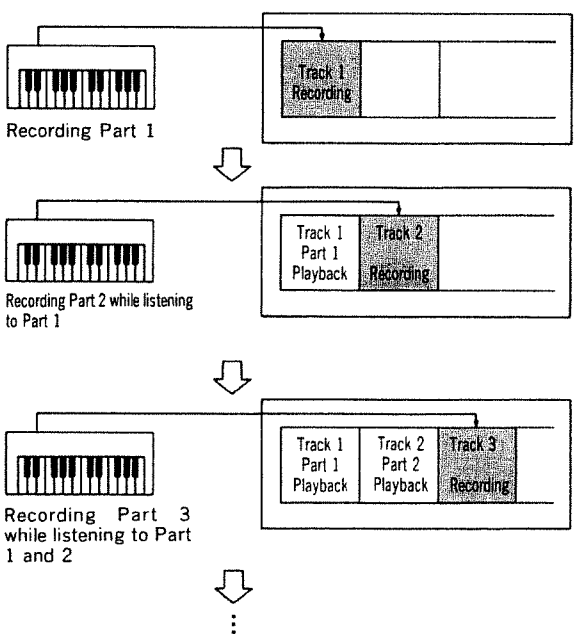
```
APPROACHING
MEM.CARD LIMIT!
```

After a little while the message will disappear. This means that the whole thing won't be saved onto a Memory Card.

> One Song can contain a maximum of 999 measures.

f. Multi-track Recording~The Composer versus Multi-track Tape Recorders

In any multi-track recording, you are able to listen to whatever tracks have already been recorded, while playing and adding additional parts on different tracks.



Although it will take a little more time, using the multi-track recording feature to record things one track at a time allows you to create Songs that you could never have played all in one take. Those with experience using a multi-track tape recorder have already taken advantage of such capabilities. The Composer, however, also provides the following advantages :

○ **Since the performance is recorded in digital form...**
- there is no loss in sound quality, no matter how many times the data is layered.
- there is no crosstalk (leakage of sound onto other tracks).
- you can instantly move to any point within a Song.
- you can store the performance data on a small, convenient Card.

○ **Since musical data (and not sound) is stored in digital form...**
- the tempo can be changed without affecting the pitch (the transpose function).
- you can change Tones or Music Styles during playback whenever you wish.
- note timing can be corrected automatically (the Quantize function).
- sections (or all) of the data can be copied or deleted.

One disadvantage of sequencers is that, since the sound itself is not being recorded, it is not possible to record vocals or acoustic instruments.

2. Recording

The Time Signatures possible on the KR-3500 are; 3/4, 4/4 and 4+5/8. For details, see the "Music Style List" (☞P. 126).

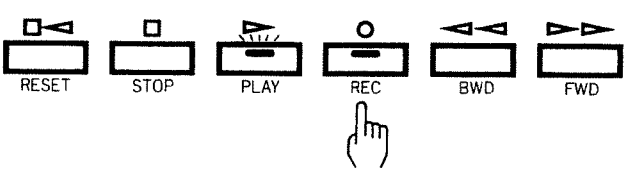
You should now be ready to try recording something! In addition to the notes you play, the Composer will faithfully capture all aspects of your performance, including changes in Tone and Music Style, playing dynamics, etc.
The Time Signature of the selected Music Style is automatically set for a Song. Consequently, once you record a Song, you can't change the Time Signature.

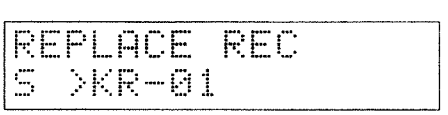
Operation

From the Master Screen :

① Make all the settings necessary to play.

② Press [REC].

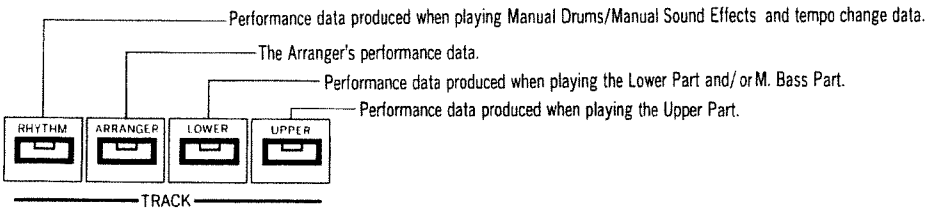




The KR-3500 automatically assigns a Song Name (like "KR-01") to a recorded Song. However, you can change this name when saving the Song onto a Memory Card (☞P. 81).

③ In the Track Select section, press the Track Select button(s) ([RHYTHM] - [UPPER]) corresponding to the track(s) you want to record on.

> The Composer provides a selection of four tracks, each with its own Part (☞P.74). Select the track (s) for the part(s) you want to record.



○ Immediately after pressing [REC], any track can be made the target for recording by pressing the relevant Track Select button (one that is not already lit), and getting its indicator to start flashing. Pressing the same button a second time turns its indicator off, which means that recording will not take place on that track.

> With each press of the button, the indicator is either turned off, or will begin flashing.

○ If immediately after pressing [REC] there are Track Select buttons that are lit, this means that there is data already recorded on those tracks.
Pressing any such buttons will cause the indicator to start flashing, showing that you can go ahead and re-record on that track (using "Replace" or "Mix" recording). If you press it one more time, the indicator goes out, meaning that the track will thereafter be muted (will not sound) during multi-track recording.

> With each press of a button, the indication changes :
> Flashing·····Track is targeted for recording.
> Off ·····Track onto which nothing will be recorded.
> Lit ·····Track has already been recorded.

④ Adjust the tempo with the Tempo Slider or the [INC]/[DEC] buttons.
You can check the tempo by monitoring the each flash of the Beat Indicator.

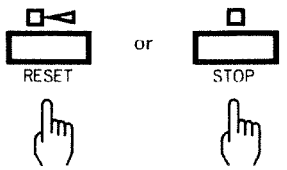
> Pressing [METRONOME] at this point will allow you to hear the metronome.

⑤ Start recording. If the Arranger track was selected in step ③ , the recording can be started in one of five ways (If not, you can start recording by pressing [PLAY]) :

○ Press [PLAY].
○ Press [START/STOP].
○ Press [INTRO].
○ Press [SYNC START] and then a key in the chord recognition area of the keyboard.
○ Press [INTRO] + [SYNC START] and then a key in the chord recognition area of the keyboard.

> Press [PLAY] and recording will start immediately following the two measure Count-in phrase.

⑥ When the performance is finished, press [STOP] or [RESET] to stop recording.



When you've done recording, the Track Select buttons for the tracks you just recorded will be lit.

Note

Recording cannot begin if a Music Style has been started first. Also, when you press [STOP] during a Style Play recording, the Music Style will automatically stop at the same moment.

Both [STOP] and [RESET] will stop recording. However, they do so in slightly different ways :
[STOP] ·····Stops recording immediately at the point where the button was pressed.
[RESET] ·····Stops recording and returns the Composer to the first measure of the Song.

You can store up to 18,000 notes in the internal memory.
When you have used 90% of the memory during recording, the following message will be displayed :

```
 INT.MEM.LIMIT!
S >KR-01
```

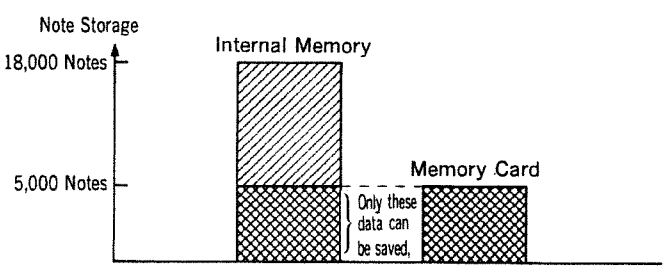
If you continue recording, the internal memory capacity will eventually be exceeded and you won't be able to enter any more data. At that point, the following message will appear :

```
 INT.MEM.FULL!!
S >KR-01
```

A Memory Card can store up to 5,000 notes. Consequently, if the data in the internal memory approaches 5,000 notes during recording, the following message will be displayed for a moment :

```
APPROACHING
MEM.CARD LIMIT!
```

In this case, you may continue recording if you wish. However, the recorded Song can't be saved properly onto a Memory Card (the latter part will be missing).

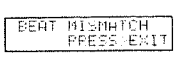


3. Playback

Now try to playback the data you just recorded. If you're not too impressed with your performance, you can always go back later and re-record the track (using the Replace Recording method). You can listen to what you recorded using any of the playback methods described below.

a. Playing Back Song Data

You cannot use a Music Style with a Time Signature that is different from that of the recorded Song. If you attempt to do so, the message shown below will appear in the display. You should always select a Music Style that matches the recorded Time Signature.

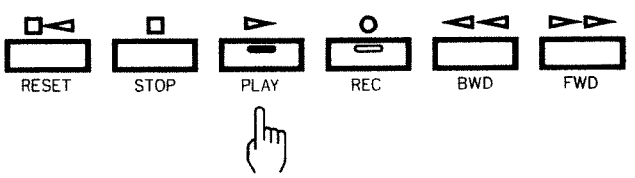


While playing back Song data from the Arranger track, you can freely change Music Styles or adjust the tempo.

Operation

From the Master Screen :

① Press [PLAY].
Play starts immediately.



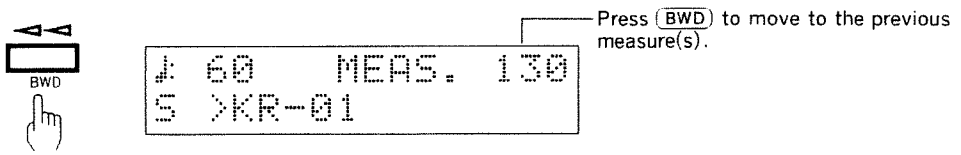
> By holding down [STOP] while you press [PLAY], the Song will start to playback immediately following the two measure Count-In phrase.

② Play stops automatically when the Song is over. If you want to stop in the middle, press [STOP] or [RESET].

> Play stops no matter which you press, the only difference being that [STOP] leaves you at the point where you pressed the button, and [RESET] takes you back to the beginning of the Song.

b. Rewind (BWD)

The [BWD] button operates like the Rewind button on a tape recorder. Here, however, the following screen will appear when the button is pressed. You'll move backward one measure for every press of [BWD], and you can obtain a continuous rewind by holding the button down.



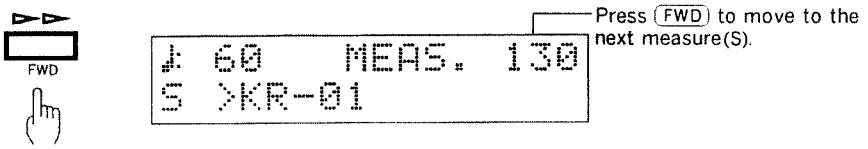
After rewinding, press [PLAY]. Playback will start from the Measure Number displayed on the screen.

Note

If you try to start playback (or recording) of Style Play in the middle of a Song, there may be a delay before the auto accompaniment joins in. This is because the measures needed for the Intro/Original/Variation/Ending are structured into block units, and all the information for how the accompaniment is programmed is specified at the beginning of each block. If you begin playback (or recording) of Style Play from within a block, auto accompaniment will begin when you reach the beginning of the next block.

c. Fast-Forward (FWD)

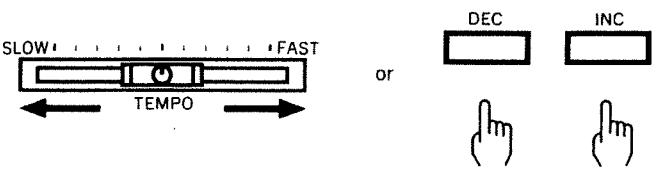
The [FWD] button operates like the Fast-Forward button on a tape recorder. Here, however, the following screen will appear when the button is pressed. You'll move forward one measure for every press of [FWD], and you can obtain a continuous fast-forward by holding the button down.



After fast-forwarding, press [PLAY]. Playback will begin from the Measure Number displayed on the screen.

d. Changing the Playback Tempo

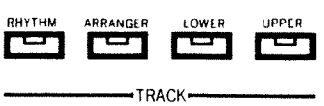
You can change the playback tempo of the music simply by moving the Tempo slider or using [INC] or [DEC]. If you can't play a Song at the correct tempo, simply record it at a slower one. The tempo can be increased during playback without affecting the pitch.



You can also change the tempo before playback using the Tap Tempo button (☞P.33).

e. Muting Tracks During Playback~Track Mute

A lit Track Select button means that the track has something recorded on it. You can "mute" that track (keep it from sounding) during playback by pressing that Track Select button ([RHYTHM] - [UPPER]).



Press it one more time (to light the Track Select button again) and enable play.

4. Storing the data onto a Memory Card~Save

As we have mentioned, any performance data stored in internal memory is lost when the power is turned off. If you want to store data permanently, you should save it onto a Memory Card. Using a Memory Card (M-256E : sold separately), you can store Song data and User Program data exactly as you created it.

a. Saving Song data

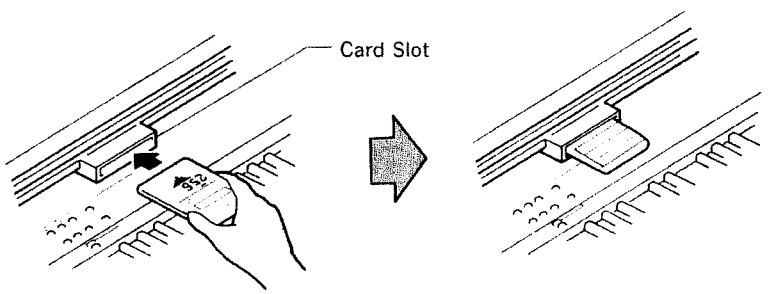
You can save Song data onto a Memory Card (M-256E : sold separately).

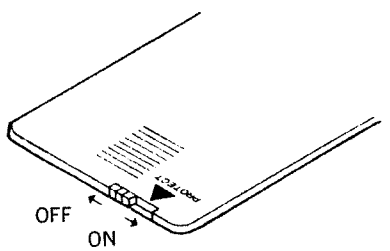
Operation

From the Master Screen :

① Insert the Memory Card into the CARD slot. Move the protect switch to the WRITE (OFF) position.

Be sure to insert the Card properly; face-side up.





Should you wish to cancel the Save process, press [EXIT].

② Press [SAVE].

The following screen will appear in the display :

```
SAVE SONG
S >KR-01
```

If you have inserted a brand new Card, or one that has been used by a different machine, you'll see one of the following screens after pressing [SAVE] :

▼Read Only Memory Card (such as a Music Style Card)

```
 CANNOT SAVE!
INSERT MEM. CARD
```

Press [EXIT]. Insert the proper Memory Card and press [SAVE] again.

▼Brand new Card (or a Card used by a different machine)

```
IMPROPER CARD!
OVERWRITE?>ENTER
```

Any data contained on a Card will be lost by pressing [ENTER]. If you decide to cancel the save procedure at this point, press [EXIT].

If there is no Song data in internal memory, the following screen will appear when [SAVE] is pressed :

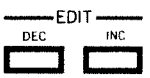
The KR-3500 automatically assigns a Song name (like "KR-01") to a recorded Song. However, you can change this name using the [UPPER/◀]/[A/▶] and [INC]/[DEC] buttons. If you don't want to change the name, you can skip steps ③, ④ and ⑤.

③ Press [UPPER/◀] or [A/▶] to move the cursor (the flashing point in the display) to the place you wish to enter the character.

Press [UPPER/◀] to move the cursor to the left.
Press [A/▶] to move the cursor to the right.

④ Press [INC] or [DEC] to select the character you wish to enter. The characters will be displayed in the following order :

···xyz0123456789 !" #%&' ( ) *+, − . / : ; =? ^ _ ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012···

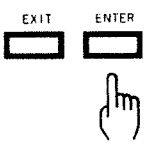


You can enter a Song name of up to 12 characters.

[INC] steps you through the characters in the order shown, [DEC] in the reverse order.

⑤ Repeat steps ③ and ④ until the Song name is complete.

⑥ Press [ENTER] and the save procedure will begin immediately.



When the save procedure is complete, you'll see the following screen for a moment before returning to the Master Screen :

```
SAVE COMPLETED
S >KR-01
```

If, in step ⑥, you try to save the Song data onto the card which has already been saved, you'll see the following message :

```
OVERWRITE DATA
SURE?PRESS>ENTER
```

Press [ENTER], if you want to load the new data (however, old data will be lost). This is called "overwriting" the data. If instead, press [EXIT], and save the Song data onto another card. :

⑦ Move the protect switch to the ON (PROTECT) position. Then remove the Card from the CARD slot.

You should leave the switch in the ON (PROTECT) position most of the time to protect your data from accidental erasure.

5. Reading the Performance data from a Memory Card~Load

You can cancel load procedure by pressing [EXIT].

Loading is the process of reading the Song data or User Program data stored on a Memory Card back into the internal memory of the KR-3500. After loading the data, you can play it back or re-record it with the Composer.

a. Loading Song data

You need to load Song data on a Memory card back into the internal memory. After the data has been loaded, you're ready to playback or re-record it with the Composer.

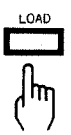
Operation

From the Master Screen :

① Insert the appropriate Memory Card into the CARD slot.

> Be sure to insert the Card properly; face-side up.

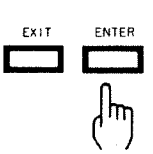
② Press [LOAD] and the following screen will appear :




```
LOAD SONG
S >KR-01
```

> If you press [LOAD] and the Card doesn't contain any Song data, you'll see one of the following screens :
>
> ```
> NO SONG DATA
>      PRESS>EXIT
> ```
>
> or
>
> ```
> LOAD USR PROGRAM
>      PRESS>WRITE
> ```
>
> In this case, press [EXIT]. Insert the proper Memory Card and then perform the load operation again.

③ Press [ENTER] and the Song load will begin immediately.



If you press [PLAY] instead of [ENTER] in step ③, the Song will automatically start playback as soon as the data has been loaded.

When the Song load is complete, you'll see the following screen for a moment before returning to the Master Screen :

```
LOAD COMPLETED
S >KR-01
```

If the Song data has already been saved in the internal memory when you try to start the load operation in step ②, you'll see the following screen :

```
OVERWRITE SONG
SURE?PRESS>ENTER
```

Press [ENTER] again if you're sure you want to go ahead and load the new data, deleting (overwriting) the data that's already there. If you decide, however, that you actually did want to keep the material you already had in memory, press [EXIT] at this point and save the Song data onto another Memory Card. Then perform the load procedure again.
If you didn't make changes in the loaded song or add something to it, the above message won't appear.

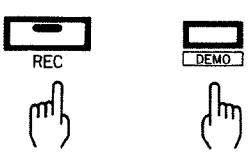
6. Deleting Song Data in the Internal Memory ~Delete

The KR-3500 can only contain one Song at a time in its internal memory. Consequently, you should delete that Song before re-recording, or before beginning work on a new Song.

Operation

From the Master Screen :

① Press [REC] while holding down [DEMO].




```
DELETE SONG
SURE?PRESS>ENTER
```

② Press [ENTER] and User Program loading will begin immediately.

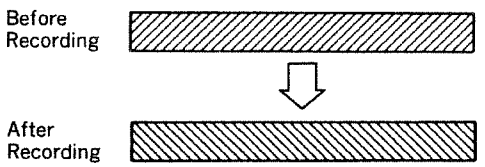
If you want to cancel the delete procedure, press [EXIT] to return to the Master Screen.

7. Advanced Recording Techniques

The KR-3500 provides three different recording techniques which enable you to create some pretty sophisticated Song data.

○ Replace Recording

If the track which you are recording on contains performance data, all the data on that track will be re-recorded (overwritten). With this technique you can record (and re-record) a track until you achieve the desired results.



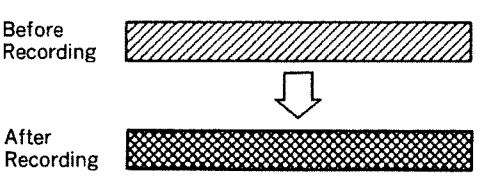
New data is stored, while data that existed before recording began is erased.

Once you have recorded the Style Play, the Time Signature of the selected Music Style has also been automatically recorded on the Arranger track. Once recorded, the Time Signature cannot be changed. For example, if you try to use "Replace Recording" to replace the Music Style originally recorded with a different one (with a different Time Signature), the following message will appear :

In this case, use the Delete procedure (☞P. 85) to delete all data from internal memory. Then record over again.

○ Mix Recording

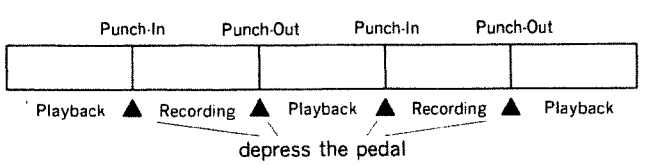
If any performance data exists on the track you are recording on, the newly recorded data will be added to the existing data.



The new data is recorded on top of the data that existed before recording began.

○ Pedal Punch-In Recording

This technique is used when you wish to re-record only certain sections of a Song. The record function is controlled by a foot pedal which has been assigned the Punch-In/Punch-Out function. Press the pedal (at the point where you wish to begin re-recording) to go from playback to recording ("Punch-In"). Press the pedal once again (at the point where you wish to stop re-recording) to go from recording to playback ("Punch-Out"). Since the playback/recording modes will alternate each time you press the pedal, you can re-record several areas if desired.



a. Replace Recording

All previously recorded data on the track is erased, and new data is recorded in its place.
Select "Replace recording" whenever you are recording on a Track for the first time.

Operation

From the Master Screen :

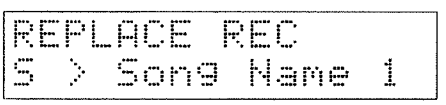
① Press [REC].

② Select the target track for recording by pressing one of the Track Select buttons ([RHYTHM] - [UPPER]). It will begin flashing.

With each press of a button, the indication changes :

Flashing·····This track has been targeted for recording. When recording begins, the performance data will be recorded on this track.
Off ·····No playback or recording.
Lit ·····You can playback all recorded data on the track.

③ Using [INC] and [DEC], select the following screen :



④ Press [PLAY] and recording will begin.

> If you select the Arranger track in step ②, the recording can be started in one of five ways including pressing [PLAY].

⑤ Press [STOP] to stop replace recording.

> You may also stop recording by pressing [RESET] (☞P. 78)

b. Mix Recording

Here you can layer a new recording on top of previously recorded performance data (this lets you do multiple recordings on the same track).

Operation

From the Master Screen :

① Press [REC].

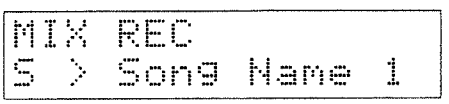
② Select the target track for recording by pressing one of the Track Select buttons ([RHYTHM] - [UPPER]). It will begin flashing.

If no target track is selected, that is, if after step ② there are no Track Select buttons flashing, then you won't be able to start recording.

With each press of a button, the indication changes :

Flashing·····This track has been targeted for recording. When recording begins, the performance data will be recorded on this track.
Off ·····No playback or recording.
Lit ·····You can playback all recorded data on the track.

③ Using [INC] and [DEC], select the following screen :



④ Recording begins as soon as you press [PLAY].

If you select the Arranger track in step ②, the recording can be started in one of five ways including pressing [PLAY] (☞P. 77)

⑤ Press [STOP] to stop mix recording.

You may also stop recording by pressing [RESET] (☞P. 78).

Pedal Punch - In Recording only works when a pedal has been set up in advance to control Pedal Punch - In/Punch - Out. See page 48 for more information on how to do this.

If no target track is selected, that is, if after step ② there are no Track Select buttons flashing, then you won't be able to start recording.

c. Pedal Punch-In Recording

When there's just a certain section in the music that you want to record over, you can control where recording starts after assigning Punch-In/Punch-Out Recording to a foot pedal. Playback will proceed normally until you depress the pedal, at which point Replace Recording will begin. Depress the pedal again, and you return to playback of the previously recorded Song data. In this way you can alternate between recording and playback with taps on the pedal, and this makes it incredibly easy to re-record a number of different places in your music.

Operation

From the Master Screen :

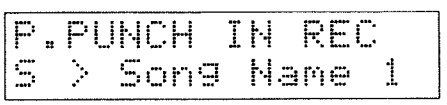
① Press [REC].

② Press one of the Track Select buttons ([RHYTHM] - [UPPER]), and confirm that its indicator is flashing; this selects the target track for recording.

With each press of a button, the indication changes :

Flashing·····This track has been targeted for recording. When recording begins, the performance data will be recorded on this track.
Off ·····No playback or recording.
Lit ·····You can playback all recorded data on the track.

③ Using [INC] and [DEC], select the following screen :



④ Playback begins as soon as you press [PLAY]. The Track Select button for the target track will light continuously.

> If you select the Arranger track in step ②, the playback can be started in one of five ways including pressing [PLAY] (☞P. 77)

⑤ When you reach the place you wish to record over, depress the pedal. The target track will switch from playback to recording (Replace Recording), and its Track Select button will begin to flash.

⑥ When you reach the end of the section you wanted to record over, press the pedal again. The target track will go from recording to playback again, and the Track Select button will light continuously.

⑦ Press [STOP] to end Pedal Punch-In Recording.

> You may also stop recording by pressing [RESET] (☞P. 78).

8. Storing the Use Program

In addition to a Song data, you can also store your User Program setting onto a Memory card.

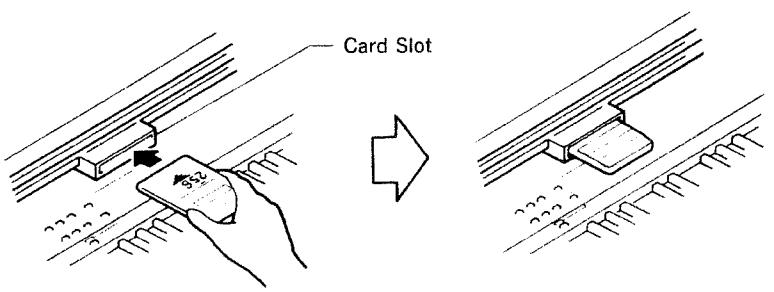
a Saving the User Program data

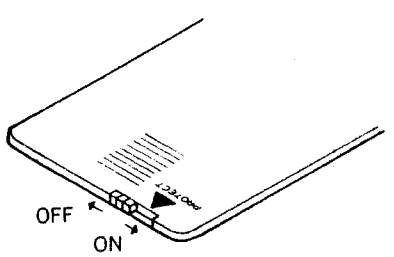
You can also save User Program data onto a Memory Card (M-256E : sold separately).

Operation

From the Master Screen :

① Insert the appropriate Memory Card into the CARD slot. Move the protect switch to the WRITE (OFF) position. Then, press [SAVE].





You may see one of the following screens after pressing [SAVE] :

▼Read Only Memory Card (such as a Music Style Card)

```
 CANNOT SAVE!
INSERT MEM. CARD
```

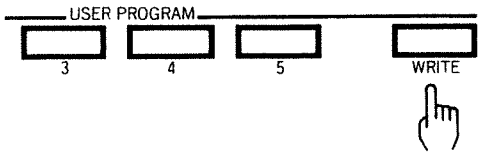
Press [EXIT]. Insert the proper Memory Card and press [SAVE] again.

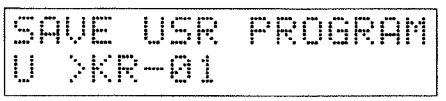
▼Brand new Card (or a Card used by a different machine)

```
 IMPROPER CARD
OVERWRITE?>ENTER
```

Any data contained on a Card will be lost by pressing [ENTER]. If you decide to cancel the save procedure at this point, press [EXIT].

② Press [WRITE] and the following screen will appear :





The KR-3500 automatically assigns a Song name (like "KR-01") to a recorded Song. However, you can change this name using the [UPPER/◀]/[A/▶] and [INC]/[DEC] buttons. If you don't want to change the name, you can skip steps ③, ④ and ⑤.

③ Press [UPPER/◀] or [A/▶] to move the cursor to the place you wish to enter the character.

Press [UPPER/◀] to move the cursor to the left.
Press [A/▶] to move the cursor to the right.

④ Press [INC] or [DEC] to select the character you wish to enter. The characters will be displayed in the following order :

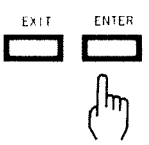
···xyz0123456789 !" #%&' ( ) *+,− . / : ; =? ^ _ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012···

[INC] steps you through the characters in the order shown, [DEC] in the reverse order.

You can enter a User Program name of up to 12 characters.

⑤ Repeat steps ③ and ④ until the User Program name is complete.

⑥ Press [ENTER] and the save will begin immediately.



You should leave the tab in the ON (PROTECT) position most of the time to protect your data from accidental erasure.

When the Song has been saved, you'll see the following screen for a moment before returning to the Master Screen :

```
SAVE COMPLETED
U >KR-01
```

⑦ Move the protect tab to the ON (PROTECT) position. Remove the Card from the CARD slot.

If there is already some data in the internal memory when you try to start the load operation in step ⑥, you'll see the following screen :

```
OVERWRITE DATA
SURE?PRESS>ENTER
```

Press [ENTER] again if you're sure you want to go ahead and load the new data, deleting (overwriting) the data that's already there. If you decide, however, that you actually did want to keep the material you already had in memory, press [EXIT] at this point and save the User Program data onto another Memory Card. Then perform the save procedure again.

b. Loading User Program data

In addition to Song data, you can also store your User Program setting onto a Memory Card.

Operation

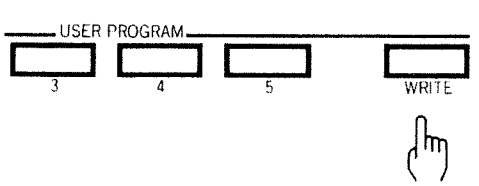
From the Master Screen :

① Insert the appropriate Memory Card into the CARD slot.

Be sure to insert the Card properly; face-side up.

② Press [LOAD].

③ Press [WRITE], and you'll see the following screen :



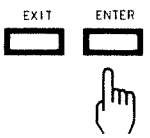

```
LOAD USR PROGRAM
U >KR-01
```

If you press [LOAD] and the Card doesn't contain any User Program data, you'll see the following screen :

```
NO USR PROG DATA
      PRESS>EXIT
```

In this case, press [EXIT]. Insert the proper Memory Card and perform the load operation again.

④ Press [ENTER] and User Program loading will begin immediately.



When the User Program is loaded, you'll see the following screen for a moment before returning to the Master Screen :

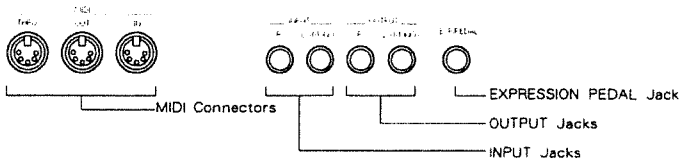
```
LOAD COMPLETED
U >KR-01
```

5

Connecting with Other Equipment

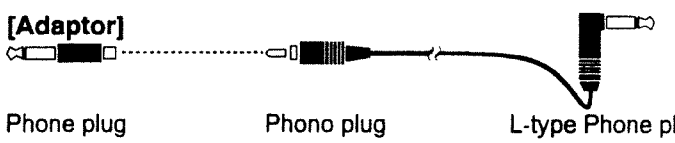
1. Using the Connectors

Although the KR-3500 allows you to enjoy realistic ensemble-like performances by itself, even greater impact can be obtained if you connect the instrument to an external stereo or PA system. Also, whenever you wish to record onto a cassette tape recorder (or the like), you will need to make the appropriate connections, as explained in the following.



*In order to make the connections between the instrument's jacks and external audio equipment, you will need to have suitable audio cables (sold separately). Make sure you select the appropriate kind.

Roland's PJ-1M (optionally available) is a cable which can be used for two different types of connection; both 1/4" phone ⇔ 1/4" phone, as well as phono⇔1/4" phone. The adaptor that is included can also be used alone for phono ⇔ 1/4"phone plug conversions.



a. OUTPUT Jacks

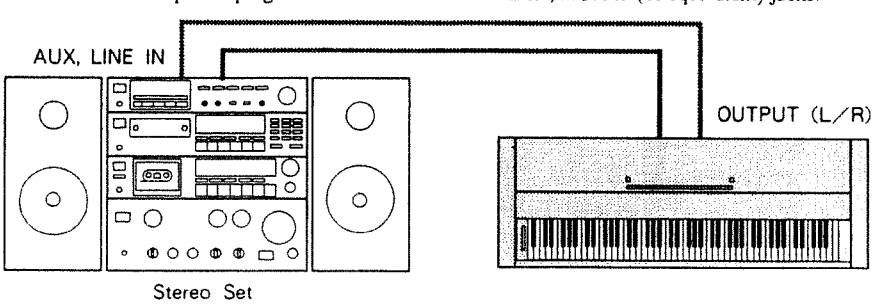
The VOLUME Slider controls the output of the OUTPUT jacks.

*Always make sure you turn down the volume on the instrument (and any other equipment) before making any connections.
*If the external unit you are using only accepts a monaural input, plug the cable into the L (MONO) jack on this instrument.

○ Connecting with a Stereo

Required: Two phono ⇔ 1/4" phone cables (The PJ-1M is convenient; simply remove the adaptor plug.)

Connect the cable's phono plugs to the external unit's LINE IN, AUX IN(or equivalent) jacks.



Stereo Set

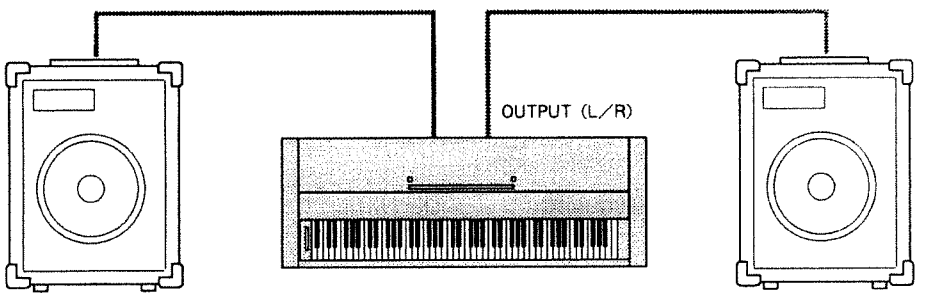
Audio cables which have phono jacks at both ends can also be used if you attach phono ⇔ 1/4" phone adaptors to the ends going to this instrument.

phono ⇔ 1/4" phone adaptors + Audio cable

○ Connecting with Keyboard Amplifiers

In order to get the most out of this instrument, the use of a stereo output is recommended.

Required : Two phone cables (PJ-1M)

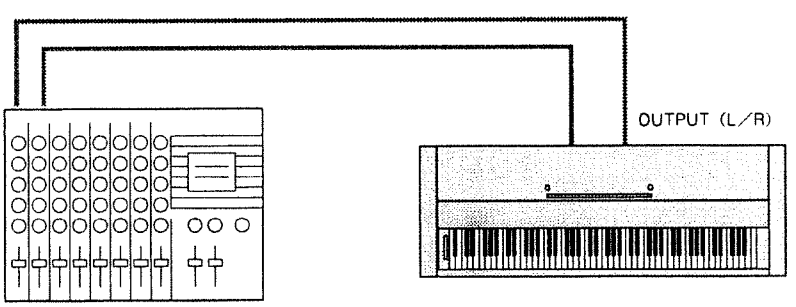


* If you are using only one amp, connect it to the L (MONO) jack on this instrument.
* When connecting to a guitar or bass amp, connect KR-3500 to the "LO" input jack (of a HI, LO pair).

○ Connecting with a PA Mixer

Connect to the jacks of unused channels.

Required : Two phone cables

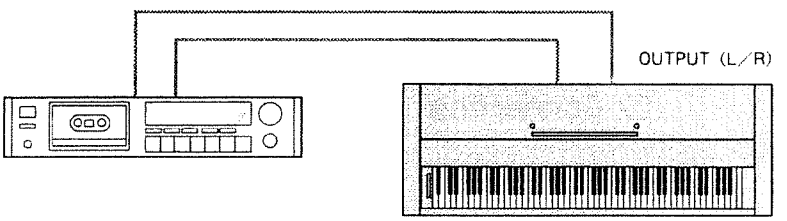


* The stereo sound field created by the KR-3500 can be fully appreciated by adjusting the panpot settings on the mixer.
* Set the volume on the instrument at maximum, and then adjust the actual output volume using the mixer's controls.

○ Recording onto a Stereo System or Cassette Recorder

Connect the cable's phono plugs to the external equipment's LINE IN, AUX IN(or equivalent) jacks.

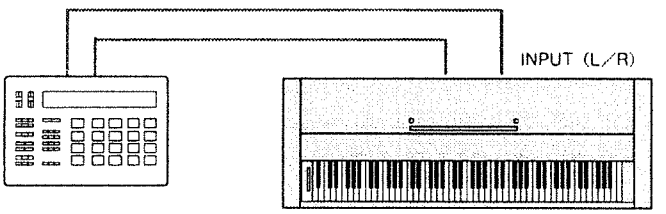
Required: Two phono ⇔ 1/4" phone cables (The PJ-1M is convenient; simply remove the adaptor .)



b. INPUT Jacks

Using these jacks, you can have sound from a synthesizer (or other equipment) played through the KR-3500's speakers.

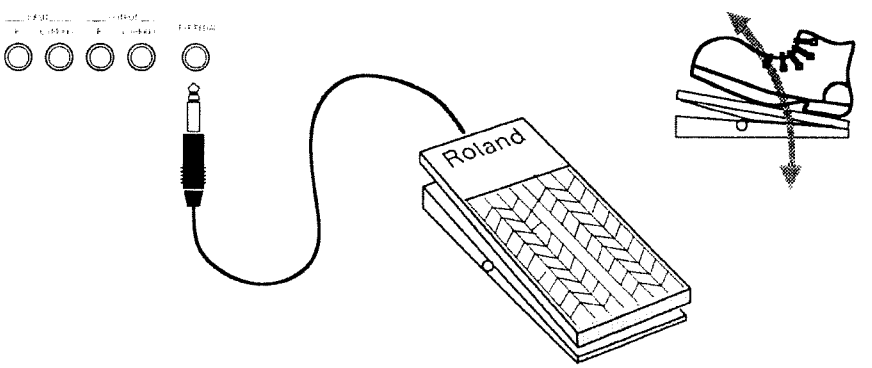
Required: phone cable (PJ-1M)



* Adjust the volume on the unit you have connected to get the appropriate volume.
* If the external unit provides only monaural output, make sure to plug the cable into the L (MONO) input jack on the KR-3500.

c. Expression Pedal Jack

Once an expression pedal (EV-5; sold separately) is connected to this jack, you gain pedal control over the instrument's overall volume.



2. Using MIDI

a. What MIDI Is ?

MIDI (Musical Instrument Digital Interface) is a standard that was formulated in order to provide for the transfer of performance, and other information, among electronic musical instruments and computers. Using MIDI to connect your KR-3500 to other electronic musical instruments, you can then use it to remotely control such units. Conversely, other instruments and devices can then be used to control your KR-3500.

b. Devices That Can Be Connected Using MIDI

Some common examples of the types of devices that could be connected to KR-3500 using MIDI are as follows:

- Another keyboard or synthesizer
- MIDI pedal controller or keyboard controller

Once a keyboard-equipped external unit or pedal set (PK-5:sold separately) is connected, it can then be used to play some of the KR-3500's Parts. If the Lower Part is played using a keyboard controller, and the Manual Bass Part is played on a pedal controller, you will be able to enjoy the traditional playing style of an electronic organ.

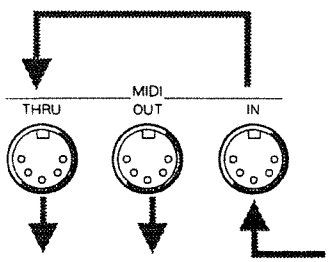
- MIDI Sequencer

A sequencer is a device which provides for the recording/playback of performance information. The Composer section on this unit is a simple sequencer. However, you may find that a full-featured sequencer (such as the MC-50), which allows you to record each of the accompaniment parts individually, as produced by the Arranger, is more convenient. With such a sequencer, a multiple number of songs can be played consecutively without the need for the loading procedure. Additionally, by having access to a greater range of editing features which can be applied to recorded data, you can pursue a more creative, individual style.

*The Composer's Song data can be transferred over MIDI to an external sequencer.

c. MIDI Connectors and Cables

As shown below, there are three MIDI connectors on the rear panel of the KR-3500. These connectors are used by the unit when communicating with external equipment.



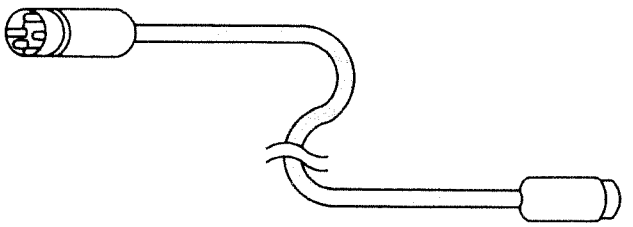
○ MIDI THRU : Sends out an exact copy of whatever performance data has been received at MIDI IN.

○ MIDI OUT : Sends out data describing everything performed on this unit.

○ MIDI IN : Receives performance data sent by another MIDI device.

*The KR-3500 has these connectors arranged in the following order, from the left : MIDI THRU, MIDI OUT, MIDI IN. Carefully check other devices you connect with, since you cannot automatically assume they use the same order. (In some cases the order is completely reversed.)

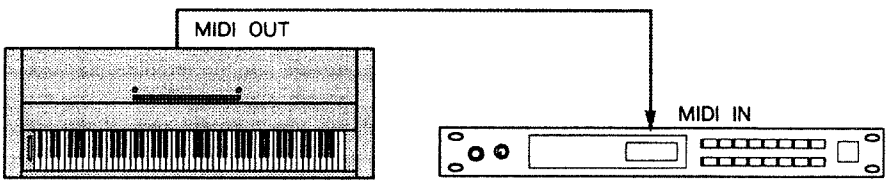
The connections between MIDI decices should be made using the appropriate MIDI cables (MSC-07/15/25/50/100; available for separately).



d. Making the Connections

○ Playing the KR-3500 and a Sound Module Simultaneously

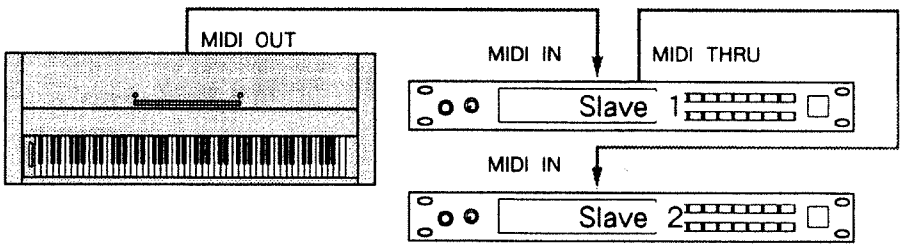
Connect the units together as shown below. Then, whenever you play the KR-3500, the sound generating module will receive that performance information and simultaneously play the same notes.



The unit that transmits the performance information is called the "master," whereas the unit receiving the information is known as the "slave."

○ Simultaneously Controlling Two Sound Modules

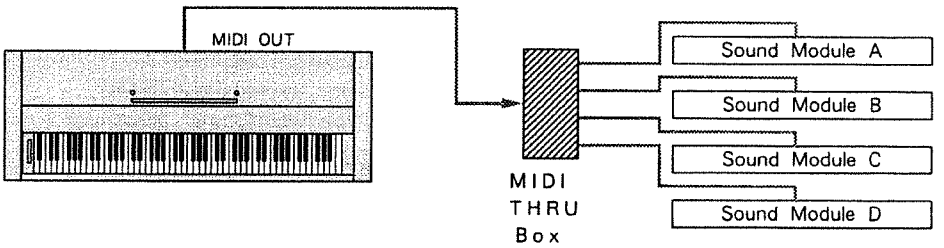
As illustrated below, connect a cable between the MIDI OUT on the KR-3500, which becomes the master, and the MIDI IN on Slave 1. Then, run a cable between the MIDI THRU on Slave 1 and the MIDI IN on Slave 2.



If you attempt to extend the above configuration by using MIDI THRU to connect onward to a third slave, the signal quality could likely deteriorate, and cause errors to occur.

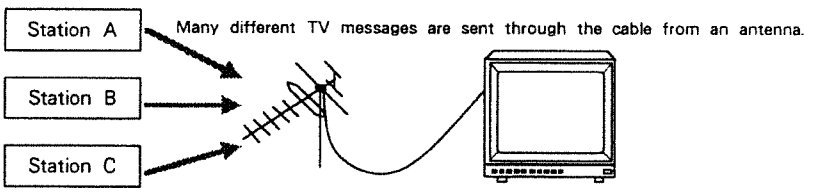
○ Controlling a Large Number of Slaves

Should you need to control three or more slave devices, you should employ a MIDI THRU Box.

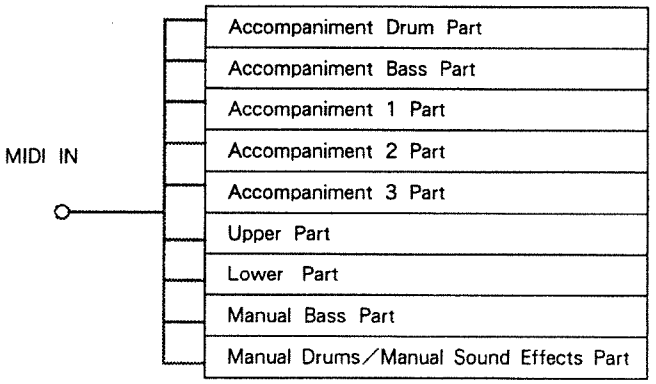


e. MIDI Channels

With MIDI, a single cable can be used to convey a wide variety of performance information, for a number of MIDI devices. This is possible thanks to the concept of MIDI channels. MIDI channels are in some ways similar to the channels on a television set. On a television set, a variety of programs broadcast from different stations can be viewed by switching channels. This is because the information on any particular channel is conveyed only when the receiver is set to the same channel that is being used for transmission. Similarly, when a receiving device is set so its MIDI channel matches the channel used by the transmitting device, the performance data on that channel is conveyed. There are a total of 16 MIDI channels available for use.



However, in one important aspect, the KR-3500 is quite different from television. One can usually only view one channel at a time on a television; whereas on the KR-3500, the performance information received on 9 channels can be independently played at the same time. This is because the KR-3500 has 9 Parts, each of which is a separate sound generator. All of these can sound at the same time, using a total of 9 channels of information. Instruments which are designed in this manner are referred to as being "multi-timbral."



f. Types of Data Handled Over MIDI

The performance information which MIDI handles is made up of numerous separate pieces of data (MIDI messages). All the various MIDI messages can be divided into two main types:

○ Channel messages : Messages handled on each channel
○ System messages : Messages handled overall, independent of individual channels

Channel Messages

Messages of this type make up the great majority of MIDI data.

○ Note Messages

These messages are sent out whenever anything is played on the keyboard. Note messages include the following types:

Note Number: Number representing the position of the key pressed.
Velocity: Strength with which the key was pressed.
Note On: Sent out each time a key is pressed.
Note Off: Sent out each time a key is released.

*When employing Drum or Rhythm Parts, Note Numbers are used to selectively play the percussive sounds.

○ Pitch Bend Messages

These Messages are sent out whenever the Pitch Bend Wheel (or Pitch Bend Lever) is operated.

○ Aftertouch Messages

These messages convey the amount of pressure that is further put on a key after it has initially been pressed. There are two types of Aftertouch; Channel and Polyphonic. Channel Aftertouch (or Channel Pressure) provides control on an individual MIDI channel basis, whereas Polyphonic Aftertouch (or Polyphonic Key Pressure) manages the information on an individual key basis. Note, however, that if a particular keyboard is not designed for a certain type of Aftertouch, it cannot transmit such Aftertouch messages.

* The keyboard on the KR-3500 is not capable of transmitting Aftertouch messages.

○ Program Change Messages

These messages relay instructions about changes in the sounds that are to be used. Thus, the Tone used by a certain Part will be changed to comply with a Program Change Message received on the channel to which that particular Part is assigned. Similarly, when a Program Change Message is received on a channel assigned to a "Chord Recognition Part," the content of a Music Style will be changed.

○ Control Change Messages

These messages are used to enhance the expressiveness of a performance, and include Damper, Volume, and Pan related messages. Note that not all of the messages of this type will be recognized across the complete range of MIDI devices available. (Each device will be somewhat different.)

System Messages

System Messages include Exclusive messages, data employed for carrying out synchronized play, as well as diagnostic-use data.

○ Exclusive Messages

Although MIDI is an internationally recognized standard used by most manufacturers, Exclusive Messages form one part of the standard where each manufacturer can devise their own types of data, as required. In order words, these types of messages are unlike the universally recognized messages in the major part of the MIDI standard, and can in a sense be considered as a "dialect" of the MIDI language as a whole. They can

be used to provide for certain unique features that a particular device may have. On the KR-3500, the GS Mode is under the control of Exclusive Messages. If an external unit sends a "GS Reset" as an Exclusive Message, the KR-3500's sound source will be automatically set to comply with the GS system of organization.

○ Common / Real-Time Messages

These messages are used to assure that any connected devices, such as a sequencer or rhythm machine, will be synchronized, and thus use the same tempo when playing, or will start or stop at the same moment. They allow for the KR-3500's Composer or Arranger to be played in sync with an external MIDI device, such as a sequencer. Common/Real Time Messages are given priority at all times, so they are processed first.

○ Active Sensing Messages

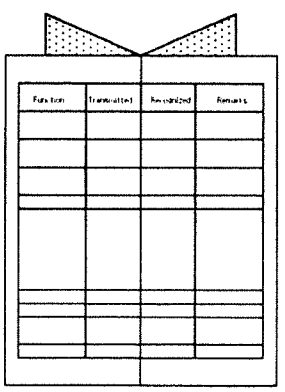
These messages serve to monitor the integrity of the MIDI connections. The system will "shut down" if cables become damaged or disconnected.

When the KR-3500 receives MIDI messages from the external MIDI device, Variation Tones specified in Roland GS format can be selected by receiving the Control Change messages and Program Change messages. Also, Control Change (NRPN) and Exclusive Messages can be employed to edit Tones and settings for effects. However, such procedures cannot be done using only the KR-3500, but rather need to be carried out using a connected sequencer or computer. Without software which supports such editing, however, a person would need to have considerable experience with MIDI and computing. For those wishing to explore such advanced MIDI applications, or for those who are programmers, a separate "KR-3500 MIDI Implementation Document" is available at any Roland Service Station.

g. Concerning MIDI Implementation Charts

MIDI makes it possible for communication between devices to take place readily, but there are still many differences between devices. Not all types of MIDI messages will be understood by every device on the market. In order to quickly check the compatibility between a master (transmitting) and slave (receiving) unit, every owner's manual includes a "MIDI Implementation Chart." This chart can be used at to determine the types of MIDI messages that can be received or transmitted by the device. The names of the various types of MIDI messages appear on the left side of the chart, in the Function column. In the Transmitted and Recognized columns there will be either a "O" or and " × ," indicating whether or not that type of data can be transmitted or received. When a "O" appears in the row for a particular type of message in both the Transmit column for the master device, and in the Recognized column for the slave device, the units will be capable of communicating that type of data with each other. Since all MIDI Implementation Charts are laid out the same way, and are the same size, the charts for two different devices can be overlapped as shown below, allowing you to compare them more easily.

Device A Chart Table



Device B Chart Table

3. Settings for MIDI Functions

The KR-3500 provides a full range of features which are controllable using MIDI.
These features are explained in the following.

a. MIDI Settings for the KR-3500

The following range of settings allow you to determine the manner in which the KR-3500 will send out its performance information when it is being used to play another instrument; or conversely, the manner in which the KR-3500 is to respond when it is being played by another unit.

○ **MIDI Channel :** These settings determine the MIDI Channel for each Part, and will be the channel on which both transmission and reception will take place.

○ **MIDI Sync Mode :** This setting determines the mode of the clock control of the KR-3500 (Internal/Remote/Auto Slave).

○ **MIDI Rx Start/Stop :** When this setting is set to ON, the Composer or Arranger will start/stop by receiving start/stop messages from an external MIDI device.

○ **MIDI Local Control :** This setting determines whether the keyboard control section (includes Pitch Bend Wheel) and the sound source (Upper, Lower, Manual Drums/Manual Sound Effects and Manual Bass Parts) are connected or not.

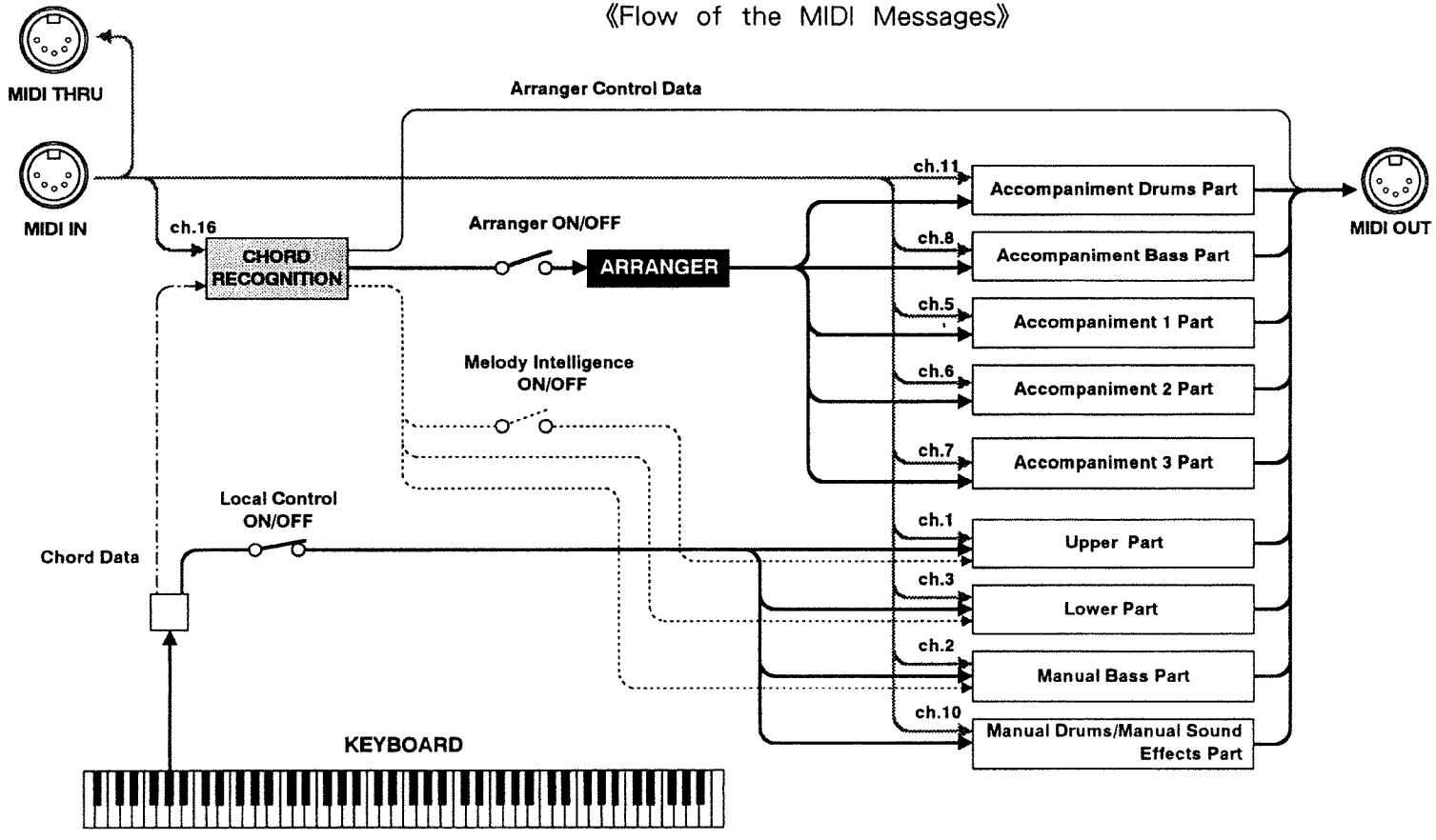
○ **Arranger MIDI Out Switch :** When this switch is set to On, the style performance data will be output from MIDI OUT.

○ **Composer MIDI Out Switch :** When this switch is set to ON, the playback data of the Composer will be output from MIDI OUT.

b. MIDI Channel

Ordinarily, when playing with Styles, the keyboard is used to play the instrument's Tones; most often those assigned to Upper and Lower Parts. Once MIDI is brought into play, however, other Parts can be placed under the control of an external MIDI keyboard or sequencer. The various Parts are configured as shown in the next diagram ("Flow of the MIDI Messages"). By assigning a different MIDI channel to each of the Parts, they can then be controlled individually, making it easy to manage an ensemble-like performance.

《Flow of the MIDI Messages》



*The MIDI Channels indicated for each Part are the factory presets.

When shipped from the factory, the following settings for MIDI channels and relevant switches were made.

Part	Channel	Switch
UPPER	1	ON
LOWER	3	ON
M. BASS (Manual Bass)	2	ON
M. DS; EFX (Manual Drums/Manual Sound Effects)	10	ON
ACCOMPANIMENT BASS	8	ON
ACCOMPANIMENT DRUMS	11	ON
ACCOMPANIMENT 1	5	ON
ACCOMPANIMENT 2	6	ON
ACCOMPANIMENT 3	7	ON
CHORD RC (Chord Recognition)	16	ON

Chord Recognition Part

This Part provides control related to the Arranger. Unlike other Parts, however, it does not respond to Note messages or produce sound in the same manner.
Additionally, if Program Change messages are received on the MIDI channel used by the Chord Recognition Part, they will cause a change in the content of the Music Style.

[External MIDI Control]
When wishing to obtain control over the Style performance using an external controller, first make sure that the items below are set as indicated.

- ○ **GS Mode ON/OFF : OFF (☞P.56)**
- ○ **Arranger ON/OFF : ON (☞P.34)**
- ○ **MIDI Sync Mode : Auto Slave or Remote (☞P.107)**
- ○ **MIDI Rx Start/Stop : Arranger (☞P.108)**

In this condition, you may send the Start message (Common Realtime Message) to start the Style Play automatically. When an external controlling device sends chord data on the MIDI channel which has been assigned to the Chord Recognition Part, an automatic accompaniment pattern using 5 Parts will be created if the Arranger is ON. The Accompaniment 1/2/3, Bass, and Drums Parts will each sound independently. (Note that the Arranger cannot be turned on/off by an external device; it must be turned ON using the KR-3500 panel beforehand.) Should chord data be received while the Arranger is OFF, none of the above Parts will sound.

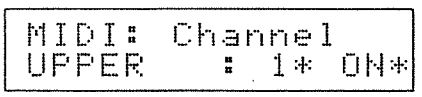
Any of the above settings for the MIDI Channel and Switch can be altered as desired in order to match with other equipment you are using.

Operation

From the Master Screen:

Only the Upper MIDI channel can be changed when the UTILITY's GS Mode has been set to ON or a GS Reset has been received via MIDI (The MIDI channel for other parts can't be changed).

① Press [MIDI] until you obtain the MIDI Channel operation screen for the Part you wish to alter.



② Using [UPPER / ◀] or [A / ▶], select the item you wish to change; either Channel or Switch.

*In the display, the setting which can be changed will be flashing. Press either [UPPER / ◀1] or [A / ▶] to get the item you wish to change to begin flashing.

③ Change the setting using [INC] and [DEC].
If it is the channel you are setting, the possible setting range is from 1-16. If it is the Switch that is being set, the possible settings are ON or OFF.

* If the Switch is "OFF", no performance data will sent or received.

④ Press [EXIT] to return to the Master Screen.

*When a Tone is selected, a corresponding Program Change message will be sent out on the MIDI channel that is currently set for that Part. See "Expansion Tone List" at the end of this manual for information on the Program Number that each Tone has been assigned.

After step ①, if [INC] and [DEC] are pressed together, the settings for the current Part can be returned to the factory default settings.

* These settings revert to the factory defaults each time the power is turned ON.

c. MIDI Sync Mode

When devices such as rhythm machines have been connected to this instrument via MIDI, performance information related to the rhythm, and Start/Stop/Tempo data for the Composer can be transmitted and received. Within the MIDI Sync Mode there are 3 selections provided which allow you to choose the manner in which the KR-3500 will play (or record).

Internal : All Start/Stop/Tempo data arriving from an external unit will be ignored. Therefore, synchronized play cannot take place. Start/Stop can be accomplished only by using the panel buttons, and the tempo can be controlled from the KR-3500.

Remote : Start/Stop takes place only when messages directing the unit to do so are received from an external unit. (Start/Stop cannot be accomplished using the panel buttons on this instrument.) However, only the KR-3500 provides control over the tempo.

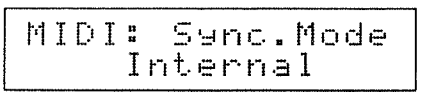
Auto Slave : Whichever unit (either the KR-3500 or the external unit) initiates the event first will be the one that takes priority, and the other will Start/Stop in compliance with it. Likewise, with the tempo as well, whichever unit starts first will establish the tempo to which both will be synchronized.

* Internal is the factory default setting.

Operation

From the Master Screen:

① Press [MIDI] until you obtain the MIDI Sync Mode operation screen.



② Using [INC] and [DEC], select the mode appropriate for the performance situation.

③ Press [EXIT] to return to the Master Screen.

After step ①, if [INC] and [DEC] are pressed together, the setting can be instantly returned to the factory default setting.

* This setting reverts to the factory default each time the power is turned ON.

d. MIDI Rx Start/Stop

This setting allows you to choose whether you want the Rhythm or Composer to start when Start/Stop messages are received from an external device.

Composer : When Start/Stop messages are received, recording will Start/Stop if the Composer has been in the recording condition; otherwise, playback will Start/Stop.

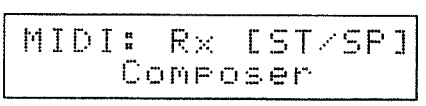
Arranger : When Start/Stop messages are received, the Arranger's Style Play will Start/Stop.

* If the MIDI Sync Mode is set to "Internal," the above functions will not work.

Operation

From the Master Screen:

① Press [MIDI] until you obtain the MIDI Rx Start/Stop operation screen.



② Using [INC] and [DEC], select the setting appropriate for the performance situation.

③ Press [EXIT] to return to the Master Screen.

*Composer is the factory defaults setting. This setting reverts to the factory default each time the power is turned ON.

e. MIDI Local Control

When MIDI Local Control is set to OFF, the keyboard will no longer be connected with many of the sound producing Parts (Upper, Lower, Manual Drum/Manual Sound Effects, and Manual Bass Parts ; for details, see «Flow of the MIDI Messages» on page 105).
Although no sound will be produced by this unit when playing the keyboard, the performance data will be sent out over MIDI. Note, however, that if the Arranger is ON, and keys within the chord detection zone are played, the performance information will be sent to the Chord Recognition Part. As a result, the automatic accompaniment produced by the Arranger will be sounded by this unit.

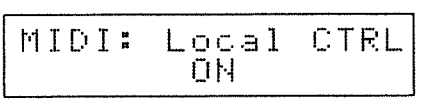
* To play the instrument normally, this setting must be at ON.

* When Local Control is set to OFF, and you have a MIDI sound generator connected, the keyboard will sound using the external sound source. Should the maximum polyphony become insufficient during play of a Style, try setting the MIDI channel for the Upper Part and for the external sound module to the same channel. Then, the melody will sound using the external sound module, while leaving all the KR-3500's voices for the rest Parts except Upper to make use of.

Operation

From the Master Screen:

① Press [MIDI] until you obtain the MIDI Local Control operation screen.



② Using [INC] and [DEC], select either ON or OFF.

③ Press [EXIT] to return to the Master Screen.

* ON is the factory default setting, the unit is set to ON. This setting reverts to the factory default each time the power is turned ON.

f. Arranger MIDI Out Switch

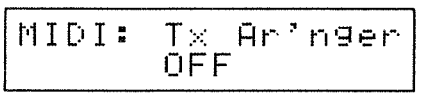
When the Arranger MIDI Out Switch is set to ON, performance data produced while an automatic accompaniment is played will be output from MIDI OUT. When set to OFF, these data will not be output.

* The Arranger can be used to play a GS Sound Source if connected to this unit. Additionally, performance data which arrives on the Chord Recognition Part can be passed through the Arranger (which creates data for an ensemble using 5 Parts), before being sent to an external sequencer for storage.

Operation

From the Master Screen:

① Press [MIDI] until you obtain the Arranger MIDI Out Switch operation screen.



② Using [INC] and [DEC], select either ON or OFF.

③ Once the setting has been made, press [EXIT] to return to the Master Screen.

*OFF is the factory default setting. This setting reverts to the factory default each time the power is turned ON.

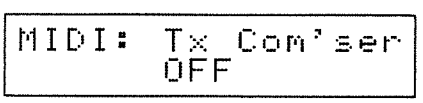
g. Composer MIDI Out Switch

When the Composer MIDI Out Switch is set to ON, performance data produced by the Composer will be output from MIDI OUT. When set to OFF, this data will not be output.

Operation

From the Master Screen:

① Press [MIDI] until you obtain the Composer MIDI Out Switch operation screen.



② Using [INC] and [DEC], select either ON or OFF.

③ Once the setting has been made, press [EXIT] to return to the Master Screen.

*OFF is the factory default setting. This setting reverts to the factory default each time the power is turned ON.

If you wish, you can also have the data that is output by the Composer be routed through the Arranger, where it will be enhanced by having an accompaniment applied to it before being output from MIDI OUT. To do this, simply set the MIDI Out Switches for both Composer and Arranger to ON. Note, however, that by requesting the KR-3500 to handle the much larger volume of data that it will be outputting from MIDI OUT, its performance (processing speed) may be reduced somewhat.

6

Appendix

■ About GS Format Compatibility

a. What is "GS" ?

With conventional MIDI sound generating devices, there have been numerous differences between one unit and the next. Such differences include those in the numerical correspondence for the variety of sounds, the manner in which they will sound, as well as the response they will provide when various controllers are used. Even when considering products produced by the same manufacturer, one might observe that model changes that have been unfettered by a strive for compatibility have on occasion unintentionaly resulted in the obsolescence of earlier units.
After taking the above problems into consideration, Roland decided to strive for a higher level of standardization in the way MIDI sound generation units will function. As a result, the GS Format was created. You can now feel assured that any sound generating module that supports the GS Format, or an instrument equipped with sounds sources supporting the GS Format, will provide a faithful quality of expression when performing using an identical set of MIDI data.

Such devices will have the GS logo on the front panel, or other prominent location, making them easy to recognize. Also, the GS logo will appear on any media (floppy disks, CD-ROMs) which contains song data that was designed (follows certain guidelines) to be played using sounds sources supporting the GS Format. As a result, song data supplied on media carrying the GS logo can be played (after possibly being loaded first into a computer or sequencer) by any unit which carries the GS logo, and produce the same result. This means that not only will sound modules no longer tend to become obsolete, but also that song data can now more easily survive the passage of time, and might remain "fresh" enough to compete with whatever new software comes out.

"GS", proposed by Roland, incorporates all of the recommendations outlined for GM (General MIDI System-Level 1) which is explained in the next paragraph, and in addition extends the definitions in order to provide for greatly enhanced handling of features and sounds.

What is "GM" ?
"GM" (official name: General MIDI System - Level 1) refers to a set of recommendations aimed at standardizing some of the most basic features (such as the organization of sounds) related to the performance of music using MIDI. The purpose of GM is of course to provide for greater compatibility across the wide range of equipment from various manufacturers.
Thanks to this standard, one can successfully play song data created with GM in mind on any MIDI sound source that complies with GM (GM Sound Source), regardless of model or manufacturer.

Note that song data that you create using the KR-3500's Composer may not always be reproduced as expected if played on some other GM sound source. This is because the KR-3500 provides a number of advanced features that have not been included as part of the features defined by GM.

*Certain sounds are formed by combining 2 voices. Be aware, therefore, that when using such sounds, the number of voices that can be produced simultaneously will be reduced. See page 124 for details on the number of voices used by each sound.

b. Main Features when the GS Mode is On

The KR-3500 is equipped with sound source that comply with the GS Format. In each of the situations listed below, the GS Mode for the KR-3500's sound sources will be switched to ON.

○ When the UTILITY function has been used to turn ON the GS mode.
○ When a "GS Reset" message has been received from an external MIDI device.

Once the GS mode is ON, all settings related to the KR-3500's sound source, including panel settings, will be altered so that they comply with the GS Format.:

Number of Parts :	16
Maximum polyphony :	28 (voices)
Tone selection :	The number of sounds which can be selected by an external controller is increased significantly, since Control Change messages (Bank Select) can be employed along with ordinary Program Change messages.
Drum Sets :	Selection of Drum Sets can be performed using Program Change data.
Effects :	Reverberation and Chorus are provided internally, and the degree to which they are applied can be set independently for each Part.

Whenever a "GM System On" message is sent to the KR-3500 by an external MIDI device, all the settings related to the KR-3500's sound source will be altered so that they comply to GM.
In actuality, when the GS sound source receive the "GM System On" message, the unit will behave the same way as it would when receiving a "GS Reset" message; it turns ON the GS Mode, and thereafter functions as a GS Sound Source device.

To get the unit to behave as it would after reception of a "GM System On" message, you can also use the UTILITY function to turn ON the GS mode.

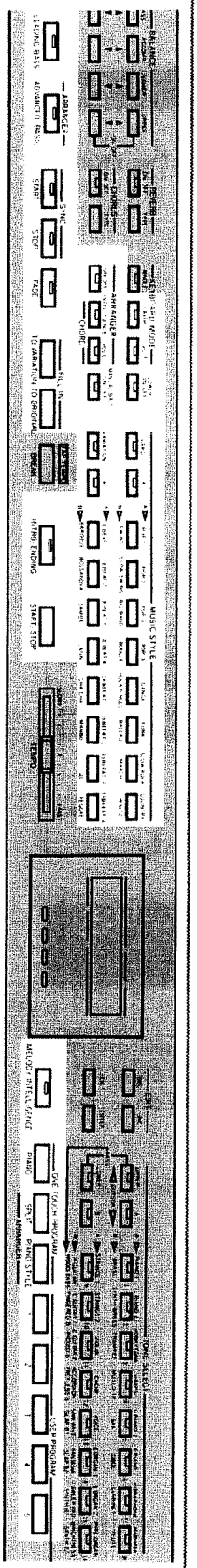
c. How the Panel Functions when the GS Mode is On

Whenever GS mode is ON, the keyboard will be fixed at WHOLE, and only the Upper Part can be sounded when the keyboard is played. However, you will still be able to play Manual Drums/Manual Sound Effects on the keyboard, and the metronome will be available for use. Also, the Part Balance buttons can be used to control the volume of any of the sounds assigned to MIDI channels.

When the GS Mode is ON, changes can be made in the settings listed below. No changes can be made for any others.

○ Tone Select
○ Master Tuning
○ Transpose
○ MIDI Channel
Upper
○ MIDI Sync Mode
○ MIDI Local Control
○ Composer MIDI OUT
○ Pitch Bend Range
○ Keyboard Sensitivity
○ LCD Contrast
○ Metronome Level
○ GS Mode
○ Reverb ON/OFF
○ Reverb Type
○ Chorus ON/OFF
○ Chorus Type

*Since Channel 10 is designed to be used mainly by the Drum Part, it ignores transposition settings.



A Point of Advice

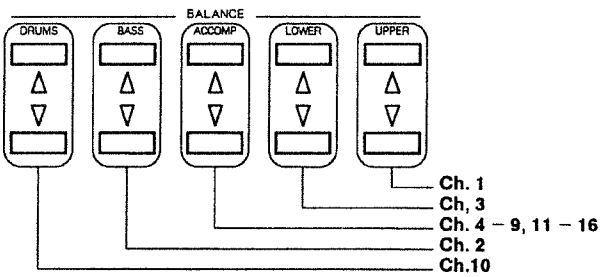
When GS Mode is ON, you can play the internal sound source by the keyboard or via received MIDI messages. The Arranger is disabled, which means you can't use Style Play. However, GS mode is automatically set to OFF, and Style Play is once again enabled, by pressing any of the buttons highlighted in white in the drawing to the left.

d. Channel Volume

By performing either of the actions below, the Part Balance buttons will function as Channel Volume controls ;the volume of any of the sounds assigned to MIDI channels can be adjusted by using the Part Balance buttons.

○ When the UTILITY's "GS Mode" has been set to ON.
○ When a "GS Reset (or GM Reset)" message has been received via MIDI.

The correspondence between Part Balance buttons and MIDI channels is as shown below.



Operation

Press [△] to increase the volume, and [▽] to lower it.

■ Troubleshooting

a. Before you consider the Instrument to be malfunctioning...

Because the KR-3500 has so many different functions, there may be times when you will find it difficult to make the settings work as you wish them to. The following is meant to assist you in troubleshooting when you have problems.

Q. Why is there no sound?

A. ○ Is the volume setting at "0"?
○ Are headphones plugged in?
○ Is the BALANCE setting of Part Volume at "0" or OFF?
○ Is Local Control set to OFF?
○ When the power is turned On and then Off repeatedly, with only short intervals in between, the mechanism will sometimes malfunction. When this happens, turn the power off, wait a short time, and then turn it back on again.

Q. Why is the following message displayed immediately after the power is turned on?

```
NO MEMORY BACKUP
   PRESS>WRITE
```

A. Memory data for panel and keyboard settings (User Program data) have been lost (this is not a malfunction). In such cases, the only thing you can do is to press [WRITE] to return to the factory default settings. Unfortunately, there is no way to recover the data.

***While the KR-3500 will retain User Program data in memory for about one month (after the power has been turned off), all important data should always be saved to Memory cards.**

Q. Why does the display return to the Master Screen during operation?

A. Immediately press one of the buttons on the panel. Even during operation, if none of the buttons on the panel have been operated for a period of time, the display may sometimes return to the Master Screen. Also, after making settings, it is best to return to the setting screen and check to ensure that the settings are as you desire them.

Q. Why are not all the melody sounds played?

A. While the KR-3500 is able to play 28 sounds simultaneously, because a single unit is playing many parts during Auto Accompaniment, some sounds may be lost when several sounds are played at the same time. In order to avoid this when performing using a style which uses the Layer Mode or Melody Intelligence functions, pay close attention to ensure that the overall number of sounds played at the same time do not overload the capacity of the equipment.

Q. Why does the damper (sustain effect) stay on during play?

A. The pedal cable may not be properly connected! Refer to the assembly diagram in the keyboard stand box.

Q. Why do sounds overlap, or sounds not selected played?

A. ○ Have you placed the KR-3500 in the layer mode (producing overlapping sounds)?
In the layer mode, two overlapping sounds are played (Refer to Layer Mode on page 12).

○ Have you placed the KR-3500 in the Tone Expansion Mode ? (Selected sounds won't play.)
In the Tone Expansion Mode, the Tone Selector button is enabled (Refer to Tone Expansion Mode on page 65).

○ Have you checked to make sure you haven't inadvertently entered the GS Mode? (Selected sounds won't play.)
(Refer to GS Mode on page 56)

Under any of the above conditions, just turn the power off for a moment, then turn it on again. When the power is turned on again, the KR-3500 will return to its original settings.

Q. Accidentally turned the power off while recording.

A. ○ Unsaved data in internal memory will be lost (Unfortunately, there is no way to recover this!).
As a precaution against such occurrences, remember to save your data regularly.

When each of the above possible causes have been checked, but the actual problem cannot be found, or if there are any questions, please contact your nearest Roland service dealer.

b. Error Message List

Recording

When the recording cannot be performed normally, the following messages will appear.

```
APPROACHING
MEM. CARD LIMIT!
```

<Cause>

You are approaching the maximum amount of data that can be stored on a Memory card.

<Remedy>

This message will only be displayed for a short time. If you continue to record much longer, there may not be enough room to save the new Song data. If you don't particularly need to save this data on a Memory Card, disregard the message and continue recording. Otherwise, stop the recording before the display changes.

*Using a dedicated MIDI sequencer (like the Roland MC-50), it is possible to record Songs that are much longer than those you can create on the KR-3500. And what's more, you can edit the notes recorded on a dedicated sequencer.

```
 INT.MEM.LIMIT!
S >KR-01
```

<Cause>

Remaining memory is 10% or less.

<Remedy>

If you continue recording until the remaining memory reaches 0%, you will see the following message:

```
 INT.MEM.FULL!!
S >KR-01
```

and recording will stop automatically.

```
BEAT MISMATCH
     PRESS>EXIT
```

<Cause>

The Time Signature of the Music Style you are trying to select is different from the one you started recording with.

<Remedy>

Select a Music Style that has the same Time Signature.

Playback

When the playback cannot be performed normally, the following messages will appear.

```
NO SONG DATA
     PRESS>LOAD
```

<Cause>

The Song data you want has not been loaded into the Composer's internal memory.

<Remedy>

-Load the Song from a Memory card.

```
BEAT MISMATCH
     PRESS>EXIT
```

<Cause>

You are trying to select a Music Style different than the time signature set during the recording session.

<Remedy>

Select a Music Style that has the same time signature.

Save

If the Song data has not been saved properly, the following messages will appear.

```
CARD NOT READY
     PRESS>EXIT
```

<Cause>

There is no Memory card in the Card slot.

<Remedy>

Insert a Memory card and try to save again.

```
CARD PROTECTED
     PRESS>EXIT
```

<Cause>

The write protect switch on the Memory card has been set to ON.

<Remedy>

Move the protect switch to the OFF(WRITE) position, then try to save again.

```
CHECK
CARD BATTERY
```

<Cause>

The battery for the Memory card has been drained of power or there is no battery in the card.

<Remedy>

Install a new battery (CR2016 : sold separately) into the Memory card as explained in the manual for the Memory card.

```
CANNOT SAVE!
INSERT MEM. CARD
```

<Cause>

You are trying to save data onto a Music Style card or other read only card.

<Remedy>

Insert the Memory card into the CARD slot and try to save procedure from the beginning.

```
IMPROPER CARD!
OVERWRITE?>ENTER
```

<Cause>

You are trying to save data onto a Memory card that has never been used in a KR-3500 before. It could be a brand new Memory card or one that has been used on a different machine.

<Remedy>

If it's a brand new Memory Card, press [ENTER].
If you want to overwrite the data that was already on the card, press [ENTER] (however, he old data will be erased).

```
SAVE USR PROGRAM
    PRESS>WRITE
```

<Cause>

The Song data is not in internal memory any more.

<Remedy>

Press [EXIT], and record the data, then save it onto the Memory card.

```
OVERWRITE DATA
SURE?PRESS>ENTER
```

<Cause>

There is Song data or User Program data already recorded on this Memory card.

<Remedy>

If you wish to overwrite the Song data or User Program, press [ENTER]. If not, press [EXIT]. Insert a different Memory card and start the save procedure over again.

```
INT SONG EXCEEDS
CARD CAPACITY!
```

<Cause>

The entire song data exceeds the memory capacity of the card.

<Remedy>

It may be a good idea to transfer the Song data to the external sequencer via MIDI and record/save the data on it.

Note:

By connecting a sequencer (such as Roland MC-50), recordingand saving long Songs that exceed the memory capacity of the card or Composer's internal memory are possible.

Loading

When the loading from a Memory card cannot be accomplished properly, the following messages will appear.

```
CARD NOT READY
    PRESS>EXIT
```

<Cause>

There is no Memory Card in the CARD slot.

<Remedy>

Insert a Memory card into the CARD slot, then try to road again.

```
CHECK
CARD BATTERY
```

<Cause>

The battery for the Memory card has been drained of power or there is no battery in the card.

<Remedy>

Install a new battery (CR2016 : sold separately) into the Memory card as explained in the manual for the Memory card.

```
IMPROPER CARD!
    PRESS>EXIT
```

<Cause>

The Memory card has not been saved by the KR-3500.

<Remedy>

Press [EXIT] and replace the Memory card with Song data saved to it, then try to road again.

```
NO SONG DATA
      PRESS>EXIT
```

or

```
LOAD USR PROGRAM
     PRESS>WRITE
```

<Cause>

There is no Song data on the card that may be loaded.

<Remedy>

Press [EXIT], replace the card with one with Song data saved to it, then try to load once again.

```
NO USR PROG DATA
      PRESS>EXIT
```

<Cause>

There is no User Program data on the card that may be loaded.

<Remedy>

Press [EXIT], replace the card with one with User Program data saved to it, then try to load once again.

```
OVERWRITE SONG
SURE?PRESS>ENTER
```

<Cause>

The internal memory you are trying to load contains Song data.

<Remedy>

In order to overwrite the song, press [ENTER] If you do not wish to overwrite the song, save the Song data in memory to a Memory card, and try to load once again.

Music Style Card

When the Music Style card cannot be read normally, the following messages will appear.

```
CARD NOT READY
     PRESS>EXIT
```

<Cause>

No Music Style card has been inserted.

<Remedy>

Insert a Music Style card, then start over.

```
NO STYLE DATA
     PRESS>EXIT
```

<Cause>

You are trying to call a Music Style from a Memory card on which no Music Style has been recorded.

<Remedy>

Insert a Music Style card and start over again.

Expansion Tone List

	PC#	Tone name
a11	1	Piano 1
a12	2	Piano 2
a13	3	Piano 3
a14	4	Honky-tonk
a15	5	E.Piano 1
a16	6	E.Piano 2
a17	7	Harpsichord
a18	8	Clav.
a21	9	Celesta
a22	10	Glockenspiel
a23	11	Music Box
a24	12	Vibraphone
a25	13	Marimba
a26	14	Xylophone
a27	15	Tubular-bell
a28	16	Santur
a31	17	Organ 1
a32	18	Organ 2
a33	19	Organ 3
a34	20	Church Org.1
a35	21	Reed Organ
a36	22	Accordion Fr
a37	23	Harmonica
a38	24	Bandneon
a41	25	Nylon-str.Gt
a42	26	Steel-str.Gt
a43	27	Jazz Gt.
a44	28	Clean Gt.
a45	29	Muted Gt.
a46	30	Overdrive Gt
a47	31	DistortionGt
a48	32	Gt.Harmonics

	PC#	Tone name
a51	33	Acoustic Bs.
a52	34	Fingered Bs.
a53	35	Picked Bs.
a54	36	Fretless Bs.
a55	37	Slap Bass 1
a56	38	Slap Bass 2
a57	39	Synth Bass 1
a58	40	Synth Bass 2
a61	41	Violin
a62	42	Viola
a63	43	Cello
a64	44	Contrabass
a65	45	Tremolo Str
a66	46	PizzicatoStr
a67	47	Harp
a68	48	Timpani
a71	49	Strings
a72	50	Slow Strings
a73	51	Syn.Strings1
a74	52	Syn.Strings2
a75	53	Choir Aahs
a76	54	Voice Oohs
a77	55	SynVox
a78	56	OrchestraHit
a81	57	Trumpet
a82	58	Trombone
a83	59	Tuba
a84	60	MutedTrumpet
a85	61	French Horn
a86	62	Brass 1
a87	63	Synth Brass1
a88	64	Synth Brass2

	PC#	Tone name
b11	65	Soprano Sax
b12	66	Alto Sax
b13	67	Tenor Sax
b14	68	Baritone Sax
b15	69	Oboe
b16	70	English Horn
b17	71	Bassoon
b18	72	Clarinet
b21	73	Piccolo
b22	74	Flute
b23	75	Recorder
b24	76	Pan Flute
b25	77	Bottle Blow
b26	78	Shakuhachi
b27	79	Whistle
b28	80	Ocarina
b31	81	Square Wave
b32	82	Saw Wave
b33	83	Syn.Calliope
b34	84	Chiffer Lead
b35	85	Charang
b36	86	Solo Vox
b37	87	5th Saw Wave
b38	88	Bass & Lead
b41	89	Fantasia
b42	90	Warm Pad
b43	91	Polysynth
b44	92	Space Voice
b45	93	Bowed Glass
b46	94	Metal Pad
b47	95	Halo Pad
b48	96	Sweep Pad

	PC#	Tone name
b51	97	Ice Rain
b52	98	Soundtrack
b53	99	Crystal
b54	100	Atmosphere
b55	101	Brightness
b56	102	Goblin
b57	103	Echo Drops
b58	104	Star Theme
b61	105	Sitar
b62	106	Banjo
b63	107	Shamisen
b64	108	Koto
b65	109	Kalimba
b66	110	Bag Pipe
b67	111	Fiddle
b68	112	Shanai
b71	113	Tinkle Bell
b72	114	Agogo
b73	115	Steel Drums
b74	116	Woodblock
b75	117	Taiko
b76	118	Melo. Tom 1
b77	119	Synth Drum
b78	120	Reverse Cym.
b81	121	Gt.FretNoise
b82	122	Breath Noise
b83	123	Seashore
b84	124	Bird
b85	125	Telephone 1
b86	126	Helicopter
b87	127	Applause
b88	128	Gun Shot

PC # : Program Number

* All the GS Bank Select numbers will be "0" (Capital Tones).

GS Tone List

	PC #	CC0 #	Tone name	V	Recommended sound range
Piano	1	0	Piano 1	1	A0 (21) — C8 (108)
		8	Piano 1w ○	2	
	2	0	Piano 2	1	
		8	Piano 2w ○	2	
	3	0	Piano 3	1	
	4	0	Honky-tonk	2	
		8	Honky-tonk w ○	2	
	5	0	E. Piano 1	1	E1 (28) — G7 (103)
		8	Detuned EP 1	2	
		16	E. Piano 1w ○	2	C2 (36) — C7 (96)
	6	0	E. Piano 2	1	E1 (28) — G7 (103)
		8	Detuned EP 2	2	
		16	E. Piano 2w ○	1	C2 (36) — C7 (96)
	7	0	Harpsichord	1	F2 (41) — F6 (89)
		8	Coupled Hps.	2	
		16	Harpsi. w ○	1	
	8	0	Clav.	1	C2 (36) — C7 (96)
Chromatic Percussion	9	0	Celesta	1	C4 (60) — C8 (108)
	10	0	Glockenspiel	1	C5 (72) — C8 (108)
	11	0	Music Box	1	C4 (60) — C6 (84)
	12	0	Vibraphone	1	F3 (53) — F6 (89)
		8	Vib. w ○	1	
	13	0	Marimba	1	C3 (48) — C6 (84)
		8	Marimba w ○	1	
	14	0	Xylophone	1	F4 (65) — C7 (96)
	15	0	Tubular-bell	1	C4 (60) — F5 (77)
		8	Church Bell	1	
	16	0	Santur	1	C4 (60) — C6 (84)
Organ	17	0	Organ 1 ○	1	C2 (36) — C7 (96)
		8	Detuned Or. 1	2	
	18	0	Organ 2 ○	1	
		8	Detuned Or. 2	2	
	19	0	Organ 3	2	
	20	0	Church Org. 1 ○	1	A0 (21) — C8 (108)
		8	Church Org. 2	2	
	21	0	Reed Organ	1	C2 (36) — C7 (96)
	22	0	Accordion Fr ○	2	F3 (53) — F6 (89)
		8	Accordion It	2	
	23	0	Harmonica	1	C4 (60) — C6 (84)
	24	0	Bandneon	2	F3 (53) — F6 (89)

	PC #	CC0 #	Tone name	V	Recommended sound range
Guitar	25	0	Nylon-str. Gt. ○	1	E2 (40) — C6 (84)
		8	Ukulele	1	A3 (57) — B5 (83)
	26	0	Steel-str. Gt.	1	E2 (40) — C6 (84)
		8	12-str. Gt.	2	
		16	Mandolin	1	G3 (55) — E6 (88)
	27	0	Jazz Gt. ○	1	E2 (40) — D6 (86)
		8	Hawaiian Gt.	1	
	28	0	Clean Gt.	1	
		8	Chorus Gt.	2	
	29	0	Muted Gt.	1	
		8	Funk Gt.	1	
	30	0	Overdrive Gt. ○	1	
	31	0	Distortion Gt.	1	
		8	Feedback Gt.	2	
	32	0	Gt. Harmonics	1	
		8	Gt. Feedback	1	
Bass	33	0	Acoustic Bs. ○	1	E1 (28) — G3 (55)
	34	0	Fingered Bs. ○	1	
	35	0	Picked Bs. ○	1	
	36	0	Fretless Bs. ○	1	
	37	0	Slap Bass 1 ○	1	
	38	0	Slap Bass 2 ○	1	
	39	0	Synth Bass 1 ○	1	
		8	Synth Bass 3	1	
	40	0	Synth Bass 2 ○	2	
		8	Synth Bass 4	2	

PC # : Program number

CC0 # : Value of control number 0 (GS bank select number)

V : Number of voices

Recommended sound range : The recommended sound range does not indicate the limit of sound production. The actual playable range extends beyond the recommended sound range.

○ : Indicates Tones which can be selected using the panel buttons when Tone Selection is in the standard mode.

With Tone Selection set to the Tone Expansion Mode, the panel buttons can be used to select from a total of 128 Tones, with CC # 0 being 0 (Capital).

	PC #	CC0 #	Tone name	V	Recommended sound range
Strings/orchestral	41	0	Violin	1	G3 (55) — C7 (96)
		8	Slow Violin ○	1	E1 (28) — C7 (96)
	42	0	Viola	1	G3 (48) — C6 (84)
	43	0	Cello	1	C2 (36) — C5 (72)
	44	0	Contrabass	1	E1 (28) — G3 (55)
	45	0	Tremolo Str	1	E1 (28) — C7 (96)
	46	0	PizzicatoStr	1	
	47	0	Harp	1	B0 (23) — G7 (103)
	48	0	Timpani	1	C2 (36) — A3 (57)
Ensemble	49	0	Strings ○	1	E1 (28) — C7 (96)
		8	Orchestra	2	C1 (24) — C7 (96)
	50	0	Slow Strings ○	1	E1 (28) — C7 (96)
	51	0	Syn. Strings1	1	C2 (36) — C7 (96)
		8	Syn. Strings3	2	C1 (24) — C7 (96)
	52	0	Syn. Strings2	2	C2 (36) — C7 (96)
	53	0	Choir Aahs ○	1	C3 (48) — G5 (79)
	54	0	Voice Oohs ○	1	
	55	0	SynVox	1	C3 (48) — C6 (84)
	56	0	OrchestraHit	2	C3 (48) — C5 (72)
Brass	57	0	Trumpet ○	1	A # 3 (58) — A # 6 (94)
	58	0	Trombone	1	A # 1 (34) — D # 5 (75)
	59	0	Tuba	1	F1 (29) — G3 (55)
	60	0	MutedTrumpet ○	1	A # 3 (58) — A # 5 (82)
	61	0	French Horn	2	F2 (41) — F5 (77)
	62	0	Brass 1 ○	1	C2 (36) — C7 (96)
		8	Brass 2	2	
	63	0	Synth Brass1 ○	2	
		8	Synth Brass3	2	
	64	0	Synth Brass2	2	
		8	Synth Brass4	1	

	PC #	CC0 #	Tone name	V	Recommended sound range
Lead	65	0	Soprano Sax	1	F # 3 (54) — D # 6 (87)
	66	0	Alto Sax ○	1	C # 3 (49) — G # 5 (80)
	67	0	Tenor Sax	1	F # 2 (42) — D # 5 (75)
	68	0	Baritone Sax	1	C # 2 (37) — G # 4 (68)
	69	0	Oboe ○	1	A # 3 (58) — G6 (91)
	70	0	English Horn	1	E3 (52) — A5 (81)
	71	0	Bassoon	1	A # 1 (34) — C5 (72)
	72	0	Clarinet ○	1	D3 (50) — G6 (91)
Pipe	73	0	Piccolo	1	D5 (74) — C8 (108)
	74	0	Flute ○	1	C4 (60) — C7 (96)
	75	0	Recorder	1	
	76	0	Pan Flute	1	
	77	0	Bottle Blow	2	
	78	0	Shakuhachi	2	
	79	0	Whistle	1	
	80	0	Ocarina	1	
Synth lead	81	0	Square Wave	2	
		8	Sine Wave	1	
	82	0	Saw Wave ○	2	
	83	0	Syn. Calliope	2	
	84	0	Chiffer Lead	2	
	85	0	Charang	2	
	86	0	Solo Vox	2	
	87	0	5th Saw Wave	2	
	88	0	Bass & Lead	2	
Synth pad etc.	89	0	Fantasia ○	2	
	90	0	Warm Pad	1	
	91	0	Polysynth	2	
	92	0	Space Voice	1	
	93	0	Bowed Glass	2	
	94	0	Metal Pad	2	
	95	0	Halo Pad	2	
	96	0	Sweep Pad ○	1	

PC # : Program number

CC0 # : Value of control number 0 (GS bank select number)

V : Number of voices

Recommended sound range : The recommended sound range does not indicate the limit of sound production. The actual playable range extends beyond the recommended sound range.

○ : Indicates Tones which can be selected using the panel buttons when Tone Selection is in the standard mode.

With Tone Selection set to the Tone Expansion mode, the panel buttons can be used to select from a total of 128 Tones, with CC # 0 being 0 (Capital).

	PC #	CC0 #	Tone name	V
Synth SFX	97	0	Ice Rain	2
	98	0	Soundtrack	2
	99	0	Crystal	2
	100	0	Atmosphere	2
	101	0	Brightness ○	2
	102	0	Goblin	2
	103	0	Echo Drops	1
	104	0	Star Theme	2
Ethnic	105	0	Sitar	1
	106	0	Banjo	1
	107	0	Shamisen	1
	108	0	Koto	1
		8	Taisho Koto	2
	109	0	Kalimba	1
	110	0	Bag Pipe	1
	111	0	Fiddle	1
	112	0	Shannai	1
Percussive	113	0	Tinkle Bell	1
	114	0	Agogo	1
	115	0	Steel Drums	1
	116	0	Woodblock *	1
		8	Castanets *	1
	117	0	Taiko *	1
		8	Concert BD *	1
	118	0	Melo Tom 1 *	1
		8	Melo Tom 2 *	1
	119	0	Synth Drum *	1
		8	808 Tom *	1
	120	0	Reverse Cym. *	2

PC # : Program number
CC0 # : Value of control number 0 (GS bank select number)
V : Number of voices
○ : Indicates Tones which can be selected using the panel buttons when Tone Selection is in the standard mode.
* : All Tones marked by an * have an unreliable pitch. Please use a key around C4 (Key # 60). The unmarked Tones use temperament and pitch of A4 (Key # 59) is 440Hz.

With Tone Selection set to the Tone Expansion mode, the panel buttons can be used to select from a total of 128 Tones, with CC # 0 besing 0 (Capital).

	PC #	CC0 #	Tone name	V
SFX	121	0	Gt. FretNoise *	1
		1	Gt. Cut Noise *	1
		2	String Slap *	1
	122	0	Breath Noise	2
		1	Fl. Key Click *	1
	123	0	Seashore *	1
		1	Rain *	2
		2	Thunder *	1
		3	Wind *	1
		4	Stream *	2
		5	Bubble *	2
	124	0	Bird *	2
		1	Dog *	1
		2	Horse-Gallop *	1
	125	0	Telephone 1 *	1
		1	Telephone 2 *	1
		2	Door Creaking *	1
		3	Door *	1
		4	Scratch *	1
		5	Windchime *	2
	126	0	Helicopter *	1
		1	Car-Engine *	1
		2	Car-Stop *	1
		3	Car-Pass *	1
		4	Car-Crash *	2
		5	Siren *	1
		6	Train *	1
		7	Jetplane *	2
		8	Starship *	2
		9	Burst Noise *	2
	127	0	Applause *	2
		1	Laughing *	1
		2	Screaming *	1
		3	Punch *	1
		4	Heart Beat *	1
		5	Footsteps *	1
	128	0	Gun Shot *	1
		1	Machine Gun *	1
		2	Lasergun *	1
		3	Explosion *	2

Drum Set List

	Note number	PC#1:STANDARD Set PC#33:JAZZ Set	PC#9:ROOM Set	PC#17:POWER Set	PC#25: ELECTRONIC Set	PC#26:TR-808 Set	PC#41: BRUSH Set	PC#49:ORCHESTRA Set
	27	High Q						Closed Hi-Hat [EXC1]
	28	Slap						Pedal Hi-Hat [EXC1]
	29	Scratch Push						Open Hi-Hat [EXC1]
	30	Scratch Pull						Ride Cymbal
	31	Sticks						
	32	Square Click						
	33	Metronome Click						
	34	Metronome Bell						
	35	Kick Drum 2						Concert BD 2
C2	36	Kick Drum 1		MONDO Kick	Elec BD	808 Bass Drum		Concert BD 1
	37	Side Stick				808 Rim Shot		
	38	Snare Drum 1		Gated SD	Elec SD	808 Snare Drum	Brush Tap	Concert SD
	39	Hand Clap					Brush Slap	Castanets
	40	Snare Drum 2			Gated SD		Brush Swirl	Concert SD
	41	Low Tom 2	Room Low Tom 2	Room Low Tom 2	Elec Low Tom 2	808 Low Tom 2		Timpani F
	42	Closed Hi - hat [EXC1]				808 CHH [EXC1]		Timpani F#
	43	Low Tom 1	Room Low Tom 1	Room Low Tom 1	Elec Low Tom 1	808 Low Tom 1		Timpani G
	44	Pedal Hi - hat [EXC1]				808 CHH [EXC1]		Timpani G#
	45	Mid Tom 2	Room Mid Tom 2	Room Mid Tom 2	Elec Mid Tom 2	808 Mid Tom 2		Timpani A
	46	Open Hi - hat [EXC1]				808 OHH [EXC1]		Timpani A#
	47	Mid Tom 1	Room Mid Tom 1	Room Mid Tom 1	Elec Mid Tom 1	808 Mid Tom 1		Timpani B
C3	48	High Tom 2	Room Hi Tom 2	Room Hi Tom 2	Elec Hi Tom 2	808 Hi Tom 2		Timpani c
	49	Crash Cymbal 1				808 Cymbal		Timpani c#
	50	High Tom 1	Room Hi Tom 1	Room Hi Tom 1	Elec Hi Tom 1	808 Hi Tom 1		Timpani d
	51	Ride Cymbal 1						Timpani d#
	52	Chinese Cymbal			Reverse Cymbal ★			Timpani e
	53	Ride Bell						Timpani f
	54	Tambourine						
	55	Splash Cymbal						
	56	Cowbell				808 Cowbell		
	57	Crash Cymbal 2						Concert Cymbal 2
	58	Vibra - slap						
	59	Ride Cymbal 2						Concert Cymbal 1
C4	60	High Bongo						
	61	Low Bongo						
	62	Mute High Conga				808 High Conga		
	63	Open High Conga				808 Mid Conga		
	64	Low Conga				808 Low Conga		
	65	High Timbale						
	66	Low Timbale						
	67	High Agogo						
	68	Low Agogo						
	69	Cabasa						
	70	Maracas				808 Maracas		
	71	Short Hi Whistle [EXC2]						
C5	72	Long Low Whistle [EXC2]						
	73	Short Guiro [EXC3]						
	74	Long Guiro [EXC3]						
	75	Claves				808 Claves		
	76	High Wood Block						
	77	Low Wood Block						
	78	Mute Cuica [EXC4]						
	79	Open Cuica [EXC4]						
	80	Mute Triangle [EXC5]						
	81	Open Triangle [EXC5]						
	82	Shaker						
	83	Jingle Bell						
C6	84	Belltree						
	85	Castanets						
	86	Mute Surdo [EXC6]						
	87	Open Surdo [EXC6]						
	88	- - - - -						Applause ★

PC # : Program number

★ : Tones which are created by using two voices. (All other Tones are created by one voice.)

Blank : Same as the percussion sound of "STANDARD"

- - - - - : No sound

[EXC] : Percussion sound of the same number will not be heard at the same time.

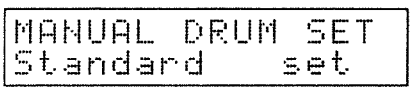
Changing the Manual Drum Set

The KR-3500 provides a selection of 8 different Drum Sets which can be played from the keyboard. The available sets are shown at left (see page **).

Operation

From the Master Screen:

① Press [MANUAL DRUMS] and confirm that its indicator is lit. The screen in which operations related to the Manual Drum Set can be made will appear in the display.



② From this screen, press [INC] or [DEC] to select the desired Drum Set.

Note :
You should try to make the selection in ② quickly enough so as not to be automatically returned to the Master Screen. However, if you should be returned to the Master Screen, simply start over again by pressing [MANUAL DRUMS] (twice) and getting its indicator to light again.

* This completes the steps neccesary for selection of a different Drum Set. You can now try out the percussive sounds of the new Drum Set by playing the keys while the indicator on [MANUAL DRUMS] is lit.

Each time power is turned on, the Standard Drum Set will automatically be selected.

● SFX set (Program number 57)

	Note number	PC#57:SFX Set	
	39	High Q	
	40	Slap	
	41	Scratch Push	
	42	Scratch Pull	
	43	Sticks	
	44	Square Click	
	45	Metronome Click	
	46	Metronome Bell	
	47	Guitar sliding finger	
C3	48	Guitar cutting noise (down)	
	49	Guitar cutting noise (up)	
	50	String slap of double bass	
	51	Fl. Key Click	
	52	Laughing	
	53	Screaming	
	54	Punch	
	55	Heart Beat	
	56	Footsteps1	
	57	Footsteps2	
	58	Applause	★
	59	Door Creaking	
C4	60	Door	
	61	Scratch	
	62	Windchime	★
	63	Car-Engine	
	64	Car-Stop	
	65	Car-Pass	
	66	Car-Crash	★
	67	Siren	
	68	Train	
	69	Jetplane	★
	70	Helicopter	
	71	Starship	★
C5	72	Gun Shot	
	73	Machine Gun	
	74	Lasergun	
	75	Explosion	★
	76	Dog	
	77	Horse-Gallop	
	78	Birds	★
	79	Rain	★
	80	Thunder	
	81	Wind	
	82	Seashore	
	83	Stream	★
C6	84	Bubble	★

★ : Tones which are created by using two voices.
(All other Tones are created by one voice.)

■ Music Style List (Expansion Mode)

No.	Music Style	Beat	Preset Tempo	I	E	No.	Music Style	Beat	Preset Tempo	I	E
11	,ROCK1	4/4	120	4	3	51	BOSSA NOVA	4/4	120	4	5
12	ROCK2	4/4	118	2	3	52	SAMBA	4/4	110	4	4
13	RAP	4/4	110	4	2	53	LATIN	4/4	90	4	3
14	HOUSE	4/4	120	4	3	54	SALSA	4/4	120	2	3
15	DANCE	4/4	120	4	4	55	CHACHA	4/4	135	3	4
16	FUNK1	4/4	115	4	1	56	RHUMBA	4/4	120	2	4
17	FUNK2	4/4	96	4	3	57	MAMBO	4/4	110	4	3
18	FUSION	4/4	127	3	2	58	TANGO	4/4	120	2	2
21	8BEAT1	4/4	64	1	2	61	SLOW WALTZ	3/4	75	4	6
22	8BEAT2	4/4	60	1	4	62	WALTZ	3/4	180	2	4
23	8BEAT3	4/4	80	2	4	63	MARCH	4/4	115	4	2
24	8BEAT4	4/4	68	3	4	64	POLKA	4/4	120	2	2
25	16BEAT1	4/4	80	4	2	65	BAROQUE	4/4	140	2	3
26	16BEAT2	4/4	74	1	4	66	COUNTRY	4/4	130	2	2
27	16BEAT3	4/4	100	4	6	67	BEGUINE	4/4	104	1	6
28	16BEAT4	4/4	80	1	3	68	REGGAE	4/4	132	1	3
31	BOOGIE	4/4	162	2	2	71	PASODOBLE	4/4	132	3	2
32	ROCK'N'ROLL	4/4	170	2	5	72	KARSI	4+5/8	120	4	2
33	TWIST	4/4	164	1	4	73	ANADOLU	4/4	108	2	3
34	CHARLESTON	4/4	212	4	4	74	ARAB	4/4	120	2	2
35	SLOW ROCK1	4/4	60	1	2	75	MALFOUF	4/4	120	2	1
36	SLOW ROCK2	4/4	64	2	2	76	KERONCONG	4/4	111	8	7
37	BALLAD1	4/4	120	1	3	77	TROT	4/4	120	4	2
38	BALLAD2	4/4	120	1	2	78	ENKA	4/4	72	4	5
41	SLOW SWING1	4/4	60	2	3	81	POP1	4/4	80	1	1
42	SLOW SWING2	4/4	108	1	6	82	POP2	4/4	120	4	5
43	SWING	4/4	135	4	2	83	POP3	4/4	80	4	4
44	FOXTROT	4/4	180	2	2	84	POP4	4/4	64	2	2
45	BIG BAND	4/4	140	2	3	85	POP5	4/4	64	1	2
46	SHUFFLE	4/4	160	4	3	86	POP6	4/4	120	4	2
47	SWING WALTZ	4/4	100	4	5	87	ROCK'N'ROLL2	4/4	160	4	2
48	DIXIELAND	4/4	162	4	4	88	SWING2	4/4	176	8	3

I : INTRO
E : ENDING

*** In the Nomal Mode, any of the Music Styles tinted gray in this list can be selected.**

POP1 – SWING2 are beautifully simple and work very well as backing for piano pieces.

User Program List

User Program 1

○ Upper Tone	A05 E.Piano 1
○ Lower Tone	A13 Voice
○ Manual Bass Tone	B12 Fretless Bas
○ Upper Part Balance	100
○ Lower Part Balance	70
○ Accompaniment Part Balance	65
○ Accompaniment Bass Part Balance	65
○ Accompaniment Drums Part Balance	65
○ Manual Bass Part Balance	65
○ Manual Drums Part Balance	65
○ Music Style	A10 8BEAT 2
○ Tempo	64
○ Variation	Off
○ Arranger (On/Off,Select)	On,ADVANCED
○ Keyboard Mode	SPLIT
○ Lower	On
○ Manual Bass	Off
○ Split Point	F#3
○ Chord Hold	On
○ Chord Intelligence	Off
○ Melody Intelligence	Off
○ Reverb (overall On/Off,Type)	On,Hall 2
◇ Level for each Part	
Upper	63
Lower	63
Accompaniment	47
Accompaniment Bass	32
Accompaniment Drums	47
Manual Bass	32
Manual Drums	47
○ Chorus(Type)	Chorus 2
◇ On/Off for each Part	
Upper	On
Lower	Off
Manual Bass	Off
○ Octave Shift	
Upper	0
Lower	1
Manual Bass	0
○ Transpose	C
○ Left Pedal	LEADING BASS
○ Manual Drums (On/Off,Set)	Off,Standard set
○ Manual Sound Effects	Off
○ Sync Start	On
○ Sync Stop	Off
○ Leading Bass	Off
○ Intro	On
○ Pitch Bend Range	
Upper	2
Lower	0
Manual Bass	0
○ Repeat Note	
Rate	1/32
Mode	UP
○ Keyboard Sensitivity	2

User Program 2

○ Upper Tone	B03 Trumpet
○ Lower Tone	A01 Piano 1
○ Manual Bass Tone	B09 Wood Bass
○ Upper Part Balance	100
○ Lower Part Balance	72
○ Accompaniment Part Balance	65
○ Accompaniment Bass Part Balance	65
○ Accompaniment Drums Part Balance	65
○ Manual Bass Part Balance	65
○ Manual Drums Part Balance	65
○ Music Style	B03 BIG BAND
○ Tempo	150
○ Variation	Off
○ Arranger (On/Off,Select)	On,ADVANCED
○ Keyboard Mode	SPLIT
○ Lower	Off
○ Manual Bass	Off
○ Split Point	F#3
○ Chord Hold	On
○ Chord Intelligence	Off
○ Melody Intelligence	Off
○ Reverb (overall On/Off,Type)	On,Hall 2
◇ Level for each Part	
Upper	63
Lower	63
Accompaniment	47
Accompaniment Bass	32
Accompaniment Drums	47
Manual Bass	32
Manual Drums	47
○ Chorus(Type)	Chorus 2
◇ On/Off for each Part	
Upper	Off
Lower	Off
Manual Bass	Off
○ Octave Shift	
Upper	0
Lower	1
Manual Bass	0
○ Transpose	C
○ Left Pedal	LEADING BASS
○ Manual Drums (On/Off,Set)	Off,Standard set
○ Manual Sound Effects	Off
○ Sync Start	On
○ Sync Stop	Off
○ Leading Bass	Off
○ Intro	On
○ Pitch Bend Range	
Upper	2
Lower	0
Manual Bass	0
○ Repeat Note	
Rate	1/32
Mode	UP
○ Keyboard Sensitivity	2

User Program 3

○ Upper Tone	B10 E.Guitar 1
○ Lower Tone	A12 Choir
○ Manual Bass Tone	B09 Wood Bass
○ Upper Part Balance	100
○ Lower Part Balance	55
○ Accompaniment Part Balance	65
○ Accompaniment Bass Part Balance	65
○ Accompaniment Drums Part Balance	65
○ Manual Bass Part Balance	65
○ Manual Drums Part Balance	65
○ Music Style	B10 BOSSANOVA
○ Tempo	120
○ Variation	Off
○ Arranger (On/Off,Select)	On,ADVANCED
○ Keyboard Mode	SPLIT
○ Lower	Off
○ Manual Bass	Off
○ Split Point	F#3
○ Chord Hold	On
○ Chord Intelligence	Off
○ Melody Intelligence	Off
○ Reverb (overall On/Off,Type)	On,Hall 2
◇ Level for each Part	
Upper	63
Lower	63
Accompaniment	47
Accompaniment Bass	32
Accompaniment Drums	47
Manual Bass	32
Manual Drums	47
○ Chorus(Type)	Chorus 2
◇ On/Off for each Part	
Upper	Off
Lower	Off
Manual Bass	Off
○ Octave Shift	
Upper	0
Lower	1
Manual Bass	0
○ Transpose	C
○ Left Pedal	LEADING BASS
○ Manual Drums (On/Off,Set)	Off,Standard set
○ Manual Sound Effects	Off
○ Sync Start	On
○ Sync Stop	Off
○ Leading Bass	Off
○ Intro	On
○ Pitch Bend Range	
Upper	2
Lower	0
Manual Bass	0
○ Repeat Note	
Rate	1/32
Mode	UP
○ Keyboard Sensitivity	2

User Program 4

○ Upper Tone	B05 Sax
○ Lower Tone	B14 Fantasia
○ Manual Bass Tone	B12 Fretless Bas
○ Upper Part Balance	100
○ Lower Part Balance	72
○ Accompaniment Part Balance	65
○ Accompaniment Bass Part Balance	65
○ Accompaniment Drums Part Balance	65
○ Manual Bass Part Balance	65
○ Manual Drums Part Balance	65
○ Music Style	A05 DANCE
○ Tempo	120
○ Variation	On
○ Arranger (On/Off,Select)	On,ADVANCED
○ Keyboard Mode	SPLIT
○ Lower	Off
○ Manual Bass	Off
○ Split Point	F#3
○ Chord Hold	On
○ Chord Intelligence	Off
○ Melody Intelligence	Off
○ Reverb (overall On/Off,Type)	On,Hall 1
◇ Level for each Part	
Upper	63
Lower	63
Accompaniment	47
Accompaniment Bass	32
Accompaniment Drums	47
Manual Bass	32
Manual Drums	47
○ Chorus(Type)	Chorus 2
◇ On/Off for each Part	
Upper	Off
Lower	Off
Manual Bass	Off
○ Octave Shift	
Upper	0
Lower	1
Manual Bass	0
○ Transpose	C
○ Left Pedal	LEADING BASS
○ Manual Drums (On/Off,Set)	Off,Standard set
○ Manual Sound Effects	Off
○ Sync Start	On
○ Sync Stop	Off
○ Leading Bass	Off
○ Intro	On
○ Pitch Bend Range	
Upper	2
Lower	0
Manual Bass	0
○ Repeat Note	
Rate	1/32
Mode	UP
○ Keyboard Sensitivity	2

User Program 5

○ Upper Tone	A08 Marimba
○ Lower Tone	B16 Brightness
○ Manual Bass Tone	B09 Wood Bass
○ Upper Part Balance	90
○ Lower Part Balance	60
○ Accompaniment Part Balance	65
○ Accompaniment Bass Part Balance	65
○ Accompaniment Drums Part Balance	75
○ Manual Bass Part Balance	65
○ Manual Drums Part Balance	75
○ Music Style (Music Style Expansion Mode)	67 BEGUINE
○ Tempo	104
○ Variation	On
○ Arranger (On/Off,Select)	On,ADVANCED
○ Keyboard Mode	SPLIT+LAYER
○ Lower	On
○ Manual Bass	Off
○ Split Point	F#3
○ Chord Hold	On
○ Chord Intelligence	Off
○ Melody Intelligence	Off
○ Reverb (overall On/Off,Type)	On,Hall 2
◇ Level for each Part	
Upper	63
Lower	63
Accompaniment	47
Accompaniment Bass	32
Accompaniment Drums	47
Manual Bass	32
Manual Drums	47
○ Chorus(Type)	Chorus 2
◇ On/Off for each Part	
Upper	Off
Lower	Off
Manual Bass	Off
○ Octave Shift	
Upper	0
Lower	1
Manual Bass	0
○ Transpose	C
○ Left Pedal	REPEAT NOTE ON
○ Manual Drums (On/Off,Set)	Off,Standard set
○ Manual Sound Effects	Off
○ Sync Start	On
○ Sync Stop	Off
○ Leading Bass	Off
○ Intro	On
○ Pitch Bend Range	
Upper	2
Lower	0
Manual Bass	0
○ Repeat Note	
Rate	1/32
Mode	UP
○ Keyboard Sensitivity	2

INTELLIGENT PIANO 【Keyboard Section】 Date : Mar. 18 1992

Model KR-3500

MIDI Implementation Chart

Version : 1.00

Function ...		Transmitted	Recognized	Remarks
Basic	Default	1, 2, 3, 10	1, 2, 3, 4, 10	1 = Upper, 2 = Manual Bass, 3 = Lower, 10 = Manual Drums
Channel	Changed	1 – 16, OFF	1 – 16, OFF	
Mode	Default	×	Mode 3	
	Messages	×	Mode 3, 4 (M = 1)	* 2
	Altered	*********		
Note Number		17 – 115	0 – 127	
	True Voice	*********	0 – 127	
Velocity	Note ON	○	○	
	Note OFF	×	×	
After Touch	Key's	×	×	
	Ch's	×	×	
Pitch Bender		○	○	
Control Change	0/32	○	○	Bank select
	1	×	○	Modulation
	5	×	○	Portamento time
	6,38	×	○	Data entry
	7	○ * 1	○ * 1	Volume
	10	×	○	Panpot
	11	×	○	Expression
	64	○	○	Hold 1
	65	×	○	Portamento
	66	○	○	Sostenuto
	67	○	○	Soft
	91	○	○ (Reverb)	Effect1 depth
	93	○	○ (Chorus)	Effect3 depth
	98,99	×	○	NRPN LSB, MSB
	100, 101	×	○	RPN LSB, MSB
	120	×	○	All sounds off
	121	×	○	Reset all controllers
Prog Change		0 – 127	○	
	True #	*********	0 – 127	
System Exclusive		×	×	
System Common	Song Pos	×	×	
	Song Sel	×	×	
	Tune	×	×	
System Real Time	Clock	×	×	
	Commands	×	×	
Aux Messages	Local ON/OFF	○	○	
	All Notes OFF	×	○ (123 – 125)	
	Active Sense	○	○	
	Reset	×	×	
Notes		* 1 ○ × can be selectable. * 2 Recognize as M = 1 even if M ≠ 1.		

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO ○ : Yes

Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO × : No

INTELLIGENT PIANO 【Arranger Section】 Date : Mar, 18 1992

Model KR-3500

MIDI Implementation Chart

Version : 1.00

Function ...		Transmitted	Recognized	Remarks
Basic	Default	16, 5, 6, 7, 8, 11	16, 5, 6, 7, 8, 11	16 = Chord Recognition, 5 = Accomp. 1, 6 = Accomp. 2, 7 = Accomp. 3, 8 = Accomp. Bass 11 = Accomp. Drums
Channel	Changed	1 – 16, OFF	1 – 16, OFF	
Mode	Default	×	Mode 3	
	Messages	×	Mode 3, 4 (M = 1)	* 2
	Altered	*********		
Note Number	True Voice	17 – 115	0 – 127	
		*********	0 – 127	
Velocity	Note ON	○	○	
	Note OFF	×	×	
After Touch	Key's	×	×	
	Ch's	×	×	
Pitch Bender		×	○	
Control Change	0/32	×	○	Bank select
	1	×	○	Modulation
	5	×	○	Portamento time
	6,38	×	○	Data entry
	7	○ * 1	○ * 1	Volume
	10	×	○	Panpot
	11	×	○	Expression
	64	×	○	Hold 1
	65	×	○	Portamento
	66	×	○	Sostenuto
	67	×	○	Soft
	91	○	○ (Reverb)	Effect1 depth
	93	×	○ (Chorus)	Effect3 depth
	98,99	×	○	NRPN LSB, MSB
	100, 101	×	○	RPN LSB, MSB
	120	×	○	All sounds off
	121	×	○	Reset all controllers
Prog Change	True #	0 – 127	○	
		*********	0 – 127	
System Exclusive		×	×	
System Common	Song Pos	×	×	
	Song Sel	×	×	
	Tune	×	×	
System Real Time	Clock	○	○	
	Commands	○	○	
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	×	○ (123 – 125)	
	Active Sense	×	○	
	Reset	×	×	
Notes		* 1 ○ × can be selectable. * 2 Recognize as M = 1 even if M ≠ 1. All Channel messages are transmitted when Arranger MIDI Out Switch is ON.		

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO ○ : Yes

Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO × : No

INTELLIGENT PIANO 【Composer Section】 Date : Mar, 18 1992

Model KR-3500

MIDI Implementation Chart

Version : 1.00

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default	1, 2, 3, 10, 16	1, 2, 3, 10, 16	1 = Upper, 2 = M.anual Bass, 3 = Lower, 10 = M. Drums/M. S. Effects, 16 = Chord Recognition
	Changed	1 – 16, OFF	1 – 16, OFF	
Mode	Default	×	Mode 3	
	Messages	×	Mode 3, 4 (M = 1)	* 2
	Altered	*********		
Note Number	True Voice	17 – 115	0 – 127	
		*********	0 – 127	
Velocity	Note ON	○	○	
	Note OFF	○	○	
After Touch	Key's	○	○	
	Ch's	○	○	
Pitch Bender		○	○	
Control Change	0/32	○	○	Bank select
	1	○	○	Modulation
	5	○	○	Portamento time
	6,38	○	○	Data entry
	7	○ * 1	○ * 1	Volume
	10	○	○	Panpot
	11	○	○	Expression
	64	○	○	Hold 1
	65	○	○	Portamento
	66	○	○	Sostenuto
	67	○	○	Soft
	91	○	○ (Reverb)	Effect1 depth
	93	○	○ (Chorus)	Effect3 depth
	98,99	○	○	NRPN LSB, MSB
	100, 101	○	○	RPN LSB, MSB
	120	○	○	All sounds off
	121	○	○	Reset all controllers
Prog Change	True #	0 – 127	○	
		*********	0 – 127	
System Exclusive		×	×	
System Common	Song Pos	○	○	
	Song Sel	○	○	
	Tune	×	×	
System Real Time	Clock	○	○	
	Commands	○	○	
Aux Messages	Local ON/OFF	○	○	
	All Notes OFF	×	○ (123 – 125)	
	Active Sense	○	○	
	Reset	×	×	
Notes		* 1 ○ × can be selectable. * 2 Recognize as M = 1 even if M ≠ 1. All Channel messages are transmitted when Composer MIDI Out Switch is ON.		

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO ○ : Yes

Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO × : No

INTELLIGENT PIANO 【GS Section】 Date : Mar, 18 1992

Model KR-3500

MIDI Implementation Chart

Version : 1.00

Function ...		Transmitted	Recognized	Remarks
Basic	Default	×	1 – 16	
Channel	Changed	×	1 – 16	
Mode	Default	×	Mode 3	
	Messages	×	Mode 3, 4 (M = 1)	* 2
	Altered	*********		
Note Number	True Voice	×	0 – 127	
		*********	0 – 127	
Velocity	Note ON	×	○	
	Note OFF	×	×	
After Touch	Key's	×	* 1	
	Ch's	×	* 1	
Pitch Bender		×	* 1	
Control Change	0/32	×	* 3 (MSB only)	Bank select
	1	×	* 1	Modulation
	5	×	* 3	Portamento time
	6,38	×	* 3	Data entry
	7	×	* 1	Volume
	10	×	* 1	Panpot
	11	×	* 1	Expression
	64	×	* 1	Hold 1
	65	×	* 1	Portamento
	66	×	* 1	Sostenuto
	67	×	* 1	Soft
	91	×	* 3 (reverb)	Effect1 depth
	93	×	* 3 (chorus)	Effect3 depth
	98,99	×	* 1	NRPN LSB, MSB
	100, 101	×	* 1	RPN LSB, MSB
	120	×	○	All sounds off
	121	×	○	Reset all controllers
Prog Change	True #	×	* 1	
		*********	0 – 127	
System Exclusive		×	○	
System Common	Song Pos	×	×	
	Song Sel	×	×	
	Tune	×	×	
System Real Time	Clock	×	×	
	Commands	×	×	
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	×	○ (123 – 125)	
	Active Sense	○	○	
	Reset	×	×	
Notes		* 1 ○ × can be selectable. * 2 Recognize as M = 1 even if M ≠ 1. * 3 ○ × can be selectable, only using the receive switch of control change (all).		

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO ○ : Yes

Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO × : No

Specifications

KR-3500 Intelligent Piano

(compatible with GS Format / General MIDI System Level 1)

Keyboard
88 keys (Rotary, Oil-Damped Mechanism)

Parts
Upper , Lower, Accompaniment 1/2/3 , Accompaniment Bass, Accompaniment Drums, Manual Bass, Manual Drums/Manual Sound Effects

Maximum Polyphony
28 voices

Tones
40 (Tone Expansion Mode:128)

Effects
Reverb, Chorus

User Programs
5

Music Styles
32 (Music Style Expansion Mode:64)
Optional Music Style cards can provide numerous more.

Composer

Tracks	:4
Songs	:1
Note Storage	:approx. 18,000 notes
Tempo	: ♩ =30 — 240
Resolution	:120 clock/quarter note
Recording Method	:Realtime

Display
16 characters, 2 lines (backlit LCD)

Connectors
Output Jacks (L(MONO) / R)
Input Jacks (L(MONO) / R)
Headphone Jack (Stereo)
Expression Pedal Jack
MIDI Connectors (In, Out, Thru)
Pedal Connector (8 pin DIN type)

Speakers
20cm Dual Cone × 2

Rated Power Output
25W × 2

Power Supply
AC117V, AC230V or AC240V

Power Consumption
70W(AC117V), 70W(AC230V), 70W(AC240V)

Finish
Brazilian Rosewood

Dimensions

KR-3500	:1415(W) × 522(D) × 217.5(H)mm
	:55-3/4(W) × 20-9/16(D) × 8-9/16(H) inches
	(including MR Holder and Rubber Foot)
Piano Stand (KRS-3500)	:1421(W) × 454(D) × 638(H) mm
	:56(W) × 17-7/8(D) × 25-1/8(H) inches
Total	:1421(W) × 522(D) × 845.5(H) mm
	:56(W) × 20-9/16(D) × 33-5/16(H) inches

Weight

KR-3500	:50.5kg / 111 lbs 6 oz
Piano Stand (KRS-3500)	:15.9kg / 35 lbs 1 oz
Total	:66.4kg / 146 lbs 7 oz

Accessories
Quick Start
Owner's Manual
Music Stand
Power Cord
Manual Drums Sticker
Piano Stand (KRS-3500)

Options

Music Style card	:TN-SC Series
Music Style Super card	:MSL-15
Memory card	:M-256E
Expression pedal	:EV-5

*The specifications and/or appearance of this product are subject to change without prior notice.

Index

Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

U. S. A.
Roland Corporation US
7200 Dominion Circle
Los Angeles, CA.
90040-3647, U. S. A.
☎ (213)685 - 5141

CANADA
Roland Canada Music Ltd.
(Head Office)
5480 Parkwood
Richmond B. C., V6V 2M4
CANADA
☎ (604)270 - 6626

Roland Canada Music Ltd.
9425 Transcanadienne
Service Rd. N., St Laurent,
Quebec H4S 1V3,
CANADA
☎ (514)335 - 2009

Roland Canada Music Ltd.
346 Watline Avenue,
Mississauga, Ontario L4Z
1X2, CANADA
☎ (416)890 - 6488

AUSTRALIA
Roland Corporation
(Australia) Pty. Ltd.
(Head Office)
38 Campbell Avenue
Dee Why West. NSW 2099
AUSTRALIA
☎ (02)982 - 8266

Roland Corporation
(Australia) Pty. Ltd.
(Melbourne Office)
50 Garden Street
South Yarra, Victoria 3141
AUSTRALIA
☎ (03)241 - 1254

UNITED KINGDOM
Roland(U.K.) Ltd.
Rye Close
Ancells Business Park
Fleet, Hampshire GU13
8UY, UNITED KINGDOM
☎ 0252 - 816181

Roland(U.K.) Ltd.,
Swansea Office
Atlantic Close, Swansea
Enterprise Park, Swansea,
West Glamorgan SA79FJ,
UNITED KINGDOM
☎ (0792)700 - 139

ITALY
Roland Italy S. p. A.
Viale delle Industrie 8
20020 ARESE MILANO
ITALY
☎ 02 - 93581311

SPAIN
Roland Electronics
de España, S. A.
Calle Bolivia 239
08020 Barcelona, SPAIN
☎ 93 - 308 - 1000

GERMANY
Roland Elektronische
Musikinstrumente
Handelsgesellschaft mbH.
Oststrasse 96, 2000
Norderstedt, GERMANY
☎ 040/52 60 090

FRANCE
Musikengro
102 Avenue Jean-Jaures
69007 Lyon Cedex 07
FRANCE
☎ (7)858 - 54 60

Musikengro (Paris Office)
Centre Region Parisienne
41 rue Charles-Fourier,
94400 Vitry s/Seine
FRANCE
☎ (1)4680 86 62

BELGIUM/ HOLLAND/ LUXEMBOURG
Roland Benelux N. V.
Houtstraat 1
B-2260 Oevel-Westerlo
BELGIUM
☎ (0032)14 - 575811

DENMARK
Roland Scandinavia A/S
Langebrogade 6
Box 1937
DK-1023 Copenhagen K.
DENMARK
☎ 31 - 95 31 11

SWEDEN
Roland Scandinavia A/S
DanvikCenter 28 A, 2 tr.
S-131 30 Nacka
SWEDEN
☎ 08 - 702 00 20

NORWAY
Roland Scandinavia
Avd. Norge
Lilleakerveien 2
Postboks 95 Lilleaker
N-0216 Oslo 2
NORWAY
☎ 02 - 73 00 74

FINLAND
Fazer Musik Inc.
Länsituulentie
POB 169
SF-02101 Espoo
FINLAND
☎ 0 - 43 50 11

NEW ZEALAND
Roland Corporation
(NZ) Ltd.
97 Mt. Eden Road, Mt.
Eden, Auckland 3,
NEW ZEALAND
☎ (09)3098 - 715

SWITZERLAND
Musitronic AG
Gerberstrasse 5, CH-4410
Liestal, SWITZERLAND
☎ 061/921 16 15

Roland CK (Switzerland)
AG
Postfach/Hauptstrasse 21
CH-4456 Tenniken
SWITZERLAND
☎ 061/98 60 55
Repair Service by
Musitronic AG

AUSTRIA
E. Dematte &Co.
Neu-Rum Siemens-
Strasse 4
A-6021 Innsbruck Box 591
AUSTRIA
☎ (0512)63 451

GREECE
V. Dimitriadis & Co. Ltd.
2 Phidiou Str., GR 106 78
Athens, GREECE
☎ 1 - 3620130

PORTUGAL
Casa Caius Instrumentos
Musicais Lda.
Rua de Santa Catarina 131
Porto, PORTUGAL
☎ 02 - 38 44 56

HUNGARY
Intermusica Ltd.
Warehouse Area 'DEPO'
Torokbalint, Budapest
HUNGARY
☎ (1)1868905

ISRAEL
D.J.A. International Ltd.
25 Pinsker St., Tel Aviv
ISRAEL
☎ 972 - 3 - 5283015

CYPRUS
Radex Sound Equipment
Ltd.
17 Panteli Katelari Str.
P.O.Box 2046, Nicosia
CYPRUS
☎ 453426, 466423

TURKEY
Barkat Sanayi ve Ticaret
Siraselviler Cad. 86/6
Taksim Istanbul, TURKEY
☎ 149 93 24

EGYPT
Al Fanny Trading Office
9, Ebn Hagar Askalany
Street, Ard El Golf,
Heliopolis, Cairo, EGYPT
☎ 2917803 - 665918

BRAZIL
Roland Brasil Ltda.
R. Alvarenga 591
CEP-05509 Sao Paulo
BRAZIL
☎ (011)813 - 7967
Repair Service for Roland
and Rhodes products

Oliver do Brasil S.A.
Instrumentos Musicais
Av. Ceci. No.578 Centro
Empresarial Tambore
Barueri SP CEP 06400
BRAZIL
☎ (011)709 - 1267
Repair Service for BOSS
products

MEXICO
Case Veerkamp, s.a. de c.v.
Mesones No. 21
Col. Centro
C.P. 06080 Mexico, D.F.
MEXICO
☎ (5)709 - 3716

La Casa Wagner de
Guadalajara s.a. de c.v.
Av. Corona No. 202 S.J.
C.P.44100
Guadalajara, Jalisco
MEXICO
☎ (36)13 - 1414

ARGENTINA
Netto S.A.
Venezuela 1433
1095 Buenos Aires
ARGENTINA
☎ 37 - 1632

HONG KONG
Tom Lee Music Co., Ltd.
Service Division
22-32 Pun Shan Street,
Tsuen Wan, New
Territories, HONG KONG
☎ 415 - 0911

KOREA
Cosmos Corporation
Service Station
261 2nd Floor Nak-Won
arcade
Jong-Ro ku, Seoul, KOREA
☎ (02) 742 8844

SINGAPORE
Swee Lee Company
Bras Basah Complex
#03-23 Singapore 0178
SINGAPORE
☎ 3367886

THAILAND
Theera Music Co., Ltd.
330 Verng Nakorn Kasem,
Soi 2, Bangkok 10100,
THAILAND
☎ 2248821

MALAYSIA
Syarikat Bentley
No.142, Jalan Bukit
Bintang 55100 Kuala
Lumpur, MALAYSIA
☎ 2421288

INDONESIA
PT Galestra Inti
Kompleks Perkantoran
Duta Merlin Blok C/59
Jl. Gajah mada No.3-5
Jakarta 10130
INDONESIA
☎ (021) 354604, 354606

TAIWAN
Siruba Enterprise(Taiwan)
Co., LTD.
Room. 5, 9fl. No. 112
Chung Shan N.Road Sec.2
Taipei, TAIWAN, R.O.C.
☎ (02)5364546

SOUTH AFRICA
That Other Music
Shop(PTY) LTD.
256 Bree Street,
Johannesburg 2001
Republic of South Africa
☎ 337 - 6573

Paul Bothner(PTY) LTD.
17 Werdmuller Centre
Claremont 7700
Republic of South Africa
☎ 021 - 64 - 4030

As of Jan 8. 1992

For Germany

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

Roland DIGITAL INTELIGENT PIANO KR-3500

(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046/1984

(Amtsblattverfugung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

Name des Herstellers/Importeurs

For the USA

RADIO AND TELEVISION INTERFERENCE

WARNING — This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equipment is likely to result in interference to radio and TV reception.

The equipment described in this manual generates and uses radio frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J, of Part 15, of FCC Rules. These rules are designed to provide reasonable protection against such a interference in a rasidential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

- Disconnect other devices and their input/output cables one at a time. If the interference stops, it is caused by either the other device or its I/O cable.
  These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non Roland devices, contact the manufacturer or dealer for assistance.
  If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:
- Turn the TV or radio antenna until the interference stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV. If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission:

"How to Identify and Resolve Radio — TV Interference Problems"

This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

For Canada

CLASS B — **NOTICE**

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

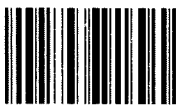
CLASSE B — **AVIS**

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Réglement des signaux parasites par le ministère canadien des Communications.

Roland®

26045989

UPC 26045989



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