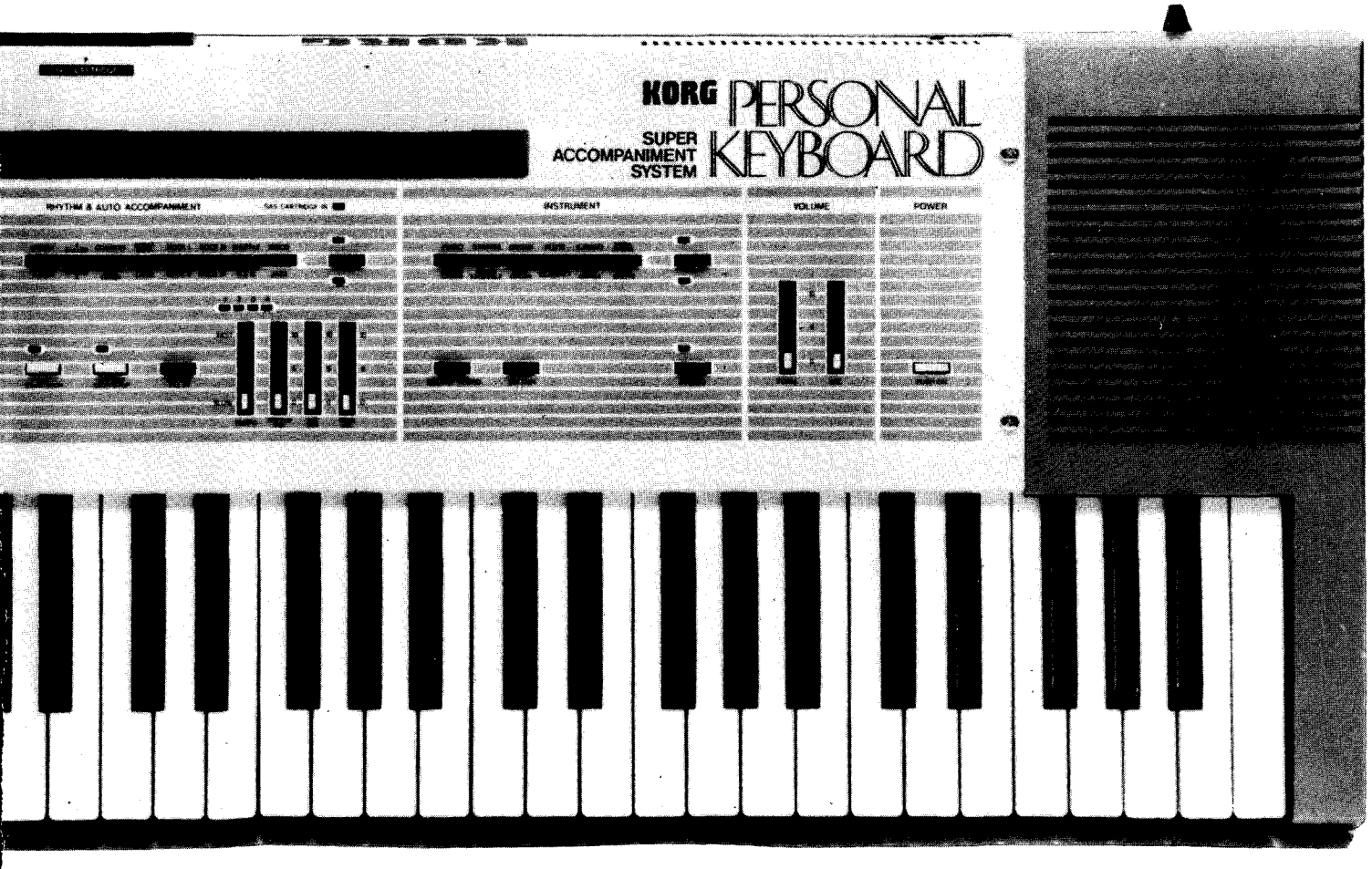
SAS-20

PERSONAL KEYBOARD

OWNER'S MANUAL

Including Music Theory Supplement



KORG®

SUPER ACCOMPANIMENT SYSTEM

Thank you and congratulations on your purchase of the Korg SAS-20. This "Personal Keyboard" gives you the unique benefits of Korg's innovative synthesizer technology combined with easy to use microcomputer functions. The SAS-20 offers a wide variety of realistic sounds and revolutionary features adding to your musical enjoyment.

For beginning keyboard players, and as a general reference for all players, a comprehensive music theory and chord guide is included at the end of this manual.

To assure optimum performance, please read this owner's manual carefully before use.

Major Features of the SAS-20

1. Korg's innovative synthesizer technology provides beautiful, realistic musical instrument sounds. Dual (Twin) speakers create spacious stereo sound.

2. Twelve different instrument sounds can be used with additional effects for extra variety and richness.

3. Rhythm & Accompaniment function provides automatic accompaniment when you play chords with your left hand. There are 16 different rhythm and accompaniment patterns to choose from. Each preset pattern is unique and musically satisfying.

4. Compu Magic Accompaniment Function automatically plays entire song accompaniment including rhythm and chord progressions, so that you are free to concentrate on the melody. This lets you give a sophisticated musical performance using just one finger.

5. Key transpose allows you to shift the entire keyboard pitch, making it easy to play in different keys or match the music to the singer's vocal range.

6. With optional SAS Cartridges, you can change the contents of the rhythm and accompaniment functions. This lets you create an unlimited library of rhythm and accompaniments to suit all your favorite kinds of music.

7. Dual stereo speakers are built in. Optional car battery adaptor is available.

CARE OF YOUR UNIT

To assure reliability and safety, please observe the following precautions and suggestions.

Environment

- To avoid damage or malfunction, do not use or store this unit in the following locations.
  - Exposed to direct sunlight.
  - Exposed to high temperature or humidity.
  - In sandy, dirty, or dusty places.

Power Supply

- Always use the correct AC line voltage. If you use this unit in a country having a different line voltage, use the appropriate voltage adaptor.
- Noise may occur and sound quality may suffer if this unit is plugged into the same wall socket as many other electrical appliances (when using extension cords, etc.).

Handling

- Do not use excessive force on control buttons and sliders.

Headphone Jack

- The headphone jack allows for private practice.

Cleaning

- Wipe the exterior with a soft, dry cloth. Do not use paint thinner, alcohol, benzene, or other chemical solvents.

Interference between Electrical Appliances

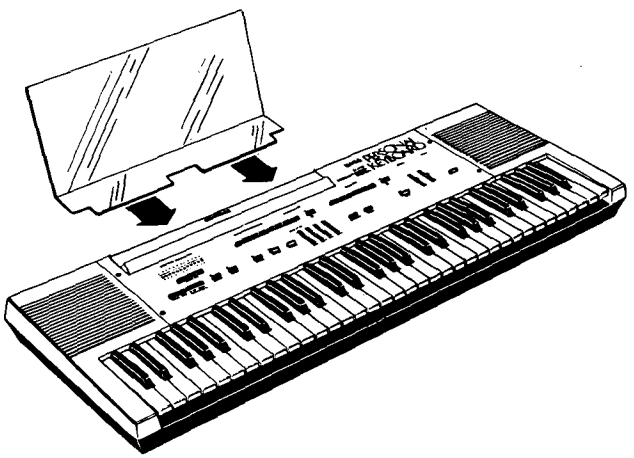
- Noise and/or misoperation may occur if this unit is played near a radio, television, or other electrical appliance. If interference occurs, move the keyboard further away from the other appliances.

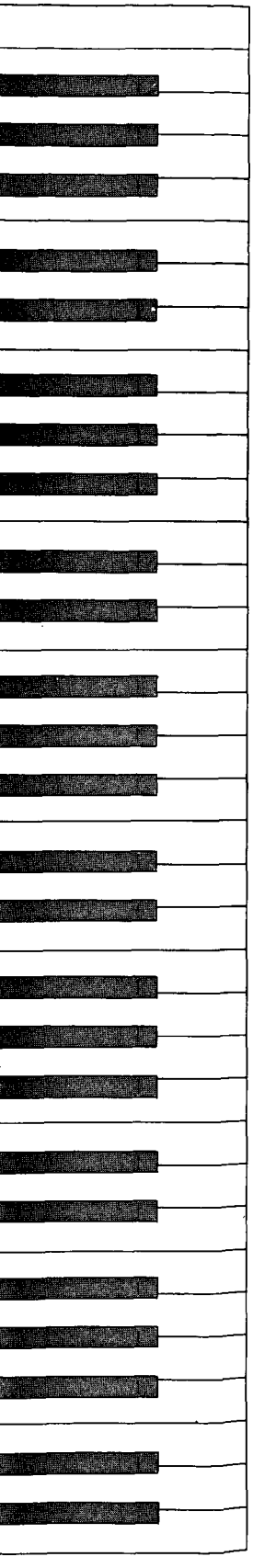
Keep this Owner's Manual

- For future reference, please store this manual in a safe place.

Mounting the Music Stand

The supplied music stand fits into the slots on the panel as shown in the illustration.





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FRONT PANEL

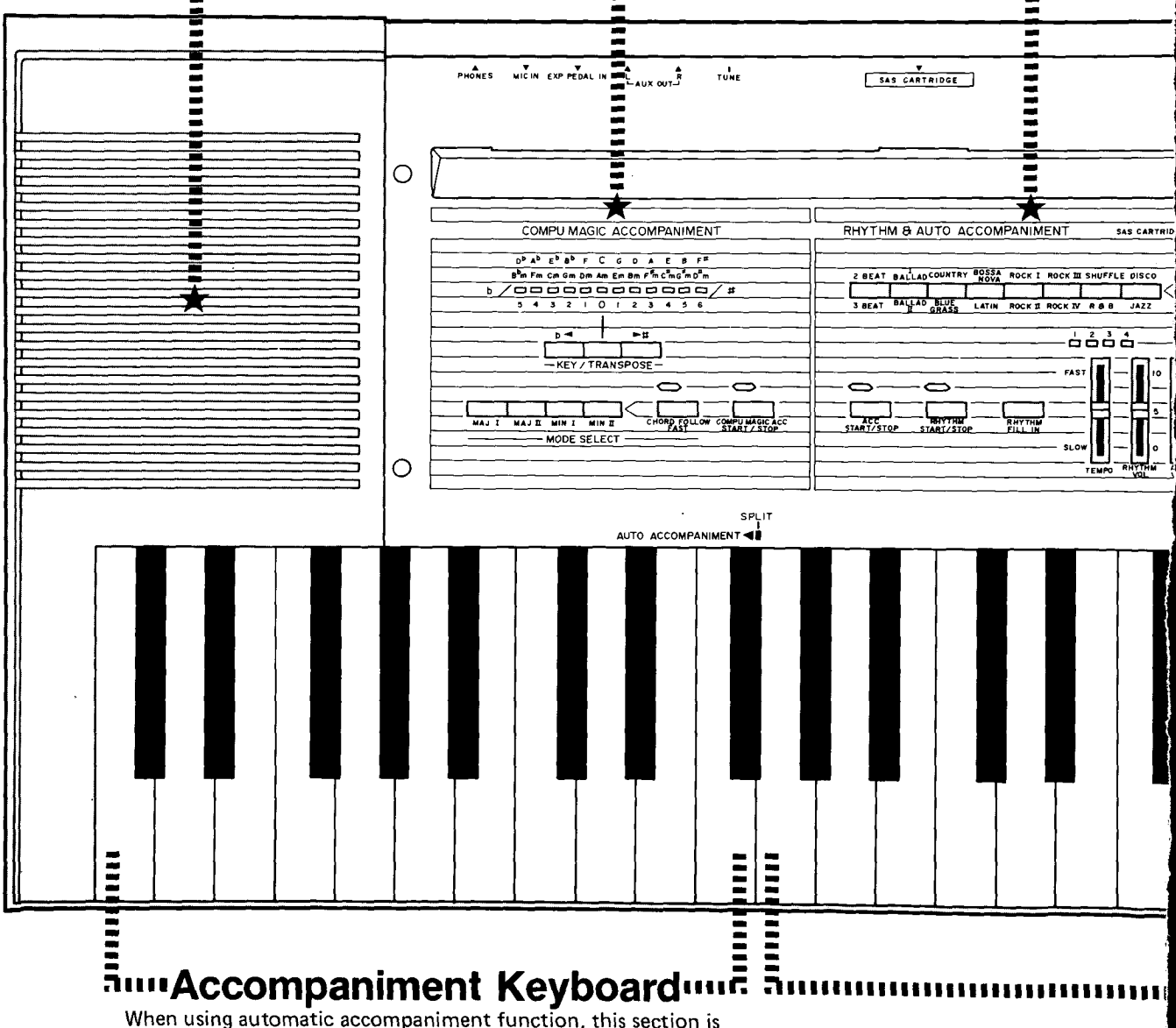
Rhythm & Auto Accompaniment

Gives you an unlimited choice of rhythm patterns and automatic accompaniment patterns (chord & bass).

Compu Magic Accompaniment

Lets you select key and chord mode progressions (major, minor) for automatic chord accompaniment when you play the melody.

Stereo Speaker



Accompaniment Keyboard

When using automatic accompaniment function, this section is used to play chords.

Instrument

Gives you a choice of 12 different instrument sounds and effects for playing on the keyboard.

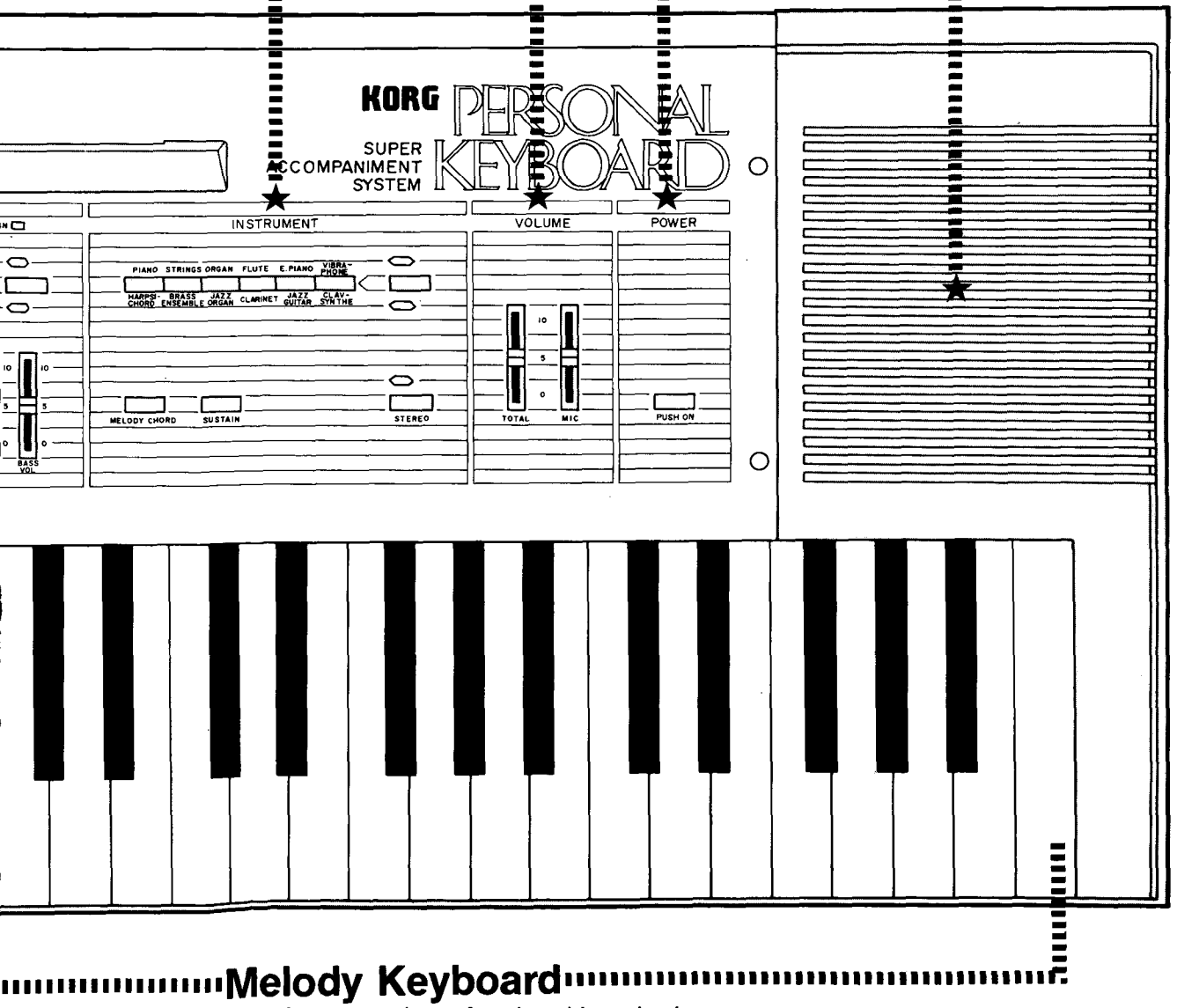
Volume

For adjustment of overall keyboard volume and volume of microphone, etc., connected to rear panel input.

Power Switch

Press to turn power on and off.

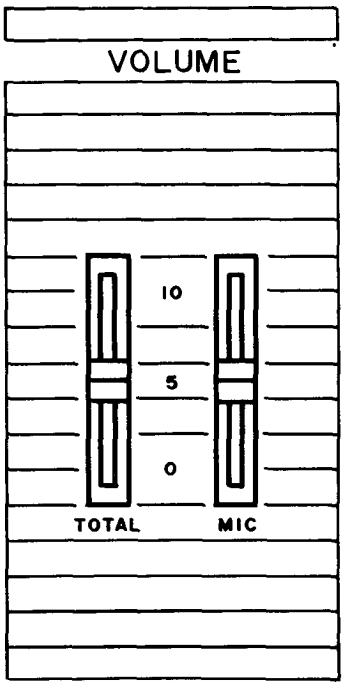
Stereo Speaker

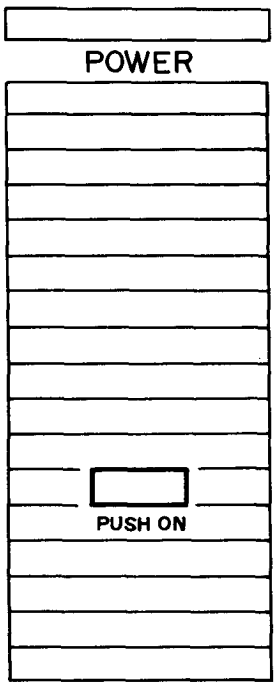


Melody Keyboard

When using automatic accompaniment function, this section is used to play the melody.

POWER SWITCH AND VOLUME CONTROLS

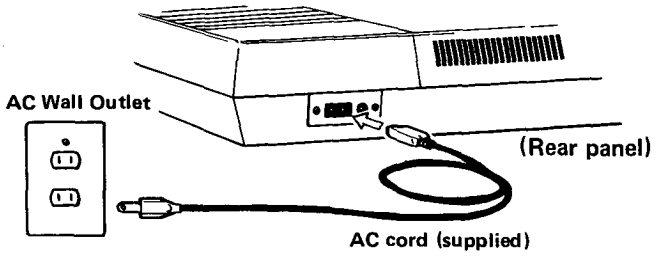




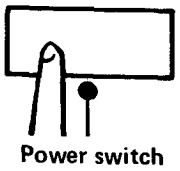
The SAS-20 Personal Keyboard has built-in stereo speakers. Connect the AC cord to the AC power socket, located on the rear panel and plug into an AC wall outlet. No other power connections are required.

Basic Preparations for PLAYING

1) Connect AC cord.



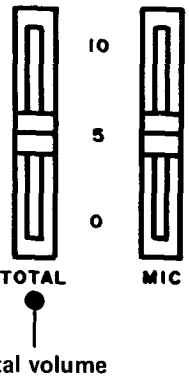
2) Turn on Power.



• Press once to turn on.
Press again to turn off.

Front panel LED indicators light up about 3 seconds after power is turned on. (Keyboard can be played after these LEDs turn on.)

3) Adjust Volume.

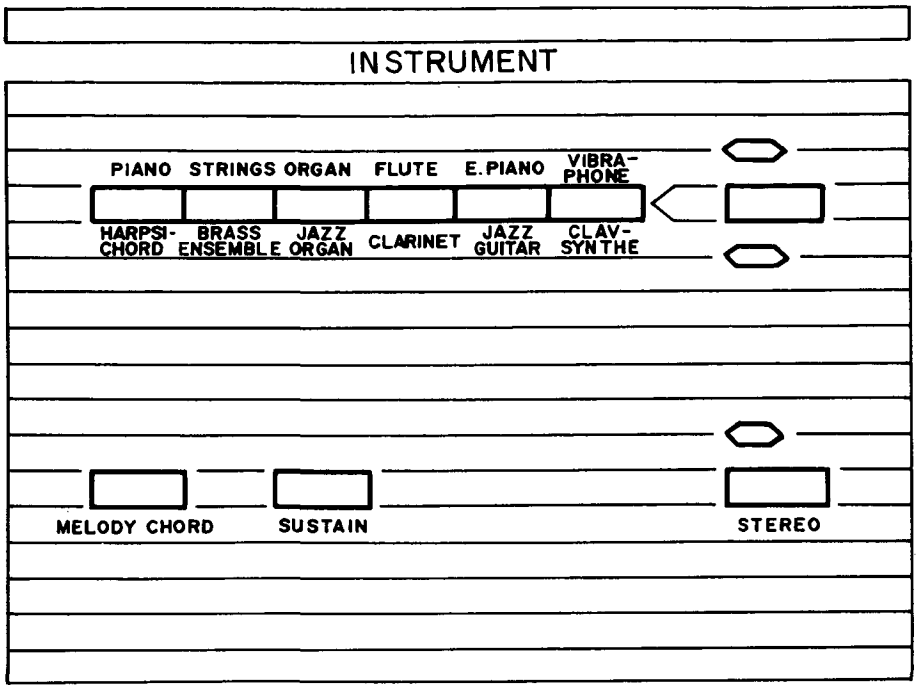


Use TOTAL VOLUME slider to adjust full keyboard volume. See "Setting Variations and Connections" section for MIC VOLUME DETAILS.

Caution

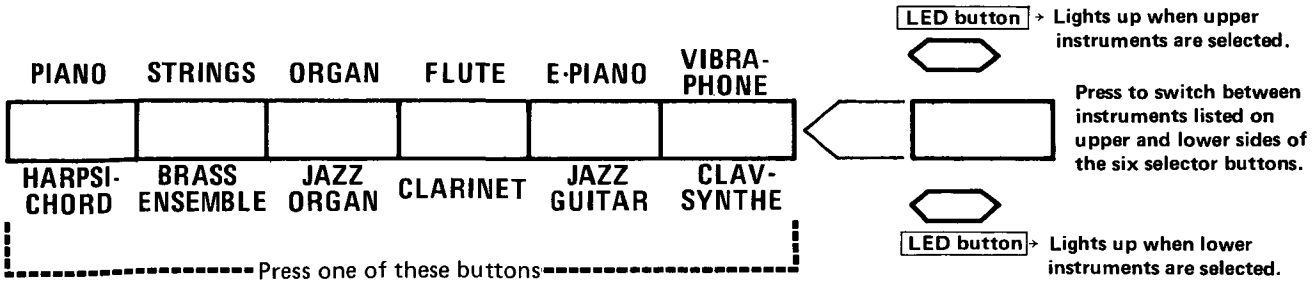
There is still a small electrical current present in the unit even if the power switch is turned off. To avoid damage, please unplug AC cord from the AC wall outlet when not using the keyboard for extended periods of time.

INSTRUMENT SELECTORS

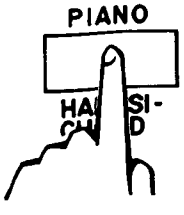


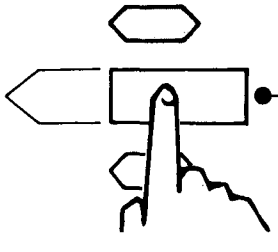
Korg's innovative synthesizer technology gives the player a choice of 12 beautifully realistic instrument sounds. Effects (melody chord, sustain, and stereo) can be added for greater richness and variety.

How to select an instrument sound



Example: To select PIANO.





Press button so that upper LED indicator lights up. (LED switches light up every time this button is pressed between upper and lower position.)

Using the instrument effects

1) STEREO

Press this button to produce a spacious stereo effect from the left and right speakers. (LED lights up when this effect is turned on.)

- Press again to return to normal (mono) sound.
- If microphone is connected, the microphone sound will also be heard in stereo.

2) SUSTAIN

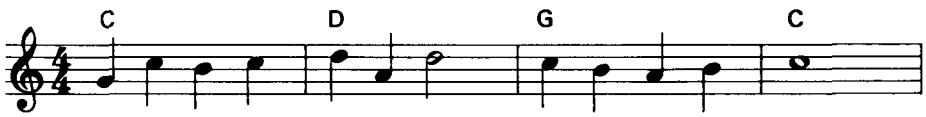
When this button is pressed, the sound takes longer to fade away after you release the keys on the keyboard. (Note that this effect is already part of the VIBRAPHONE sound.)

- Press again to turn off effect.

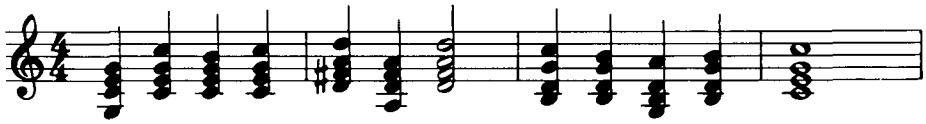
3) MELODY CHORD

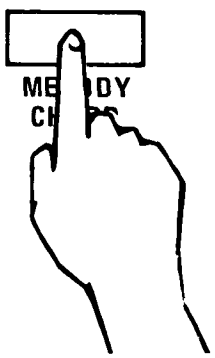
Used with the Auto Accompaniment and Compu Magic functions, this effect produces full rich chords when you play single notes on the melody keyboard (anywhere above the "split" line).

Example



If you play the melody above, you might hear the chords shown below. Chord structure varies according to key, mode, etc.



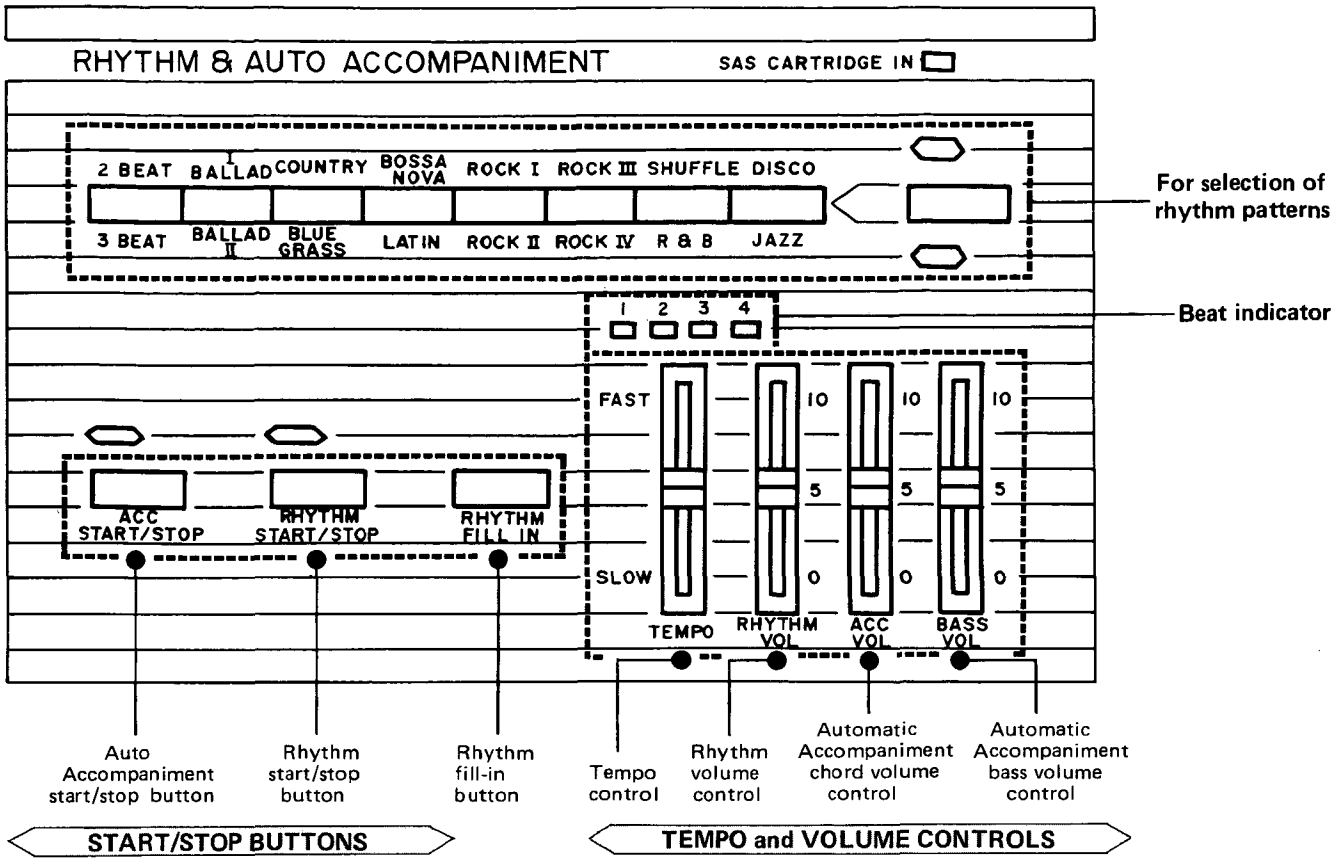


Press again to turn off melody chord effect.

Note

When the melody chord function is being used, you will only hear a chord from one key at a time (in the melody keyboard section).
Melody chord has no effect when Compu Magic and other automatic functions are turned off.
(See pages 11 for explanations of Acc and Compu Magic Accompaniment functions.)

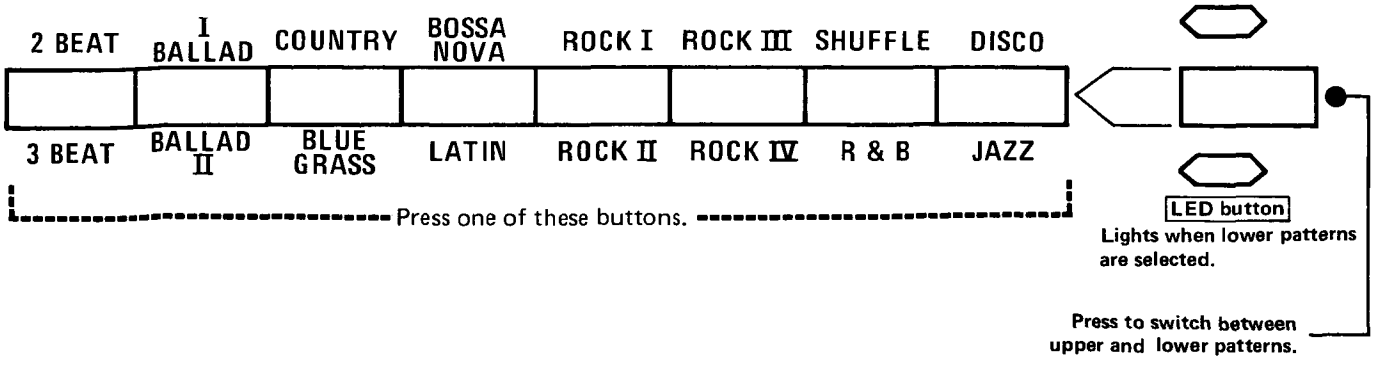
RHYTHM & AUTO ACCOMPANIMENT SECTION



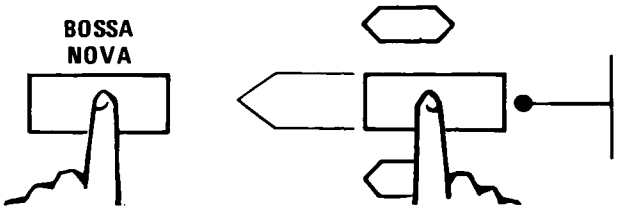
RHYTHM

Sixteen rhythm patterns are available to suit virtually any kind of music.

1) Select desired rhythm pattern.

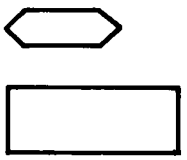


—Example: To select bossa nova pattern.



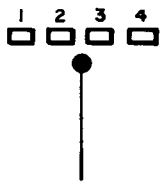
Press to switch to upper pattern (if necessary).
(LED switches light up every time button is pressed between upper and lower position.)

2) Start rhythm pattern.

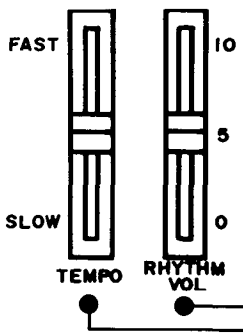


Press this button to begin rhythm play.
(Press again to stop.)

3) Adjust tempo and volume.



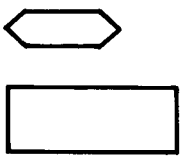
Beat indicator
Shows tempo (how fast rhythm is playing) and beat. Red LED is first beat of the measure.



Rhythm volume control
Allows independent adjustment of rhythm (drums, percussion) volume level.

Tempo
Adjusts how fast the rhythm plays.

4) Try adding a fill in pattern.



Press this during rhythm play when you want a fill in pattern. (One measure drum rhythm change.)

- The rhythm sounds are reproduced in stereo.

AUTO ACCOMPANIMENT

This function provides an automatic accompaniment when you play chords in the lower part of the keyboard (to the left of the "split" line). The rhythm selector buttons are used to select accompaniment patterns as well. The instrument sound used for the accompaniment depends on the rhythm selected. Bass patterns are also included in the accompaniment.

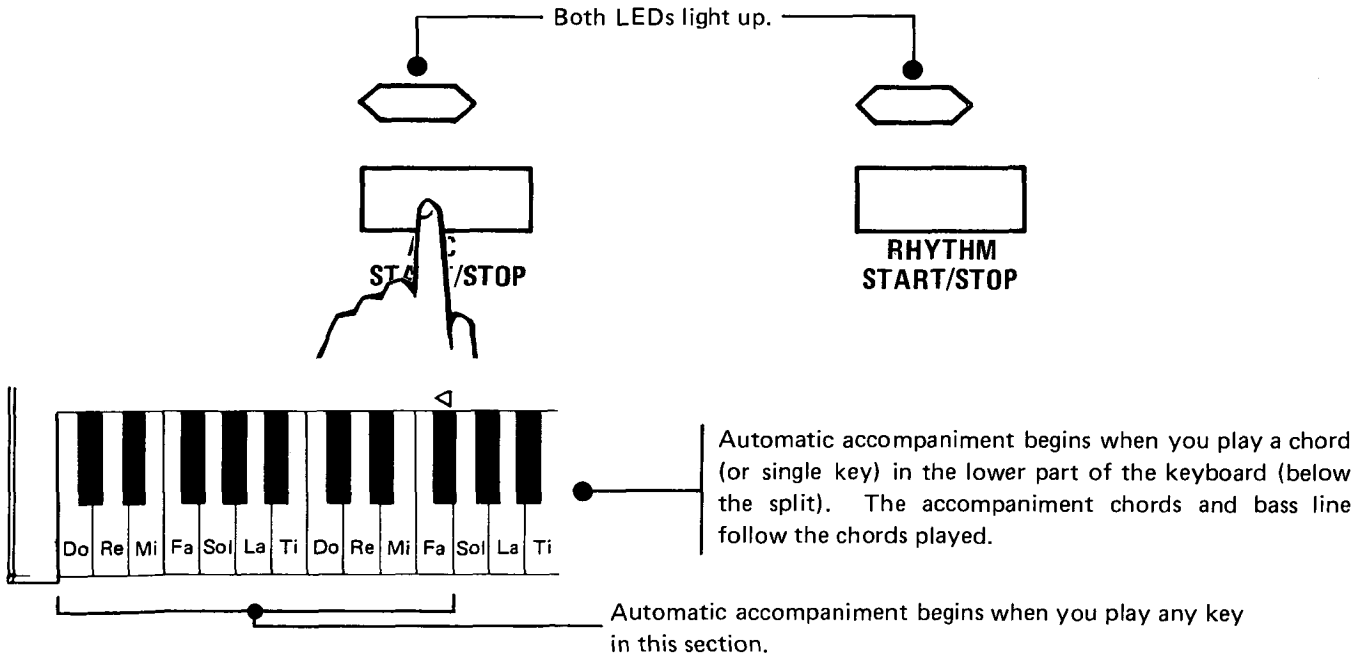
Using auto accompaniment

- Depress one of the MODE SELECT buttons in the Compu Magic Accompaniment section. It does not matter which button is depressed. (If none or two buttons are depressed you will still get an automatic chord progression.)

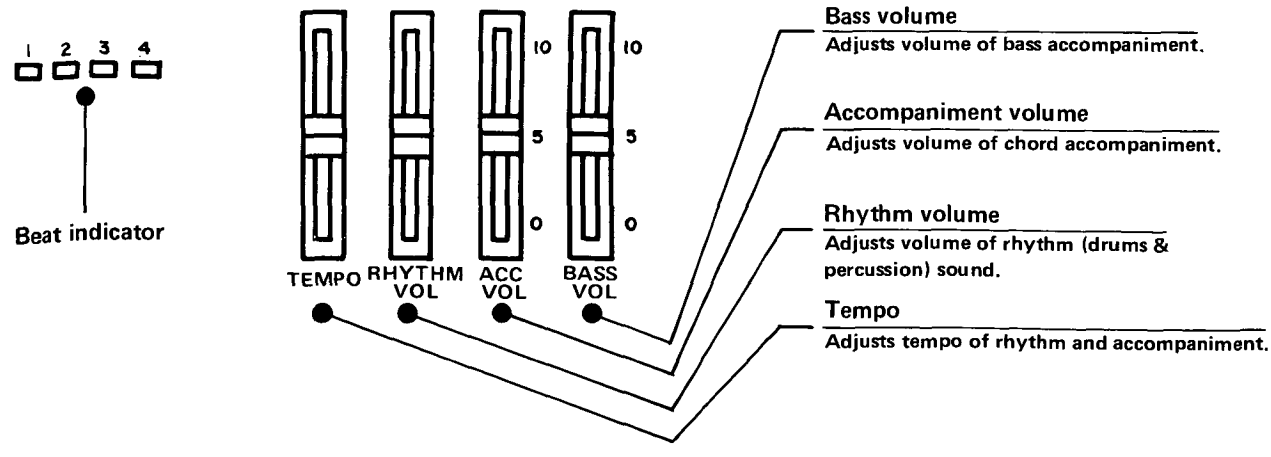
1) Select rhythm pattern.

2) Press ACC START/STOP button.

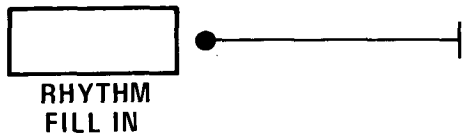
- You cannot turn on the ACC START/STOP button if the RHYTHM START/STOP button is already on. In this case, press the RHYTHM START/STOP button to turn it off, then press ACC START/STOP. LEDs over both buttons will then light up.



3) Adjust tempo and volume.

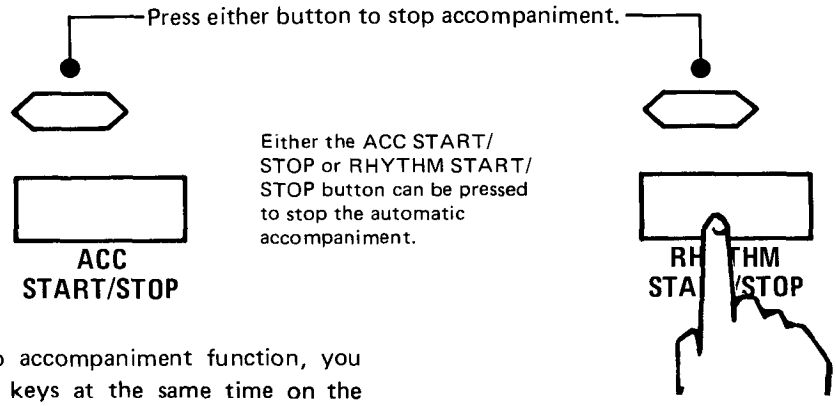


4) Try adding fill in.



Press this button when you want to add a fill in pattern.

5) Stop.



- When using the auto accompaniment function, you can play up to four keys at the same time on the melody keyboard. If MELODY CHORD is used, then only one key can be played at a time.
- Be sure to play chords within the AUTO ACCOMPANIMENT section of the keyboard. If part of a chord is played above this section, then it will not be properly produced in the automatic accompaniment.
- The ACC START/STOP button will not turn on if you have any keys depressed when you try to turn it on.
- The AUTO ACCOMPANIMENT section of the keyboard can be used to play the types of chords shown in the adjacent chart.

Chord examples with C root	
Major chords:	C, C_6, C_7, C_{maj7}
Minor chords:	Cm, C_{m6}, C_{m7}, C_{mM7}
Other chords:	Caug, Cdim, C_{sus4}, C_{sus2}

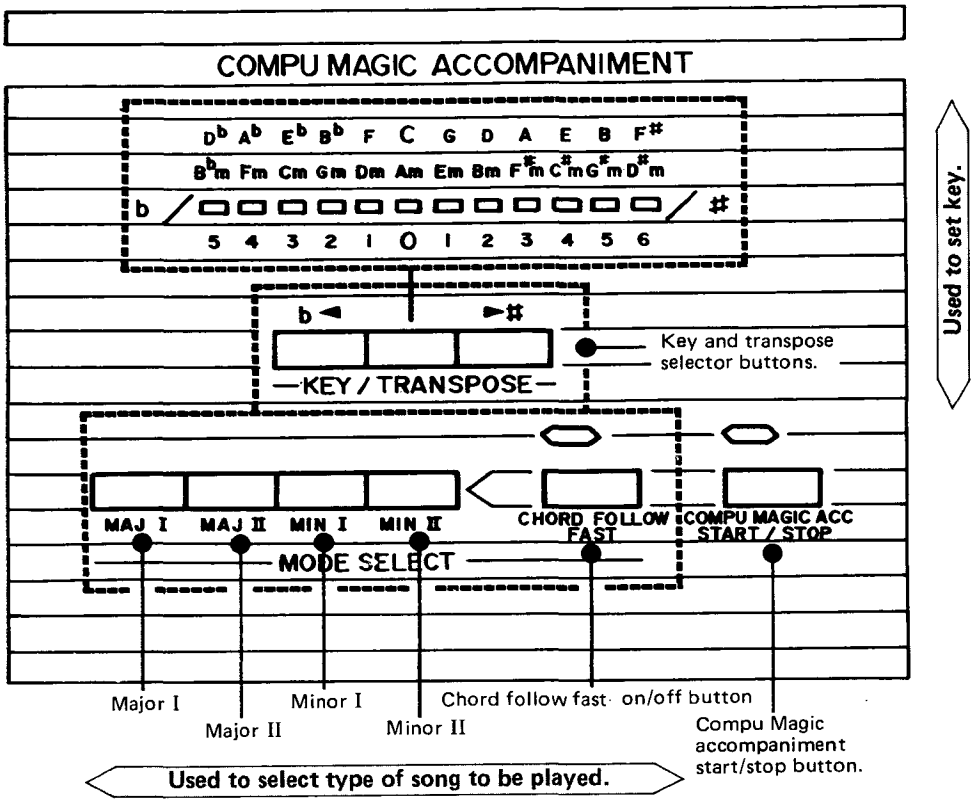
Suggestions for playing chords in the AUTO ACCOMPANIMENT section.

1) Major chords can be played in any form. You only need to play the root (and 7th or maj7th if desired).
2) Minor chords can be played in any form. You only need to play the root and minor 3rd (and 7th or maj7th if desired).
3) For 6th and minor 6th chords, you must play the 6th above the root. (If you play the chord inverted so the 6th is below the root, then you will get a minor chord a 3rd below.)
4) To play other chords, play every note in the chord structure.

Note

If more than four keys are depressed, the lower four keys will determine the chord.

COMPU MAGIC ACCOMPANIMENT



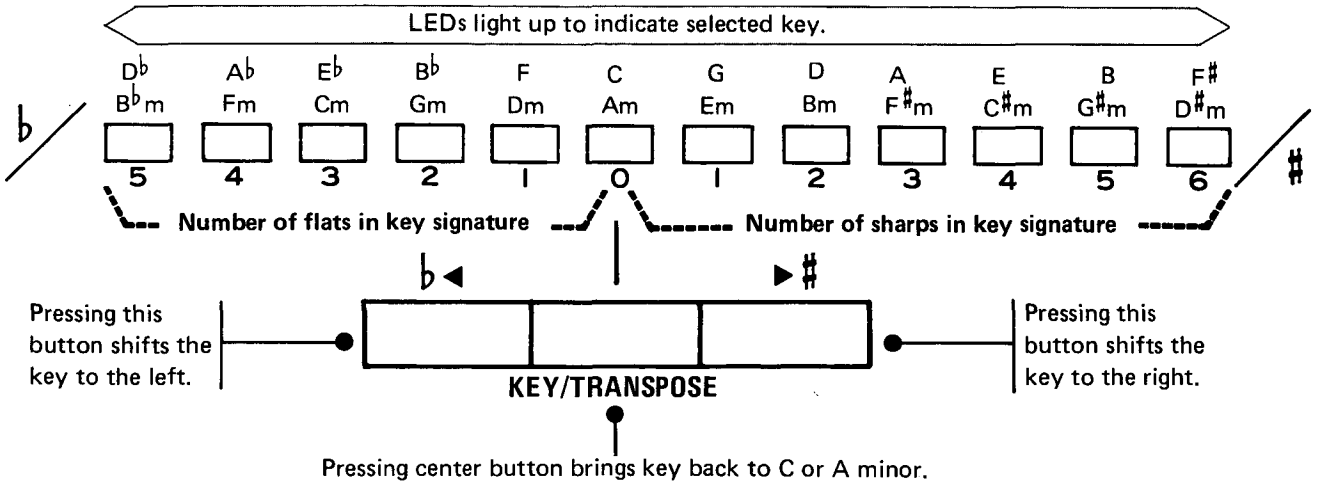
This revolutionary feature allows the beginning keyboard player to give an accomplished performance of many songs. The built-in microcomputer analyzes the melody being played instantly and then provides a suitable chord and bass accompaniment.

In spite of the incredible number of songs in existence, they can all be classified in four modes according to type of melody or chord progression. The microcomputer in the SAS-20 is programmed to produce suitable chords based on the selected mode and the melody being played.

This system is especially useful for the beginning player who may find it difficult to play chords with the left hand while playing melody with the right hand. The supplied songbook includes a large number of popular songs which you can play using the Compu Magic Accompaniment function.

Using compu magic accompaniment

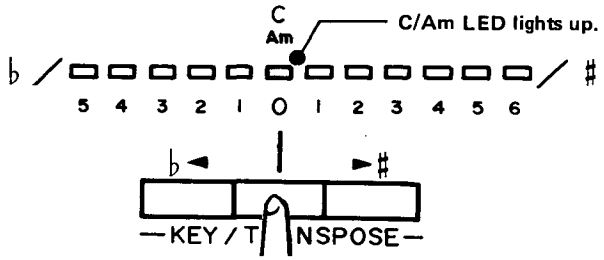
1) Selecting the key of the song.



Example

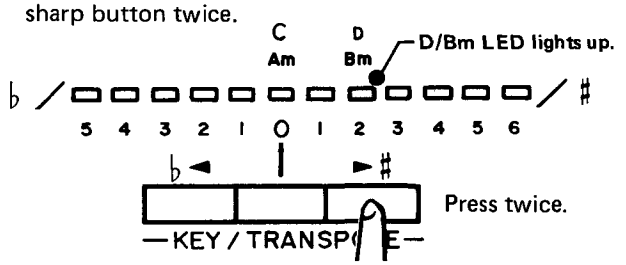
Key signature for D major or B minor.

1) First press center button.



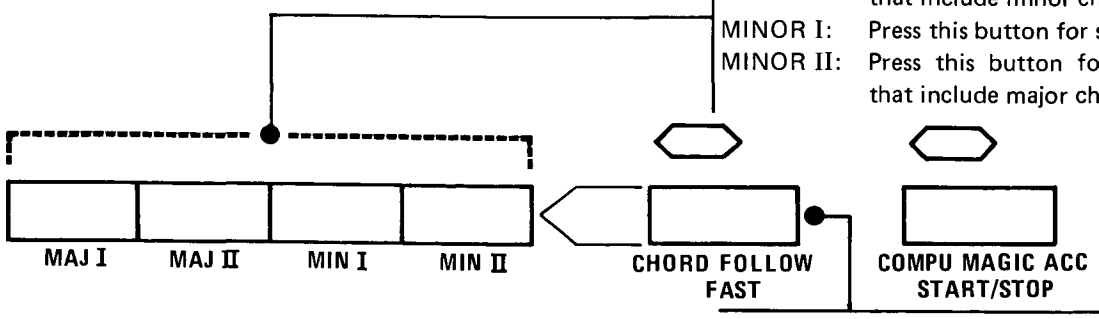
- Beginning from the center C/Am position, press the sharp or flat button the same number of times as there are flats or sharps in the key signature.

2) In this case there are two sharps, so you press the sharp button twice.



2) Selecting the song mode.

MAJOR I: Press this button for songs in major keys.
MAJOR II: Press this button for songs in major keys that include minor chords.
MINOR I: Press this button for songs in minor keys.
MINOR II: Press this button for songs in minor keys that include major chords.



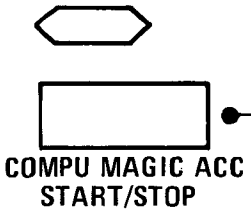
- The supplied music book includes mode settings for each song.

Use this function if you want chord changes at the half measure as well as at the beginning of the measure. (With the 3-beat rhythm, the chord change will occur at the second beat. With the 4-beat rhythm, the chord change will occur at the third beat.)

3) Select instrument and effects.

4) Select rhythm pattern.

5) Press COMPU MAGIC ACC START/STOP button.



When this button is pressed, automatic accompaniment will begin in the key and mode you choose.

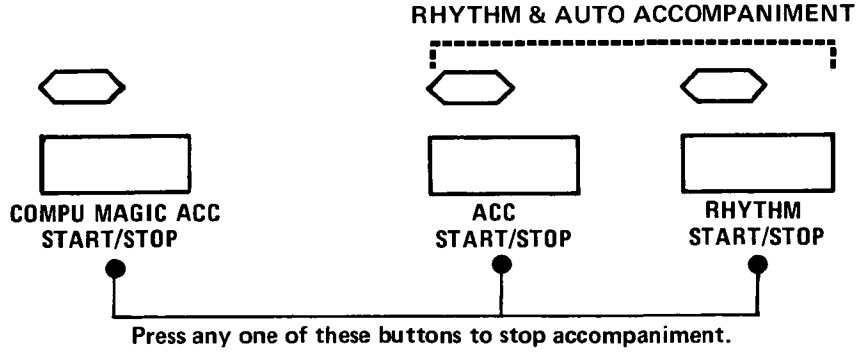
- **Compu Magic will not turn on if you press the START/STOP button while any keys are depressed.**

6) Adjust tempo and volume controls.

7) Play the song's melody.

- To switch from Auto Accompaniment to Compu Magic Accompaniment, first turn off the ACC START/STOP button, then press the COMPU MAGIC ACC START/STOP button.

8) After playing stop automatic accompaniment.



Press any one of these buttons to stop accompaniment.

Please Note

- The Compu Magic system does not memorize the actual melody or chord progressions of songs. Rather, it "decides" what the chord progression should be, based on the melody being played. Therefore, the Compu Magic accompaniment may be different from the song's original chord progression. There are, however, many songs where the Compu Magic accompaniment will be correct (assuming you select the right mode). Many of these are in the supplied song book.
- If you can play chords, then use the Auto Accompaniment function instead of Compu Magic.
- If you make a mistake while the Compu Magic function is on (or play the same part of the song over and over), the computer will think that this is part of the melody and will give you the wrong accompaniment. In this case, stop the accompaniment, press the COMPU MAGIC ACC START/STOP button again and start playing the song again from the beginning.
- Practice playing the melody with just the rhythm accompaniment. Use the Compu Magic when you know the melody perfectly.
- Play each melody note separately and cleanly. Use the SUSTAIN effect instead of keeping the keys held down.

Further instructions for compu magic accompaniment

When using the supplied music book you can simply set the mode and key according to each song's setting chart. For other music, please follow the instructions below.

A) Key setting.

Look at the key signature at the beginning of the music. Count the sharps or flats and press the # or b button the same number of times (starting from C/Am). For example, if there is one sharp (#), then you would press the # button once so that the G/Em LED lights up. If there are no sharps or flats then the song is in the key of C major or A minor so you would set the key at C/Am which is the center red LED.

B) Deciding whether the key is major or minor.

1. Look at the letter name of the first and last chord in the song. In most cases, the first and last chord are the same. If they are both the same major chord, the song is most likely in a major key. If they are both the same minor chord, then the song is in a minor key. For example, if in step "A", above, you set the key to G/Em (because there was one sharp in the key signature) and the first and last chords were G, then the song is in G major. If both chords were Em, then it would be E minor.
2. If the first and last chords are different then the key is probably major if the melody sounds "bright". It is probably minor if it sounds "dark".

C) Mode selection.

After determining whether the song is in a major or minor key, follow these rules to select the mode.

1. Press MAJ I if the song has a relatively simple major chord progression.
2. Press MAJ II if the song is in a major key but includes many minor chords (for example Dm, Gm, etc.).
3. Press MIN I if the song has a relatively simple minor chord progression.
4. Press MIN II if the song is in a minor key but includes many major chords (for example F, C, etc.).

If you cannot decide whether to use a "I" or "II" mode setting, try either setting, while playing along. Use the mode setting which sounds the best.

D) Chord Follow Fast.

Normally there is no more than one chord change per measure, but if you turn on this function, chord changes will also occur at the half measure (or between the first and second beat of a song in triple time). Turn on this switch if there are two or more chord changes per measure in the song.

E) Chord "edit" function.

The Compu Magic Accompaniment system was developed to allow the inexperienced player to give a complex performance using only one finger to play the melody.

This system is based on statistical analysis of 1,500 chord progressions from the world's most popular songs. Based on this input, the built-in microcomputer predicts what the chord progression will be, based on the melody notes that you play. Therefore, there are a number of cases where the microcomputer will provide an accompaniment that does not exactly match the original musical composition. For example:

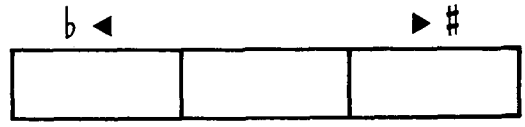
- if most of the melody notes are not part of the structure of the song's chords;
- if the song has many changes between major and minor chords;
- if the song changes key.

Nevertheless, the Compu Magic accompaniment will still be "correct" as far as basic music theory is concerned. The chord "edit" function allows you to make corrections when you feel that the accompaniment does not fit the original song. This is performed in the same way as when you play with the Auto Accompaniment function. Whenever you come to the part of the song where you want to make a correction, simply play the correct chord in the lower part of the keyboard (to the left of the "split" mark). Most chords can be played in simplified form, as described on pages 35 through 69 in the "Music Theory and Chord Supplement" section of this manual.

Review

1. Find the music for the song you want to play.
2. Set key of the song according to the number of sharps or flats in the key signature at the beginning of the music. If there are no sharps or flats then set the key to C/Am.
3. Press one of the "MODE SELECT" buttons according to whether the song is in a major or minor key and the type of chords that it includes.
4. Turn on CHORD FOLLOW FAST if there is more than one chord change per measure.
5. Select your desired rhythm.
6. Select your desired instrument.
7. Press COMPU MAGIC START/STOP button. Accompaniment will begin according to your selected key and mode.

KEY TRANSPOSE



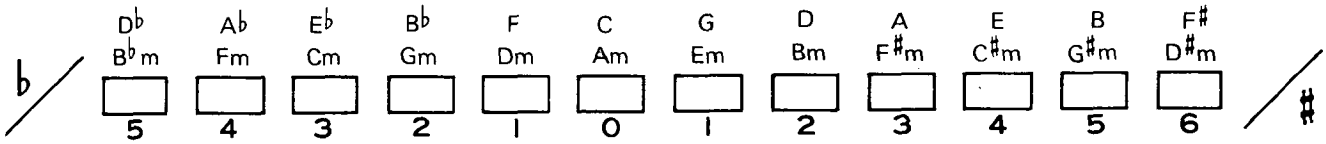
– KEY/TRANSPOSE –

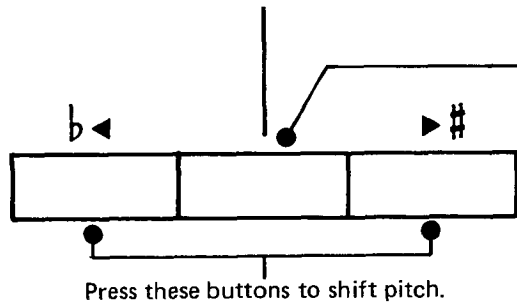
This feature is like a capo on a guitar. It lets you shift the pitch of the keyboard so that the melody will match your vocal range. It can also be used to play music written for different instruments or to make it easier to play music that has many sharps or flats. For example, if you set the key transpose to G/Em and play a C major scale, you will hear a G major scale.

Setting "key" transpose

When power is turned on, key is automatically set to the normal C/Am position indicated by the central red LED.

1) Press center (orange) button.
2) Press the white (# and b) buttons to find the pitch that is easiest to sing in.





Press these buttons to shift pitch.

When the orange button is pressed, key is not transposed, so the sound you hear is the same as the note you play.

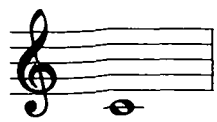
Note

- **When using Compu Magic Accompaniment, only the chord progression is transposed.**
- **When using Auto Accompaniment, the entire keyboard pitch is transposed.**

How "key transpose" works

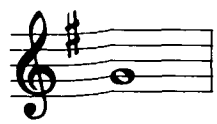
–Example: If you set key transpose to G/Em

1

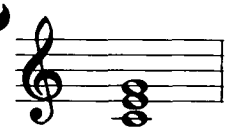


If you play this,

You will hear this.

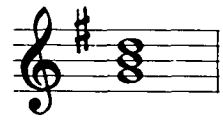


2

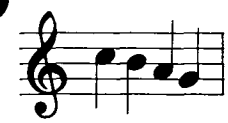


If you play this chord,

You will hear this.

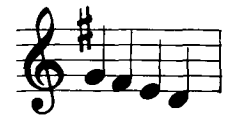


3

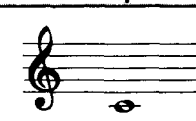
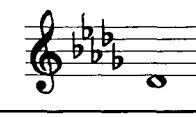
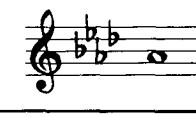
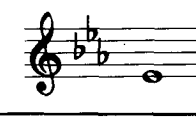
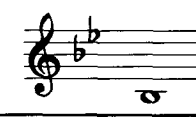
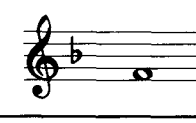
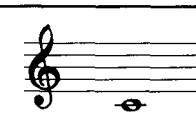
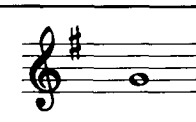
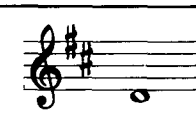
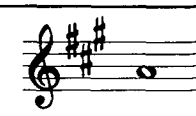
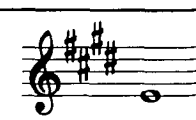
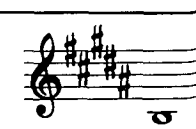
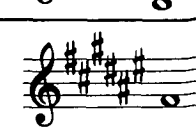


If you play a song in C major or A minor,

You will hear this.



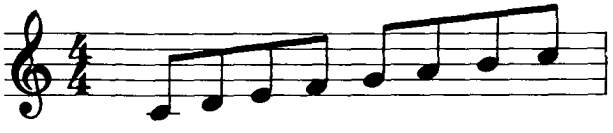
It will sound like it is being played in G major or E minor.

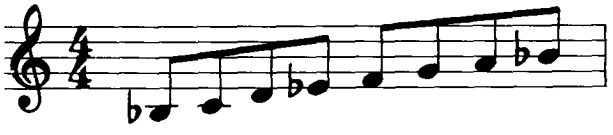
Key / transpose setting		Note played on keyboard (or key of music)												Example
	Major	C	D♭	D	E♭	E	F	F♯	G	A♭	A	B♭	B	
	Minor	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	
		Note produced (or key)												
D♭	Major	D♭	D	E♭	E	F	F♯	G	A♭	A	B♭	B	C	
B♭m	Minor	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	Am	
A♭	Major	A♭	A	B♭	B	C	D♭	D	E♭	E	F	F♯	G	
Fm	Minor	Fm	F♯m	Gm	G♯m	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	
E♭	Major	E♭	E	F	F♯	G	A♭	A	B♭	B	C	D♭	D	
Cm	Minor	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	Am	B♭m	Bm	
B♭	Major	B♭	B	C	D♭	D	E♭	E	F	F♯	G	A♭	A	
Gm	Minor	Gm	G♯m	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	
F	Major	F	F♯	G	A♭	A	B♭	B	C	D♭	D	E♭	E	
Dm	Minor	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	Am	B♭m	Bm	Cm	C♯m	
C	Major	C	D♭	D	E♭	E	F	F♯	G	A♭	A	B♭	B	
Am	Minor	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	
G	Major	G	A♭	A	B♭	B	C	D♭	D	E♭	E	F	F♯	
Em	Minor	Em	Fm	F♯m	Gm	G♯m	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	
D	Major	D	E♭	E	F	F♯	G	A♭	A	B♭	B	C	D♭	
Bm	Minor	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	Am	B♭m	
A	Major	A	B♭	B	C	D♭	D	E♭	E	F	F♯	G	A♭	
F♯m	Minor	F♯m	Gm	G♯m	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	
E	Major	E	F	F♯	G	A♭	A	B♭	B	C	D♭	D	E♭	
C♯m	Minor	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	G♯m	Am	B♭m	Bm	Cm	
B	Major	B	C	D♭	D	E♭	E	F	F♯	G	A♭	A	B♭	
G♯m	Minor	G♯m	Am	B♭m	Bm	Cm	C♯m	Dm	D♯m	Em	Fm	F♯m	Gm	
F♯	Major	F♯	G	A♭	A	B♭	B	C	D♭	D	E♭	E	F	
D♯m	Minor	D♯m	Em	Fm	F♯m	Gm	G♯m	Am	B♭m	Bm	Cm	C♯m	Dm	

Other applications of key transpose

1 Playing music written for wind instruments.

For example, if a trumpet (B^b) plays this scale, it will sound like this.



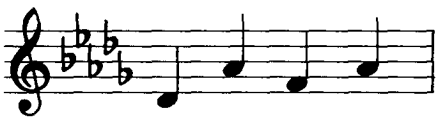


In other words, music written for certain wind instruments is not the same as that written for piano or guitar (etc.). To play such music correctly, you should use the key transpose buttons to shift key according to the chart below.

Instrument	Key transpose setting
Trumpet (B^b)	B^b/Gm
Alto sax	E^b/Cm
Tenor sax	B^b/Gm
Soprano sax	B^b/Gm
Clarinet (B^b)	B^b/Gm

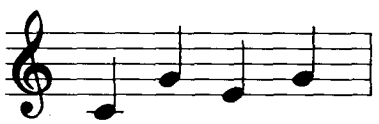
2 Making it easy to play music in keys having many sharps or flats.

—Example



Original music written in D^b.

⇩ Rewrite music in key of C.



⇩

Set key transpose to D^b/B^bm.

⇩

Play music as you have rewritten it in C. It will sound as if you are playing in D^b.

AUTO CHORD PROGRESSIONS

Seven different preset chord progressions can be selected. These are useful for practicing improvisation. Auto chord progressions are selected by combining mode selector buttons as shown below. Each combination of two buttons gives a different chord progression. You will also get an auto chord progression if none of the buttons is depressed.

If you want the chord progressions in a different key from C/Am (shown in the chart), use key transpose to shift to your desired key. If you use the COMPU MAGIC ACC START/STOP button to begin the auto chord progression, key transpose will not affect the pitch of the melody keyboard. If you press ACC START/STOP and then press any of the lower keys (below the "split" mark) to begin the auto chord progression, key transpose will affect the melody keyboard. You will also be able to play chords if you use ACC START/STOP (unless MELODY CHORD is turned on). (In either case, lower part of the keyboard has no effect on the chord progression; you can only play in the melody keyboard section.)

Seven preset chord progressions

1)

MAJ I	MAJ II	MIN I	MIN II
	ON	ON	

C	C	Am	C	
Am	C	G	C	

2)

MAJ I	MAJ II	MIN I	MIN II
ON		ON	

C/G	Am/C	F/C	F/G	

3)

MAJ I	MAJ II	MIN I	MIN II
ON	ON		

C7	C7	C7	C7	
F7	F7	C7	C7	
G7	F7	C7	G7	

4)

MAJ I	MAJ II	MIN I	MIN II
		ON	ON

C7	F7	C7	Gm7/C7	
F7	F7	C7	A7	
Dm7	G7	C7	G7	

5)

MAJ I	MAJ II	MIN I	MIN II
ON			ON

C/Am7	Dm7/G7

6)

MAJ I	MAJ II	MIN I	MIN II
	ON		ON

Am	Dm	G7	Am

7)

MAJ I	MAJ II	MIN I	MIN II

All off.

Am/C	D/F	Am/E7	Am/E7	
Am/C	D/F	Am/C	Esus4/E7	
Am/C	D/F	Am/E7		

Note

When not using the auto chord progressions, be sure that only one of the mode selector buttons is depressed.

SAS CARTRIDGES

By inserting the supplied (or optional) SAS cartridge into the rear panel SAS CARTRIDGE slot, you can change the sixteen rhythm and auto accompaniment patterns, etc. Each SAS cartridge contains data for rhythm patterns, accompaniment patterns, modes, and (in some cases) auto chord progressions. Therefore, you can use an SAS cartridge to "convert" the SAS-20 into a keyboard that is suited to your preferred musical taste.

SAS cartridge rhythm patterns and auto accompaniment patterns

- When SAS cartridge SC-02 is used, the rhythm and auto accompaniment section contents become as shown here.

• SC-02 Easy Listening

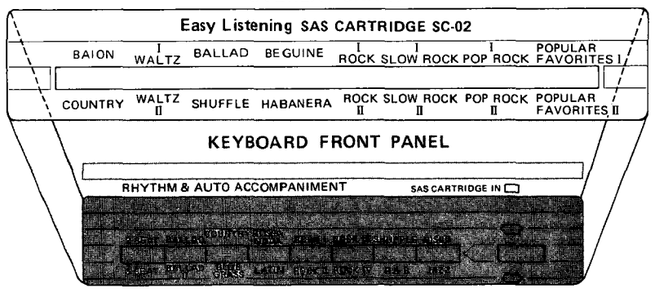
BAION	I WALTZ	BALLAD	BEGUINE	I ROCK	I SLOW ROCK	I POP ROCK	POPULAR FAVORITES I
COUNTRY	WALTZ II	SHUFFLE	HABANERA	ROCK II	SLOWROCK II	POP ROCK II	POPULAR FAVORITES II

SAS Cartridges Available

Cartridge for other musical tastes will be available soon.

- Supplied with the SAS cartridges is a magnetic sheet on which are written the accompaniment patterns. Place this sheet over the rhythm and auto accompaniment section.

OVERLAY CHART

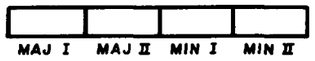


Using the auto chord progressions

1) Select instrument and effects.

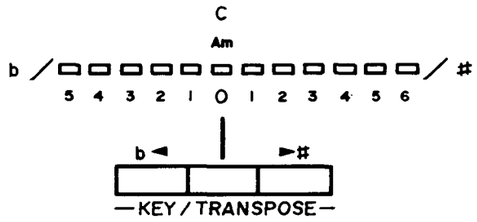
2) Select rhythm pattern.

3) Select desired auto chord progression using MODE SELECT buttons.



MODE SELECT

4) Use key transpose to select key (if desired).



5) Press COMPU MAGIC ACC START/STOP button.

OR: Press ACC START/STOP button and then press any of the keys in the lower part of the keyboard.

Neither button will turn on if any keys are depressed.

6) Adjust tempo and volume controls.

7) Begin playing along.

8) To stop auto chord progression, press any of these three buttons.

(unless you used ACC START/STOP to begin, in which case pressing COMPU MAGIC ACC START/STOP will have no effect.)

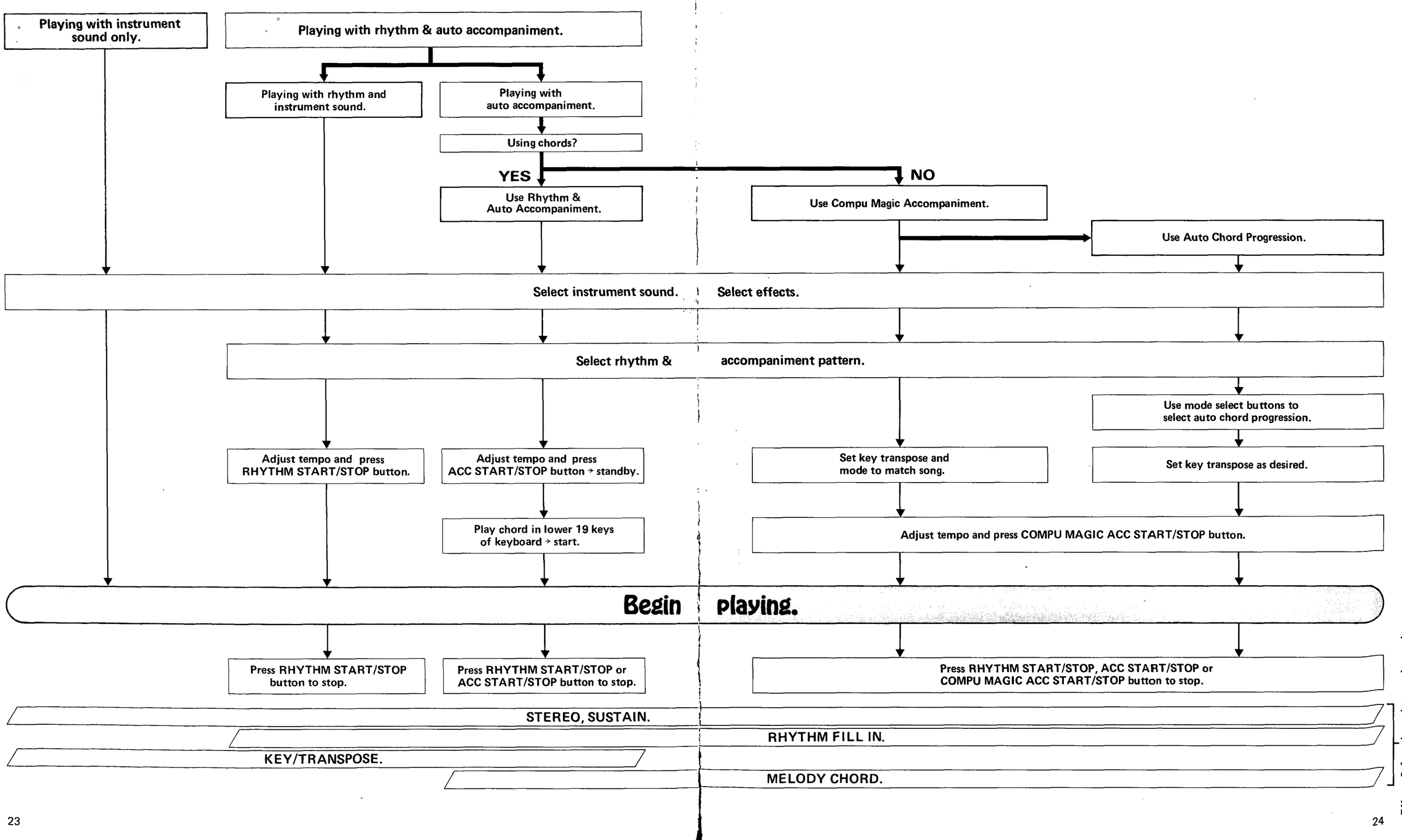
Note

In step "5" you have a choice of how to begin the auto chord progression.

Use COMPU MAGIC ACC START/STOP in this case:
If you want to practice playing along in different keys. Set key transpose to desired key, then play along. For example, if you set key transpose to F/Dm, then you will have to play the note F to match the F major chord in the progression.

Use ACC START/STOP (and one of the lower keys) in these cases:
If you want to play chords (up to four notes at a time) along with the auto chord progression. Or, if you want to play in a different key but don't want to be bothered with having to play the actual notes to match it. For example, if you set key transpose to F/Dm, you can match the F chord in the auto chord progression by playing a C on the keyboard. In other words, key transpose affects melody keyboard pitch as well as the key of the auto chord progression.

OPERATION CHART



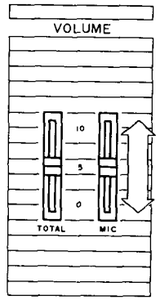
SETTING VARIATIONS AND CONNECTIONS

1 Using headphones.

Connect stereo headphones to rear panel PHONES jack. Convenient for private practice. No sound comes from speakers when headphones are plugged in.

2 Playing or singing along with the SAS-20.

A microphone, electric guitar, or other instrument can be connected to the MIC input to play through the SAS-20's built-in speakers. Use front panel MIC volume control to adjust volume.



3 Using a volume pedal.

For foot control of total volume, connect optional EXP-1 expression pedal to rear panel EXP PEDAL IN jack.

Note

If you use a volume or expression pedal other than the KORG EXP-1, you may not have complete control over total volume.

4 Using AUX OUT jacks.

For greater volume or improved sound quality you may wish to use an external amplifier, home hi-fi system or radio cassette recorder, etc. Use the optional stereo connection cord to make the connection from the keyboard's AUX OUT jacks to the appropriate input jack (or jacks) on the amp or other external equipment. Adjust volume on keyboard and external unit to minimize distortion and noise. Consult your Korg dealer if necessary. Otherwise follow the chart below to determine which input to use on the external unit.

External unit & appropriate input jack name

Instrument amp (guitar amp, etc.)	INPUT
Hi-Fi amp or receiver	AUX
Mixer	LINE IN
Radio cassette recorder	AUX or LINE IN
Electronic organ	AUX or EXT IN

5 For travel or outdoor use.

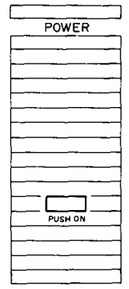
The optional car adaptor cord can be used to power the keyboard from a car's cigarette lighter socket. The adaptor connects from the lighter socket to the rear panel DC 12V jack. Note cautions below.

Caution

- **Please use the recommended Korg car adaptor cord. Other adaptors may have the wrong polarity and may damage the circuitry.**
- **If the keyboard does not seem to be operating properly when being powered with the car adaptor cord, the problem is probably in the car battery.**

How to connect an SAS cartridge

1) Turn off power

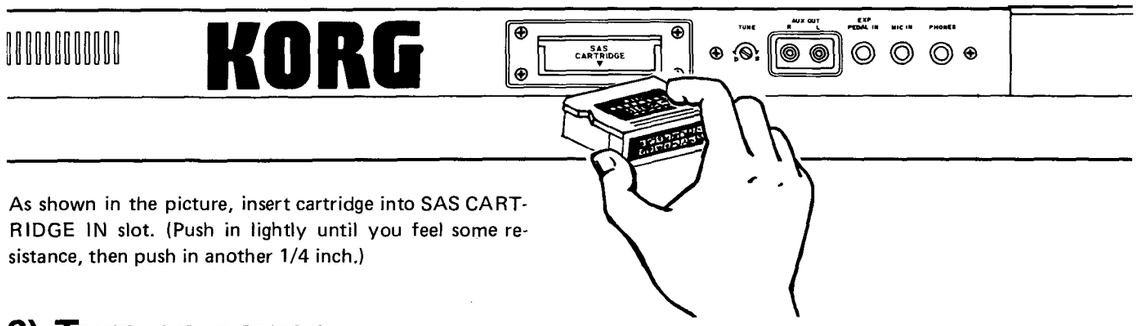


Push Off

Note

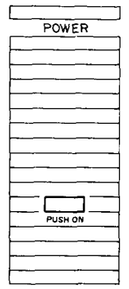
Always turn off power before inserting or removing an SAS cartridge. If power is on during insertion or removal, the circuitry may be damaged.

2) Insert SAS cartridge



As shown in the picture, insert cartridge into SAS CARTRIDGE IN slot. (Push in lightly until you feel some resistance, then push in another 1/4 inch.)

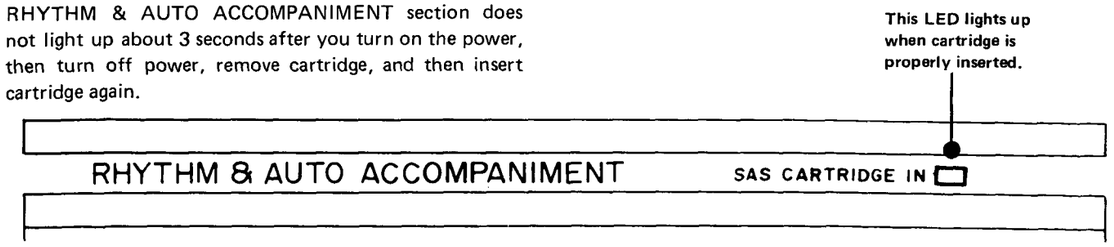
3) Turn on power



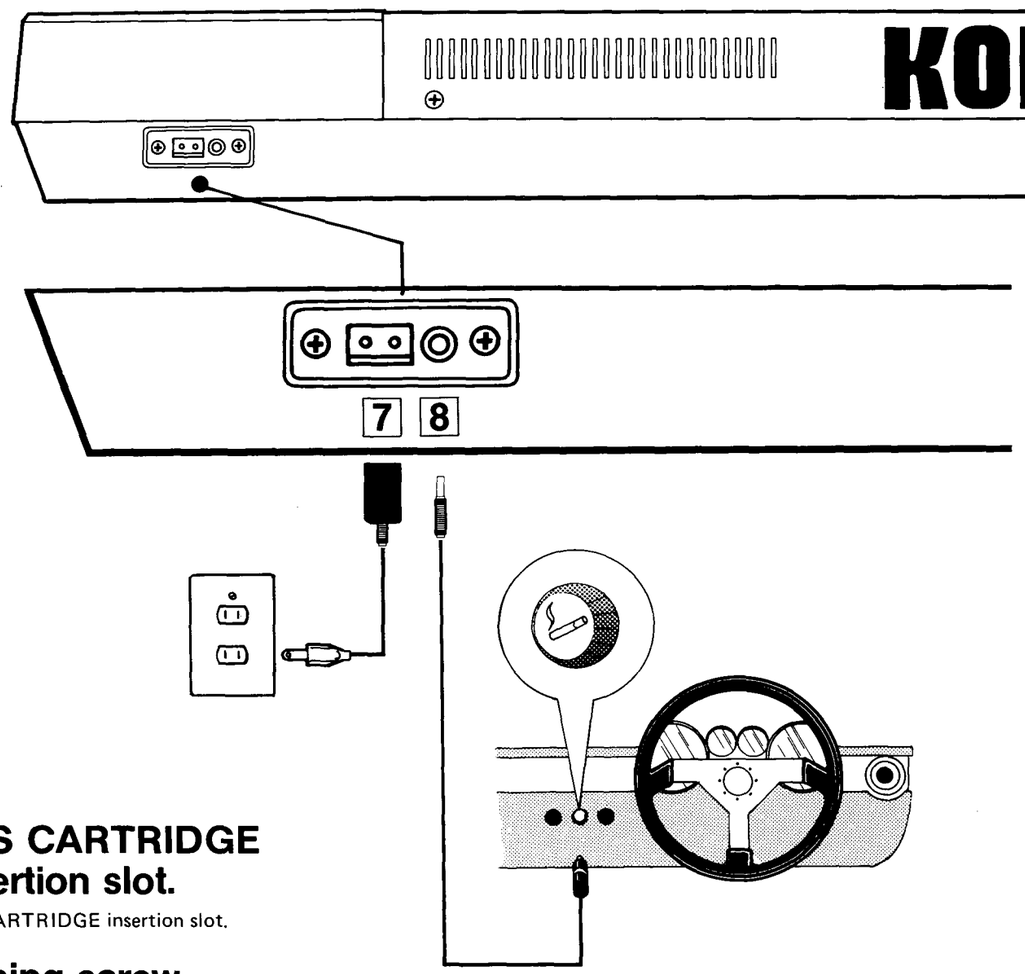
Push On

4) SAS cartridge insertion check

If the SAS CARTRIDGE in LED on the front panel RHYTHM & AUTO ACCOMPANIMENT section does not light up about 3 seconds after you turn on the power, then turn off power, remove cartridge, and then insert cartridge again.



REAR PANEL FACILITIES



1) SAS CARTRIDGE insertion slot.

SAS CARTRIDGE insertion slot.

2) Tuning screw.

Turn clockwise to raise entire keyboard pitch if necessary.
Pitch has been preset to A = 440 Hz (standard pitch) at the factory.

3) AUX output jacks.

For connection to a radio cassette player or hi-fi system if desired. Use optional stereo connection cord.

4) Expression pedal input jack.

For connection of optional EXP-1 expression pedal.

5) Microphone input jack.

For microphone or guitar connection.

6) Headphone jack.

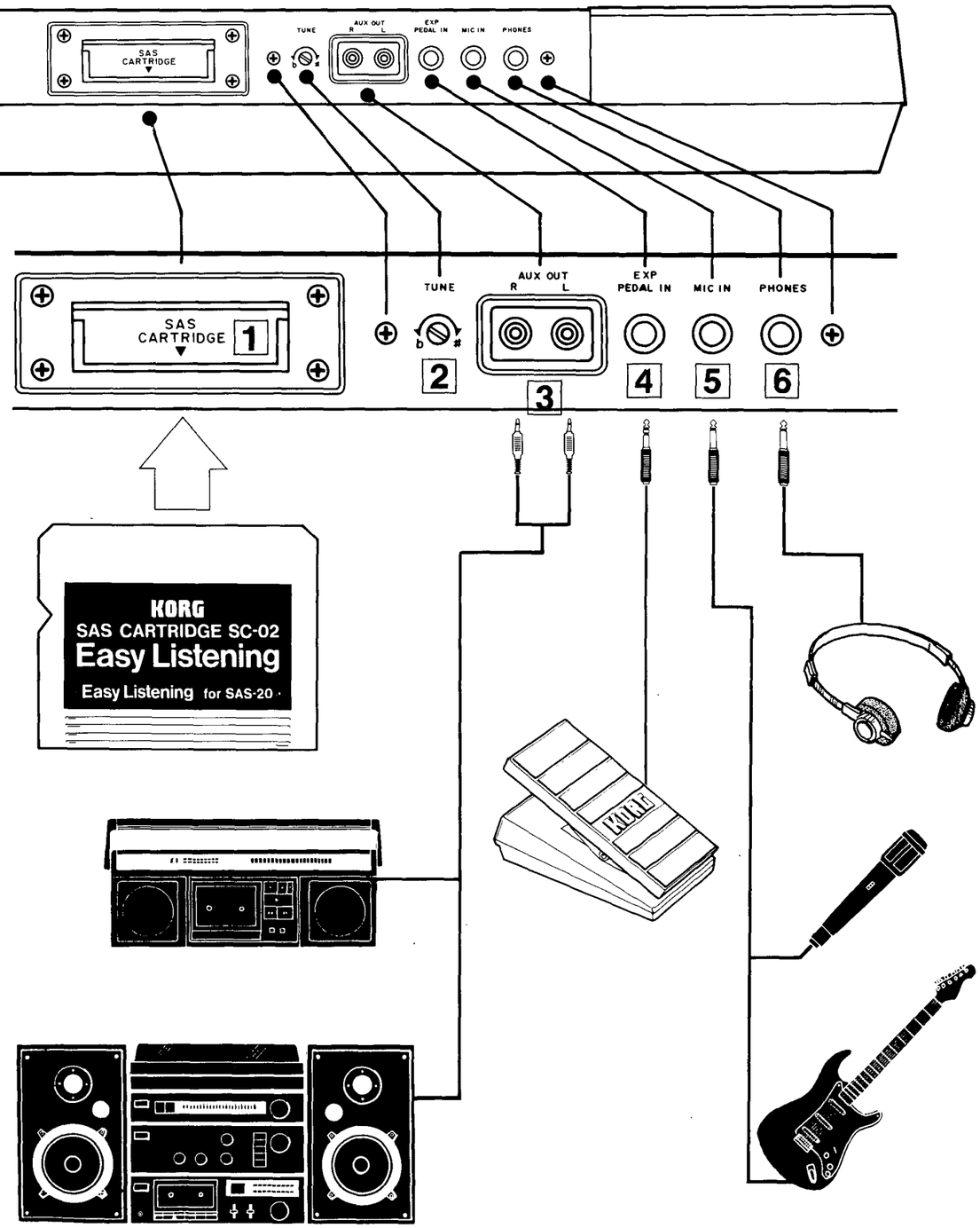
Headphone

7) AC power cord jack.

Connect supplied AC power cord to this jack.

8) DC 12V jack.

For connection of optional car adaptor cord. Connects to car's cigarette lighter socket.



TROUBLE-SHOOTING GUIDE

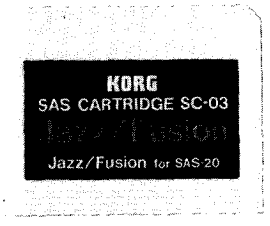
Before consulting your Korg dealer or service center, please check the following chart. Most problems are easily solved.

PROBLEM	CAUSE & SOLUTION
No sound.	• Sound is not produced until about 3 seconds after power is turned on.
	• TOTAL VOLUME is set at or near "0".
	• AC power cord is not plugged in.
	• Something is plugged into PHONES jack.
No sound from rhythm or auto accompaniment.	• RHYTHM VOL, ACC VOL, and BASS VOL controls are set to "0".
	• After pressing the ACC START/STOP button, you must play a key in the lower part of the keyboard before accompaniment will begin.
ACC START/STOP or COMPU MAGIC ACC START/STOP do not turn on when they are pressed while depressing keys on the keyboard.	• This is normal. Take your hands off the keyboard, then press the desired button.
No more than eight keys will sound at one time when using just the instrument and rhythm sounds.	• This is normal. You can not play more than eight keys at once whether the rhythm is on or off.
When using auto accompaniment and playing in the melody section of the keyboard, no more than four keys will sound at one time.	• After turning on the ACC START/STOP button and playing a key in the lower part of the keyboard, you can not play more than four keys at once in the melody keyboard.
When using COMPU MAGIC ACCOMPANIMENT, only one note will sound at a time and the accompaniment chords are wrong if two or more keys are played at once.	• Only play one note at a time when using COMPU MAGIC. The system cannot follow the melody if you depress two or more keys at once.
Chords change automatically when using auto accompaniment.	• More than one of the mode select buttons is depressed (or none are depressed). In this case you get an auto chord progression which is not affected by what you play. Make sure that just one of the mode select buttons is depressed.
Electric guitar sounds distorted when played through MIC IN.	• The MIC IN jack's sensitivity is matched to a typical microphone's output level. If you connect a guitar (or other input) having a higher signal level, then distortion may occur. Turn down the guitar's volume.
Noise and/or misoperation may occur for some unknown reason.	• A nearby electrical appliance (especially a motor) may be causing interference. Try turning off the keyboard's power switch, waiting about ten seconds, then turning it on again. Move keyboard away from possible source of interference.

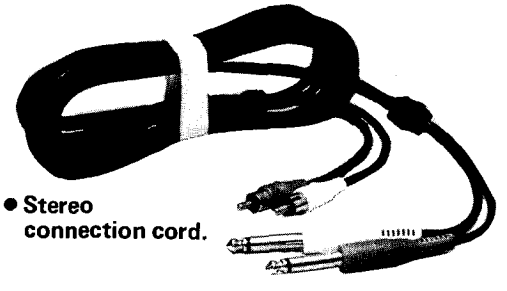
SPECIFICATIONS

Keyboard	61 Keys (Lower 19 for accompaniment; upper 42 for melody).	
Instrument	Sounds	Piano, strings, organ, flute, electric piano, vibraphone, harpsichord, brass ensemble, jazz organ, clarinet, jazz guitar, clav synthe.
	Effects	Melody chord, sustain, stereo.
Rhythm & Auto Accompaniment	Patterns	2 beat, ballad I, country, bossa nova, rock I, rock II, shuffle, disco, 3 beat, ballad II, bluegrass, latin , rock III, rock IV. rhythm & blues, jazz.
	Start/stop switches	ACC start/stop, rhythm start/stop, fill in.
	Controls	Tempo, rhythm volume, accompaniment volume, bass volume.
Compu Magic Accompaniment	Key/transpose	D^{b} ~ F#, B^{b} ~ D#m (12 positions).
	Mode selectors	Major I, major II, minor I, minor II.
	Start/stop switch	Compu magic ACC start/stop.
Volume	Controls	Total volume, microphone volume.
Power	Power on/off switch	
Input/output jacks	Input jacks	Mic in, expression pedal in, DC 12V in, AC power cord connection, SAS cartridge slot.
	Output jacks	Headphones, aux out.
Speakers	4-3/4" x 2" (7W + 7W).	
Dimensions	36-1/4"(W) x 4"(H) x 14-1/4"(D)	
Weight	24-1/4 lbs .	
Power	AC	
Power consumption	20W.	
Supplied accessories	Music stand, dust cover, power cord, owner's manual, music book, SAS cartridge (SC-02).	

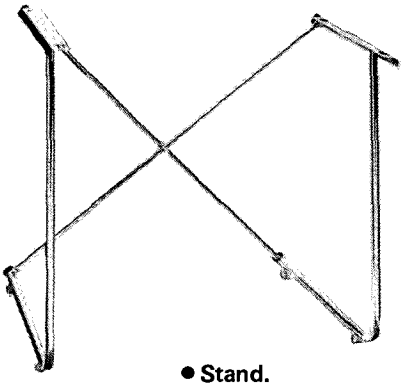
OPTIONAL ACCESSORIES



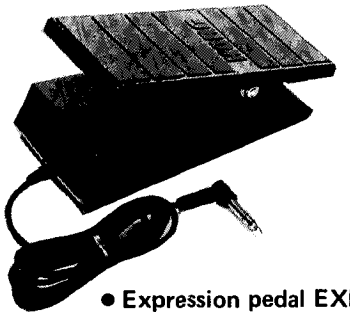
● SAS cartridges SC-03.



● Stereo connection cord.

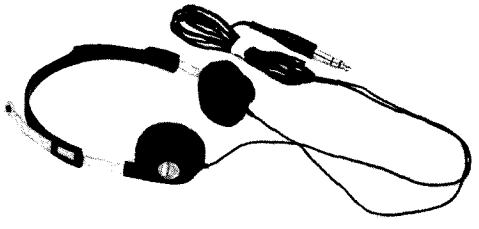


● Stand.



● Expression pedal EXP-1.

● Car adaptor cord.



● Stereo headphones KH-1.

● Soft case

MUSIC THEORY AND CHORD SUPPLEMENT

This section includes a brief, basic introduction to reading music and playing the keyboard. Chord supplement includes simplified (one finger) chords and complete chord diagrams.

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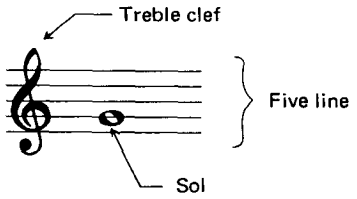
MELODY
How to interpret music.

Introduction of the basics that will help you read music and play a melody using one finger. This section will let you take advantage of the Compu Magic Accompaniment function.

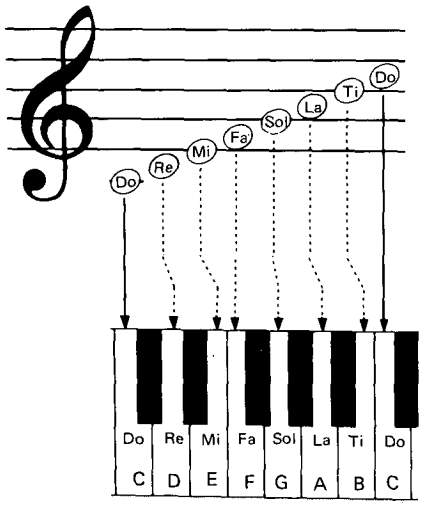
Step 1 The staff and its notes.

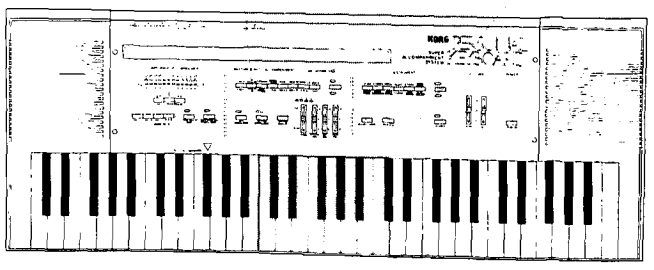
The melody is written on a "staff" of five lines. At the left of the staff is a symbol called the treble clef (or G clef).



From bottom to top, the names of the five lines are E, G, B, D, F (which you can memorize as "Every Good Boy Does Fine"). Between the lines are four spaces: F, A, C, E (which you can memorize as "FACE"). "Ledger lines" are added when it is necessary to show notes above or below the basic staff.
Here is how the white keys from C to C (one octave) are written.

In the "do, re, mi" system, C is do, D is re, E is mi, F is fa, G is sol, A is la, and B is ti.





Step 2 Length of notes.

The length of a note tells you how long to hold it. The quarter-note indicates one beat of a measure (or bar).

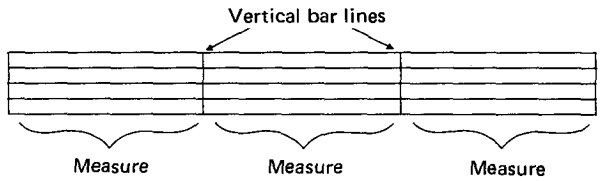
Compare the notes shown in the chart below.

Quarter note

Note symbol	Name	Length
𝅝	Whole note	4 beats
𝅗𝅥.	Dotted half note	3 beats
𝅗𝅥	Half note	2 beats
♩	Quarter note	1 beat

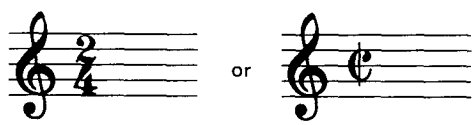
Step 3 Measures (bars) and time signatures.

Music is rhythmically divided into measures or bars, indicated by vertical bar lines.

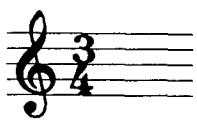


Next to the treble clef symbol you will find a "time signature". This tells you how many beats there are in each measure (and the length of each beat, most commonly a quarter note).

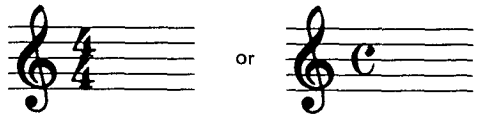
- **Two-four-time or "double time".**



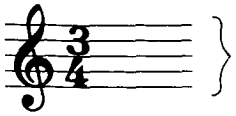
- **Three-four-time.**
  Also called "triple time" or "waltz time".



- **Four-four-time.**
  Also called "common time" or "quadruple time".



How to read time signatures.

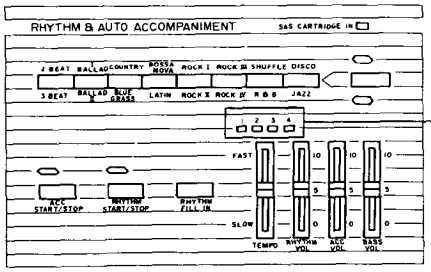


The upper number tells you the number of beats per measure. The lower number tells you the time value of each beat.

For example, in 3/4 time (three-four-time), there are three beats per measure and each beat is a quarter note.

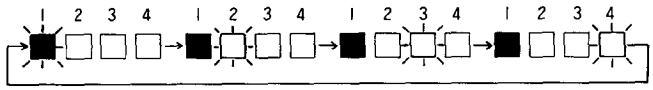
Step 4 About the beat indicator.

The SAS-20 front panel has a set of four LEDs that light up in time with the rhythm and accompaniment. Use this as a guide for playing the melody. Each LED indicates one beat per quarter note. The red LED indicates the first beat in each measure.

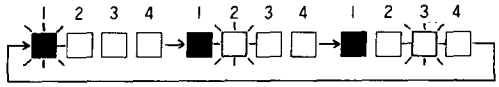


- **Beat indicator examples.**

Four-four-time.



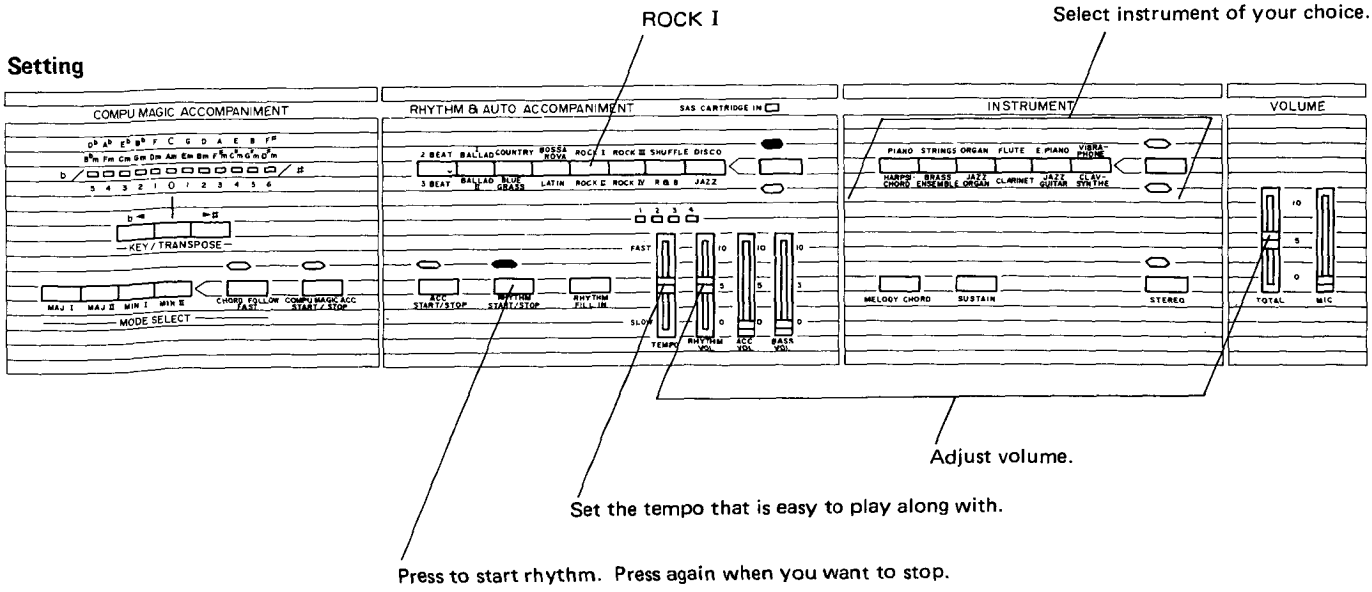
Three-four-time.



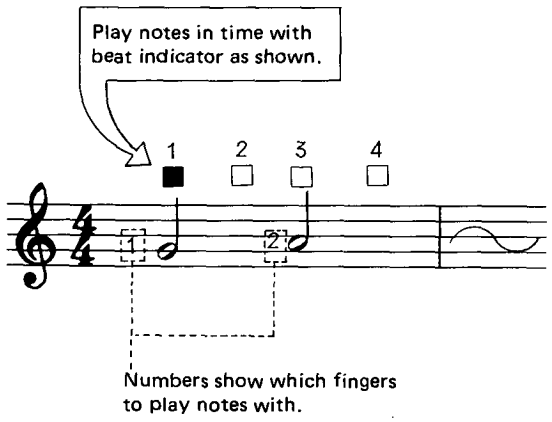
LESSON 1

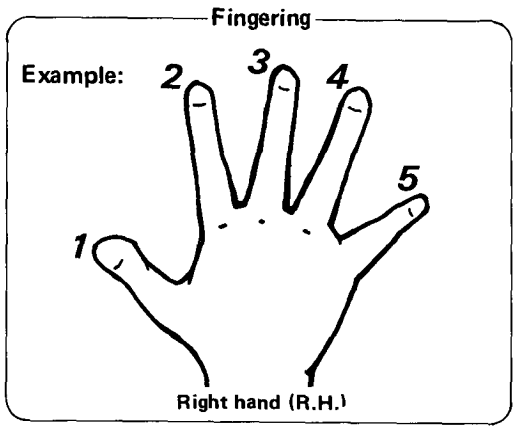
Set controls as shown.

Setting

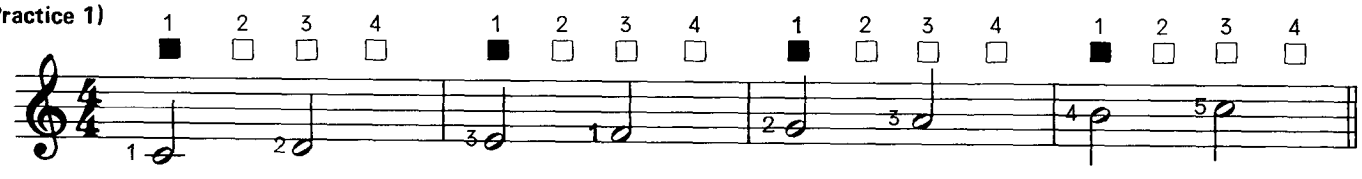


How to interpret practice music.





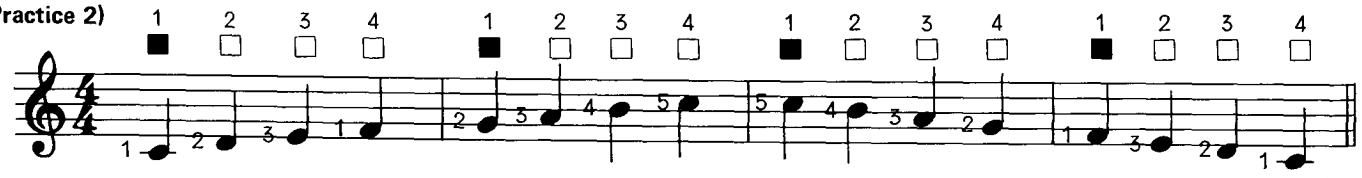
(Practice 1)



Do Re Mi Fa Sol La Ti Do

Here, thumb passes under middle finger of right hand. (*Fingering A*)

(Practice 2)

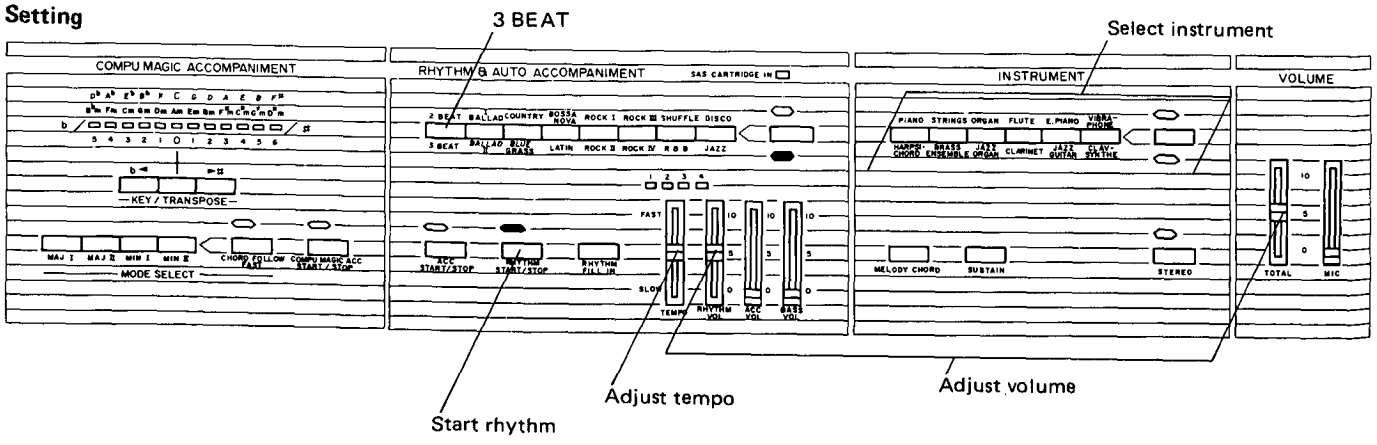


Do Re Mi Fa Sol La Ti Do Do Ti La Sol Fa Mi Re Do

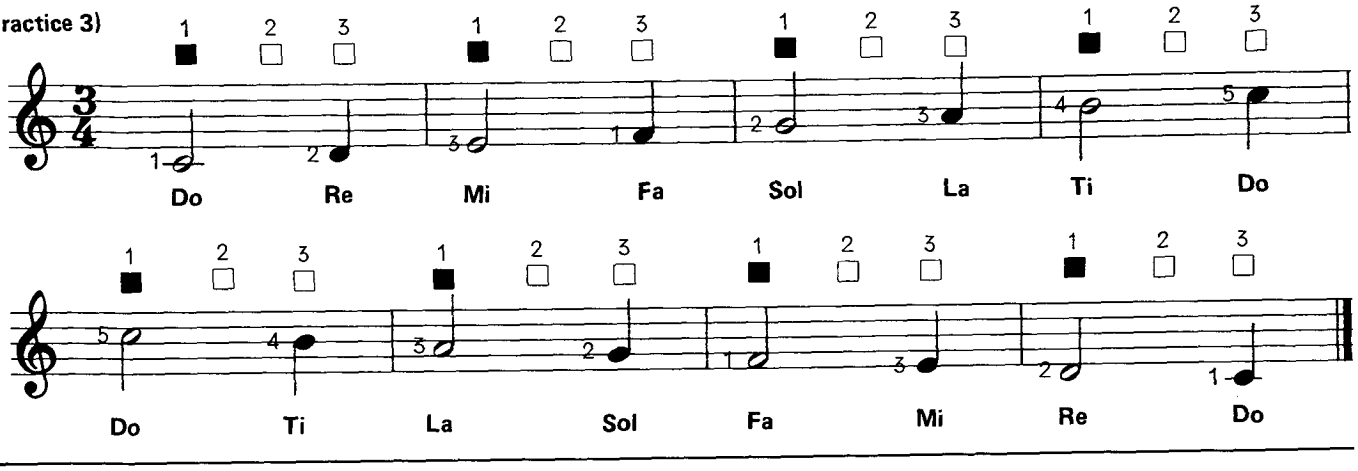
Here, middle finger passes over thumb of right hand. (*Fingering B*)

- Begin practicing slowly, then increase the tempo gradually. Next, try playing in three-four-time (waltz time) using the setting below.

Setting

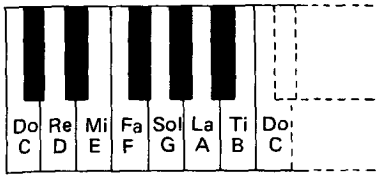


(Practice 3)

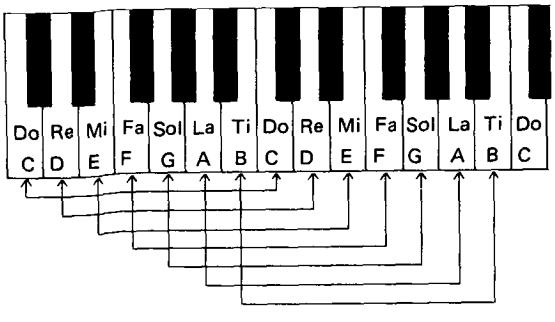


Step 5 Octaves.

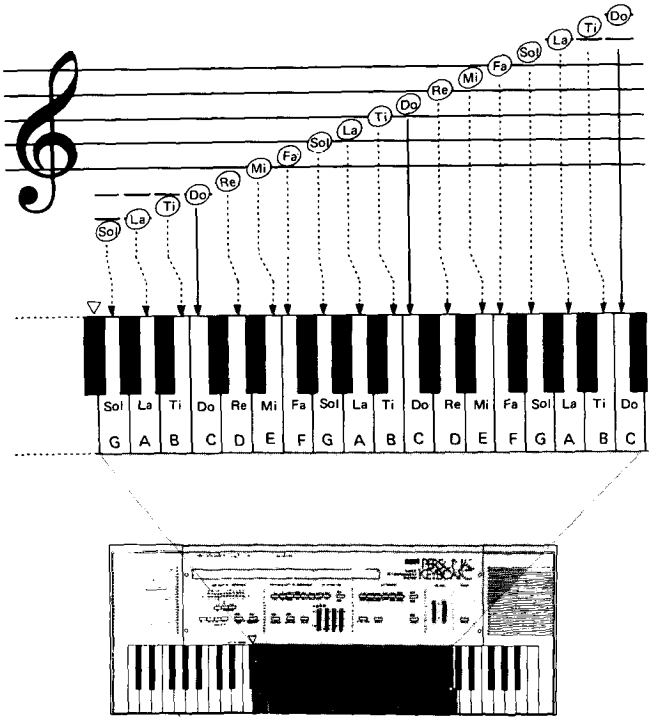
If you look at the keyboard you will see that the same pattern of keys is repeated.



Keys in the same place in the pattern have the same names. The space from one note to the next having the same name is called an octave. If you count white keys, there is an octave every eight keys.



This keyboard covers five octaves. Familiarize yourself with the 2-1/2 octave section shown below. This is the main part of the melody keyboard that you will use when playing with the Compu Magic Accompaniment.



Step 6 Rests.

Rests are spaces between notes. When you come to a rest you don't play anything for the length of the rest. This is a quarter note rest. It has the same length as a quarter note.

Quarter note rest

This means that you don't play anything for one beat. Rest symbols and values are shown below.

Rest symbol	Name	Length
	Whole note rest	4 beats
	Dotted half note rest	3 beats
	Half note rest	2 beats
	Quarter note rest	1 beat

Step 7 Other notes and rests.

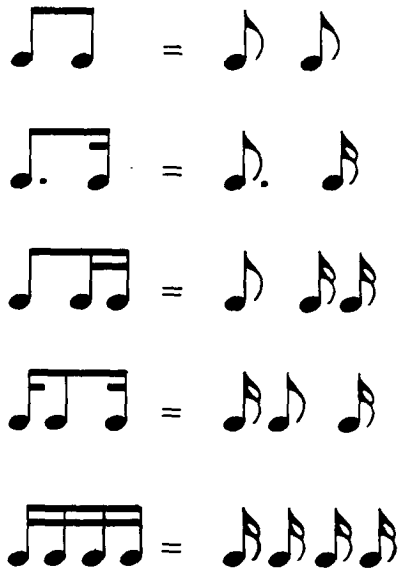
Notes and rests can be divided into other values as shown in these charts (4/4 time).

Note symbol	Name	Length
	Dotted quarter note	1-1/2 beats
	Quarter note	1 beat
	Dotted eighth note	3/4 beat
	Eighth note	1/2 beat
	Sixteenth note	1/4 beat

Rest symbol	Name	Length
	Dotted quarter note rest	1-1/2 beats
	Quarter note rest	1 beat
	Dotted eighth note rest	3/4 beat
	Eighth note rest	1/2 beat
	Sixteenth note rest	1/4 beat

Step 8 Notes written together.

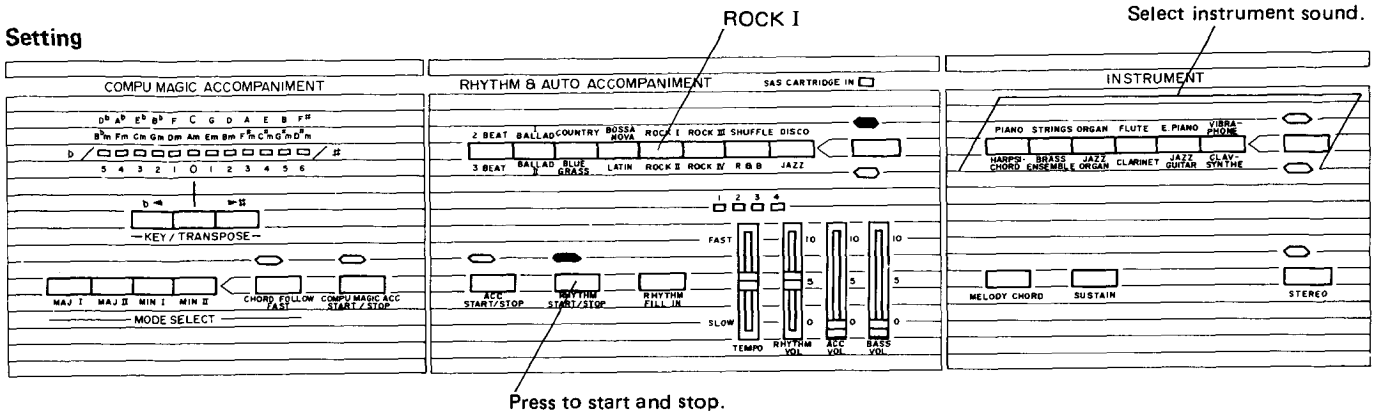
Eighth notes and sixteenth notes are often written grouped together to make them easier to read. This has no effect on the way they are to be played.



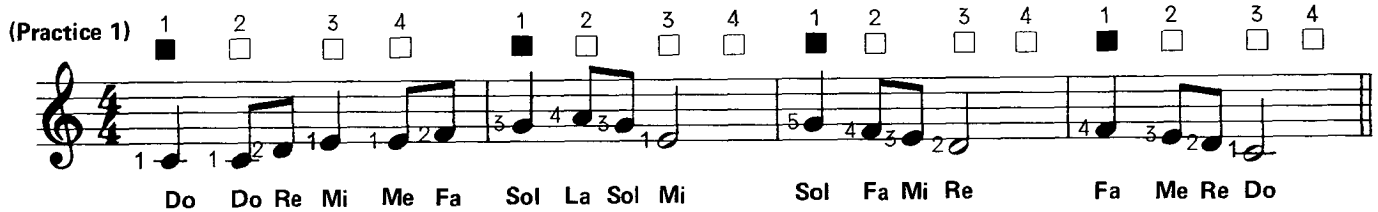
LESSON 2

Set controls as shown.

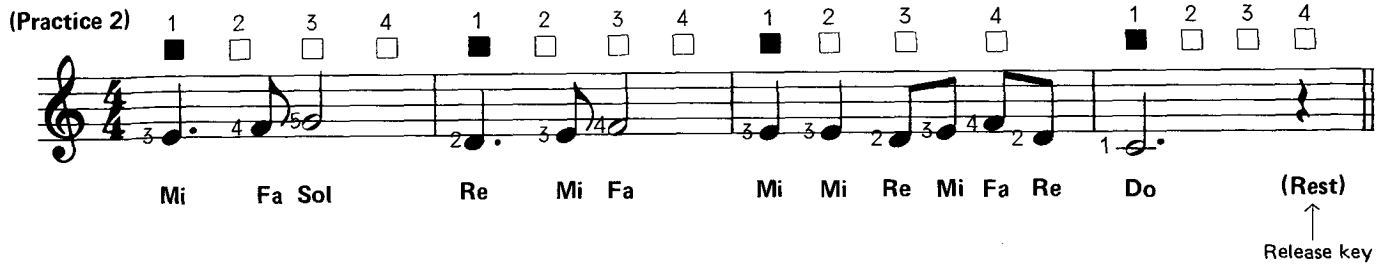
Setting



(Practice 1)

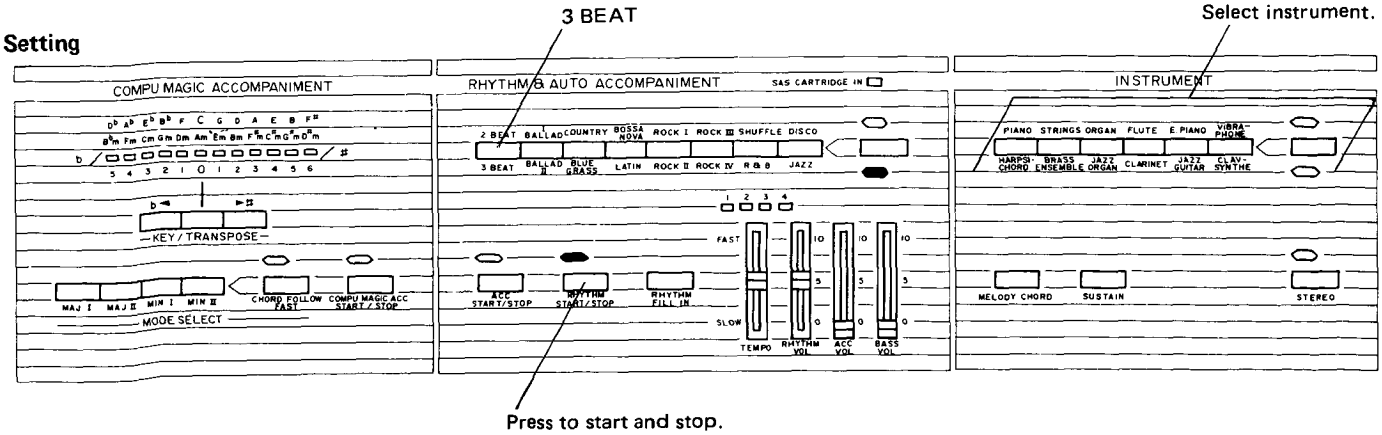


(Practice 2)

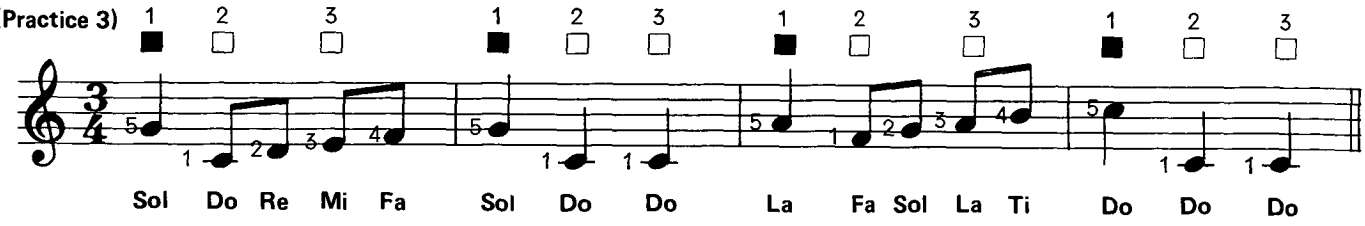


Next is an exercise in 3/4 time.

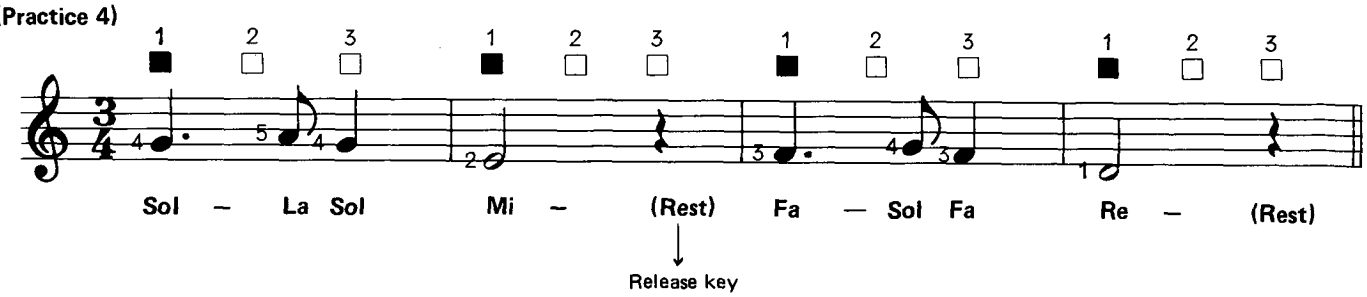
Setting



(Practice 3)



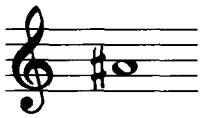
(Practice 4)



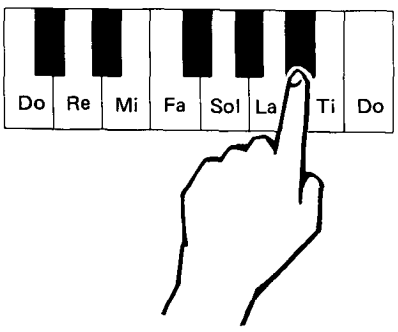
Step 9 Sharps and flats.

When you see a # (sharp) mark beside a note, you are supposed to play that note a semi-tone higher than usual. The difference from Mi to Fa and from Ti to Do is a semi-tone.
So is the difference between the white keys and their neighboring black keys.

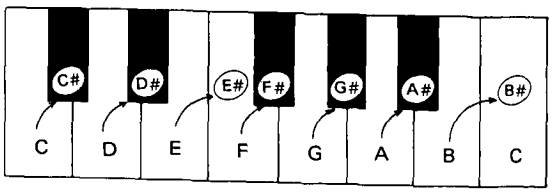
For example:



To play A#, you play the black key in between A and B.

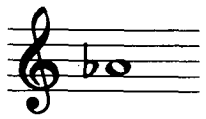


This means that F could be considered E#.

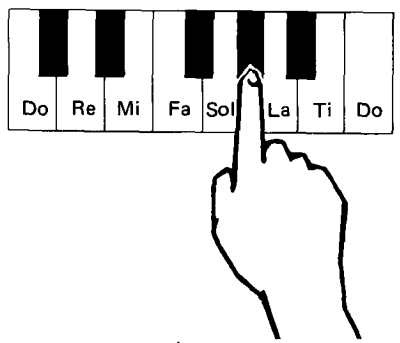


When you see a b (flat) mark beside a note you are supposed to play that note a semi-tone lower than usual.

For example:

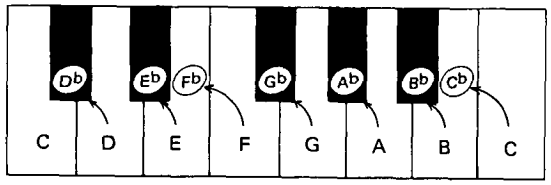


This means that you go down to the closest note to the left.



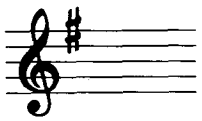
In other words, D^b is the same as C#.

As you can see, the matter of sharps and flats is relative. It depends on which way you are going from the original note.

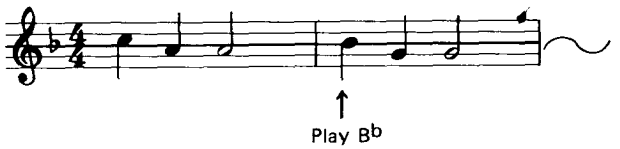


Step 10 Key signatures.

To the right of the treble clef symbol you may find a number of sharps or flats.



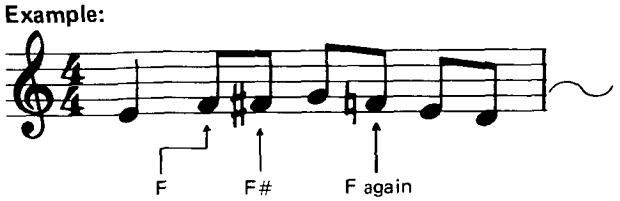
These tell you what key the music is written in; they are the "key signature". If there are sharps, then those notes where the sharps (#) are written must be raised a semi-tone when playing the music. If there are flats (b) then those notes must be lowered a semi-tone.



Step 11 Naturals.

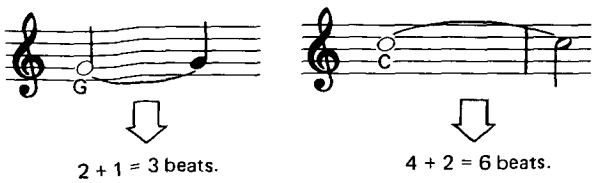
To return a sharp or flat to its original note, the natural sign (♮) is used.

Example:



Step 12 The tie.

Ties are used to connect two notes of the same pitch. Therefore, you extend the first note to include the time value (length) of the second note.



2 + 1 = 3 beats.

4 + 2 = 6 beats.

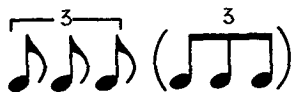
Step 13 The slur.

This looks like a tie but it usually connects notes of different pitch. The slur means that you should play the notes so that they sound smoothly connected.

These notes are to be joined smoothly together.

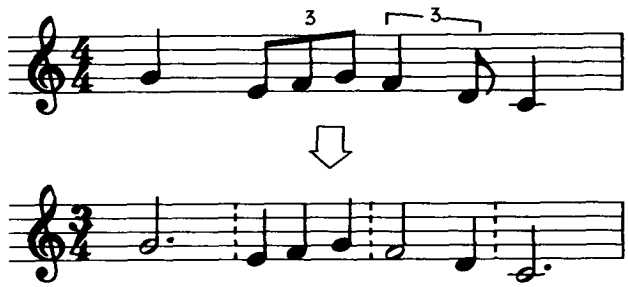
Step 14 Triplets.

When three notes are played in the space of one beat, they are called triplets.

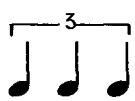


Triplet equals one beat.

Example 1.

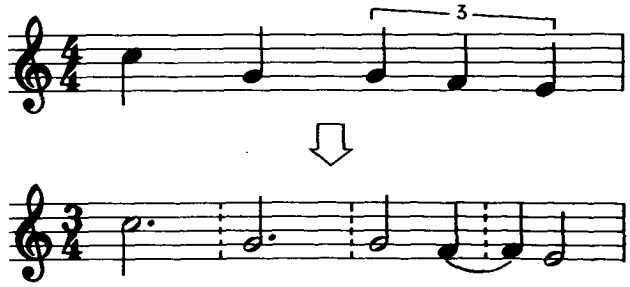


It is also possible to divide two beats into triplets.



Triplet equals two beats.

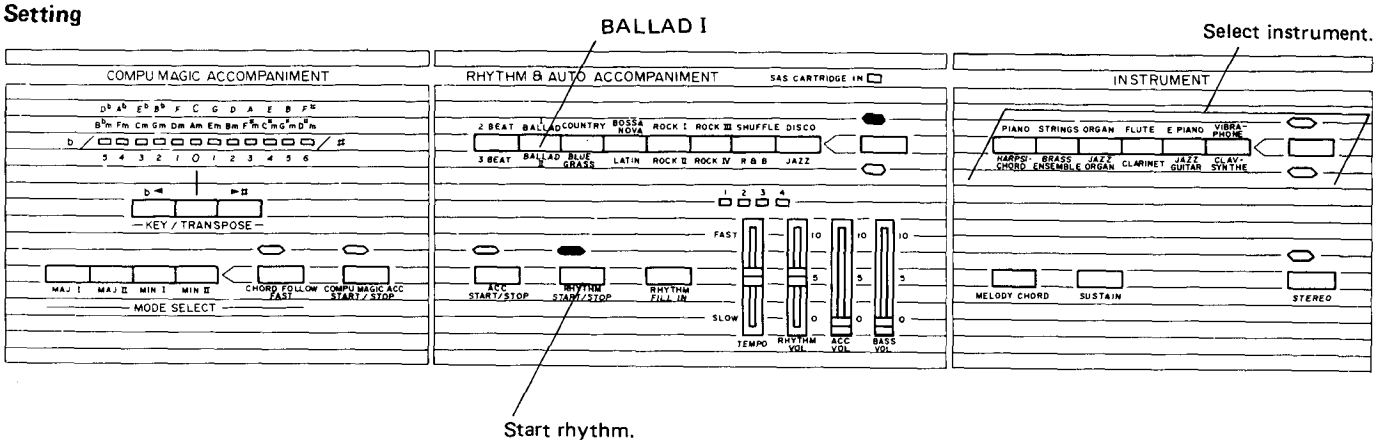
Example 2.



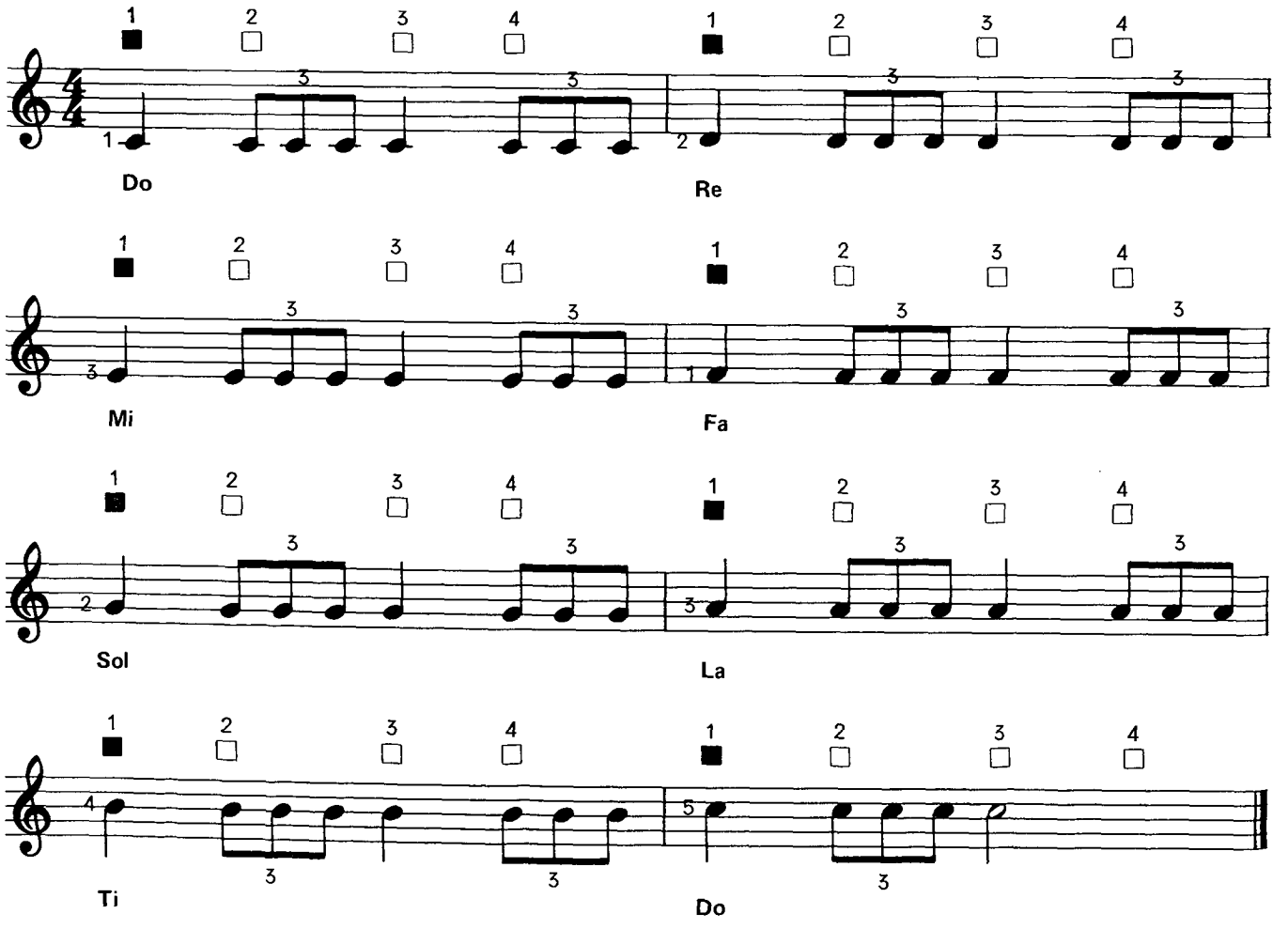
LESSON 3

Set controls as shown.

Setting



(Practice 1)



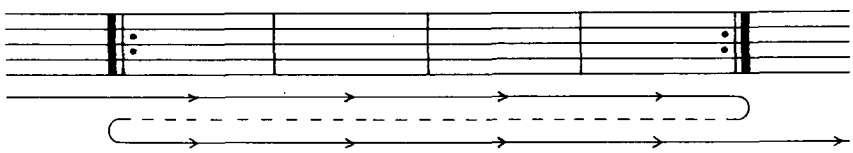
Step 15 Repeat signs and other musical notations.

Music often has repetitive passages. These are indicated by repeat signs. Other signs tell you to go to the end or to a point further in the music.

Repeat signs

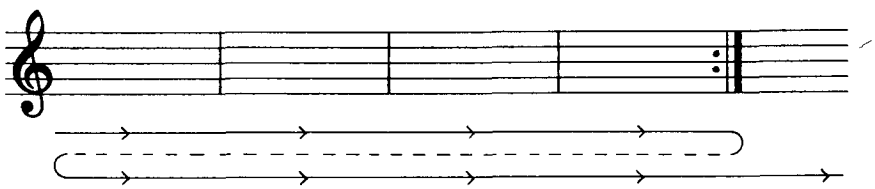
In figure 1, go to the second repeat sign, then go back and play on through from the first repeat sign.

Figure 1.



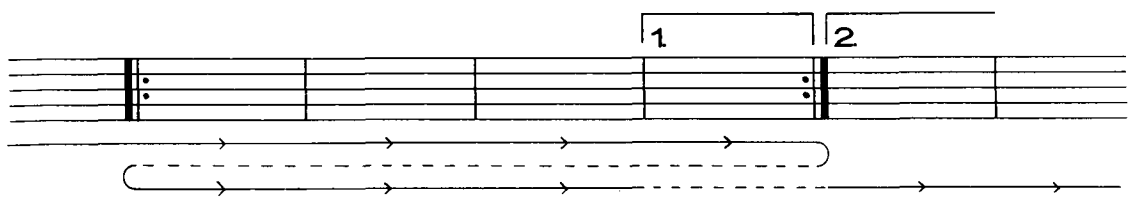
In figure 2, go back to the beginning then play on through.

Figure 2.



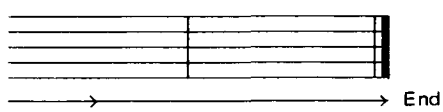
In figure 3, you play the section marked "1" the first time through. The second time, you play "2" instead of "1".

Figure 3.

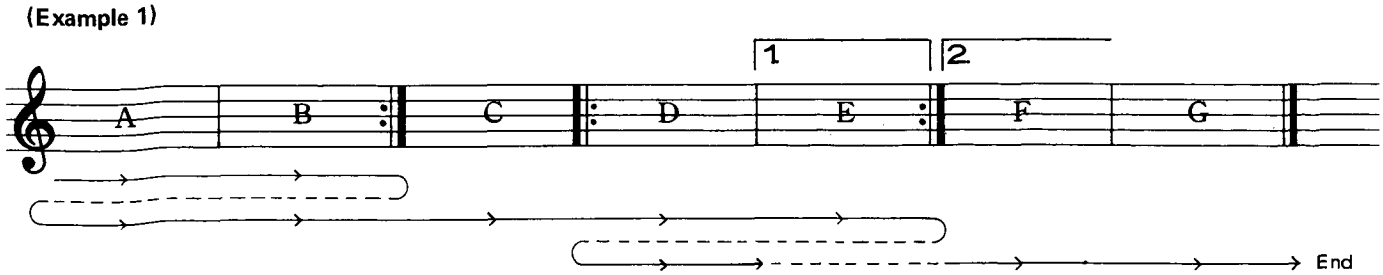


Ending

The double bar-line indicates the end of the music.



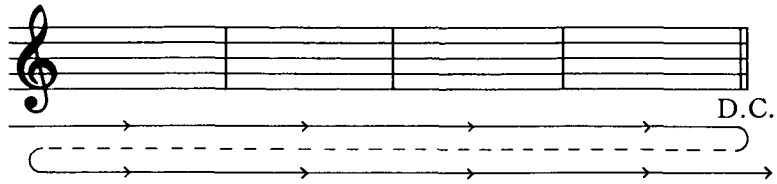
(Example 1)



Play sections in the following order:
A, B, A, B, C, D, E, D, F, G.

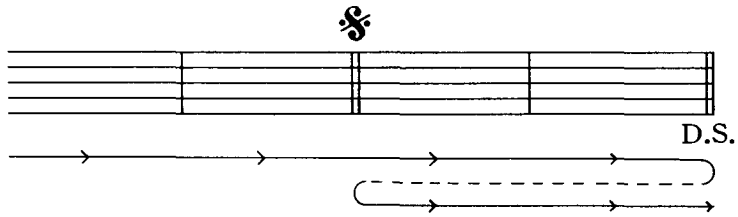
Other musical notations D.C.

D.C. (Da capo) means that you go back to the beginning and play the music again.



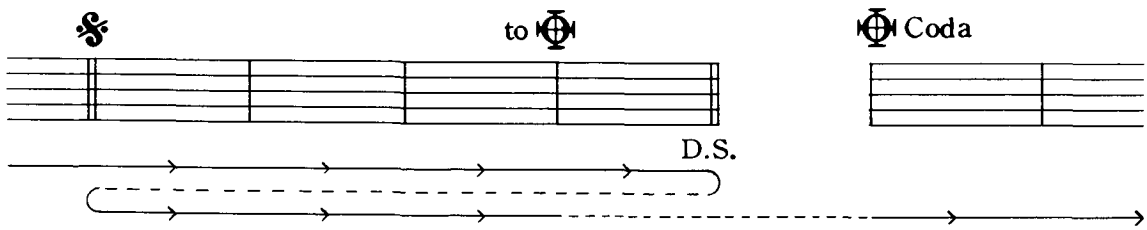
D.S.

D.S. (Dal segno) means you go back to the 𝄋 sign.



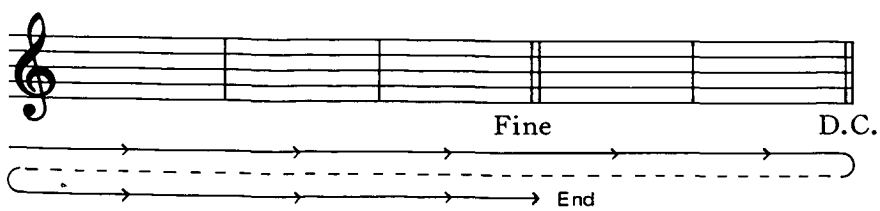
Coda and to coda

After a D.C. or D.S. tells you to repeat, you play again up to the "to coda" sign (or "al coda") to ⊕ . From there you go directly to the end section which begins with the coda sign ⊕ .

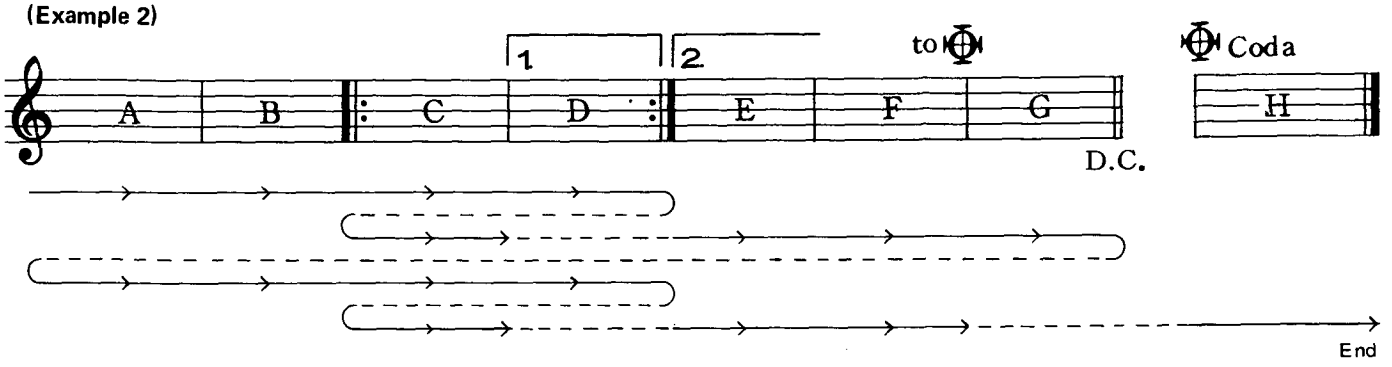


Fine

After a D.C. or D.S., you play the music again up to the "Fine" and end there.

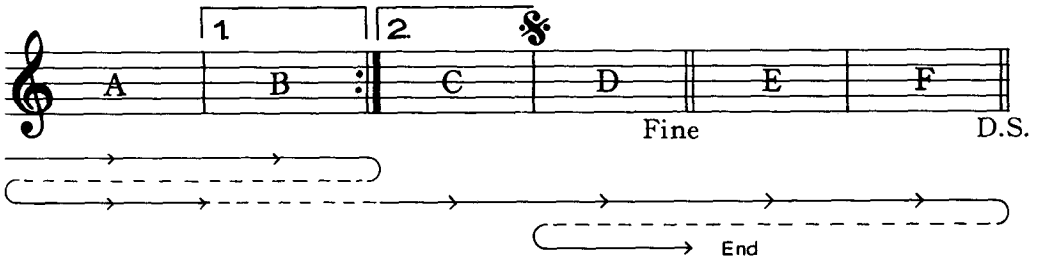


(Example 2)



Play sections in this order:
A, B, C, D, C, E, F, G,
A, B, C, D, C, E, F, H.

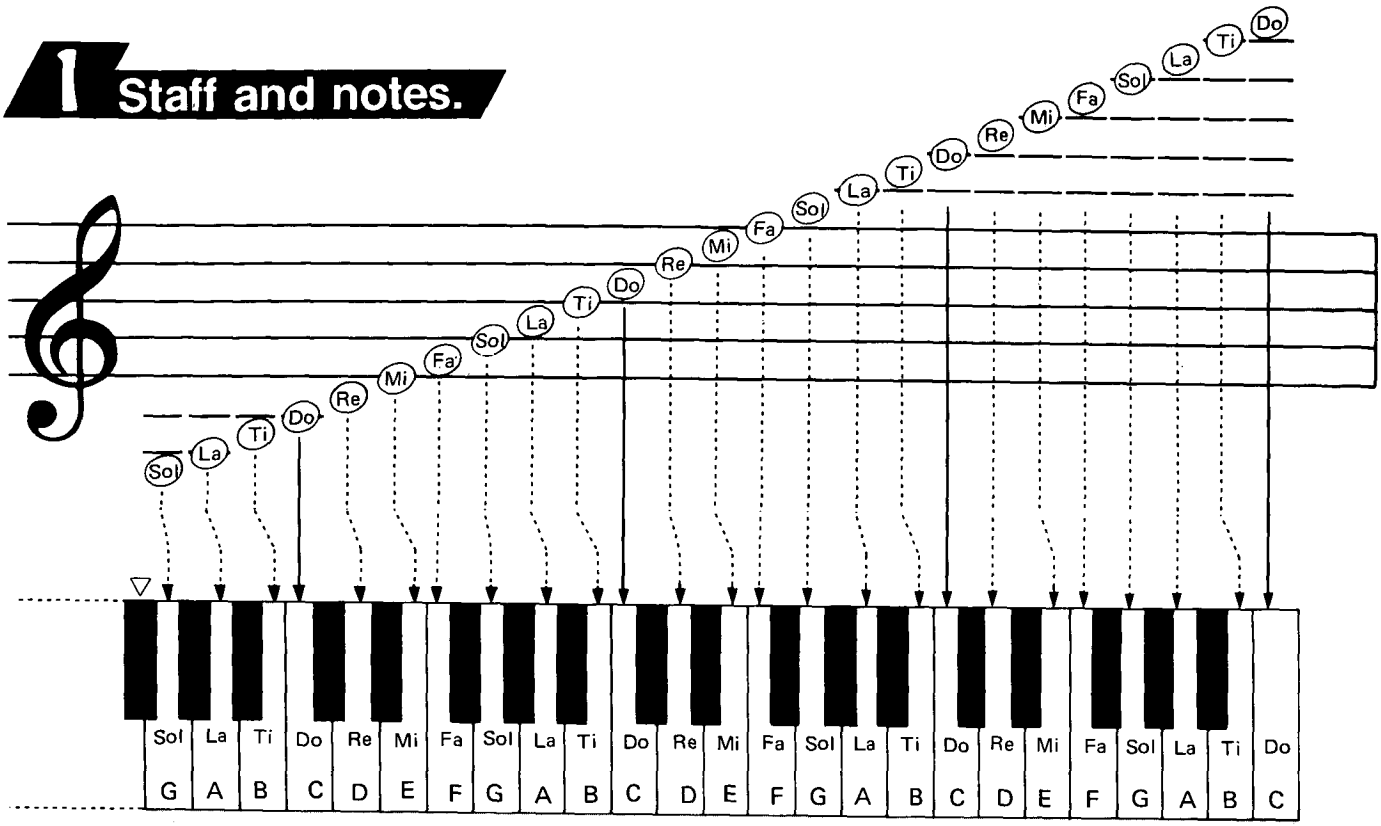
(Example 3)

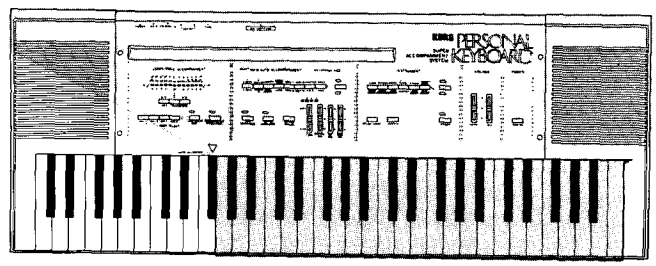


Play sections in this order:
A, B, A, C, D, E, F, D.

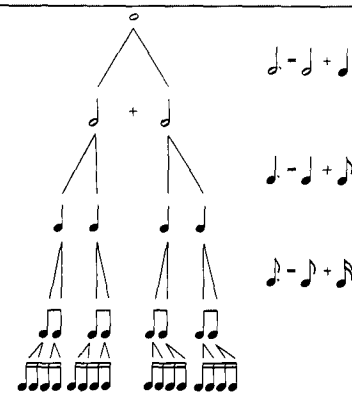
SUMMARY

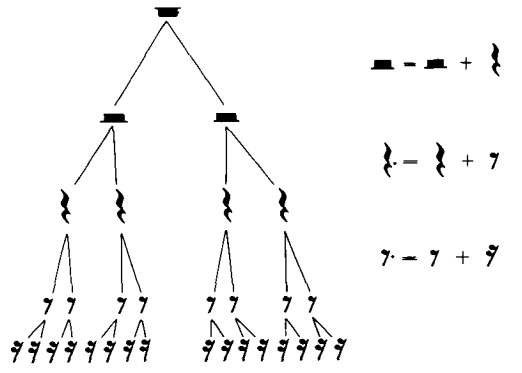
1 Staff and notes.





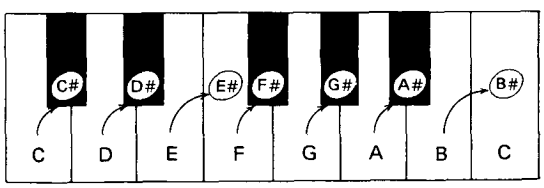
2 Notes and rests.

Symbol	Name		Division of length
𝅝	Whole note	4	
𝅗𝅥.	Dotted half note	3	
𝅗𝅥	Half note	2	
♩.	Dotted quarter note	1-1/2	
♩	Quarter note	1	
♪.	Dotted eighth note	3/4	
♪	Eighth note	1/2	
𝅘𝅥𝅯	Sixteenth note	1/4	
♫	Triplet	♩ - ♫	
♫	2 beat triplet	𝅗𝅥 - ♫	

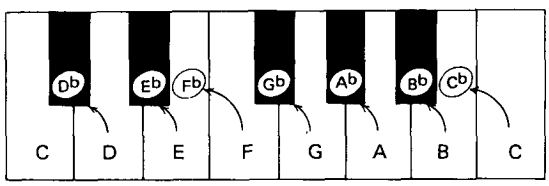
Rest Symbol	Name		Division of length
𝄻	Whole note rest	4	
𝄼.	Dotted half note rest	3	
𝄼	Half note rest	2	
𝄽.	Dotted quarter note rest	1-1/2	
𝄽	Quarter note rest	1	
𝄾.	Dotted eighth note rest	3/4	
𝄾	Eighth note rest	1/2	
𝄿	Sixteenth note rest	1/4	

3 Sharps, flats, and naturals.

For a sharp (#), move up a semi-tone.

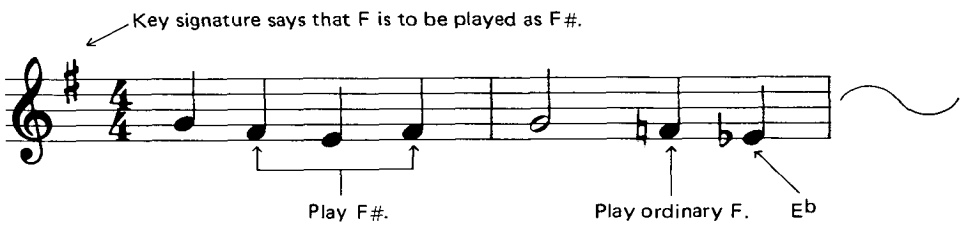


For a flat (b), move down a semi-tone.



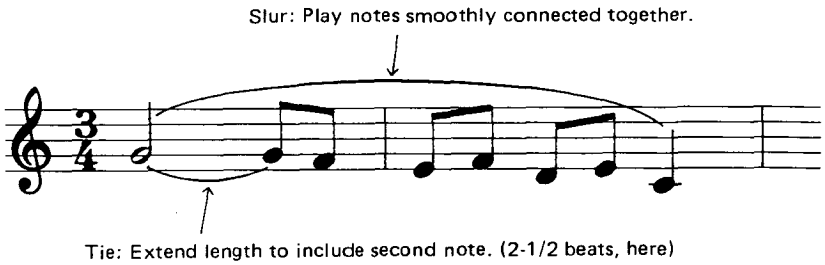
For a natural (♮), play note without sharp or flat.

(Example)

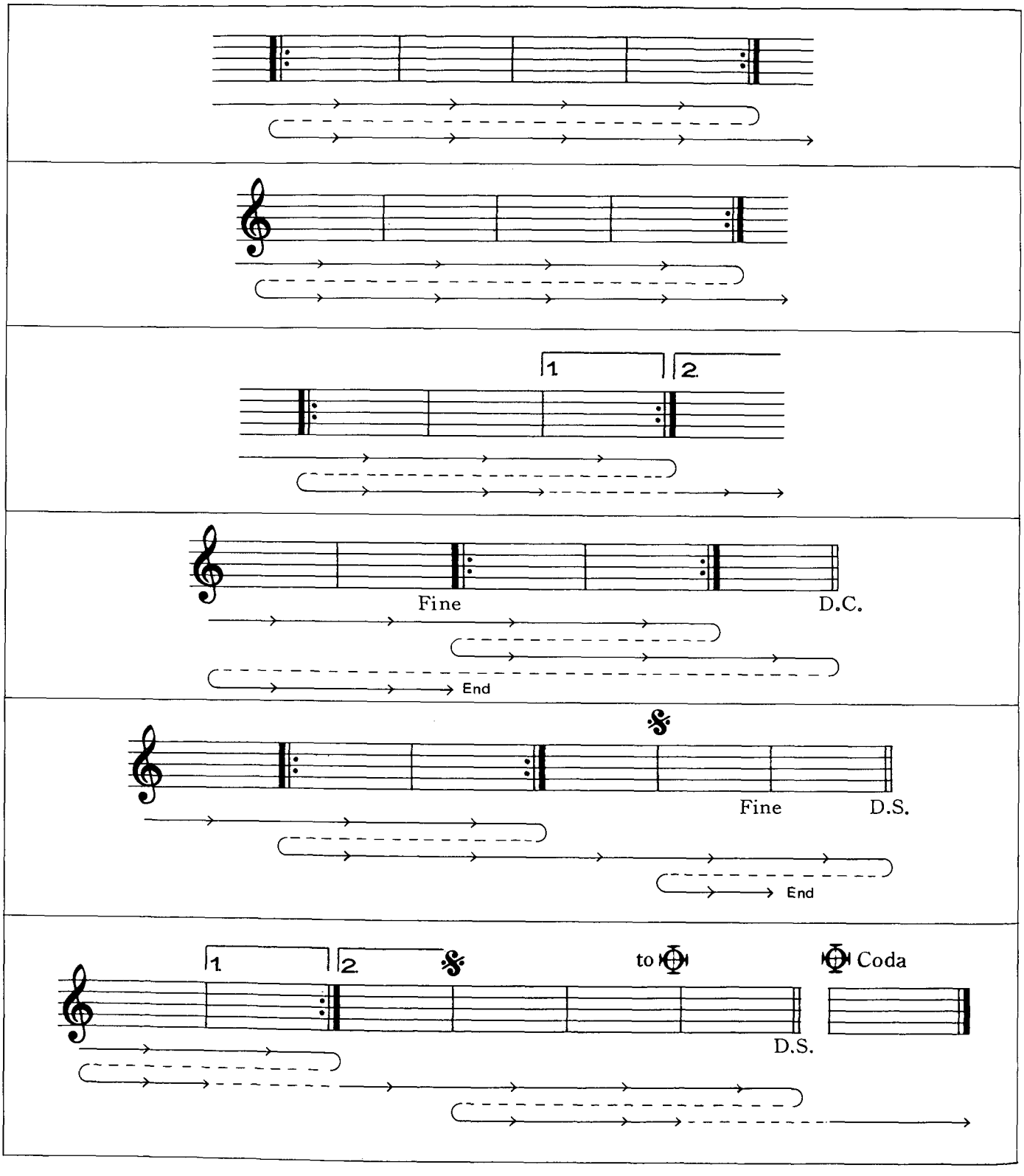


4 Ties and slurs.

(Example)



5 Repeats and other musical notations.

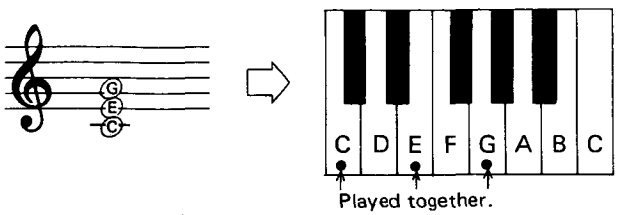


CHORD GUIDE

This section teaches you how to play chords in the lower part of the keyboard.

Step 1 Chord names.

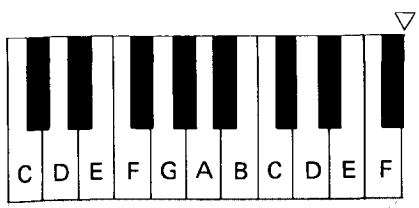
When three or more notes are played together, it is called a chord. The notes are written vertically on the staff.

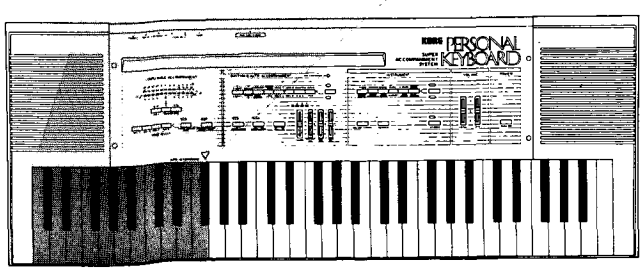


The name of the chord depends on which notes are played together. If you remember the names of chords and the notes on the keyboard, you will be on your way to being able to play chords.

Step 2 About the ACCOMPANIMENT KEYBOARD.

On the SAS-20 you can play simplified chords on the lower part of the keyboard when using the AUTO ACCOMPANIMENT function.





Accompaniment keyboard

Step 3 "One finger chords" and "fingered chords".

On the SAS-20 you can play chords in two ways.

One finger chords

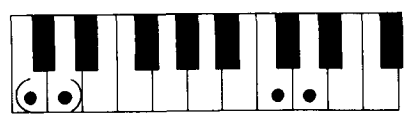
In this case, you usually only need to play one or two notes in the chord. The built-in microcomputer does the rest.

Fingered chords

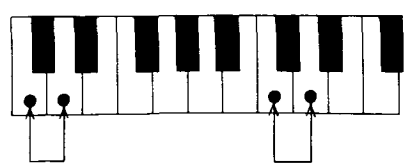
After you learn more about playing the keyboard, you can play all the notes in the chord. In this case, you don't need to use the AUTO ACCOMPANIMENT function and you will be able to play chords in the upper part of the keyboard.

In the following steps we will show you how to play some one finger chords. The diagrams follow the form below. Try to memorize all chords in this section.

Example:



In the case above you can play either the keys in brackets or those without brackets. You will hear the same chord either way.



(Keys must be played at the same time.)

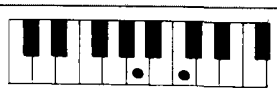
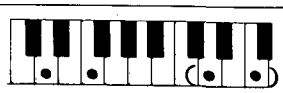
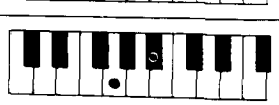
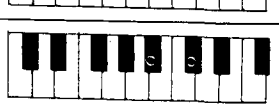
Step 4 Major chords.

Chords such as C, D, and E♭ are called major chords. They can be played with just one finger.

Chord	How to play
C	
D	
F	
G	
B♭	

Step 5 Minor chords.

If there is a small "m" beside the letter, the chords are minor. (E♭ m is read E flat minor.) These can be played with two fingers.

Chord	How to play
Am	
Dm	
E♭m	
Em	
Gm	
B♭m	

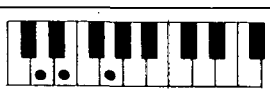
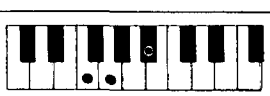
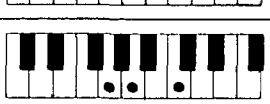
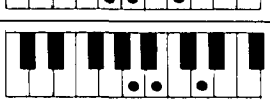
Step 6 Seventh chords.

Here there is a number 7 beside the letter. (C7 is read C seventh.) These can be played with two fingers.

Chord	How to play
C7	
D7	
E7	
G7	
A7	
B7	

Step 7 Minor seventh chords.

Here there is a number 7 beside the letter and small "m". (Dm7 is read D minor seventh.) These must be played with three fingers.

Chord	How to play
Dm7	
Em7	
Gm7	
Am7	
Bm7	

Step 8 Major seventh chords.

In this case, you have the letter name, then "maj" or (M), then a number 7. (Cmaj7 or CM7 is read C major seventh.) These can be played with two fingers.

Chord	How to play
Cmaj7	
Fmaj7	
B♭maj7	

Step 9 Sixth chords.

Here there is a number 6 beside the letter name. (G6 is read G sixth.) This can be played with two fingers.

Chord	How to play
G6	

Step 10 Minor Sixth chords.

Here there is a number 6 after the letter name and small "m". These must be played with three fingers.

Chord	How to play
Fm6	
Am6	

Step 11 Other common chords.

Here are a few other common chords.

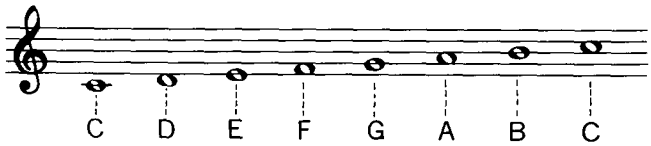
Chord	(read as)	How to play
C♯dim	C sharp diminished	
AmM7	A minor major seventh	
E sus4	E suspended fourth	
G sus4	G suspended fourth	

CHORD THEORY

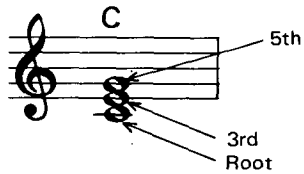
If you know how chords are constructed, then you can figure out how to play any chords. This is useful for advancing beyond the "one-finger" style described in the previous section.

1 Basis of chord names.

Each note has a name which is a letter of the alphabet from A through G.



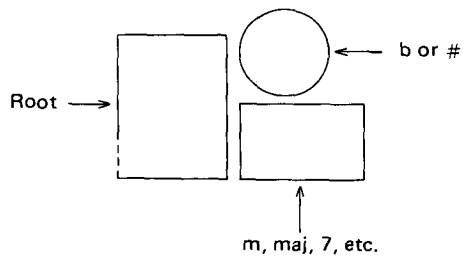
Lets take a C major (or just C) chord as an example.



The root note is C and above that are the 3rd and fifth notes of the scale.

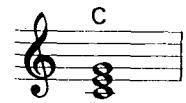
If the chord is not a simple major chord, then it is written with other symbols along with the letter name.

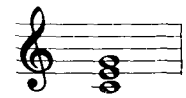
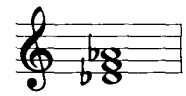
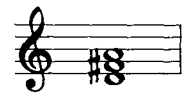
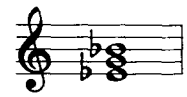
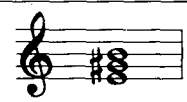
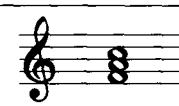
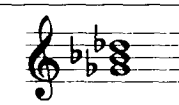
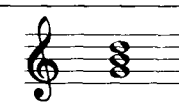
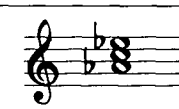
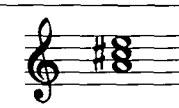
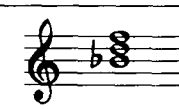
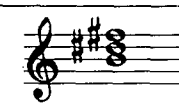
(Parts of chord name)



2 Major chords.

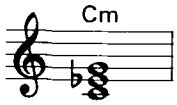
A major chord is made up of the root together with the 3rd and 5th of the major scale. (Do, Mi, Sol.)

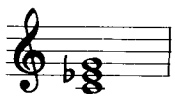
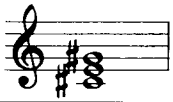
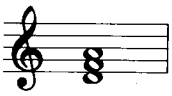
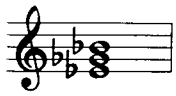
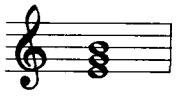
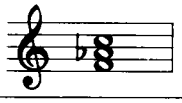
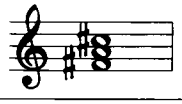
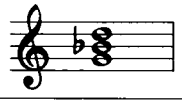
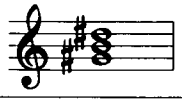
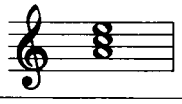
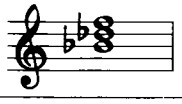
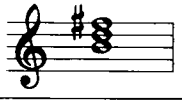


C	
D♭ (C♯)	
D	
E♭ (D♯)	
E	
F	
G♭ (F♯)	
G	
A♭ (G♯)	
A	
B♭ (A♯)	
B	

3 Minor chords.

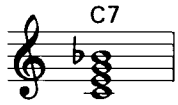
In a minor chord, the 3rd is reduced by a semi-tone. The root and the 5th are the same as for a major chord.

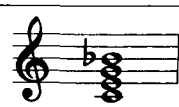
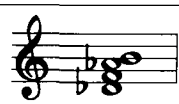
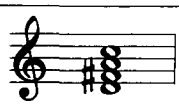
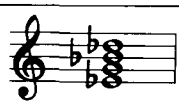
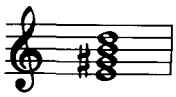
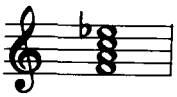
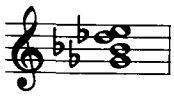
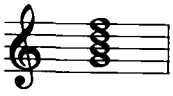
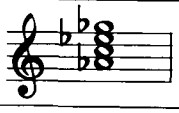
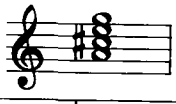
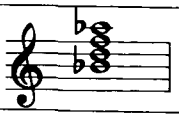
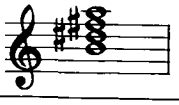


Cm	
D♭m (C♯m)	
Dm	
E♭m (D♯m)	
Em	
Fm	
G♭m (F♯m)	
Gm	
A♭m (G♯m)	
Am	
B♭m (A♯m)	
Bm	

4 Seventh chords.

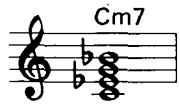
This is a major chord with the addition of the 7th note of the scale reduced by a semi-tone. The seventh note of a C major scale is B so you would add B♭ to create a C7 chord.

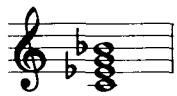
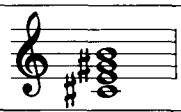
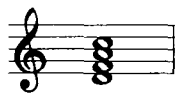
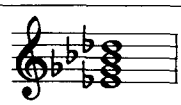
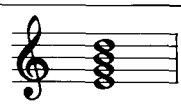
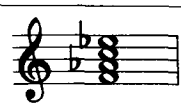
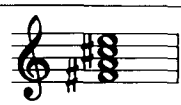
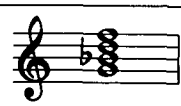
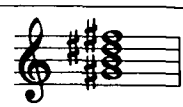
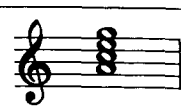
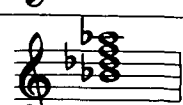
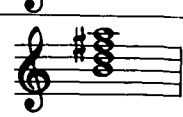


C7	
D♭7 (C♯7)	
D7	
E♭7 (D♯7)	
E7	
F7	
G♭7 (F♯7)	
G7	
A♭7 (G♯7)	
A7	
B♭7 (A♯7)	
B7	

5 Minor seventh chords.

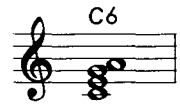
This is a minor chord plus the 7th note of the scale reduced by a semi-tone. For Cm7, you play Cm plus B♭.

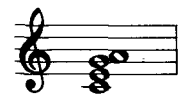
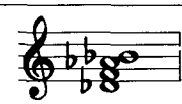
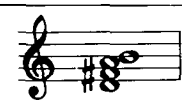
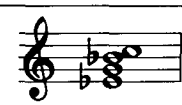
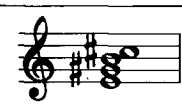
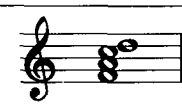
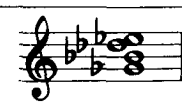
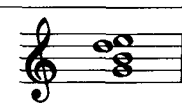
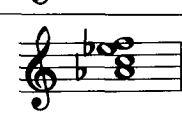
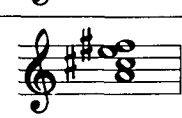
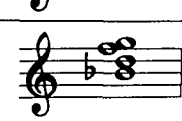
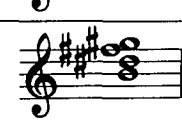


Cm7	
D♭m7 (C♯m7)	
Dm7	
E♭m7 (D♯m7)	
Em7	
Fm7	
G♭m7 (F♯m7)	
Gm7	
A♭m7 (G♯m7)	
Am7	
B♭m7 (A♯m7)	
Bm7	

6 Sixth chords.

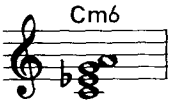
Here you add the sixth note of the scale to the major chord. For C6 you would add A to the C major chord.



C6	
D♭6 (C♯6)	
D6	
E♭6 (D♯6)	
E6	
F6	
G♭6 (F♯6)	
G6	
A♭6 (G♯6)	
A6	
B♭6 (A♯6)	
B6	

7 Minor sixth chords.

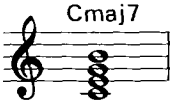
This is a minor chord plus the 6th note of the scale. For Cm6, you play Cm plus A.



Cm6	
D♭m6 (C♯m6)	
Dm6	
E♭m6 (D♯m6)	
Em6	
Fm6	
G♭m6 (F♯m6)	
Gm6	
A♭m6 (G♯m6)	
Am6	
B♭m6 (A♯m6)	
Bm6	

8 Major seventh chords.

In this case you simply add the seventh note of the scale to a major chord. For Cmaj7, you would play a C major chord with B.

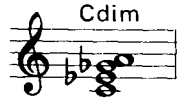


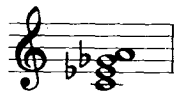
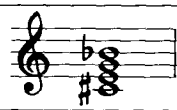
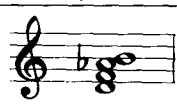
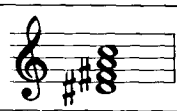
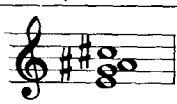
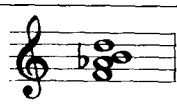
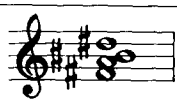
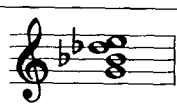
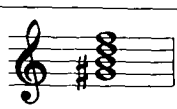
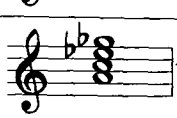
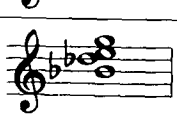
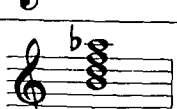
Cmaj7	
D♭maj7 (C♯maj7)	
Dmaj7	
E♭maj7 (D♯maj7)	
Emaj7	
Fmaj7	
G♭maj7 (F♯maj7)	
Gmaj7	
A♭maj7 (G♯maj7)	
Amaj7	
B♭maj7 (A♯maj7)	
Bmaj7	

9 Other chords.

- **Diminished chords.**
  This is a minor sixth chord with the fifth reduced by a semi-tone.
  NOTE: G♭ dim – B should be B# in manual.

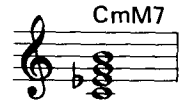
Cdim

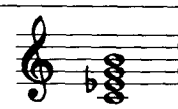
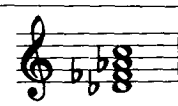
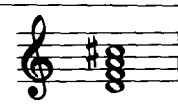
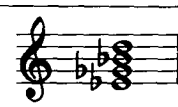
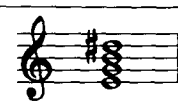
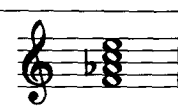
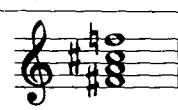
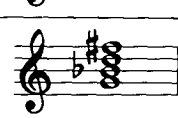
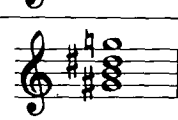
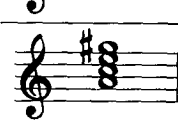
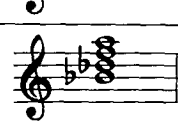
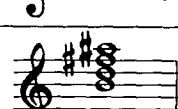


Cdim	
D♭dim (C♯dim)	
Ddim	
E♭dim (D♯dim)	
Edim	
Fdim	
G♭dim (F♯dim)	
Gdim	
A♭dim (G♯dim)	
Adim	
B♭dim (A♯dim)	
Bdim	

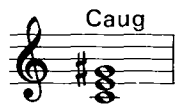
- **Minor major seventh chords.**
  This is a minor chord with the seventh note of the scale. It is also the same as a major 7th chord with the 3rd reduced a semi-tone.

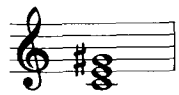
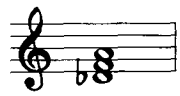
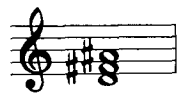
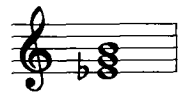
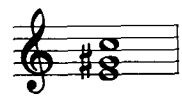
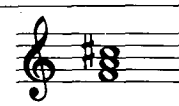
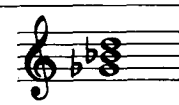
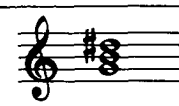
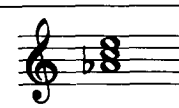
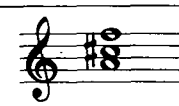
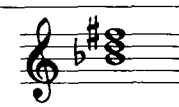
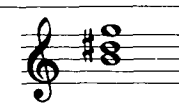
CmM7



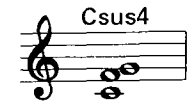
CmM7	
D♭mM7 (C♯mM7)	
DmM7	
E♭mM7 (D♯mM7)	
EmM7	
FmM7	
G♭mM7 (F♯mM7)	
GmM7	
A♭mM7 (G♯mM7)	
AmM7	
B♭mM7 (A♯mM7)	
BmM7	

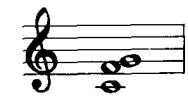
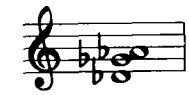
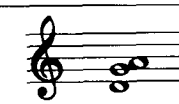
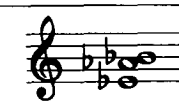
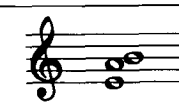
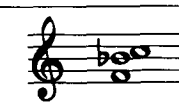
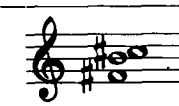
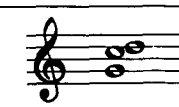
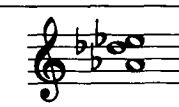
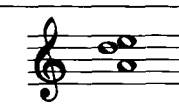
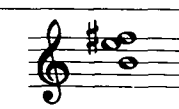
- **Augmented chords.**
  This is a major chord with the 5th raised a semi-tone.



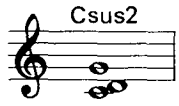
Caug	
D♭aug (C♯aug)	
Daug	
E♭aug (D♯aug)	
Eaug	
Faug	
G♭aug (F♯aug)	
Gaug	
A♭aug (G♯aug)	
Aaug	
B♭aug (A♯aug)	
Baug	

- **Suspended fourth chords.**
  Here you take a major chord and play the 4th instead of the 3rd.



Csus4	
D♭sus4 (C♯sus4)	
Dsus4	
E♭sus4 (D♯sus4)	
Esus4	
Fsus4	
G♭sus4 (F♯sus4)	
Gsus4	
A♭sus4 (G♯sus4)	
Asus4	
B♭sus4 (A♯sus4)	
Bsus4	

- **Suspended second chords.**
  Here you take a major chord and play the second instead of the 3rd.

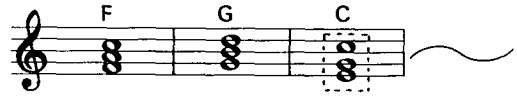


Csus2	
D♭sus2 (C♯sus2)	
Dsus2	
E♭sus2 (D♯sus2)	
Esus2	
Fsus2	
G♭sus2 (F♯sus2)	
Gsus2	
A♭sus2 (G♯sus2)	
Asus2	
B♭sus2 (A♯sus2)	
Bsus2	

10 Chord inversions.

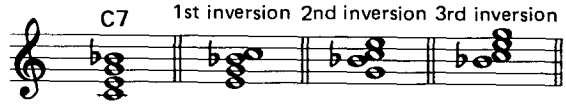
It is often more practical or more pleasing to the ear if you do not play chords with all of the notes stacked up over the root. As long as you play all of the notes in the chord, it does not matter if some are below or above the others in pitch.

(Example 1)



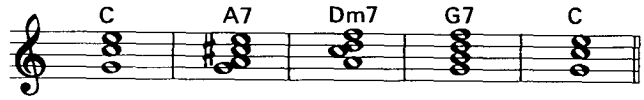
This is called "inversion". Above you see an inverted C chord. Other inversions are possible as shown below.

(Example 2)



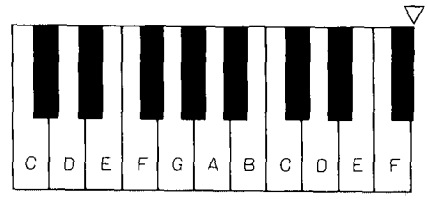
As you can see in example 3, chord inversions allow you to play a series of different chords without having to move your fingers as much.

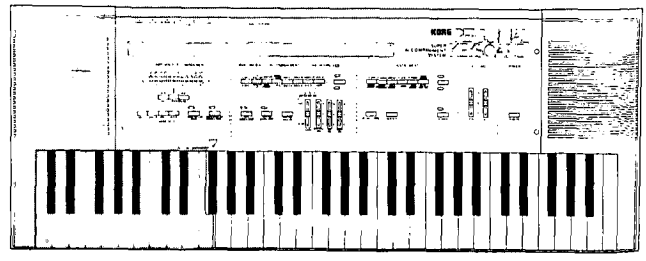
(Example 3)



11 ACCOMPANIMENT KEYBOARD and fingered chords.

When using the AUTO ACCOMPANIMENT function, you can only play accompaniment chords in the lower part of the keyboard (shaded area in diagram).



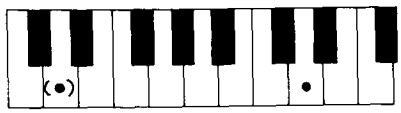
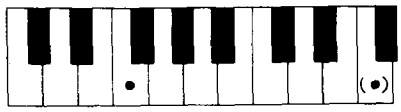
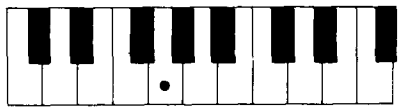
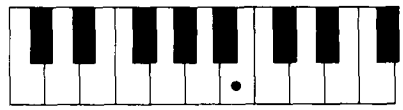


Therefore, it may be necessary to play complicated chords in inverted form.

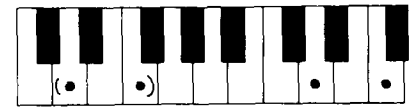
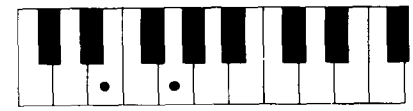
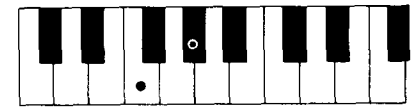
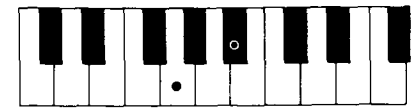
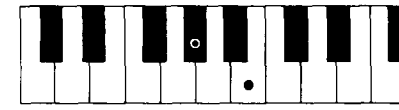
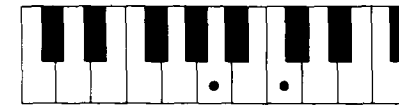
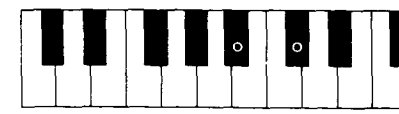
One finger chord charts.

(May be played in inverted form as long as you do not play notes outside of the accompaniment keyboard section.)

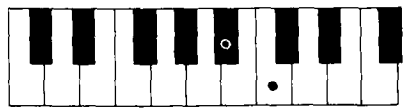
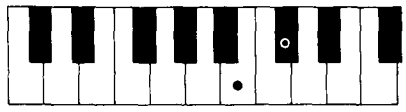
Major chords

C	
D♭ (C♯)	
D	
E♭ (D♯)	
E	
F	
G♭ (F♯)	
G	
A♭ (G♯)	
A	
B♭ (A♯)	
B	

Minor chords

Cm	
D♭m (C♯m)	
Dm	
E♭m (D♯m)	
Em	
Fm	
G♭m (F♯m)	
Gm	
A♭m (G♯m)	
Am	
B♭ (A♯m)	
Bm	

Seventh chords.

C7	
D♭7 (C♯7)	
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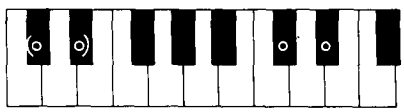
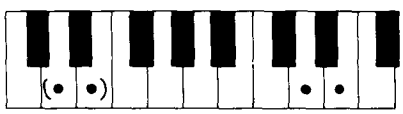
E♭7 (D♯7)	
E7	
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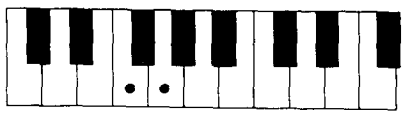
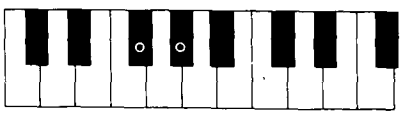
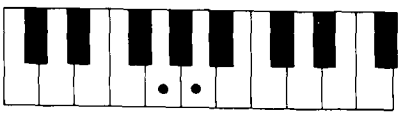
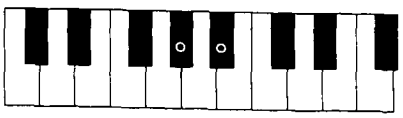
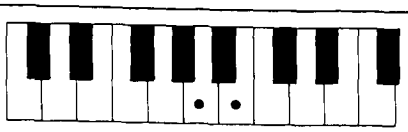
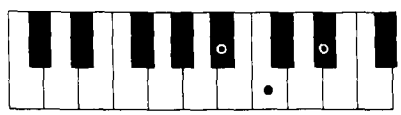
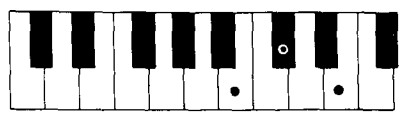
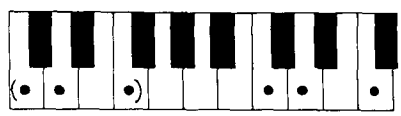
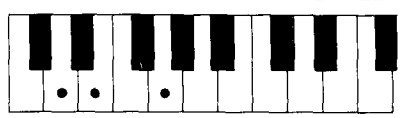
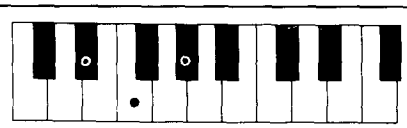
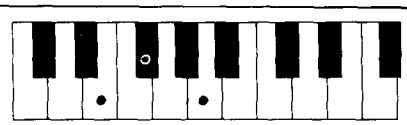
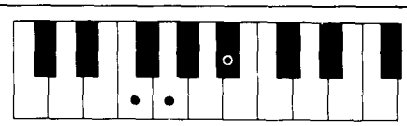
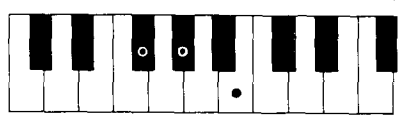
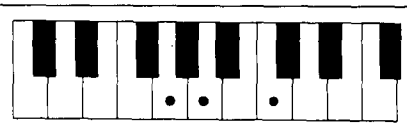
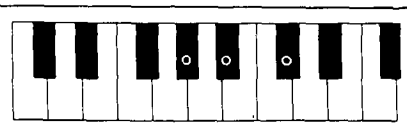
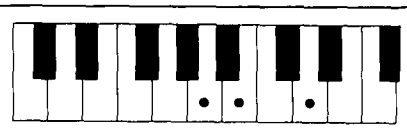
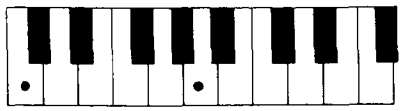
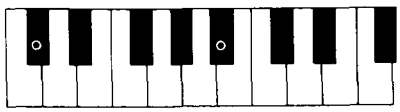
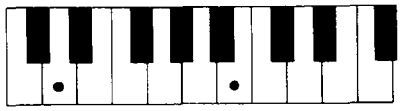
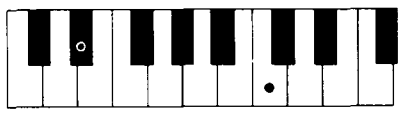
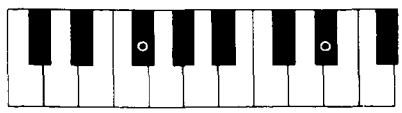
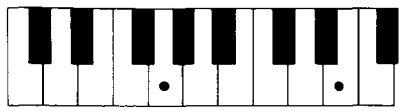
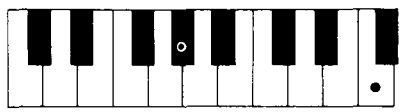
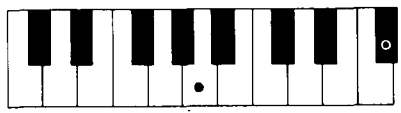
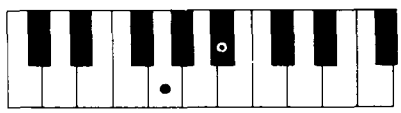
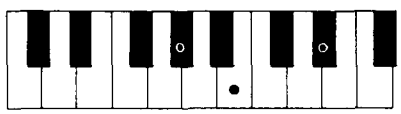
G♭7 (F♯7)	
G7	
A♭7 (G♯7)	
A7	
B♭7 (A♯7)	
B7	

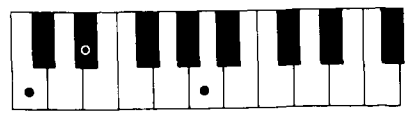
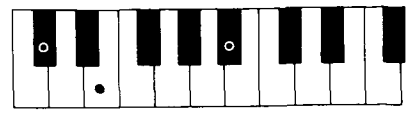
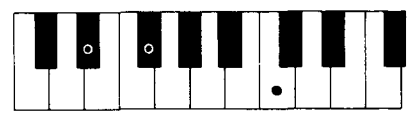
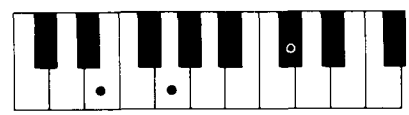
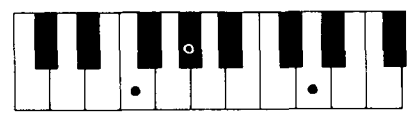
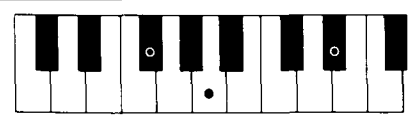
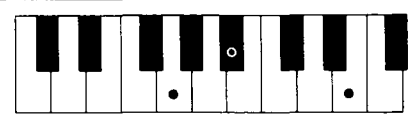
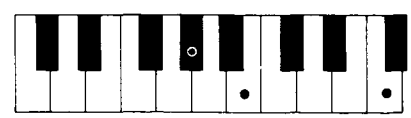
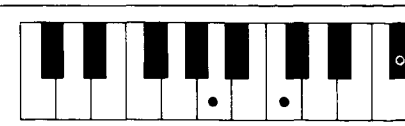
Minor seventh chords

Cm7	
D♭m7 (C♯m7)	
Dm7	
E♭m7 (D♯m7)	
Em7	
Fm7	
G♭m7 (F♯m7)	
Gm7	
A♭m7 (G♯m7)	
Am7	
B♭m7 (A♯m7)	
Bm7	

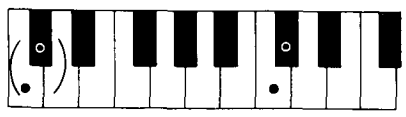
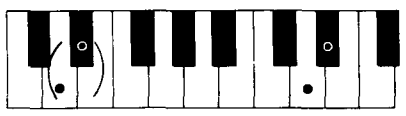
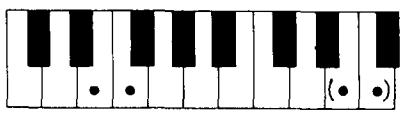
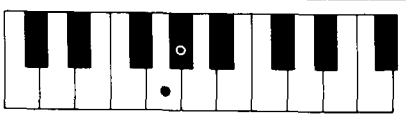
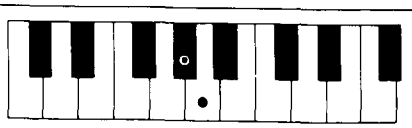
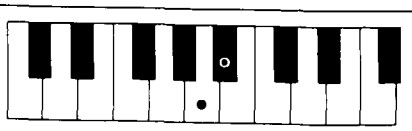
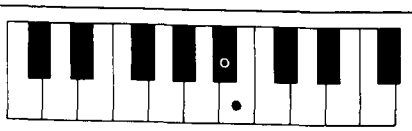
Sixth chords

C6	
D♭6 (C♯6)	
D6	
E♭6 (D♯6)	
E6	
F6	
G♭6 (F♯6)	
G6	
A♭6 (G♯6)	
A6	
B♭6 (A♯6)	
B6	

Minor sixth chords

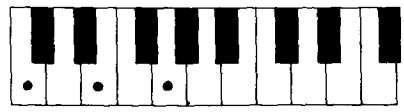
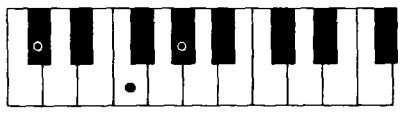
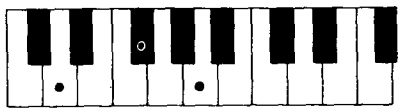
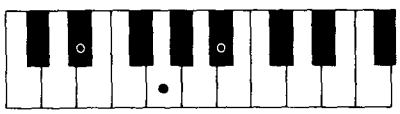
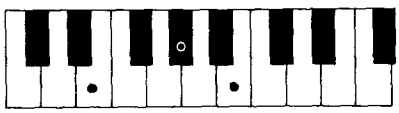
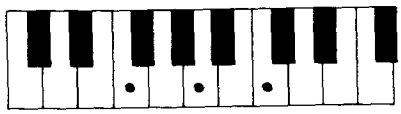
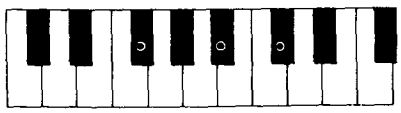
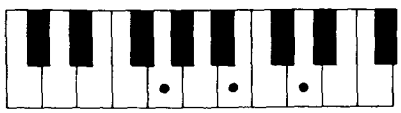
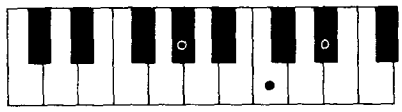
Cm6	
D♭m6 (C♯m6)	
Dm6	
E♭m6 (D♯m6)	
Em6	
Fm6	
G♭m6 (F♯m6)	
Gm6	
A♭m6 (G♯m6)	
Am6	

Major seventh chords

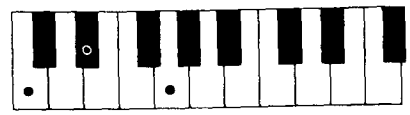
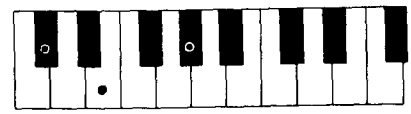
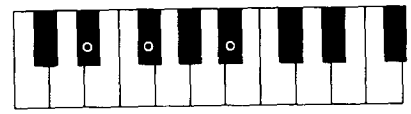
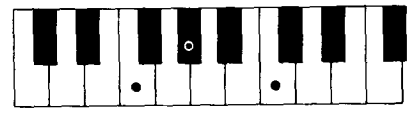
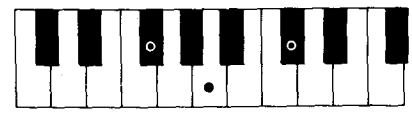
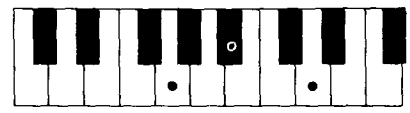
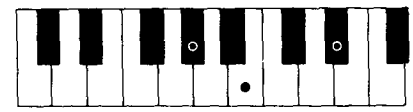
Cmaj7	
D♭maj7 (C♯maj7)	
Dmaj7	
E♭maj7 (D♯maj7)	
Emaj7	
Fmaj7	
G♭maj7 (F♯maj7)	
Gmaj7	
A♭maj7 (G♯maj7)	
Amaj7	
B♭maj7 (A♯maj7)	
Bmaj7	

Fingered chord charts.

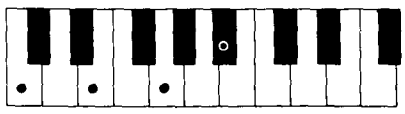
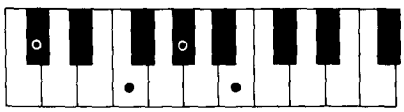
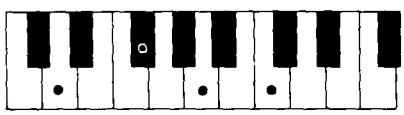
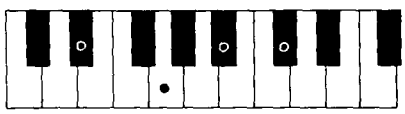
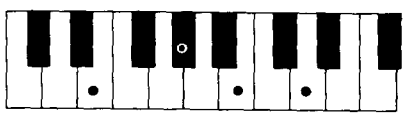
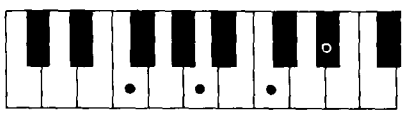
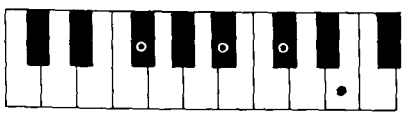
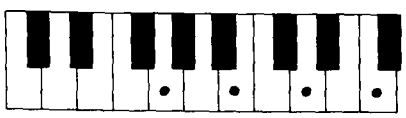
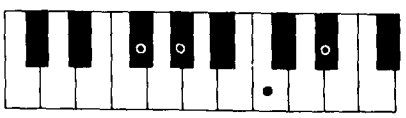
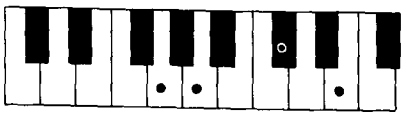
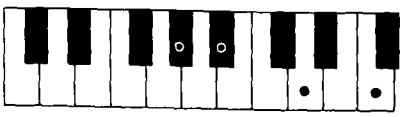
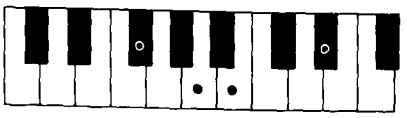
Major chords

C	
D♭ (C♯)	
D	
E♭ (D♯)	
E	
F	
G♭ (F♯)	
G	
A♭ (G♯)	
A	
B♭ (A♯)	
B	

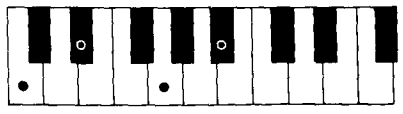
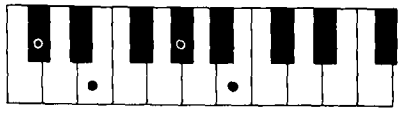
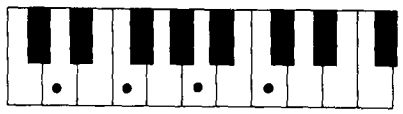
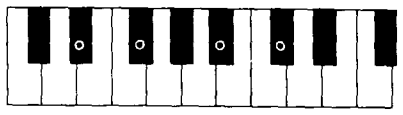
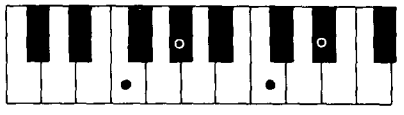
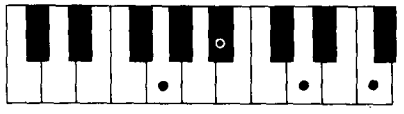
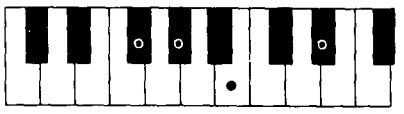
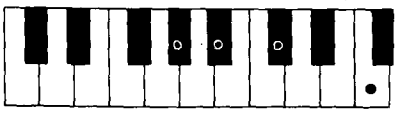
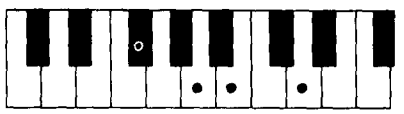
Minor chords

Cm	
D♭m (C♯m)	
Dm	
E♭m (D♯m)	
Em	
Fm	
G♭m (F♯m)	
Gm	
A♭m (G♯m)	
Am	
B♭m (A♯m)	
Bm	

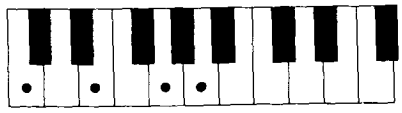
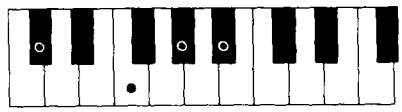
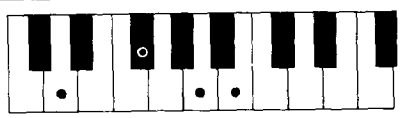
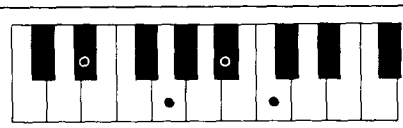
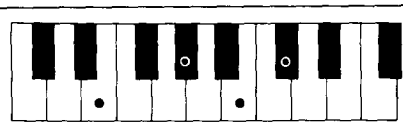
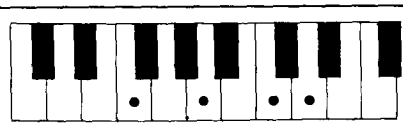
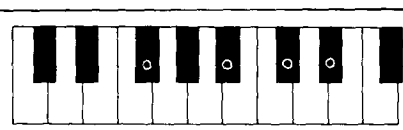
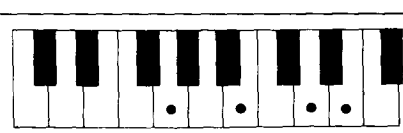
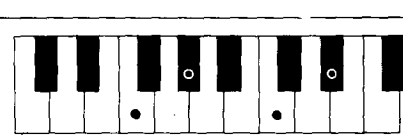
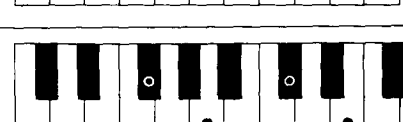
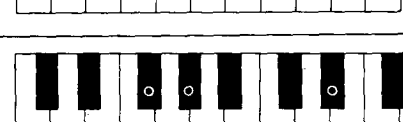
Seventh chords

C7	
D♭7 (C♯7)	
D7	
E♭7 (D♯7)	
E7	
F7	
G♭7 (F♯7)	
G7	
A♭7 (G♯7)	
A7	
B♭7 (A♯7)	
B7	

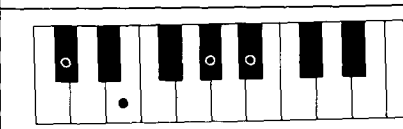
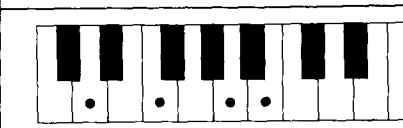
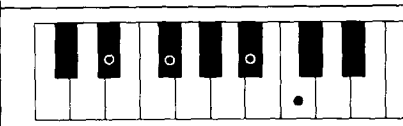
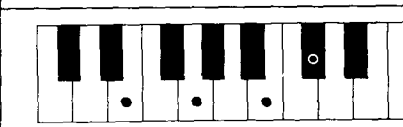
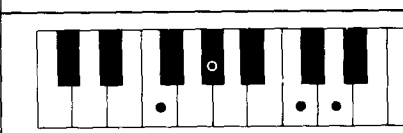
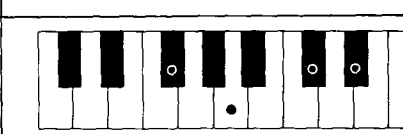
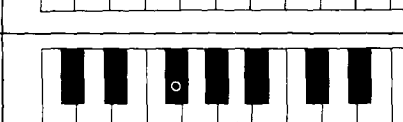
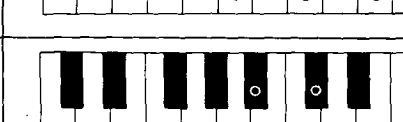
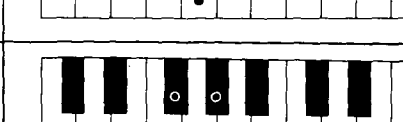
Minor seventh chords

Cm7	
D♭m7 (C♯m7)	
Dm7	
E♭m7 (D♯m7)	
Em7	
Fm7	
G♭m7 (F♯m7)	
Gm7	
A♭m7 (G♯m7)	
Am7	
B♭m7 (A♯m7)	
Bm7	

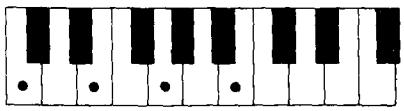
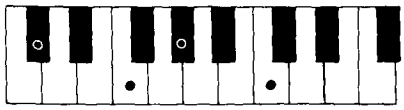
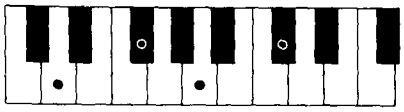
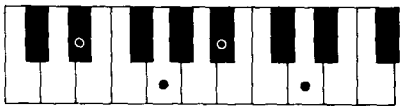
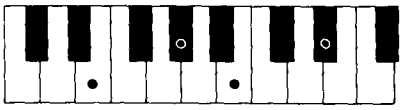
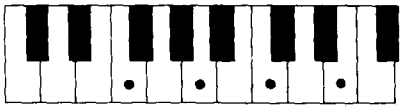
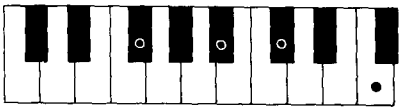
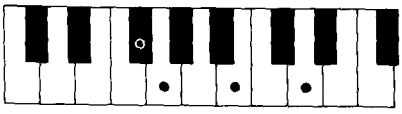
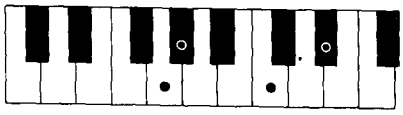
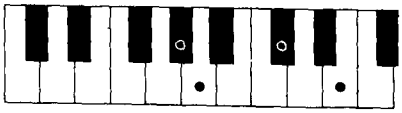
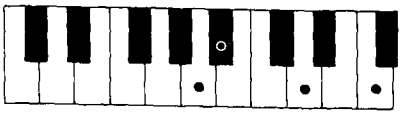
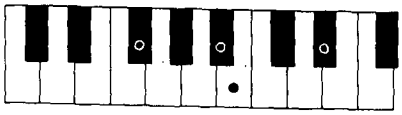
Sixth chords

C6	
D♭6 (C♯6)	
D6	
E♭6 (D♯6)	
E6	
F6	
G♭6 (F♯6)	
G6	
A♭6 (G♯6)	
A6	
B♭6 (A♯6)	
B6	

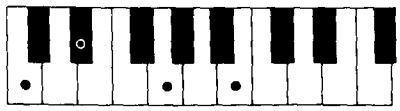
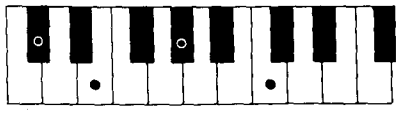
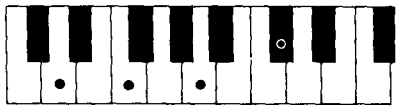
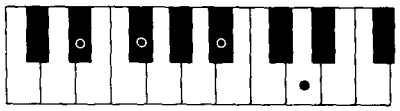
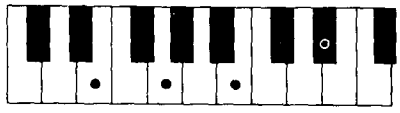
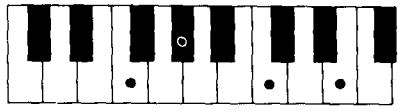
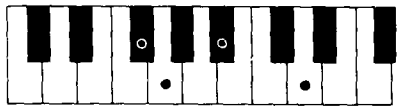
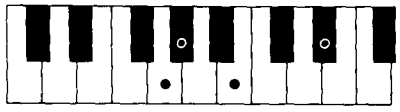
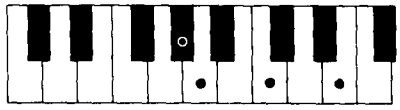
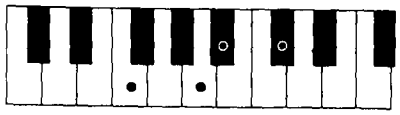
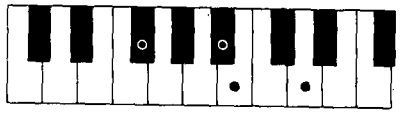
Minor sixth chords

Cm6	
D♭m6 (C♯m6)	
Dm6	
E♭m6 (D♯m6)	
Em6	
Fm6	
G♭m6 (F♯m6)	
Gm6	
A♭m6 (G♯m6)	
Am6	
B♭m6 (A♯m6)	
Bm6	

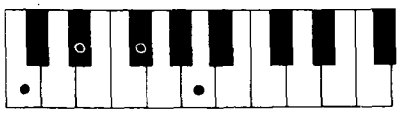
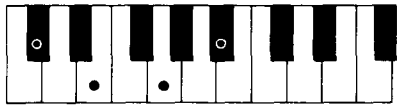
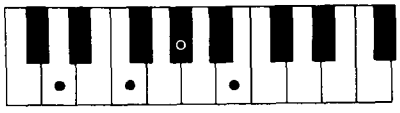
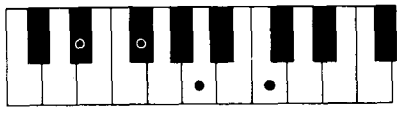
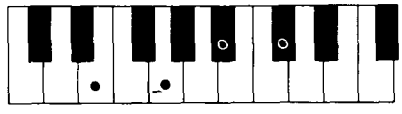
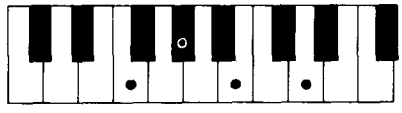
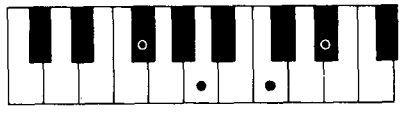
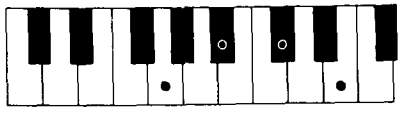
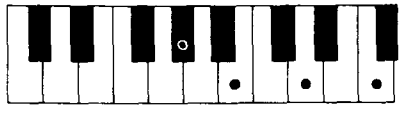
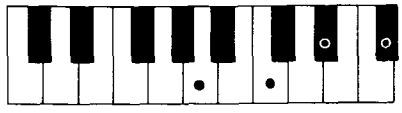
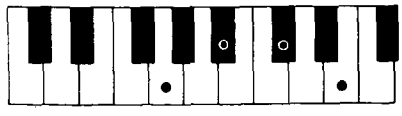
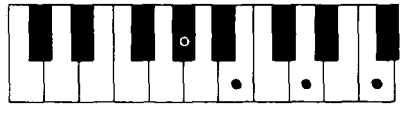
Major seventh chords

Cmaj7	
D♭maj7 (C♯maj7)	
Dmaj7	
E♭maj7 (D♯maj7)	
Emaj7	
Fmaj7	
G♭maj7 (F♯maj7)	
Gmaj7	
A♭maj7 (G♯maj7)	
Amaj7	
B♭maj7 (A♯maj7)	
Bmaj7	

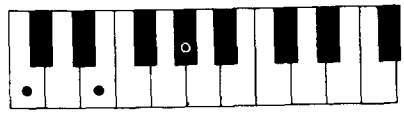
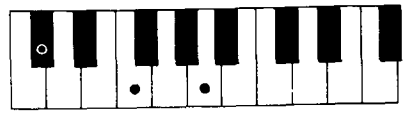
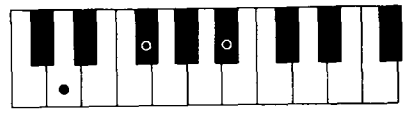
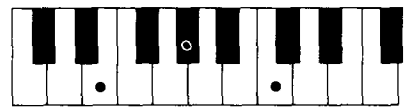
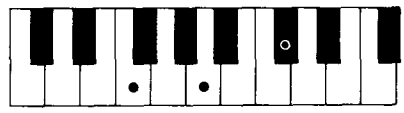
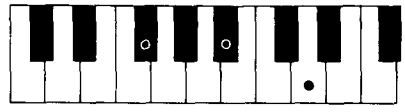
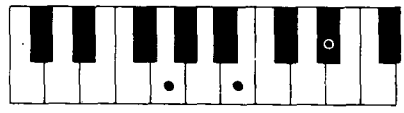
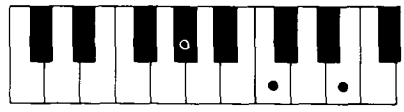
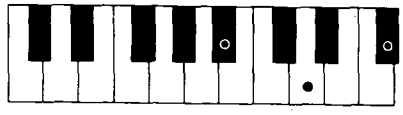
Minor major seventh chords

CmM7	
D♭mM7 (C♯mM7)	
DmM7	
E♭mM7 (D♯mM7)	
EmM7	
FmM7	
G♭mM7 (F♯mM7)	
GmM7	
A♭mM7 (G♯mM7)	
AmM7	
B♭mM7 (A♯mM7)	
BmM7	

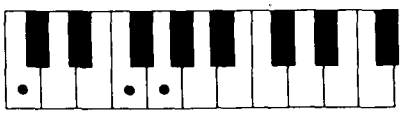
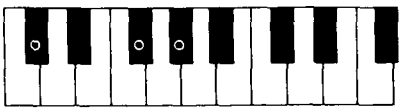
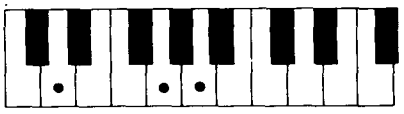
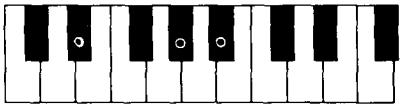
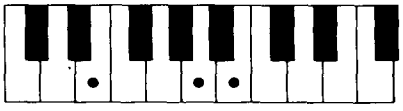
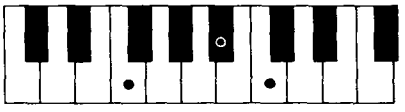
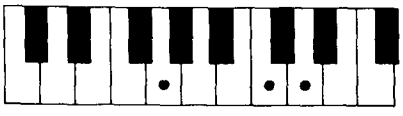
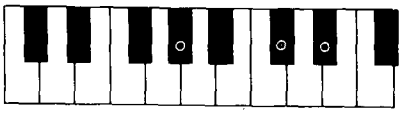
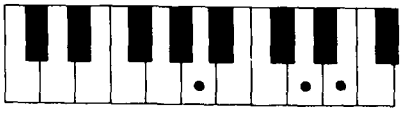
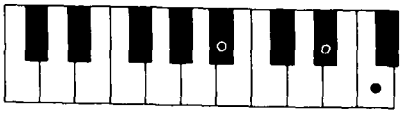
Diminished chords

Cdim	
D♭dim (C♯dim)	
Ddim	
E♭dim (D♯dim)	
Edim	
Fdim	
G♭dim (F♯dim)	
Gdim	
A♭dim (G♯dim)	
Adim	
B♭dim (A♯dim)	
Bdim	

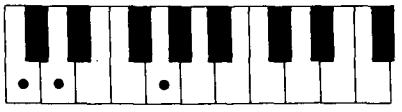
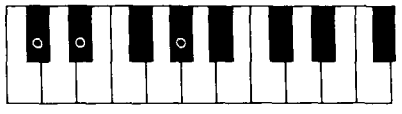
Augmented chords

Caug	
D♭aug (C♯aug)	
Daug	
E♭aug (D♯aug)	
Eaug	
Faug	
G♭aug (F♯aug)	
Gaug	
A♭aug (G♯aug)	
Aaug	
B♭aug (A♯aug)	

Suspended fourth chords

Csus4	
D♭sus4 (C♯sus4)	
Dsus4	
E♭sus4 (D♯sus4)	
Esus4	
Fsus4	
G♭sus4 (F♯sus4)	
Gsus4	
A♭sus4 (G♯sus4)	
Asus4	
B♭sus4 (A♯sus4)	
Bsus4	

Suspended second chords

Csus2	
D♭sus2 (C♯sus2)	
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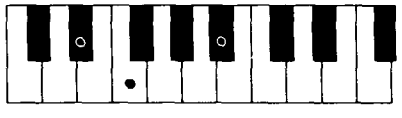
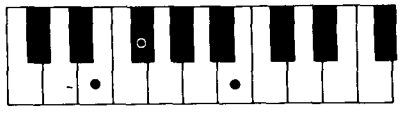
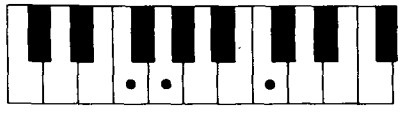
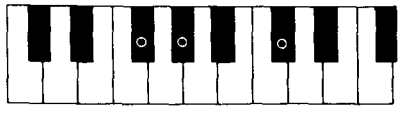
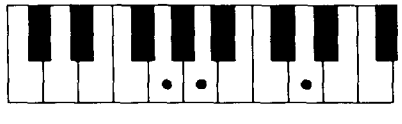
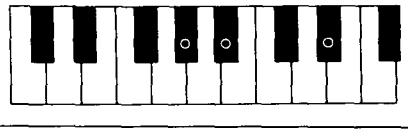
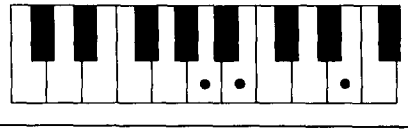
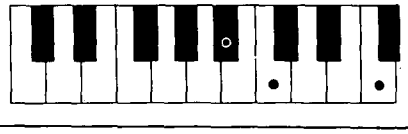
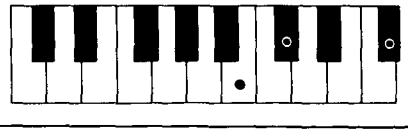
E♭sus2 (D♯sus2)	
Esus2	
Fsus2	
G♭sus2 (F♯sus2)	
Gsus2	
A♭sus2 (G♯sus2)	
Asus2	
B♭sus2 (A♯sus2)	
Bsus2	

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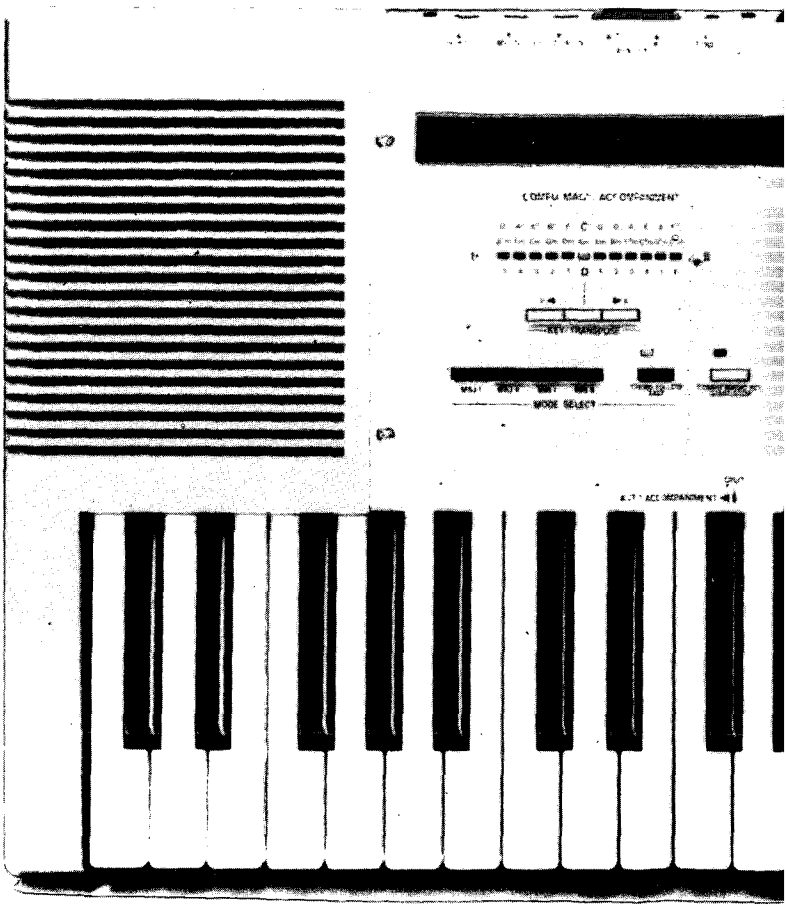

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