GETTING THE BEST FROM YOUR MSX

A BEGINNERS GUIDE TO HOME COMPUTING

MUSIC EDITION

SPECIALLY COMMISSIONED FOR HX-10 USERS BY

TOSHIBA

Appendix devoted to HX-MU900/1 with HX-10

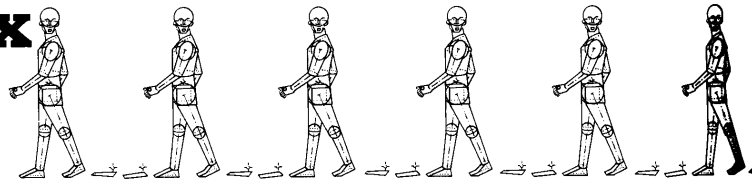*Scanned and converted to PDF by HansO, 2003*

GETTING THE BEST FROM YOUR

MSX

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TOSHIBA

APPENDIX

Setting Up

While you are still getting to know the Music System, all you need to use is the music keyboard, the HX-10 and a TV set. Later, you may wish to connect up a stereo amplifier for even better quality sound, and a cassette recorder so that you can save your music on tape.

Arrange the music keyboard in front of the HX-10, as close as possible so that you can reach both easily. Set up the TV and the HX-10 as usual, but don't turn either on yet. Plug the FM-Synthesizer Unit into the cartridge slot, and connect the lead from the music keyboard to the side of the Unit. That's all there is to it – the keyboard has no separate power supply. Turn on the TV set and the HX-10, and you are ready to play.

The MSX-MUSIC title screen shows the keyboard, computer, TV and a set of percussion instruments. You can make these work! Play some notes and you will see keys move on the screen. Now tap the Multi-Sensor – the grey panel on the music keyboard. You will see some action among the percussion instruments. The Multi-Sensor acts as a drum set – though as you will see later, it can do much more.

You will also notice on the screen a flashing red arrow. Use the cursor keys to move this to SONG 1, then press the space bar. Sit back and enjoy the sample music. Try SONGS 2 and 3.

As you've just discovered, you can enjoy the Music System when the TV is showing the title screen. But to make music yourself, you need to go to the EDIT screen. Move the arrow to EDIT and press the space bar to take you there.
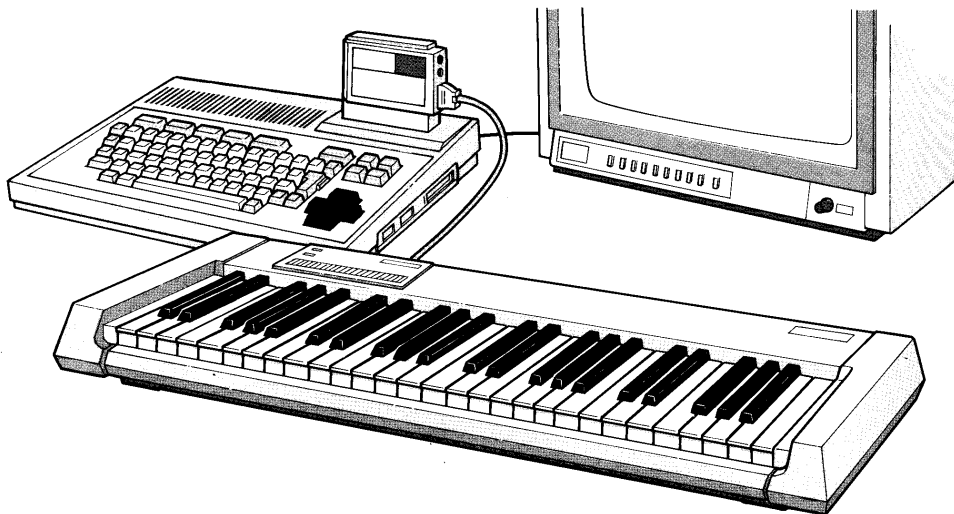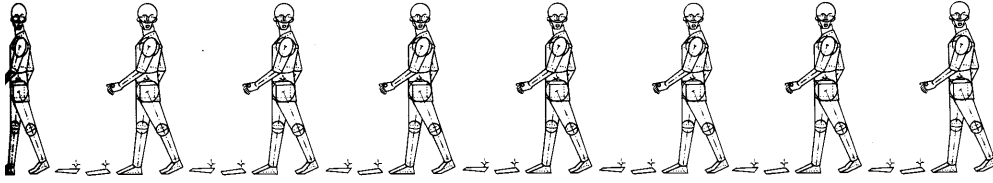
The Edit Screen

Look first at the box on the right-hand side labelled PLAY-MODE. This tells you the status of the keyboard and of the Multi-Sensor, both of which can be used in different ways.

Play a range of notes and listen to their tones, then use the cursor control keys to move the red arrow to KEY-MODE. Press the space bar to change the mode.

In the NORMAL key-mode, the keyboard is treated as a single unit. The nature of its sounds are controlled in the screen box marked POLY(phonic).

In the SPLIT key-mode, the BASS controls come into play, as the lower and upper parts of the keyboard can be tuned to sound like different instruments.

The third key-mode – ENSEMble – is more complex. This produces chords when bass keys are played, but will only work when the auto-rhythm is turned on.

SEN-MODE tells you about the Multi-Sensor. It should say PERCUS(sion) now, but if it doesn't, change it by moving the red arrow to it and pressing the space bar. You will see a bar across the bottom of the screen coloured to match the bar above the Multi-Sensor. The letters on the bar stand for Bass Drum, Side Drum, TOMtom, CYMbal and High-Hat. Tap the appropriate colour on the Multi-Sensor for the instrument you want.

The Multi-Sensor has six modes, some more complex than others (see pp. 58 and 61). Change SEN-MODE to read VOICE, and look again at the coloured bar. It now shows the codes for five different instruments. Play a few notes on the keyboard, then tap the Multi-Sensor. Play again, and notice the change in the sound. The VOICE sen-mode is a convenient way of changing instruments quickly.

The best way to find out about the Edit Screen is to set up the Music System and play some music.
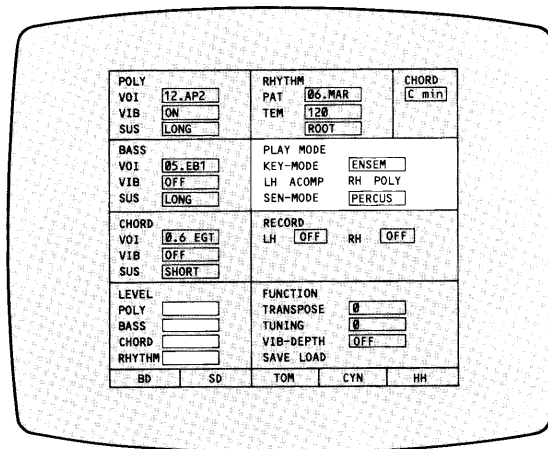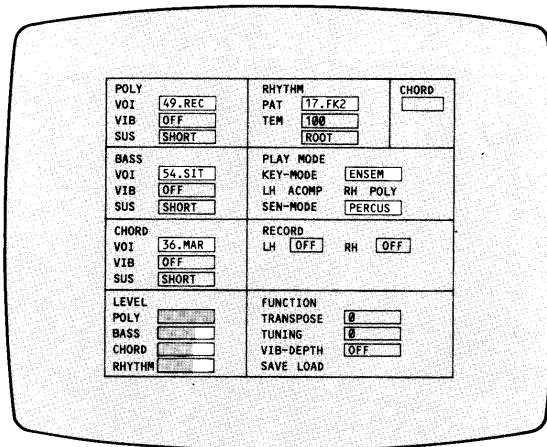
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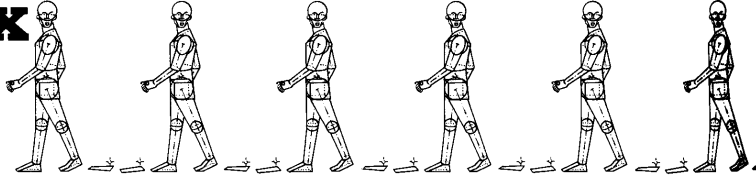
The Snake Charmer

Playing this piece shows how easy it is to create full-bodied music with the system. Set KEY-MODE to ENSEMble. You now have a 'backing group' ready to accompany you! Move the cursor across to the top left, to set VOIce in the POLY box. This controls the keyboard from F to the top. VOIce should be set to 49.REC(order). Press the space bar to move one voice at a time forward through the range, or hold down SHIFT and press the space bar to go forward in fives. BS (Back Space), and SHIFT can be used to step or leap back through the range.
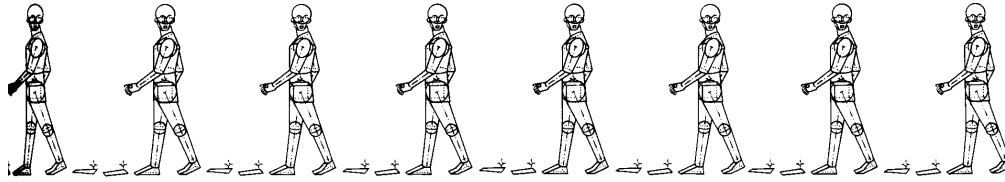
The other two parts of the POLY box can be left as they are for now. Move the red arrow down to the BASS VOIce control. Change this to 54.SIT(ar). Carry on down to the CHORD VOIce and select VOIce 36. MAR(imba). This combination should give an oriental air to the music.

While you are on the left of the screen, move into the LEVEL box. This controls the volume of the different parts of the system. The width of the yellow bar shows the level of each part. Take the red arrow to BASS, CHORD and RHYTHM in turn, and lower the volume a little by holding SHIFT and pressing BS once. This will stop the backing group from drowning your music.

There is one last section to set before you play. Move up to the RHYTHM controls – use SHIFT with the cursor for faster movement. PAT is the pattern of the rhythm. 17.FK2 will give a FunKy swing to your music though 06.MAR(ch) may be easier to play along with as the beat is much simpler. TEM sets the TEMpo, or speed. Somewhere around 100 should sound right.

POLY		RHYTHM		CHORD
VOI	49.REC	PAT	17.FK2	
VIB	OFF	TEM	100	
SUS	SHORT		ROOT	

BASS		PLAY MODE		
VOI	54.SIT	KEY-MODE	ENSEM	
VIB	OFF	LH ACOMP	RH POLY	
SUS	SHORT	SEN-MODE	PERCUS	

CHORD		RECORD		
VOI	36.MAR	LH OFF	RH OFF	
VIB	OFF			
SUS	SHORT			

| LEVEL		FUNCTION		
POLY		TRANSPOSE	0	
BASS		TUNING	0	
CHORD		VIB-DEPTH	OFF	
RHYTHM		SAVE LOAD		

You are ready to play. Press SELECT to start the auto-rhythm off. Now play D and F together in the Bass part of the keyboard. This will set the ensemble playing a D minor chord in a swinging rhythm. You do not need to hold the chord down. It will continue to sound until you play a different Bass key, and you want it to run throughout this piece.

Play the tune on the upper half of the keyboard, keeping in time with the beat. If it is too fast, move to TEMpo and change the speed while the rhythm is still playing. Voice controls and volume levels can also be altered while the auto-rhythm is on. When you want to shut down your backing group, press STOP.

Try some different voices with this piece. Many of the wind instruments sound very good here. 29.PIC(calo), 30.FL(ute), 31.CL(arinet) and 45.SH (amisen) are well worth trying. The voices are listed in Chapter 7 of the *Owner's Manual*.

The Snake Charmer
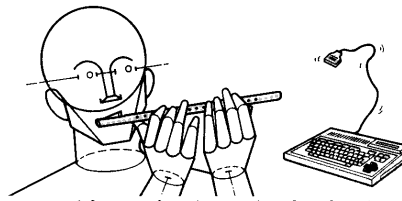
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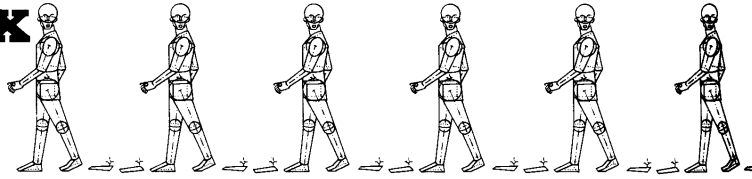
Spanish Waltz   *Di Chiara*

Here is another piece to play in
ENSEMble mode, though in this one your
left hand is going to be a little busier, as
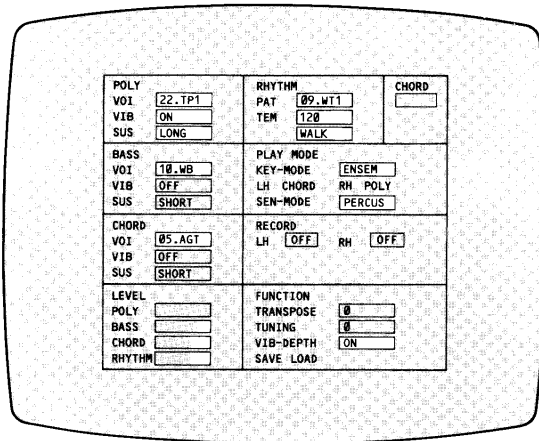the accompanying chords change.

Start by setting up the RHYTHM box.
9.WT1 gives the traditional waltz rhythm,
or use 10.WT2 for a more swinging beat.
A TEMpo of 120 will be needed, but start
at a lower speed while you are learning
the notes. The last part of the RHYTHM
box – BASS – should be set to WALK.
This produces a 'Walking Bass'. In a C
chord, the Bass note alternates between
C and E. If a ROOT setting were used,
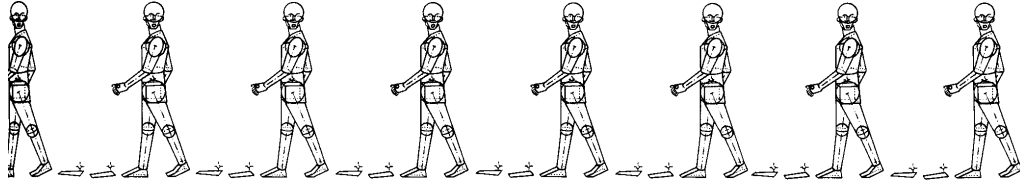the Bass note would be a steady C.

As this is a Spanish piece, the
accompanying instruments used here are
10.WB (Wooden Bass) for the BASS
VOIce, and 5.AGT (Acoustic GuiTar) for
the CHORD VOIce. The POLY VOIce

could be 22 TP1 (TrumPet 1), though for
a rather different effect, 17 EO1 (an
Electric Organ) or even 40 TBL (TuBuLar
bells) can be used.

Whatever instrument is chosen for the
POLY VOIce, make sure that it produces
long-lasting notes by setting SUS(tension)
to LONG. Now the notes will be
SUStained, and die away after release,
rather than stopping abruptly as you take
your fingers off the keys. Set VIB(rato) to
ON. When VIB is OFF, each note has a
constant pitch. When it is ON, there is a
steady wavering of pitch, giving the notes
a fuller sound and helping to make the
lead instrument stand out. This effect can
be changed by the VIB-DEPTH setting in
the FUNCTION box. For the most
pronounced Vibrato, set this to ON.

Press SELECT to start the rhythm, and
you are ready to play.

POLY		RHYTHM		CHORD
VOI	22.TP1	PAT	09.WT1	
VIB	ON	TEM	120	
SUS	LONG		WALK	

BASS		PLAY MODE	
VOI	10.WB	KEY-MODE	ENSEM
VIB	OFF	LH CHORD	RH POLY
SUS	SHORT	SEN-MODE	PERCUS

CHORD		RECORD			
VOI	05.AGT	LH	OFF	RH	OFF
VIB	OFF				
SUS	SHORT				

LEVEL		FUNCTION	
POLY		TRANSPOSE	0
BASS		TUNING	0
CHORD		VIB-DEPTH	ON
RHYTHM		SAVE LOAD	

Spanish Waltz

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APPENDIX
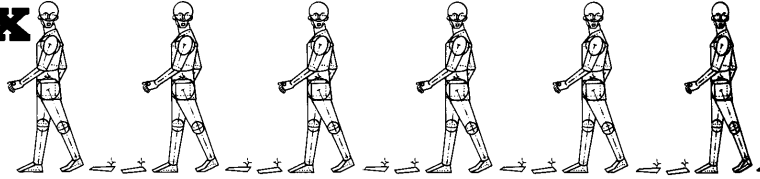
Air in D Minor — *Henry Purcell*

Here we focus on the RECORD box, which is used for storing music in the computer's memory, and for playing it back. This means you can play along with yourself!

Start in the PLAY-MODE box, and set KEY-MODE to NORMAL. Now move to the POLY box and select a VOIce. 31.CL(arinet) sounds good with this piece, especially if VIB is ON, and SUS is LONG. For a very antique sound, try 14.HPC (HarPsiChord), with VIB OFF and SUS set at LONG.

In the RHYTHM box, select PAT 20.NRY (No RhYthm). When you record the accompaniment, you will not want any percussion backing.
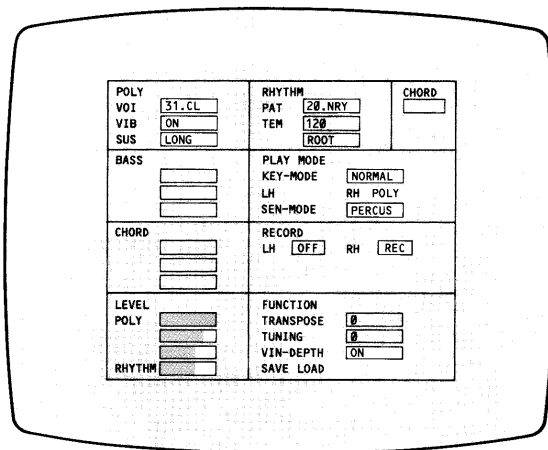
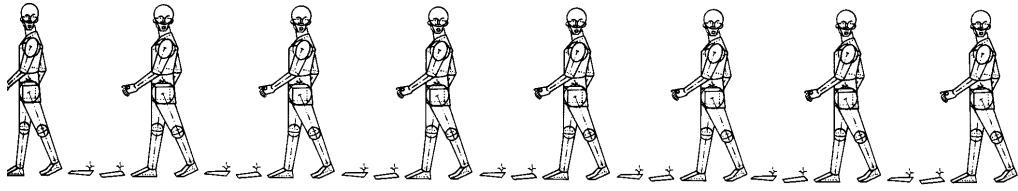Practise the bottom line of the Air until you can play it through. Now move to RH (Right Hand) in the RECORD box and select REC. (As you are in NORMAL Key-Mode, it's as if the whole keyboard is under Right Hand control.) When you are ready, press SELECT and play the bottom line. If you make a mistake, press STOP and start again.

At the end of the piece, press STOP, then change RH to PLaY. Press SELECT to listen to your recording.
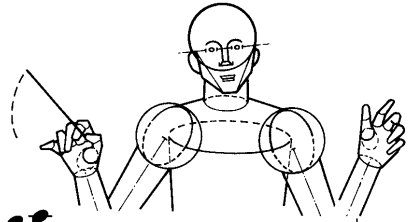
Practise the top line, then replay the bottom line and play along with it.

Notice the sharps (#) and flats (♭) in this piece. A sharp is played on the black key to the right of the natural of that name. Flats are played to the left. Here, all Bs are flat, unless the note is followed by a natural sign (♮).

POLY		RHYTHM		CHORD
VOI	31.CL	PAT	20.NRY	
VIB	ON	TEM	120	
SUS	LONG		ROOT	

BASS	PLAY MODE	
	KEY-MODE	NORMAL
	LH	RH POLY
	SEN-MODE	PERCUS

CHORD	RECORD			
	LH	OFF	RH	REC

LEVEL	FUNCTION	
POLY	TRANSPOSE	0
	TUNING	0
	VIN-DEPTH	ON
RHYTHM	SAVE LOAD	

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Air in D Minor
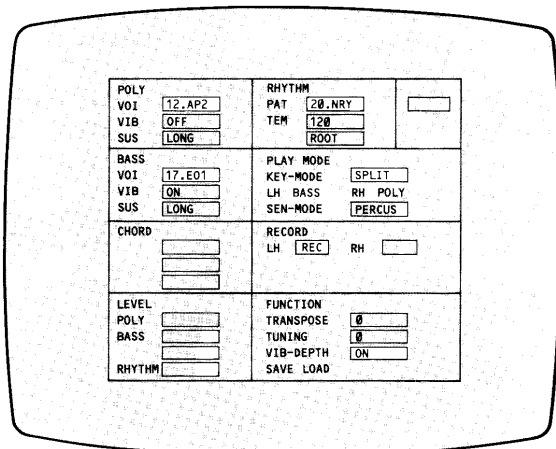

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APPENDIX
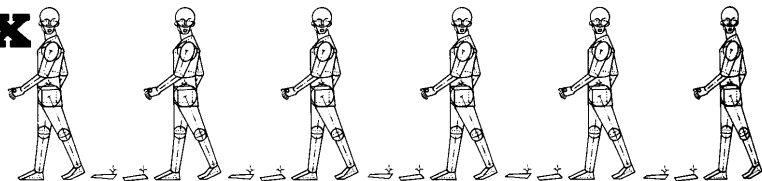
All Through The Night

This time, set the Key-Mode to SPLIT, so that different voices can sound on the two parts of the keyboard. The Bass part begins at F#, and one note at a time can be played here. 17.EO1 (Electric Organ) is suitable for this piece.

Now on the upper (POLYphonic) part of the keyboard, up to five notes at a time may be played. Try 12.AP2 (Acoustic Piano). It sounds the same as AP1, but all notes are one octave higher, so that C' in AP1 is the same as C in AP2.

If you can't play both hands at once, then record either the right or left hand line and replay it while you play the other line. Before recording, set the RHYTHM PAT to 20.NRY, then move to LH or RH in the RECORD box. Set to REC and press SELECT to start.

Notice all Fs are sharp, and watch out for some G#s in the bottom line.

```
POLY              RHYTHM
 VOI  [12.AP2]     PAT  [20.NRY]      [    ]
 VIB  [OFF]        TEM  [120]
 SUS  [LONG]            [ROOT]

BASS              PLAY MODE
 VOI  [17.EO1]     KEY-MODE   [SPLIT]
 VIB  [ON]         LH  BASS    RH  POLY
 SUS  [LONG]       SEN-MODE   [PERCUS]

CHORD             RECORD
     [    ]        LH  [REC]   RH  [    ]
     [    ]
     [    ]

LEVEL             FUNCTION
 POLY [     ]      TRANSPOSE  [0   ]
 BASS [     ]      TUNING     [0   ]
                   VIB-DEPTH  [ON  ]
 RHYTHM[     ]     SAVE  LOAD
```


The Multi-Sensor 1

In both NORMAL and SPLIT Key-Modes, these Multi-Sensor modes can be used. SEN-MODE will tell you which mode you are in, and the coloured bar at the bottom of the screen shows what the different parts of the Sensor do.

1. PERCUSSION. Tap the Sensor under the different colours to play the Bass Drum, Side Drum, TOMtom, CYMbal and High Hat.

2. RHYPAT – RHYthm PATtern. This gives you a quick way of changing between five patterns. (See the *Owner's Manual* for details on setting up your own selection of rhythm patterns.)

3. RHYEDT – RHYthm EDiT. This allows you to create your own rhythms to replace the preset tones. (See the *Owner's Manual*.)

4. VOICE. This is similar to RHYPAT, except that now the Multi-Sensor can be used to change the voice of the POLY part of the keyboard. You can set the selection of voices yourself. (See the *Owner's Manual*.)
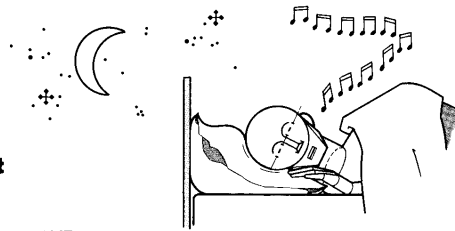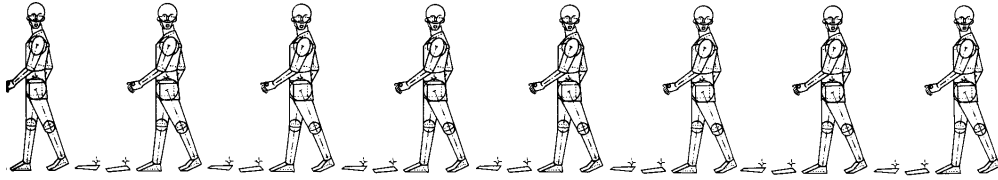
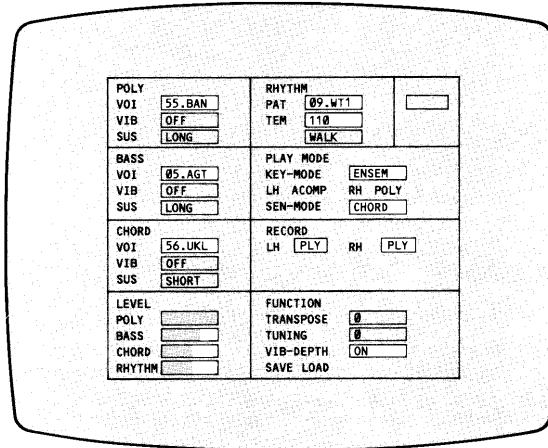**All Through The Night**

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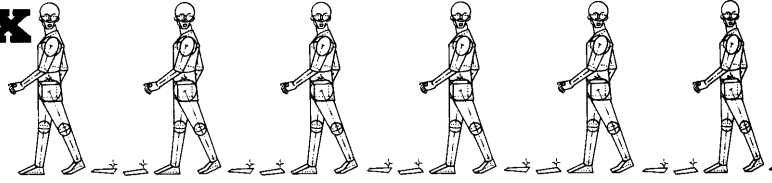
Clementine

This old American song needs old American instruments. It should be played in ENSEMble Key-Mode, so all three VOIces need setting. 55.Banjo (POLY), 5.Acoustic Guitar (BASS) and 56. Ukelele (CHORD) sound good, or try Banjos throughout for a really twangy sound. You might also like to try 48.Harmonica for the POLY VOIce.
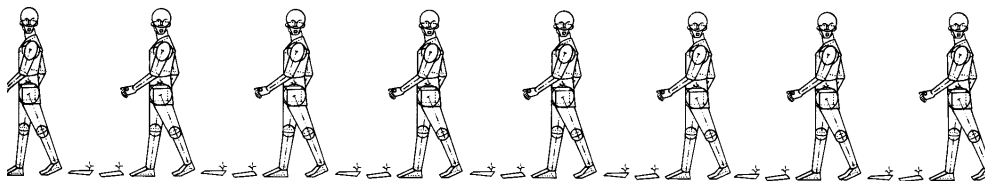
When you are using Banjo for the melody line, to make a note last, you must take your finger off quickly after pressing a key. If you hold it down, you will cut the note short. This is the opposite of what happens when a wind or string instrument is played. Most of the percussion instruments (39 to 43) should be played in the same way – release to let the note ring out.

Clementine is played in 3/4 time, so select one of the Waltz time rhythms (9 or 10). A TEMpo of 110–120 will be needed at performance, but take it slower at first.

Set SEN-MODE to PERCUS for a full automatic backing while you play, or select ARPEG or CHORD and record the lines separately. Music played on the Multi-Sensor is not recorded, but it can be added at playback to good effect. Start by recording the left hand, changing the Bass keys at the right places. Set the LH to PLaYback, and the RH to REC, and record the top line. Now, with both set to PLaYback, you can add strummed chords via the Multi-Sensor.

POLY		RHYTHM	
VOI	55.BAN	PAT	09.WT1
VIB	OFF	TEM	110
SUS	LONG		WALK

BASS		PLAY MODE	
VOI	05.AGT	KEY-MODE	ENSEM
VIB	OFF	LH ACOMP	RH POLY
SUS	LONG	SEN-MODE	CHORD

CHORD		RECORD	
VOI	56.UKL	LH PLY	RH PLY
VIB	OFF		
SUS	SHORT		

| LEVEL		FUNCTION	
POLY		TRANSPOSE	0
BASS		TUNING	0
CHORD		VIB-DEPTH	ON
RHYTHM		SAVE LOAD	

The Multi-Sensor 2

In ENSEMble Key-Mode, the Multi-Sensor has two additional functions.

5. ARPEG – ARPEGgio. Slide your finger across the sensor to hear a 'broken' chord, i.e. a chord that is played one note at a time. The chord is selected by pressing a Bass key. (N.B. the Bass keys will not produce any sound by themselves in this mode). The arpeggios are particularly effective with BASS VOIce at 53. HRP, producing an authentically harp-like effect.

6. CHORD. This works in the same way as ARPEG, though here the three or four notes that make a chord are played simultaneously. Chords are selected by pressing bass keys, and the choice of VOIce is set in the CHORD box.

In both of these modes, the auto-rhythm function will play percussion and Bass, but not chords, as these are controlled by you.

The chord chart at the back of this book shows you which keys to press to select chords in both of these modes.

Clementine

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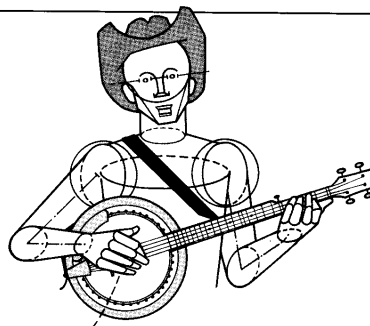
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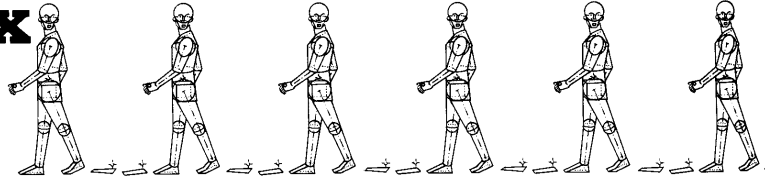
Musical Terms

By tradition, instructions on how to play a piece of music are usually written in Italian. Below are the ones you are most likely to meet.

At the start of a piece, you will usually find a tempo instruction.

Tempo means the speed at which a piece is to be played. It may be given as a word, or as a figure, in which case it refers to the number of beats per minute.

Allegro – fast.
Allegretto – not quite as fast as *allegro*.
Allegro vivace – fast and lively.
Moderato – moderate speed.
Andante – at a walking pace.
Adagio – slow.
Largo – very slow.
Lento – also slow.

Poco linked to any of these terms means a little, and *Molto* means much, or very.

You may also find other terms on the top line, or within the body of a piece. These will give an indication of how you should play.

Staccato – each note should be quite separate, and cut off sharply.
Cantabile – smoothly, as if singing.
Subito – suddenly.
Ritardando (*rit.*) and *rallentando* (*rall.*) both mean gradually slowing down.
Accelerando – gradually getting faster.
A tempo will follow a speed change, and means go back to the original tempo.

Keyboard/volume levels can be changed while playing, if you have a free hand. There will be times when this is not possible, and then you should set them at a suitable level at the start.

Piano (*p*) means quietly.
Forte (*f*) means loudly.
Mezzo before either of them (*mp* or *mf*) means fairly quiet, or fairly loud, while *pianissimo* (*pp*) and *fortissimo* (*ff*) mean very soft and very loud respectively.

Crescendo (*cresc.*) during a piece means gradually getting louder, and *dimenduendo* (*dim.*) tells you to let the volume die down.

Musical Symbols

THE STAVES

A staff (or stave) is the set of lines and spaces on which notes are written. There are always five lines in a staff, with short (ledger) lines added above or below as needed for those notes that are beyond the five-line range.

is the treble clef, and marks the staff used for the higher notes - usually the melody line. The notes on the lines are E,G,B,D,F, reading from the bottom up. The notes in the spaces beween the lines are F, A, C, E. Middle C sits on the leger line below the staff.

is the bass clef, and marks the lower staff. If Middle C is wanted here, it must be written on a leger line above the staff. The notes on the lines are therefore G,B,D,F,A reading from the bottom again. The notes in the spaces are A, C, E, G.

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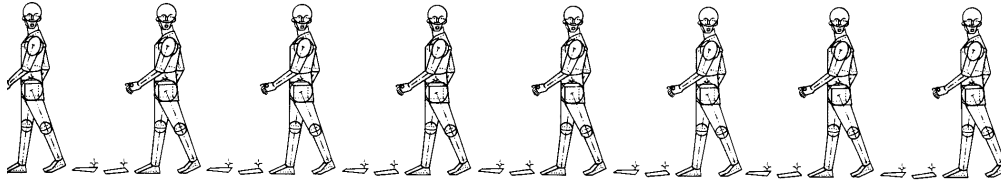
TIME VALUES

These are always given at the start of the first line of a piece. They show the number of beats per bar.

4/4 time (sometimes shown as C for Common time) has four beats to the bar. The emphasis is on the first beat. Count 'ONE-two-three-four, ONE-two-three-four'. Pattern 14.Tango, and 6.March are examples of 4/4 time.

3/4 time has three beats to the bar. Count 'ONE-two-three, ONE-two-three'. Pattern 9, Waltz 1, is a clear 3/4 rhythm.

2/4 time is used for lively music. Count 'ONE-two, ONE-two, ONE-two'.

6/8 time has six half beats to the bar, with most emphasis on the first half beat, and some on the fourth. Count 'ONE-two-three-FOUR-five-six'. The Slow Ballad (11.SLB) has this rhythm.

NOTE VALUES

The *crotchet* ♩ is the basic note, with a value of one beat. The *tempo* is usually set in terms of crotchets (beats) per minute.

A *minim* ♩ has a value of two beats.

A *semi-breve* 𝅝 has a value of four beats.

You may occasionally meet a *breve* ‖O‖ in very old music. This is eight beats long.

A *quaver* ♪ is a half-beat. All shorter notes are expressed in terms of quavers.

A *semi-quaver* ♬ is a quarter-beat.

A *demi-semi-quaver* ♬ is one-eighth of a beat.

A dot after a note makes it worth half as much again. ♩. = ♩ + ♪

OTHER SYMBOLS

<   getting louder.
>   getting softer.
♩‿♩   Run each note smoothly into the next.

:‖   Repeat from the place marked ‖: or from the beginning.
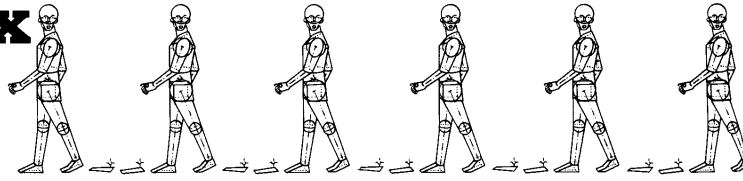
KEY SIGNATURES

Sharps or flats written at the start of each stave show what key a piece is played in.

If there are no sharps or flats, then the the key is C.

A single sharp on the F line means that the key is G or Em. All Fs are played as F#.

This flat tells us that the key is F, or D minor. All Bs are played as B♭.

APPENDIX

Chord finder

To set up a major chord (e.g. C,D, or E) simply press the bass key of that name. Where there are two bass keys with the same name, either will do. The other chords will require at least one extra key to be pressed, as well as the name key. e.g. for C7, press C and Bb. The system plays C-E-G-Bb.

Press E by itself, and you will hear E-G#-B, the E major chord.

Minor 5th chords can be produced by combining the extra keys needed for Minor 7th and Diminished chords.

e.g. Cm7 = C + Eb + Bb
    C dim = C Eb + Gb
    Cm5 = C + Eb + Bb + Gb

	MAJOR	MINOR	7TH	MINOR 7TH	DIM	AUG	SUS
Written	(e.g. C)	(e.g. Cm)	(e.g. C7)	(e.g. Cm7)	(e.g. C dim)	(e.g. C aug)	(e.g. C sus)
	C	Eb	Bb	Eb Bb	Eb Gb	E G#	F G Bb
	D	F	C	F C	F Ab	F# A#	G A C
	E	G	D	G D	G Bb	G# C	A B D
	F	Ab	Eb	Ab Eb	Ab B	A C#	Bb C Db
	G	Bb	F	Bb F	Bb Db	B D#	C D F
	A	C	G	C G	C Eb	C# F	D E G
	B	D	A	D A	D F	D# G	E F# A

C D E F G A B C' D' E' F' G' A' B' C''

C D E F G A B C D E F G A B

C#D# F# G# A#
D♭ E♭ G♭ A♭ B♭

|←——BASS——→|←————POLYPHONIC————→|

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Key Identifiers

Affix these to the keys, as shown on page 64.

C̳ D̳ E̳ F̲ G̳ A̲

B̳ C̲ D̲ E̲ F̲ G̲

A̲ B̲ C D E F

G A B C′ D′ E′

F′ G′ A′ B′ C″ **TOSHIBA**