Hendrix

The Chords Generator

A program written by guitarists for guitarists

Hendrix Overview

This program, developed by guitarists for other guitarists, allows everybody to make a series of operations that normal guitar handbooks can not allow: for instance the possibility to represent **all theoretical chords positions**.

It contains powerful elaboration and search tools that allow to generate all the positions referred to the stated performing parameters.

Hendrix was conceived as a very interactive tool, that is able to adapt, to all objects present in the screen, all changes operated.

Considering that the program will be executed together with a guitar, we have tried to find the easiest and faster way of getting results.

All funcionts can be carried out by the mouse, the menu and the keyboard.

Obviously, in the age of multimedias, this kind of program gives the opportunity to recreate the sound of everything represented in graphical and musical ways.

Most remarkable available functions in Hendrix:

- Choose the chord type from a list of standard chords.
- Set the chord type by working directly on the musical intervals.
- Set the fret band to develop all chords positions.
- Pratically modify positions on the chord fretboard window.
- Attributes possible chords naming to positions entered by user.
- Point out most suitable fingering position.
- Choose from the summary page (map) the chord position to work with.
- Develop chords position on a variable number of strings, with a minimum of three ones.
- Set the guitar tuning, by choosing among a lot of "open" tunings or to set a custom tuning.
- Show chords position and scales on piano keyboard.
- Read chords positions from chords and scales in musical notes.
- Set MIDI parameters for sound performance.
- Listen to, by the MIDI card, the chord position and the selected scale.
- Play single notes that form chords and scales on the guitar, on the stave and on the piano.
- Define the tonal context by choosing a scale among the ones including all set chord.

- Set different filters for searching a scale among the ones containing the set chord.
- Save chord sequences with all relevant contexts (tuning, number of strings, chord type, fret number, position number, ...).
- Save chords sequence in Midi File format.
- Change chord and scale performance parameters by choosing among a great number   of musical rhythms.
- Use the mouse to open single chords saved in the sequences.
- Listen to chord sequences in different ways: arpeggio, rhythmic accompaniment....

Thanks for trying Hendrix, we hope you will find it useful !!

The authors   Paolo Piga & Paolo Mereu

Menu

File
Load   Open a chord sequence
Save   Save a chord sequence
Exit   Quit the program

Tuning
Standard   Restore standard tuning
Custom Tunings   Setting program defined and user tunings

Scale
Scales List   Choose scales among the ones containing Chord
Play Guitar Scale   Setting scale performing paremeters showed on the guitar
Play Score Scale   Setting scale performing paremeters showed on the five-line stave

Chord
Standard chord   Choose the chord from a list of stated chords
Positions map   Shows all chords positions on the chosen button
Play chord   Setting chord performing parameters
Search   Setting search parameters of a chord position
Interpretations   Choose a chord interpretation name
The Circle of fifths Access to modify the chord in the circle of the fifth

Photographs
Play Photographs   Setting chord sequences performing parameters
Memorize Chord Position Save the current chord-set in a frame
Erase Empty Frames Zipping the film by the elimination of empty frames
Erase Photo   Procedure description
Erase all...   Remove film content

Options
12 Strings Sound   Activate 12 strings sound option
MIDI Setting   Set MIDI parameters
Default   Restore program at the default conditions
Undo   Delete the last change

Help
Summary   HELP references
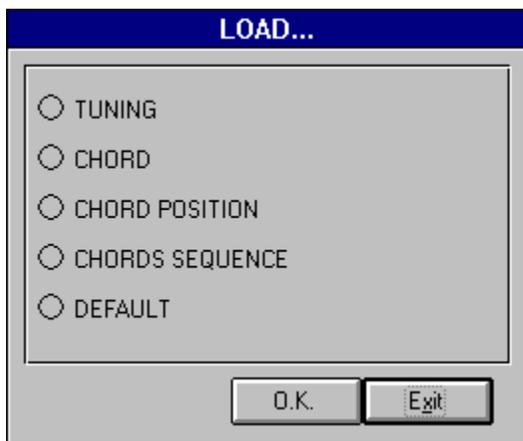**Help Labels**   Enable help yellow labels
About Hendrix   Hendrix Informations

Menu File

Load
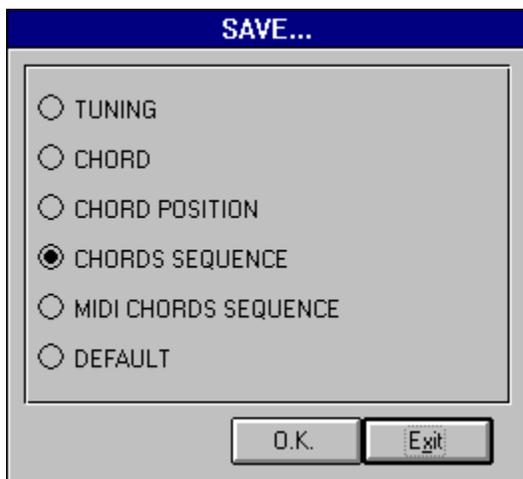
When this voice is selected you open a dialog box that allows you to choose the subject you want to load on memory.

Save

When this voice is selected, you open a dialog box that allows you to choose the subject you want to save on disk.

Menu File

Exit

When you select this voice you quit the program **HENDRIX.**

Menu Tuning

Standard

When you select this voice from the menu you can restore the guitar standard tuning.

If the tuning is the standard one, the voice of the menu is disabled.

See: <u>Tuning</u>

Custom Tunings

When you select this voice, you open a dialog box that allows you to choose one of the program defined tunings or to set one of your owns.

See: <u>Tuning</u>

Menu Scale

Scales List

When you select this voice, you open a dialog box that allows you to choose one of the scales, compatible with the current chord.

See: <u>Scale</u>

Menu Scale

Play Guitar Scale

When you select this voice you open a dialog box that allows you to set all parameters related to the scale music performance shown on the guitar keyboard.

See: <u>Play Guitar Scale</u>

Menu Scale

Play Score Scale

When you select this voice, you open a dialog box that allows you to set all parameters related to the scale music performance, shown on stave.

See: <u>Play Score Scale</u>

Menu Chord

Standard Chords

When you select this voice you open a dialog box that allows you to choose among different types of chords.

See: <u>Chord Setting</u>

Menu Chord

Positions Map

When you select this voice, you open a window that shows all current chord positions, availables on the current fretboard section.

When you select a position, you'll be able to process it by clicking the mouse button.

See: <u>Button Map</u>

Menu Chord

Play Chord

When you select this voice, you open a dialog box that allows you to set all parameters related to the current chord music performance.

See:Play Chord Position

Search Chord

When you select this voice you open a dialog box that allows you to set all search parameters of a current chord position.

See: <u>Search Chord Position</u>

Menu Chord
Chord Name Interpretation

When you select this voice you open a dialog box that allows you to choose among one of the possible current chord   interpretation name, taking each time as a chord <u>root</u> note all notes belonging to it.

See:<u>Chord Name Interpretation</u>

Menu Chord
The Circle Of The Fifths

When you select this voice, you open a windows   that allows you to set graphically the chord represented in the circle of the fifth.
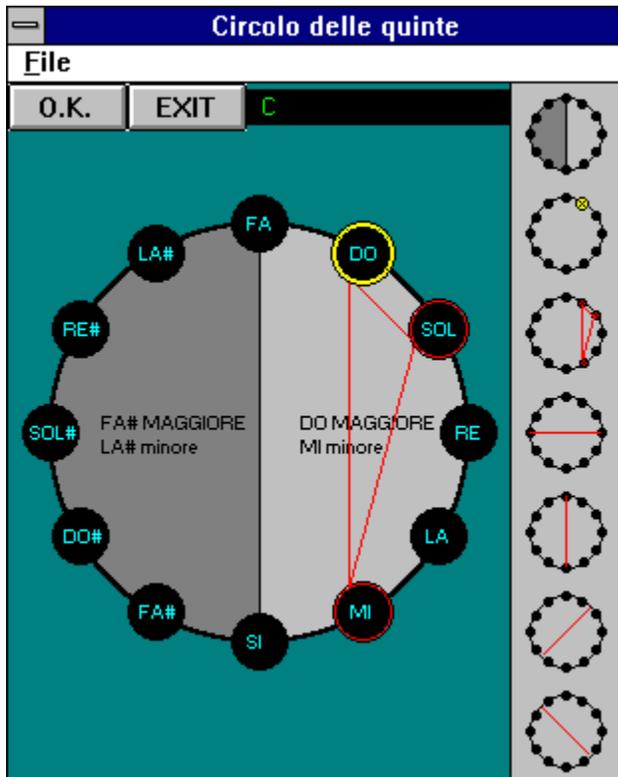
The chord is represented by a delimited side of lines that links notes belonging to it. The chord is translated with a signature tune in the display.

When you click the left mouse button on a note, the note itself is enclosed in chord composition. If the notes already exists in the chord it is eliminated.
A note is played by clicking the right muose button.

All tools available in the extreme right of the window allow to change the chord and its context.
You can use the tools by clicking the left mouse button to decrease and the right mouse button to increase their parameters

The first tool at the top allows you to change the reference tonal context. The tonality is put in evidence in the circle of the fifht both with the name of major scale and its related minor one and with the diferent colour that graphically separates the circle of the fifth into two opposite semicircles. The change is shown with a rotary movement that causes an ascending and a descending gap.

The second tool allows you to change the reference root chord note. It makes "rotate" it among all notes included in the chord
The third tool allows you to lift   the chord. It makes "rotate" it of about an upper or lower fifht
The remaining of the tools allow a chord transposition depending on a mirror-like movement

suggested by the dividing line present in the single tools icon.

When you click the left mouse button on each of any area of the window, the chord, represented in the circle of the fifth, is played.

The O.K and EXIT buttons allow you to confirm and cancel all modifies made in the chord.

Menu Photographs

Play Photographs

When you select this voice, you open a dialog box that allows you to set all parameters related to the saved chord sequence music performance.

The chord sequence is represented by a photographic film shown on the bottom of the window.

If the film does not contain any chord, this menu voice is disabled.

See: <u>Play Photographs</u>

Menu Photographs
Memorize Chord Position

When you select this voice from the menu, you save the chord current position in a memory area that may contain a 25 chords sequence.

The buffer is represented by a photographic film; if these frames are exposed, they will contain the miniature chord position.

Besides the chord position all parameters necessary to the performance are saved (tuning, fret number, strings number).

The film is automatically set on the next free frame.

The chord sequence, previously saved in the buffer, can be saved on disk by choosing the option **Save** from the menu **File.**

A chord sequence previously saved can be loaded in the disk by choosing the option **Load** in the menu File.

See: Photographs

Erase Empty Frames

When you select this voice from the menu, you have the possibility to remove all empty frames resulting from the elimination of sequence chords.
In this way you will obtain a zipped film.

If the frame does not contain any chord this voice of the menu will be disabled.

See:Photographs

Menu Photographs

Erase Photo

When you select this voice from the menu you have the procedure description to remove a frame.

To remove a frame you have to put the mouse arrow on the frame you want to cancel and to click the right button.

If the film does not contain any chord, this voice of the menu will be disabled.

See: <u>Photographs</u>

Menu Photographs

Erase All

When you select this voice from the menu, you erase all film content.

This procedure is preceded by a message asking to confirm erase operation.

If the film does not contain any chords, this voice of the menu will be disabled.

See: <u>Photographs</u>

12 Strings Sound

When you select this voice from the menu, you open a dialog box that allows you to open the 12 strings sound, by setting the additional strings tuning.

Menu Options

MIDI Setting

When you select this voice from the menu, you open a dialog box that allows you to set the parameters of the <u>MIDI</u> device installed.

See: <u>MIDI</u>

Menu Options

Default

When you select this voice from the menu, you can set the program with the default parameters (tuning, number of strings, chord type, fret, ...).

Menu Options

Undo

When you select this voice from the menu, you return to the program condition that

precedes the last confirm done by clicking the button

This voice of the menu, is available only if you have set the program in a way that allows the

button to blink. , otherwise the voice is disabled.

Menu Help

Summary

Shows help for using Hendrix program **... the one you are now playing.**

Menu Help

Help Labels

Shows a short definition of commands present on screen, simply putting on the mouse cursor and waiting a little bit.

When this function is active the voice of   the menu is preceded by a tick.

About Hendrix

Shows all informations about Hendrix.

Keyboard

Access to the program functions through the computer keyboard

Key	Menu Voice/Button	Action
Alt+F	**File**	Open menu File
L	**Load...**	Load file...
S	**Save...**	Save file...
E	**Exit ...**	Exit from Hendrix
Alt+T	**Tuning**	Open menu Tuning
S	**Standard**	Restore standard tuning
C	**Custom ...**	Access to the dialog box Tuning
Alt+S	**Scale**	Open Menu Scale
S	**Scales List ...**	Access to the dialog box Scale
P	**Play Guitar Scale ...**	Access to the dialog box Play guitar scale
L	**Play Score Scale ...**	Access to the dialog box Play Score scale
Alt+C	**Chord**	Open Menu Chord
C	**Standard Chord ...**	Access to the dialog box CHORD
M	**Positions Map**	Open summary Window of the Chord Positions
P	**Play Chord ...**	Access to the dialog box Play Chord
S	**Search ...**	Access to the dialog box Search
I	**Interpretations...**	Access to the dialog box Chord Performances
F	**The Circle Of Fifths ...**	Open the circle of the fifth window
Alt+P	**Photos**	Open Menu Photos
P	**Play Photo...**	Access to the dialog box Play Photos
M	**Memorize Chord Position**	Save Chord-set and current position
F	**Erase Empty Frames**	Zipping film
E	**Erase Photo**	Procedure description
A	**Erase All ...**	Erase film contents
Alt+O	**Options**	Menu Options
S	**12 Strings Sound ...**	Access to the dialog box 12 Chord sound
M	**MIDI Setting ...**	Access to the dialog box MIDI
D	**Default**	Restore Program to the default conditions
U	**Undo**	Cancel last Change
Alt+H	**Help**	Menu Help
S	**Summary**	Consulting HELP
L	**Help Labels**	Shows a short help about program objects
H	**About Hendrix ...**	About Hendrix informations
c	CHORD	Access to the dialog box CHORD
t	TUNING	Access to the dialog box TUNING
d	MIDI	Access to the dialog box MIDI

Key	Button	Description
l	PLAY	Musical performance of the guitar scale
Shift+l	PLAY	Access to the dialog box PLAY GUITAR SCALE
m	MAP	Open MAP window
p	PLAY	Musical performance of the guitar chord
Shift+p	PLAY	Access to the dialog box PLAY GUITAR CHORD
r	SEARCH	Carring out chord search
Shift+r	SEARCH	Access to the dialog box SEARCH
s	SCALA C Maggiore	Access to the dialog box SCALE
y	PLAY	Musical performance of the chord sequence
Shift+y	PLAY	Access to the dialog box Play Chord Sequences
Arrow <-	◀ ▶	Previous position
Arrow ->	◀ ▶	Next position
Up Arrow	▲ ▼	Previous Scale
Down Arrow	▲ ▼	Next Scale
-	FRET	Decrease fret
+	FRET	Increase fret

	1'	3'	5'	2'	9'	4/11	6/13
	C	M	5				

Key	Description
1	Change root
3	Change The Third
5	Change The Fifth Chord
7	Change The Seventh
9	Change The Ninth
4	Change The forth/eleventh
6	Change The Sixth/therteen

?   Access to the dialog box Chord Interpretation

Enter   Confirm Changes

Video

Tuning Display

| Standard | E | A | D | G | B | E |

Set Tuning Button

[TUNING]

Set Chord Button

[CHORD]

Chord Display

C

Search Chord Button

[SEARCH]

Map Button

[MAP]

Modify Chord Position Button

X Button

X Reset Button

[RESET X]

Fret Number Display

[1 FRET]

Play Chord Button

[PLAY]

Decrease/Increase Position number Button

[◀] [▶]

Chord Position Display

[1 POSITION]

Play Guitar Scale Button

PLAY

Display Scale Button

SCALA
C Maggiore

Decrease/Increase Scale Button

OK Button

O.K

(Sharp) and b (Flat) Buttons

#
b

Chord Intervals Buttons

1'	3'	5'	7'	9'	4/11	6/13
C	M	5				

Chord Name Interpretation Button

CHORD

Repeated Notes Button

♪♪

Scale Octave Display

2
OCTAVE

Scale Speed Display

5
SPEED

Ascending Scale Button

♪♪♪♪♪♪

Descending Scale Button

♪♪♪♪♪♪

Play Five-line stave Scale Button

PLAY

MIDI Button

CHORD

MIDI channel Display

1
CHANNEL

MIDI Program Change Display

Metronomo Button

Memorize Chord Position Button

Chord Photograph Window

Play Photograph Button

Guitar Scale Window
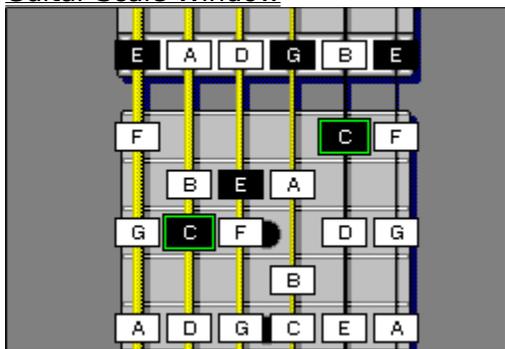
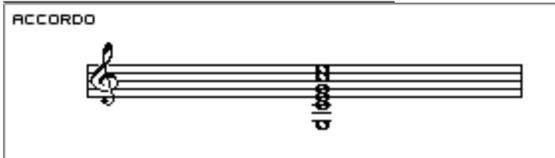## Five-line stave Scale Window

Piano Keyboard Window

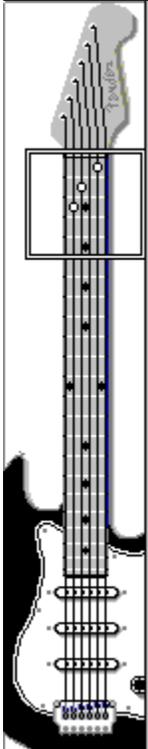## Guitar Chord Window
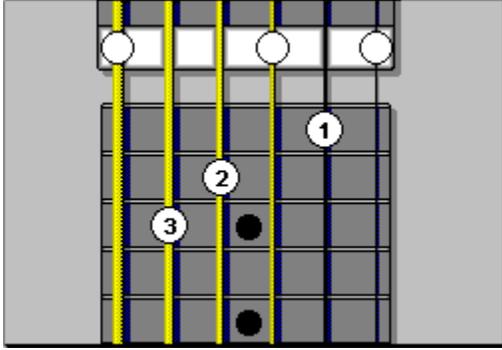
Five-line stave Chord Window

Piano Chord Window

Guitar Fret Window

Tuning Display

This display contains the current <u>tuning</u> name and all <u>notes</u> belonging to it

See: <u>Tuning</u>

Chord Display

It shows the current chord name.

First letter identify the chord root, possibly alterated by an accidental mark.

If the chord is major, the 3rd is not declared, whereas if the chord is minor the display of the basic chord is followed by the little letter **m** .

If the chord contains a perfect 5th interval, the 5th is not declared, whereas if the 5th is diminuished or augmented it is declared by the number 5 followed by a necessary alteration.

The declaration follows about other possible intervals present on the chord.

See: Setting Chord, Chord Position Modify

Chord Position Display

The number shown in the display, points the order of current position, inside the position sequencies developed on the chosen fret, for current <u>chord</u>.

You can look for the desired position number with the mouse.
You increase the position number by clicking   left button, you decrease it by clicking   the right button.

. This button blinks when the position number is modified.
Press the button to confirm the choise.

See: <u>Button Map</u>

MIDI Channel Display

It is possible to change the <u>MIDI</u> channel number shown in this diplay, by using the mouse

You decrease the <u>MIDI</u> channel number (1-16) by clicking the left mouse button.
You increase it by clicking the right button.

The choice has an immediate effect and does not need a confirm.

See: <u>MIDI</u>

MIDI Program Change Display

It is possible to change the program change code shown in this diplay, by using the mouse.

You decrease the Program change by clicking the left mouse button code (1-128).
You increase it by clicking the right button.

The choice has an immediate effect and does not need a confirm.

See: MIDI

Metronomo on/off

With this button you can set the metronomo.

See:<u>MIDI</u>

Scales List Button

When you press the button SCALE you get the dialog box that allows you to choose one of the <u>scales</u> compatible with the current chord

The display shows the selected scale names for current <u>chord</u>

If you use the mouse in this display, scales scroll on (right button) or back (left button)
When the search scale appears you can confirm your choice by the blinking button

See: <u>Scala</u>

Repeated Notes

With this button you can set the repeated notes function for the musical performances.

See: Scala Play Chitarra, Scala Play Spartito

Scale Speed Display

It is possible to change the current <u>scale</u> speed performance shown in this display, by using the mouse

You decrease the performance speed by clicking the left mouse button speed , you increase it by clicking the right button
. The choice has an immediate effect and does not need a confirm

See: <u>Play guitar scale</u>, <u>Play scale score</u>

Scale Octave Display

It is possible to change the current <u>octave</u> of the <u>scale</u>, shown in this diplay, both in the <u>musical notation</u> and in the musical performance,   by using the mouse.

You decrease the scale <u>octave</u> by clicking the left mouse button, you increase it by clicking the right button (1-128)
The choice has an immediate effect and does not need a confirm.

See: <u>Play scale score</u>

Fret Display

1'	3'	5'	2'	9'	4/11	6/13
C	M	5				

This display selects a fret where a <u>chord</u> is developed
The selected fret is shown in romanic numbers

You can get a choice with the mouse:
  Left button: previous fret
  Right button: next fret

1'	3'	5'	2'	9'	4/11	6/13
C	M	5				

This button blinks when the fret is modified
Click on this button to confirm fret choice

See: <u>Fret</u>

Chord Diagram Window

This window shows the selected <u>chord</u> positions

Numbers within circles indicate the suggested <u>fingering</u>, empty circles indicate open strings
If the position can not be fingered all circles will be empty

It is possible to play single notes belonging to the <u>chord</u> by clicking the mouse on the corresponding note.

See: <u>Setting Chord</u>, <u>Play Chord</u>, <u>Chord Position Modify</u>

Five-line Stave Chord Window
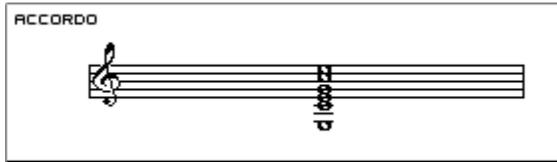
 This window shows the <u>chord</u> position in a <u>musical notation</u>.
Representation in musical notation is in operation of the current current selected <u>scale</u>

You get the corresponding sounds by clicking on single notes

See: <u>Setting Chord</u>, <u>Chord Name Interpretation</u>, <u>Chord Position Modify</u>

Piano Chord Window

Keys in a green colour on the piano keyboard represent the transposition of the <u>chord</u> position developed on the guitar finger board.

It is possible to play each piano keys using the mouse.

See: <u>Setting Chord</u>, <u>Chord Name Interpretation</u>, <u>Chord Position Modify</u>

Chord Photographs Window

Each frame represents a photographed position

It is possible to photograph 25 positions using this button .

Pointing the mouse cursor on a frame you get an immage of the position

When you press the right mouse button on a frame you get the tools that allow to select, to play or to cancel a position

When you press the left mouse button on a frame you select/play/cancel the chord for the chosen instrument

See: <u>Photographs</u>

Scale Diagram Window
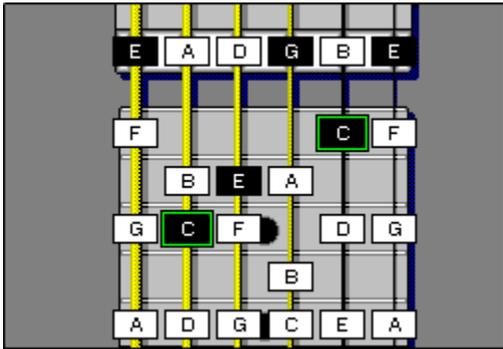
. All available notes of a selected scale will appear in a sector of the fretboard, among the ones that you can use with the chosen chord..

The shadowed rectangles indicate the chord notes in the scale, the green ones indicate the root.

When you click on the notes youll get the corresponding sounds.

See: Scale

Scale Five-lines Stave Window

. Scales compatible with the chosen <u>chord</u> will appear in <u>musical notation</u>
I All characters put at the bottom of the <u>five-line stave</u>, next to some basic notes of the <u>scale</u>, indicate corresponding <u>degrees</u> of the current chord.
1= <u>root</u>, **3M**= the <u>third</u> <u>major</u>...

When you click on the notes, youll get the corresponding sounds.

See: <u>Scale</u>

Piano Scale Window

. All keys in a yellow colour represent the selected <u>scale</u> notes on the piano keyboard.

It is possible to play each key of the piano keyboard with the mouse.

See: <u>Scale</u>

Set Fret Number Window

When the mouse opens this window its cursor take an upright double arrows shape. By clicking and scrolling up and down the frame along the finger board, you choose a finger board section where it is possible to develope the chosen <u>chord</u> position.

You will automatically get a confirm of the chosen button, when you exit from the window that contains the guitar.

See: <u>Fret</u>

Set Tuning Button

When you click on this button you get a dialog box that allows you to select one of the available tuning in the list or to set one of your own.

See: Tuning

Set Chord Button

When you click on this button you get a dialog box that allows you to select one of the program defined <u>chords</u> available in the list.

See: <u>Setting Chord</u>

Set Chord By Intervals Buttons

You can obtain some chords by a sum of intervals: you can include the <u>perfect</u> corresponding <u>interval</u> or omit it by clicking on these buttons
The <u>root</u> of a <u>chord</u> is an exception because it cannot be omitted

It is possible to change all contents of a dialog box, if you point the mouse cursor on the displays and click the left mouse button to decrease the interval or the right mouse button to increase it.

You have to notice that "sus 4" is considered alternative of the <u>third</u> so it is set by the display as an interval of the third

You can use the <u>computer keyboard</u> instead of the mouse

. This button blinks when a chord <u>interval</u> is changed
Click on this button to confirm the changed chord

Sharp and Flat Buttons

You can choose to perform all notes alteration, as sharp or flat, with this switch.

For instance, **C#** (**C** <u>sharp</u>) as **Db** (**D** <u>flat</u>).

Memorize Chord Position Button

When you clich on this button with the left mouse button you can save the current chord in a buffer that can memorize a sequence of 25 <u>chords</u>

The buffer is represented by a film. Its frames, if exposed, contain a very small <u>chord</u> position image.

The film gets on the first free frame when you photograph it.

All parameters that the program needs to process a <u>chord</u> position (<u>tuning</u>, fret number, strings number, position number) are saved.

The chord sequences may be saved in the hard disk by choosing the option "Save" in the File menu

When you click on this button you get a dialog box that allows you to load a chord sequence, previously saved, in the film.

See: <u>Photographs</u>

Play Photograph Button

When you click on this button you get a dialog box that allows you to set the musical performance parameters of a   chord sequence in a film.

When you click on this with the left mouse button you will get the nusical performance of the chord sequence in the film

See: Photographs

Chord Name Interpretation Button

When you click on this button you get a dialog box that allows you to choose among all possible <u>chord</u> interpretation

You get a list which contains the names of notes   by taking every time as <u>Root</u> each of the <u>notes</u> belonging to the <u>chord</u>

It also indicates the omitted degrees and the ones that can not be classified<u>.</u>

See: <u>Chord Name Interpretation</u>

Modify Chord Position Button

1'	3'	5'	2'	9'	4/11	6/13
C	M	5				

When you click on this button you get the set <u>chord</u> mode that allows you to define graphically the chosen position, You can draw your position by dragging the notes with the mouse.
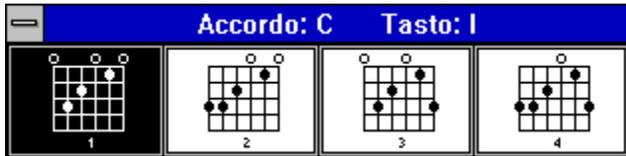
Click again the button to exit from this mode

It will be possible to click this button

1'	3'	5'	2'	9'	4/11	6/13
C	M	5				

to confirm all changes, if   a position is changed and the button blinks

See: <u>Change Position Chord</u>

Map Button

When you click on this button you get a dialog box that allows you to show all current <u>chord</u> positions that can be referred to the chosen fret .

. When you open this window it is possible to get one of the shown positions by clicking a mouse button or to select the position with the computer arrows keys confirming your choice pressing Enter.
The current position is shown inside the window.

Click a mouse button outside the window to exit from it without making a choice; or press Esc on the computer keyboard.

MIDI Button

When you click on this button you get a dialog box that allows you to set all <u>MIDI</u>midi parameters

It is possible to modify some <u>MIDI</u> parameters if an audio card or a MIDI port are regularly installed in Window

See: <u>MIDI</u>

O.K. Button

This button blinks when a change needing a confirm is done

Press OK or Enter to confirm the changes

You have to select UNDO from Options <u>Menu</u> or press Del in the <u>computer keyboard</u> to undo the last change

Play Chord Button

When you click on this button you get a dialog box that allows you to set the musical performance parameters of the <u>chord</u> positions

When you click on it with the left mouse button you get the musical performance, with all previously defined parameters of the current <u>chord</u> position

The chord will be automatically played each time you change it, if the flag Autoplay is set (Play will appear in a green colour)

It is possible to modify all parameters of the Program Change and the <u>Midi</u> Channel, on the display that is at the top of the piano keyboard

See: <u>Play Chord</u>

Play Guitar Scale Button

When you click on this button with the right mouse button you get a dialog box that allows you to set all scale musical performance parameters

When you click on it with the right mouse button you get the musical performance, with all previously defined parameters of the current scale

The scale will be automatically played each time you change it, if the flag Autoplay is set (Play will appear in a yellow colour)

See: Play Guitar Scale

Play Five-Line Stave Scale Button

When you click on this button with the right mouse button you get a dialog box that allows you to set all <u>scale</u> musical performance parameters

When you click on it with the left mouse button you get the musical performance, with all previously defined parameters of the current <u>scale</u>

The scale will be automatically played each time you change it, if the flag Autoplay is set (Play will appear in a yellow colour)

See: <u>Play Score Scale</u>

Find Chord Position Number Buttons

Decrease | 1' | 3' | 5' | 2' | 9' | 4/11 | 6/13 |
| C | M | 5 | | | | | **Increase**

When you click on the left button you decrease the number of the current <u>chord</u> position

When you click on the right button you increase the number of the current chord position

| 1' | 3' | 5' | 2' | 9' | 4/11 | 6/13 |
| C | M | 5 | | | | |

 This display shows the number of the chord position

The choice has an immediate effect and does not need a confirm
All chord windows, the <u>five line stave</u> and the piano that can be referred to the guitar are brought up to date

See: <u>Map Button</u>

Search: Set Filters Button

When you click on this button with the right mouse button   you get a dialog box that allows you to set all search parameters of a current <u>chord</u> position

When you click on this button with the left mouse button   you search a <u>chord</u> position as the previously set search parameters

See: <u>Search Position Chord</u>

ᴋ**Scales List Button**

When you click on this button you get a dialog box that allows you to choose a scale among the ones that are compatible with the current chord

See: Scale

Ascending Scale Button

When you click on this button you get a <u>scale</u> musical performance that goes from the lowest note to the highest one.

It is possible to activate this mode at the same time with the descending performance
It is not possible to disable both choices

See: <u>Play Guitar Scale</u>, <u>Play Score Scale</u>

Descending Scale Button

When you click on this button you get a <u>scale</u> musical performance that goes from the highest note to the lowest one.

It is possible to activate this modality at the same time with the ascending performance. It is not possible to disable both choices.

See: <u>Play Guitar Scale</u>, <u>Play Score Scale</u>

Decrease Scale Button

When you click on this button you get the previous scale to the current one among the scales compatible with the current chord

See: Scale

Increase Scale Button

1'	3'	5'	7'	9'	4/11	6/13
C	M	5				

Decrease   **Increase**

When you click on the button at the top you get the previous <u>scale</u> among the ones belonging to the <u>chord</u>

When you click on the button at the bottom you get the following scale among the ones belonging to the chord

See: <u>Scale</u>

Set Strings Number   (X)   Button

When you press this button the icon will disappear from the button and the mouse cursor will take an **X** shape that allows you   to change the string numbers and to develope all chord positions

Press again the button to exit from this mode

See: Choice Strings

Reset Strings Number (X) Button

When you press this button you will restore the string numbers (six) used to develope the chord
All disabled strings will be enabled

This button will disappear after pressing it. Its presence depends on at least one string disabled

See: Choice Strings Number

Functions

Tuning

Chord Setting
Chord Interpretation
Chord Position Modify
Chord Position Play
Chord Position Search

Strings Choose

Photos
Photos Play

MIDI

Scale
Scale Guitar Play
Scale Score Play

Fret

Tuning

The tuning display shows the chord name and all notes belonging to it.

When you press this button you get the Dialog Box TUNING that allows you to modify current tuning.

You can open the dialog box TUNING even from the <u>menu</u> or the <u>computer keyboard</u>.
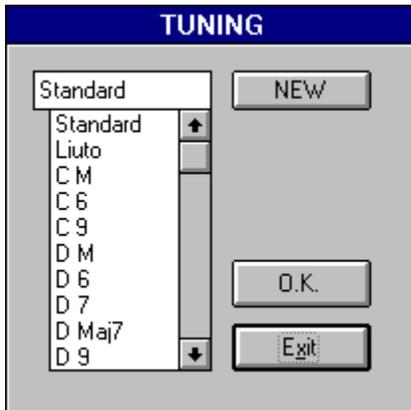
It is possible to choose a tuning.

- by selecting it from a list of program defined tunings.

- by clicking on button NEW to create your own tuning.
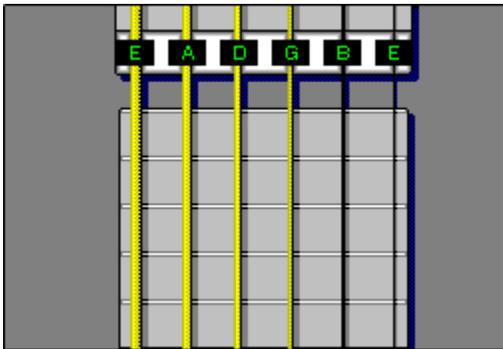
When you choose option NEW, the dialog box TUNING will be closed and you can set a change on the single notes shown in a green colour on the guitar *capotasto*.

The left mousebutton decreases note.

The right mousebutton increases note.

 Sharp and Flat buttons allow you to change the way the <u>alteration</u> of notes are shown.

 When you press this button you obtain the tuning sound.

 This button blinks awaiting a confirm when a tuning is changed.

Press this button to confirm tuning change.

It is possible to restore the standard tuning by choosing the corresponding voice of the <u>menu</u>.
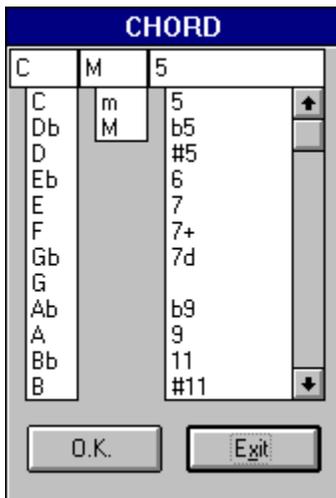
Setting Chord Formula

The display CHORD shows the new selected chord name.

When you press this button you get the Dialog Box CHORD.
In the Dialog Box CHORD you can choose the chord to elaborate among a list of program defined chords.

You can open the dialog box CHORD even from the menu or the computer keyboard.

 The dialog box CHORD allows you to set a chord by choosing the root, the third and the chord type.

You can choose the root of a chord from a list containing all chromatic notes.

Alterated notes are represented with a diesis or a flat mark as shown on the button.

You can choose the third of a chord from a list containing major (M) and minor (m) procedures.

You can choose the quality of a chord from a list containing all defined chords.

This is the faster way to choose a chord among the most common ones.

You can use the single interval button to set more complex chords.

When you set a chord, you have the choice to eliminate or to activate the interval you want, by clicking on one of these buttons.

The Root   of a chord can not be ommitted.

You can point the arrow of the mouse on corresponding displays to obtain an alteration of

single intervals.
You can press the left mouse button to decrease an interval, and the right mouse button to increase it.

The same action may be done using the corresponding keys of the <u>computer keyboard</u>.

This button blinks awaiting a confirm when a chord   <u>interval</u> is changed.
Press this button to confirm the chord changes.

However the two displays are linked together,   they show all changes   made on set chords**.**
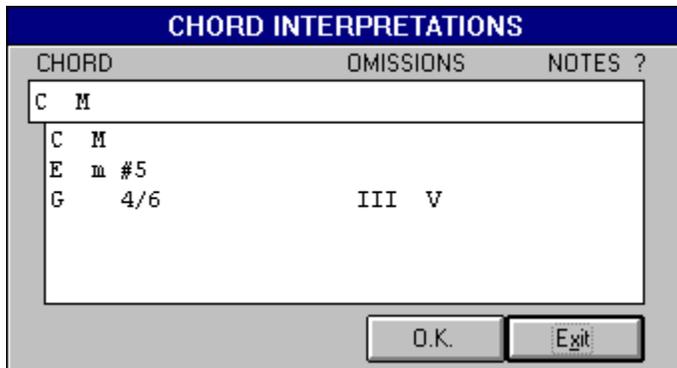
Interpretation Chord Name

A chord may be considered like a blend of notes that, when linked together, have a particular "texture" and, as in a picture all sensations are transmitted by a combination of colours, so the harmonic feelings come out from a chord succession.

The present software, from this point of view, allows you to generate all possible changes in each chord and it also allows you to processes chords, taking as a point of reference (root) each single note belonging to it.

When you press this button you get the dialog box that allows you to see and then to choose the possible interpretations of the name of the current chord.

You can open the dialog box INTERPRETATION CHORD even from the menu or the computer keyboard

 The dialog box shows a list of possible chords interpretation. The list contains so many chords as the notes of current chord.

Interpretation contains: the root; the chord definition, and all omissions.
You can choose the interpretation by clicking the left mousebutton and the OK button.
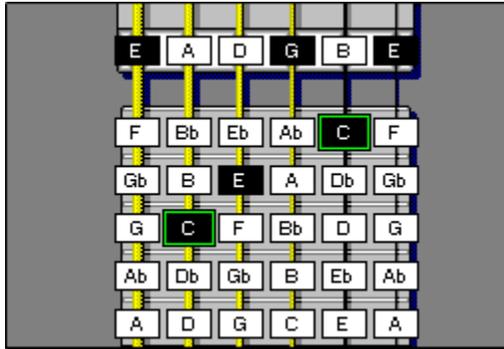
Omissions of the   third and the fifth and the number of notes that can not be performed are shown in the interpretation list.
These ones can be revealed in the presence of cluster semitones of the chord.

Modify Chord Position

When you press this button you get the graphic function to modify a chord position.

A chromatic scale will be shown on a sector of the fretboard in the mode SCALE.

You can set a new chord position clicking the left mouse button on a note of a string, then confirming the action with the OK button.

This option is useful when you know a chord position on the fretboard but you do not know its name.

The shape of the mouse pointer changes and it is transformed in a hand; in this way, you can drag the notes upon the strings to have a new input for next processing.

You can change every position both in the fretboard SCALE or CHORD.

The chord is automatically performed when the position is changed, and its new name is shown in the corresponding display.

When you press this button you can go to other new informations connecting the chord to a root one chosen among the note belonging to it.

You can exit from this option by clicking on the button containing the hand (in this way it will appear empty).

If the position has been changed you have to click the button   to confirm changes.

Play Chord Position

When you press this with the   left mouse button you get a musical performance of the current chord position.

When you press this with the right mouse button, you get the dialog box to set all parameters of chord musical performances.
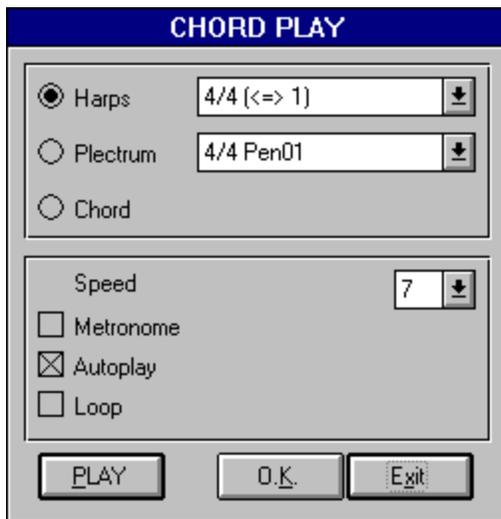
 You can open the dialog box even from the menu or the computer keyboard.

When you choose one of the following performing parameters you are excluding the others two, i.e. they are optionals

The parameters you can change are:

Arpeggio : allows you to choose an arpeggio from a list of defined arpeggios to apply to a chord position performance.

Plectrum : allows you to choose a rhythm from a list of defined rhythms to apply to a chord position performance.

Chord : determines a chord position performance.

Selecting Options

Performance Speed : allows you to change chord performance speed choosing this option among a list of speed values that goes from 1 to 9.

Metronome : with this option a metronome will beep   on each chord position. Metronome MIDI parameters. (Program Change, notes, speed) can be set from the dialog box MIDI

Autoplay : You get automatically a chord performance every time you choose a new position.
When you choose this option the colour of PLAY text in the button will change from a white to a green colour.

PLAY This button allows you to listen to the chord   performance inside the dialog box together to all new chords settled.

All parameters, set in the dialog box, begin active if confirmed. They determine the chord

performance way by clicking the button...

1'	3'	5'	2'	9'	4/11	5/13
C	M	5				

Search Chord Position

When you press it   with the left mouse button, a search is done about the chord position, depending on all parameters set in the dialog box shown near here.

You can select all options of   SEARCH CHORD by clicking   this button with the right mouse button.

You can open the dialog box SEARCH CHORD even from the menu or the computer keyboard.

All parameters of a search position chord are set inside the dialog box SEARCH CHORD; four alternative ways of searching   are available and a filter works upon all positions to be shown.

Search Frets : looks for   a chord position on the fret following the current one. If a complete chord position is not identified on the next fret, searching will continue on the following frets.

Search Strings : looks for a complete chord position into the current used fret, showing all positions found on a certain group of strings.

Bass Note : When you select this mode it is possible to set a search and to decide what kind of note among the chords ones, will be played on bass.

List containes all intervals belonging to the current chord and they are represented by roman numbers (I, III, V..) ; the search will be done first on the current fret, then on the following frets.

Highest Note : The same as above but it is referred to the highest note.

Only Fingering Position : this filter allows you to show only fingering positions identified by the program.

A search will begin when you clik on the OK button on the dialog box SEARCH.

The selected setting, when confirmed, will be always active, so it is possible to search fastly chords position that correspond to the preset parameters pressing
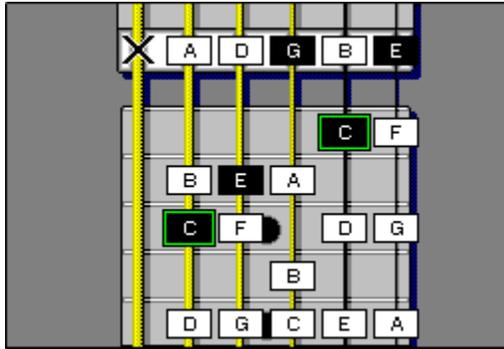
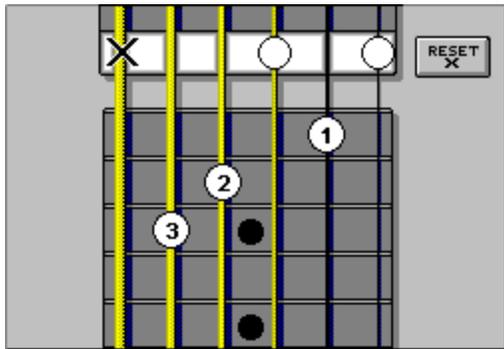**with the left mouse button, the following button** .

Choose Strings Number

When you press this button the cursor of the mouse gets a **X** shape. The cursor allows you to activate or disactivate one or more strings.

You have to point the cursor on a string and to press the left mouse button to activate or disactivate it.

If the number of the strings is below to 6, this window will show the button RESET that allows you a fast reset of all 6 strings.

The right mouse button is always available to play the chord notes.

To exit the function CHOOSE STRINGS press again the button

Photos

When you press this button with the left mouse button, you memorize a chord and its context (tuning, chord number, fret...).
You can go to this function even from the menu or the computer keyboard
The memorized position will fill the first free frame of the film shown at the bottom of the window.

At present 25 frames   can be memorized

When you point the left mouse button on a frame you get the enlargement of the position that it containes.

When you click the right mouse button on any one of the frame you get a box that containes three tools:
an **arrow**, a **musical note** and a **rubber.**

You can use these tools by clicking the left mouse button on the frame you need.

The tool funcionts are:

Arrow: it allows you to elaborate a memorazed   position and its context;

Note: it allows a memorized position musical performance ;

Rubber: it allows you to erase a memorized position ;

The memorized positions represent a chord sequence.

When you press this button with the left mouse button you get the chord sequence musical performance.

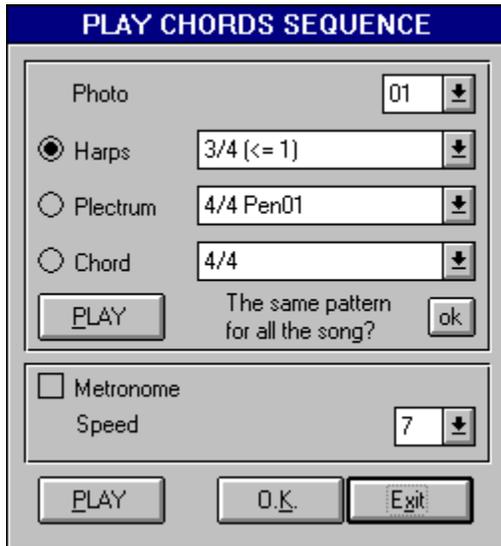With the right mouse button you get the play parameters modifies.

It is possible to save or to load a chord sequence by choosing the options from the menu

Play Photos

 When you press this button you get the chord sequences musical performance.

When you press it   with the left mouse button, you get the dialog box PLAY CHORD SEQUENCE.

You can open the dialog box that sets all performance parameters even from the <u>menu</u> or the <u>computer keyboard</u>

Frames : It allows you to choose in which sequence frame you can set performance parameters.

Arpeggio : It allows you to assign an arpeggio to the selected frame musical performance.

Plectrum : It allows you to assign a rhythm to the selected frame musical performance.

Chord : It allows you to listen only once   to the chord performance.

Play : It allows you to listen to the musical performance of a single selected frame.

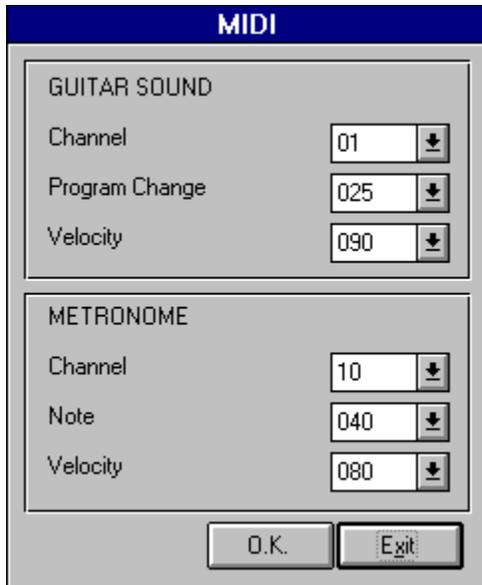**Metronome :** You get a metronome beat during the musical performance.

Performance Speed : It determines a metronome tempo speed of the chord sequence musical performance.

PLAY : This button opens a chord sequence musical performance without exiting from the dialog box.

MIDI

Press this button to get the dialog box MIDI

MIDI

GUITAR SOUND

Channel   01

Program Change   025

Velocity   090

METRONOME

Channel   10

Note   040

Velocity   080

O.K.   Exit

You can open the dialog box that set all MIDI parameters even from the menu or the computer keyboard.

The dialog box is divided into two sections that allow you to change both the timbre setting and the metronome.

SOUND

Channel : It determines the MIDI channel on which to send audio play messages (1-16)

Sound : (program change) It allows you to select the MIDI sound by choosing a number among 1 and 128.

Velocity : It controls the sound intensity with a value included among 1 and 128.

METRONOME

MIDI Channel : It defines the MIDI channel to use 1-16) the metronome (usually channel 10).

Notes : It allows you to select the sound that marks metronome tempo.

Velocity : It controls the intensity of metronome beeps, in a value range among 1 and 128.

Scale

 The current scale name is shown on the display.

It is possible to scroll the list of the current compatibles scales, positioning the cursor of the mouse on the display and clicking the left or the right buttons.
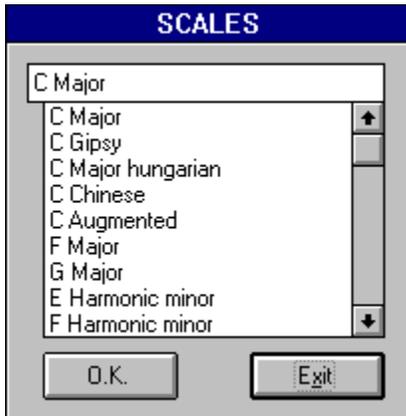
 This button blinks when a new scale is used.

Press this button to confirm the chord changes.

 Press the SCALE button to go to the dialog box SCALES

You can go to   the dialog box even from the menu or the computer keyboard.

 It is possible to change the tonal contest of the current chord, choosing a scale among a list of scale names that are compatible with the chord.

Every list names are represented by a scale root followed by the name of the scale.

When you choose a new scale, this shows an immediate scale up to date in the windows scale and on the stave.

Play Guitar Scale

 When you press this button with the left mouse button, you get the scale musical performance represented on the fretboard.

When you press this button with the right mouse button you get the dialog box that allows you to set all scale musical performance parameters.

You can open the dialog box PLAY GUITAR SCALE even from the menu or the computer keyboard.
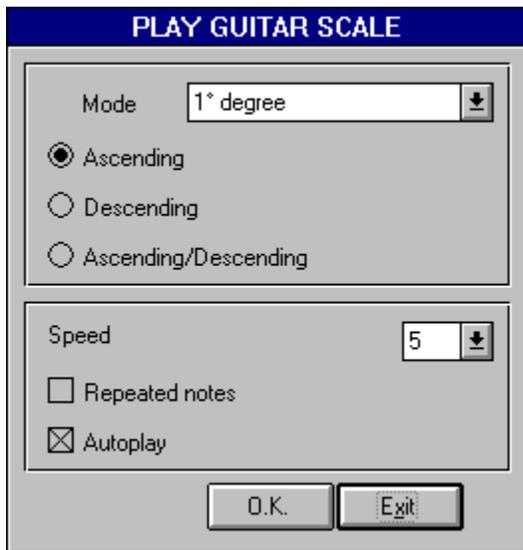
The changeable parameters are:

Mode : It allows you to change the scale performance mode, by choosing it among a list that containes the following modes:

The 1st degree : (the 2nd, the 3rd,... the 7th degree) a current scale performance is obtained in a range of an octave beginning from a chosen degree.

Chord Root : The scale is performed in octave beginning from the root of the current chord.

All notes : The scale is performed beginning from the first note available on a sector of the guitar fretboard ending with the last available note.

When you choose one of the following performing parameters you are excluding the others.

Ascending : The scale is played beginning from the lowest note and ending to the highest one of a chosen mode.

Descending : The scale is played beginning from the highest note and ending to   the lowest one of a chosen mode.

Ascending/descending : The scale is played first in an ascending way and then in a descending one.

All choices are shown on the corresponding buttons set above the piano keyboard

Performance speed : It allows you to change the performance speed choosing the time value to be used among a list that containes a series of numbers (1-9)

Repeated note : Each note of a scale is played twice.

Autoplay   Each scale will be automatically performed every time the scale used is changed.

When this option is activated the written word on the button will change from a white to a yellow colour.

All parameters, set in the dialog box, are activated if confirmed.

They determine the scale performance by clicking the button... .

Play Scale Score

When you press this button with the left mouse button, you get the scale musical performance.

When you press this button with the right mouse button you get the dialog box that allows you to change all scale musical performance parameters represented on the <u>five-line stave</u>.

You can go to the dialog box even from the <u>menu</u> or the <u>computer keyboard</u>.
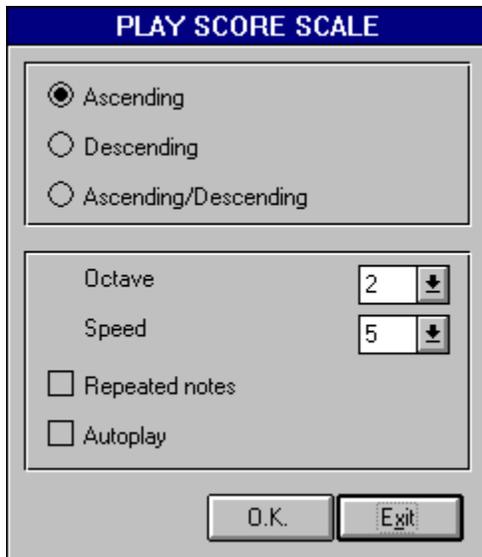
The changeable parameters are:

When you choose one of the following performing parameters you are excluding the others.

Ascending : The scale is played beginning from the lowest note and ending to the highest one.

Descending : The scale is played beginning from the highest note and ending to   the lowest one.

Ascending/descending : The scale is played first in an ascending way and then in a descending one.

All choices are shown on the corresponding buttons set below the five-line stave scales.

Octave : it allows you to change the used <u>octave</u> to show and to listen again to the <u>stave</u> scale, choosing it among a list that has a series of numbers (1-4) which identifies the <u>octave</u>.

Performance speed : It allows you to change the performance speed choosing a list that has a series of numbers (1-9) representing its speed.

Repeated note : Each note of a scale is played twice.

Autoplay : Each new selected scale will be automatically performed.

When this option is activated the written word on the button will change from a white to yellow colour.

All parameters, set in the dialog box, begin active if confirmed. They determine the scale performance by clicking the button...

Fret

It is possible to change a group of   frets in two ways; from here onwards chord positions (diagrams) are developed: setting it graphically on the fretboard or in the corresponding display.

The fret   graphical setting is done by positioning the cursor of the mouse on the fretboard (the cursor is shown as a double upright arrow), clicking and dragging the white box along the fretboard.

This button blinks when a group of frets   position is moved.

A choice is automatically confirmed when the mouse cursor exits from a window.

In this display it is possible to set the fret;   from here onwards the chord will develop itself. You will decrease the fret clicking on the left mouse button; you will increase the fret number clicking on the right mouse button. The fret position will be shown in the display as roman numbers (I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII)

This button blinks when the key position is changed.

Click to confirm changes.

Glossary

A
A
accidental
alteration
arpeggio
augmented

B
B
bichord

C
C
chord
chromatic
cluster
common chord (triad)

D
D
degree
diatonic
dominant

E
E
enharmonic
excedent

F
F
fingering
five-line stave
flat

G
G

H
harmonic
harmony

I
improvisation

interval

M
major
MIDI
minor

N
natural
notation
note

O
octave

P
perfect

R
rhythm
root

S
scale
semitone
sharp
subdominant

T
tablature
third
tonality
tone
tonic
triad
tuning

U
unison

A
It is Synonim of the A major Chord

Accident

Notation-mark used in the western musical system that preceding a note
alterates it respectively :

> **sharp** and **double sharp:** marks rise a note of a semitone and a tone
> **flat** and **double flat:** marks low a note of a semitone and a tone
> **natural** and **double natural:** marks undo former marks

Tuning

Adjusting   guitar strings tension to obtain the right tuning according with the tuning-fork..
The most   used   tuning of the guitar (starting from the highest tuned string) is: **e, b, g, d,
a, e**
An open tuning means the whole notes tuned for obtaining a specific chord sound.
The program gives the most frequently used open tunings.

Chord

A simultaneous combination of at least three sounds (triad).
The bichord is not considered a chord because it is indetermined from a tonal system point of
view.

Taking the lowest note as reference, chords may be represented as root if the lowest note is
the one giving the chord his name; or as **inversion** if it is one among others notes that
belong to the   chord (the first, the second, the third inversion,...).

Harmony is the science that formulates the theory of nature, caracteristics and relations
among chords.

Alteration

A temporary alteration of a note of about one or two semitones towards
high and low sounds in relation with his basic tonality tune.

Alterations, also called accidental, define the passage tonality when
they are   marked with a key.

Harmony

A whole of rules that define the chords structure on the bases of tonality
principles and control their course in time.

Harmonic

Or harmonic sound, is the sound you can get by vibrating a guitar
string in one of the fractional point of its length (1/2, 1/3, 1/4...).

Arpeggio

The consecutive performance of singles
and more notes of a musical chord.

Augmented

See: Excedent.

B
It is Synonim of the B major Chord

Flat

Alteration mark that put next to a note lows it of a chromatic semitone.
To low a note of two semitones you use the double flat.

Bichord

It joins only two sounds (excluding unison and octave).

C
It is Synonim of the C major Chord

Cantino

Capotasto

Barretta rigida applicata
trasversalmente alla parte iniziale
della tastiera della chitarra.

Il capotasto tiene le corde sollevate
tanto da permettere loro di vibrare.

Cluster

An harmonic group of adjacent sounds.

Chromatic

Chromatic interval: it shows a semitone interval In the temperato
system.

Chromatic scale: it defines a succession of 12 simultaneous
semitones.

It is possible to use chromatic scales having third or forth tones,   in
other systems.

See also diatonic and enharmonic.

D
It is Synonim of the D major Chord

Diatonic

It is a system based on a scale of 7 notes that subdivide an octave
interval in 5 tones and 2 semitones in a sequence that avoids
semitones to be adjacent.

See also chromatic and enharmonic

Diesis (sharp)

A alteration mark that   rises a note of about a semitone.
Double diesis (sharp) is used to rise a note of about 2
semitones.

Fingering

The choice of fingers as in playing a chord, a scale
or a musical phrasing.

Fingers are indicated with numbers:

1= INDEX FINGER
2= MIDDLE FINGER
3= RING FINGER
4= LITTLE FINGER

Dominant

In the tonal system indicates the fifht degree of a major or minor scale, and it has the most important degree after the   tonic.

E
It is Synonim of the E major Chord

Excedent

Every musical interval that rise of a semitone the second, the third, the sixth and the seventh major intervals, and the forth, the fifth and octave perfect intervals.

Enharmonic

It indicates the relation between two notes named in a different way but having the same height.

See also diatonic and chromatic.

F
It is Synonim of the F major Chord

Root

It indicates a sound that produces a triad, in harmony.
It is a synonimous of tonic in the musical scale.

G
It is Synonim of the G major Chord

Perfect

A forth, fifth and octave interval and all intervals that could be brought back   (the eleventh, the twelfth ..).
When it is not exceed   or diminuished of a semitone.

Degree

It indicates the notes position on the diatonic scale (the first, the

second, the third degree) in relation with the tonic or the basic ones, named the first tonic degree.

The scale degrees are called tonic, overtonic, characteristic, subdominant, dominant, overdominant, sensible as the role they play in the tonal range.

Improvisation

A musical composition created during the performance.

In Jazz, the improvisation is often linked to harmonic models and/or predifined rhythmic schemes.

Tablature

A system of representing chords, scales and musical phrasing related with a performance (string, key, fingering...) for string instruments.

Interval

The height difference between two sounds.

The temperato system divides an octave into 12 same parts so determining the minimum semitone interval.

So you have:

the second, third, sixth and seventh **major and minor intervals**

the forth, fifth and octave **perfect intervals**

augmented and diminuished intervals

La
Nome del sesto grado della scala maggiore naturale di do. Nei paesi anglosassoni la nota si indica con la lettera **A.**

La nota la viene utilizzata come riferimento per l'intonazione degli strumenti.

Per convenzione la frequenza del la utilizzato come diapason è 440 Hz.

Major

It shows an interval amplitude, a chord structure, a scale or

a tonality mode.

The major scale is an ascending succession of two tones, a semitone, three tones and a semitone.

For each major tonality exists a relative minor tonality, the tonic corresponding to the sixth degree in the major scale.

In the tonic system the major mode is opposed to the minor one.

Minor

It shows an interval amplitude, a chord structure, a scale or a tonality mode.

The **minor melodic scale** is an ascending succession of a tone, a semitone, four tones and a semitone.

The **minor harmonic scale** is an ascending succession of a tone, a semitone, two tones, a semitone, a half and a tone and a semitone.

For each minor tonality, exists a relative major tonality, the tonic corresponding to the third degree in the minor scale

In the tonal system the minor way is opposed to the major one.

MIDI

Acrostic for: Musical Instrument Digital Interface.

Natural

A note that is not alterated by a flat, double flat, sharp (sharp) or double sharp (sharp) mark.

Alteration mark that put next to a note undo the effect of a previous alteration.
The double natural mark undo the effect of previous double flat or double sharp.

Note

A graphic symbol, usually alterated by a alteration mark, representing a musical sound and its related duration.

A note is also the height of a specific sound, indicated by a particular name or letter.

Notation

System of codifies used to write the music.

Notazione Anglosassone

A=LA
B=SI
C=DO
D=RE
E=MI
F=FA
G=SOL

Octave

A height interval between two sounds with the same name. One of them has a double frequence compared with the other one.

Five-Line Stave

A group of five horizontal lines and four spaces between a line and another one Notes, intervals and dinamic marks are written on it.

A key is shown at the beginning of the five-line stave; it establishes the referring note position which determines the position of all notes.

When a note is written outside the five-line stave, because of its height, usually it has a sign at the top or at the bottom of the line.

Rhythm

A music dimension related to the organization of sound length, that determines the identity of the music in a very strong way.

Scale

A succession of notes performed in ascending and descending order through an octave interval in a certain number of intervals.

The theoretical system in which western music is based is the result of the temperata scale definition that is divided into the same 12 semitones.

Semitone

It is the smallest interval in the temperato system.

Subdominant

The forth degree of the diatonic scale.
It is the same both in major and in minor ways.

The presence of the subdominant in a tonic range is particurarly important because of its link between the static aspect of tonic and the dominant one of dinamic.

Third

A interval between two separate notes, in the continuing succession of the diatonic scale, only starting from a third note.

Third is called *major, minor, diminuished or exceding* because it contains two tones, a half and a tone, a tone or two halves and a tone.

Tonality

A system of organizing chords in connenction to a main chord called tonic chord.

Tonic (Root)

The most important pole in tonic system.

The first degree ot the diatonic scale, or basic sound, and a base for the perfect major and minor chord.

Tone

A major second interval.

Triad

A chord of three sounds, made of two laid third intervals.

Triad gives rise to four different chords in accordance with the nature   of the third intervals: *major, minor, exceding and diminuishing.*

Unison

Equality between two sounds with the same height even if they have different timbre.